Draft
Environmental Impact Report

SCH# 2025071048

Volume 1

Chapters 1 through 10

Discovery Solar PV and Storage Project

Discovery Solar PV and Storage Project by Discovery Solar Storage, LLC (PP24408); ZCC No. 56, Map 197; ZCC No. 71, Map 198; ZCC No. 29, Map 214; ZCC No. 16, Map 215; CUP No. 22 Map 197; CUP No. 47, Map 198; CUP No. 50, Map 214; CUP No. 51, Map 214; CUP No. 19, Map 215; ZV No. 20, Map 197; ZV No. 36, Map 198; ZV No. 15, Map 214; ZV No. 3, Map 215; GPA No. 18, Map 197 (Circulation); GPA No. 5, Map 198 (Circulation); GPA No. 10, Map 214 (Circulation); GPA No. 7, Map 215 (Circulation); Multiple Vesting Tentative Parcel Maps (VTPM)

Kern County
Planning and Natural Resources Department
Bakersfield, California

January 2026

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KERN COUNTY
Planning & Natural Resources

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NOTICE OF AVAILABILITY FOR PUBLIC REVIEW AND HEARING ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED DISCOVERY SOLAR PV AND STORAGE PROJECT

This is to advise that the Kern County Planning and Natural Resources Department has prepared a Draft Environmental Impact Report (EIR) for the project identified below. As mandated by State law, the minimum public review period for this document is 45 days.

PROJECT TITLE: Draft EIR for the Discovery Solar PV and Storage Project by Discovery Solar Storage, LLC. (PP24408); ZCC No. 56, Map 197; ZCC No. 71, Map 198; ZCC No. 29, Map 214; ZCC No. 16, Map 215; CUP No. 22 Map 197; CUP No. 47, Map 198; CUP No. 50, Map 214; CUP No. 51, Map 214; CUP No. 19, Map 215; ZV No. 20, Map 197; ZV No. 36, Map 198; ZV No. 15, Map 214; ZV No. 3, Map 215; GPA No. 18, Map 197 (Circulation); GPA No. 5, Map 198 (Circulation); GPA No. 10, Map 214 (Circulation); GPA No. 7, Map 215 (Circulation); Multiple Vesting Tentative Parcel Maps (VTPM)

PROJECT LOCATION: The proposed project site is located at the western edge of the Antelope Valley, approximately 6 miles southwest of the community of Mojave, approximately 9 miles southeast of the City of Tehachapi, approximately 8 miles northwest of the unincorporated community of Rosamond, and approximately 20 miles west of Edwards Air Force Base. Portions of the proposed project are adjacent to and on both sides of the Tehachapi Willow Springs Road, and the LADWP aqueduct. The proposed project is located within the Monolith, Willow Springs, and Soledad Mountain U.S. Geological Survey 7.5-minute quadrangles, and spans multiple Townships, Ranges, and Sections including the following: Township 10 North, Range 13 West, Sections 2-8, 10, and 18; Township 10 North, Range 14 West, Sections 1, 2, 11, 12, 14, 15, 22, and 23; Township 11 North, Range 13 West, Sections 21, 31, 32, and 33; and Township 11 North, Range 14 West, Sections 25, 26, 35, and 36 of the San Bernardino Base and Meridian (SBB&M).

DOCUMENT AVAILABILITY: The Draft EIR and the documents referenced in it are available for public review at the Kern County Clerk's Office, located at 1115 Truxtun Avenue, Bakersfield, CA 93301; the Planning and Natural Resources Department, located at 2700 "M" Street, Suite 100, Bakersfield, CA 93301 or on the Planning and Natural Resources Department website at: **https://kernplanning.com/environmental-doc/discovery-solar-pv-and-storage-project/**

PUBLIC COMMENT: The required Draft EIR public review period is 45 days.

January 28, 2026 – March 13, 2026

Written comments may be submitted to the project planner identified below prior to the close of the Draft EIR public review period on **March 13, 2026, at 5:00 p.m.** to:

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

PUBLIC HEARING: A public hearing has been scheduled with the Kern County Planning Commission to consider a recommendation on the proposed project and solicit comments on the adequacy and completeness of the analysis and proposed mitigation measures described in the Draft EIR. You may comment by providing testimony at the public hearing on:

DATE: **April 23, 2026**
TIME: **7:00 P.M. or soon thereafter**
LOCATION: **Chambers of the Board of Supervisors**
Kern County Administrative Center, First Floor
1115 Truxtun Avenue, Bakersfield, CA 93301

After consideration by the Planning Commission, a public hearing will be scheduled for the Kern County Board of Supervisors for final consideration and action. Comments may be provided at that hearing or prior to any action by the Board of Supervisors on any matter. The Board of Supervisors decision is final.

If you challenge the action taken on this request in court, you may be limited to raising only those issues you or someone else raised at this public hearing, or in written correspondence delivered to the Planning and Natural Resources Department at, or prior to, the public hearing.

PROJECT DESCRIPTION: The proposed Discovery Solar PV and Storage Project is a photovoltaic (PV) solar facility with associated infrastructure necessary to generate up to 1,400 megawatts (MW) of renewable electrical energy with up to 8 gigawatt-hours (GWh) of energy storage capacity (approximately 1,000 MW) on an approximate 7,700 acre project site, across 473 privately owned parcels, in an unincorporated area of southeastern Kern County.

A 13.8-acre portion of an additional parcel located adjacent to the southern portion of the proposed project site is proposed for a temporary, off-site construction laydown yard to supplement proposed laydown areas within the Conditional Use Permit (CUP) boundaries of the solar arrays. An additional approximate 411 acres on six (6) parcels are allotted for the proposed medium-voltage (MV) transmission and access easement. PV solar panels, a power collection system, including MV lines that connect the solar facilities, inverters, a 230 kilovolt switchyard, foundations, and transformers will be installed onsite.

Associated infrastructure includes an operations and maintenance (O&M) facility, telecommunication facilities, energy storage system(s), up to three 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.

Implementation of the project as proposed includes the following land use entitlement requests:

Zone Change

(a) Zone Classification Change No. 56, Map 197 from A-1 (Limited Agriculture) to A (Exclusive Agriculture) on approximately 357.88 acres, A-1 FP (Limited Agriculture, Floodplain Combining) to A FP (Exclusive Agriculture, Floodplain Combining) on approximately 10.02 acres, A-1 (Limited Agriculture) and A-1 FP (Limited Agriculture, Floodplain Combining) to A FP (Exclusive Agriculture, Floodplain Combining) on approximately 574.63 acres, and A-1 (Limited Agriculture) and A-1 WE (Limited Agriculture, Wind Energy Combining) to A (Exclusive Agriculture) and A WE (Exclusive Agriculture, Wind Energy Combining) on approximately 85.06 acres, for a total of approximately 1,027.59 acres.

(b) Zone Classification Change No. 71, Map 198 from A-1 (Limited Agriculture) to A (Exclusive Agriculture) on approximately 80.26 acres, E (2.5) RS (Estate 2.5 acres, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 10 acres, E (20) RS (Estate 20 Acres, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 493.64 acres, and A WE (Exclusive Agriculture, Wind Energy Combining) and E (20) RS (Estate 20 Acres, Residential Suburban Combining) to A WE (Exclusive Agriculture,

Wind Energy Combining) on approximately 40.01 acres, and A (Exclusive Agriculture) on approximately 40 acres, for a total of approximately 623.91 acres.

(c) Zone Classification Change No. 29, Map 214 from E (2.5) RS (Estate 2.5 Acres, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 150.70 acres, PL RS (Platted Lands, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 308.69 acres and A-1 (Limited Agriculture) to A (Exclusive Agriculture), and PL RS FP (Platted Lands, Residential Suburban Combining, Floodplain Combining) to A FP (Exclusive Agriculture, Floodplain Combining) on approximately 170.39 acres, for a total of approximately 629.78 acres.

(d) Zone Classification Change No. 16, Map 215 from PL RS (Platted Lands, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 111.71 acres.

Conditional Use Permit

(a) Conditional Use Permit No. 22, Map 197, to allow for the construction and operation of a solar facility up to 200 MW and associated infrastructure, including energy storage and a switchyard, on approximately 811.23 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.

(b) Conditional Use Permit No. 47, Map 198, to allow for the construction and operation of a solar facility up to 150 MW and associated infrastructure, including energy storage and temporary construction staging, on approximately 721.65 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.

(c) Conditional Use Permit No. 50, Map 214, to allow for the construction and operation of a solar facility up to 550 MW and associated infrastructure, including energy storage and temporary construction staging and equipment storage, on approximately 3,164.18 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) Conditional Use Permit No. 19, Map 215, to allow for the construction and operation of a solar facility up to 500 MW and associated infrastructure, including energy storage and temporary construction staging and equipment storage, on approximately 2,773.09 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.

General Plan Amendment (Circulation)

(a) General Plan Amendment No. 18, Map 197, to remove future road reservations on section and mid-section lines as called for within the Circulation Element of the Kern County General Plan; and to remove future road reservations on section and mid-section lines within the project boundary.

(b) General Plan Amendment No. 5, Map 198, to remove road reservations on section and mid-section lines as called for within the Circulation Element of the Kern County General Plan; and to remove future road reservations on section and mid-section lines within the project boundary.

(c) General Plan Amendment No. 10, Map 214, to remove road reservations on section and mid-section lines as called for within the Circulation Element of the Kern County General Plan; and to remove future road reservations on section and mid-section lines within the project boundary.

(d) General Plan Amendment No. 7, Map 215, to remove road reservations on section and mid-section lines as called for within the Circulation Element of the Kern County General Plan; and to remove future road reservations on section and mid-section lines within the project boundary.

Zone Variance:

(a) Zone Variance No. 20, 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 140.15 total acres.

(b) Zone Variance No. 36, Map 198, 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 or the E(20) (Estate - 20 acres) District to the A (Exclusive Agriculture) District across approximately 205.68 total acres.

(c) Zone Variance No. 15, Map 214, to authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning from the PL (Platted Lands) District to the A (Exclusive Agriculture) District across approximately 89.83 total acres.

(d) Zone Variance No. 3, Map 215, to authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning from the PL (Platted Lands) District to the A (Exclusive Agriculture) District across approximately 10.12 total acres.

Vesting Tentative Parcel Maps:

(a) Vesting Tentative Parcel Map No. 12587 – Proposing a merger and re-subdivision of five (5) parcels into one (1) parcel of Case Map 197, Section 31, Township 11, Range 13, Quarter of County of Kern, consisting of 220.32 acres (gross), resulting in a 220.32 acre (gross) parcel.

(b) Vesting Tentative Parcel Map No. 12589 – Proposing a merger and re-subdivision of four (4) parcels into one (1) parcel of Case Map 198, Parcel Map 3816, Lots 1-4 of County of Kern, consisting of 159.83 acres (gross), resulting in a 159.83 acre (gross) parcel.

(c) Vesting Tentative Parcel Map No. 12590 – Proposing a merger and re-subdivision of six (6) parcels into one (1) parcel of Case Map 198, Section 31, Township 11, Range 14, Quarter of County of Kern, consisting of 20.06 acres (gross), resulting in a 20.06 acre (gross) parcel.

(d) Vesting Tentative Parcel Map No. 12591 – Proposing a merger and re-subdivision of twenty-four (24) parcels into one (1) parcel of Case Map 198, Section 26, Township 11, Range 14, Quarter of County of Kern, consisting of 160.71 acres (gross), resulting in a 160.71 acre (gross) parcel.

(e) Vesting Tentative Parcel Map No. 12592 – Proposing a merger and re-subdivision of seventeen (17) parcels into one (1) parcel of Case Map 214, Section 2, Township 10, Range 13, Quarter of County of Kern, consisting of 140.76 acres (gross), resulting in a 140.76 acre (gross) parcel.

(f) Vesting Tentative Parcel Map No. 12593 – Proposing a merger and re-subdivision of ten (10) parcels into one (1) parcel of Case Map 214, Section 3, Township 10, Range 13, Quarter of County of Kern, consisting of 74.86 acres (gross), resulting in a 74.86 acre (gross) parcel.

(g) Vesting Tentative Parcel Map No. 12594 – Proposing a merger and re-subdivision of sixty-eight (68) parcels into one (1) parcel of Case Map 214, Section 4, Township 10, Range 13, Quarter of County of Kern, consisting of 502.73 acres (gross), resulting in a 502.73 acre (gross) parcel.

(h) Vesting Tentative Parcel Map No. 12595 – Proposing a merger and re-subdivision of fifty (50) parcels into one (1) parcel of Case Map 214, Section 6, Township 10, Range 13, Quarter of County of Kern, consisting of 530.27 acres (gross), resulting in a 530.27 acre (gross) parcel.

(i) Vesting Tentative Parcel Map No. 12597 – Proposing a merger and re-subdivision of twenty-three (23) parcels into one (1) parcel of Case Map 214, Section 7, Township 10, Range 13, Quarter of County of Kern, consisting of 231.36 acres (gross), resulting in a 266.74 acre (gross) parcel.

(j) Vesting Tentative Parcel Map No. 12598 – Proposing a merger and re-subdivision of nineteen (19) parcels into one (1) parcel of Case Map 214, Section 7, Township 10, Range 13, Quarter of County of Kern, consisting of 106.21 acres (gross), resulting in a 106.21 acre (gross) parcel.

(k) Vesting Tentative Parcel Map No. 12599 – Proposing a merger and re-subdivision of twenty-six (26) parcels into one (1) parcel of Case Map 214, Section 8, Township 10, Range 13, Quarter of County of Kern, consisting of 336.79 acres (gross), resulting in a 336.79 acre (gross) parcel.

(l) Vesting Tentative Parcel Map No. 12600 – Proposing a merger and re-subdivision of four (4) parcels into one (1) parcel of Case Map 215, Section 23, Township 10, Range 14, Quarter of County of Kern, consisting of 40.47 acres (gross), resulting in a 40.47 acre (gross) parcel.

(m) Vesting Tentative Parcel Map No. 12601 – Proposing a merger and re-subdivision of seven (7) parcels into one (1) parcel of Case Map 215, Section 15, Township 10, Range 14, Quarter of County of Kern, consisting of 281.45 acres (gross), resulting in a 281.45 acre (gross) parcel.

(n) Vesting Tentative Parcel Map No. 12602 – Proposing a merger and re-subdivision of forty-seven (47) parcels into one (1) parcel of Case Map 215, Section 12, Township 10, Range 14, Quarter of County of Kern, consisting of 503.38 acres (gross), resulting in a 501.78 acre (gross) parcel.

(o) Vesting Tentative Parcel Map No. 12603 – Proposing a merger and re-subdivision of five (5) parcels into one (1) parcel of Case Map 215, Section 2, Township 10, Range 14, Quarter of County of Kern, consisting of 407.89 acres (gross), resulting in a 407.89 acre (gross) parcel.

Offsite Features:

(a) Conditional Use Permit No. 51, Map 214, to allow for a temporary, offsite construction laydown area on approximately 13.7 acres of a 30.21 acre parcel in the A (Exclusive Agriculture) District.

ENVIRONMENTAL REVIEW FINDINGS: Anticipated significant and unavoidable impacts on Aesthetics (Project and Cumulative), Biological Resources (Project and Cumulative), Wildfire (Cumulative)

CRAIG M. MURPHY, Director
Planning and Natural Resources Department

To be published once only on next available date and as soon as possible

THE BAKERSFIELD CALIFORNIAN
MOJAVE DESERT NEWS
ROSAMOND WEEKLY NEWS

MT (01/28/26)

cc: County Clerk (2) (with fee)
Environmental Status Board
Supervisorial District No. 2

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Discovery Solar PV and Storage Project
(PP24408)

Surrounding Property Owners

474 160 19 00 8
ABANES JUANITA & BRILLANTE I A
58-109 KAUNALA
HALIEWA HI 96712

474 171 21 00 3
ABARIENTOS ED & LIZA TRUST
815 VANDERBILT CT
EL DORADO HILLS CA 95762

474 171 29 00 7
ACABADO CARLITO P & ZAIDA C
P O BOX 3163
AGANA GU 96910

474 160 18 00 5
ACERET REGINO ET AL
P O BOX 302
KAHUKU HI 96731

346 061 22 01 9
ADAMO VOLTURNO M & EBY
2545 E AVENUE I SP 79
LANCASTER CA 93535-1009

474 040 03 00 6
ADESKO JANELLE M
2200 COUNTRY COTTAGE CT
LAS VEGAS NV 89117

237 331 17 00 9
ADVM INVESTMENTS LLC
1369 ALLENFORD AV
LOS ANGELES CA 90049

474 082 09 00 0
AERO ENERGY LLC
125 E JEFFERSON ST
SYRACRUSE NY 13202

346 100 05 00 5
ALLEN PETER B
P O BOX 3095
MCALL ID 83638

346 071 30 00 6
ALVIDREZ RICHARD E & MARY M
DEC TRUST
1840 S ANCHOVY AV
SAN PEDRO CA 90732

346 132 34 00 2
ANA PROPERTIES LLC
P O BOX 1510
LA MIRADA CA 90637

474 171 04 00 4
ANTON THOMAS J
P O BOX 2127
BAKERSFIELD CA 93303

345 062 43 00 1
ARCINIEGA HUMBERTO
2979 RANDOLPH ST
HUNTINGTON PARK CA 90255

346 061 21 01 6
AREFIEG TAGHREED LIVING TRUST
19180 REDFORD LN
HUNTINGTON BCH CA 92648-2148

237 192 08 00 0
ARTESIAN COMPANY LTD
901 MONTANA AV # B
SANTA MONICA CA 90403

474 040 02 00 3
ATHERTON LAWRENCE O
1440 WALLACE ST
CLOVIS NM 88101-4770

345 063 18 00 6
BABA GEORGE Y & TOSHI M
REVOCABLE TRUST
5898 S MARY AV
HARRISON ID 83833

345 092 31 00 5
BARRERA CARLOS NOE
QUINTANILLA
7716 MAC ARTHUR BL APT A
OAKLAND CA 94605

346 072 19 00 2
BHANOT SANJIV K & PRIYANKA S
22246 ROUNDUP DR
WALNUT CA 91789

474 021 13 00 6
BLUE PACIFIC HOLDING INC
P O BOX 803022
SANTA CLARITA CA 91380

237 042 03 00 1
BONYNGE LENORE A SEPARATE
PROP REVOCABLE TR
122 ASPEN LAKES DR
HAILEY ID 83333

346 132 01 00 6
BORAK BARBARA TRUST
2832 E LARKHILL DR
WEST COVINA CA 91791-3426

346 072 04 00 8
BOTELLO MARGARITA
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CORONA CA 92883-8102

346 072 20 00 4
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346 132 13 00 1
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ACTON CA 93510

474 160 22 00 6
BRANDEN MICHAEL
PO BOX 12472
MARINA DEL REY CA 90292

474 072 06 00 8
BREWSTER HERB & DORIS LIV TR
465 NE GREYSTONE LP
MOUNTAIN HOME ID 83647-6030

345 092 24 00 5
BROWN DANIEL A
P O BOX 66
CALIF HOT SPG CA 93706

346 132 29 00 8
BRYAN KATHLEEN
8941 BACKUS RD
MOJAVE CA 93501

474 171 09 00 9
BULBUK JOHN
6538 BARRIE CI
BRIGHTON MI 48114-7435

346 041 26 00 6
BULLARD RAYMOND L
509 S BROOKSIDE ST
CENTRALIA IL 62601-3446

474 160 23 00 9
BURNS DEBRA L
715 LAKE LEAVITT RD
SUSANVILLE CA 96130

237 332 20 00 4
BURNS FAMILY TR
6214 W LUJACK WY
RATHDRUM ID 83858

346 021 01 00 7
BURTON JOHN CLIFFORD
162 PROSPECT
SAUSALITO CA 94965

346 021 02 00 0
BURTON TRUST A
162 PROSPECT
SAUSALITO CA 94965

474 040 14 00 8
BUTALA MICHAEL A 2024 TRUST
7556 CODY DR
STANTON CA 90680

474 021 17 02 6
CADABONA BALDOMERO ET AL
3895 KAIA PL
LIHUE HI 96766-9409

237 342 05 00 4
CALEB PROP LLC
7701 JENICA RD
BAKERSFIELD CA 93314

237 091 04 00 2
CALIFORNIA PORTLAND CEMENT CO
2025 E FINANCIAL WY
GLENDORA CA 91741-4692

346 120 37 00 4
CALIFORNIA PORTLAND CEMENT CO
PO BOX 371534
LAS VEGAS NV 89137

237 042 01 00 5
CALPORTLAND CO
PO BOX 371534
LAS VEGAS NV 89137

346 072 07 00 7
CAPALAD LEONARDO & CECILIA
329 ROXAS BLVD

237 054 37 00 7
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P O BOX 9273
DEDEDO GU 96912

237 342 03 00 8
CARLSON LIVING TR
2212 VIA ALAMITOS ST
PALOS VERDE EST CA 90274

474 171 33 00 8
CARSON HELEN
30352 GULF STREAM DR
CANYON LAKE CA 92587-7472

346 090 32 00 1
CASTRO MALDONADO FAMILY TRUST
845 ARCHWOOD PL
ALTADENA CA 91001

237 053 12 00 7
CHACON LEONARDO & AGRIPINA TR
28832 LEAH CI
RANCHO PLS VERD CA 90275

346 041 03 00 9
CHANDAR ROBERTS LLC
3050 AVENIDA ENCINAS STE 350
CARLSBAD CA 92008

474 021 02 00 4
CHANG JOHN
16569 HUTCHISON RD
ODESSA FL 33556

474 081 20 00 4
CHAPMAN GEORGE 2018 FAM TR
10216 MOUNTAIR AV
TUJUNGA CA 91042

474 220 13 00 7
CHAU ALEX & ALYSSA LY
30066 CAMBRIGDE AV
CASTAIC CA 91384

474 082 07 00 4
CHAU FAM TR
8568 HARRISON WY
BUENA PARK CA 90620-3813

474 021 10 00 7
CHEN SHU LIEN
5299 ALTON PW
IRVINE CA 92604

474 171 13 00 0
CHEN YUEH CHIAO
10024 VALLEY BL # 205
EL MONTE CA 91731-1702

345 063 01 00 6
CHUNG DAL & HAE CHUNG TRUST
5329 TOPEKA DR
TARZANA CA 91356

345 063 27 00 2
CHURCHILL CAROLYN F TRUST
1108 TERRITORIES DR
EDMOND OK 73034-2614

237 042 05 00 7
CITY OF LOS ANGELES D W P
P O BOX 51111 RM 633
LOS ANGELES CA 90051-0100

237 042 21 00 3
CITY OF LOS ANGELES D W P
PO BOX 51111 RM 633
LOS ANGELES CA 90051-5700

345 062 55 00 6
CITY OF LOS ANGELES D W P
P O BOX 51111
LOS ANGELES CA 90051-5700

345 063 14 00 4
CITY OF LOS ANGELES D W P
111 N HOPE ST
LOS ANGELES CA 90012-2607

345 063 37 00 1
CITY OF LOS ANGELES D W P
PO BOX 51111
LOS ANGELES CA 90051-5700

345 061 04 00 1
CITY OF LOS ANGELES DWP
PO BOX 51111
LOS ANGELES CA 90051-5700

237 093 03 00 3
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ORANGE CA 92869

237 093 50 00 9
CK HILLS LIVING TRUST
16401 ORANGEWIND LN
RIVERSIDE CA 92503-6628

237 332 13 00 4
CLEMMER JAMES D
1717 SAN JUAN CAPISTRANO
SIERRA VISTA AZ 85635

474 071 22 00 7
COMEAU L RENEE & TERRY D
GULDEN TR
1201 VIRGINIA WY
LA JOLLA CA 92037

237 332 12 00 1
COOLEY SCOTT M 1997 SEPARATE
PROPERTY TRUST
15900 KENNEDY RD
LOS GATOS CA 95032

346 100 04 00 2
COOLEY SCOTT M SEP PROPERTY
TRUST
15900 KENNEDY RD
LOS GATOS CA 95032

346 120 06 00 4
CORDA BURTON TRUST
162 PROSPECT AV
SAUSALITO CA 94965

474 040 27 00 6
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346 132 31 00 3
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2430 S SALTA ST
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346 071 09 00 6
CORTINEZ MICHAEL JOSEPH
785 TUCKER RD STE G115
TEHACHAPI CA 93561

237 342 04 00 1
CPP IMAGE SYSTEMS LLC
6975 WYNDHAM HILL DR
RIVERSIDE CA 92506

345 062 22 00 0
CRUZ FERMIN M
1008 SANDIA AV
LA PUENTE CA 91746

237 341 25 00 5
CURTIN FAMILY TRUST
19242 HAMLIN ST U 6
RESEDA CA 91335-5807

346 061 39 02 8
CUSTER FAMILY TRUST
11754 ENCINO AV
GRANADA HILLS CA 91344

237 342 01 00 2
CWLP LLC
108 S HOLLY ST
COPPELL TX 75019

346 072 17 00 6
DAMASO ROMULO F & DELORES G
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HENDERSON NV 89015-5962

345 091 18 00 1
DANO EFREN ET AL
5111 ROLLING FIELD CT
ANTELOPE CA 95843

474 190 18 00 4
DAVIS JEFFREY L & VICKI L
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237 093 06 00 2
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474 180 14 00 9
DE LEON FAMILY TRUST
721 VERSAILLES PW
OSWEGO IL 60543

346 081 12 00 7
DEANDA TR
18735 NADAL ST
SANTA CLAIRTA CA 91351

474 021 11 00 0
DISHEROON JOHN R LIVING TRUST
3006 MCNIEL AV APT 50
WICHITA FALLS TX 76309-4939

345 092 21 00 6
DL INVESTORS 1 LLC
450 ANTHONY TL
NORTHBROOK IL 60062

474 021 07 00 9
DONOR MICHAEL B
13650 FIDDLESTICKS BL
FORT MYERS FL 33912-0312

346 132 21 00 4
DORIA LEONIDA T
7603 GOODE ST
SAN DIEGO CA 92139-4001

346 090 31 00 8
DOUTRE ANN K TR
3 CHURCHILL CT
WESTFORD MA 01886

346 132 06 00 1
DOWNS DARRELL KENNETH II
353 GRACIOUS WY
HENDERSON NV 89011

474 071 20 00 1
DURAN RAFAEL
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346 072 28 00 8
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BOISE ID 83713-5002

345 062 44 00 4
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8301 JOSHUA LN
MOJAVE CA 93501-7228

237 054 17 00 9
EDWARDS SANBORN LAND HOLDINGS LLC
9480 GATEWAY DR STE 201
RENO NV 89521

474 071 26 00 9
ELKETTANEH ABDO
155 BALLIOL STREET SUITE#1201

346 081 03 00 1
ELLIS FAMILY TRUST
200 MANOR CT B
WINDSOR CO 80550-5808

346 072 24 00 6
EMAMI DARA
12166 METRIC BL APT 3004
AUSTIN TX 78758

346 071 31 00 9
ENXCO DEV CORP
15445 INNOVATION DR
SAN DIEGO CA 92128-3432

474 052 14 00 5
ENXCO DEV CORP
PO BOX 504080
SAND DIEGO CA 92150-4080

474 172 06 00 7
ENXCO DEV CORP
5000 EXECUTIVE PW STE 140
SAN RAMON CA 94583-4342

474 040 12 00 2
ENXCO SERVICES CORP
15445 INNOVATION DR
SAN DIEGO CA 92128-3432

474 160 04 00 4
EQUITY TRUST COMPANY CUST FBO CLARK CAROLYN
8268 S SICILY CT
AURORA CO 80016

345 091 19 00 4
ESCRIN OSMUNDO A & ERLINDA T
6043 JOAQUIN MURIETA AV #D
NEWARK CA 94560

345 062 23 00 3
ESREY DENISE L
950 MAIDU AV
NEVADA CITY CA 95959-8698

237 331 14 00 0
FAIRGRIEVE WILLIAM T & RHONDA S TR
2552 E ALASKA AV
PORT ORCHARD WA 98366-8213

474 052 12 00 9
FARZAN MAHNAZ KEYVANJAH
161 CHERRY TREE LN
MIDDLETOWN NJ 07748-1813

474 052 28 00 6
FAUSTO BENJAMIN R ET AL
3124 GUILFORD DR
WALDORF MD 20602

345 062 16 00 3
FIET JOSEPH & JEAN FAMILY TRUST
762 W H ST
ONTARIO CA 91762-2633

474 220 18 00 2
FISHER MITCH & KRISTY FAMILY TRUST
17445 FLANDERS ST
GRANADA HILLS CA 91344

474 220 20 00 7
FISHER MITCH & KRISTY FAMILY TRUST
17445 FLANDERS ST
GRANDA HILLS CA 91344

474 040 21 00 8
FLANAGAN JOHN P TRUST
P O BOX 7067
CARMEL CA 93921

474 071 14 00 4
FOISY MICHAEL & JANE FAMILY TRUST
5960 LONG ACRES CT
FAIR OAKS CA 95628

237 054 32 00 2
FRANK JAMES JR
2201 BAXTER LANE # 10852

346 072 30 00 3
FRAZEUR FAMILY TRUST
1520 SOUTH CT APT A
GARDNERVILLE NV 89410-4134

345 062 21 00 7
FREEMAN RONAL S & LYNN M
1013 HARBOR BL
OXNARD CA 93035-1131

474 083 06 00 8
FRIELING DAVID & DIANA
PO BOX 2626
TEHACHAPI CA 93584

474 052 10 00 3
FRISCO PAULINE REV TRUST
3140 E HARDING ST
LONG BEACH CA 90805

474 052 05 00 9
FUENTES RUDY BLADIMIR & FLORIDALMA A V LOPEZ
240 5 W W FLORENCE AV APT 5
LOS ANGELES CA 90003

346 072 26 00 2
FUKUSHIMA REVOCABLE LIVING TRUST
946 COBBLE SHORES DR
SACRAMENTO CA 95831-4312

474 200 05 00 8
GALAPON JAIME & EVANGELINA ET AL
43312 22NDST W
LANCASTER CA 93536

346 090 39 00 2
GALEON ORLANDO ET AL
94-1085 HINA ST
WAIPAHU OAHU HI 96797

237 054 18 00 2
GARCIA LUIS & SILVERIA
P O BOX 149
RUNNING SPRINGS CA 92382

474 082 06 00 1
GARCIA ROSA ELBA
705 E 56TH ST
LOS ANGELES CA 90011

474 171 32 00 5
GARDNER EVAN L
19465 MARQUITA CT
TEHACHAPI CA 93561

346 072 25 00 9
GARIBAY MIGUEL ET AL
10288 CHURCH ST
RNCHO CUCAMONGA CA 91730-3011

237 093 04 00 6
GELASIO ALFRED I & NORA D
309 SYCAMORE ST
PACIFICA CA 94044

345 092 22 00 9
GENDY MEIRI
9796 ALTADENA ST
LAS VEGAS NV 89183

346 132 14 00 4
GILBERT MARILYN J
888 WEST MARSHALL BL
SN BERNARDINO CA 92405

346 120 17 00 6
GILMOUR PIKE ENTERPRISES INC
P O BOX 232
CASTAIC CA 91310

474 160 26 00 8
GM GABRYCH FAMILY LTD PTP
2006 OLD HIGHWAY 395
FALLBROOK CA 92028-8816

474 040 13 00 5
GOMEZ JOSE J DURAN
11008 MYRTLE AV
LAMONT CA 93241

346 072 12 00 1
GONZALEZ LIGIA E
1258 W ROSAMOND BL # 41
ROSAMOND CA 93560

237 341 19 00 8
GREATER PACIFIC HOLDINGS LTD
1849 KINNELOA MESA RD
PASADENA CA 91107

474 190 17 00 1
GREEN ROBERT K & MARIA T
1342 164TH ST # 1
GARDENA CA 90247

474 081 15 00 0
GREENE GORDON G & SHIRLEY J
2706 PALATINE AV
YAKIMA WA 98902-3779

346 011 08 00 5
GUEM CHRISTIAN & PATRICIA A
2737 SE HELMS AV
PT ST LUCIE FL 34952

237 341 27 00 1
GUERRERO LUZVIMINDA S
PO BOX 9363
DEDEDO GU 96912-0363

237 341 18 00 5
GUMBISH ANTHONY M & TRACY R
57560 29 PALMS HW
YUCCA VALLEY CA 92284-2934

346 050 27 00 5
GUTSCHOW FAMILY TRUST
10679 EL ADELANTE
FOUNTAIN VALLEY CA 92708

237 331 11 00 1
HALCROW RONALD B & DEBRA K
24939 HIGHSPRING AV
NEWHALL CA 91321-3461

346 090 06 00 6
HALE MARJORIE
7792 LEDON WY
MIDWAY CITY CA 92655

474 021 03 00 7
HAN SEUNG HOON
1411 E ALTADENA DR
ALTADENA CA 91001-1826

474 072 05 00 5
HATCHER FAMILY TR
3027 EMSGLEN LN
ARNOLD MO 63010

346 131 03 00 5
HAU BETTY
301 RUSSELL AV
MONTEREY PARK CA 91755

474 060 41 00 2
HAWKINS DONALD MARK
109 SMART CT
ENCINITAS CA 92024-2934

345 062 14 00 7
HAYLING LINA BELLA P
11 SUNRISE CI
CLINTON NJ 08809

474 190 36 00 6
HENDERSON FRANK D
3010 CONCORD CT
MARINA CA 93933-4003

237 054 16 00 6
HERNANDEZ DAVID & ENGRACIA
FAM TR
4405 SURITA ST
SACRAMENTO CA 93550

474 160 11 00 4
HERNANDEZ VICENTE L & LO
31441 SANTA MARGARITA PW STE
A313
RANCHO SANTA MA CA 92688-1835

474 010 31 00 8
HERRMANN FAMILY TRUST
PO BOX 2469
DANVILLE CA 94526-7469

474 040 28 00 9
HIGA JULIE D
437 N 16TH ST
MONTEBELLO CA 90640

237 342 14 00 0
HIGUCHI DEAN R
4518 PASEO DE LAS TORTUGA
TORRANCE CA 90505-6332

474 171 12 00 7
HILL GORDON STUART
1530 WINDSHORE WY
OXNARD CA 93035-1401

474 190 19 00 7
HOANG PHAN & NANCY
8315 DUCOR AV
WEST HILLS CA 91304

346 072 16 00 3
HOFFMAN FAMILY REVOCABLE TRUST
20934 DUMETZ RD
WOODLAND HILS CA 91364-4527

345 100 02 00 9
HOLLIDAY ROCK CO INC
1401 N BENSON AV
UPLAND CA 91786

474 010 33 00 4
HONG CHANG-ZERN ET AL
12421 SALMON RIVER RD
SAN DIEGO CA 92129

237 342 12 00 4
HUGGINS TRACY A
675 W CASA MIRAGE DR
CASA GRANDE AZ 85122-6506

474 160 21 00 3
HUGHES REBECCA R 2017 TR
219 S ROSE ST
LODI CA 95240-3435

345 063 24 00 3
HUMPHREY JAMES M & CHRISTINE
1257 W 26TH PL
SAN PEDRO CA 90731-5605

474 083 05 00 5
HUNG TRAN TIEN
1438 E VALENCIA DR
FULLERTON CA 92831-4733

345 091 04 00 0
I R FINANCIAL CORP
29732 VIA LAS CHACRAS
TEMECULA CA 92591

346 132 04 00 5
ICHIROH 2018 TRUST
P O BOX 56867
SHERMAN OAKS CA 91413-6867

237 342 06 00 7
IKEDA FAMILY 1997 TRUST
17816 MANHATTAN ST
TORRANCE CA 90504

474 071 13 00 1
IMGRUND JAHNSON MORRISON
415 E 2ND ST APT 12
TUSTIN OR 92780

474 180 06 00 6
INGERICK EDWARD O
403 BAILEY RD
W HENRIETTA NY 14586

474 180 07 00 9
IPPOLITO GIOVANNI & VLACANCICH TANYA
15430 POWELLS COVE BL
WHITESTONE NY 11357-1330

346 071 28 00 1
ISAAC HANY L
14920 ASTORIA ST APT 311
SYLMAR CA 91342

474 072 08 00 4
ISGRIG SYMANTHA
722 MOUNTAIN RD
MESQUITE NV 89027-3209

474 022 12 00 0
JAMES LISA E REV TR
220 E VALERIO ST APT 2
SANTA BARBARA CA 93101-1936

474 081 24 00 6
JAMES THOMAS D
1610 E WASHINGTON AV
COTTAGE GROVE OR 97424-2265

474 180 11 00 0
JAMESON W DONALD
2294 GRAND AV
CLAREMONT CA 91711

346 072 21 00 7
JARVIS KATHERINE C
33902 DESERT RD
ACTON CA 93510-2819

474 171 16 00 9
JEFFERS SCOTT
4962 LAGO VISTA WY
PARADISE CA 95969

346 072 06 00 4
JIMENEZ ENRIQUE U & VIOLETA R
P O BOX 803
KILAUEA HI 96754

474 081 14 00 7
JOHNSON DANIEL
31830 WINDRUSH RD
AQUA DULCE CA 91390

474 171 18 00 5
KALRA HIRA LAL & NEETA
5936 LEMP AV
NO HOLLYWOOD CA 91601

474 190 13 00 9
KAPLAN FAMILY TR
533 SPOLETO DR
PCFIC PALSADS CA 90272

474 171 17 00 2
KAPLAN LAWRENCE E
P O BOX 6367
ALTADENA CA 91003-6367

346 132 02 00 9
KARCZEWSKI MACIEJ O &
KARCZEWSKA MARZENNA T
PO BOX 56867
SHERMAN OAKS CA 91413-1867

345 092 35 00 7
KARRIS PROPERTIES INC
42263 W 50TH ST # 107
QUARTZ HILL CA 93536

346 072 29 00 1
KEELER MATTHEW & BARKUS SHAREE
4830 STETSON AV
ROSAMOND CA 93560

474 082 05 00 8
KELLEY JACQUELINE M
P O BOX 441164
SOMERVILLE MA 02144

474 052 07 00 5
KEMBLE MARY
P O BOX 2212
ROSAMOND CA 93560

474 171 08 00 6
KERMODE RALPH D
25101 BEAR VALLEY RD PMB 280
TEHACHAPI CA 93561-8311

474 171 25 00 5
KHUMAR DHARMENDRA & KANT GUNJAN
703 WINDSOR RD
COPPELL TX 75019

237 331 22 00 3
KL INVS LLC
200 VALLEY BL
TEHACHAPI CA 93561

474 190 22 00 5
KLEINKRAMER PAUL R & JANE L
129 N GILL RD
EXETER CA 93221

474 180 15 00 2
KOCH ROBERT
40514 W 90TH ST
PALMDALE CA 93551

474 171 07 00 3
KOREAN GOSPEL BROADCASTING CO
2641 W LA PALMA AV
ANAHEIM CA 92801

345 091 14 00 9
KRISTAN RAMEL TRUST
501 GALER PL
GLENDALE CA 91206-3435

474 171 34 00 1
KURTZ JAMES L & DOLLIE D
PO BOX 27911
LAS VEGAS NV 89126-1911

346 011 14 00 2
KWAK FAMILY TRUST
17150 SAN PEDRO CI
FOUNTAIN VALLEY CA 92708

345 062 51 00 4
L A CITY OF
PO BOX 51111 # 1031
LOS ANGELES CA 90051-5700

345 062 54 00 3
L A CITY OF
PO BOX 51111
LOS ANGELES CA 90051-0100

345 063 17 00 3
LAITAN RALPH B & ROSALINA M
4444 BEL AIRE DR
LA CANADA FLINT CA 91011-3317

474 010 29 00 3
LE DUC SONIA S & LARRY V
11741 115TH ST
ROSAMOND CA 93560

474 180 10 00 7
LE HIEN & BRIGITTE & SZTO V
234 CHAHYGA CI
LOUDON TN 37774-2827

346 132 03 00 2
LE TRUC NGUYEN THU LIVING TRUST
PO BOX 56867
SHERMAN OAKS CA 91413-6867

346 072 13 00 4
LEAHY DANA JO
3221 SOLSTICE LN
NEWBERG OR 97132-2867

474 072 10 00 9
LEBOW MARCEL
511 ARENA ST
EL SEGUNDO CA 90245

346 081 06 00 0
LEE FAMILY LIVING TRUST
580 MAIN ST 209
ALHAMBRA CA 91801-3369

346 132 05 00 8
LEE FAMILY LIVING TRUST
1411 W DAHLIA ST
LA HABRA CA 90631-9282

474 072 09 00 7
LIM ANTHONY
1250 WEST KILDARE ST
LANCASTER CA 93534

237 341 24 00 2
LITMER ROBERT & LAURIE TR
19461 N 96TH PL
SCOTTSDALE AZ 85255

346 081 05 00 7
LLENO JOCELYN
481 RIVER VIEW DR
SAN JOSE CA 95111

474 160 16 00 9
LMR PROP L P
1551 15TH ST
SANTA MONICA CA 90404-3304

237 055 14 00 7
LOH INV L P
5625 RUFFIN RD # 210
SAN DIEGO CA 92123-4446

474 190 43 00 6
LOPEZ ARTHUR
1104 CACIQUE ST
SANTA BARBARA CA 93103-3407

346 072 01 00 9
LOST PROP LLC
1704 W SUNSET BL
SAINT GEORGE UT 84770-6504

474 171 27 00 1
M I S REFRIGERATION CORP
894 COTTONWOOD ST
CORONA CA 92879-3062

345 011 33 02 8
MADDEN REVOCABLE TR
3036 VIA BUENA
PALOS VRD EST CA 90274

237 331 18 00 2
MALAKIAN ALBERT
10728 MC VINE AV
SUNLAND CA 91040

474 200 27 00 2
MALIK IDA M
10219 E 219TH AVENUE CT # 26
BONNEY LAKE WA 98391-4033

346 072 03 00 5
MANAOIS ROSITA
2076 PUU KAA ST
KAPAA HI 96746-2338

346 072 18 00 9
MANAOIS ROSITA
PO BOX 80414
SAN DIEGO CA 92138-0414

474 171 20 00 0
MARCOS TEODORO T & NYMPHA L
2420 E 4TH ST APT 14
LONG BEACH CA 90814-3479

345 063 08 00 7
MARKS DEBRA J
4930 SPARKS AV
SAN DIEGO CA 92110

345 011 02 00 0
MARSH N C & SAUNDERS TR
10053 NW 47TH ST
CORAL SPRINGS FL 33076-2495

474 172 11 00 1
MASTAN LEONA D LIV REV TR
6882 S WILD ROSE LN
ATOKA OK 74525

474 172 01 00 2
MASTAN LEONA D TR
6882 S WILD ROSE LN
ATOKA OK 74525

474 171 10 00 1
MATHESON FAM TRUST 2014
7470 ADAMS ST
VENTURA CA 93003

345 063 31 00 3
MATIENZO MARIA L LIVING TRUST
P O BOX 56867
SHERMAN OAKS CA 91413-6867

346 061 13 00 4
MAYFIELD ROSIE M TRUST
2800 PLAZA DEL AMO #443
TORRANCE CA 90503-8907

474 171 19 00 8
MAZZEI IRVIN CHARLES JR
562 E HILLCREST AV
RIDGECREST CA 93555

346 072 27 00 5
MC BROOM MARK N
6911 STOCKTON DR
KNOXVILLE TN 37909-2632

345 061 05 00 4
MC FARLAND WINDMILL PROP LLC
717 VERNON WY
BURLINGAME CA 94010-2819

474 040 18 00 0
MC NEIL DARWIN P & DEBRA L
11715 TEH WILLOW SPGS RD
ROSAMOND CA 93560

474 171 05 00 7
MC NEIL DOUGLAS W
3035 MARY ST
RIVERSIDE CA 92506

474 160 14 00 3
MEDEIROS JULIANNA L
9515 YUCCA HILLS RD
SANTA CLARITA CA 91390-4529

345 011 35 02 4
MILIRAS FAMILY TRUST
155 N HAMILTON DR # 202
BEVERLY HILLS CA 90211-2290

237 055 03 00 5
MOJAVE SECTION 28 LLC
39 SW 106TH PL
PORTLAND OR 97225

474 172 13 00 7
MOKRI TRUST
17088 LON RD
LOS GATOS CA 95033-8510

345 100 03 00 2
MOLANO WILFREDO N & HELEN V
6799 LEWIS CLARK TR
CINCINNATI OH 45241

474 040 25 00 0
MOORE FRANK W & FRANCES ANN
2398 VIENNA PW
DAYTON OH 45459

346 132 32 00 6
MORTENSON ROGER
8941 BACKUS RD
MOJAVE CA 93501

346 132 30 00 0
MORTENSON ROGER LEE
8941 BACKUS RD
MOJAVE CA 93501

346 072 10 00 5
MUNN ROBERT & RENATE REV TR
7321 FALL RIVER CI
LAS VEGAS NV 89129

346 131 07 00 7
MURATA KEN & YASUDA JAMES S
1070 GLENVIEW TL
MONTEREY PARK CA 91754

474 071 19 00 9
MURILLO GLORIA
11893 TRURO AV APT 6
HAWTHORNE CA 90250

474 071 27 00 2
NAVARRO GEORGE D ET AL
2437 CORINTH AV APT 110
LOS ANGELES CA 90064

346 072 11 00 8
NESHEIWAT FAMILY TRUST
3915 INLET ISLE DR
CORONA DEL MAR CA 92625

346 090 04 00 0
NGUYEN ANTHONY
11105 PETAL AV
FOUNTAIN VALLEY CA 92708

346 090 05 00 3
NGUYEN ANTHONY C
11105 PETAL AV
FOUNTAIN VALLEY CA 92708

237 331 21 00 0
NGUYEN FRANK TUAN & HUONG
5749 LOS AMIGOS ST
BUENA PARK CA 90620

345 063 39 00 7
NIEBRES FEDERICO JR & RALINA
21781 TEGLEY
MISSION VIEJO CA 92692-3051

237 410 11 00 7
NISHANIAN 2011 FAMILY TRUST
1919 HARVARD AV
CLOVIS CA 93612

346 061 62 02 4
O CONNELL RAYMOND R JR &
CHERYL A
85438 CAMPANA AV
INDIO CA 92203-2985

474 072 07 00 1
O CONNOR MARILOU P
PO BOX 4484 AAFB
YIGO GU 96929-4484

237 053 04 01 3
OAK CREEK T M CO LLC
11512 EL CAMINO REAL STE 370
SAN DIEGO CA 92130-3025

237 331 19 00 5
OAK INVS LLC
PO BOX 2016
BEVERLY HILLS CA 90213-2016

346 050 25 00 9
OAK INVS LLC
P O BOX 2016
BEVERLY HILLS CA 90213

237 053 14 00 3
OASIS LAND HOLDINGS LLC
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

474 052 21 00 5
ORTEGA ARTURO
11437 OXNARD ST # 1
NORTH HOLLYWOOD CA 91606

346 132 33 00 9
ORTIZ DAVID
P O BOX 2637
RAMONA CA 92065

474 171 24 00 2
OSBORNE FAMILY TRUST
19203 PRICETOWN AV
CARSON CA 90746

474 021 16 02 3
OSEE WILSON YONG
12629 EPPS FIELD RD
DALLAS TX 75234-6205

346 090 38 00 9
PARAOAN BERNARDO &
CONSOLACION
4206 BOUGAINVILLE AV APT C
KAPOLEI HI 96707-3504

474 172 12 00 4
PARAVATO FRANK
P O BOX 2618
ROSAMOND CA 93560

237 332 14 00 7
PARK JAE GYU & BI KYUNG
P O BOX 501568
SAIPAN MP 96950

474 200 13 00 1
PAVER WILLIAM R & JOAN M
130 WINDSOR PARK DR APT C214
CAROL STREAM IL 60188-1998

345 011 32 02 5
PERALTA AGUSTIN JOHN &
LORRAINE
23031 CABRILLO
TORRANCE CA 90501

237 053 08 00 6
PETRO LOCK INC
44604 LOWTREE AV
LANCASTER CA 93534-2922

345 011 38 00 5
PHAM VO BETTYE
3657 LISBON CT
SAN JOSE CA 95132-1315

474 081 23 00 3
PICOU DWIGHT A SR & URSULA
CABRINI
480 TIMBER RIDGE DR
HIGHLAND TWP MI 48357

474 010 09 00 5
POINT WILD LLC
P O BOX 372448
SATELLITE BEACH FL 32937

474 220 05 00 4
POLLOCK MARGARET
PO BOX 2262
MOUNTAIN HOME AR 72654-2264

474 190 33 00 7
PORRAS BETTY
2254 POSADA CT
CORONA CA 92879-8201

474 052 17 00 4
PRELEWICZ DONALD W & RUTH J
4181 N COVE RD
GOLDEN VALLEY AZ 86413

474 082 01 00 6
PROFESSIONAL EQUITIES IN
23201 MILL CREEK DR FLR 3
LAGUNA HILLS CA 92653-1692

474 040 23 00 4
QUANTUM MIRACLES SPENDTHRIFT TRUST
202 VERITAS CT
SAN RAMON CA 94582

346 072 05 00 1
QUIBAN VERONICO B & MARIETTA E
BLOCK 25 LOT 6 DUHAT ST

346 072 02 00 2
QUINONEZ CARLOS & ANGELA E
1187 HUCKLEBERRY LN
SAN JACINTO CA 92582

474 190 10 00 0
QUINONEZ JAIME
260 N LYON AV SP 168
HEMET CA 92543-3832

237 341 26 00 8
QUIROZ INEZ
3900 W TULARE AV APT 19
VISALIA CA 93277-1739

474 171 22 00 6
R FAMILY TRUST
21218 HIGHLINE RD
TEHACHAPI CA 93561

474 171 06 00 0
RADER FAMILY TR
2333 WEST AVENUE K
LANCASTER CA 93534

474 071 23 00 0
RARICK TERRY & KAREN TRUST
262 ELM AV
CHULA VISTA CA 91910-2909

474 052 16 00 1
REED SUE ET AL
16256 E AVENUE G
LANCASTER CA 93535-8889

474 052 18 00 7
REED SUE ET AL
3640 MYERS ST
OROVILLE CA 95966-6657

346 061 33 00 2
REICHENTHAL PEGGY LIVING TRUST
20630 ADAM CI
YORBA LINDA CA 92886-4599

474 051 03 00 6
REYNOLDS LIVING TRUST
17290 LAMPLIGHT DR
MONUMENT CO 80132-7405

346 021 03 00 3
RIDGELINE MATERIALS LLC
8941 BACKUS RD
MOJAVE CA 93501

474 021 18 01 0
RITTAMEL FRANCES A 1993 TR
18535 QUAIL RIDGE RD
CALIENTE CA 93518-4408

474 052 25 00 7
RIVERA ELIEZEL
202 E HOUSTON ST APT 802
SAN ANTONIO TX 78205-1846

474 171 02 00 8
RODRIGUEZ STEVEN C
2761 W NEWGROVE ST
LANCASTER CA 93536

237 331 20 00 7
ROGERS GLEN A
5030 LANDIS AV
BALDWIN PARK CA 91706

474 052 04 00 6
ROJAS THERESA M REV TRUST
13686 PHILLIPPI AV
SYLMAR CA 91342

346 071 13 00 7
ROSS ROSALIND R
2010 WESTWIND CT
ROSAMOND CA 93560

474 021 19 00 4
RWM REVOCABLE TRUST
P O BOX 93
SUTTONS BAY MI 49682

474 071 25 00 6
SAENZ LORNA FAMILY TRUST
227 E BURBANK BL U D
BURBANK CA 91502

474 083 07 00 1
SAGEBIEL FAMILY TR
9906 OWENSMOUTH AV # 5
CHATSWORTH CA 91311

345 063 35 00 5
SAKS BARRY E
422 CHESTNUT AV
LONG BEACH CA 90802

474 171 03 00 1
SALAZAR ROMUALDO F & EDYTH
14 NAIC ST CARMEL III SUBD

345 091 01 00 1
SANCHEZ ALFONSO
5394 BACKUS RD
MOJAVE CA 93501-7203

346 050 05 00 1
SANCHEZ MICHAEL
2401 FLOWER ST
WASCO CA 93280

474 072 11 00 2
SANDOVAL ERIC
7316 CAMELIA AV
NORTH HOLLYWOOD CA 91605

474 160 03 00 1
SANNEMAN RAYMOND E & DOREEN TR
7201 PILOT CT
SPARKS NV 89436-5425

345 063 25 00 6
SARDEA EDITA LAITAN REVOCABLE LIVING TRUST
PO BOX 6961

345 063 26 00 9
SARDEA ROGELIO A & EDITA L
PO BOX 6961
TAMUNING GU 96931-6961

474 083 02 00 6
SCANLAN JAMES J & MARGARET M
44239 165TH STREET EAST
LANCASTER CA 93535

474 180 04 00 0
SCHAPPI ERNEST H & JO ANN M TR
3332 BRITTANY LN
LANCASTER CA 93536-4833

474 200 26 00 9
SCHUMAN BARRY HOWARD REV TRUST
69130 GERALD FORD DR U 32
CATHEDRAL CITY CA 92234

474 081 19 00 2
SCHUNEMAN JOHN D & PYONG SUN
2318 WEST BROADWAY
ANAHEIM CA 92804

474 081 13 00 4
SECONDHAND ANIMALS
PO BOX 1993
ROSAMOND CA 93560-1993

474 190 32 00 4
SEIZED PROP
13312 RANCHERO RD # 430
OAK HILLS CA 92344-4812

346 072 22 00 0
SELIS LAURA
2461 A ST
SAN DIEGO CA 92102

346 072 08 00 0
SESAR REVOCABLE TRUST
15735 ADDISON ST
ENCINO CA 91436

346 081 07 00 3
SHAYNE STEPHANIE LIVING TRUST
249 MARKS ST
HENDERSON NV 89074-8044

237 342 11 00 1
SILVERMAN FAMILY TR
8272 LE CONTE DR
HUNTINGTON BCH CA 92646

474 051 31 00 7
SIMMONS FAMILY TR
4638 BROOKHILL TL
RIVERSIDE CA 92509

237 341 17 00 2
SIMS RONALD E & LINDA L
14027 FAIRWAY WILLOW LN
WINTER GARDEN FL 34787

345 011 01 00 7
SINCLAIR WIND FARMS LLC
76 1000 AEO ST
KAILUA KONA HI 96740-9770

474 190 48 00 1
SLK SEPARATE PROP TRUST OF 1989
4650 N MOORPARK RD
SANTA ROSA VLY CA 93012

346 041 14 00 1
SMITH RORY CLIFFORD
1659 W COLLEGE ST
PULASKI TN 38478-5207

237 055 10 00 5
SOLAR HUB PV LLC
11512 EL CAMINO REAL STE 370
SAN DIEGO CA 92130-3025

474 051 30 00 4
SOU CAL EDISON CO
2244 WALNUT GROVE AV
ROSEMEAD CA 91770

474 071 21 00 4
SOU CAL EDISON CO
2244 WALNUT GROVE
ROSEMEAD CA 91700

474 051 11 00 9
SOUTHERN CALIF EDISON CO
14799 CHESTNUT ST
WESTMINSTER CA 92683

237 331 12 00 4
SPIERER FAMILY TRUST
23432 THORNEWOOD DR
SANTA CLARITA CA 91321

474 190 16 00 8
STAGG JACOB WILLIAM
600 N THE STRAND # 38
OCEANSIDE CA 92054

237 055 13 00 4
STATE OF CALIF
PO BOX 989052
W SACRAMENTO CA 95798

474 010 04 00 0
STERN LEGACY LLC
201 WILSHIRE BL
SANTA MONICA CA 90401

474 021 18 02 9
STRECKER REVOCABLE LIVING TRUST
8845 SW HILLVIEW TR
PORTLAND OR 97225

474 180 03 00 7
STRNAD LIVING TRUST
19509 STAGG ST
RESEDA CA 91335-2353

346 132 16 00 0
TAHMASBI REVOCABLE LIVING TRUST
19313 STARLIGHT DR
TARZANA CA 91356

346 132 11 00 5
TEMPLE FAMILY REVOCABLE TRUST
2430 TRADITIONS LOOP
PASO ROBLES CA 93446-7135

474 040 01 00 0
THIEMAN CONNIE MARIE LILLO
13400 WILLOW OAK CI
GULFPORT MS 39503-5668

474 200 32 00 6
TIVENS DONALD J & M FAMILY TR
PO BOX 36
WOODLAND HILLS CA 91365-0036

237 341 28 00 4
TONG NHIEM & LY HUONG P
PO BOX 2411
LA HABRA CA 90632-2411

474 160 13 00 0
TORQUATO MARCUS G
PO BOX 7019
VAN NUYS CA 91409-7019

474 172 10 00 8
TORRES ALBERTO & LEODOVINA
8306 CORD AV
PICO RIVERA CA 90660-5216

237 093 05 00 9
TURMEZEI DAVID J
PO BOX 191
TEHACHAPI CA 93581

237 093 02 00 0
U S A
1600 PENNSYLVANIA AV NW
WASHINGTON DC 20500

346 081 04 00 4
U S A

237 331 24 00 9
UNDERWOOD NAOMI N
10078 SYCAMORE CANYON RD
MORENO VALLEY CA 92557-1859

237 054 01 00 2
UNION PACIFIC R/R CO
1400 DOUGLAS ST # 1610
OMAHA NE 68179-1610

346 072 09 00 3
UY ROSS SHELLEY S
1326 PAZ ST

237 042 22 00 6
VIOLE FAMILY LLC
241 S WINDSOR BL
LOS ANGELES CA 90004

474 021 20 00 6
WADE BERNARD R TR
1658 SCENIC VIEW DR
SAN LEANDRO CA 94577

474 021 21 00 9
WADE BERNARD R TR
1658 SCENICVIEW DR
SAN LEANDRO CA 94577-5333

346 062 49 00 6
WALDEN WILLIAM RONALD &
MARGARET JUNE TR
11013 OCEAN DR
CULVER CITY CA 90230-4910

345 062 33 00 2
WALTERS BUD
2050 ROAD 150
LAKIN KS 67860-6228

345 011 44 00 2
WAN CHING YI
PO BOX 93
ALVISO CA 95002-0093

346 042 44 00 5
WEBSTER MICHAEL
16525 COTUIT CI
HUNTINGTON BCH CA 92649

237 342 10 00 8
WELCH ILEANA A LIVING TR
6100 N RAINBOW BL
LAS VEGAS NV 89130-1408

474 172 09 00 6
WESTER NATURAL RESOURCES LLC
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

474 190 11 00 3
WESTERN AMERICA SERVICE CORP
TRUST 80445
13743 VENTURA BL STE 290
SHERMAN OAKS CA 91423-3091

346 061 55 00 6
WESTERN NATIONAL RESOURCES
LLC
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

237 370 03 00 3
WESTERN NATRUAL RESOURCES
LLC
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

346 132 24 00 3
WESTERN NATURAL RESOURCE LLC
11455 EL CAMINO RD STE 160
SAN DIEGO CA 92130

346 062 50 00 8
WESTERN NATURAL RESOURCES
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

237 053 09 00 9
WESTERN NATURAL RESOURCES
LLC
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

237 054 39 00 3
WESTERN NATURAL RESOURCES
LLC
11455 EL CAMINO REAL # 160
SAN DIEGO CA 92130

237 054 44 00 7
WESTERN NATURAL RESOURCES
LLC
11455 EI CAMINO REAL STE 160
SAN DIEGO CA 92130

345 062 02 00 2
WESTERN NATURAL RESOURCES
LLC
11455 EL CAMINO REAL 160
SAN DIEGO CA 92130

345 062 39 00 0
WESTERN NATURAL RESOURCES
LLC
11455 EL CAMIO REAL STE 160
SAN DIEGO CA 92130

346 041 16 00 7
WESTERN NATURAL RESOURCES
LLC
11455 EL CAMINO REAL STE 16
SAN DIEGO CA 92130

346 050 36 00 1
WESTERN NATURAL RESOURCES
LLC
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 90034

474 051 25 00 0
WESTERN NATURAL RESOURCES
LLC
11455 EL CAMINO REAL LLC
SAN DIEGO CA 92130

474 071 03 00 2
WESTERN NATURAL RESOURCES LLC
1455 EL CAMINO REL STE 160
SAN DIEGO CA 92130

474 180 08 00 2
WESTERN NATURAL RESOURCES LLC
7339 COLLEGE AV
WHITTIER CA 90602

346 071 22 00 3
WESTERNNATURAL RESOURCE LLC
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

346 012 12 00 3
WESTN NATL RESOURCES LLC
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

346 041 32 00 3
WESTN NATURAL RESOUCES LLC
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

346 050 17 00 6
WESTN NATURAL RESOURCES
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

237 053 02 00 8
WESTN NATURAL RESOURCES LLC
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

237 093 48 00 4
WESTN NATURAL RESOURCES LLC
114550 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

237 093 49 00 7
WESTN NATURAL RESOURCES LLC
11455 EL CMAINO REAL STE 160
SAN DIEGO CA 92130

345 011 31 00 4
WESTN NATURAL RESOURCES LLC
11455 EL CAMINO REAL
SAN DIEGO CA 92130

346 061 47 00 3
WESTN NATURAL RESOURECES LLC
11455 EL CAMINO REAL STE 160
SAN DIEGO CA 92130

474 171 35 00 4
WIDMER HOLDINGS LTD
62 MCKENZIE LAKE PLACE SE

346 100 02 00 6
WIGGINS ADRIENNE K
PO BOX 50322
AUSTIN TX 78763-0322

474 052 06 00 2
WIGGINS BRENT D & MARIA I
13686 PHILLIPPI AV
SYLMAR CA 91342

474 052 20 00 2
WILLIAMS COMMUNICATIONS INC
P O BOX 22067
TULSA OK 74121-2067

474 171 30 00 9
WILLIAMS ROBERT M & JENNIFER LYN
627 REBEL RD
OLD HICKORY TN 37138

237 053 18 00 5
WINDSTAR ENERGY LLC
399 BIG BAY RD
QUEENSBURY NY 12804-7854

237 331 10 00 8
WOODCLIFF INVS INC
19313 STARLIGHT DR
TARZANA CA 91356

346 132 19 00 9
YANG MICHAEL CHAO PING
3839 MICHILLINDA DR
WALNUT CA 91107-5714

346 131 06 00 4
YASUDA JAMES S & MARGARET M LIVING TRUST
1070 GLENVIEW TERRACE
MONTEREY PARK CA 91754

474 180 05 00 3
YAVARI ASADOLLAH
11716 W PICO BL STE 201
LOS ANGELES CA 90064

474 200 35 00 5
YOUNG ANDREW PETER & CICELY TR
8819 NE 12TH AV
SEATTLE WA 98115

345 063 33 00 9
ZUBER REBECCA L
71004 NEERCITY RD
RAINER OR 97048

237 093 10 00 3
110 ACRES MOJAVE TRUST
1134 HYATT AV
WILMINGTON CA 90744

Discovery Solar PV and Storage Project
(PP24408)

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California City Planning Dept
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California City, CA 93515

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Delano, CA 93216

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

City of McFarland
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McFarland, CA 93250

City of Ridgecrest
100 West California Avenue
Ridgecrest, CA 93555

City of Shafter
336 Pacific Avenue
Shafter, CA 93263

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

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

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Wasco, CA 93280

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Independence, CA 93526

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Los Angeles Co Reg Planning Dept
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Los Angeles, CA 90012

San Bernardino Co Planning Dept
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San Luis Obispo Co Planning Dept
Planning and Building
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San Luis Obispo, CA 93408

Santa Barbara Co Resource Mgt Dept
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Santa Barbara, CA 93101

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Visalia, CA 93291

Ventura County RMA Planning Div
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Ventura, CA 93009-1740

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Ridgecrest Field Office
300 South Richmond Road
Ridgecrest, CA 93555

China Lake Naval Weapons Center
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China Lake, CA 93555

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Mission Sustainability Liaison
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Edwards AFB, CA 93524

Eastern Kern Resource Cons Dist.
300 South Richmond Road
Ridgecrest, CA 93555-4436

Environmental Protection Agency
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San Francisco, CA 94105

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5080 California Avenue, Ste 150
Bakersfield, CA 93309-0711

U.S. Army Corps of Engineers
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Santa Clarita, CA 91383-9321

State Air Resources Board
Stationary Resource Division
P.O. Box 2815
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Planning/Land Bank Bldg.
P.O. Box 12616
Fresno, CA 93778

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

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

State Dept of Conservation
Director's Office
715 "P" Street, MS 1900
Sacramento, CA 95814

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

State Mining and Geology Board
715 “P” Street, MS 1909
Sacramento, CA 95814

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Bakersfield - Library
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Bakersfield, CA 93309

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

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

State Dept of Food & Agriculture
1220 "N" Street
Sacramento, CA 95814

California Highway Patrol
Planning & Analysis Division
P.O. Box 942898
Sacramento, CA 94298-0001

State Office of Historical Pres
Attention Susan Stratton
P.O. Box 942896
Sacramento, CA 95296-0001

Integrated Waste Management
P.O. Box 4025, MS #15
Sacramento, CA 95812-4025

State Water Resources Control Board
Division of Drinking Water
Attn: Jesse Dhaliwal, Sr. Sanitary Eng
4925 Commerce Drive, Suite 120
Bakersfield, CA 93309

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

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

State Lands Commission
100 Howe Avenue, Ste 100-South
Sacramento, CA 95825-8202

State Dept of Toxic Substance Control
Environmental Protection Agency
1515 Tollhouse Road
Clovis, CA 93612

Cal Environmental Protection Agency/
Dept of Toxic Substances Control, Reg 1
Attn: Dave Kereazis, Permit Div - CEQA
8800 Cal Center Drive, 2nd Floor
Sacramento, CA 95826

State Dept of Water Resources
San Joaquin Dist.
4201 S Sabodan St
Bakersfield, CA 93313

State Dept of Water Resources
Div. Land & Right-of-Way
P.O. Box 942836
Sacramento, CA 94236

Kern County
Agriculture Department

Kern County Airports Department

County Clerk

Kern County Administrative Officer

Kern County Public Works Department/
Building & Development/Floodplain

Kern County Public Works Department/
Building & Development/Survey

Kern County
Env. Health Services Department

Kern County Fire Dept
Aaron Duncan

Kern County Library/Beale
Local History Room

Kern County Library/Beale
Andie Sullivan

Kern County Museum
3801 Chester Avenue
Bakersfield, CA 93301

Kern County Parks & Recreation

Kern County Sheriff's Dept
Administration

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

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

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

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

Mojave Unified School Dist.
3500 Douglas
Mojave, CA 93501

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

Tehachapi Unified School Dist.
300 S Robinson Street
Tehachapi, CA 93561

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

Local Agency Formation Comm/LAFCO
5300 Lennox Avenue, Suite 303
Bakersfield, CA 93309

Golden Hills Community Serv Dist.
P.O. Box 637
Tehachapi, CA 93581

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

Kern County Water Agency
3200 Rio Mirada Drive
Bakersfield, CA 93308

Tehachapi Parks & Recreation Dist.
P.O. Box 373
Tehachapi, CA 93561

Tehachapi-Cummings Co Water Dist.
P.O. Box 326
Tehachapi, CA 93561

East Kern Air Pollution Control District

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

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

U.S. Army
Attn: Daniel J. Saelens
G3 Force Integration
P.O. Box 105100
Fort Irwin, CA 92310

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

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

U.S. Marine Corps
Command Gen MCIWEST-MCB CamPen
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Box 555010, Bldg 1160, Rm 280
Camp Pendleton, CA 92055-5246

AT&T California
OSP Engineering/Right-of-Way
4901 Ashe Road
Bakersfield, CA 93313

Kern Audubon Society
Attn: Frank Bedard, Chairman
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Bakersfield, CA 93385

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

Center on Race, Poverty
& the Environnent
5901 Christie Avenue, Suit 208
Emeryville, CA 94608

Center on Race, Poverty
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CA Rural Legal Assistance Foundation
1012 Jefferson Street
Delano, CA 93215

Defenders of Wildlife
P.O. Box 401
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California Farm Bureau
2300 River Plaza Drive, NRED
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Mojave, CA 93502

Native American Heritage Council
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18169 Highway 155
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Kern Valley Indian Council
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Sacramento, CA 95814

California High Speed Rail Authority
Central California Regional Office
1111 H Street
Fresno, CA 93721

Yuhaaviatam of San Manuel Nation
Attn: Kristen Tuosto
26569 Community Center Dr
Highland, CA 92346

Twenty-Nine Palms Band of Mission
Indians
Attn: Darrell Mike, Tribal Chairman
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Yuhaaviatam of San Manuel Nation
Attn: Aleandra McCleary, Ph.D.
26569 Community Center Drive
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Tejon Indian Tribe
Attn: Candice Garza
4941 David Road
Bakersfield, CA 93307

Torres Martinez Desert Cahuilla Indians
Attn: Michael Mirelez, Cultural
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Attn: Anthony Madrigal Jr.
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Indians, Cultural Resource Committee
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Ojai, CA, 93024

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Gabe Frausto, Chairman
P.O. Box 40653
Santa Barbara, CA, 93140

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

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Road
Banning, CA, 92220

Morongo Band of Mission Indians
Ann Brierty, THPO
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Violet Walker, Chairperson
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Jordan Joaquin, President
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Quechan Tribe of the Fort Yuma Reservation
Jill McCormick, Hist. Preserv. Officer
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Quechan Tribe of the Fort Yuma Reservation
Manfred Scott, Acting Chairman
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Serrano Nation of Mission Indians
Mark Cochrane, Co-Chairperson
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Serrano Nation of Mission Indians
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U. S. Fish & Wildlife Service
Division of Ecological Services
2800 Cottage Way #W-2605
Sacramento, CA 95825-1846

Federal Communications Comm
18000 Studebaker Road, #660
Cerritos, CA 90701

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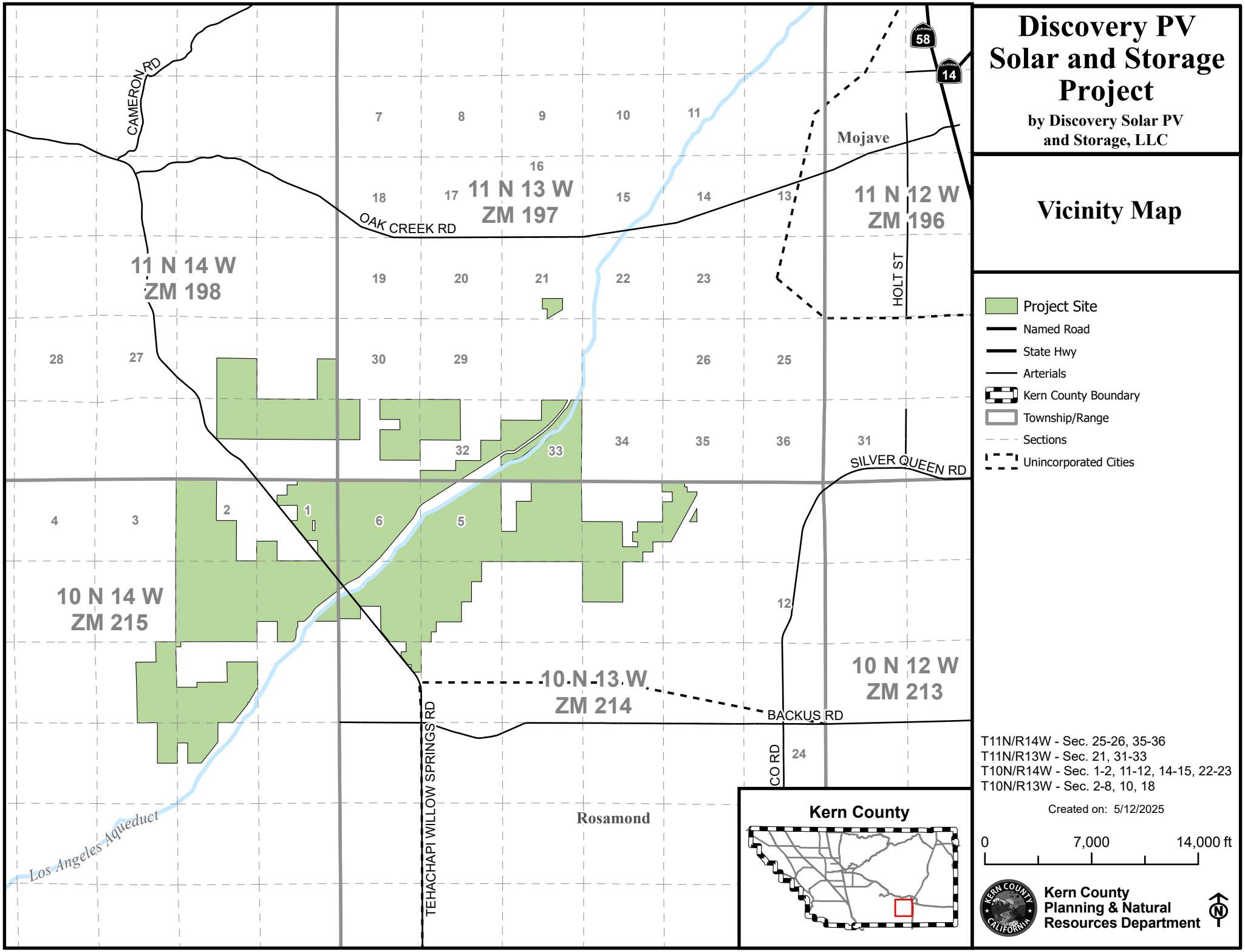
Discovery PV Solar and Storage Project
by Discovery Solar PV and Storage, LLC
Vicinity Map
Project Site
Named Road
State Hwy
Arterials
Kern County Boundary
Township/Range
Sections
Unincorporated Cities
T11N/R14W - Sec. 25-26, 35-36
T11N/R13W - Sec. 21, 31-33
T10N/R14W - Sec. 1-2, 11-12, 14-15, 22-23
T10N/R13W - Sec. 2-8, 10, 18
Created on: 5/12/2025
0
7,000
14,000 ft
Kern County Planning & Natural Resources Department
Kern County
11 N 14 W ZM 198
11 N 13 W ZM 197
11 N 12 W ZM 196
10 N 14 W ZM 215
10 N 13 W ZM 214
10 N 12 W ZM 213
CAMERON RD
OAK CREEK RD
HOLT ST
SILVER QUEEN RD
BACKUS RD
TEHACHAPI WILLOW SPRINGS RD
CO RD
Mojave
Rosamond
Los Angeles Aqueduct
58
14

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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 # 2025071048

Project Title: Discovery Solar PV and Storage Project by Discovery Solar PV and Storage, LLC

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
Cross Streets: Tehachapi Willow Springs Road and LADWP Aqueduct
Zip Code: 93560
Longitude/Latitude (degrees, minutes and seconds): 34 ° 58 ′ 47.10 ″ N / 118 ° 18 ′ 48.82 ″ W
Total Acres: 7,700
Assessor's Parcel No.: 474-060-17; Multiple
Section: Multi
Twp.: Multi
Range: Multi
Base: SBBM
Within 2 Miles: State Hwy #: SR-58
Waterways: LADWP Aqueduct
Airports: Mojave Air and Space Port
Railways: Union Pacific; CAHSR (Future)
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: _____

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 PV MW 1,400
☐ Waste Treatment: Type _____ MGD _____
☐ Hazardous Waste: Type _____
☒ Other: Battery Energy Storage Systems (BESS) - 8 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 Discovery Solar PV and Storage Project is a photovoltaic (PV) solar facility with associated infrastructure necessary to generate up to to 1,400 megawatts (MW) of renewable electrical energy with up to 8 gigawatt-hours (GWh) of energy storage capacity (approximately 1,000 MW) on an approximate 7,700 acre project site, across 473 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), a 230 kilovolt switchyard, up to three 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**".

X	Air Resources Board		Office of Historic Preservation
	Boating & Waterways, Department of		Office of Public School Construction
	California Emergency Management Agency	X	Parks & Recreation, Department of
X	California Highway Patrol		Pesticide Regulation, Department of
X	Caltrans District # 9	X	Public Utilities Commission
X	Caltrans Division of Aeronautics	X	Regional WQCB # Central
X	Caltrans Planning	X	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
X	Conservation, Department of		Santa Monica Mtns. Conservancy
	Corrections, Department of		State Lands Commission
	Delta Protection Commission		SWRCB: Clean Water Grants
	Education, Department of	X	SWRCB: Water Quality
X	Energy Commission		SWRCB: Water Rights
X	Fish & Game Region # Fresno		Tahoe Regional Planning Agency
	Food & Agriculture, Department of	X	Toxic Substances Control, Department of
X	Forestry and Fire Protection, Department of	X	Water Resources, Department of
	General Services, Department of		
	Health Services, Department of		Other:
	Housing & Community Development		Other:
X	Native American Heritage Commission		

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

Starting Date January 28, 2026 Ending Date March 13, 2026

Lead Agency (Complete if applicable):

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

Applicant: Discovery Solar PV and Storage, LLC attn: Simon Day
Address: 11455 El Camino Real, Suite 160
City/State/Zip: San Diego, CA 92130
Phone: 415-404-0807

Signature of Lead Agency Representative: **Date:** 1/28/26

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

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Acronyms and Abbreviations

°F	degree Fahrenheit
µg/m^3	microgram per cubic meter
A	Exclusive Agriculture
A-1	Limited Agriculture
AAQA	ambient air quality analysis
AC	alternating current
ADT	average daily traffic
AF	acre-feet
AFB	Air Force Base
AFY	acre-feet per year
AGL	above ground level
AHJ	Authority Having Jurisdiction
ALUCP	Airport Land Use Compatibility Plan
amsl	above mean sea level
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 Monitoring Plan
AR	Assessment Report
AR5	Fifth Assessment Report
AR6	Sixth Assessment Report
ATCM	Airborne Toxic Control Measures
AVEK	Antelope Valley-East Kern Water Agency
AVGB	Antelope Valley Groundwater Basin
BBI	Bloom Biological, Inc.
BESS	battery energy storage system
bgs	below ground surface

BIOS	Biogeographic and Information Observation System
BLM	Bureau of Land Management
BMP	best management practice
BNSF	Burlington Northern and Santa Fe Railway
BP	before present
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal NAGPRA	California Native American Graves Protection and Repatriation Act
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California OSHA
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalGEM	California Geologic Energy Management Division
CALGreen	California Green Building Standards Code
California Register or CRHR	California Register of Historical Resources
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
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
CdTe	cadmium telluride
CEC	California Energy Commission

CEQA	California Environmental Policy Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERS	California Environmental Reporting System
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
CHSRA	California High Speed Rail Authority
CI	*Coccidioides immitis*
CIC	Cumulative Impact Charge
CMA	Congestion Management Agency
CMP	congestion management program
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalents
COG	Council of Governments
County	Kern County
CPUC	California Public Utilities Commission
CREC	controlled recognized environmental condition
CRPR	California Rare Plant Rank
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency

CVC	California Vehicle Code
CWA	Clean Water Act
DC	direct current
DOC	California Department of Conservation
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
E	Estate
ECA	Essential Connectivity Area
EIA	U.S. Energy Information Administration
EIR	Environmental Impact Report
EKAPCD	Eastern Kern Air Pollution Control District
EMF	electromagnetic fields
EMS	Emergency Medical Services Division
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
FIRM	Flood Insurance Rate Maps
FMMP	Farmland Mapping and Monitoring Program)
FP	Floodplain
FPPA	Farmland Protection Policy Act
FPS	Floodplain Secondary
FR	*Federal Register*
FRAP	Fire and Resource Assessment Program

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
GO	General Order
GPA	General Plan Amendment
GPS	Global Positioning System
GSP	Groundwater Sustainability Plan
GWh	gigawatt-hour
GWP	Global Warming Potential
H_2S	hydrogen sulfide
HAP	hazardous air pollutant
HASP	Health and Safety Plan
Heritage	Heritage Environmental Consultants, LLC
HFC	hydrofluorocarbon
HFTD	High Fire Threat District
HMA	Hazard Mitigation Analysis
HMBP	Hazardous Materials Business Plan
HRA	Health Risk Assessment
HREC	historical recognized environmental condition
HSC	Health and Safety Code
HSWA	Hazardous and Solid Waste Act
HVAC	heating, ventilation, and air conditioning
I-5	Interstate 5
IBA	Important Bird Areas
IFC	International Fire Code

IGY	International Geophysical Year
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
ITP	Incidental Take Permit
IWMS	Integrated Wildfire Mitigation Strategy
KCFD	Kern County Fire Department
KCOG	Kern Council of Governments
KCSO	Kern County Sheriff's Office
kV	kilovolt
kWh	kilowatt-hour
LACFD	Los Angeles County Fire Department
LACNHM	Los Angeles County Natural History Museum
LADWP	Los Angeles Department of Water and Power
LCFS	Low Carbon Fuel Standard
LEV	Low-Emissions Vehicle
LOS	Level of Service
LRA	Local Responsibility Area
LSFT	large-scale fire testing
M&I	municipal and industrial
MBTA	Migratory Bird Treaty Act
MCA	Medieval Climatic Anomaly
MDAB	Mojave Desert Air Basin
MEIR	maximally exposed individual resident
MEIW	maximally exposed individual worker
mg/L	milligrams per liter
MMcfd	million cubic feet per day
MMT	million metric tons

$MMTCO_2e$	million metric ton of CO_2 equivalent
MND	Mitigated Negative Declaration
MPO	metropolitan planning organization
MPUD	Mojave Public Utility 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	National Fire Protection Association
NHD	National Hydrographic Dataset
NHMLAC	Natural History Museum of Los Angeles County
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Safety and Health
NLM	Natural Landscape Block
NO	nitric oxide
NO_2	nitrogren dioxide
NOC	Notice of Completion
NOI	Notice of Intent
NOP/IS	notice of preparation/initial study

NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPPA	Native Plant Protection Act
NR	Natural Resources
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NUA	Northern Uto Aztecan
NWCG	National Wildfire Coordinating Group
NWI	National Wetlands Inventory
O&M	operations and maintenance
O_3	ozone
OEHHA	California Office of Environmental Health Hazard Assessment
OEIS	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
PE	Petroleum Extraction
PF	Floodplain
PFC	perfluorocarbon
PHEV	plug-in hybrid electric vehicle
PHI	point of historical interest
PI	Plasticity index
PL	Platted Lands

PM	particulate matter
PMI	point of maximum impact
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
ppb	part per billion
ppm	part per million
PRC	Public Resources Code
project proponent	Discovery Solar PV and Storage, LLC
project	Discovery Solar PV and Storage Project
PSD	Prevention of Significant Deterioration
PSPS	Public Safety Power Shutoff
PV	photovoltaic
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental concern
Registry	California Climate Action Registry
RHNA	Regional Housing Needs Allocation
RMR	RMR Water Trucks and Rental Equipment, Inc.
ROG	reactive organic gas
ROW	right-of-way
RPS	Renewable Portfolio Standard
RS	Residential Suburban
RSLF	Recycling and Sanitary Landfill
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
S	Statewide
SAFE	Safer Affordable Fuel-Efficient
SAR	Second Assessment Report
SARA	Superfund Amendements and Reauthorization Act
SCADA	supervisory control and data acquisition
SCAQMD	South Coast Air Quality Management District

SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SDC	seismic design category
SEPV	(awaiting definition)
SF_6	sulfur hexachloride
SGMA	California 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
SoCalGas	Southern California Gas Company
SPCC	spill prevention, countermeasure, and control
SR	State Route
SRA	State Responsibility Area
SSJVIC	San Joaquin Valley Information Center
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 liquids
Tetra Tech	Tetra Tech, Inc.
TMDL	total maximum daily load
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	ultraviolet
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
VOC	volatile organic compound
W	watt
WDR	Waste Discharge Requirement
WE	Wind Energy
WEMO Plan	West Mojave Plan
Wh	watt-hour
Williamson Act	California Land Conservation Act of 1965\
WJT	Western Joshua tree
WJTCA	Western Joshua Tree Conservation Act
WMP	Wildfire Mitigation Plan
WOTUS	waters of the United States
YSMN	Yuhaaviatam San Manuel Nation
ZCC	Zone Classification Change
ZEV	Zero-Emissions Vehicle

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Chapter 1
Executive Summary

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Chapter 1
Executive Summary

1.1 Introduction

The Discovery Solar PV and Storage Project (project) proposed by Discovery Solar PV and Storage, LLC (project applicant/proponent) includes the construction, operation, maintenance, and eventual decommissioning of an approximately 1,400 megawatt (MW) photovoltaic (PV) solar facility with up to 1,000 MW of battery energy storage capacity (8 gigawatt-hours; GWh) on approximately 7,700 acres across 473 privately owned parcels in an unincorporated area of southeastern Kern County, California.

The overall project boundary consists of two distinct interior boundaries: (1) the Conditional Use Permit (CUP) boundary, of which acreage specifies areas designated for proposed solar array portions of the project; and (2) the Zone Classification Change boundary, of which acreage specifies entirety of the parcels for which changes in zoning are requested. It should be noted that these two boundaries are not the same and are delineated by proposed legal descriptions. Additional project components that contribute to the overall project include areas affected by vesting tentative parcel maps, as well as accessory structures such as the medium voltage (MV) and generation (gen-tie) line corridors. A 13.8-acre portion of an additional parcel located adjacent to the southern portion of the project site is proposed for a temporary offsite construction laydown yard. Other laydown yards would be located within the project site boundary.

To deliver the project's power to the grid, a new, 230-kilovolt (kV) gen-tie line extending from a collector substation located within the project boundaries south of the Los Angeles Department of Water and Power (LADWP) aqueduct would head north and cross the LADWP aqueduct and then combine with stepped-up generation from additional collector substation(s) (north of the LADWP) via either a switchyard or direct connection. From there, the two circuits would be combined into a double circuit that would run north to a new 230-kV switchyard to connect and/or route the project gen-tie circuits into an existing gen-tie corridor, previously approved and constructed as part of the Sanborn Solar Project, and then west towards Southern California Edison's (SCE) Windhub Substation. The proposed gen-tie line would have poles at a maximum height of up to 250 feet. A 230-kV to 500-kV step-up substation, constructed north of the Windhub Substation as part of the Kern County–approved Enterprise Solar Storage Project, would step up the voltage once again prior to interconnecting with SCE's grid. The final design, layout, and required interconnection components would be refined during the detailed engineering design stage. The project may be constructed in multiple phases.

At the end of the proposed 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, removal of all 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.

The proposed project consists of six non-contiguous areas (five solar sites and a 230-kV switchyard). Implementation of the project as proposed includes the following requests:

Zone Change

(a) Zone Classification Change No. 56, Map 197 from A-1 (Limited Agriculture) to A (Exclusive Agriculture) on approximately 357.88 acres, A-1 FP (Limited Agriculture, Floodplain Combining) to A FP (Exclusive Agriculture, Floodplain Combining) on approximately 10.02 acres, A-1 (Limited Agriculture) and A-1 FP (Limited Agriculture, Floodplain Combining) to A FP (Exclusive Agriculture, Floodplain Combining) on approximately 170.27 acres, A-1 (Limited Agriculture) and A-1 WE (Limited Agriculture, Wind Energy Combining) to A (Exclusive Agriculture) and A WE (Exclusive Agriculture, Wind Energy Combining) on approximately 449.33 acres, for a total of approximately 987.5 acres;

(b) Zone Classification Change No. 71, Map 198 from A-1 (Limited Agriculture) to A (Exclusive Agriculture) on approximately 80.26 acres, E(2.5) RS (Estate 2.5 acres, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 10 acres, E (20) RS (Estate 20 Acres, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 493.64 acres, A WE (Exclusive Agriculture, Wind Energy Combining) and E (20) RS (Estate 20 Acres, Residential Suburban Combining) to A WE (Exclusive Agriculture, Wind Energy Combining) on approximately 40.01 acres, and A (Exclusive Agriculture) on approximately 40 acres, for a total of approximately 623.91 acres;

(c) Zone Classification Change No. 29, Map 214 from E (2.5) RS (Estate 2.5 Acres, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 150.7 acres, PL RS (Platted Lands, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 308.69 acres, PL RS FP (Platted Lands, Residential Suburban Combining, Floodplain Combining) to A FP (Exclusive Agriculture, Floodplain Combining) on approximately 170.39 acres, for a total of approximately 629.78 acres;

(d) Zone Classification Change No. 16, Map 215 from PL RS (Platted Lands, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 111.71 acres.

Conditional Use Permit

(a) Conditional Use Permit No. 22, Map 197, to allow for the construction and operation of a solar facility up to 200 MW and associated infrastructure, including energy storage and a switchyard, and temporary construction staging and equipment storage on approximately 811.23 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.

(b) Conditional Use Permit No. 47, Map 198, to allow for the construction and operation of a solar facility up to 150 MW and associated infrastructure, including energy storage and temporary construction staging, on approximately 721.65 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.

(c) Conditional Use Permit No. 50, Map 214, to allow for the construction and operation of a solar facility up to 550 MW and associated infrastructure, including energy storage and temporary construction staging and equipment storage, on approximately 3,164.18 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) Conditional Use Permit No. 19, Map 215, to allow for the construction and operation of a solar facility up to 500 MW and associated infrastructure, including energy storage and temporary construction staging and equipment storage, on approximately 2,773.09 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.

General Plan Amendment (Circulation)

(a) General Plan Amendment No. 18, Map 197, to remove future road reservations on section and mid-section lines within the project boundary as called for within the Circulation Element of the Kern County General Plan.

(b) General Plan Amendment No. 5, Map 198, to remove future road reservations on section and mid-section lines within the project boundary as called for within the Circulation Element of the Kern County General Plan.

(c) General Plan Amendment No. 10, Map 214, to remove future road reservations on section and mid-section lines within the project boundary as called for within the Circulation Element of the Kern County General Plan.

(d) General Plan Amendment No. 7, Map 215, to remove future road reservations on section and mid-section lines within the project boundary as called for within the Circulation Element of the Kern County General Plan.

Zone Variance:

(a) Zone Variance No. 20, 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 104.61 total acres.

(b) Zone Variance No. 36, Map 198, 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 or the E(20) (Estate - 20 acres) District to the A (Exclusive Agriculture) District across approximately 205.68 total acres

(c) Zone Variance No. 15, Map 214, to authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning from the PL (Platted Lands) District to the A (Exclusive Agriculture) District across approximately 89.83 total acres.

(d) Zone Variance No. 3, Map 215, to authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning from the PL (Platted Lands) District to the A (Exclusive Agriculture) District across approximately 10.12 total acres.

Offsite Features:

a) Conditional Use Permit No. 51, Map 214, to allow for a temporary, offsite construction laydown area on approximately 13.7 acres of a 30.21 acre parcel in the A (Exclusive Agriculture) District.

(b) Franchise Agreement for the right-of-way (ROW) along 90th Street to use for underground MV transmission.

Removal of Road Reservations:

The proposed project includes a request for an amendment to the Circulation Element of the Kern County General Plan to eliminate road reservations designated for potential future arterial and collector roadways along section and midsection lines within the project site.

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 public access easements will be vacated through parcel maps that have been submitted separately to the Kern County Land Division Unit for review and approval.

Table 1-1, *Project Assessor Parcel Numbers, Existing and Proposed Land Use Zoning, and Acreages*, identifies the Assessor Parcel Numbers (APN) for the project site.

This Draft Environmental Impact Report (EIR) has been prepared by Kern County as the Lead Agency under the California Environmental Quality Act (CEQA). The Draft EIR provides information about the environmental setting and impacts of the project and alternatives. It informs the public about the project and its impacts and provides information to meet the needs of local, State, and federal permitting agencies that are required to consider the project. The EIR will be used by Kern County to determine whether to approve the project applications as described above.

This Executive Summary summarizes the requirements of the CEQA *Guidelines*; provides an overview of the project and alternatives; identifies the purpose of this EIR; outlines the potential impacts of the project and the recommended mitigation measures; and discloses areas of controversy and issues to be resolved.

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

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
CUP 22, MAP 197									
197	237-053-02	21.25	21.25	KCGP	8.5; 8.5/2.5	8.5; 8.5/2.5	A-1; A-1 WE	A; A WE	
197	237-053-04	21.26	21.26	KCGP	8.5	8.5	A-1; A-1 WE	A; A WE	
197	237-053-05	21.27	21.27	KCGP	8.5	8.5	A-1; A-1 WE	A; A WE	
197	237-053-06	21.28	21.28	KCGP	8.5	8.5	A-1; A-1 WE	A; A WE	
197	237-053-09	39.92	39.92	KCGP	8.5; 8.5/2.5	8.5; 8.5/2.5	A-1; A-1 FP	A; A FP	
197	237-053-10	80.06	80.06	KCGP	8.5; 8.5/2.5	8.5; 8.5/2.5	A-1; A-1 FP	A; A FP	
197	237-053-13	10.01	10.01	KCGP	8.5/2.5	8.5/2.5	A-1; A-1 FP	A; A FP	*
197	237-053-14	10.02	10.02	KCGP	8.5/2.5	8.5/2.5	A-1 FP	A FP	*
197	237-053-16	80.37	80.37	KCGP	8.5; 8.5/2.5	8.5; 8.5/2.5	A-1; A-1 FP	A; A FP	
197	237-054-09	10.21	10.21	KCGP	8.5	8.5	A-1	A	10.21
197	237-054-10	10.2	10.2	KCGP	8.5	8.5	A-1	A	10.2
197	237-054-11	20.38	20.38	KCGP	8.5	8.5	A-1	A	
197	237-054-12	40.77	40.77	KCGP	8.5	8.5	A-1	A	
197	237-054-13	81.52	81.52	KCGP	8.5	8.5	A-1	A	
197	237-054-25	2.53	2.53	KCGP	8.5	8.5	A-1	A	2.53
197	237-054-26	2.53	2.53	KCGP	8.5	8.5	A-1	A	2.53
197	237-054-27	2.53	2.53	KCGP	8.5	8.5	A-1	A	2.53
197	237-054-28	2.53	2.53	KCGP	8.5	8.5	A-1	A	2.53
197	237-054-30	3.06	3.06	KCGP	8.5	8.5	A-1	A	3.06
197	237-054-31	2.51	2.51	KCGP	8.5	8.5	A-1	A	2.51
197	237-054-32	2.66	2.66	KCGP	8.5	8.5	A-1	A	2.66
197	237-054-33	25.09	25.09	KCGP	8.5	8.5	A-1	A	
197	237-054-36	20.19	20.19	KCGP	8.5; 8.5/2.5	8.5; 8.5/2.5	A-1	A	20.19
197	237-054-39	10.16	10.16	KCGP	8.5/2.5	8.5/2.5	A-1	A	10.16
197	237-054-40	10.16	10.16	KCGP	8.5; 8.5/2.5	8.5; 8.5/2.5	A-1	A	10.16
197	237-054-41	29.72	29.72	KCGP	8.5	8.5	A-1	A	

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
197	237-054-44	5.08	5.08	KCGP	8.5	8.5	A-1	A	5.08
197	237-055-16	364.27	188	KCGP	8.5	8.5	A-1; A-1 FP	A; A FP	*
197	237-055-17	20.25	20.25	KCGP	8.5	8.5	A-1	A	*
197	237-055-18	20.26	20.26	KCGP	8.5	8.5	A-1	A	20.26
197	237-332-15	10.15	10.15	KCGP	8.5	8.5	A-1	A	10.15
197	237-332-16	5.08	5.08	KCGP	8.5	8.5	A-1	A	5.08
197	237-332-17	5.08	5.08	KCGP	8.5	8.5	A-1	A	5.08
197	237-332-18	10.15	10.15	KCGP	8.5	8.5	A-1	A	10.15
197	237-332-19	5.08	5.08	KCGP	8.5	8.5	A-1	A	5.08
CUP 22, MAP 197 TOTALS:		**1,027.59**	**851.32**						**140.15**
CUP 47, MAP 198									
198	237-093-10	50.06	50.06	KCGP	8.3	8.3	E(20) RS	A	
198	237-093-11	10.01	10.01	KCGP	8.3	8.3	A	A	*
198	237-093-12	5.01	5.01	KCGP	8.3	8.3	E(20) RS	A	5.01
198	237-093-13	10.02	10.02	KCGP	8.3	8.3	E(20) RS	A	10.02
198	237-093-14	10.02	10.02	KCGP	8.3	8.3	E(20) RS	A	10.02
198	237-093-15	5.01	5.01	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-16	5.01	5.01	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-18	50.1	50.1	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-46	39.9	39.9	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-47	40	40	KCGP	8.3	8.3	E(20) RS	A	
198	237-093-48	40.01	40.01	KCGP	8.3	8.3	A WE; E(20) RS	A WE; A	
198	237-093-49	39.92	39.92	KCGP	8.3	8.3	E(20) RS	A	
198	237-093-51	2.51	2.51	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-53	2.51	2.51	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-55	2.51	2.51	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-56	2.51	2.51	KCGP	8.3	8.3	E(20) RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
198	237-370-01	5.04	5.04	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-02	5.03	5.03	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-03	5.03	5.03	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-04	5.02	5.02	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-05	10.03	10.03	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-06	2.5	2.5	KCGP	8.5	8.5	E(2 1/2) RS	A	*
198	237-370-07	2.5	2.5	KCGP	8.5	8.5	E(2 1/2) RS	A	*
198	237-370-08	2.5	2.5	KCGP	8.5	8.5	E(2 1/2) RS	A	*
198	237-370-09	2.5	2.5	KCGP	8.5	8.5	E(2 1/2) RS	A	*
198	237-370-11	10.03	10.03	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-12	5.02	5.02	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-13	2.51	2.51	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-14	2.51	2.51	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-15	5.02	5.02	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-16	10.08	10.08	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-17	2.5	2.5	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-18	7.51	7.51	KCGP	8.5	8.5	A	A	*
198	237-380-01	2.52	2.52	KCGP	8.5	8.5	E(20) RS	A	*
198	237-380-02	2.52	2.52	KCGP	8.5	8.5	E(20) RS	A	*
198	237-380-03	2.52	2.52	KCGP	8.5	8.5	E(20) RS	A	*
198	237-380-04	2.52	2.52	KCGP	8.5	8.5	E(20) RS	A	*
198	237-380-05	10.06	10.06	KCGP	8.5	8.5	E(20) RS	A	*
198	237-380-06	40.11	40.11	KCGP	8.5	8.5	A; A WE	A; A WE	
198	237-380-07	10.07	10.07	KCGP	8.5	8.5	E(20) RS	A	*
198	237-380-08	10.09	10.09	KCGP	8.5	8.5	E(20) RS	A	*
198	237-400-02	10.03	10.03	KCGP	8.5	8.5	A-1	A	10.03
198	237-400-03	10.03	10.03	KCGP	8.5	8.5	A-1	A	10.03
198	237-400-05	10.03	10.03	KCGP	8.5	8.5	A-1	A	10.03

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
198	237-400-06	20.07	20.07	KCGP	8.5	8.5	A-1	A	20.07
198	237-400-07	10.03	10.03	KCGP	8.5	8.5	A-1	A	10.03
198	237-400-08	10.03	10.03	KCGP	8.5	8.5	A-1	A	10.03
198	237-400-11	2.51	2.51	KCGP	8.5	8.5	A-1	A	2.51
198	237-400-13	2.51	2.51	KCGP	8.5	8.5	A-1	A	2.51
198	237-400-14	2.51	2.51	KCGP	8.5	8.5	A-1	A	2.51
198	237-400-15	2.51	2.51	KCGP	8.5	8.5	A-1	A	2.51
198	237-410-01	10.02	10.02	KCGP	8.3	8.3	A; A WE	A; A WE	*
198	237-410-02	10.03	10.03	KCGP	8.3	8.3	A; A WE	A; A WE	*
198	237-410-03	10.03	10.03	KCGP	8.3	8.3	E(20) RS	A	10.03
198	237-410-05	10.04	10.04	KCGP	8.3	8.3	E(20) RS	A	10.04
198	237-410-06	10.04	10.04	KCGP	8.3	8.3	E(20) RS	A	10.04
198	237-410-07	10.04	10.04	KCGP	8.3	8.3	E(20) RS	A	10.04
198	237-410-08	10.04	10.04	KCGP	8.3	8.3	E(20) RS	A	10.04
198	237-410-09	10.04	10.04	KCGP	8.3	8.3	E(20) RS	A	10.04
198	237-410-10	10.04	10.04	KCGP	8.3	8.3	E(20) RS	A	10.04
198	237-410-11	5.02	5.02	KCGP	8.3	8.3	E(20) RS	A	5.02
198	237-410-12	5.02	5.02	KCGP	8.3	8.3	E(20) RS	A	5.02
198	237-410-13	10.03	10.03	KCGP	8.3	8.3	E(20) RS	A	10.03
198	237-410-14	20.06	20.06	KCGP	8.3	8.3	E(20) RS	A	
198	237-410-15	20.06	20.06	KCGP	8.3	8.3	A; A WE	A; A WE	
198	237-410-18	10.03	10.03	KCGP	8.3	8.3	E(20) RS	A	10.03
CUP 47, MAP 198 TOTALS:		**721.65**	**721.65**						**205.68**
CUP 50, MAP 214									
214	345-011-03	160.44	160.44	KCGP	8.3	8.3	A	A	
214	345-011-07	2.51	2.51	KCGP	8.3	8.3	PL RS	A	2.51
214	345-011-08	2.5	2.5	KCGP	8.3	8.3	PL RS	A	2.5
214	345-011-09	2.5	2.5	KCGP	8.3	8.3	PL RS	A	2.5

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	345-011-10	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	345-011-11	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	345-011-12	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	345-011-13	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	345-011-14	2.5	2.5	KCGP	8.3	8.3	PL RS	A	2.5
214	345-011-15	2.5	2.5	KCGP	8.3	8.3	PL RS	A	2.5
214	345-011-16	2.5	2.5	KCGP	8.3	8.3	PL RS	A	2.5
214	345-011-24	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	345-011-25	2.49	2.49	KCGP	8.3	8.3	PL RS	A	*
214	345-011-26	9.98	7.51	KCGP	8.3	8.3	A	A	*
214	345-011-31	9.98	9.98	KCGP	8.3	8.3	A	A	*
214	345-011-36	2.49	2.49	KCGP	8.3	8.3	A	A	*
214	345-011-37	7.48	7.48	KCGP	8.3	8.3	A	A	*
214	345-011-39	10	5	KCGP	8.3	8.3	PL RS	A	*
214	345-011-40	9.99	9.99	KCGP	8.3	8.3	PL RS	A	*
214	345-011-41	9.98	9.98	KCGP	8.3	8.3	PL RS	A	*
214	345-011-42	9.97	9.97	KCGP	8.3	8.3	A	A	*
214	345-062-01	9.94	9.94	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	9.94
214	345-062-02	2.47	2.47	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-03	2.47	2.47	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-04	2.47	2.47	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-05	2.47	2.47	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-07	19.98	19.98	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	345-062-08	19.96	19.96	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-26	1.22	1.22	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-27	1.19	1.19	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-28	1.23	1.23	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-29	1.23	1.23	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-30	2.47	2.47	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-31	2.47	2.47	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-39	1.23	1.23	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-40	1.23	1.23	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-42	1.23	1.23	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-56	43.76	33.68	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	
214	345-063-29	33.68	33.68	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	
214	345-100-01	160.67	160.67	KCGP	8.3	8.3	A	A	
214	346-011-02	570.33	570.33	KCGP	8.3; 8.3/2.5; 8.4	8.3; 8.3/2.5; 8.4	A; A FP	A; A FP	
214	346-011-07	20.04	20.04	KCGP	8.3; 8.4/2.4	8.3; 8.4/2.4	A	A	
214	346-011-09	20.03	20.03	KCGP	8.3	8.3	A	A	
214	346-011-12	20.03	20.03	KCGP	8.3; 8.4	8.3; 8.4	A	A	
214	346-011-13	20.03	20.03	KCGP	8.3; 8.4	8.3; 8.4	A	A	
214	346-011-14	20.03	20.03	KCGP	8.3; 8.4/2.4	8.3; 8.4/2.4	A	A	
214	346-011-15	20.03	20.03	KCGP	8.3	8.3	A	A	

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-011-17	20.04	20.04	KCGP	8.3	8.3	A	A	
214	346-011-18	20.04	20.04	KCGP	8.3	8.3	A	A	
214	346-012-04	80.4	80.4	KCGP	8.3; 8.4	8.3; 8.4	A; A FP	A; A FP	
214	346-012-06	40.27	40.27	KCGP	8.3	8.3	A FP	A FP	
214	346-012-07	40.23	40.23	KCGP	8.3	8.3	A FP	A FP	
214	346-012-09	20.07	17.24	KCGP	8.3	8.3	A FP	A FP	
214	346-012-10	20.06	20.06	KCGP	8.3	8.3	A FP	A FP	
214	346-012-11	20.05	20.05	KCGP	8.3	8.3	A FP	A FP	
214	346-012-12	20.04	20.04	KCGP	8.3	8.3	A FP	A FP	
214	346-041-05	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-041-07	20.03	20.03	KCGP	8.3	8.3	A	A	
214	346-041-08	20.03	20.03	KCGP	8.3	8.3	A	A	
214	346-041-18	2.51	2.51	KCGP	8.3	8.3	A	A	*
214	346-041-19	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-21	2.51	2.51	KCGP	8.3	8.3	A	A	*
214	346-041-22	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-23	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-24	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-25	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-28	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-29	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-32	7.51	7.51	KCGP	8.3	8.3	A	A	*
214	346-042-35	9.96	9.96	KCGP	8.3	8.3	PL RS	A	*
214	346-042-37	9.89	9.89	KCGP	8.3	8.3	PL RS	A	*
214	346-042-39	10.01	10.01	KCGP	8.3	8.3	PL RS	A	*
214	346-042-40	10.01	10.01	KCGP	8.3	8.3	PL RS	A	*
214	346-042-43	2.51	2.51	KCGP	8.3	8.3	PL RS	A	*
214	346-042-44	2.51	2.51	KCGP	8.3	8.3	PL RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-042-45	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-042-46	2.49	2.49	KCGP	8.3	8.3	PL RS	A	*
214	346-042-47	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-042-48	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-042-49	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-042-50	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-042-51	2.49	2.49	KCGP	8.3	8.3	PL RS	A	*
214	346-042-52	2.49	2.49	KCGP	8.3	8.3	PL RS	A	*
214	346-042-53	2.47	2.47	KCGP	8.3	8.3	PL RS	A	*
214	346-042-54	2.51	2.51	KCGP	8.3	8.3	PL RS	A	*
214	346-042-55	2.49	2.49	KCGP	8.3	8.3	PL RS	A	*
214	346-042-56	2.49	2.49	KCGP	8.3	8.3	PL RS	A	*
214	346-042-57	2.48	2.48	KCGP	8.3	8.3	PL RS	A	*
214	346-042-58	2.48	2.48	KCGP	8.3	8.3	PL RS	A	*
214	346-042-59	19.97	19.97	KCGP	8.3	8.3	PL RS	A	*
214	346-042-60	19.97	19.97	KCGP	8.3	8.3	PL RS	A	*
214	346-042-61	20.03	20.03	KCGP	8.3	8.3	PL RS	A	
214	346-042-62	20.02	20.02	KCGP	8.3	8.3	PL RS	A	
214	346-050-03	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-04	5.01	5.01	KCGP	8.3	8.3	PL RS	A	*
214	346-050-05	5.01	5.01	KCGP	8.3	8.3	PL RS	A	*
214	346-050-06	5.01	5.01	KCGP	8.3	8.3	PL RS	A	*
214	346-050-07	5.01	5.01	KCGP	8.3	8.3	PL RS	A	*
214	346-050-13	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-14	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-15	10.02	10.02	KCGP	8.3	8.3	A	A	*
214	346-050-17	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-18	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-050-19	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-20	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-21	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-22	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-23	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-24	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-25	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-26	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-27	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-28	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-29	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-30	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-31	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-32	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-050-33	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-050-35	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-050-36	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-061-01	20.35	20.35	KCGP	8.3; 8.3/2.5	8.3; 8.3/2.5	A; A FP	A; A FP	
214	346-061-04	10.17	10.17	KCGP	8.3; 8.3/2.5	8.3; 8.3/2.5	A	A	*
214	346-061-05	40.25	40.25	KCGP	8.3; 8.3/2.5	8.3; 8.3/2.5	A	A	
214	346-061-06	8.7	8.7	KCGP	8.3	8.3	A; A FP	A; A FP	*
214	346-061-08	10.01	10.01	KCGP	8.3	8.3	A; A FP	A; A FP	*
214	346-061-09	38.3	38.3	KCGP	8.3	8.3	A FP	A FP	
214	346-061-11	10.12	10.12	KCGP	8.3	8.3	A FP	A FP	*
214	346-061-12	10.12	10.12	KCGP	8.3	8.3	A FP	A FP	*
214	346-061-13	5.07	5.07	KCGP	8.3	8.3	PL RS FP	A FP	5.07
214	346-061-14	5.07	5.07	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-15	5.06	5.06	KCGP	8.3	8.3	PL RS FP	A FP	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-061-16	5.03	5.03	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-17	5.01	5.01	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-18	5.04	5.04	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-19	2.54	2.54	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-21	2.53	2.53	KCGP	8.3	8.3	PL RS FP	A FP	2.53
214	346-061-22	2.52	2.52	KCGP	8.3	8.3	PL RS FP	A FP	2.52
214	346-061-24	5.04	5.04	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-25	5.04	5.04	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-28	20.19	20.19	KCGP	8.3	8.3	A FP	A FP	
214	346-061-29	20.23	20.23	KCGP	8.3	8.3	A FP	A FP	
214	346-061-30	7.51	7.51	KCGP	8.3	8.3	PL RS FP	A FP	7.51
214	346-061-31	8.57	8.57	KCGP	8.3	8.3	PL RS FP	A FP	8.57
214	346-061-33	19.62	19.62	KCGP	8.3	8.3	A; A FP	A; A FP	*
214	346-061-35	17.64	17.64	KCGP	8.3	8.3	A	A	*
214	346-061-37	40.27	40.27	KCGP	8.3	8.3	A	A	
214	346-061-39	20.25	20.25	KCGP	8.3	8.3	A	A	
214	346-061-40	20.29	20.29	KCGP	8.3; 8.5/2.5	8.3; 8.5/2.5	A	A	
214	346-061-45	5.04	5.04	KCGP	8.3	8.3	A	A	*
214	346-061-46	5.04	5.04	KCGP	8.3	8.3	A	A	*
214	346-061-47	5.04	5.04	KCGP	8.3	8.3	A	A	*
214	346-061-48	5.04	5.04	KCGP	8.3	8.3	A	A	*
214	346-061-49	5.05	5.05	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-50	5.05	5.05	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-51	5.05	5.05	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-52	5.04	5.04	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-53	2.54	2.54	KCGP	8.3/2.5	8.3/2.5	PL RS	A	*
214	346-061-54	2.54	2.54	KCGP	8.3; 8.3/2.5	8.3; 8.3/2.5	PL RS	A	*
214	346-061-55	2.54	2.54	KCGP	8.3; 8.3/2.5	8.3; 8.3/2.5	PL RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-061-56	2.54	2.54	KCGP	8.3; 8.3/2.5	8.3; 8.3/2.5	PL RS	A	*
214	346-061-58	2.53	2.53	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-59	2.53	2.53	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-60	2.53	2.53	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-61	2.52	2.52	KCGP	8.3	8.3	PL RS FP	A FP	2.52
214	346-061-62	2.52	2.52	KCGP	8.3	8.3	PL RS FP	A FP	2.52
214	346-062-03	10.06	10.06	KCGP	8.3	8.3	A	A	*
214	346-062-04	10.06	10.06	KCGP	8.3	8.3	A	A	*
214	346-062-06	40	40	KCGP	8.3	8.3	A	A	
214	346-062-07	39.32	39.32	KCGP	8.3	8.3	A	A	
214	346-062-11	125.93	125.93	KCGP	8.3	8.3	A; A FP	A; A FP	
214	346-062-12	44.02	44.02	KCGP	8.3	8.3	A	A	
214	346-062-14	14.68	14.68	KCGP	8.3	8.3	A	A	*
214	346-062-16	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-062-17	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-062-18	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-062-19	44.65	44.65	KCGP	8.3	8.3	A	A	
214	346-062-23	11.27	11.27	KCGP	8.3	8.3	A	A	*
214	346-062-24	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-062-25	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-062-26	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-062-27	14.61	14.61	KCGP	8.3	8.3	A	A	*
214	346-062-29	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-30	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-31	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-32	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-34	2.8	2.8	KCGP	8.3	8.3	PL RS	A	*
214	346-062-35	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-062-36	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-37	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-38	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-39	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-40	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-41	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-42	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-44	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-46	2.81	2.81	KCGP	8.3	8.3	PL RS	A	2.81
214	346-062-47	2.81	2.81	KCGP	8.3	8.3	PL RS	A	2.81
214	346-062-48	2.82	2.82	KCGP	8.3	8.3	PL RS	A	*
214	346-062-49	2.82	2.82	KCGP	8.3	8.3	PL RS	A	2.82
214	346-062-50	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-51	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-52	20.03	20.03	KCGP	8.3	8.3	A	A	
214	346-062-53	20.03	20.03	KCGP	8.3	8.3	A	A	
214	346-071-01	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-02	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-03	2.51	2.51	KCGP	8.3	8.3	PL RS FP	A FP	2.51
214	346-071-04	2.51	2.51	KCGP	8.3	8.3	PL RS FP	A FP	2.51
214	346-071-05	2.51	2.51	KCGP	8.3	8.3	PL RS FP	A FP	2.51
214	346-071-06	2.51	2.51	KCGP	8.3	8.3	PL RS FP	A FP	2.51
214	346-071-07	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-08	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-09	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-10	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-15	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-16	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-071-17	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-18	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-23	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-24	2.78	2.78	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-25	2.73	2.73	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-26	2.75	2.75	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-081-01	5.02	5.02	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-081-02	5.02	5.02	KCGP	8.3; 8.4	8.3; 8.4	PL RS FP	A FP	*
214	346-081-03	5.02	5.02	KCGP	8.3; 8.4	8.3; 8.4	PL RS FP	A FP	*
214	346-081-13	5.02	5.02	KCGP	8.3; 8.4	8.3; 8.4	PL RS FP	A FP	*
214	346-081-14	5.02	5.02	KCGP	8.3; 8.4	8.3; 8.4	PL RS FP	A FP	*
214	346-090-01	120.74	120.74	KCGP	8.3; 8.4	8.3; 8.4	A; A FP	A; A FP	
214	346-090-07	2.51	2.51	KCGP	8.4	8.4	PL RS	A	*
214	346-090-09	2.51	2.51	KCGP	8.4	8.4	PL RS	A	*
214	346-090-11	10.05	10.05	KCGP	8.3; 8.4	8.3; 8.4	A; A FP	A; A FP	*
214	346-090-12	10.05	10.05	KCGP	8.3; 8.4	8.3; 8.4	A FP	A FP	*
214	346-090-13	10.05	10.05	KCGP	8.3; 8.4	8.3; 8.4	A FP	A FP	*
214	346-090-14	10.05	10.05	KCGP	8.3; 8.4	8.3; 8.4	A FP	A FP	*
214	346-090-19	10.05	10.05	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-21	10.05	10.05	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-22	10.06	10.06	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-23	10.06	10.06	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-24	2.51	2.51	KCGP	8.4	8.4	A	A	*
214	346-090-28	2.51	2.51	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-29	2.51	2.51	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-30	5.03	5.03	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-33	2.51	2.51	KCGP	8.4	8.4	A	A	*
214	346-090-35	2.51	2.51	KCGP	8.4	8.4	A	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-090-36	2.51	2.51	KCGP	8.4	8.4	A	A	*
214	346-090-41	2.51	2.51	KCGP	8.4	8.4	A	A	*
214	346-090-42	2.51	2.51	KCGP	8.4	8.4	A	A	*
214	346-132-18	2.51	2.21	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-19	10.03	9.5	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-22	2.51	2.51	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-23	2.51	2.51	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-24	2.51	2.51	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-25	2.51	2.51	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-26	5.02	5.02	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-27	10.04	10.04	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-28	10.04	9.77	KCGP	8.3	8.3	A; A FP	A; A FP	*
CUP 50, MAP 214 TOTALS:		**3,185.66**	**3,164.18**						**89.83**
CUP 19, MAP 215									
215	474-010-04	648.95	648.95	KCGP	8.3	8.3	A	A	
215	474-010-29	107.89	107.89	KCGP	8.3	8.3	A	A	
215	474-010-30	111.23	111.23	KCGP	8.3	8.3	A	A	
215	474-010-31	107.88	107.88	KCGP	8.3	8.3	A	A	
215	474-021-04	40.31	40.31	KCGP	8.3	8.3	A	A	
215	474-021-05	40.25	40.25	KCGP	8.3	8.3	A	A	
215	474-021-06	40.27	40.27	KCGP	8.3	8.3	A	A	
215	474-021-18	40.19	40.19	KCGP	8.3	8.3	A; A WE	A; A WE	
215	474-021-19	40.12	40.12	KCGP	8.3	8.3	A WE	A WE	
215	474-021-20	40.19	40.19	KCGP	8.3	8.3	A; A WE	A; A WE	
215	474-021-21	40.12	40.12	KCGP	8.3	8.3	A WE	A WE	
215	474-040-09	81.1	81.1	KCGP	8.3	8.3	A	A	
215	474-040-15	10.25	10.25	KCGP	8.3	8.3	A	A	*
215	474-040-16	10.28	10.28	KCGP	8.3	8.3	A	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
215	474-040-17	10.08	10.08	KCGP	8.3	8.3	A	A	
215	474-040-19	40.31	40.31	KCGP	8.3	8.3	A	A	
215	474-040-20	40.37	40.37	KCGP	8.3	8.3	A	A	
215	474-051-04	14.5	14.5	KCGP	8.3	8.3	A	A	*
215	474-051-05	2.52	2.35	KCGP	8.3	8.3	A	A	*
215	474-051-06	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-07	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-08	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-09	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-10	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-12	4.99	4.99	KCGP	8.3	8.3	A	A	*
215	474-051-14	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-15	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-16	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-17	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-18	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-19	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-20	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-21	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-22	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-23	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-24	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-25	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-26	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-27	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-28	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-29	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-33	20.18	17.08	KCGP	8.3	8.3	A	A	

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
215	474-052-01	20.27	20.27	KCGP	8.3	8.3	A	A	
215	474-052-02	10.13	10.13	KCGP	8.3	8.3	A	A	*
215	474-052-03	10.13	10.13	KCGP	8.3	8.3	A	A	*
215	474-052-29	20.23	20.23	KCGP	8.3	8.3	A	A	
215	474-052-31	10.1	10.1	KCGP	8.3	8.3	A	A	*
215	474-052-32	7.59	7.59	KCGP	8.3	8.3	PL RS	A	7.59
215	474-052-33	2.53	2.53	KCGP	8.3	8.3	PL RS	A	2.53
215	474-060-03	10.16	10.16	KCGP	8.3	8.3	A	A	*
215	474-060-05	2.53	2.53	KCGP	8.3	8.3	PL RS	A	*
215	474-060-09	10.16	10.16	KCGP	8.3	8.3	A	A	*
215	474-060-11	10.16	10.16	KCGP	8.3	8.3	A	A	*
215	474-060-12	10.16	10.16	KCGP	8.3	8.3	A	A	*
215	474-060-13	7.62	7.62	KCGP	8.3	8.3	PL RS	A	*
215	474-060-14	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-15	5.08	5.08	KCGP	8.3	8.3	PL RS	A	*
215	474-060-16	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-17	121.74	121.74	KCGP	8.3	8.3	A	A	
215	474-060-19	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-20	5.08	5.08	KCGP	8.3	8.3	PL RS	A	*
215	474-060-21	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-22	40.65	40.65	KCGP	8.3	8.3	A	A	
215	474-060-24	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-060-25	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-060-26	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-060-27	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-060-30	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-31	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-32	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
215	474-060-33	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-34	5.08	5.08	KCGP	8.3	8.3	PL RS	A	*
215	474-060-35	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-36	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-38	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-39	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-40	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-41	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-42	10.16	10.16	KCGP	8.3	8.3	PL RS	A	*
215	474-060-43	5.08	5.08	KCGP	8.3	8.3	PL RS	A	*
215	474-060-44	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-45	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-071-01	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-071-02	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-071-03	10.16	10.16	KCGP	8.3	8.3	A	A	*
215	474-071-04	10.16	10.16	KCGP	8.3	8.3	A	A	*
215	474-071-05	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-071-06	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-071-07	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-071-08	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-071-09	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-071-10	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-071-11	7.62	7.62	KCGP	8.3	8.3	PL RS	A	*
215	474-071-12	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-071-18	37.51	37.51	KCGP	8.3	8.3	A	A	
215	474-072-03	60.51	60.51	KCGP	8.3	8.3	A; A FPS	A; A FPS	
215	474-083-06	40.41	40.41	KCGP	8.3	8.3	A	A	
215	474-083-07	40.48	40.48	KCGP	8.3	8.3	A	A	

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
215	474-160-01	10.12	10.12	KCGP	8.3	8.3	A WE	A WE	*
215	474-160-02	10.12	10.12	KCGP	8.3	8.3	A WE	A WE	*
215	474-160-05	10.13	10.13	KCGP	8.3	8.3	A WE	A WE	*
215	474-160-06	10.13	10.13	KCGP	8.3	8.3	A	A	*
215	474-160-07	10.12	10.12	KCGP	8.3	8.3	A	A	*
215	474-160-08	10.11	10.11	KCGP	8.3	8.3	A; A WE	A; A WE	*
215	474-160-09	80.96	77.14	KCGP	8.3	8.3	A; A WE; A FP	A; A WE; A FP	
215	474-171-01	2.54	2.54	KCGP	8.3	8.3	A	A	*
215	474-172-13	40.58	40.58	KCGP	8.3	8.3	A	A	
215	474-172-14	20.3	20.3	KCGP	8.3	8.3	A	A	
215	474-180-02	5.07	5.07	KCGP	8.3	8.3	A WE	A WE	*
215	474-180-03	5.07	5.07	KCGP	8.3	8.3	A; A WE	A; A WE	*
215	474-180-04	50.63	50.63	KCGP	8.3	8.3	A; A WE	A; A WE	
215	474-180-05	132.39	131.96	KCGP	8.3	8.3	A; A WE; A FPS	A; A WE; A FPS	
215	474-180-06	60.74	60.74	KCGP	8.3	8.3	A; A WE	A; A WE	
215	474-180-07	20.22	20.22	KCGP	8.3	8.3	A; A WE	A; A WE	
215	474-180-08	10.11	10.11	KCGP	8.3	8.3	A WE	A WE	*
215	474-220-15	40.06	40.06	KCGP	8.3	8.3	A; A WE	A; A WE	
215	474-220-22	40.12	40.12	KCGP	8.3	8.3	A; A WE	A; A WE	
CUP 19, MAP 215 TOTALS:		**2,780.61**	**2,773.09**						**10.12**
Temporary Laydown Area CUP 51, MAP 214									
Temporary Laydown Area									
214	346-021-01	30.21	30.21	KCGP	8.3; 8.4/2.4	8.3; 8.4/2.4	A; A FP	N/A	
Medium-Voltage Transmission and Access Easement									
197	237-053-08	85.2	N/A	KCGP	8.5/2.5, 8.5	8.5/2.5, 8.5	A-1; A-1 FP WE; A-1 FP	N/A	

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
198	237-093-50	321.08	N/A	KCGP	8.5, 8.3	8.5, 8.3	A WE; E(20) RS; E(20) RS WE	N/A	
215	474-172-02	2.54	N/A	KCGP	8.3	8.3	A	N/A	*
215	474-172-03	2.54	N/A	KCGP	8.3	8.3	A	N/A	*
215	474-172-04	2.54	N/A	KCGP	8.3	8.3	A	N/A	*
215	474-172-05	2.54	N/A	KCGP	8.3	8.3	A	N/A	*
197	237-053-28	20	N/A	KCGP	8.5/2.5	8.5/2.5	A-1 FP	N/A	
197	237-054-38	20	N/A	KCGP	8.5/2.5, 8.5	8.5/2.5, 8.5	A-1	N/A	
Proposed Gen-Tie Line (new)									
197	237-332-11	10	N/A	KCGP	8.5	8.5	A-1	N/A	*
197	237-114-04	2.64	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-114-03	2.53	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-114-06	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-114-07	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-114-10	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-114-09	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-114-16	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-113-13	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-113-14	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-113-15	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-113-16	2.11	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-113-09	2.11	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-031-38	556.36	N/A	KCGP	8.5	8.5	A WE	N/A	
197	237-031-04	636.36	N/A	KCGP	8.4	8.4	A WE	N/A	
197	237-055-08	5	N/A	KCGP	8.5	8.5	A-1; A WE	N/A	*
197	237-055-09	5	N/A	KCGP	8.5	8.5	A-1	N/A	*
197	237-055-10	112.28	N/A	KCGP	8.5	8.5	A-1 WE; A-1	N/A	
197	237-055-12	119.37	N/A	KCGP	8.5	8.5	A-1 WE; A-1	N/A	

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested

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

[a] Kern County General Plan (KCGP) and Specific Plan (SP) Map Code Designation:

1.1 (State and Federal Land)
2.4 (Steep Slope)
2.5 (Flood Hazard)
4.1 (Accepted County Plan Areas)
4.3 (Specific Plan Required)
7.3 (Heavy Industrial)
8.2 (Resource Agriculture)
8.3 (Extensive Agriculture)
8.4 (Mineral and Petroleum, Min 5 Acre Parcel Size)
8.5 (Resource Management, Min. 20 Acre Parcel Size)

[b] Kern County Zoning District:

A (Exclusive Agriculture); A-1 (Limited Agriculture); E (Estate); FP (Floodplain Combining); FPS (Floodplain Secondary Combining); M-3 (Heavy Industrial); MH (Mobile Home Combining); OS (Open Space); PL (Platted Lands); R-2 (Medium Density Residential); RS (Residential Suburban Combining); WE (Wind Energy Combining)

Project Summary

The project would develop a solar PV generating facility and energy storage facilities. As shown in Chapter 3, *Project Description*, **Figure 3-1**, *Vicinity Map*, and **Figure 3-2**, *Aerial Map*, of this EIR, the project is located in the southeastern corner of the desert region in unincorporated Kern County. The project site is generally undeveloped land in the Mojave Desert within the Antelope Valley in southern Kern County, California. The project would generate up to 1,400 MW of renewable electrical energy with up to 8 GWh of energy storage capacity (approximately 1,000 MW) on approximately 7,700 acres across 473 privately owned parcels.

Project facilities would include solar PV modules, energy storage facilities, onsite collector substations, a 230-kV switchyard, underground collection systems, telecommunication equipment, onsite access roads, perimeter fencing and lighting, and other facilities following components, which are described in greater detail in **Section 1.3** below and shown in **Chapter 3**, *Project Description*, on **Figure 3-3**, *Proposed Site Plan*.

Entitlements Required

The Kern County Planning and Natural Resources Department as the CEQA Lead Agency (per CEQA *Guidelines* Section 15052) has primary responsibility for the project. To implement this project, various discretionary and ministerial permits/approvals may be required, including but not limited to:

- **Federal**
  - U.S. Fish and Wildlife Service Incidental Take Permit and Habitat Conservation Plan (if sought by project proponent).
  - U.S. Army Corps of Engineers, Section 404 Permit (if required)
- **State**
  - California Public Utilities Commission
    - Public Utilities Crossing/Encroachment Agreements
  - California Department of Fish and Wildlife
    - Section 2081 Permit (Incidental Take Permit for state-listed species, including Western Joshua Tree under the Western Joshua Tree Conservation Act) (if sought by project proponent)
    - Section 1600 *et seq*. (Lake and Streambed Alteration Agreement) (if required)
  - Lahontan Regional Water Quality Control Board
    - Waste Discharge Requirements (if required)
    - Regional Water Quality Certification (401 Permit) (if required)
    - National Pollutant Discharge Elimination System Construction General Permit
  - California Department of Transportation
    - Right-of-Way Encroachment Permit (if required)

        - Permit for Transport of Oversized Loads

- **Local**
    - Kern County
        - Approval of Amendments to the Kern County General Plan (Circulation Element)
        - Approval of Changes in Zone Classifications
        - Approval of Conditional Use Permits for the project site
        - Approval of Zone Variances
        - Approval of Kern County Demolition Permits
        - Approval of Kern County Grading and Building Permits
        - Approval of Kern County Encroachment Permits
        - Approval of Franchise Agreement for street ROW along 90th Street
        - Approval of Parcel Maps (parcel mergers) by the Kern County Land Division Unit
    - Eastern Kern Air Pollution Control District
        - Approval of Fugitive Dust Control Plan
        - Authority to Construct
        - Permit to Operate
    - LADWP
        - Crossing Agreement

The preceding actions/approvals are potentially required and do not necessarily represent a comprehensive list of all possible permits/approvals required. Other additional permits or approvals from responsible agencies may be required for the proposed project.

Relationship of the Project to Other Solar Projects

The proposed project is being developed independently of other approved or proposed solar projects in the County. If approved, the project facilities would be subject to their own use permits, conditions of approval, interconnection agreements, and power purchase agreements. The new 230-kV switchyard is expected to route gen-tie conductors for the proposed Galaxy Solar PV & Storage Project off of existing gen-tie poles and onto new transmission line poles that continue to the SCE Windhub Substation (to be permitted separately under the proposed Galaxy Solar PV & Storage Project). The Galaxy Solar PV & Storage Project is a separate solar energy project proposed by a separate legal entity (Galaxy Solar PV & Storage, LLC) on private lands under the County's land use jurisdiction. Kern County understands that the project facilities would be built and operated independently of any other solar project and, if approved, would not depend on any other solar project for economic viability.

1.2 Purpose and Use of the EIR

An EIR is a public informational document used in the planning and decision-making process. This project-level EIR will analyze the environmental impacts of the project. The Kern County Planning Commission and Board of Supervisors will consider the information in this EIR, including the public comments and staff response to those comments, during the public hearing process. The final decision is made by the Kern County Board of Supervisors, who may approve, conditionally approve, or deny the project. The purpose of an EIR is to identify:

- The significant potential impacts on the environment and indicate the manner in which those significant impacts can be avoided or mitigated;
- Any unavoidable adverse impacts that cannot be mitigated; and
- Reasonable and feasible alternatives to the project that would eliminate any significant adverse environmental impacts or reduce the impacts to a less-than-significant level.

An EIR also discloses growth-inducing impacts; impacts found not to be significant; and significant cumulative impacts of past, present, and reasonably anticipated future projects. CEQA requires preparation of an EIR that reflects the independent judgment of the lead agency regarding the impacts, the level of significance of the impacts both before and after mitigation, and mitigation measures proposed to reduce the impacts. A draft EIR is circulated to responsible agencies, trustee agencies with resources affected by the project, and interested agencies and individuals. The purposes of public and agency review of a draft EIR include sharing expertise, disclosing agency analyses, checking for accuracy, detecting omissions, discovering public concerns, and soliciting counterproposals. Reviewers of a draft EIR are requested to focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment, and ways in which the significant impacts of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate significant environmental effects.

This EIR is being distributed directly to agencies, organizations, and interested groups and persons for comment during a 45-day formal review period in accordance with CEQA *Guidelines* Section 15087. The EIR process, including means by which members of the public can comment on the EIR, is discussed further in **Chapter 2**, *Introduction*.

1.3 Project Overview

Regional Setting

The project is located in Kern County, California, at the western edge of the Antelope Valley. The project site is approximately 6 miles southwest of the community of Mojave, approximately 9 miles southeast of the City of Tehachapi, approximately 8 miles northwest of the unincorporated community of Rosamond, and approximately 20 miles west of Edwards Air Force Base. The project is located within the Monolith, Willow Springs, and Soledad Mountain U.S. Geological Survey 7.5-minute quadrangles, and spans multiple Townships, Ranges, and Sections including the following: Township 10 North, Range 13 West, Sections 2-8, 10, and 18; Township 10 North, Range 14 West, Sections 1, 2, 11, 12, 14, 15, 22, and 23; Township 11 North, Range 13 West, Sections 21, 31, 32, and 33; and Township 11 North, Range 14 West

Sections 25, 26, 35, 36. **Figure 3-1,** *Vicinity Map* and **Figure 3-2**, *Aerial Map*, in **Chapter 3**, *Project Description*, show the project in context of the region.

Surrounding Land Uses and Project Site Conditions

Areas surrounding the project include renewable energy development, scattered rural residential development, livestock grazing, light and heavy industrial and mining uses, and undeveloped lands. The project consists of 473 privately owned parcels, as well as an additional parcel located adjacent to the southern portion of the project site, a portion of which is proposed for temporary offsite construction laydown. **Table 1-2**, *Proposed Project Site and Surrounding Land Uses*, demonstrates the existing land use of the proposed project site and surrounding areas.

TABLE 1-2: PROPOSED PROJECT SITE AND SURROUNDING LAND USES

Area	Existing Land Use	Existing General/Specific Plan Map Code Designation[1]	Existing Zoning Classification[b]
Project Site	Generally undeveloped/vacant land, various named and unnamed dirt roads, wind turbines and transmission lines, possible grazing.	8.3 8.3/2.5, 8.4, 8.4/2.4, 8.5/2.5, 4.1 (Low Density Residential)	A, A-1, PL, FP, FPS, RS, WE
North	Vacant land, wind and solar power facilities, Windhub Substation, CalPortland Mojave Cement Plant, Union Pacific Railroad	1.1, 7.3, 8.3, 8.4, 4.1 (Low Density Residential)	A, A-1, M-3, PL, R-2, WE, FP
East	Vacant land, residential properties	4.3, 8.3, 4.1 (Low Density Residential)	A, A-1, E, PL
South	Vacant land, Catalina Solar Project, Big Beau Solar Project, Holiday Rock Quarry, residential properties, possible grazing.	1.1, 8.2, 8.3, 8.4	A, A-1, E, FP, FPS, RS, MH, WE
West	Vacant land, residential properties, BLM land, possible grazing.	1.1, 8.2, 8.3, 8.4	A, E, OS, PL, RS, WE

Note:

[a] Kern County General Plan (KCGP) and Specific Plan (SP) Map Code Designation:
1.1 (State and Federal Land
2.4 (Steep Slope)
2.5 (Flood Hazard)
4.1 (Accepted County Plan Areas)
4.3 (Specific Plan Required)
7.3 (Heavy Industrial)
8.2 (Resource Agriculture)
8.3 (Extensive Agriculture)
8.4 (Mineral and Petroleum, Min 5 Acre Parcel Size)
8.5 (Resource Management, Min. 20 Acre Parcel Size)

[b] Kern County Zoning Districts:
A (Exclusive Agriculture); A-1 (Limited Agriculture); E (Estate); FP (Floodplain Combining); FPS (Floodplain Secondary Combining); M-3 (Heavy Industrial); MH (Mobile Home Combining); OS (Open Space); PL (Platted Lands); R-2 (Medium Density Residential); RS (Residential Suburban Combining); WE (Wind Energy Combining)

Applicant-Submitted Project Objectives

State 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 applicant-submitted 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.
- Provide the 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 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, ROWs, 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 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), 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.

Project Characteristics

The project would use PV solar technology designed in a collection of subarrays to convert solar energy directly to electrical power. The project is intended to operate year-round and would generate electricity during daylight hours to deliver renewable energy into the electric grid, and/or store the generated energy in on-site batteries and discharge it into the grid at various times when electricity demand is at its peak. The power generated on the project site would assist the state in complying with the Renewables Portfolio Standard under Senate Bill 350 (2015), which requires 50 percent of all electricity sold in the state be generated from renewable energy sources by December 31, 2030, and Senate Bill 100, approved in 2018, which requires that 100 percent of all electricity sold in the state be generated from renewable energy sources by 2045 (CPUC, 2020). The power generated on the project site would be sold to California investor-owned utilities, municipalities, community choice aggregators, or other purchasers in furtherance of the goals of the California Renewables Portfolio Standard. At the end of the project's operational term, the project applicant/proponent would determine whether the project site should be decommissioned and deconstructed, or if it would seek an extension of its CUP. If any portion of the project site is decommissioned, it would be converted to other uses in accordance with the applicable land use regulations in effect at that time.

Specifications surrounding the selection (manufacturer) of modules, racking, BESS, and inverters (among other materials) may ultimately guide the final internal layout of the array and BESS and placement of various elements within the project fencing. Setbacks resulting in modifications would be substantially consistent with the proposed site plan. The project includes the following components, which are described in more detail in the following subsections:

- Installation of up to 1,400 MW alternating current (AC) of solar PV modules, mounted on a single-axis racking and/or a fixed tilt system. The mounting systems for the modules would be mounted on steel support posts that would be pile-driven into the ground;
- Installation of energy storage facilities and accessory infrastructure that would provide energy storage capacity of up to 8 GWh for the electrical grid (approximately 1,000 MW);
- Up to three onsite collector substations, including circuit breakers, disconnect switches, metering protection equipment, and main step-up transformer(s);
- One 230-kV switchyard;
- Potential upgrades to, and installation of new circuits, lines, switches, utility poles, etc. at the 230-kV to 500-kV step-up substation located north of the SCE Windhub Substation (constructed as part of the County-approved Enterprise Solar Storage Project);

- Overhead and underground collection systems (the collection systems would be aggregated at multiple circuit breakers or MV switchgear positions within the project facilities, leading to the project collector substations);
- Telecommunication equipment, including underground and overhead fiberoptics, and meteorological data collection systems or supervisory control and data acquisition (SCADA);
- Up to two O&M facilities with approximately six permanent, full-time employees;
- Onsite access roads
- Perimeter security fencing and nighttime directional lighting; and
- Project design features to avoid, preserve, and minimize impacts to Western Joshua tree (WJT) and Joshua tree woodland at the project.

Solar PV Generating Facilities and Solar Modules

The project would use PV solar technology designed in a collection of subarrays to convert solar energy directly to electrical power for eventual export to the electrical grid. The project would include installation of PV modules that would be mounted on a single-axis solar tracking system (and/or fixed tilt racking systems), as shown in **Chapter 3**, *Project Description*, on **Figure 3-15**, *Solar Panel – Elevations (Conceptual)*. The tracking system would be supported by steel posts that would be pile-driven into the ground. The modules would be made of a thin film material or crystalline silicon material which would be dark in color, highly absorptive, and have minimum reflectivity. The modules would be manufactured at an offsite location and transported to the project site.

Depending on the type of technology (modules) used, the panels would typically measure approximately 4.5 feet wide and 8 feet long with the total height of the panel system, measured from the ground surface, would be approximately 9 to 12 feet. The length of each row of panels would be up to 550 feet and would be oriented in the north-south direction in order to maximize panel surface area relative to the sun, which is southerly in the northern hemisphere. As technology continues to advance, upgraded system dimensions that enable enhanced efficiency and output without expanding the project development footprint may be utilized.

Spacing between each row would be approximately 8 to 22 feet to allow access for maintenance and cleaning. Single-axis tracking systems would employ a motor mechanism that would allow the arrays to track the path of the sun from east to west throughout the day. In the morning, the panels would face east. The panels would slowly move to the upright position at noon and on to the west at sundown. The panels would reset to the east in the evening or early morning to receive sunlight at sunrise.

Battery Energy Storage System

The proposed BESS would use direct current (DC)-coupled and/or AC-coupled battery storage. The DC energy storage system would be distributed and located throughout the solar arrays. The AC energy storage system could be either centralized and located close to one or both of the collector substations or distributed throughout the solar arrays; typical BESS facilities are depicted in **Chapter 3**, *Project Description*, on **Figure 3-16**, *Battery Energy Storage System*.

The energy storage batteries would be housed in purpose-built outdoor enclosures, unless a single, stand-alone structure (discussed below) is utilized. Typically, such energy storage systems are based on lithium-

ion battery modules installed in racks and housed in outdoor BESS enclosures. A typical BESS enclosure will house hundreds of battery modules collectively capable of storing between 0.4 to 5 megawatt-hours (MWh) of energy. The modules within each enclosure would be accessed for maintenance from the cabinet's exterior via cabinet doors. To ensure safe and efficient operations, each individual module within an enclosure would be monitored and controlled, and every enclosure would be equipped with integrated operational management systems and fire and safety systems, such as heating ventilation and cooling (HVAC); gas, heat, and smoke detection; and alarms. The battery enclosures are attached to inverters which convert DC to AC (and vice-versa when charging). Starting approximately 5 years after original installation, the project proponent may be required to install additional battery modules and enclosures to augment lost storage capacity, which occurs naturally as the batteries are used. BESS augmentation would occur within areas designated for BESS, as shown on the site plans, and would ensure the project can maintain the full energy storage capacity approved under the project. BESS augmentation would not result in increased storage capacity beyond the amount approved under the CUPs.

The dimensions of a typical BESS enclosure vary between manufacturers and are typically arranged in repeated "blocks" across the site. System blocks may consist of a single enclosure or several smaller enclosures set side by side to create banks of batteries with similar overall dimensions. Smaller enclosures are typically closely spaced and may be physically attached at the time of construction; larger enclosures are placed in smaller groupings or individually. An enclosure grouping typically consists of multiple enclosures measuring up to 22 feet in height. The number, size, layout, and capabilities of each enclosure will vary depending on the battery enclosure manufacturer design, and the BESS system manufacturer(s) selected for the project. Regardless of the system manufacturer, the project's developed footprint and overall capacity will remain substantially the same. If the battery modules are stored in a single, stand-alone structure instead of individual enclosures, the maximum height (including any screening for HVAC) of the structure would be approximately 35 feet. The batteries under this configuration would be housed in open-air-style racking (similar to computer racking) approximately 10 to 12 feet high. The associated inverters, transformers, and switchgear would be located immediately adjacent to the structure on concrete pads or on driven pier foundations.

The proposed project and its systems would be designed, constructed, and operated pursuant to the current California and local building code and California Fire Code requirements. The California Fire Code specifies maximum limits on sizing for battery systems, seismic and structural design, spacing, vehicle impact protection, testing, maintenance and repairs, battery management system monitoring, shutdown and notification requirements, automatic smoke detector requirements, automatic fire sprinkler systems and ventilation specifications. Section 1210 of the California Fire Code also requires that the battery systems be "listed," which is achieved through testing by an Occupational Safety and Health Administration-certified Nationally Recognized Testing Laboratory. The proposed project would be built and operated in accordance with these standards and codes.

The energy storage structure, if used, would also have a fire rating in conformance with County standards and specialized fire suppression systems installed for the battery rooms. All non-battery rooms would have County-approved fire suppression systems. The structure would also have HVAC cooling in the battery room to maintain energy efficiency. Power to the HVAC, lighting, and other equipment would be provided via a connection to the service transformer of one of the three onsite collector substations connection lines installed above ground and/or below ground. Backup generators for the BESS may be required by the Authority Having Jurisdiction to provide backup emergency electricity for fire protection. If required, the generators would use diesel fuel and would need to be intermittently run for maintenance and testing

purposes. The generators would operate in accordance with applicable Eastern Kern Air Pollution Control District (EKAPCD) regulations and appropriate air permits will be obtained from EKAPCD. The energy storage system would be unstaffed, with remote operational control and periodic inspections and maintenance performed as necessary.

Power Collection System and Inverters

The solar panels would be electrically connected to each other via both aboveground and underground wiring. Underground electrical cables (underground collection system) would be installed from groups of solar arrays that would be arranged into power blocks. The cables would convey DC electricity to inverters, which convert the DC electricity to AC. Electrical inverters and associated transformers would be dispersed among the solar arrays and installed on prefabricated metal skids that would sit on steel pier foundations or concrete foundations, depending on the design. The inverter pad transformers would step up the voltage of the array output to 34.5 kV, which would be collected at the onsite circuit breakers or switchgear positions. From the circuit breakers or switchgear positions, the MV collector lines would be routed underground or aboveground to onsite collector substations.

Collector Substations

The onsite collector substations are the termination points of the collection system of 34.5-kV AC electricity. At the collector substations, the output of the field of interconnected arrays is passed through an interconnection step-up transformer to convert it from 34.5 kV to 230 kV. Up to three onsite collector substations would be needed for the project, pending final engineering. Project collector substations would be constructed within the project site. Potential locations of the collector substations are shown within **Figure 3-3**, *Proposed Site Plan*. The collector substations would host the grid intertie safety equipment and switches required to interconnect to the high-voltage transmission system. Generators for backup emergency power would be required at the collector substations. Generators would operate in accordance with applicable EKAPCD regulations and appropriate air permits will be obtained from EKAPCD. The footprint for each collector substation, approximately 500 feet in length and 400 feet in width, would be sized to accommodate all required equipment with safety-related setbacks and would consist of components up to 75 feet in height.

Transmission, Switchyard and Grid Interconnection

To connect the project to the grid, a new, 230-kV transmission line extending from a collector substation located south of the LADWP aqueduct would head north and cross the LADWP aqueduct and then combine with stepped-up generation from the collector substation(s) north of the LADWP via either a switchyard or direct connection. From there, the two circuits would be combined into a double circuit that would run north to a new 230-kV switchyard to connect and/or route the project gen-tie circuits into the previously constructed gen-tie corridor (approved as part of the Sanborn Solar project) north and then west towards SCE's Windhub substation. This switching area would consist of 230-kV breakers, poles and structures, disconnect switches, bus work, a control shelter, and other high-voltage equipment. The switchyard would be approximately 250 feet wide by 250 feet long in area and pole heights associated with the switchyard would be less than 250 feet tall. A 230-kV transmission line may also be constructed from the westernmost onsite collector substation through the project site, joining with the previously described gen-tie lines before continuing north. The proposed transmission line(s) would have poles at a maximum height of up to 250 feet. The final design, layout, and required interconnection components would be determined during the

detailed engineering design stage. A 230-kV to 500-kV step-up substation, constructed north of the Windhub Substation as part of the County-approved Enterprise Solar Storage Project, would step up the voltage once again prior to interconnecting with SCE's grid.

The new 230-kV switchyard also is expected to route gen-tie conductors for the proposed Galaxy Solar PV & Storage Project off of existing gen-tie poles and onto new transmission line poles that continue to the SCE Windhub Substation (to be permitted separately under the proposed Galaxy Solar PV & Storage Project). The Galaxy Solar PV & Storage Project is a separate solar energy project proposed by a separate legal entity (Galaxy Solar PV & Storage, LLC) on private lands under the County's land use jurisdiction. The Galaxy Solar PV & Storage Project is located approximately 9 miles east of the project and, if approved, would construct and operate a new gen-tie line and other associated infrastructure to interconnect to the SCE Windhub Substation. The projects are expected to have different off-takers under unique power purchase agreements and to have separate interconnection agreements. If both the project and Galaxy Solar PV & Storage Project are approved and proceed to construction, the projects would use the same 230 kV switchyard to route each project's gen-tie circuits north and then west to the SCE Windhub Substation. Using the same 230-kV switchyard for both projects would reduce the overall amount of new infrastructure required for the projects and the corresponding environmental footprint of the two solar projects by constructing a single, shared facility. However, if only the project is approved, the 230-kV switchyard would be constructed to serve only the project. Similarly, if only the Galaxy Solar PV & Storage Project is approved, the 230-kV switchyard would be built to serve only the Galaxy Solar PV & Storage Project. Thus, if approved, each project could and would be built and operated independently of the other such that each of the projects include a CUP for the switchyard. The County is preparing a separate EIR to support its review of the Galaxy Solar PV & Storage Project.

Telecommunication Facilities

The SCADA system is critical to the California Independent System Operator and SCE utility interconnection and provides for the proper operation and maintenance of the project. The system uses proprietary software; fiberoptic communication lines; and communication systems such as telephone and/or radio link. The SCADA system functions as a remote start, stop, reset, and safety lock out for the facility, and provides site diagnostic information from the energy generating facility. The SCADA system would also control the collector substations, allowing for fully centralized operation of the project to meet all California Independent System Operator and utility interconnection requirements.

The proposed project would use local exchange carrier services for telecommunication to support remote monitoring requirements. The proposed project would connect to telecommunication fiberoptic lines owned and managed by AT&T or an alternative provider. The cabinet holding the connection equipment would have a base of approximately 4 feet by 2 feet and would be approximately 5 feet in height. From the point of demarcation, an underground or overhead fiberoptic cable would be installed within the proposed project footprint to connect the cabinet to the SCADA equipment within the onsite collector substations.

Operations and Maintenance Facility

It is anticipated that approximately six permanent, full-time employees would be needed to operate and maintain the project. Up to two permanent, onsite O&M facility(ies) and/or small satellite offices may be built onsite to facilitate rapid repair of equipment. Each O&M facility(ies) would be approximately 1,000 to 3,000 square feet and include offices, workshops, and conference rooms. The O&M facility(ies) is

expected to be a prefabricated commercial structure, as shown in **Figure 3-17**, *Operations and Maintenance Facility*. Permanent restroom facilities with septic system/tank and/or portable toilets would be used for sanitary purposes and water would be sourced from trucked water, well water , and/or bottled water would be provided for staff. Supplemental water may be sourced from RMR Water Trucks and Rental Equipment, Inc. (RMR) and the Mojave Public Utility District (MPUD). Proposed O&M facility(ies) would include the requisite number of parking spaces for staff and visitor vehicles and O&M equipment and would comply with Americans with Disabilities Act requirements. Power for the O&M facility(ies) would be provided by either the project's electrical generation or supplied by the local power provider. A back-up generator for critical and emergency facility services with a fuel storage tank would be installed. The O&M facility(ies) would also include approved, non-occupied storage outbuildings for hazardous waste, including lithium-ion battery storage and associated containment for oil and fuels and vehicle maintenance. The O&M facility(ies) would be sited near one of the project entrances and/or in proximity to one of the project collector substations, on APN 346-061-05 or APN 474-060-17, and access to these proposed locations would be on project access roads from 90th Street West or Tehachapi Willow-Springs Road, respectively. These locations are shown in **Chapter 3**, *Project Description*, on **Figure 3-17**, *Operations and Maintenance Facility*.

Site Access and Security

Access to the project site is provided via multiple existing roads; the primary roadways for local access include Tehachapi-Willow Springs Road, 90th Street West, and Backus Road. Tehachapi Willow-Springs Road bisects the project and would serve as the primary access to the project site driveways, particularly within the central and southern portions of the project site. 90th Street West, south off Oak Creek Road, would provide access to the northern portion of the project site. Backus Road would provide access to the southwestern portion of the project site. Interstate 5 is the largest highway that would provide regional access to the project vicinity from the north and the south, along with State Routes 14, 58, and 138.

Internal project access roads would be up to 25 feet wide and would be cleared and compacted for access to the solar blocks and equipment within the site. These project access roads would remain in place for ongoing O&M activities after construction is completed. Dirt roads that are located within the boundaries of the project, and that are not the subject of a written easement, would be closed to third-party use for vehicular or other access. Any such third parties that may currently use these dirt roads would be rerouted to public access routes, which would remain open.

Final project access road alignments would depend on the final placement of solar panels and on the results of field investigations, including topography and any other site-specific details to be incorporated into final site design. Should project access roads be required to cross streambed areas under the jurisdiction of California Department of Fish and Wildlife and/or Regional Water Quality Control Board, appropriate crossings would be installed to minimize impacts to these jurisdictional areas and comply with all California Fish and Game Code and Porter Cologne Act requirements, including authorization through a Streambed Alteration Agreement and Waste Discharge Requirements, as appropriate.

Perimeter fence installation requirements would be evaluated, and the best-fit scenario would be incorporated at the project site. Fencing would be installed around the perimeter of the project site and areas requiring controlled access for safety and security purposes, as needed (i.e. collector substation, switchyard). Fencing would remain for the life of the project. The project site may be fenced to keep terrestrial wildlife species from entering the project site temporarily during the project construction phase. Permanent perimeter fencing would be designed to allow for passage of small and medium-sized wildlife

with a gap at the bottom of the fence to allow permeability for wildlife and wildlife movement through and around the project site, while permanent exclusion fencing around collector substations and the switchyard may be required. Final fence design will be developed in consultation with appropriate agencies.

Permanent motion-sensitive, directional security lights would be installed to provide adequate illumination around the collector substation areas and points of ingress/egress. All lighting would be shielded and directed downward to the extent feasible to minimize the potential for glare or spillover onto adjacent properties. All lighting would conform to applicable County Dark Skies Ordinance requirements. Lighting would be used from dusk to dawn once the project is operational. Motion-sensitive cameras may also be installed throughout the solar arrays at the inverters for added security. If installed, cameras would be mounted on poles approximately 20 feet in height.

Project Design Features to Avoid, Preserve, and Minimize Impacts to Western Joshua Tree and Joshua Tree Woodland at the Project

The project includes WJT removal and translocation (in accordance with the Western Joshua Tree Conservation Act). Given that WJT individuals would be impacted by the project, the project includes a number of design features to avoid, minimize, and preserve WJT and Joshua tree woodland at the project that would be enforced as mitigation measures (see **Section 4.4**, *Biological Resources*):

- An onsite 50-foot vegetated strip between the project site and Tehachapi Willow Springs Road will remain undeveloped as shown on **Figure 3-3**, *Proposed Site Plan*. County verification that the 50-foot vegetated strip is clearly identified and labeled on the Site Plan will occur prior to issuance of a building permits.

- The project includes restoration and enhancements of WJT habitats through relocation of a minimum of 10,000 onsite WJT stems to the onsite Woodland Habitat Preservation Areas, to the 50-foot vegetated strip along Tehachapi Willow Springs Road, and to other onsite or offsite conserved lands. WJT restoration and relocation activities, as authorized in any California Department of Fish and Wildlife (CDFW) incidental take permit issued to the project, may be phased in accordance with project development. 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.

- Creation of 420 acres of Woodland Habitat Preservation Areas on the project site would avoid impacts to contiguous blocks of Joshua tree woodlands (preserving approximately 34,200 living and dead WJT stems). The 420 acres of Woodland Habitat Preservation Areas exceed the approximately 325 acres of mapped Joshua tree woodland at the project to allow space for relocation of WJT into less dense portions of these areas, and for the potential organic expansion of existing Joshua tree woodland into these areas. The Woodland Habitat Preservation Areas would be protected for the life of the project and are shown on **Figure 3-3**, *Proposed Site Plan*. County verification that the Woodland Habitat Preservation Areas are clearly identified and labeled on the Site Plan will occur prior to issuance of building permits.

- The project proponent intends to obtain take coverage from CDFW for impacts to WJT and, prior to the issuance of grading or building permits, documentation of take authorizations will be provided to Kern County (**Mitigation Measure MM 4.4-7**). Mitigation for impacts to WJT would be coordinated with CDFW through take coverage permitting and is expected to include measures

such as seed collection, WJT relocation requirements, and the acquisition of offsite compensatory mitigation lands with a focus on WJT refugia habitat.

1.4 Environmental Impacts

CEQA *Guidelines* Section 15128 requires that an EIR contain a statement briefly indicating the reasons why any new and possibly significant effects of a project were determined not to be significant and were, therefore, not discussed in detail in the EIR. The County has engaged the public to participate in the scoping of the environmental document. The contents of this EIR were established based on a notice of preparation (NOP) prepared in accordance with the CEQA *Guidelines*, as well as public and agency input that was received during the scoping process. A summary of the comments received on the NOP are located in **Chapter 2**, *Introduction*. Specific issues found to have no impact or less-than-significant impacts during preparation of the NOP do not need to be addressed further in this EIR. Based on the findings of the NOP and the results of scoping, a determination was made that this EIR must contain a comprehensive analysis of all environmental issues identified in CEQA *Guidelines* Appendix G except population and housing and recreation.

Impacts Not Further Considered in this EIR

As discussed in the NOP (located in **Appendix A** of this EIR), the project was determined to have no impact with regard to the following resource areas, which are therefore not analyzed in this EIR.

- Population and Housing
- Recreation

Impacts of the Project

Sections 4.1 through **4.18** in **Chapter 4**, *Environmental Setting, Impacts, and Mitigation Measures*, provide a detailed discussion of the environmental setting, impacts associated with the project, and mitigation measures designed to reduce significant impacts to less-than-significant levels, when feasible. The impacts, mitigation measures, and residual impacts for the project are summarized in **Table 1-7**, *Summary of Impacts, Mitigation Measures, and Levels of Significance*, located at the end of this chapter, and are discussed further below.

Impacts related to the following resource areas are evaluated in this EIR for their potential significance:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Public Services
- Traffic and Transportation
- Tribal Cultural Resources

- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Utilities and Service Systems
- Wildfire

Less-than-Significant Impacts

Table 1-3, *Summary of Project Impacts that are Less than Significant or Less than Significant with Mitigation*, presents those impacts of the project that were determined to be less than significant by themselves, or less than significant with implementation of mitigation measures. Less-than-significant cumulative impacts are also included in this table. **Sections 4.1** through **4.18** of this EIR present detailed analysis of these impacts and describe the means by which the mitigation measures listed in **Table 1-3**, *Summary of Project Impacts That Are Less than Significant or Less than Significant with Mitigation*, would reduce impacts to a less than significant level.

TABLE 1-3: SUMMARY OF PROJECT IMPACTS THAT ARE LESS THAN SIGNIFICANT OR LESS THAN SIGNIFICANT WITH MITIGATION

Impact	Mitigation Measures
Agriculture and Forestry Resources (Project and Cumulative)	No mitigation required
Air Quality (Project and Cumulative)	MM 4.3-1 through 4.3-8
Biological Resources (Project, with the exception of WJT)	MM 4.1-1, MM 4.1-3, MM 4.1-6, MM 4.1-7, MM 4.3-3, MM 4.9-2, MM 4.13-1, and MM 4.4-1 through MM 4.4-20
Cultural Resources (Project and Cumulative)	MM 4.5-1 through MM 4.5-5
Energy (Project and Cumulative)	MM 4.3-3
Geology and Soils (Project and Cumulative)	MM 4.7-1 through MM 4.7-6 and MM 4.10-1
Greenhouse Gas Emissions (Project and Cumulative)	No mitigation required
Hazards and Hazardous Materials (Project and Cumulative)	MM 4.1-1. 4.9-1 through MM 4.9-3, MM 4.14-1, and 4.15-1
Hydrology and Water Quality (Project and Cumulative)	MM 4.9-1, MM 4.10-1 and MM 4.10-2
Land Use and Planning (Project and Cumulative)	MM 4.9-3 and MM 4.11-1
Mineral Resources (Project and Cumulative)	No mitigation required
Noise (Project and Cumulative)	MM 4.13-1 through MM 4.13-3
Public Services (Project and Cumulative)	MM 4.14-1 through MM 4.14-4
Transportation and Traffic (Project and Cumulative)	MM 4.15-1 and MM 4.15-2
Tribal Cultural Resources (Project and Cumulative)	MM 4.5-1 through MM 4.5-5
Utilities and Service Systems (Project and Cumulative)	MM 4.1-1, 4.10-1, MM 4.10-2, and MM 4.17-1
Wildfire (Project)	MM 4.10-1, MM 4.14-1, and MM 4.15-1

Significant and Unavoidable Impacts

CEQA *Guidelines* Section 15126.2(b) requires that the EIR describe any significant impacts, including those that can be mitigated but not reduced to less-than-significant levels. Potential environmental effects of the project and proposed mitigation measures are discussed in detail in **Chapter 4**, *Environmental* Setting, *Impacts, and Mitigation Measures*, of this EIR.

According to CEQA *Guidelines* Section 15355, the term cumulative impacts "… refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Individual effects that may contribute to a cumulative impact may be from a single project or a number of separate projects. Individually, the impacts of a project may be relatively minor, but when considered along with impacts of other closely related or nearby projects, including newly proposed projects, the effects could be cumulatively considerable. This EIR has considered the potential cumulative effects of the project along with other current and reasonably foreseeable projects. Impacts for the following have been found to be cumulatively considerable:

- Aesthetics (Project and Cumulative)
- Biological Resources (Project WJT only and Cumulative)
- Wildfire (Cumulative)

Table 1-4, *Summary of Significant and Unavoidable Project-Level and Cumulative Impacts of the Project*, presents those impacts at the project level and cumulatively. **Sections 4.1**, **4.4**, and **4.18** of this EIR present detailed analyses of these impacts and describe the means by which the mitigation measures listed in **Table 1-4,** *Summary of Significant and Unavoidable Project-Level and Cumulative Impacts of the Project*, would reduce the severity of impacts to the extent feasible.

TABLE 1-4: SUMMARY OF SIGNIFICANT AND UNAVOIDABLE PROJECT-LEVEL AND CUMULATIVE IMPACTS OF THE PROJECT

Resources	Project Impacts	Cumulative Impacts
Aesthetics	Implementation of the project would result in significant visual impacts to the existing visual quality or character of the site and surrounding area. Even with distance and diminished visibility, visual change associated with introduction of utility-scale solar development and associated infrastructure on currently undeveloped desert terrain would likely attract attention. Further, development of the project would expand existing renewable energy development present south of State Route (SR) 58 and east and west of SR-14. **Mitigation Measures MM 4.1-1** through **MM 4.1-7** would help to reduce visual impacts associated with the proposed project. Nevertheless, even with implementation of **Mitigation Measures MM 4.1-1** through **MM 4.1-7**, project-level impacts to visual character and quality would remain **significant and unavoidable**.	While other projects in the region would also be required to implement various mitigation measures to reduce impacts, conversion of approximately 7,700 of acres in a presently rural area to solar energy production uses cannot be mitigated to a degree that impacts are no longer significant. Therefore, even with implementation **of Mitigation Measures MM 4.1-1** through **MM 4.1-7**, the project's contribution to significant impacts associated with visual character in the Antelope Valley would be **cumulatively significant and unavoidable.**

Resources	Project Impacts	Cumulative Impacts
Biological Resources	Implementation of the project would have a substantial adverse effect, either directly or through habitat modifications on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations by the CDFW. Approximately 80 percent of western Joshua tree (WJT) stems at the project are within the WJT Impact Area and are subject to potential direct impacts. The remainder of WJT stems (20 percent) at the project would be preserved onsite within Woodland Habitat Preservation Areas. However, while implementation of the project design features and **Mitigation Measures MM 4.4-7** and **MM 4.4-1** through **MM 4.4-3** would reduce impacts to WJT, the County considers impacts to WJT to be **significant and unavoidable** due to the number of WJT that would be impacted to implement the project. Impacts would be less than significant for all other affected species.	Implementation of the project in addition to the other projects under way or proposed within Kern County would impact special-status plant and wildlife species. Given the number of present and reasonably foreseeable future development projects in the Antelope Valley, the project, when combined with other projects, would result in a significant and unavoidable cumulative loss of foraging and nesting habitat for special-status species. While the project would have less-than-significant impacts 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 4.9-2, MM 4.13-1,** and **MM 4.4-1** through **MM 4.4-20**, when combined with related projects, the project would contribute to impacts that would be **cumulatively significant and unavoidable**.
Wildfire	There would be no significant and unavoidable project impacts.	Despite implementation of **Mitigation Measures MM 4.10-1** and **MM 4.14-1**, given the project's location in a rural area and limited infrastructure, the project and related projects have the potential to result in a cumulative impact related to wildfire and, thus, would be **cumulatively significant and unavoidable**.

Growth Inducement

The Kern County General Plan recognizes that certain forms of growth are beneficial, both economically and socially. CEQA *Guidelines* Section 15126.2(d) provides the following guidance on growth-inducing impacts:

> *A project is identified as growth-inducing if it "would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.*

Growth inducement can be a result of new development that requires an increase in employment levels, removes barriers to development, or provides resources that lead to secondary growth. With respect to employment, the project would not induce substantial growth. There would be six permanent employees during operations. It is anticipated that the construction workforce would commute to the project site each day from local and regional communities, and the majority would likely come from the existing labor pool as construction workers travel from site to site as needed. Construction staff not drawn from the local and regional labor pool would stay in any of the local hotels in local communities.

Although the project would contribute to the energy supply, which supports growth, the development of power infrastructure is a response to increased market demand. It does not induce new growth. Kern County planning documents already permit and anticipate a certain level of growth in the area of the project and in the State as a whole, along with attendant growth in energy demand. It is this anticipated growth that drives

energy-production projects, not vice versa. The project would supply energy to accommodate and support existing demand and projected growth statewide, but it would not foster any new growth within the project vicinity. Therefore, any link between the project and growth in Kern County would be speculative.

In *Kerncrest Audubon Society v. Los Angeles Department of Water and Power*, the analysis of growth-inducing effects contained in the EIR for the Pine Tree Wind Development Project was challenged. Plaintiffs argued that the discussion was too cursory to provide adequate information about how additional electricity generated by the project would sustain further growth in the Los Angeles area. The court held that the additional electricity that the project would produce was intended to meet the current forecast of growth in the Los Angeles area. As such, the wind development project would not cause growth, and so it was not reasonable to require a detailed analysis of growth-inducing impacts. In addition, EIRs for similar energy projects have contained similarly detailed analyses of growth-inducing impacts. Their conclusions that increasing the energy supply would not create growth has been upheld, because: (1) the additional energy would be used to ease the burdens of meeting existing energy demands within and beyond the area of the project; (2) the energy would be used to support already-projected growth; or (3) the factors affecting growth are so multifarious that any potential connection between additional energy production and growth would necessarily be too speculative and tenuous to merit extensive analysis. Thus, as has been upheld in the courts, this level of analysis provided in this EIR is adequate to inform the public and decision makers of the growth-inducing impacts of the project.

Irreversible Impacts

CEQA Guidelines Section 15126.2(c) defines an irreversible impact as an impact that uses nonrenewable resources during the initial and continued phases of the project. Irreversible impacts can also result from damage caused by environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to ensure that such consumption is justified.

Build-out of the project would commit nonrenewable resources during project construction. During project operations, oil, gas, and other fossil fuels and nonrenewable resources would be consumed, primarily in the form of transportation fuel for project employees, construction vehicles, and equipment, as well as any power sources (e.g., portable generators) to facilitate construction activities. Therefore, an irreversible commitment of nonrenewable resources would occur as a result of long-term project operations. However, assuming that those commitments occur in accordance with the adopted goals, policies, and implementation measures of the Kern County General Plan and the Soledad Mountain Elephant Butte Specific Plan, as a matter of public policy, those commitments have been determined to be acceptable and necessary to successfully implement the project and achieve project objectives. The Kern County General Plan ensures that any irreversible environmental changes associated with those commitments will be minimized.

1.5 Alternatives to the Project

CEQA *Guidelines* Section 15126.6 states that an EIR must address "a range of reasonable alternatives to the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives." Based on the significant environmental impacts of the project, the aforementioned objectives established for the project and the feasibility of the alternatives considered, a range of alternatives is analyzed below and discussed in detail in **Chapter 6**, *Alternatives*, of this EIR.

Alternatives Considered and Rejected

Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects (CEQA *Guidelines* Section 15126.6(c)). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not need to be considered (CEQA *Guidelines* Section 15126(f)(2)). Kern County considered several alternatives to reduce impacts to aesthetics (project and cumulative), biological resources (cumulative only), and wildfire (cumulative only). Per CEQA, the lead agency may make an initial determination as to which alternatives are feasible and warrant further consideration, and which are infeasible. The following alternatives were initially considered but were eliminated from further consideration in this EIR because they do not meet project objectives or were infeasible.

Wind Energy Project Alternative

The Wind Energy Project Alternative would involve the use of wind energy as an alternative to the development of a solar project. Similar to solar power, energy production from the wind is an alternative to energy production from more commonly used coal, oil, or natural gas sources. Wind energy provides the following benefits:

- Wind is a renewable and infinite resource.
- After activation, wind energy generation results in a net reduction of emissions, including carbon dioxide and other greenhouse gases (GHG).
- Wind is a free resource after the capital cost of installation (excluding maintenance).
- A Wind Energy Project is compatible with existing wind development surrounding the project site.

In addition, energy production from wind power would not require the significant water usage associated with coal, natural gas, oil, and combined-cycle sources. Turbines used in wind farms for commercial production of electric power are usually three-bladed units that are pointed into the wind by computer-controlled motors. The wind farm would consist of a group of wind turbines placed where electrical power is produced. The individual turbines would be interconnected with a medium-voltage power collection system and a communications network. At a substation, the medium-voltage electrical current would be increased through a transformer before connecting to the high-voltage transmission system. Compared with traditional energy sources, the environmental effects of wind power are relatively minor. However, wind farms would not decrease short-term construction-related air emissions. Wind turbines would also have the potential to affect avian species in the local area. In addition, in order for wind turbines to produce an equivalent 1,400 MW of power that the project would produce, the alternative would require more space than what the project site currently accommodates. Consequently, the project site would need to be expanded to facilitate the number of turbines needed and oriented to maximize exposure to prevailing winds, accounting for tower wake avoidance, to match the output of the proposed project.

As noted above, some of the project's objectives are to assist California in meeting its GHG emission reduction goals through establishing solar PV power-generating facilities to produce reliable electricity in an economically feasible and commercially financeable manner while minimizing environmental impacts and using proven and established PV technology that is efficient, requires low maintenance, and is recyclable. In accordance with the CEQA *Guidelines* (Section 15126.6[c]), alternatives may be eliminated

from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce significant environmental effects. Therefore, this alternative was eliminated from further consideration because:

It would substantially increase the significant aesthetic impacts associated with the project because wind turbines would be much taller than solar panels, require Federal Aviation Administration lighting, and be more visible from many viewpoints.

- It may conflict with the Mojave Air and Space Port, Kern County Airport Land Use Compatibility Plan, and the Edwards Air Force Base due to the heights of the turbines.
- It may result in additional/greater biological resources impacts to avian species than the project.
- It may require greater encroachment into western Joshua tree woodlands for optimal spacing and orientation relative to prevailing winds and tower wake.
- It may generate long-term noise impacts to nearby sensitive receptors from rotating turbine blades.
- It would not reduce temporary and cumulatively significant air quality impacts due to similar construction requirements.

Industrial Power Plant Alternative

This alternative would involve the development of a natural gas–fired power plant or plants (equivalent to 1,400 MW) in Kern County, such as the La Paloma Generating Project in McKittrick. Fossil fuel–powered plants are designed on a large scale for continuous operation. However, byproducts of industrial power plant operation need to be considered in both design and operation. When waste heat that results from the finite efficiency of the power cycle is not recovered and used as steam or hot water, it must be released to the atmosphere, and often uses a cooling tower as a cooling medium (especially for condensing steam). The flue gas from combustion of the fossil fuels is discharged to the air and contains carbon dioxide and water vapor as well as other substances, such as nitrogen, nitrogen oxides, and sulfur oxides. Furthermore, unlike the proposed project, fossil fuel–powered plants are major emitters of GHGs. In addition, industrial power plants generally involve the construction of large structures, such as cooling towers and gas stacks, as well as a large number of employees to operate the facility on a 24/7 basis 365 days a year. Accordingly, the development of an industrial power plant would typically result in greater adverse impacts related to: (1) aesthetics and the local visual setting of the project area; (2) air quality and GHG emissions; (3) land use and planning conflicts with the rural development of the surrounding area; (4) noise from the plant operations; (5) traffic from increased employment at the facility; and (6) demand on public utilities, including water and waste disposal.

As noted above, some of the project's objectives are to assist California in meeting its GHG emission reduction goals through establishing solar PV power-generating facilities to produce reliable electricity in an economically feasible and commercially financeable manner while minimizing environmental impacts and using proven and established PV technology that is efficient, requires low maintenance, and is recyclable. In accordance with the CEQA *Guidelines* (Section 15126.6[c]) alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce significant environmental effects. Therefore, this alternative was eliminated from further consideration because:

- It would result in additional/greater impacts than the project including aesthetics, air quality, GHG emissions, land use and planning, noise, transportation, and public utilities, including water use and disposal.
- Depending on siting, it may also result in greater biological resources impacts than the project resulting from emission byproducts (e.g. acid rain).
- It may conflict with the Mojave Air and Space Port, Kern County Airport Land Use Compatibility Plan, and potentially the Edwards Air Force Base due to the heights of the cooling towers and smoke stacks, as well as flue gas.
- It would not contribute to the statewide renewable energy and GHG emission reduction objectives as this alternative would use nonrenewable energy to produce electricity.

Alternative Site

This alternative would involve the development of the project on another site located within Kern County, other than constructing rooftop distributed generation systems. Although undetermined at this time, the alternative project site would likely be located in western Antelope Valley, similar to the proposed project. This alternative is assumed to involve construction of a 1,400-MW PV solar facility with up to 8 GWh of energy storage on a site totaling 7,700 acres. CEQA *Guidelines* 15126.6(f)(2(a) states that the key and initial step in considering an alternative site is whether "any of the significant effects of the project would be avoided or substantially lessened" in relocating the project, while remaining consistent with the same basic objectives of the project.

Western Antelope Valley has attracted renewable energy development applications that are being proposed for vacant land or land with a history of agricultural uses. The availability of alternative sites is constrained by the renewable energy market itself. While other sites of similar size, configuration, and use history may exist in western Antelope Valley, alternative project sites in the area are likely to have similar project and cumulatively significant impacts after mitigation, including cumulatively significant impacts to aesthetics, biological resources, and wildfire. This is based on the known general conditions in the area and the magnitude of the project.

In addition, alternative sites for the project are not considered to be "potentially feasible," as there are no suitable sites within the control of the project proponent that would reduce significant project impacts. The potential amount of available similar sites is further reduced because, unlike the project, alternative sites may not be within close proximity to transmission infrastructure. Therefore, this alternative was eliminated because it would not avoid or substantially reduce the significant environmental effects of the project.

Alternatives Selected for Analysis

The following alternatives have been determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of the project, but which may avoid or substantially lessen any of the significant impacts of the project. The following alternatives are analyzed in detail in this **Chapter 6**, *Alternatives*, of this EIR:

- Alternative 1: No Project Alternative
- Alternative 2: General Plan/Specific Plan and Zoning Build-Out Alternative

- Alternative 3: Reduced Acreage Alternative
- Alternative 4: No Ground-Mounted Utility-Solar Development Alternative – Distributed Commercial and Industrial Rooftop Solar Only

Table 1-5, *Summary of Development Alternatives*, on the following page, provides a summary of the relative impacts and feasibility of each alternative and **Table 1-6**, *Comparison of Alternatives*, provides a summary and side-by-side comparison of the potential impacts of the alternatives and the project. A complete discussion of each alternative is provided below. Please note that in Alternatives 1 through 4 in **Table 1-6,** *Comparison of Alternatives*, the references to "less, similar, or greater" refer to the impact of the alternative compared to the proposed project, and the impacts "no impact (NI), less than significant (LTS), or significant and unavoidable (SU)" in the parentheses refer to the significant impact of the specific alternative.

TABLE 1-5: SUMMARY OF DEVELOPMENT ALTERNATIVES

Alternative	Description	Basis for Selection and Summary of Analysis
Project	Construction and operation of a solar facility and associated infrastructure necessary to generate up to 1,400 MW of renewable electrical energy and up to 8 GWh of energy storage capacity on approximately 7,700 acres. The power would be delivered via a gen-tie line to a grid interconnection point at the SCE Windhub Substation. Approval of zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, and vesting tentative parcel maps would be required.	N/A
Alternative 1: No Project Alternative	No development would occur on the project site. The project site would remain unchanged.	• Required by CEQA. • Avoids need for CUPs, zone classification changes, General Plan amendments, zone variances, removal of road reservations, vacation of easements, or vesting tentative parcel maps. • Avoids all significant and unavoidable impacts. • Would not offset greenhouse gas (GHG) emissions from existing nonrenewable energy generation, and thus have greater impacts on GHG emissions. • No impact in all remaining environmental issue areas. • Does not meet any of the project objectives.
Alternative 2: General Plan/Specific	Project site would be developed to the maximum intensity allowed under existing Kern County General Plan or Soledad	• Avoids need for the proposed zone classification changes, CUPs, General Plan amendments, zone variances,

Alternative	Description	Basis for Selection and Summary of Analysis
Plan and Zoning Build-Out Alternative	Mountain Elephant Butte Specific Plan land use designations and zoning classifications and other existing applicable allowances.	removal of road reservations, vacation of easements, and vesting tentative parcel maps. However, similar entitlements may be required for uses specified in existing zone districts. • Reduces impacts to aesthetics, agriculture and forestry, and wildfire resources. • Similar impacts to air quality, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, and noise. • Greater overall impacts in all remaining environmental issue areas. • Does not meet any of the project objectives.
Alternative 3: Reduced Acreage Alternative	Construction and operation of a solar power generation and energy storage facility on a reduced project site, leaving a total of approximately 2,900 acres undeveloped. This alternative is still expected to contain enough land to construct a solar array field capable of generating up to approximately 800 MW, with up to 4.8 GWh of energy storage. The alternative would similarly require zone classification changes, conditional use permits, General Plan amendments, zone variances, removal of road reservations, vacation of easements, and vesting tentative parcel maps.	• Greater GHG emissions impact as benefit of offsetting GHG emissions from nonrenewable energy generation would be minimized. • Greatly reduces the ability to optimize the value and use of existing nearby infrastructure deliverability capacity at Windhub Substation. • Reduces, but similar impacts to hazards and hazardous materials, land use and planning, mineral resources, noise, public services, and wildfires. • Reduces impacts in all remaining environmental issue areas. • Would not eliminate or substantially lessen significant and unavoidable impacts associated with aesthetics (project and cumulative), biological resources (project, WJT only and cumulative), or wildfire (cumulative only). • Does not meet all of the project objectives

Alternative	Description	Basis for Selection and Summary of Analysis
Alternative 4: No Ground-Mounted Utility-Solar Development Alternative – Distributed Commercial and Industrial Rooftop Solar Only	The construction of 1,400 MW of PV solar distributed on rooftops throughout western Antelope Valley. Electricity generated would be for onsite use only.	• Avoids need for zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, and vesting tentative parcel maps at the project site, but may require other entitlements (such as a CUP or variance) on other sites. • Avoids significant and unavoidable impacts associated with aesthetics, biological resources, and wildfire. • Greater GHG emissions impact as a benefit of offsetting GHG emissions from nonrenewable energy generation would be reduced. • No impacts on land use and planning or mineral resources. • Similar impacts to air quality, energy, and noise. • Reduces impacts in all remaining environmental issue areas. • Does not meet most project objectives nor does this alternative account for the benefits of inclusion of an energy storage component of the project.

TABLE 1-6: COMPARISON OF ALTERNATIVES

Environmental Resource	Project	Alternative 1: No Project Alternative	Alternative 2: General Plan/Specific Plan and Zoning Build-Out Alternative	Alternative 3: Reduced Acreage Alternative	Alternative 4: No Ground-Mounted Utility-Solar Alternative – Distributed Commercial and Industrial Rooftop Solar Only
Aesthetics	Significant and unavoidable (project and cumulative)	Less (NI)	Less (LTS)	Less (SU)	Less (LTS)
Agriculture and Forestry Resources	Less than significant (project and cumulative)	Less (NI)	Less (LTS)	Less (LTS)	Less (NI)
Air Quality	Less than Significant with Mitigation (project and cumulative)	Less (NI)	Similar (LTS)	Less (LTS)	Greater (SU)
Biological Resources	Less than Significant with Mitigation (project; except for WJT) Significant and unavoidable (project WJT only and cumulative)	Less (NI)	Greater (SU)	Less (SU)	Less (LTS)
Cultural Resources	Less than significant with mitigation (project and cumulative)	Less (NI)	Greater (LTS)	Less (LTS)	Less (LTS)
Energy	Less than significant (project and cumulative)	Less (NI)	Greater (LTS)	Less (LTS)	Similar (LTS)
Geology and Soils	Less than significant with mitigation (project and cumulative)	Less (NI)	Similar (LTS)	Less (LTS)	Less (LTS)
Greenhouse Gas Emissions	Less than significant (project and cumulative)	Greater (LTS)	Greater (LTS)	Greater (LTS)	Greater (LTS)
Hazards and Hazardous Materials	Less than significant with mitigation (project and cumulative)	Less (NI)	Greater (LTS)	Similar (LTS)	Less (LTS)

Environmental Resource	Project	Alternative 1: No Project Alternative	Alternative 2: General Plan/Specific Plan and Zoning Build-Out Alternative	Alternative 3: Reduced Acreage Alternative	Alternative 4: No Ground-Mounted Utility-Solar Alternative – Distributed Commercial and Industrial Rooftop Solar Only
Hydrology and Water Quality	Less than significant with mitigation (project and cumulative)	Less (NI)	Greater (LTS)	Less (LTS)	Less (LTS)
Land Use and Planning	Less than significant with mitigation (project and cumulative)	Less (NI)	Similar (LTS)	Similar (LTS)	Less (NI)
Mineral Resources	Less than significant (project and cumulative)	Less (NI)	Similar (LTS)	Similar (LTS)	Less (NI)
Noise	Less than significant with mitigation (project and cumulative)	Less (NI)	Greater (LTS)	Similar (LTS)	Similar (LTS)
Public Services	Less than significant with mitigation (project and cumulative)	Less (NI)	Greater (LTS)	Similar (LTS)	Less (LTS)
Transportation	Less than significant with mitigation (project and cumulative)	Less (NI)	Greater (LTS)	Less (LTS)	Less (LTS)
Tribal Cultural Resources	Less than significant with mitigation (project and cumulative)	Less (NI)	Greater (LTS)	Less (LTS)	Less (NI)
Utilities and Service Systems	Less than significant with mitigation (project and cumulative)	Less (NI)	Greater (LTS)	Less (LTS)	Less (LTS)
Wildfires	Less than significant with mitigation (project)	Less (NI)	Similar (SU)	Similar (LTS)	Less (LTS)
	Significant and unavoidable (cumulative only)	Less (NI)	Similar (SU)	Similar (SU)	Less (LTS)

Environmental Resource	Project	Alternative 1: No Project Alternative	Alternative 2: General Plan/Specific Plan and Zoning Build-Out Alternative	Alternative 3: Reduced Acreage Alternative	Alternative 4: No Ground-Mounted Utility-Solar Alternative – Distributed Commercial and Industrial Rooftop Solar Only
Meet Project Objectives?	All	None	None	Partially	Partially
Reduce the Project's Significant and Unavoidable Impacts?	N/A	All	Some	None	All

NI = No Impact
LTS = Less Than significant
SU = Significant and Unavoidable

Alternative 1: No Project Alternative

The CEQA *Guidelines* require EIRs to include a No Project Alternative for the purpose of allowing decision makers to compare the effects of approving the project versus a No Project Alternative. Accordingly, Alternative 1, the No Project Alternative, assumes that the development of the 1,400-MW solar PV facility with up to 8 GWh of energy storage on the approximately 7,700-acre site would not occur. The No Project Alternative would not require the requested entitlements, including CUPs, amendments to the Circulation Element of the Kern County General Plan, ZCCs, Zone Variances, or Vesting Tentative Parcel Maps. The No Project Alternative would maintain the current zoning, road reservations, parcel acreages, public access easements, and existing land uses, which consist mostly of undeveloped desert land. No physical changes would be made to the project site.

Alternative 2: Specific Plan and Zoning Build-Out Alternative

Alternative 2, the General Plan/Specific Plan and Zoning Build-Out Alternative, assumes the project site would be developed to the maximum intensity allowed under the existing Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan land use and zoning classifications. The existing General and Specific Plan designations are described in **Chapter 3**, *Project Description,* and shown in **Figure 3-6**, *Existing General Plan Map,* and listed in **Table 1-1,** *Project Assessor Parcel Numbers, Existing and Proposed Land Use, Zoning, and Acreages*.

No solar or energy storage facilities would be developed under this alternative and, therefore, no zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, or vesting tentative parcel maps for construction and operation would be required for this alternative. The project site would be developed in accordance with the existing land use designations, zone districts while adhering to the applicable General/Specific Plan goals, policies and implementation measures. Implementation of Alternative 2 also assumes any uses developed onsite would be limited in scope to the listed "by right" or discretionary uses outlined for the existing zone district, and design features would conform with special development standards and best practices outlined in the Kern County Zoning Ordinance or other local regulatory frameworks.

Alternative 3: Reduced Acreage Alternative

Under Alternative 3, the Reduced Acreage Alternative, approximately 4,800 acres would be developed with a solar power generation and energy storage facility and associated infrastructure with the capacity to generate up to 800 MW of renewable electric energy with up to 4.8 GWh of battery energy storage capacity. Under this alternative, approximately 2,900 acres would remain undeveloped. The generation tie (gen-tie) interconnection would remain unchanged from the project. Eliminating development of approximately 2,900 acres from the project would reduce the project's total solar power generation capacity by up to 600 MW (from 1,400 MW to 800 MW), reduce the project's battery storage capacity by up to 3.2 GWh (from 8 GWh to 4.8 GWh), and reduce the developed area from approximately 7,700 acres to approximately 4,800 acres. Similar to the proposed project, this alternative would require proportionally reduced entitlement boundaries for zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, and vesting tentative parcel maps for construction and operation of a utility-scale solar generation and energy storage facility.

Alternative 4: No Ground-Mounted Utility-Solar Development Alternative – Distributed Commercial and Industrial Rooftop Solar Only

Alternative 4, the No Ground-Mounted Utility-Solar Development Alternative, would involve the development of a number of geographically distributed small to medium solar PV systems (100 kilowatt hours to 1 MW) within existing developed areas, typically on the rooftops of commercial and industrial facilities situated throughout western Antelope Valley. Under this alternative, no undeveloped, desert land would be developed or altered. However, depending on the type of solar modules installed and the type of tracking equipment used (if any), a similar or greater amount of acreage (i.e., greater than 7,700 acres of total rooftop area) may be required to attain the project's capacity of up to 1,400 MW of solar PV generating capacity. Because of space or capital cost constraints, many rooftop solar PV systems would be fixed-axis systems or would not include the same type of sun-tracking equipment that would be installed in a freestanding utility-scale solar PV project and, therefore, would not attain the same level of efficiency with respect to solar PV generation. Alternative 4 would generate up to 1,400 MW of electricity, but dispersed across different land uses and development types not likely to exceed onsite demand, and would not include up to 8 GWh of battery storage capacity. This alternative assumes that rooftop development would occur primarily on commercial and industrial structures due to the greater availability of large, relatively flat roof areas necessary for efficient solar installations. Solar panel shade structures constructed over parking lots or landscaped areas within the commercial or industrial development could potentially contribute to the available acreage suitable for solar installations, also noting the County's minimum requirement for landscaping area is 5 percent of the developed area. Similar to the proposed project, this alternative would be designed to operate year-round using PV panels to convert solar energy directly to electrical power. Power generated by such distributed solar PV systems would typically be consumed onsite by the commercial or industrial facility without requiring the construction of a new electrical substation or transmission facilities. Under this alternative, the proposed project's requested zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, or vesting tentative parcel maps would not necessarily be required, with exception to CUPs for instances the generated solar energy exceeds onsite demands as part of the intended use.

Environmentally Superior Alternative

As presented in the comparative analysis above, and as shown in **Table 1-6,** *Comparison of Alternatives,* there are a number of factors in selecting the environmentally superior alternative. An EIR must identify the environmentally superior alternative to the project. Alternative 1, the No Project Alternative, would be environmentally superior to the project on the basis of its minimization or avoidance of physical environmental impacts. However, CEQA *Guidelines* Section 15126.6(e)(2) states:

> *The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.*

Because the No Project Alternative cannot be the Environmentally Superior Alternative under CEQA, the Environmentally Superior Alternative is considered to be the No Ground-Mounted Utility-Solar

Development Alternative - Distributed Commercial and Industrial Rooftop Solar Only Alternative. This alternative would avoid significant and unavoidable impacts to aesthetics (project and cumulative), biological resources (project, WJT only and cumulative), and wildfire (cumulative only). Direct impacts related to GHG emissions would be greater under this alternative due to the potential for significant truck trips associated with panel delivery and the lower efficiency of the distributed systems. Construction impacts to both GHG emissions and air quality may be lower with this alternative due to the lack of need for site preparation activities. The alternative also would not include up to 8 GWh of energy storage. The potential for increased fire risk is considered small as solar is commonly and safely added to structures, and all building codes would be conformed to under this alternative. This alternative would result in less impact to aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, public services, transportation, tribal cultural resources, utilities and service systems, and wildfires. However, impacts related to GHG emissions would be greater under this alternative due to the potential for increased truck trips associated with solar panel delivery and the lower efficiency of the distributed systems. Thus, for most environmental resource areas, this alternative would result in fewer environmental impacts, both short term and long term, when compared to the proposed project.

It is important to note that it is considered to be impracticable and infeasible to construct the No Ground-Mounted Utility-Solar Development Alternative - Distributed Commercial and Industrial Rooftop Solar Only Alternative within the same timeframe and/or with the same efficiency as the project because the project proponent lacks control and access to the sites required to develop 1,400 MW of distributed solar generated electricity. Additionally, doing so would be economically infeasible because, given rooftop suitability and availability as well as space constraints, the extensive area of rooftop solar needed to replace the project (approximately 200,000 homes at 6 kilowatts per household) would be infeasible within any medium-term timeline. In addition, this alternative would not achieve the project objective of assisting California load-serving entities in meeting their obligations under California's Renewable Portfolio Standard Program as the rooftop solar technology is primarily designed to not exceed on-site demands. Nonetheless, because this alternative reduces impacts to a greater degree than the General Plan and Zoning Build-Out Alternative and Reduced Acreage Alternative, the No Ground-Mounted Utility-Solar Development Alternative - Distributed Commercial and Industrial Rooftop Solar Only Alternative is considered the Environmentally Superior Alternative.

1.6 Areas of Controversy

Areas of controversy were identified through written agency and public comments received during the scoping period and distribution of the Notice of Preparation. Public comments received during the scoping period are summarized in **Chapter 2**, *Introduction*, and the Notice of Preparation is provided in **Appendix A**. In summary, the following CEQA issues were identified during scoping and are addressed in the appropriate sections of **Chapter 4**, *Environmental Setting, Impacts, and Mitigation Measures*:

- Impacts to aesthetics
- Impacts to agricultural resources
- Impacts related to air quality
- Impacts related to biological resources

- Impacts to cultural and tribal cultural resources
- Impacts to hydrology and water quality resources
- Impacts to hazards and hazardous materials
- Impacts to transportation resources

1.7 Issues to Be Resolved

CEQA *Guidelines* Section 15123(b)(3) requires that an EIR contain issues to be resolved, which includes the choices among alternatives and whether or how to mitigate significant impacts. The following major issues are to be resolved:

- Determine whether the EIR adequately describes the environmental impacts of the project;
- Choose among alternatives;
- Determine whether the recommended mitigation measures should be adopted or modified; and
- Determine whether additional mitigation measures need to be applied to the project.

1.8 Summary of Environmental Impacts and Mitigation Measures

Table 1-7, *Summary of Impacts, Mitigation Measures, and Level of Significance*, summarizes the environmental impacts of the project, mitigation measures, and unavoidable significant impacts identified and analyzed in **Sections 4.1** through **4.18** of this EIR. Refer to the appropriate EIR section for additional information.

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
4.1 Aesthetics			
Impact 4.1-1: The project would have a substantial adverse effect on a scenic vista.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.1-2: The project would substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	No impact	No mitigation measures are required.	No impact
Impact 4.1-3: The project would, in nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage points) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.	Potentially significant	**MM 4.1-1:** Prior to issuance of a grading or building permit, a Maintenance, Trash Abatement, and Pest Management Program shall be submitted for review and approval to the Kern County Planning and Natural Resources Department. The program shall include, but not be limited to the following: a. The project proponent/operator shall clear debris from the project area at least twice per year; this can be done in conjunction with regular array washing and site maintenance activities. b. The project proponent/operator shall erect signs with contact information for the project proponent/operator's maintenance staff at regular intervals along the site boundary, as required by the Kern County Planning and Natural Resources Department. Maintenance staff shall respond within two (2) weeks to resident requests for additional cleanup of debris. Correspondence with such requests and responses shall be submitted to the Kern County Planning and Natural Resources Department. c. The project proponent/operator shall implement a regular trash removal and recycling program on an ongoing basis during construction, operation, and decommissioning of the project. Barriers to prevent pest/rodent access to food waste receptacles shall be implemented. Locations of all trash receptacles during operation of the project shall be shown on final plans.	Significant and unavoidable

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
		d. Trash and food items shall be contained in closed containers to be locked at the end of the day and removed at least once per week to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs. **MM 4.1-2:** Prior to the issuance of building permits, the project proponent/operator shall submit a proposed color scheme and treatment plan, for review and approval by the Kern County Panning and Natural Resources Department, that will ensure project facilities including operations and maintenance buildings, gen-tie poles, array facilities, etc. blend in with the colors found in the natural landscape. Color treatments shall result in matte or nonglossy/non-reflective finishes. **MM 4.1-3:** Wherever possible, within the proposed project boundary, native vegetation shall remain undisturbed unless mowing or grading is necessary for placement of project components. Native vegetation adjacent to the proposed project boundary shall remain in place as permitted by Fire Code. Prior to the commencement of project operations and decommissioning, the project proponent/operator shall submit a Landscape Revegetation and Restoration Plan for the project site to the Kern County Planning and Natural Resources Department for review and approval. The plan shall include the measures detailed below. a. 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 (including Mohave creosote scrub habitat) and/or allowed to re-vegetate with the existing native seed bank in the topsoil where possible to establish revegetation. Areas that contain permanent project features such as security fencing, substations, BESS facilities, stormwater basins, perimeter and maintenance roads, or under solar arrays do not require revegetation. b. The plan must include but is not limited to: (1) the approved California native seed mix that will be used onsite, (2) a timeline for seeding the site, (3) details of which areas are to be revegetated, (4) a list of the consultation efforts completed, and (5) the methods and schedule for installation of fencing that complies with wildlife agency regulations, and a clear prohibition of the use of toxic rodenticides. c. Ground cover shall include native seed mix and shall be spread where earthmoving activities have taken place, as needed to establish re-vegetation. The seed mix or native plants shall be determined through consultation with professionals such as landscape architect(s), horticulturist(s), botanist(s), etc. with local knowledge as shown on submitted resume and shall be approved by the Kern County Planning and Natural Resources Department prior to planting. Phased seeding may be used if a phased construction approach is used (i.e., the entire site need not be seeded at the same time).	

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
		d. Vegetation/ground cover shall be continuously maintained on the site by the project operator. e. Revegetation and restoration of the site shall be monitored annually for a three- (3-) year period following restoration activities that occur post-construction and post-decommissioning until vegetative cover is evenly established over 70 percent of disturbed and exposed areas of soil (non-paved or non-built). In areas that naturally have low vegetative coverage (e.g., deserts), 70 percent of natural conditions of local undisturbed areas is acceptable. Based on annual monitoring visits during these three-year periods, an annual evaluation report shall be submitted to the Kern County Planning and Natural Resources Department for the three- (3-) year period. Should efforts to reach 70 percent final cover prove in the second year to not be successful compared to existing conditions, re-evaluation of revegetation methods shall be made in consultation with the Kern County Planning and Natural Resources Department and an additional year shall be added to the monitoring program until the required minimum is achieved. The three- (3-) year monitoring program is intended to ensure the site naturally achieves native plant diversity, establishes perennials, and is consistent with conditions prior to implementation of the proposed project, where feasible. **MM 4.1-4:** The project proponent shall install fence slats or similar view-screening materials, as approved by the Kern County Planning and Natural Resources Department, in on-site perimeter fencing for the portion of the solar site that abuts parcels zoned for residential use, including E (Estate Residential), R-1 (Low-Density Residential), R-2 (Medium-Density Residential), R-3 (High-Density Residential), or PL (Platted Lands) zoning unless the adjacent property is owned by the project proponent (to be verified by the Kern County Planning and Natural Resources Department) or a public or private agency that has submitted correspondence to the Kern County Planning and Natural Resources Department requesting this requirement to be waived. Should the project proponent sell the adjacent property, slat fencing or similar view-screening materials shall be installed prior to the sale. **MM 4.1-5:** For portions of the project that abut residentially zoned parcels not controlled by the project proponent, an aesthetics setback of 100 feet shall be required from the project property boundary line, which includes the centerline of any public roadway or easement. If a public roadway or easement does not exist between the project site and the residentially zoned property, the 100-foot setback shall be measured from the edge of the shared property line. The project proponent shall be responsible for continued dust control and weed maintenance within this	

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
		additional setback area. No solar arrays, substations or operating equipment shall be located in or stored in the identified setback area.	
Impact 4.1-4: The project would create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.	Potentially significant	Implementation of **Mitigation Measure MM 4.1-2** above, is required. **MM 4.1-6:** Prior to the issuance of building permits, the project proponent shall demonstrate to the Kern County Planning and Natural Resources Department, through the submittal of a lighting plan, that the project site complies with the applicable provisions of the Dark Skies Ordinance (Chapter 19.81 of the Kern County Zoning Ordinance) and shall be designed to provide the minimum illumination needed to achieve safety and security objectives. Lighting shall be directed downward and shielded to focus illumination on the desired areas only and avoid light trespass into adjacent properties and roadways. Lenses and bulbs shall not be exposed or extend below the shields. **MM 4.1-7:** Prior to the issuance of building permits, the project proponent shall demonstrate solar arrays and hardware are designed to minimize glare and spectral highlighting. Emerging technologies, such as diffusion coatings and nanotechnological innovations shall be used to effectively reduce the refractive index of the solar cells and protective glass. These technological advancements are intended to make the solar arrays more efficient with respect to converting incident sunlight into electrical power while also reducing the amount of glare generated by the arrays. Specifications of such designs shall be submitted to the Kern County Planning and Natural Resources Department.	Less than significant
Impact 4.1: Cumulative Impacts	Potentially significant	Implementation of **Mitigation Measures MM 4.1-1** through **MM 4.1-7** is required.	Significant and unavoidable (Visual Character) Less than significant (Scenic Vista; Scenic Resource; Light and Glare)

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
4.2 Agriculture and Forestry Resources			
Impact 4.2-1: The project would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use.	No impact	No mitigation measures are required.	No impact
Impact 4.2-2: The project would conflict with existing zoning for agricultural use or Williamson Act Contract.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.2-3: The project would conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)) or timberland (as defined in Public Resources Code Section 4526) or timberland zoned Timberland Production (as defined by	No impact	No mitigation measures are required.	No impact

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
Government Code Section 51104 (g).			
Impact 4.2-4: The project would result in the loss of forestland or conversion of forest land to non-forest use.	No impact	No mitigation measures are required.	No impact
Impact 4.2-5: The project would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.2-6: The project would result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15206(b)(3) Public Resources Code.	No impact	No mitigation measures are required.	No impact
Impact 4.2: Cumulative Impacts	Less than significant	No mitigation measures are required.	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
4.3 Air Quality			
Impact 4.3-1: The project would conflict with or obstruct implementation of the applicable air quality plan.	Potentially significant	**MM 4.3-1:** The project shall continuously comply with applicable rules and regulations set forth by the East Kern Air Pollution Control District. **MM 4.3-2:** To control fugitive PM emissions during implementation of the project, prior to the issuance of grading or building permits, the project proponent shall prepare a comprehensive Site-Specific Fugitive Dust Control Plan in coordination with the Eastern Kern Air Pollution Control District. A copy of the final plan shall be submitted to the Kern County Planning and Natural Resources Department to be kept on file. The plan shall include Eastern Kern Air Pollution Control District-recommended measures, including but not limited to, the following: a. Identify a comprehensive grading schedule for the entire project site. When feasible, grading activities shall be phased and minimized to those areas necessary for project access and installation of solar panels and other areas of infrastructure associated with the solar facility. b. The Site-Specific Fugitive Dust Control Plan shall identify, in addition to those measures required by the air district, measures being undertaken during construction activities, operational activities and decommissioning activities to ensure fugitive dust being blown off site is minimized. Measures may include, but are not limited to: 1. Use of water trucks as required for the expected level of winds in the area. 2. Use of dust suppressant (i.e., soil binders or mulch). 3. Pre-seeding and irrigating prior to construction to create vegetation with useful root structures. 4. Construction of dust screening in appropriate locations around the project site (i.e., fence slats or mesh screening). 5. A copy of the final Site-Specific Fugitive Dust Control Plan shall be kept at the site construction office and measures included in the Site-Specific Fugitive Dust Control Plan shall be included on Grading Plans issued for the project by the Kern County Public Works Department. **MM 4.3-3:** The project proponent and/or its contractors shall continuously implement the following measures during implementation of the project to control emissions from the on-site equipment:	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
		a. All equipment shall be maintained in accordance with the manufacture's specifications. b. All equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for extended periods of time. Engine idling of all equipment shall be minimized. c. Construction equipment shall not operate longer than eight cumulative hours per day. d. All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NO_X emissions. e. On-road and off-road diesel equipment shall use diesel particulate filters (or the equivalent) if permitted under manufacturer's guidelines. f. All on-site off-road equipment and on-road vehicles shall meet the recent California Air Resources Board engine emission standards or alternatively fueled equipment, such as compressed natural gas, liquefied natural gas, or electric, as appropriate. **MM 4.3-4:** Prior to commencement of any onsite construction activities (i.e., fence construction, mobilization of construction equipment, initial grading), including decommissioning, the project proponent shall provide written notice to the public through mailing a notice to property owners of all parcels within 1,000 feet of the project site, no sooner than 15 days prior to construction activities. The notices shall include the construction schedule, a telephone number and email address where complaints and questions can be registered. Additionally, a minimum of one sign, legible at a distance of 50 feet, shall also be posted at the construction sites or adjacent to the nearest public access to the main construction entrances throughout construction activities which include the construction schedule (updated as needed) and a telephone number where complaints can be registered. Documentation that the public notice has been sent and the sign has been posted shall be provided to the Kern County Planning and Natural Resources Department. **MM 4.3-5:** Prior to the issuance of any grading or building permit, the project proponent shall establish a "construction coordinator" and submit written documentation which includes their phone number, email address and mailing address. The construction coordinator shall be responsible for the following: a. Responding to any local complaints about construction activities. The construction coordinator shall determine the cause of the construction complaint and shall be required to implement reasonable measures such that the complaint is resolved.	

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
		b. Ensuring all appropriate construction notices have been made available to the public and that all appropriate construction signs have been installed. c. Maintaining an ongoing up-to-date log of all construction related complaints (i.e., blowing dust, inability to access parcels, etc.) during project construction activities. The log shall include the nature of the complaint and the measures that were undertaken to address the concerns. Upon request, the construction coordinator shall provide the log to the Planning and Natural Resources Department no later than three business days from request.	
Impact 4.3-2: The project would expose sensitive receptors to substantial pollutant concentrations.	Potentially significant	Implementation of **Mitigation Measures MM 4.3-1** through **MM 4.3-5** is required. **MM 4.3-6:** To minimize personnel and public exposure to potential Valley Fever-containing dust on and offsite, the following control measures shall be implemented during project construction: a. Equipment, vehicles, and other items shall be thoroughly cleaned of dust before they are moved offsite to other work locations. b. Wherever possible, grading and trenching work shall be phased so that earth-moving equipment is working well ahead or downwind of workers on the ground. c. The area immediately behind grading or trenching equipment shall be sprayed with water before ground workers move into the area. d. In the event that a water truck runs out of water before dust is sufficiently dampened, ground workers being exposed to dust shall leave the area until a truck can resume water spraying. e. To the greatest extent feasible, heavy-duty earth-moving vehicles shall be closed-cab and equipped with HEP-filtered air system. f. Workers shall receive training in procedures to minimize activities that may result in the release of airborne *Coccidioides immitis* (CI) spores, to recognize the symptoms of Valley Fever, and shall be instructed to promptly report suspected symptoms of work-related Valley Fever to a supervisor. Evidence of training shall be provided to the Kern County Planning and Natural Resources Department. g. A Valley Fever informational handout shall be provided to all onsite construction personnel. The handout shall, at a minimum, provide information regarding the symptoms, health effects, preventative measures, and treatment. Additional information and handouts can be obtained by contacting the Kern County Public Health Services Department.	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
		h. Onsite personnel shall be trained on the proper use of personal protective equipment, including respiratory equipment. National Institute for Occupational Safety and Health–approved respirators shall be provided to onsite personal upon request. When exposure to dust is unavoidable, provide appropriate National Institute for Occupational Safety & Health-approved respiratory protection to affected workers, if necessary. If respiratory protection is deemed necessary, employers must develop and implement a respiratory protection program in accordance with California Division of Occupational Safety and Health's Respiratory Protection standard (8 CCR 5144). **MM 4.3-7:** Prior to the issuance of grading permits, a one-time fee shall be paid to the Kern County Public Health Services Department in the amount of $3,200 for Valley Fever public awareness programs. **MM 4.3-8:** At the time of project implementation, a COVID-19 Health and Safety Plan should be prepared in accordance with the Kern County Public Health Services Department and Kern County Health Officer mandates. A copy of the COVID-19 Health and Safety Plan shall be submitted to the Kern County Planning and Natural Resources Department for review and approval.	
Impact 4.3-3: The project would result in other emissions (such as those leading to odors) adversely affecting a substantial number of people)	Potentially significant	Implementation of **Mitigation Measure MM 4.3-3** would be required.	Less than significant
Impact 4.3-4: Cumulative Impacts	Potentially significant	Implementation of **Mitigation Measures MM 4.3-1** through **MM 4.3-3**, and **MM 4.3-5** through **MM 4.3-8** is required.	Less than significant
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	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** as described above and **MM 4.9-2, MM 4.13-1, and MM 4.14-1**, described below, is 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 USFWS to oversee compliance with protection measures for all listed and other special-status species that may be affected by the	Significant and unavoidable (for Western Joshua tree) Less than significant (for all other

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
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.		construction, operation, and decommissioning of the project. The contact information for the Lead Biologist shall be provided in writing to the Planning and Natural Resources Department. The following measures pertain to the Lead Biologist: a. The Lead Biologist 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 to oversee compliance with protection measures during operations. c. The Lead Biologist or approved Biological Monitor 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 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 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 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 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 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	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
		be retained by the Lead Biologist 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 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 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 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 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 shall directly supervise the provision of escape structures and/or trench modification to allow	

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
		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 or approved Biological Monitor 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 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 or approved Biological Monitor. 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 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	

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
		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 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 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. **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.	

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
		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. **MM 4.4-5:** Within 14 days prior to the commencement of ground-disturbing activities, the Lead Biologist 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 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, 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 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 shall be avoided by a buffer of 25 feet. Sturdy, highly visible, orange plastic construction fencing (or equivalent material verified by the Lead	

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
		Biologist) 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. Fencing will also be installed in such a way as to avoid wildlife entanglement (i.e., installed with a gap between the bottom of the fence and ground level) and promote wildlife permeability. 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 present on the site that have not otherwise been accounted for in an approved removal 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 impacted 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 will review the seeding palette to ensure that no seeding 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
		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:** Prior to the issuance of grading permits, the project applicant shall provide proof of fee payment for the removal of silver cholla and beavertail pricklypear in accordance with the California Desert Native Plant Act to the Kern County Planning and Natural Resources Department. **MM 4.4-7:** The project shall avoid western Joshua tree (WJT) individuals, except to the extent take is permitted by CDFW. Prior to the issuance of grading permits, the project applicant shall consult with CDFW regarding 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 issuance of grading permits, site plans shall clearly identify and label an onsite 50-foot vegetated strip as a receiver site for WJT impacted by the project, located between the project site and Tehachapi Willow Springs Road, and will remain undeveloped for the life of the project. b. 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 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 CESA or CDFW take requirements and compensatory mitigation related to the protection or mitigation of impacted Joshua trees. c. 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 10,000 onsite WJT stems to the onsite Woodland Habitat Preservation Areas, to the 50-foot vegetated strip along Tehachapi Willow Springs Road, and to other onsite or offsite conserved lands.	

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
		d. Prior to issuance of grading permits, the project proponent shall identify within site plans the creation of 420 acres of Woodland Habitat Preservation Areas on the project site that avoid impacts to contiguous blocks of Joshua tree woodlands, thereby preserving approximately 34,200 living and dead WJT stems. The Woodland Habitat Preservation Areas shall: 1. be labeled and identified on all plans, with boundaries clearly illustrated and included on plan legends. Woodland Habitat Preservation areas shall be consistent with areas shown on **Figure 3-3**, *Proposed Site Plan*, of the Final EIR. 2. exceed the total 325 acres of mapped Joshua tree woodland at the project to allow space for relocation of WJT into less dense portions of these areas, and for the potential organic expansion of existing Joshua tree woodland into these areas. 3. be protected for the life of the project. e. 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 4.4-8:** Within a maximum of 30 days of the start of ground disturbance for construction or decommissioning activities, a Lead Biologist 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 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 4.4-9:** If construction and decommissioning activities are conducted during the typical nesting bird season (February 1 through August 31), a Lead Biologist or their designee shall conduct a pre-construction or pre-decommissioning nesting survey within 14 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 14 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, a Lead Biologist or approved Biological Monitor shall establish an appropriate buffer distance around the nest site (typically 100 feet for passerines and up to 500 feet for raptors). The buffer shall remain in place	

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
		until the Lead Biologist or approved Biological Monitor has determined that the nest is no longer active. Encroachment into the buffer may occur at the discretion of the Lead Biologist in consultation with the Kern County Planning and Natural Resources Department. 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 4.4-10:** No more than 14 days prior to commencement of ground-disturbing activities, a Lead Biologist 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 radius (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 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	

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
		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. 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, 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 Incidental Take Permit (ITP) issued for the project by CDFW authorizing take of the species. **MM 4.4-11:** 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 or their designee no more than 30 days prior to project ground disturbance. a. If the Lead Biologist determines that the den(s) are inactive, den(s) shall be collapsed by a Lead Biologist to prevent occupation of the den(s) between the time of the preconstruction survey and construction activities. b. If the Lead Biologist 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. c. If the Lead Biologist 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	

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
		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. **MM 4.4-12:** If construction activities are scheduled to be initiated during the Swainson's hawk nesting season (March 1 through September 15), a Lead Biologist 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 & CDFW Guidance (2010). To the extent feasible, the project applicant 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 a Lead Biologist or approved Biological Monitor and no construction within the buffer shall be allowed until the Lead Biologist has determined the nest is no longer active. Encroachment into the buffer may occur at the discretion of a Lead Biologist in consultation with 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	

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
		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 4.4-13:** Within 14 days prior to the commencement of any ground-disturbing activities a Lead Biologist 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, including desert tortoise, within the project site, as well 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 14 days prior to ground disturbance in specific areas of the site. a. If no Class 1 desert tortoise burrows or tortoises are discovered during preconstruction surveys, no further mitigation for desert tortoise is necessary. If Class 1 burrows or tortoises are identified on the project site during preconstruction surveys, the project proponent shall be required to consult with the USFWS and CDFW regarding take coverage, and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any issued permit for the project authorizing take of the species. Documentation of any such take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department. b. A Raven Management Plan shall be developed for the project site in accordance with USFWS guidelines and shall implement management measures for ravens in the project area. This plan shall include at a minimum: 1. 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. 2. Identification of all common raven nests within the project area during construction. 3. 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 USFWS, CDFW, and the Kern County Planning and Natural Resources	

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
		Department within five calendar days; and 4. 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 4.4-14:** 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 4.4-15:** The project proponent/operator shall install power lines in conformance with Avian Power Line Interaction Committee (APLIC) standards for electrocution-reducing techniques as 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 4.4-16:** 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 authorized biologists to systematically sample the project site by walking transects through the solar arrays scanning for deceased birds.	

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
		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 4.4-17**: 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 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 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 a Lead Biologist 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.	

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. If avoidance of an active nest is not feasible, the project proponent/operator shall consult with CDFW regarding potential for project activities to result in take 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 4.4-18:** 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 County Planning 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. 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.	
Impact 4.4-2: The project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Potentially significant	Implementation of **Mitigation Measures MM 4.4-7, MM 4.10-1, MM 4.10-2** as described below, is required. **MM 4.4-19:** Prior to issuance of any grading or building permit, the project proponent/operator shall submit to Kern County a jurisdictional delineation report detailing identified ephemeral drainages within the project boundary. The report shall include information as shown below as a plan if necessary and shall outline compliance with the following: a. Clearly identify jurisdictional features identified in the jurisdictional delineation that cannot feasibly be avoided. This may be shown in plan form. b. Any material/spoils generated from project activities shall be located away from jurisdictional areas or special-status habitat and 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.	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
		c. 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. d. 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. For all spills, the project foreman or designated environmental representative shall be notified. **MM 4.4-20:** If Regional Water Quality Control Board (RWQCB) and/or 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 shall be provided to the Kern County Planning and Natural Resources Department.	
Impact 4.4-3: The project would have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	No impact	No mitigation measures are required.	No impact

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
Impact 4.4-4: The project would interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Less than significant	Implementation of **Mitigation Measure MM 4.1-6** is required.	Less than significant
Impact 4.4-5: The proposed project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Potentially significant	Implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-20** is required.	Less than significant
Impact 4.4-6: The project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	No impact	No mitigation measures are required.	No impact
Impact 4.4: Cumulative Impacts	Potentially significant	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 4.4-20, MM 4.9-2, MM 4.10-1,MM 4.10-2, MM 4.13-1, and MM 4.14-1** is required.	Significant and unavoidable

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
4.5 Cultural Resources			
Impact 4.5-1: The project would cause a substantial adverse change in the significance of a historical resource, as defined in CEQA Guidelines Section 15064.5.	Potentially significant	**MM 4.5-1:** The project proponent/operator shall retain a Lead Archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior, 2011), to carry out all mitigation measures related to archaeological and unique historical resources. The contact information for this Lead Archaeologist shall be provided to the Kern County Planning and Natural Resources Department prior to the commencement of any construction activities onsite. Further, the Lead Archaeologist shall be responsible for ensuring the following employee training provisions are implemented during implementation of the project: a. Prior to commencement of any ground disturbing activities, the Lead Archaeologist, in consultation with Native American monitor(s), shall prepare Cultural Resources Sensitivity Training materials, including a Cultural Resources Sensitivity Training Guide, to be used in an orientation program given to all personnel working on the project. The training guide may be presented in video form. A copy of the proposed training materials shall be provided to the Planning and Natural Resources Department prior to the issuance of grading or building permits. b. The project proponent/operator shall ensure all new employees or onsite workers who have not participated in earlier Cultural Resources Sensitivity Trainings shall meet provisions specified above. c. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the Lead Archaeologist and/or Native American monitor(s) for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of archaeological resources. d. A copy of the Cultural Resources Sensitivity Training Guide/Materials shall be kept onsite and available for all personnel to review and be familiar with, as necessary. It is the responsibility of the Lead Archaeologist to ensure all employees receive appropriate training before they work onsite. e. The services of Native American Monitors, as identified through consultation with appropriate Native American tribes, working under the supervision of the Lead Archaeologist, shall be retained to monitor initial excavation or ground-disturbing activities as identified in **Mitigation Measure MM 4.5-2** below.	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
		MM 4.5-2: Prior to the issuance of grading or building permits, the project proponent shall submit to the Kern County Planning and Natural Resources Department a Cultural Resources Treatment Plan. The plan shall: a. Require that prior to conducting initial ground disturbance in the vicinity of a prehistoric archaeological site that requires avoidance, an "exclusion area" (i.e., the recorded boundary of the archaeological site that require avoidance and the area within 50 feet thereof) shall be temporarily marked with exclusion markers or protective fencing as determined by the Lead Archaeologist in consultation with the Native American Monitor. b. Require that the construction zone shall be narrowed or otherwise altered to avoid any exclusion areas. c. Provide an overview of best management practices to be utilized during ground-disturbing construction activities to ensure protection of cultural resources. d. Outline the process for evaluation of any unanticipated cultural discoveries during project construction activities. e. Provide a Data Recovery Plan, if required, prepared by the Lead Archeologist in consultation with the Native American Monitor(s), for the recovery of known and unanticipated cultural discoveries that cannot be avoided or preserved in place. **MM 4.5-3:** In the event that previously unknown archaeological materials are encountered during the course of grading or construction, the project contractor shall cease ground-disturbing activities within 50 feet of the find. The area of the discovery shall be marked off by temporary fencing that encloses a 50-foot radius from the location of the discovery. Signs shall be posted that establish it as an "Exclusion Area," and all entrance into the area shall be avoided until the discovery is assessed by the Lead Archaeologist and Native American Monitor. The Lead Archaeologist, in consultation with the Native American Monitor, shall evaluate the significance of the resources and recommend appropriate treatment measures. If further treatment of the discovery is necessary, the Exclusion Area shall remain in place until the treatment is completed. Per CEQA Guidelines Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means to avoid impacts to significant historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the Lead Archaeologist, in consultation with Native American Monitor, shall develop additional treatment measures in consultation with Kern County, which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if	

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
		the resources are prehistoric or Native American in nature. Diagnostic archaeological materials with research potential recovered during an investigation shall be curated at an accredited curation facility. The Lead Archaeologist, in consultation with a designated Native American Monitor, shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the Kern County Planning and Natural Resources Department and to the SSJVIC at California State University, Bakersfield. **MM 4.5-4:** The services of both an Archaeological and Native American Monitor, working under the supervision of the Lead Archaeologist as identified through consultation with appropriate Native American tribes, shall be retained by the project proponent to monitor ground-disturbing activities associated with project construction, as follows: a. During project construction, Archaeological and Native American monitoring shall be conducted for all initial excavation or ground-disturbing activities. If no archaeological discoveries are made during the course of this monitoring, no additional monitoring will be required. If the Lead Archaeologist can demonstrate that the level of monitoring should be reduced or discontinued, or a need for continuing monitoring, the Lead Archaeologist, in consultation with the Kern County Planning and Natural Resources Department, may adjust the level of monitoring to circumstances as warranted. b. All ground disturbing activities within 100 feet of a grave site shall be monitored by Archaeological and Native American Monitor(s). c. The Lead Archaeologist and Native American Monitor(s) shall be provided all project documentation related to cultural resources within the project site prior to commencement of ground disturbance activities. Should the services of any additional individuals be retained (as the Lead Archaeologist, Archaeological Monitor, or Native American Monitor) subsequent to commencement of ground disturbing activities, such individuals shall be provided all proposed project documentation related to cultural resources within the project site, prior to beginning work. Documentation shall include but not be limited to previous cultural studies, surveys, maps, drawings, etc. Any modifications or updates to project documentation, including construction plans and schedules, shall immediately be provided to the Lead Archaeologist, Archaeological Monitor, and Native American Monitor. d. The Archaeological Monitor(s) shall keep daily logs and the Lead Archaeologist shall submit monthly written updates to the Kern County Planning and Natural Resources Department and Native American Monitor. After monitoring has been completed, the Lead Archaeologist shall prepare a monitoring report that details monitoring results;	

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
		assessment of inadvertent discoveries; communication with Tribal representatives; installation of, maintenance of, and guidance for environmentally sensitive areas; and general implementation of the required mitigation. The final monitoring report shall act as a record of compliance with guiding documents and mitigation, and shall be submitted to the Kern County Planning and Natural Resources Department and the Southern San Joaquin Valley Information Center at California State University, Bakersfield.	
Impact 4.5-2: The project would cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines	Potentially significant	Implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-4** is required.	Less than significant
Impact 4.5-3: The project would disturb any human remains, including those interred outside of formal cemeteries.	Potentially significant	**MM 4.5-5:** If human remains are uncovered during project construction, the project contractor shall immediately halt work within 100 feet of the find, contact the Kern County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 of the California Environmental Quality Act Guidelines. If the County Coroner determines that the remains are Native American, the coroner shall contact the Native American Heritage Commission, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by Assembly Bill 2641). The Native American Heritage Commission shall designate a Most Likely Descendent for the remains per Public Resources Code 5097.98. Per Public Resources Code 5097.98, and in accordance with generally accepted cultural or archeological standards or practices, the project proponent shall ensure that the immediate vicinity of the Native American human remains is not damaged or disturbed by further development activity until the project proponent has discussed and conferred with the most likely descendent regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. If the remains are determined to be neither of forensic value to the Coroner, nor of Native American origin, provisions of the California Health and Safety Code (7100 et. seq.) directing identification of the next-of-kin will apply.	Less than significant
Impact 4.5: Cumulative Impacts	Potentially significant	Implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5** is required.	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
4.6 Energy			
Impact 4.6-1: The project would result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Potentially significant	Implementation of **Mitigation Measure MM 4.3-3** is required.	Less than significant
Impact 4.6-2: The project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.6: Cumulative Impacts	Potentially significant	Implementation of **Mitigation Measure MM 4.3-3** is required.	Less than significant
4.7 Geology and Soils			
Impact 4.7-1: The project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo earthquake fault zoning map issued by the state geologist for	Potentially significant	**MM 4.7-1:** Prior to the issuance of grading or building permits, the project proponent shall conduct a site-specific final geotechnical study in accordance with applicable ordinances of the Kern County Building Code (Chapter 17.08) and the CBC to evaluate soil conditions and geologic hazards on the project site and submit it to the Kern County Public Works Department for review and approval. The project proponent shall determine the final siting of project facilities based on the results of the site-specific final geotechnical study and implement recommended measures to minimize geologic hazards. The project proponent shall not locate project facilities on or immediately adjacent to an active fault trace. **MM 4.7-2:** Prior to the issuance of grading permits, the project proponent shall retain a California registered and licensed geotechnical engineer to design project facilities to withstand probable seismically induced ground shaking at the site. All grading and construction onsite shall adhere to	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
the area or based on other substantial evidence of a known fault.		the specifications, procedures, and site conditions contained in the final design plans, which shall be fully compliant with the seismic recommendations of the California-registered professional engineer. The Kern County Public Works Department shall evaluate any final facility siting design developed prior to the issuance of any grading or building permits to verify that geological constraints have been avoided. Additionally, structures supported on a shallow foundation system should bear on engineered fill extending to a depth determined by a California registered and licensed geotechnical engineer, based on site-specific conditions.	
Impact 4.7-2: The project would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking, seismic-related ground failure, including liquefaction; or landslides.	Potentially significant	Implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2** above, is required.	Less than significant
Impact 4.7-3: The project would result in substantial soil erosion or the loss of topsoil.	Potentially significant	Implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2**, above and **MM 4.10-1** described below is required.	Less than significant
Impact 4.7-4: The project would be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading,	Potentially significant	Implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2** above is required.	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
subsidence, liquefaction, or collapse.			
Impact 4.7-5: The project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	Potentially significant	Implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2** above, is required.	Less than significant
Impact 4.7-6: The project would have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater.	Potentially Significant	**MM 4.7-3:** Prior to the issuance of grading or building permits for the operation and maintenance facility, the project operator shall obtain all required permits and approvals from Kern County Environmental Health Services Division and shall implement all required conditions regarding the design and siting of the septic system.	Less than significant
Impact 4.7-7: The project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, as defined in CEQA Guidelines Section 15064.	Potentially significant	**MM 4.7-4:** The project proponent shall retain a qualified paleontologist, defined as a paleontologist meeting the Society for Vertebrate Paleontology's Professional Standards (SVP 2010), to carry out all mitigation measures related to paleontological resources. a. Prior to the start of any ground disturbing activities, the qualified paleontologist shall prepare a Paleontological Resources Awareness Training program for all construction personnel working on the project. A Paleontological Resources Awareness Training Guide approved by the qualified paleontologist shall be provided to all personnel. A copy of the Paleontological Resources Awareness Training Guide shall be submitted to the Kern County Planning and Natural Resources Department. The training guide may be presented in video form. b. Paleontological Resources Awareness Training may be conducted in conjunction with other awareness training requirements. c. The training shall include an overview of potential paleontological resources that could be encountered during ground disturbing activities to facilitate worker recognition,	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
		avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of paleontological resources. d. The project operator shall ensure all new employees who have not participated in earlier Paleontological Resources Sensitivity Trainings shall meet the provisions specified above. e. The Paleontological Resources Awareness Training Guides shall be kept onsite and available for all personnel to review and be familiar with as necessary. **MM 4.7-5:** Prior to construction, the qualified paleontologist shall review excavation plans to determine where paleontologically sensitive stratigraphic units will potentially be disturbed by ground-disturbing activities. **MM 4.7-6:** During construction, the qualified paleontologist or designated monitor shall monitor all ground-disturbing activities (with the exception of vibratory or hydraulic installation of tracking or mounting structures and foundations or supports) that occurs at a depth of 15 feet or deeper below ground surface. Following completion of monitoring, the paleontologist shall prepare a report documenting the absence or discovery of fossil resources on site. A copy of the report shall be submitted to the Kern County Planning and Natural Resources Department to be kept on file. **MM 4.7-7:** If a paleontological resource is found, the project contractor shall cease ground-disturbing activities within 50 feet of the find. The qualified paleontologist shall evaluate the significance of the resources and recommend appropriate treatment measures. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Any fossils encountered and recovered shall be catalogued and donated to a public, non-profit institution with a research interest in the materials. Accompanying notes, maps, and photographs shall also be filed at the repository.	
Impact 4.7: Cumulative Impacts	Less than significant	Implementation of **Mitigation Measures MM 4.7-1** through **MM 4.7-7**, as described above, and **MM 4.10-1**, described below, is required.	Less than significant
4.8 Greenhouse Gas Emissions			
Impact 4.8-1: The project would generate greenhouse gas emissions, either directly	Less than significant	No mitigation measures are required.	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
or indirectly, that may have a significant impact on the environment.			
Impact 4.8-2: The project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.8: Cumulative Impacts	Less than significant	No mitigation measures are required.	Less than significant
4.9 Hazards and Hazardous Materials			
Impact 4.9-1: The project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Potentially significant	Implementation of **Mitigation Measure MM 4.17-1**, as described below, is required. **MM 4.9-1:** During the life of the project, including decommissioning, the project operator shall prepare and maintain a Hazardous Materials Business Plan (HMBP), as applicable, pursuant to Article 1 and Article 2 of California Health and Safety Code 6.95 and in accordance with Kern County Ordinance Code 8.04.030, by submitting all the required information to the California Environmental Reporting System (CERS) for review and acceptance by the Kern County Environmental Health Services Division/Hazardous Materials Section. The HMBP shall: a. Delineate hazardous material and hazardous waste storage areas. b. Describe proper handling, storage, transport, and disposal techniques. c. Describe methods to be used to avoid spills and minimize impacts in the event of a spill. d. Describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction and operation. e. Establish public and agency notification procedures for spills and other emergencies including fires. f. Include procedures to avoid or minimize dust from existing residual pesticides and herbicides that may be present on the site.	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
		The project proponent shall ensure that all contractors working on the project are familiar with the facility's HMBP as well as ensure that one copy is available at the project site at all times. In addition, a copy of the accepted HMBP from CERS shall be submitted to the Kern County Planning and Natural Resources Department for inclusion in the projects permanent record.	
Impact 4.9-2: The project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Potentially significant	Implementation of **Mitigation Measure MM 4.9-1**, described above, **MM 4.17-1** and **MM 4.10-1**, described below, is required. **MM 4.9-2:** The project proponent/operator shall continuously comply with the following: a. The construction contractor or project personnel shall use herbicides that are approved for use in California and are appropriate for application adjacent to natural vegetation areas (i.e., non-agricultural use). Personnel applying herbicides shall have all appropriate State and local herbicide applicator licenses and comply with all State and local regulations regarding herbicide use. b. Herbicides shall be mixed and applied in conformance with the manufacturer's directions. c. The herbicide applicator shall be equipped with splash protection clothing and gear, chemical resistant gloves, chemical spill/splash wash supplies, and material safety data sheets for all hazardous materials to be used. To minimize harm to wildlife, vegetation, and water bodies, herbicides shall not be applied directly to wildlife. d. Products identified as non-toxic to birds and small mammals shall be used if nests or dens are observed; and herbicides shall not be applied if it is raining at the site, rain is imminent, or the target area has puddles or standing water. e. Herbicides shall not be applied when wind velocity exceeds 10 miles per hour. If spray is observed to be drifting to a non-target location, spraying shall be discontinued until conditions causing the drift have abated. f. A written record of all herbicide applications on the site, including dates and amounts shall be furnished annually to the Kern County Planning and Natural Resources Department.	Less than significant
Impact 4.9-3: The project would emit hazardous emissions or involves handling hazardous or acutely hazardous materials, substances, or waste	Less than significant	No mitigation measures are required.	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
within 0.25 mile of an existing or proposed school.			
Impact 4.9-4: The project would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.9-5: The project would result in a safety hazard or excessive noise for people residing or working in the project area, for a project located within the vicinity of a private airstrip.	Potentially significant	**MM 4.9-3:** Prior to the issuance of grading or building permits, the project proponent/operator shall comply with the following: a. Submit Form 7460-1 (Notification of Proposed Construction or Alteration) to the Federal Aviation Administration, in the form and manner prescribed in Code of Federal Regulation 77.17, for any project components that would meet noticing requirements under 14 CFR Part 77. b. For project components meeting noticing requirements under 14 CFR Part 77, obtain a Federal Aviation Administration issued "Determination of No Hazard to Air Navigation." c. Provide documentation to the Kern County Planning and Natural Resources Department demonstrating that a copy of the final site plans have been provided to the operators of Mojave Air Space and Port.	Less than significant
Impact 4.9-6: The project would impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.	Less than significant	Though the impact is less than significant, implementation of **Mitigation Measures MM 4.14-1** and **4.15-1** would further reduce impacts.	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
Impact 4.9-7: The project would expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	Potentially significant	Implementation of **Mitigation Measure MM 4.14-1**, as described below, is required.	Less than significant
Impact 4.9-8: The project would generate vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste? Specifically, would the proposed project exceed the following qualitative threshold: the presence of domestic flies, mosquitoes, cockroaches, rodents, and/or any other vectors associated with the proposed project is significant when the applicable enforcement agency determines that any of the vectors: i. Occur as immature stages and adults in	Less than significant	Though the impact is less than significant, implementation of **Mitigation Measure MM 4.1-1** would further reduce impacts.	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
numbers considerably in excess of those found in the surrounding environment; or ii. Are associated with design, layout, and management of proposed project operations; or iii. Disseminate widely from the property; or iv. Cause detrimental effects on the public health or well-being of the majority of the surrounding population.			
Impact 4.9: Cumulative Impacts	Potentially significant	Implementation of **Mitigation Measures MM 4.1-1**, **MM 4.9-1** through **MM 4.9-3**, and **MM 4.14-1** is required.	Less than significant
4.10 Hydrology and Water Quality			
Impact 4.10-1: The project would violate water quality standards or waste discharge requirements or otherwise degrade water quality.	Potentially significant	Implementation of **Mitigation Measure MM 4.9-1**, above, is required. **MM 4.10-1:** Prior to issuance of a grading permit, the project proponent/operator shall submit a Stormwater Pollution Prevention Plan (SWPPP) for review and approval by the Kern County Planning and Natural Resources Department and/or Kern County Public Works Department. The SWPPP shall be designed to minimize runoff and shall specify best management practices to prevent all construction pollutants from contacting stormwater, with the intent of keeping sediment or any other pollutants from moving offsite and into receiving waters. The requirements of the SWPPP shall be incorporated into design specifications and construction contracts. Recommended best management practices to be incorporated in the SWPPP may include the following: a. Minimization of vegetation removal; b. Implementing sediment controls, including silt fences a necessary; c. Installation of a stabilized construction entrance/exit and stabilization of disturbed areas;	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
		d. Properly containing and disposing of hazardous materials used for construction onsite; e. Properly covering stockpiled soils to prevent wind erosion; f. Proper protections and containment for fueling and maintenance of equipment and vehicles; and g. Appropriate disposal of demolition debris, concrete and soil, and aggressively controlling litter. h. Cleanup of silt and mud on adjacent street due to construction activity. i. Checking all lined and unlined ditches after each rainfall. j. Restore all erosion control devices to working order to the satisfaction of the Kern County Planning and Natural Resources Department and/or Kern County Public Works Department after each rainfall runoff. k. Install additional erosion control measures as may be required due to uncompleted grading operations or unforeseen circumstances which may arise. **MM 4.10-2:** Prior to the issuance of grading permits, the project proponent/operator shall complete a Final Drainage Plan designed to evaluate and minimize potential increases in runoff from the project site. The study shall include, but is not limited to, the following: a. A numerical stormwater model for the project site that evaluates existing and proposed (with project) drainage conditions during storm events ranging up to the 100-year event. b. The study shall also consider potential for erosion and sedimentation in light of modeled changes in stormwater flow across the project area that would result from project implementation. c. Engineering recommendations to be incorporated into the project design and applied within the site boundary. Engineering recommendations will include measures to offset increases in stormwater runoff that would result from the project, as well as implementation of design measures to minimize or manage flow concentration and changes in flow depth or velocity so as to minimize erosion, sedimentation, and flooding onsite or offsite. d. A specification that the final design of the solar arrays shall include one foot of freeboard clearance above the calculated maximum flood depths for the solar arrays or the finished floor of any permanent structures. Solar panels placed within a 100-year floodplain shall be graded to direct potential flood waters without increasing the water surface elevations more than one foot or as required by Kern County's Floodplain Management Ordinance.	

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
		e. The Final Drainage Plan shall be prepared in accordance with the Kern County Grading Code and Kern County Development Standards, and approved by the Kern County Public Works Department prior to the issuance of grading permits.	
Impact 4.10-2: The project would substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.10-3: The project would substantially alter the existing drainage patterns of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner than would result in substantial erosion and/or sedimentation on-site or off-site.	Potentially significant	Implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2** is required.	Less than significant
Impact 4.10-4: The project would substantially alter the existing drainage patterns of the site or area, including through	Potentially significant	Implementation of **Mitigation Measures MM 4.4-18,** above, **MM 4.10-1** and **MM 4.10-2** is required.	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
the alteration of the course of a stream or river, in a manner that would result in flooding onsite or offsite.			
Impact 4.10-5: The project would create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.	Potentially significant	Implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2** is required.	Less than significant
Impact 4.10-6: The project would place within a 100-year flood hazard area structures that would impede or redirect flood flows.	Potentially significant	Implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2** is required.	Less than significant
Impact 4.10-7: The project would result in a flood hazard, tsunami, or seiche zone, and risk release of pollutants due to project inundation.	Potentially significant	Implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2** is required.	Less than significant
Impact 4.10-8: The project would conflict with or obstruct implementation of a water quality control plan or sustainable	Less than significant	No mitigation measures are required.	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
groundwater management plan.			
Impact 4.10: Cumulative Impacts	Potentially significant	Implementation of **Mitigation Measures MM 4.9-1**, **MM 4.10-1**, and **MM 4.10-2** is required.	Less than significant
4.11 Land Use			
Impact 4.11-1: The project would physically divide an established community.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.11-2: The project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	Potentially significant	Implementation of **Mitigation Measure MM 4.9-3** above, is required.	Less than significant
Impact 4.11: Cumulative Impacts	Potentially significant	**MM 4.11-1:** Prior to issuance of building permits, the project operator shall provide a Decommission Plan for review and approval by the Kern County Engineering, Surveying, and Permit Services Department or a County-contracted consulting firm at a cost to be borne by the project operator. The Decommission Plan shall factor in the cost to remove the solar panels and support structures, replacement of any disturbed soil from removal of support structures, and control of fugitive dust on the remaining undeveloped land. Salvage value for the solar panels and support structures shall be included in the financial assurance calculations. The assumption, when preparing the estimate, is that the project operator is incapable of performing the work or has abandoned the solar facility, thereby requiring Kern County to hire an independent contractor to perform the decommissioning work. In addition to submitting a Decommission Plan, the project operator shall post or establish and maintain financial assurances with Kern County related to the deconstruction of the site as identified on the approved Decommission Plan in the event that at any point in time the project operator determines it is not in the company's best interest to operate the facility.	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
		The financial assurance required prior to issuance of any building permit shall be established using one of the following: a. An irrevocable letter of credit; b. A surety bond; c. A trust fund in accordance with the approved financial assurances to guarantee the deconstruction work will be completed in accordance with the approved decommission plan; or d. Other financial assurances as reviewed and approved by the respective County administrative offices, in consultation with the Kern County Planning and Natural Resources Department. The financial institution or Surety Company shall give the County at least 180 days' notice of intent to terminate the letter of credit or bond. Financial assurances shall be reviewed annually by the Kern County Engineering, Surveying, and Permit Services Department or County contracted consulting firm(s) at a cost to be borne by the project operator to substantiate those adequate funds exist to ensure deconstruction of all solar panels and support structures identified on the approved Decommission Plan. Should the project operator deconstruct the site on their own, the County will not pursue forfeiture of the financial assurance. Once deconstruction has occurred, financial assurance for that portion of the site will no longer be required and any financial assurance posted shall be adjusted or returned accordingly. Any funds not utilized through decommission of the site by the County shall be returned to the project operator. Should any portion of the solar field not be in operational condition for a consecutive period of twelve 12 months that portion of the site shall be deemed abandoned and shall be removed within sixty (60) days from the date a written notice is sent to the property owner and solar field owner, as well as the project operator, by the County. Within this sixty (60) day period, the property owner, solar field owner, or project operator may provide the director of the Kern County Planning and Natural Resources Department a written request and justification for an extension for an additional twelve (12) months. The Kern County Planning and Natural Resources Director shall consider any such request at a Director's Hearing as provided for in Section 19.102.070 of the Kern County Zoning Ordinance. In no case shall a solar field that has been deemed abandoned be permitted to remain in place for more than forty-eight (48) months from the date the solar facility was first deemed abandoned.	
4.12 Mineral Resources			

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
Impact 4.12-1: The project would result in the loss of availability of a known mineral resource that would be of value to the region and residents of the State.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.12-2: The project would result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.12: Cumulative Impacts	Less than significant	No mitigation measures are required.	Less than significant
4.13 Noise			
Impact 4.13-1: The project would result in the generation of a substantial temporary or permanent increase in the ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies.	Less than significant	**MM 4.13-1:** The following measures are to be implemented to further reduce short-term noise levels associated with project construction and decommissioning: a. Construction and decommissioning activities at the project site shall comply with the hourly restrictions for noise-generating construction activities, as specified in the Kern County Noise Ordinance, Chapter 8.36. Construction activities shall be prohibited between the hours of 9:00 p.m. to 6:00 a.m. on weekdays, and between 9:00 p.m. to 8:00 a.m. on weekends, if they result in noise which is audible to a person with average hearing faculties or capacity at a distance of 150 feet from the construction site, if the construction site is within 1,000 feet of an occupied residential dwelling. These hourly limitations shall not apply to activities where hourly limitations would result in increased safety risk to workers or the public, such as commissioning and maintenance activities that must occur after dark to ensure photovoltaic arrays are not energized, unanticipated emergencies requiring immediate attention, or security patrols.	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
		b. Stage equipment in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during construction to the extent practical. Place stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site, where feasible. c. Ensure construction equipment is fitted with noise-reduction features such as mufflers and engine shrouds that are no less effective than those originally installed by the manufacturer. d. Limit haul trucks from idling for periods greater than 5 minutes, except as needed to perform a specified function (e.g., concrete mixing). e. Limit onsite vehicle speeds to 15 miles per hour, or less (except in cases of emergency). f. Adjust back-up beepers for construction equipment to the lowest noise levels possible, provided that the Occupational Safety and Health Administration and California Division of Occupational Safety and Health's safety requirements are not violated. On vehicles where back-up beepers are not available, employ alternative safety measures such as escorts and spotters. **MM 4.13-2:** Prior to the issuance of grading permits, the construction contractor shall establish a Noise Disturbance Coordinator for the project during construction. The Noise Disturbance Coordinator is responsible for responding to any complaints about construction noise. The Noise Disturbance Coordinator shall be responsible for determining the cause of the complaint and shall be required to implement reasonable measures to resolve the complaint. Contact information for the Noise Disturbance Coordinator shall be submitted to the Kern County Planning and Natural Resources Department prior to commencement of any ground disturbing activities. **MM 4.13-3:** Prior to commencement of any onsite construction and decommissioning activities (i.e., fence construction, mobilization of construction equipment, initial grading, etc.), the project proponent/operator shall provide written notice to the public through mailing a notice, which shall include: a. The mailing notice shall be to all residences within 1,000 feet of the project site, 15 days or less prior to construction activities. The notices shall include the construction schedule and a telephone number and email address where complaints and questions can be registered with the noise disturbance coordinator. b. A minimum of one sign, legible at a distance of 50 feet, shall be posted at the construction site, or adjacent to the nearest public access to the main construction	

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
		entrance, throughout construction activities that shall provide the construction schedule (updated as needed) and a telephone number where noise complaints can be registered with the noise disturbance coordinator. c. Documentation that the public notice has been sent and the sign has been posted shall be provided to the Kern County Planning and Natural Resources Department.	
Impact 4.13-2: The project would expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.13-3: For a project within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would expose people residing or working in the project area to excessive noise levels.	No impact	No mitigation measures are required.	No impact
Impact 4.13: Cumulative Impacts	Potentially significant	Implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-3** is required.	Less than significant
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	Potentially significant	**MM 4.14-1:** Prior to the issuance of grading or building permits, the project proponent/operator shall develop and implement a Fire Safety Plan for use during construction, operation, and decommissioning. The project proponent/operator shall submit the plan, along with maps of the project site and access roads, to the Kern County Fire Department for review and approval. A copy of the approved	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
which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services or police protection and law enforcement services.		Fire Safety Plan shall be submitted to the Kern County Planning and Natural Resources Department. The Fire Safety Plan shall contain notification procedures and emergency fire precautions including, but not limited to, the following: a. All internal combustion engines, both stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order. b. Light trucks and cars with factory installed (type) mufflers shall be used only on roads where the roadway is cleared of vegetation. These vehicle types will maintain their factory installed (type) muffler in good condition. c. Fire rules shall be posted on the project bulletin board at the contractor's field office and areas visible to employees. d. Procedures shall be established for minimizing potential ignition, including, but not limited to, vegetation clearing and management, parking requirements/restrictions, idling restrictions, smoking restrictions, and proper use of gas-powered equipment. e. Personnel shall be trained in the practices of the fire safety plan relevant to their duties. Construction and maintenance personnel shall be trained and equipped to extinguish small fires to prevent them from growing into more serious threats. f. The project proponent/operator shall make an effort to restrict the use of chainsaws, chippers, vegetation masticators, grinders, drill rigs, tractors, torches, and explosives to periods outside of the official fire season. When the above tools are used, water tanks equipped with hoses, fire rakes, and axes shall be easily accessible to personnel. g. Building plans shall be included for the energy storage system to verify adherence to Kern County and California Building and Fire Code standards. h. Information for first responders about the type of battery energy storage technology on site, potential hazards and mitigations, and recommended firefighting tactical procedures in case of an accidental fire. **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 Cumulative Impact Charge (CIC) shall apply. The first annual payment is to be paid by December 31 of the year the first legislatively provided	

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
		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, above. E. All areas of buildings, accessory improvements and easements used in the calculations shall be shown on the submitted Map. 2. Calculation of Cumulative Impact Charge (CIC) and annual payment A. A payment 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 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 Cumulative Impact Charge (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 County Administrative Office Fiscal Division (CAO) by written response. **MM 4.14-3:** Written verification of ownership of the proposed project shall be submitted to the Kern County Planning and Natural Resources Department by April 15 of each calendar year. If the project is sold to a city, county, or utility company that pays assessed taxes that total less than $3,000 per megawatt per year, then a Supplemental Cumulative Impact Charge (SCIC) shall be paid for the difference annually up to $3,000 per megawatt. The SCIC payments shall be made annually directly to the County Administrative Office (CAO) Fiscal Division and labeled "Supplemental Cumulative Impact Charge (SCIC)" with the project name and phase number. The fee shall be paid to the Kern County Auditor/Controller by April 30 of each calendar year. **MM 4.14-4:** The project proponent/operator shall work with the County to determine how the use of sales and use taxes from construction of the project can be maximized. This process shall include, but is not necessarily limited to, the project proponent/operator obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, and registering this address with the State Board of Equalization. As an alternative to the aforementioned process, the project proponent/operator may make arrangements with Kern County for a guaranteed single payment that is equivalent to the amount of sales and use taxes that would have otherwise been received (less any sales and use taxes actually paid); with the amount of the single payment to be determined via a formula approved by Kern County. The project proponent/operator shall allow the County to use this sales tax information publicly for reporting purposes.	

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 4.14-5: Prior to the issuance of building permits, the project operator shall submit a letter detailing the hiring efforts prior to commencement of construction, which encourages all contractors of the project site to hire at least 50 percent of their workers from local Kern County communities. The project operator shall provide the contractors a list of training programs that provide skilled workers and shall require the contractor to advertise locally for available jobs, notifying the training programs of job availability, all in conjunction with normal hiring practices of the contractor.	
Impact 4.14: Cumulative Impacts	Potentially significant	Implementation of **Mitigation Measures MM 4.14-1** through **MM 4.14-5** is required.	Less than significant
4.15 Traffic and Transportation			
Impact 4.15-1: The project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	Less than significant	Though the impact is less than significant, implementation of **Mitigation Measures MM 4.15-1** and **MM 4.15-2** would further reduce impacts. **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 along Tehachapi Willow Springs Road; 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 Tehachapi Willow Springs Road, 4. Establish procedures for coordinating with local emergency response agencies to ensure dissemination of information regarding emergency response vehicle	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
		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. Dedicate a 55-foot half-width right-of-way for Tehachapi Willow Springs Road, where the project borders and/or fronts said roadway, provided such lands are controlled by project proponent/operator shall dedicate required right-of-way as designated for Tehachapi Willow Springs Road, where project borders and/or fronts said roadway, provided such lands are controlled by the project proponent/operator.	

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
		f. Provide and/or dedicate access rights (private or public easements) to properties that do not belong to the project such that they are not land locked, unless existing private or public easements provide sufficient access. Such easements shall remain open during construction and operation of the project or the project proponent/operator shall provide temporary or permanent alternative access easements. g. 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. **MM 4.15-2:** Prior to the issuance of grading or building permits, the project proponent/operator shall implement measures to reduce construction worker vehicle trips during the AM and PM peak hours. These measures may include, but are not limited to the following: a. The Construction Traffic Control Plan (see **MM 4.15-1**, above) shall outline the methods used to control the number of worker vehicles arriving and departing from the project site during peak AM and PM hours, and document all reasonable efforts made to avoid impacts to area intersections. b. The project proponent/operator shall limit construction worker vehicle trips to and from the site to the extent possible during the AM and PM peak periods (i.e., 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) by implementing such measures as: 1. Instituting incentives and providing options for construction workers to carpool and/or vanpool to and from the project site. 2. Scheduling construction worker shifts so that a majority of the workers arrive and depart the project site outside the AM and PM peak periods. 3. Staggering construction worker shifts so that construction worker vehicle trips are distributed over a broader period (i.e., construction workers arrive in staggered shifts starting from 6:00 a.m. and depart in staggered shifts starting from 2:00 p.m.).	
Impact 4.15-2: The project would conflict with or be inconsistent with CEQA Guidelines	Less than significant	No mitigation measures are required.	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
Section 15064.3, subdivision (b).			
Impact 4.15-3: The project would substantially increase hazards due to a geometric design feature (such as sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Potentially significant	Implementation of **Mitigation Measure MM 4.15-1** is required.	Less than significant
Impact 4.15-4: The project would result in inadequate emergency access.	Potentially significant	Implementation of **Mitigation Measure MM 4.15-1** is required.	Less than significant
Impact 4.15: Cumulative Impacts	Less than significant	Implementation of **Mitigation Measures MM 4.15-1** and **MM 4.15-2** is required.	Less than significant
4.16 Tribal Cultural Resources			
Impact 4.16-1a: The project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object	Potentially significant	Implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5,** as described above, is required.	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
with cultural value to a California Native American tribe that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).			
Impact 4.16-1b: The project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set	Potentially significant	Implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5,** as described above, is required.	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
forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			
Impact 4.16: Cumulative Impacts	Less than significant	Implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5,** as described above, is required.	Less than significant
4.17 Utilities and Service Systems			
Impact 4.17-1: The project would require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	Potentially significant	Implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2**, as described above, is required.	Less than significant
Impact 4.17-2: The project would have sufficient water supplies	Less than significant	No mitigation measures are required.	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
available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.			
Impact 4.17-3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.17-4: The project would generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	Potentially significant	Implementation of **Mitigation Measure MM 4.1-1**, as described above, is required. **MM 4.17-1:** Prior to issuance of a grading or building permit, an onsite Waste Disposal and Recycling Coordinator shall be designated by the project proponent/operator to facilitate waste disposal and recycling as part of the Maintenance, Trash Abatement, and Pest Management Program. The provisions listed below shall apply to the project: a. The project proponent/operator shall provide a storage area (or areas) for waste and recyclable materials within the fenced project site that is clearly identified for waste and recycling. This area shall be maintained on the site during construction, operations and decommissioning. b. During construction, operation, and decommissioning, debris and waste generated shall be recycled to the extent feasible. c. The Waste Disposal and Recycling Coordinator shall facilitate recycling of all construction and decommissioning waste through coordination with contractors, local waste haulers, and/or other facilities that recycle construction/demolition wastes. d. The Waste Disposal and Recycling Coordinator shall coordinate with Kern County Public Works Department – Solid Waste Division the acceptance for disposal or	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
		recycling of construction and decommissioning waste prior to being transported to any public disposal facility. e. The Waste Disposal and Recycling Coordinator shall ensure that materials transported to public disposal facilities for recycling shall be separated by material type so as not to be co-mingled or contaminated with waste material. f. The Waste Disposal and Recycling Coordinator shall also be responsible for ensuring wastes requiring special disposal are handled according to State and County regulations that are in effect at the time of disposal. g. Contact information of the coordinator shall be provided to the Kern County Planning and Natural Resources Department prior to issuance of building permits.	
Impact 4.17-5: The project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.	Potentially significant	Implementation of **Mitigation Measure MM 4.17-1** is required.	Less than significant
Impact 4.17: Cumulative Impacts	Potentially significant	Implementation of **Mitigation Measures MM 4.1-1, 4.10-1**, **4.10-2**, and **MM 4.17-1** is required.	Less than significant
4.18 Wildfire			
Impact 4.18-1: The project would substantially impair an adopted emergency response plan or emergency evacuation plan.	Less than significant	Though the impact is less than significant, implementation of **Mitigation Measure MM 4.15-1**, as described above, would further reduce potential impacts.	Less than significant
Impact 4.18-2: The project would, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby	Potentially significant	Implementation of **Mitigation Measure MM 4.14-1**, as described above, is required.	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
expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.			
Impact 4.18-3: The project would require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	Potentially significant	Implementation of **Mitigation Measure MM 4.14-1**, as described above, is required.	Less than significant
Impact 4.18-4: The project would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes.	Potentially significant	Implementation of **Mitigation Measures MM 4.10-1**, as described above, is required.	Less than significant
Impact 4.18: Cumulative Impacts	Potentially significant	Implementation of **Mitigation Measures MM 4.10-1** and **MM 4.14-1**, as described above, is required.	Significant and unavoidable

Chapter 2
Introduction

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Chapter 2
Introduction

2.1 Intent of the California Environmental Quality Act

The Kern County Planning and Natural Resources Department, as Lead Agency, has determined that an Environmental Impact Report (EIR) must be prepared for the proposed Discovery Solar PV and Storage Project (project). The project is located on approximately 7,700 acres and would generate up to 1,400 megawatts (MW) of electricity from a photovoltaic (PV) solar facility and up to 8 gigawatt-hours (GWh) of energy storage in unincorporated Kern County.

The project proposes to develop and operate a PV solar facility and associated infrastructure necessary to generate up to 1,400 MW of renewable electrical energy with up to 8 GWh of energy storage capacity (approximately 1,000 MW) on an approximately 7,700-acre project site, across 473 privately owned parcels, in an unincorporated area of southeastern Kern County, California. A 13.8-acre portion of an additional parcel located adjacent to the southern portion of the project site is proposed for a temporary, offsite construction laydown yard to supplement proposed laydown areas within the Conditional Use Permit (CUP) boundaries of the solar arrays. An additional approximately 411 acres on six (6) parcels are allotted for the proposed medium-voltage (MV) transmission and access easement. PV solar panels, a power collection system, including MV lines that connect the solar facilities, inverters, a switchyard, foundations, and transformers will be installed onsite. 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. The project may be constructed in multiple phases.

This EIR has been prepared pursuant to the following:

- The California Environmental Quality Act (CEQA; Public Resources Code, Section 21000 et seq.)
- CEQA *Guidelines* (California Code of Regulations, Title 14, Division 6, Article 1, Chapter 3, Section 15000 et seq.)
- The Kern County CEQA Implementation Document

The overall purposes of the CEQA process are to:

- Ensure that the environment and public health and safety are protected in the face of discretionary projects initiated by public agencies or private concerns.
- Provide for full disclosure of the project's environmental effects to the public, the agency decision-makers who will approve or deny the project, and responsible and trustee agencies charged with managing resources (e.g., wildlife, air quality) that may be affected by the project.
- Provide a forum for public participation in the decision-making process with respect to environmental effects.

2.2 Purpose of this Environmental Impact Report

An EIR is a public informational document used in the planning and decision-making process. This project-level EIR will analyze the environmental impacts of the project. The Kern County Planning Commission and Board of Supervisors will consider the information in the EIR, including the public comments and staff response to those comments, during the public hearing process. The final decision is made by the Board of Supervisors, who may approve, conditionally approve, or deny the project. The purpose of an EIR is to identify:

- The potential significant impacts of the project on the environment and indicate the manner in which those significant impacts can be avoided or mitigated;
- Any unavoidable adverse impacts that cannot be mitigated; and
- Reasonable and feasible alternatives to the project that would eliminate any significant adverse environmental impacts or reduce the impacts to a less-than-significant level.

An EIR also discloses growth-inducing impacts; impacts found not to be significant; and significant cumulative impacts of the project when taken into consideration with other past, present, and reasonably anticipated future projects.

CEQA requires that an EIR reflect the independent judgment of the lead agency regarding the impacts, the level of significance of the impacts both before and after mitigation, and feasible mitigation measures proposed to reduce the impacts. A Draft EIR is circulated to responsible agencies, trustee agencies with resources affected by the project, and interested agencies and individuals. The purposes of public and agency review of a Draft EIR include sharing expertise, disclosing agency analyses, checking for accuracy, detecting omissions, discovering public concerns, and soliciting mitigation measures and alternatives capable of avoiding or reducing the significant effects of the project, while still attaining most of the basic objectives of the project.

Issues to Be Resolved

Section 15123(b)(3) of the CEQA *Guidelines* requires that an EIR contain issues to be resolved, which includes the choices among alternatives and whether or how to mitigate significant impacts. The following major issues are to be resolved:

- Determine whether the EIR adequately describes the environmental impacts of the project;
- Determine the preferred choice among alternatives;
- Determine whether the recommended mitigation measures should be adopted or modified; and
- Determine whether additional mitigation measures need to be applied to the project.

2.3 Terminology

To assist reviewers in understanding this EIR, the following terms are defined:

- *Project* means the whole of an action that has the potential for resulting in a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.
- *Environment* refers to the physical conditions that exist in the area and that would be affected by a proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved is where significant direct or indirect impacts would occur as a result of the project. The environment includes both natural and man-made (artificial) conditions.
- *Impacts* analyzed under CEQA must be related to a physical change. Impacts are:
  - Direct or primary impacts that would be caused by the project and would occur at the same time and place; or
  - Indirect or secondary impacts that would be caused by the project and would be later in time or farther removed in distance but would still be reasonably foreseeable. Indirect or secondary impacts may include growth-inducing impacts and other effects related to induced changes in the pattern of land use; population density or growth rate; and related effects on air and water and other natural systems, including ecosystems.
- *Significant impact on the environment* means a substantial, or potentially substantial, adverse change in any of the physical conditions in the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. An economic or social change by itself is not considered a significant impact on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.
- *Mitigation* consists of measures that avoid or substantially reduce the project's significant environmental impacts by:
  - Avoiding the impact altogether by not taking a certain action or parts of an action;
  - Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
  - Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
  - Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or
  - Compensating for the impact by replacing or providing substitute resources or environments.
- *Cumulative impacts* are two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. The following statements also apply when considering cumulative impacts:
  - The individual impacts may be changes resulting from a single project or separate projects.
  - The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant projects taking place over time.

This EIR uses a variety of terms to describe the level of significance of adverse impacts. These terms are defined as follows:

- *No impact.* The resource is either not present on the project site or vicinity, and there is no potential for direct, indirect, or cumulative impacts. No mitigation measures are required when there is a no impact determination. See *Notice of Preparation* section below regarding the determination of *No Impact* on *Recreation* and *Population and Housing* resources.
- *Less than significant.* An impact that is adverse but that does not exceed the defined thresholds of significance. Less than significant impacts do not require mitigation.
- *Significant.* An impact that exceeds the defined thresholds of significance and would or could cause a substantial adverse change in the environment. Mitigation measures are recommended to eliminate the impact or reduce it to a less than significant level.
- *Significant and unavoidable.* An impact that exceeds the defined thresholds of significance and cannot be eliminated or reduced to a less-than-significant level through the implementation of mitigation measures.

2.4 Decision-making Process

CEQA requires lead agencies to solicit and consider input from other interested agencies, citizen groups, and individual members of the public. CEQA also requires the project to be monitored after it has been permitted to ensure that mitigation measures are carried out.

CEQA requires the lead agency to provide the public with a full disclosure of the expected environmental consequences of the project and with an opportunity to provide comments. In accordance with CEQA, the following steps constitute the process for public participation in the decision-making process:

- **Initial Study/Notice of Preparation (IS/NOP).** Kern County prepared and circulated an NOP for 30 days to responsible, trustee, and local agencies for review and comment beginning on July 31, 2025, and ending on September 2, 2025.
- **Draft EIR Preparation/Notice of Completion (NOC).** A Draft EIR is prepared, incorporating public and agency responses to the NOP and the scoping process. The Draft EIR is circulated for review and comment to appropriate agencies and additional individuals and interest groups who have requested to be notified of EIR projects. Per Section 15105 of the CEQA *Guidelines*, Kern County will provide for a 45-day public review period on the Draft EIR. Kern County will subsequently respond to each comment on the Draft EIR received in writing through a Response to Comments chapter in the Final EIR. The Response to Comments will be provided to each agency or person who provided written comments on the EIR a minimum of 10 business days before the scheduled Planning Commission hearing on the Final EIR and project.
- **Preparation and Certification of Final EIR.** The Kern County Planning Commission will consider the Final EIR and the project, acting in an advisory capacity to the Kern County Board of Supervisors. Upon receipt of the Planning Commission's recommendation, the Board of Supervisors will also consider the Final EIR, all public comments, and the project and take final action on the project. At least one public hearing will be held by both the Planning Commission and Board of Supervisors to consider the Final EIR, take public testimony, and then approve, conditionally approve, or deny the project.

Notice of Preparation

Pursuant to Section 15082 of the CEQA *Guidelines*, as amended, the Kern County Planning and Natural Resources Department circulated an NOP to the State Clearinghouse, public agencies, special districts, and members of the public for a public review period beginning on July 31, 2025, and ending on September 2, 2025. The NOP was also posted in the Kern County Clerk's office for 30 days and sent to the State Clearinghouse at the Governor's Office of Planning and Research to solicit Statewide agency participation in determining the scope of the EIR.

The purpose of the NOP is to formally convey that the Kern County Planning and Natural Resources Department, as Lead Agency, solicited input regarding the scope and proposed content of the EIR. With respect to the following resource areas, which were discussed in the IS/NOP, it was determined that no impacts would occur that would require analysis in the EIR:

- Population and Housing; and
- Recreation.

The NOP determined that the proposed project would have up to six permanent employees. Maintenance personnel would likely be drawn from the local labor force and would commute from their permanent residences to the project site during those times. However, even if the maintenance employees were hired from out of the area and had to relocate to eastern Kern County, it is expected that accommodations would be available in the nearby hotels in Rosamond, Mojave, Lancaster, or other local communities and would not result in a substantial increase in population in the area. Consequently, this would represent a minor increase in the number of users at local recreational facilities. As a result, the project would not directly or indirectly induce the development of any new housing or businesses, and there would not be a detectable increase in the use of parks or other recreational facilities. No impacts to population and housing or recreation would occur, and no further analysis is warranted.

Additionally, no comments were received during circulation of the NOP indicating that additional impacts would need to be addressed. No further discussion of these topics is warranted. For a complete analysis of potential impacts to these resource areas, please refer to Appendix A of this EIR..

Scoping Meeting

Pursuant to Section 15082 (c)(1) of the CEQA *Guidelines*, for projects of statewide, regional, or area-wide significance, the lead agency is required to conduct at least one scoping meeting. The scoping meeting is for jurisdictional agencies and interested persons or groups to provide comments regarding, but not limited to, the range of actions, alternatives, mitigation measures, and environmental effects to be analyzed. Kern County hosted a scoping meeting on August 21, 2025, at the Kern County Planning and Natural Resources Department, located at 2700 "M" Street, Suite 100, Bakersfield, California.

Notice of Preparation and Scoping Meeting Results

Verbal comments were received at the August 21, 2025 scoping meeting. Of the nine total members of the public in attendance, three individuals spoke during the meeting, raising common concerns regarding affected property values and land access that could result from development of the proposed project.

Mr. Ken Wan, representing APN 345-011-44, stated he had received many offers for the purchase of his land, also sharing concerns that the proposal would hurt property value and decrease land value. Mr. Wan also raised concerns with potential road closures that could result from the elimination of road reservation as part of the General Plan Amendment to the Circulation Element.

Both Mr. Victor Navas, representing APN 474-052-21, and Mr. Carlos Quinonez, representing APN 346-072-02, stated their concerns related to property values and access were similar to those raised in Mr. Wan's statement.

Specific concerns raised in written comments received during the NOP public review period are discussed below. The NOP and all comments received are included in Appendix A.

NOP Written Comments

The following specific environmental concerns listed in **Table 2-1,** *Summary of NOP Comments,* were received in writing by the County in response to the NOP.

TABLE 2-1: SUMMARY OF NOP COMMENTS

Commenter	Date Comment Received	Summary of Comment
	Federal Agencies	
None		
	State Agencies	
California Department of Fish and Wildlife (CDFW)	August 27, 2025	Provided 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. Mitigation measures were proposed. See Section 4.4, *Biological Resources*.
California Department of Conservation (DOC): Geologic Energy Management Division	August 12, 2025	Commented regarding wells on the project site. See Section 4.12, *Mineral Resources*.
	August 26, 2025	Provided comments regarding potential issues associated with development near wells, including regulatory requirements for well abandonment or re-abandonment, required approvals, and safety. See Section 4.12, *Mineral Resources*.
Native American Heritage Commission (NAHC)	August 8, 2025	Requested that Assembly Bill 52 and Senate Bill 18 requirements for consultation be followed, as well as their own recommendations. See Section 4.16, *Tribal Cultural Resources.*
Local		
Eastern Kern Air Pollution Control District	August 12, 2025	Requested that a Fugitive Dust Emission Monitoring Plan be developed prior to construction. See Section 4.3, *Air Quality*.
Kern County Fire Department (KCFD)	August 6, 2025	Requested that the project proponent allow the fire department to review the project prior to construction. See Section 4.18, *Wildfire* and Section 4.14, *Public Services.*
Kern County Superintendent of Schools	August 12, 2025	Commented that the project would have no significant impacts on the district's facilities. See Section 4.14, *Public Services.*

Commenter	Date Comment Received	Summary of Comment
Kern County Public Works	August 14, 2025	The Floodplain Management Division requested that the County provide conditions of approval that include disposal of drainage water as well as ensuring that the project design includes flood hazard requirements. See Section 4.10, *Hydrology and Water Quality*.
Kern County Public Works	August 19, 2025	The County Surveyor requests that all survey monuments be properly tied out, recorded, and restored by a Licensed Land Surveyor before permits, final inspections, and project completion, with required records submitted to the County Surveyor and ensured accessibility per relevant sections of the Professional Land Surveyor's Act and Civil Code. See Section 4.11, *Land Use*.
Tribal		
Ft. Yuma Quechan Indian Tribe	August 19, 2025	Deferred consultation to other regional tribes. See Section 4.16, *Tribal Cultural Resources*.
Santa Rosa Rancheria	August 6, 2025	Commented that the project was not located in an area of interest to the Tribe. See Section 4.16, *Tribal Cultural Resources*.
Tejon Indian Tribe	August 13,2025	Requested additional project information and recommend pedestrian surveys be conducted and Native American Monitoring during all ground disturbances. See Section 4.5, *Cultural Resources* and Section 4.16, *Tribal Cultural Resources*.
Interested Parties		
Western States Regional Council of Carpenters	September 2, 2025	Requested that the County require a labor agreement, as well as implementation of training to prevent the spread of COVID-19 and other infectious diseases. See Section 4.14, *Public Services*.
Holiday Rock Readymix Concrete, Asphalt, & Aggregate	August 21, 2025	Requested that the environmental document address impacts related to ground water pumping, as well as requiring long term groundwater monitoring as a condition of approval. See Section 4.10, *Hydrology and Water Quality*.
Michael Branden	September 2, 2025	Shared concern regarding their property value, as well as their concern of how the battery energy storage system and solar facility could impact the environment. See Section 4.4, *Biological Resources* and Section 4.14, *Public Services*.
Hisham Elkhatib	August 4, 2025	Requested that the lots they own receive royalties from project energy generation. A request was also made to limit road vacations. See Section 4.11, *Land Use* and Section 4.15, *Transportation*.
Gloria Murillo	August 19, 2025	Requested that the environmental document address direct impacts to their property value, the cumulative burden to the region, health and safety concerns involving battery energy storage, and the conversion of agriculture lands. See Sections 4.1, Aesthetics, 4.2, *Agricultural and Forestry Resources,* 5.0, *Consequences*, and 6.0, *Alternatives*.
Scott M. Cooley	August 6, 2025	Noted their support for the project.

Commenter	Date Comment Received	Summary of Comment
Defenders of Wildlife, California Native Plant Society, Center for Biological Diversity	September 2, 2025	Provided comments and recommendations to assist the County in adequately identifying and/or mitigating the project's significant, or potentially significant, direct, indirect, and cumulative impacts on biological resources. Mitigation measures were proposed. See Section 4.4, *Biological Resources*.

Availability of the Draft EIR

This Draft EIR is being distributed directly to agencies, organizations, and interested groups and persons for comment during a 45-day formal review period in accordance with Section 15087 of the CEQA *Guidelines*. This Draft EIR and the full administrative record for the project, including all studies, are available for review during normal business hours Monday through Friday at the Kern County Planning Department, located at:

Kern County Planning and Natural Resources Department
2700 "M" Street, Suite 100
Bakersfield, CA 93301-2370
Phone: (661) 862-8600, Fax: (661) 862-8601

This EIR is also available on the Kern County Planning and Natural Resources Department website: https://kernplanning.com/environmental-doc/discovery-solar-pv-and-storage-project/.

Additionally, this EIR is available at the following libraries:

Kern County Library/Beale
Local History Room
701 Truxtun Avenue
Bakersfield, CA 93301

Kern County Library
Mojave Branch
16916 ½ Highway 14, Space D2
Mojave, CA 93501

2.5 Format and Content

This EIR addresses the potential environmental effects of the project and was prepared following input from the public and responsible and affected agencies, and through the EIR scoping process, as discussed previously. The contents of this EIR were based on the findings in the NOP, and public and agency input. Based on the findings of the NOP, a determination was made that an EIR was required to address potentially significant environmental effects on the following resources:

- Aesthetics;
- Agriculture and Forestry Resources;
- Air Quality;
- Biological Resources;
- Cultural Resources;
- Energy;
- Hydrology and Water Quality;
- Land Use and Planning;
- Mineral Resources;
- Noise;
- Public Services;
- Traffic and Transportation;

- Geology and Soils;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Tribal Cultural Resources;
- Utilities and Service Systems; and
- Wildfire.

As noted previously, the following resource areas were discussed in the IS/NOP and it was determined that no impacts would occur that would require analysis in the EIR:

- Population and Housing; and
- Recreation.

Required EIR Content and Organization

This EIR includes all of the sections required by CEQA. **Table 2-2,** *Required EIR Contents*, contains a list of sections required under CEQA, along with a reference to the chapter in which they can be found in this EIR document.

TABLE 2-2: REQUIRED EIR CONTENTS

Requirement (CEQA *Guidelines* Section)	Location in EIR
Table of contents (Section 15122)	Table of Contents
Summary (Section 15123)	Chapter 1
Introduction (Section 15132)	Chapter 2
Project description (Section 15124)	Chapter 3
Significant environmental impacts (Section 15126.2)	Sections 4.1–4.18
Environmental setting (Section 15125)	Sections 4.1–4.18
Mitigation measures (Section 15126.4)	Sections 4.1–4.18
Cumulative impacts (Section 15130)	Sections 4.1–4.18
Growth-inducing impacts (Section 15126.2)	Chapter 5
Effects found not to be significant (Section 15128)	Chapters 1, 5; Sections 4.1–4.18
Significant irreversible changes	Chapter 5
Unavoidable significant environmental impacts (Section 15126.2)	Chapter 5
Alternatives to the project (Section 15126.6)	Chapter 6
Response to Comments (Section 15132)	Chapter 7
Organizations and persons consulted	Chapter 8
List of preparers (Section 15129)	Chapter 9
References (Section 15129)	Chapter 10

The content and organization of this EIR are designed to meet the requirements of CEQA and the CEQA *Guidelines*, as well as to present issues, analysis, mitigation, and other information in a logical and understandable way. This EIR is organized into the following sections:

- Chapter 1, *Executive Summary*, provides a summary of the project description and a summary of the environmental impacts and mitigation measures.
- Chapter 2, *Introduction*, provides CEQA compliance information, an overview of the decision-making process, organization of the EIR, and a responsible and trustee agency list.
- Chapter 3, *Project Description*, provides a description of the location, characteristics, and objectives of the projects, and the relationship of the projects to other plans and policies associated with the project.
- Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, contains a detailed environmental analysis of the existing conditions, projects impacts, mitigation measures, and cumulative impacts.
- Chapter 5, *Consequences of Project Implementation*, presents an analysis of the project's cumulative and growth-inducing impacts and other CEQA requirements, including significant and unavoidable impacts and irreversible commitment of resources.
- Chapter 6, *Alternatives*, describes a reasonable range of alternatives to the projects that could reduce the significant environmental effects that cannot be avoided.
- Chapter 7, *Responses to Comments*, is reserved for responses to comments on the Draft EIR.
- Chapter 8, *Organizations and Persons Consulted*, lists the organizations and persons contacted during preparation of this EIR.
- Chapter 9, *Preparers*, identifies persons involved in the preparation of the EIR.
- Chapter 10, *Bibliography*, identifies reference sources for the EIR.
- *Appendices* provide information and technical studies that support the environmental analysis contained within the EIR.

The analysis of each environmental category in **Chapter 4**, *Environmental Setting, Impacts, and Mitigation Measures* is organized as follows:

- "Introduction" provides a brief overview on the purpose of the section being analyzed with regards to the project.
- "Environmental Setting" describes the physical conditions that exist at this time and that may influence or affect the topic being analyzed.
- "Regulatory Setting" provides State and federal laws and the Kern County General Plan goals, policies, and implementation measures that apply to the topic being analyzed.
- "Project Impacts and Mitigation Measures" discusses the impacts of the projects in each category, presents the determination of the level of significance, and provides a discussion of feasible mitigation measures to reduce any impacts.
- "Cumulative Setting, Impacts, and Mitigation Measures" provides a discussion of the cumulative geographic area for each resource area, and analysis of whether the project would contribute to a significant cumulative impact, and if so, identifies cumulative mitigation measures.

2.6 Responsible and Trustee Agencies

Projects or actions undertaken by the lead agency, in this case the Kern County Planning and Natural Resources Department, may require subsequent oversight, approvals, or permits from other public agencies in order to be implemented. Other such agencies are referred to as "responsible agencies" and "trustee agencies." Pursuant to Sections 15381 and 15386 of the CEQA *Guidelines*, as amended, responsible agencies and trustee agencies are defined as follows:

- A "responsible agency" is a public agency that proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term "responsible agency" includes all public agencies other than the lead agency that have discretionary approval power over the project (Section 15381).
- A "trustee agency" is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California (Section 15386).

The various public, private, and political agencies and jurisdictions with a particular interest in the project may include, but are not limited to, the following:

Federal Agencies

- United States Fish and Wildlife Service
- Federal Aviation Administration
- United States Army Corps of Engineers

State Agencies

- California Public Utilities Commission
- California Department of Fish and Wildlife
- Lahontan Regional Water Quality Control Board
- California Department of Transportation

Local Agencies

- Eastern Kern County Air Pollution Control District
- Kern County Board of Supervisors

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

Kern County

- Planning and Natural Resources Department
- Public Works Department

- Public Health Services Department, Environmental Health Services Division
- Fire Department (Kern County Fire Department)
- Sherriff's Department

Other additional permits or approvals from Kern County may be required for the project.

2.7 Incorporation by Reference

In accordance with Section 15150 of the CEQA *Guidelines* to reduce the size of the report, the following documents are hereby incorporated by reference into this EIR and are available for public review at the Kern County Planning and Natural Resources Department. A brief synopsis of the scope and content of these documents is provided below.

Kern County General Plan

The Kern County General Plan is a policy document with land use maps and related information that are designed to give long-range guidance to those County officials making decisions affecting the growth and resources of the unincorporated Kern County jurisdiction, excluding the metropolitan Bakersfield planning area. This document, adopted on June 14, 2004, and last amended on September 22, 2009, helps ensure that day-to-day decisions conform to the long-range program designed to protect and further the public interest as related to Kern County's growth and development and mitigate environmental impacts. The Kern County General Plan also serves as a guide to the private sector of the economy in relating its development initiatives to the public plans, objectives, and policies of the County.

Soledad Mountain Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan was certified on June 28, 1973 (then known as the South of Mojave Elephant Butte Specific Plan). The plan addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. There are no goals or policies included in the plan.

Kern County Zoning Ordinance

According to the Kern County Zoning Ordinance Chapter 19.02.020, Purposes, Title 19 was adopted to promote and protect the public health, safety, and welfare through the orderly regulation of land uses throughout the unincorporated area of Kern County. Further, the purposes of this title are to:

- Provide the economic and social advantages resulting from an orderly planned use of land resources;
- Encourage and guide development consistent with the Kern County General Plan;
- Divide Kern County into zoning districts of a number, size, and location deemed necessary to carry out the purposes of the Kern County General Plan and this title;
- Regulate the size and use of lots, yards, and other open spaces;
- Regulate the use, location, height, bulk, and size of buildings and structures;

- Regulate the intensity of land use;
- Regulate the density of population in residential areas;
- Establish requirements for off-street parking;
- Regulate signs and billboards; and
- Provide for the enforcement of the regulations of Chapter 19.02.

Regional Transportation Plan

The latest Regional Transportation Plan (RTP) was prepared by the Kern Council of Governments (COG) and was adopted on July 21, 2022. The 2022 RTP is a 24-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. It was developed through a continuing, comprehensive, and cooperative planning process, and provides for effective coordination between local, regional, State, and federal agencies. Included in the 2022 RTP is the Sustainable Communities Strategy (SCS), which is required by California's Sustainable Communities and Climate Protection Act, Senate Bill 375. The California Air Resources Board (CARB) set targets for Kern's GHG emissions reductions from passenger vehicles and light-duty trucks at 9 percent per capita by 2020 and 15 percent per capita by 2035 as compared to 2005. In addition, Senate Bill 375 provides for closer integration of the RTP/SCS with the Regional Housing Needs Allocation ensuring consistency between low-income housing need and transportation planning. Kern COG is a federally designated Metropolitan Planning Organization and a state designated Regional Transportation Planning Agency. These designations formally establish Kern COG's role in transportation planning. Preparing an RTP is one of Kern COG's primary statutory responsibilities under federal and state law.

Kern County Airport Land Use Compatibility Plan

The Kern County Airport Land Use Compatibility Plan (ALUCP) was originally adopted in 1996 and has since been amended to comply with Aeronautics Law, Public Utilities Code (Chapter 4, Article 3.5) regarding public airports and surrounding land use planning. As required by that law, proposals for public or private land use developments that occur within defined airport influence areas are subject to compatibility review. The principal airport land use compatibility concerns addressed by the plan are: (1) exposure to aircraft noise, (2) land use safety with respect to both people and property on the ground and the occupants of aircraft, (3) protection of airport air space, and (4) general concerns related to aircraft overflights.

The ALUCP identifies policies and compatibility criteria for influence zones or planning area boundaries. The ALUCP maps and labels these zones as A, B1, B2, C, D, E1, and E2, ranging from the most restrictive (A – airport property-runway protection zone) to the least restrictive (D – disclosure to property owners only), while the E zone is intended to address special land use development. According to the ALUCP, no portion of the project site, or the 230-kilovolt gen-tie line, is located within the sphere of influence of the Mojave Air and Space Port.

2.8 Sources

This EIR is dependent upon information from many sources. Some sources are studies or reports that have been prepared specifically for the project. Other sources provide background information related to one or more issue areas that are discussed in this document. The sources and references used in the preparation of this EIR are listed in **Chapter 10**, *Bibliography*, and are available for review during normal business hours at the Kern County Planning and Natural Resources Department, located at 2700 "M" Street, Suite 100, Bakersfield, CA 93301-2370. This EIR is also available on the Kern County Planning and Natural Resources Department website: https://kernplanning.com/environmental-doc/discovery-solar-pv-and-storage-project/.

Chapter 3
Project Description

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Chapter 3
Project Description

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 Discovery Solar PV and Storage Project (project) proposed by Discovery Solar PV and Storage, LLC (project proponent). The project proposes to develop and operate a photovoltaic (PV) solar facility and associated infrastructure necessary to generate up to 1,400 megawatts (MW) of renewable electrical energy with up to 8 gigawatt-hours (GWh) of energy storage capacity (approximately 1,000 MW) on an approximately 7,700-acre project site, across 473 privately owned parcels, in an unincorporated area of southeastern Kern County, California. A 13.8-acre portion of an additional parcel located adjacent to the southern portion of the project site is proposed for a temporary, offsite construction laydown yard to supplement proposed laydown areas within the Conditional Use Permit (CUP) boundaries of the solar arrays. An additional approximate 411 acres on six (6) parcels are allotted for the proposed medium-voltage (MV) transmission and access easements. PV solar panels, a power collection system including 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), up to three onsite collector substations, a 230-kilovolt (kV) switchyard, interconnection and transmission systems, and temporary laydown areas. The proposed project also includes a generation-tie (gen-tie) line to connect the project to the existing Windhub Substation. 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 for those project parcels not already zoned A. 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. Therefore, concurrent approval of the requested ZCCs and the CUPs, in addition to other land use entitlements listed below, are required to develop the project. Construction and operation of the proposed gen-tie lines, although proposed to be analyzed as part of the overall project, is exempt from the County's zoning code in accordance with section 19.08.090 and only require ministerial permits granted by the Kern County General Services Division.

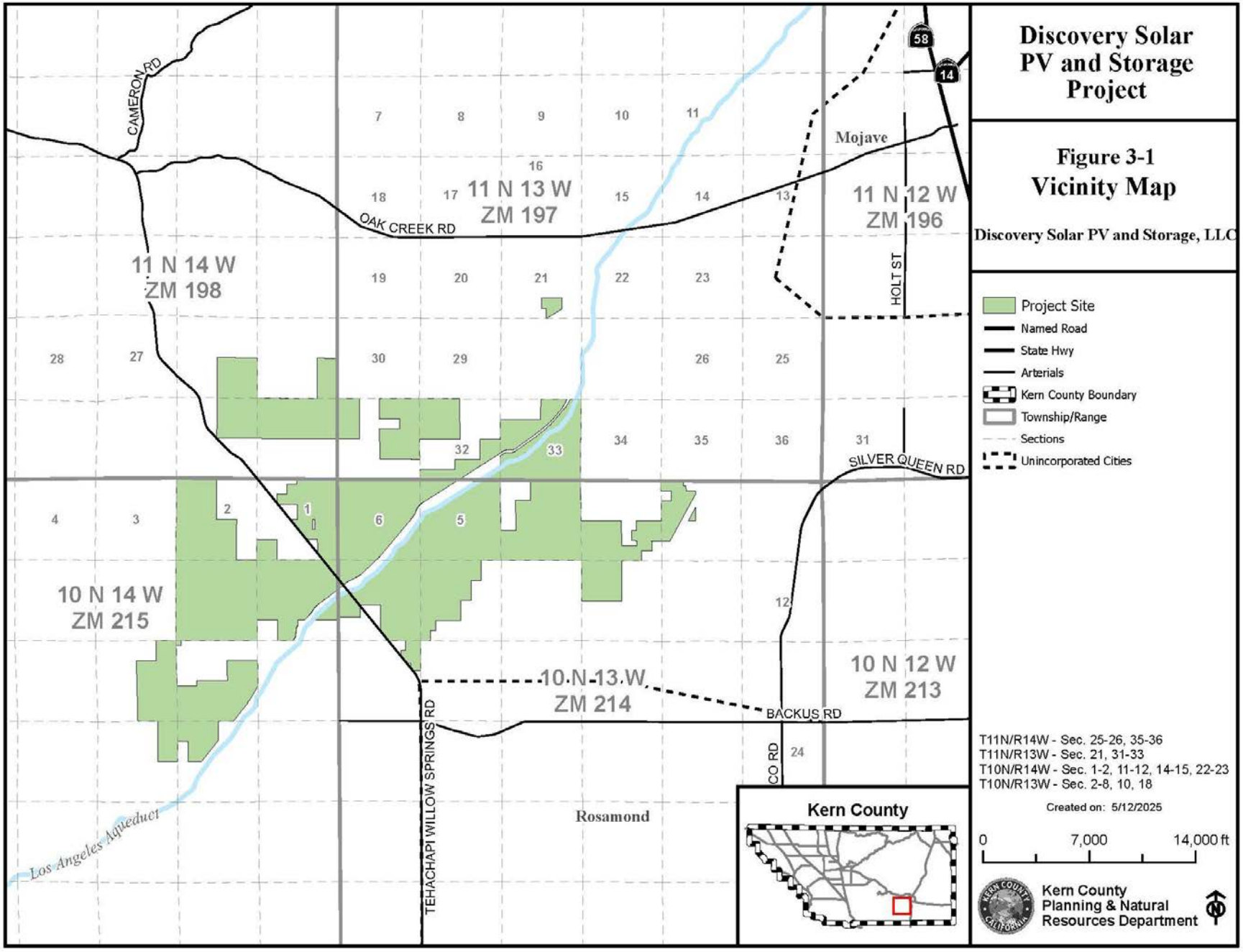
3.2 Project Location

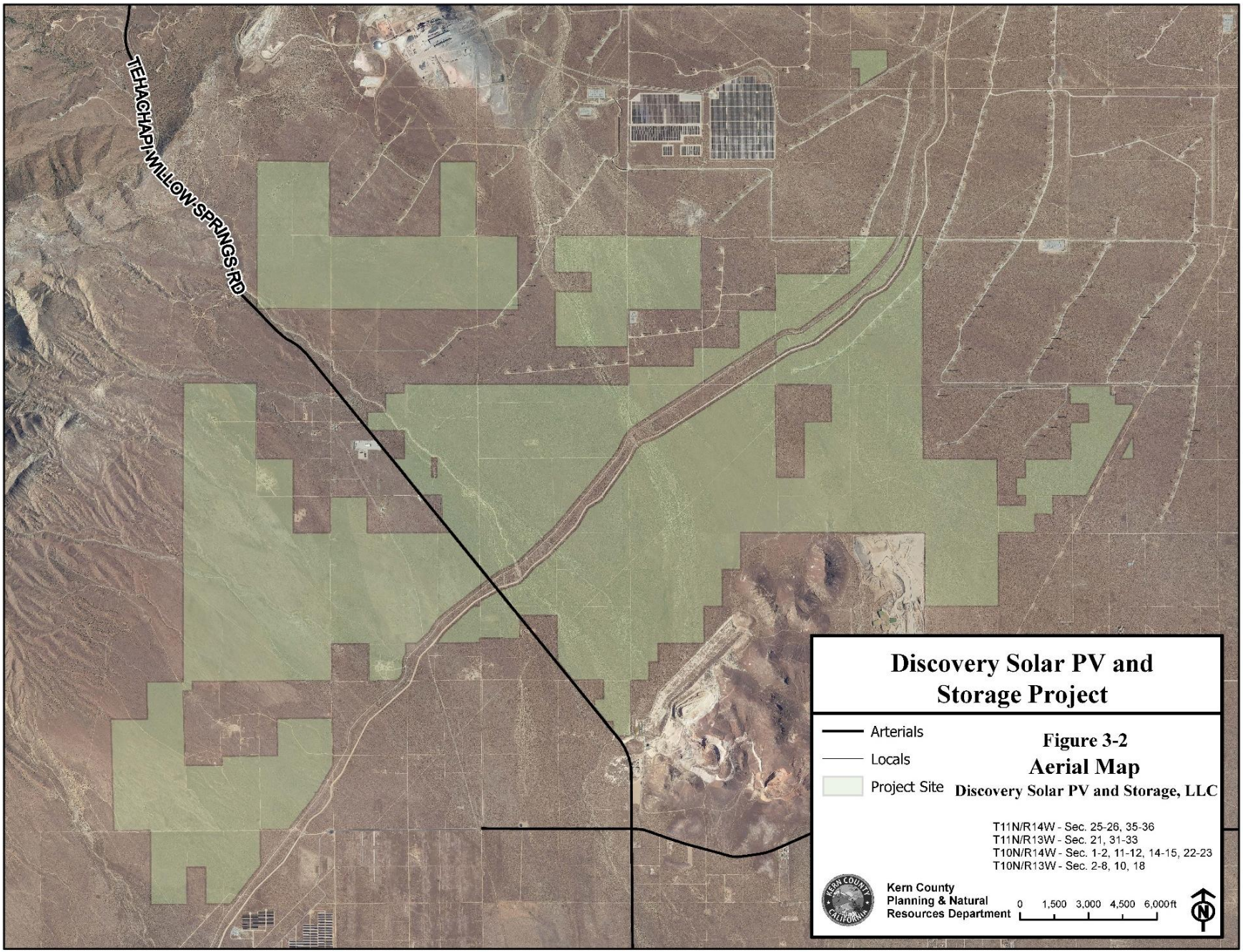
The proposed project site is located at the western edge of the Antelope Valley, approximately 6 miles southwest of the community of Mojave, approximately 9 miles southeast of the City of Tehachapi, approximately 8 miles northwest of the unincorporated community of Rosamond, and approximately 20 miles west of Edwards Air Force Base (AFB). The project is located within the Monolith, Willow Springs, and Soledad Mountain U.S. Geological Survey 7.5-minute quadrangles, and spans multiple Townships, Ranges, and Sections including the following: Township 10 North, Range 13 West, Sections 2-8, 10, and 18; Township 10 North, Range 14 West, Sections 1, 2, 11, 12, 14, 15, 22, and 23; Township 11 North,

Range 13 West, Sections 21, 31, 32, and 33; and Township 11 North, Range 14 West Sections 25, 26, 35, 36. The proposed project boundary is shown in **Figure 3-1**, *Vicinity Map.*

Portions of the project are adjacent to and on both sides of the Tehachapi Willow Springs Road, and the Los Angeles Department of Water and Power (LADWP) aqueduct. The proposed project boundaries are shown in **Figure 3-2**, *Aerial Map*. All temporary laydown areas will be located within the project site boundary, with the exception of one approximately 12-acre temporary construction laydown area located adjacent to the southern portion of the project site. The project would interconnect via gen-tie facilities to the Windhub Substation as shown on **Figure 3-3,** *Proposed Site Plan* and as described above.

The project site consists of 473 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 12 acres of a 30.09-acre offsite parcel that would be used as a temporary construction laydown area. The Assessor Parcel Numbers (APNs) 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.*


Discovery Solar PV and Storage Project
Figure 3-1
Vicinity Map
Discovery Solar PV and Storage, LLC
Project Site
Named Road
State Hwy
Arterials
Kern County Boundary
Township/Range
Sections
Unincorporated Cities
T11N/R14W - Sec. 25-26, 35-36
T11N/R13W - Sec. 21, 31-33
T10N/R14W - Sec. 1-2, 11-12, 14-15, 22-23
T10N/R13W - Sec. 2-8, 10, 18
Created on: 5/12/2025
0
7,000
14,000 ft
Kern County Planning & Natural Resources Department
Kern County
11 N 14 W ZM 198
11 N 13 W ZM 197
11 N 12 W ZM 196
10 N 14 W ZM 215
10 N 13 W ZM 214
10 N 12 W ZM 213
CAMERON RD
OAK CREEK RD
HOLT ST
SILVER QUEEN RD
BACKUS RD
TEHACHAPI WILLOW SPRINGS RD
CO RD
Mojave
Rosamond
Los Angeles Aqueduct
58
14


TEHACHAPI/WILLOW SPRINGS RD
Discovery Solar PV and Storage Project
Arterials
Locals
Project Site
Figure 3-2
Aerial Map
Discovery Solar PV and Storage, LLC
T11N/R14W - Sec. 25-26, 35-36
T11N/R13W - Sec. 21, 31-33
T10N/R14W - Sec. 1-2, 11-12, 14-15, 22-23
T10N/R13W - Sec. 2-8, 10, 18
Kern County
Planning & Natural
Resources Department
0 1,500 3,000 4,500 6,000ft
N

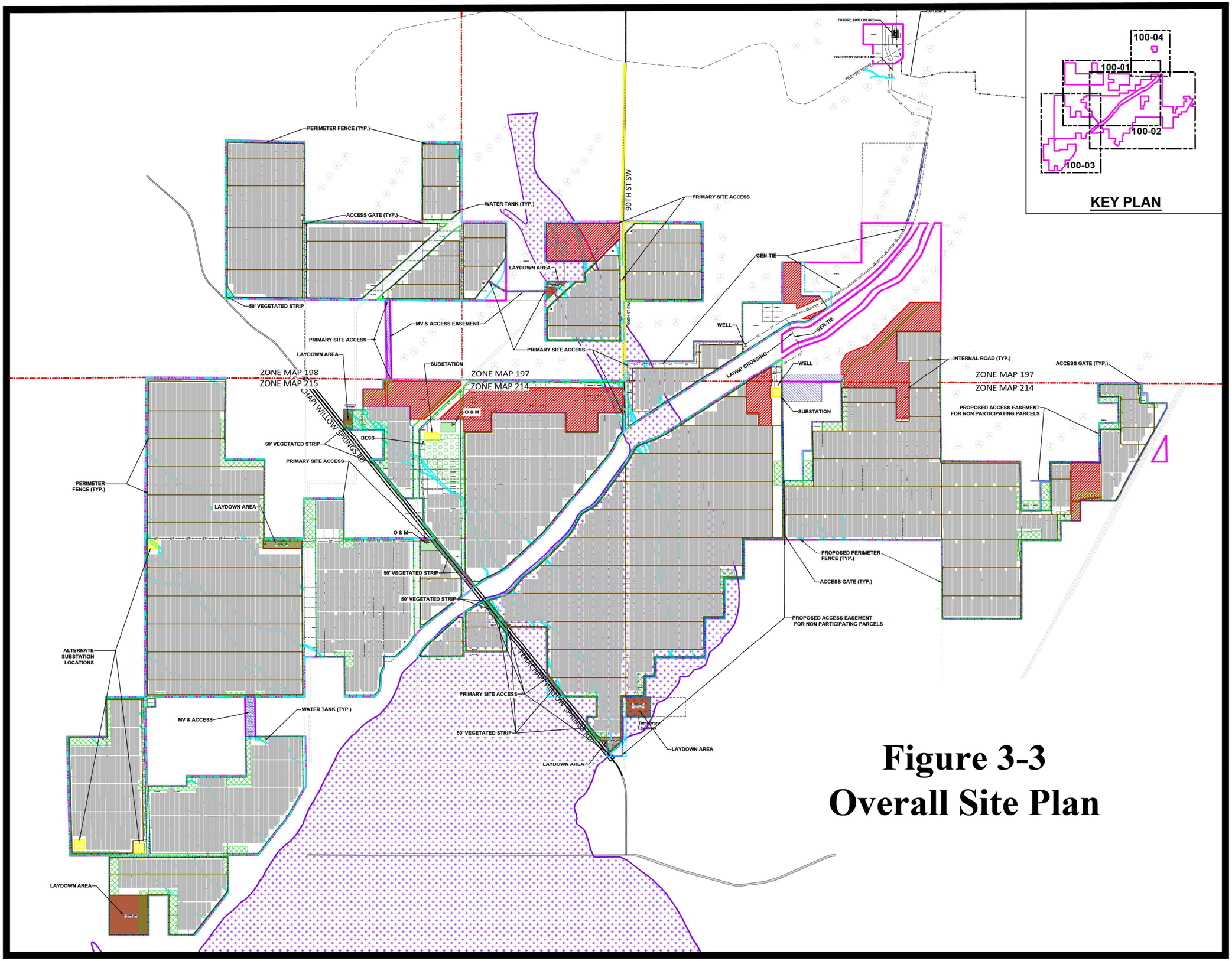


Figure 3-3
Overall Site Plan

DISCOVERY SOLAR PV AND STORAGE

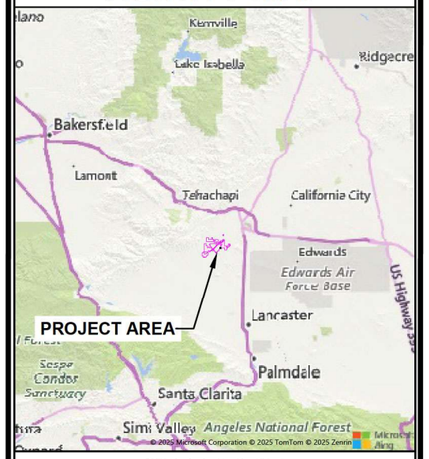
N

0 0.5 1 Miles

LEGEND

- PROJECT SITE
- ZONE MAP BOUNDARY
- CUP BOUNDARY
- PARCEL BOUNDARY
- DEVELOPMENT FOOTPRINT
- AQUEDUCT CENTERLINE
- OHE — EXISTING TRANSMISSION LINE
- EXISTING ROAD
- X — PROJECT FENCE
- GT — GEN-TIE ROUTE
- ACCESS ROAD
- SUBSTATION
- O&M AREA
- BESS AREA
- LAYDOWN AREA
- MV & ACCESS EASEMENT
- DELINEATED WATERS
- FEMA 1% ANNUAL FLOOD HAZARD AREA
- WOODLAND HABITAT PRESERVATION AREA
- ADJACENT PARCEL PV SETBACK
- 50' VEGETATED STRIP
- EXISTING WIND TURBINE-500' SETBACK
- G — PROPOSED SITE ACCESS/GATE
- WATER TANK
- WELL
- PROPOSED SOLAR ARRAY

VICINITY MAP



SHEET TITLE	
OVERALL SITE PLAN	
SCALE	SHEET #
1"=3000'	100
PLOT DATE	
1/8/2026	
FILE NAME	
Discovery Site Plan_20260108	

PERIMETER FENCE (TYP.)
WATER TANK (TYP.)
ACCESS GATE (TYP.)
50' VEGETATED STRIP
MV & ACCESS EASEMENT
PRIMARY SITE ACCESS
LAYDOWN AREA
SUBSTATION
ZONE MAP 198
ZONE MAP 215
TEHACHAPI WILLOW SPRING
ZONE MAP 197
ZONE MAP 214
90TH ST SW
PRIMARY SITE ACCESS
LAYDOWN AREA
PRIMARY SITE ACCESS
GEN-TIE
WELL
GEN-TIE
LADWP CROSSING
O & M
BESS
50' VEGETATED STRIP
50' VEGETATED STRIP
50' VEGETATED STRIP
SUBSTATION
300' MIN.
300' MIN.
600' MIN.
300' MIN.
SUBSTATION & BESS AREA
SCALE: 1"=600'
ZONE MAP 197
SUBSTATION
O & M
PROPOSED PERIMETER FENCE (TYP.)
ACCESS GATE (TYP.)
PROPOSED ACCESS EASEMENT FOR NON PARTICIPATING PARCELS
WELL
TEHACHAPI

Figure 3-3
Plan View 1

DISCOVERY SOLAR PV AND STORAGE

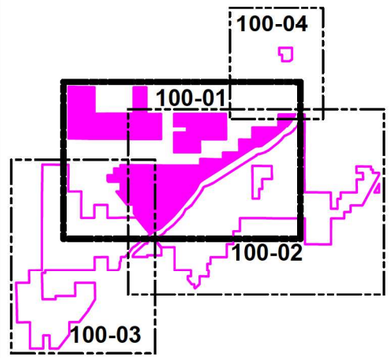
N

0 0.25 0.5 Miles

LEGEND

- PROJECT SITE
- ZONE MAP BOUNDARY
- CUP BOUNDARY
- DEVELOPMENT FOOTPRINT
- PARCEL BOUNDARY
- AQUEDUCT CENTERLINE
- OHE — EXISTING TRANSMISSION LINE
- EXISTING ROAD
- X — PROJECT FENCE
- GT — GEN-TIE ROUTE
- ACCESS ROAD
- SUBSTATION
- O&M AREA
- OPTIONAL BESS AREA
- LAYDOWN AREA
- ACCESS & MV AREA
- DELINEATED WATERS
- FEMA 1% ANNUAL FLOOD HAZARD AREA
- WOODLAND HABITAT PRESERVATION AREA
- ADJACENT PARCEL PV SETBACK
- 50' VEGETATED STRIP
- EXISTING WIND TURBINE-500' SETBACK
- G — PROPOSED SITE ACCESS/GATE
- WT — WATER TANK
- WELL
- PROPOSED SOLAR ARRAY

KEY PLAN



SHEET TITLE

PLAN VIEW 1

SCALE	SHEET #
1"=1800'	100-01
PLOT DATE	
1/8/2026	

FILE NAME

Discovery Site Plan_20260108

DISCOVERY SOLAR PV AND STORAGE

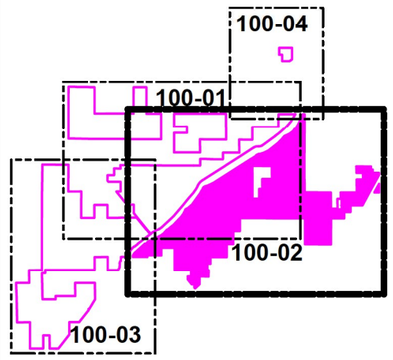
N

0 0.25 0.5 Miles

LEGEND

- PROJECT SITE
- ZONE MAP BOUNDARY
- CUP BOUNDARY
- DEVELOPMENT FOOTPRINT
- PARCEL BOUNDARY
- AQUEDUCT CENTERLINE
- OHE — EXISTING TRANSMISSION LINE
- EXISTING ROAD
- X — PROJECT FENCE
- GT — GEN-TIE ROUTE
- ACCESS ROAD
- SUBSTATION
- O&M AREA
- OPTIONAL BESS AREA
- LAYDOWN AREA
- ACCESS & MV EASEMENT
- DELINEATED WATERS
- FEMA 1% ANNUAL FLOOD HAZARD AREA
- WOODLAND HABITAT PRESERVATION AREA
- ADJACENT PARCEL PV SETBACK
- 50' VEGETATED STRIP
- EXISTING WIND TURBINE-500' SETBACK
- G — PROPOSED SITE ACCESS/GATE
- WT — WATER TANK
- WELL
- PROPOSED SOLAR ARRAY

KEY PLAN

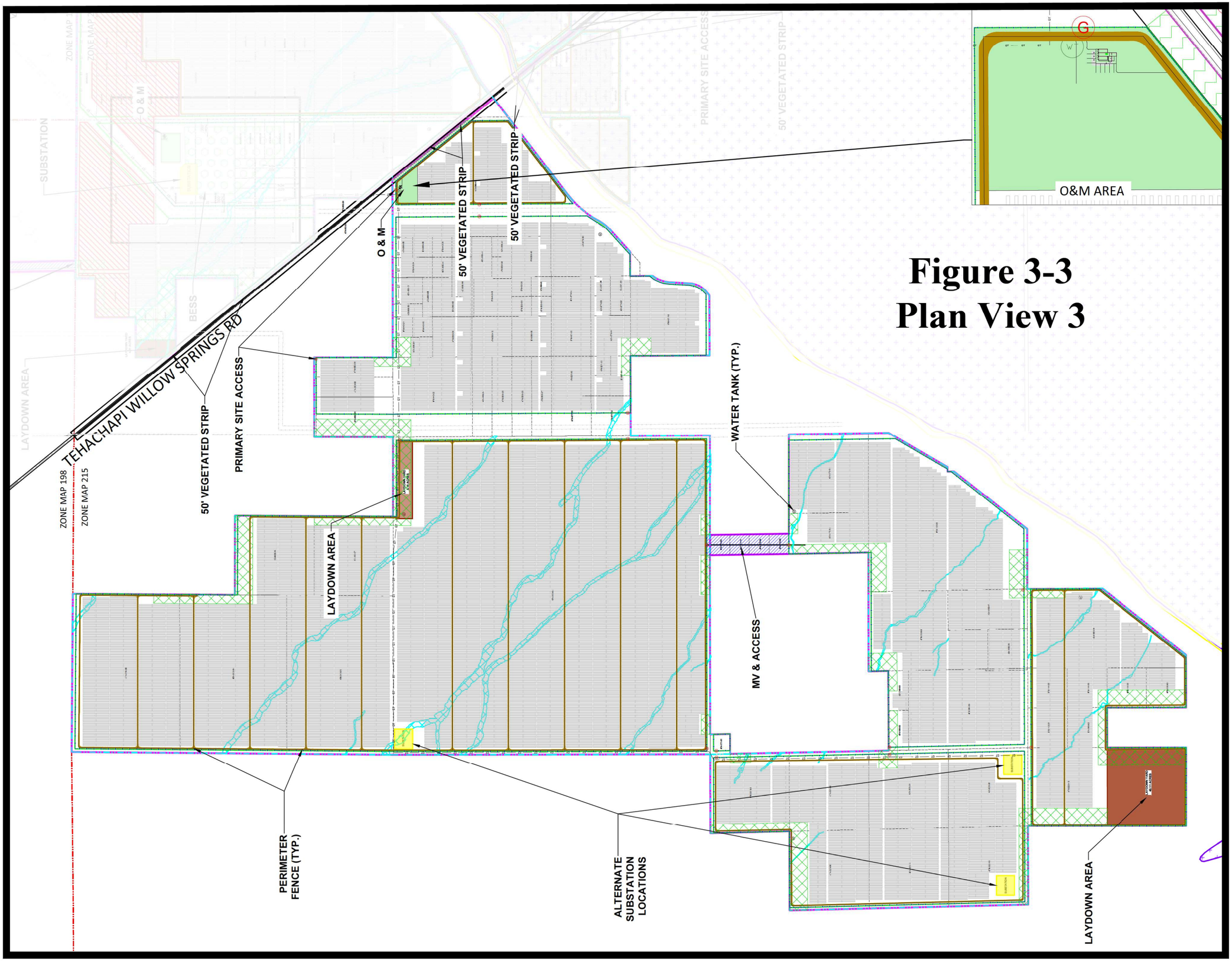


SHEET TITLE	
PLAN VIEW 2	
SCALE	SHEET #
1"=2000'	100-02
PLOT DATE	
1/8/2026	
FILE NAME	
Discovery Site Plan_20260108	

WATER TANK (TYP.)
PRIMARY SITE ACCESS
90TH ST SW
GEN-TIE
LAYDOWN AREA
MV & ACCESS EASEMENT
WELL
PRIMARY SITE ACCESS
SUBSTATION
ZONE MAP 197
ZONE MAP 214
O & M
BESS 01
50' VEGETATED STRIP
LADWP CROSSING
GEN-TIE
WELL
SUBSTATION
INTERNAL ROAD (TYP.)
ACCESS GATE (TYP.)
ZONE MAP 197
ZONE MAP 214
PROPOSED ACCESS EASEMENT FOR NON PARTICIPATING PARCELS
PROPOSED PERIMETER FENCE (TYP.)
ACCESS GATE (TYP.)
TEHACHAPI-WILLOW SPRINGS RD
PRIMARY SITE ACCESS
50' VEGETATED STRIP
Temporary Laydown
LAYDOWN AREA
LAYDOWN AREA
LOS ANGELES AQUEDUCT
237-054-31
237-054-32
SUBSTATION
SUBSTATION
SCALE: 1"=600'

Figure 3-3
Plan View 2

Figure 3-3
Plan View 3



DISCOVERY SOLAR PV AND STORAGE

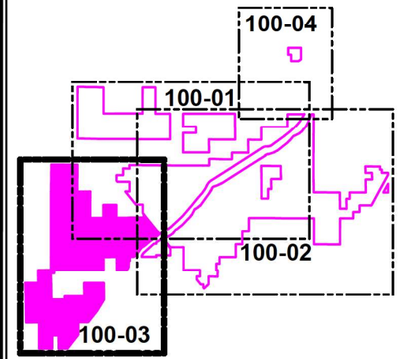
N

0 0.25 0.5 Miles

LEGEND

- PROJECT SITE
- ZONE MAP BOUNDARY
- CUP BOUNDARY
- DEVELOPMENT FOOTPRINT
- PARCEL BOUNDARY
- AQUEDUCT CENTERLINE
- OHE — EXISTING TRANSMISSION LINE
- EXISTING ROAD
- X — PROJECT FENCE
- GT — GEN-TIE ROUTE
- ACCESS ROAD
- SUBSTATION
- O&M AREA
- OPTIONAL BESS AREA
- LAYDOWN AREA
- ACCESS & MV EASEMENT
- DELINEATED WATERS
- FEMA 1% ANNUAL FLOOD HAZARD AREA
- WOODLAND HABITAT PRESERVATION AREA
- ADJACENT PARCEL PV SETBACK
- 50' VEGETATED STRIP
- EXISTING WIND TURBINE-500' SETBACK
- G — PROPOSED SITE ACCESS/GATE
- WT — WATER TANK
- WELL
- PROPOSED SOLAR ARRAY

KEY PLAN



SHEET TITLE

PLAN VIEW 3

SCALE	SHEET #
1"=1500'	100-03
PLOT DATE	
1/8/2026	

FILE NAME

Discovery Site Plan_20260108

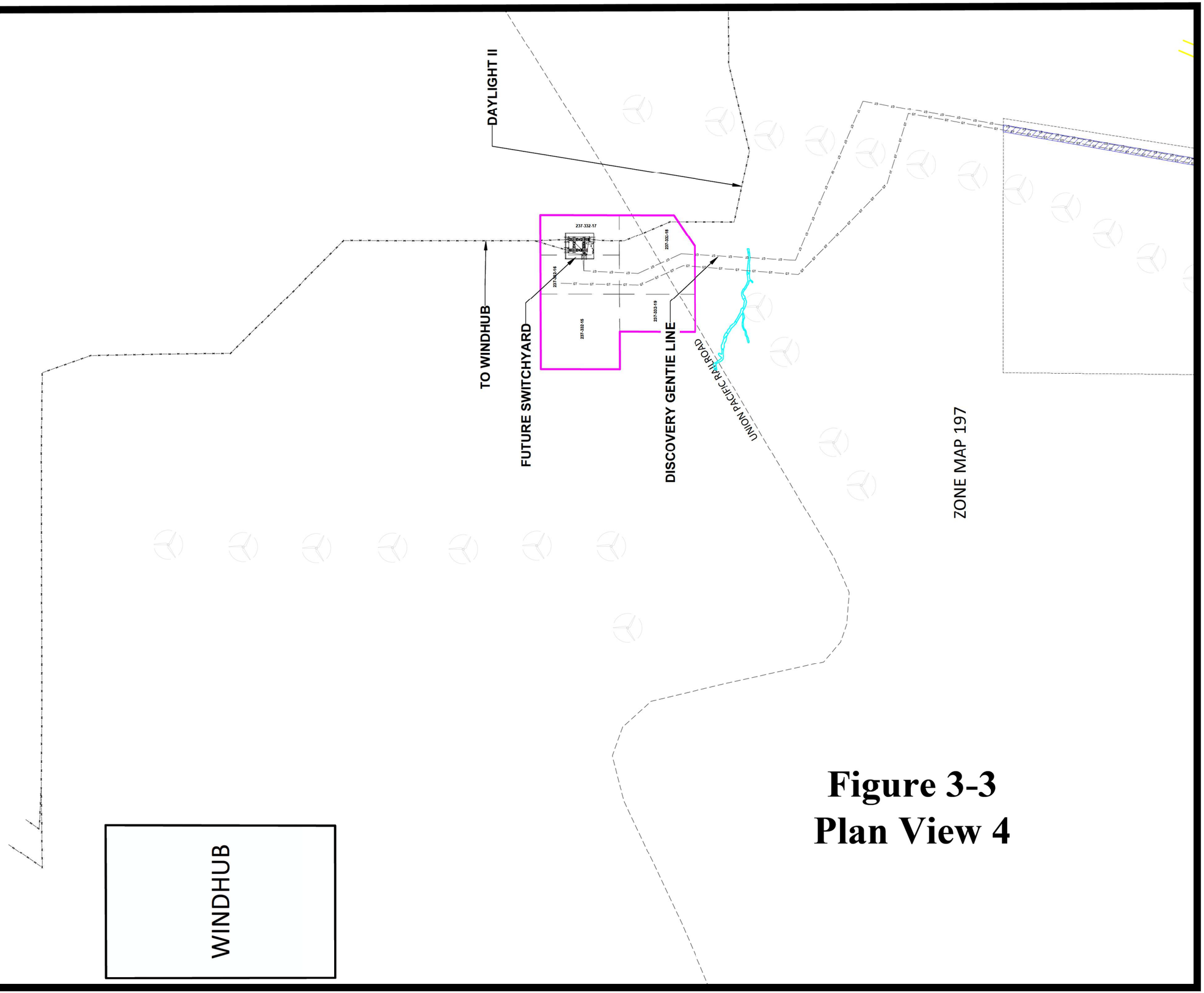


Figure 3-3
Plan View 4

DISCOVERY SOLAR PV AND STORAGE

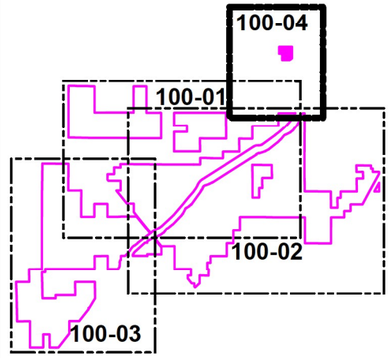
N

0 600 1200 Feet

LEGEND

- PROJECT SITE
- ZONE MAP BOUNDARY
- CUP BOUNDARY
- DEVELOPMENT FOOTPRINT
- PARCEL BOUNDARY
- AQUEDUCT CENTERLINE
- OHE — EXISTING TRANSMISSION LINE
- EXISTING ROAD
- X — PROJECT FENCE
- GT — GEN-TIE ROUTE
- ACCESS ROAD
- SUBSTATION
- O&M AREA
- OPTIONAL BESS AREA
- LAYDOWN AREA
- ACCESS & MV EASEMENT
- DELINEATED WATERS
- FEMA 1% ANNUAL FLOOD HAZARD AREA
- WOODLAND HABITAT PRESERVATION AREA
- ADJACENT PARCEL PV SETBACK
- 50' VEGETATED STRIP
- EXISTING WIND TURBINE-500' SETBACK
- G — PROPOSED SITE ACCESS/GATE
- WT — WATER TANK
- WELL
- PROPOSED SOLAR ARRAY

KEY PLAN



SHEET TITLE

PLAN VIEW 4

SCALE	SHEET #
1"=800'	100-04
PLOT DATE	
1/8/2026	

FILE NAME

Discovery Site Plan_20260108

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

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
CUP 22, MAP 197									
197	237-053-02	21.25	21.25	KCGP	8.5; 8.5/2.5	8.5; 8.5/2.5	A-1; A-1 WE	A; A WE	
197	237-053-04	21.26	21.26	KCGP	8.5	8.5	A-1; A-1 WE	A; A WE	
197	237-053-05	21.27	21.27	KCGP	8.5	8.5	A-1; A-1 WE	A; A WE	
197	237-053-06	21.28	21.28	KCGP	8.5	8.5	A-1; A-1 WE	A; A WE	
197	237-053-09	39.92	39.92	KCGP	8.5; 8.5/2.5	8.5; 8.5/2.5	A-1; A-1 FP	A; A FP	
197	237-053-10	80.06	80.06	KCGP	8.5; 8.5/2.5	8.5; 8.5/2.5	A-1; A-1 FP	A; A FP	
197	237-053-13	10.01	10.01	KCGP	8.5/2.5	8.5/2.5	A-1; A-1 FP	A; A FP	*
197	237-053-14	10.02	10.02	KCGP	8.5/2.5	8.5/2.5	A-1 FP	A FP	*
197	237-053-16	80.37	80.37	KCGP	8.5; 8.5/2.5	8.5; 8.5/2.5	A-1; A-1 FP	A; A FP	
197	237-054-09	10.21	10.21	KCGP	8.5	8.5	A-1	A	10.21
197	237-054-10	10.2	10.2	KCGP	8.5	8.5	A-1	A	10.2
197	237-054-11	20.38	20.38	KCGP	8.5	8.5	A-1	A	
197	237-054-12	40.77	40.77	KCGP	8.5	8.5	A-1	A	
197	237-054-13	81.52	81.52	KCGP	8.5	8.5	A-1	A	
197	237-054-25	2.53	2.53	KCGP	8.5	8.5	A-1	A	2.53
197	237-054-26	2.53	2.53	KCGP	8.5	8.5	A-1	A	2.53
197	237-054-27	2.53	2.53	KCGP	8.5	8.5	A-1	A	2.53
197	237-054-28	2.53	2.53	KCGP	8.5	8.5	A-1	A	2.53
197	237-054-30	3.06	3.06	KCGP	8.5	8.5	A-1	A	3.06
197	237-054-31	2.51	2.51	KCGP	8.5	8.5	A-1	A	2.51
197	237-054-32	2.66	2.66	KCGP	8.5	8.5	A-1	A	2.66
197	237-054-33	25.09	25.09	KCGP	8.5	8.5	A-1	A	
197	237-054-36	20.19	20.19	KCGP	8.5; 8.5/2.5	8.5; 8.5/2.5	A-1	A	20.19
197	237-054-39	10.16	10.16	KCGP	8.5/2.5	8.5/2.5	A-1	A	10.16
197	237-054-40	10.16	10.16	KCGP	8.5; 8.5/2.5	8.5; 8.5/2.5	A-1	A	10.16
197	237-054-41	29.72	29.72	KCGP	8.5	8.5	A-1	A	
197	237-054-44	5.08	5.08	KCGP	8.5	8.5	A-1	A	5.08
197	237-055-16	364.27	188	KCGP	8.5	8.5	A-1; A-1 FP	A; A FP	*
197	237-055-17	20.25	20.25	KCGP	8.5	8.5	A-1	A	*
197	237-055-18	20.26	20.26	KCGP	8.5	8.5	A-1	A	20.26

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
197	237-332-15	10.15	10.15	KCGP	8.5	8.5	A-1	A	10.15
197	237-332-16	5.08	5.08	KCGP	8.5	8.5	A-1	A	5.08
197	237-332-17	5.08	5.08	KCGP	8.5	8.5	A-1	A	5.08
197	237-332-18	10.15	10.15	KCGP	8.5	8.5	A-1	A	10.15
197	237-332-19	5.08	5.08	KCGP	8.5	8.5	A-1	A	5.08
CUP 22, MAP 197 TOTALS:		**1,027.59**	**851.32**						**140.15**
CUP 47, MAP 198									
198	237-093-10	50.06	50.06	KCGP	8.3	8.3	E(20) RS	A	
198	237-093-11	10.01	10.01	KCGP	8.3	8.3	A	A	*
198	237-093-12	5.01	5.01	KCGP	8.3	8.3	E(20) RS	A	5.01
198	237-093-13	10.02	10.02	KCGP	8.3	8.3	E(20) RS	A	10.02
198	237-093-14	10.02	10.02	KCGP	8.3	8.3	E(20) RS	A	10.02
198	237-093-15	5.01	5.01	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-16	5.01	5.01	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-18	50.1	50.1	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-46	39.9	39.9	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-47	40	40	KCGP	8.3	8.3	E(20) RS	A	
198	237-093-48	40.01	40.01	KCGP	8.3	8.3	A WE; E(20) RS	A WE; A	
198	237-093-49	39.92	39.92	KCGP	8.3	8.3	E(20) RS	A	
198	237-093-51	2.51	2.51	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-53	2.51	2.51	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-55	2.51	2.51	KCGP	8.3	8.3	E(20) RS	A	*
198	237-093-56	2.51	2.51	KCGP	8.3	8.3	E(20) RS	A	*
198	237-370-01	5.04	5.04	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-02	5.03	5.03	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-03	5.03	5.03	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-04	5.02	5.02	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-05	10.03	10.03	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-06	2.5	2.5	KCGP	8.5	8.5	E(2 1/2) RS	A	*
198	237-370-07	2.5	2.5	KCGP	8.5	8.5	E(2 1/2) RS	A	*
198	237-370-08	2.5	2.5	KCGP	8.5	8.5	E(2 1/2) RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
198	237-370-09	2.5	2.5	KCGP	8.5	8.5	E(2 1/2) RS	A	*
198	237-370-11	10.03	10.03	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-12	5.02	5.02	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-13	2.51	2.51	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-14	2.51	2.51	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-15	5.02	5.02	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-16	10.08	10.08	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-17	2.5	2.5	KCGP	8.5	8.5	E(20) RS	A	*
198	237-370-18	7.51	7.51	KCGP	8.5	8.5	A	A	*
198	237-380-01	2.52	2.52	KCGP	8.5	8.5	E(20) RS	A	*
198	237-380-02	2.52	2.52	KCGP	8.5	8.5	E(20) RS	A	*
198	237-380-03	2.52	2.52	KCGP	8.5	8.5	E(20) RS	A	*
198	237-380-04	2.52	2.52	KCGP	8.5	8.5	E(20) RS	A	*
198	237-380-05	10.06	10.06	KCGP	8.5	8.5	E(20) RS	A	*
198	237-380-06	40.11	40.11	KCGP	8.5	8.5	A; A WE	A; A WE	
198	237-380-07	10.07	10.07	KCGP	8.5	8.5	E(20) RS	A	*
198	237-380-08	10.09	10.09	KCGP	8.5	8.5	E(20) RS	A	*
198	237-400-02	10.03	10.03	KCGP	8.5	8.5	A-1	A	10.03
198	237-400-03	10.03	10.03	KCGP	8.5	8.5	A-1	A	10.03
198	237-400-05	10.03	10.03	KCGP	8.5	8.5	A-1	A	10.03
198	237-400-06	20.07	20.07	KCGP	8.5	8.5	A-1	A	20.07
198	237-400-07	10.03	10.03	KCGP	8.5	8.5	A-1	A	10.03
198	237-400-08	10.03	10.03	KCGP	8.5	8.5	A-1	A	10.03
198	237-400-11	2.51	2.51	KCGP	8.5	8.5	A-1	A	2.51
198	237-400-13	2.51	2.51	KCGP	8.5	8.5	A-1	A	2.51
198	237-400-14	2.51	2.51	KCGP	8.5	8.5	A-1	A	2.51
198	237-400-15	2.51	2.51	KCGP	8.5	8.5	A-1	A	2.51
198	237-410-01	10.02	10.02	KCGP	8.3	8.3	A; A WE	A; A WE	*
198	237-410-02	10.03	10.03	KCGP	8.3	8.3	A; A WE	A; A WE	*
198	237-410-03	10.03	10.03	KCGP	8.3	8.3	E(20) RS	A	10.03
198	237-410-05	10.04	10.04	KCGP	8.3	8.3	E(20) RS	A	10.04
198	237-410-06	10.04	10.04	KCGP	8.3	8.3	E(20) RS	A	10.04

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
198	237-410-07	10.04	10.04	KCGP	8.3	8.3	E(20) RS	A	10.04
198	237-410-08	10.04	10.04	KCGP	8.3	8.3	E(20) RS	A	10.04
198	237-410-09	10.04	10.04	KCGP	8.3	8.3	E(20) RS	A	10.04
198	237-410-10	10.04	10.04	KCGP	8.3	8.3	E(20) RS	A	10.04
198	237-410-11	5.02	5.02	KCGP	8.3	8.3	E(20) RS	A	5.02
198	237-410-12	5.02	5.02	KCGP	8.3	8.3	E(20) RS	A	5.02
198	237-410-13	10.03	10.03	KCGP	8.3	8.3	E(20) RS	A	10.03
198	237-410-14	20.06	20.06	KCGP	8.3	8.3	E(20) RS	A	
198	237-410-15	20.06	20.06	KCGP	8.3	8.3	A; A WE	A; A WE	
198	237-410-18	10.03	10.03	KCGP	8.3	8.3	E(20) RS	A	10.03
CUP 47, MAP 198 TOTALS:		**721.65**	**721.65**						**205.68**
CUP 50, MAP 214									
214	345-011-03	160.44	160.44	KCGP	8.3	8.3	A	A	
214	345-011-07	2.51	2.51	KCGP	8.3	8.3	PL RS	A	2.51
214	345-011-08	2.5	2.5	KCGP	8.3	8.3	PL RS	A	2.5
214	345-011-09	2.5	2.5	KCGP	8.3	8.3	PL RS	A	2.5
214	345-011-10	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	345-011-11	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	345-011-12	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	345-011-13	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	345-011-14	2.5	2.5	KCGP	8.3	8.3	PL RS	A	2.5
214	345-011-15	2.5	2.5	KCGP	8.3	8.3	PL RS	A	2.5
214	345-011-16	2.5	2.5	KCGP	8.3	8.3	PL RS	A	2.5
214	345-011-24	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	345-011-25	2.49	2.49	KCGP	8.3	8.3	PL RS	A	*
214	345-011-26	9.98	7.51	KCGP	8.3	8.3	A	A	*
214	345-011-31	9.98	9.98	KCGP	8.3	8.3	A	A	*
214	345-011-36	2.49	2.49	KCGP	8.3	8.3	A	A	*
214	345-011-37	7.48	7.48	KCGP	8.3	8.3	A	A	*
214	345-011-39	10	5	KCGP	8.3	8.3	PL RS	A	*
214	345-011-40	9.99	9.99	KCGP	8.3	8.3	PL RS	A	*
214	345-011-41	9.98	9.98	KCGP	8.3	8.3	PL RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	345-011-42	9.97	9.97	KCGP	8.3	8.3	A	A	*
214	345-062-01	9.94	9.94	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	9.94
214	345-062-02	2.47	2.47	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-03	2.47	2.47	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-04	2.47	2.47	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-05	2.47	2.47	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-07	19.98	19.98	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-08	19.96	19.96	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-26	1.22	1.22	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-27	1.19	1.19	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-28	1.23	1.23	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-29	1.23	1.23	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-30	2.47	2.47	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-31	2.47	2.47	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-39	1.23	1.23	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-40	1.23	1.23	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-42	1.23	1.23	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	*
214	345-062-56	43.76	33.68	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	345-063-29	33.68	33.68	Soledad Mtn Elephant Butte	Low Density Residential	Low Density Residential	E(2 1/2) RS	A	
214	345-100-01	160.67	160.67	KCGP	8.3	8.3	A	A	
214	346-011-02	570.33	570.33	KCGP	8.3; 8.3/2.5; 8.4	8.3; 8.3/2.5; 8.4	A; A FP	A; A FP	
214	346-011-07	20.04	20.04	KCGP	8.3; 8.4/2.4	8.3; 8.4/2.4	A	A	
214	346-011-09	20.03	20.03	KCGP	8.3	8.3	A	A	
214	346-011-12	20.03	20.03	KCGP	8.3; 8.4	8.3; 8.4	A	A	
214	346-011-13	20.03	20.03	KCGP	8.3; 8.4	8.3; 8.4	A	A	
214	346-011-14	20.03	20.03	KCGP	8.3; 8.4/2.4	8.3; 8.4/2.4	A	A	
214	346-011-15	20.03	20.03	KCGP	8.3	8.3	A	A	
214	346-011-17	20.04	20.04	KCGP	8.3	8.3	A	A	
214	346-011-18	20.04	20.04	KCGP	8.3	8.3	A	A	
214	346-012-04	80.4	80.4	KCGP	8.3; 8.4	8.3; 8.4	A; A FP	A; A FP	
214	346-012-06	40.27	40.27	KCGP	8.3	8.3	A FP	A FP	
214	346-012-07	40.23	40.23	KCGP	8.3	8.3	A FP	A FP	
214	346-012-09	20.07	17.24	KCGP	8.3	8.3	A FP	A FP	
214	346-012-10	20.06	20.06	KCGP	8.3	8.3	A FP	A FP	
214	346-012-11	20.05	20.05	KCGP	8.3	8.3	A FP	A FP	
214	346-012-12	20.04	20.04	KCGP	8.3	8.3	A FP	A FP	
214	346-041-05	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-041-07	20.03	20.03	KCGP	8.3	8.3	A	A	
214	346-041-08	20.03	20.03	KCGP	8.3	8.3	A	A	
214	346-041-18	2.51	2.51	KCGP	8.3	8.3	A	A	*
214	346-041-19	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-21	2.51	2.51	KCGP	8.3	8.3	A	A	*
214	346-041-22	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-23	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-24	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-25	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-28	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-29	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-041-32	7.51	7.51	KCGP	8.3	8.3	A	A	*
214	346-042-35	9.96	9.96	KCGP	8.3	8.3	PL RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-042-37	9.89	9.89	KCGP	8.3	8.3	PL RS	A	*
214	346-042-39	10.01	10.01	KCGP	8.3	8.3	PL RS	A	*
214	346-042-40	10.01	10.01	KCGP	8.3	8.3	PL RS	A	*
214	346-042-43	2.51	2.51	KCGP	8.3	8.3	PL RS	A	*
214	346-042-44	2.51	2.51	KCGP	8.3	8.3	PL RS	A	*
214	346-042-45	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-042-46	2.49	2.49	KCGP	8.3	8.3	PL RS	A	*
214	346-042-47	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-042-48	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-042-49	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-042-50	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-042-51	2.49	2.49	KCGP	8.3	8.3	PL RS	A	*
214	346-042-52	2.49	2.49	KCGP	8.3	8.3	PL RS	A	*
214	346-042-53	2.47	2.47	KCGP	8.3	8.3	PL RS	A	*
214	346-042-54	2.51	2.51	KCGP	8.3	8.3	PL RS	A	*
214	346-042-55	2.49	2.49	KCGP	8.3	8.3	PL RS	A	*
214	346-042-56	2.49	2.49	KCGP	8.3	8.3	PL RS	A	*
214	346-042-57	2.48	2.48	KCGP	8.3	8.3	PL RS	A	*
214	346-042-58	2.48	2.48	KCGP	8.3	8.3	PL RS	A	*
214	346-042-59	19.97	19.97	KCGP	8.3	8.3	PL RS	A	*
214	346-042-60	19.97	19.97	KCGP	8.3	8.3	PL RS	A	*
214	346-042-61	20.03	20.03	KCGP	8.3	8.3	PL RS	A	
214	346-042-62	20.02	20.02	KCGP	8.3	8.3	PL RS	A	
214	346-050-03	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-04	5.01	5.01	KCGP	8.3	8.3	PL RS	A	*
214	346-050-05	5.01	5.01	KCGP	8.3	8.3	PL RS	A	*
214	346-050-06	5.01	5.01	KCGP	8.3	8.3	PL RS	A	*
214	346-050-07	5.01	5.01	KCGP	8.3	8.3	PL RS	A	*
214	346-050-13	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-14	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-15	10.02	10.02	KCGP	8.3	8.3	A	A	*
214	346-050-17	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-050-18	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-19	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-20	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-21	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-22	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-23	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-24	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-25	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-26	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-27	10.01	10.01	KCGP	8.3	8.3	A	A	*
214	346-050-28	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-29	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-30	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-31	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-050-32	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-050-33	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-050-35	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-050-36	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-061-01	20.35	20.35	KCGP	8.3; 8.3/2.5	8.3; 8.3/2.5	A; A FP	A; A FP	
214	346-061-04	10.17	10.17	KCGP	8.3; 8.3/2.5	8.3; 8.3/2.5	A	A	*
214	346-061-05	40.25	40.25	KCGP	8.3; 8.3/2.5	8.3; 8.3/2.5	A	A	
214	346-061-06	8.7	8.7	KCGP	8.3	8.3	A; A FP	A; A FP	*
214	346-061-08	10.01	10.01	KCGP	8.3	8.3	A; A FP	A; A FP	*
214	346-061-09	38.3	38.3	KCGP	8.3	8.3	A FP	A FP	
214	346-061-11	10.12	10.12	KCGP	8.3	8.3	A FP	A FP	*
214	346-061-12	10.12	10.12	KCGP	8.3	8.3	A FP	A FP	*
214	346-061-13	5.07	5.07	KCGP	8.3	8.3	PL RS FP	A FP	5.07
214	346-061-14	5.07	5.07	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-15	5.06	5.06	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-16	5.03	5.03	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-17	5.01	5.01	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-18	5.04	5.04	KCGP	8.3	8.3	PL RS FP	A FP	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-061-19	2.54	2.54	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-21	2.53	2.53	KCGP	8.3	8.3	PL RS FP	A FP	2.53
214	346-061-22	2.52	2.52	KCGP	8.3	8.3	PL RS FP	A FP	2.52
214	346-061-24	5.04	5.04	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-25	5.04	5.04	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-28	20.19	20.19	KCGP	8.3	8.3	A FP	A FP	
214	346-061-29	20.23	20.23	KCGP	8.3	8.3	A FP	A FP	
214	346-061-30	7.51	7.51	KCGP	8.3	8.3	PL RS FP	A FP	7.51
214	346-061-31	8.57	8.57	KCGP	8.3	8.3	PL RS FP	A FP	8.57
214	346-061-33	19.62	19.62	KCGP	8.3	8.3	A; A FP	A; A FP	*
214	346-061-35	17.64	17.64	KCGP	8.3	8.3	A	A	*
214	346-061-37	40.27	40.27	KCGP	8.3	8.3	A	A	
214	346-061-39	20.25	20.25	KCGP	8.3	8.3	A	A	
214	346-061-40	20.29	20.29	KCGP	8.3; 8.5/2.5	8.3; 8.5/2.5	A	A	
214	346-061-45	5.04	5.04	KCGP	8.3	8.3	A	A	*
214	346-061-46	5.04	5.04	KCGP	8.3	8.3	A	A	*
214	346-061-47	5.04	5.04	KCGP	8.3	8.3	A	A	*
214	346-061-48	5.04	5.04	KCGP	8.3	8.3	A	A	*
214	346-061-49	5.05	5.05	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-50	5.05	5.05	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-51	5.05	5.05	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-52	5.04	5.04	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-53	2.54	2.54	KCGP	8.3/2.5	8.3/2.5	PL RS	A	*
214	346-061-54	2.54	2.54	KCGP	8.3; 8.3/2.5	8.3; 8.3/2.5	PL RS	A	*
214	346-061-55	2.54	2.54	KCGP	8.3; 8.3/2.5	8.3; 8.3/2.5	PL RS	A	*
214	346-061-56	2.54	2.54	KCGP	8.3; 8.3/2.5	8.3; 8.3/2.5	PL RS	A	*
214	346-061-58	2.53	2.53	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-59	2.53	2.53	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-60	2.53	2.53	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-061-61	2.52	2.52	KCGP	8.3	8.3	PL RS FP	A FP	2.52
214	346-061-62	2.52	2.52	KCGP	8.3	8.3	PL RS FP	A FP	2.52
214	346-062-03	10.06	10.06	KCGP	8.3	8.3	A	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-062-04	10.06	10.06	KCGP	8.3	8.3	A	A	*
214	346-062-06	40	40	KCGP	8.3	8.3	A	A	
214	346-062-07	39.32	39.32	KCGP	8.3	8.3	A	A	
214	346-062-11	125.93	125.93	KCGP	8.3	8.3	A; A FP	A; A FP	
214	346-062-12	44.02	44.02	KCGP	8.3	8.3	A	A	
214	346-062-14	14.68	14.68	KCGP	8.3	8.3	A	A	*
214	346-062-16	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-062-17	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-062-18	2.5	2.5	KCGP	8.3	8.3	PL RS	A	*
214	346-062-19	44.65	44.65	KCGP	8.3	8.3	A	A	
214	346-062-23	11.27	11.27	KCGP	8.3	8.3	A	A	*
214	346-062-24	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-062-25	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-062-26	2.5	2.5	KCGP	8.3	8.3	A	A	*
214	346-062-27	14.61	14.61	KCGP	8.3	8.3	A	A	*
214	346-062-29	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-30	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-31	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-32	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-34	2.8	2.8	KCGP	8.3	8.3	PL RS	A	*
214	346-062-35	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-36	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-37	2.81	2.81	KCGP	8.3	8.3	PL RS	A	*
214	346-062-38	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-39	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-40	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-41	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-42	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-44	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-46	2.81	2.81	KCGP	8.3	8.3	PL RS	A	2.81
214	346-062-47	2.81	2.81	KCGP	8.3	8.3	PL RS	A	2.81
214	346-062-48	2.82	2.82	KCGP	8.3	8.3	PL RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-062-49	2.82	2.82	KCGP	8.3	8.3	PL RS	A	2.82
214	346-062-50	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-51	2.52	2.52	KCGP	8.3	8.3	A	A	*
214	346-062-52	20.03	20.03	KCGP	8.3	8.3	A	A	
214	346-062-53	20.03	20.03	KCGP	8.3	8.3	A	A	
214	346-071-01	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-02	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-03	2.51	2.51	KCGP	8.3	8.3	PL RS FP	A FP	2.51
214	346-071-04	2.51	2.51	KCGP	8.3	8.3	PL RS FP	A FP	2.51
214	346-071-05	2.51	2.51	KCGP	8.3	8.3	PL RS FP	A FP	2.51
214	346-071-06	2.51	2.51	KCGP	8.3	8.3	PL RS FP	A FP	2.51
214	346-071-07	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-08	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-09	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-10	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-15	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-16	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-17	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-18	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-23	2.74	2.74	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-24	2.78	2.78	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-25	2.73	2.73	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-071-26	2.75	2.75	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-081-01	5.02	5.02	KCGP	8.3	8.3	PL RS FP	A FP	*
214	346-081-02	5.02	5.02	KCGP	8.3; 8.4	8.3; 8.4	PL RS FP	A FP	*
214	346-081-03	5.02	5.02	KCGP	8.3; 8.4	8.3; 8.4	PL RS FP	A FP	*
214	346-081-13	5.02	5.02	KCGP	8.3; 8.4	8.3; 8.4	PL RS FP	A FP	*
214	346-081-14	5.02	5.02	KCGP	8.3; 8.4	8.3; 8.4	PL RS FP	A FP	*
214	346-090-01	120.74	120.74	KCGP	8.3; 8.4	8.3; 8.4	A; A FP	A; A FP	
214	346-090-07	2.51	2.51	KCGP	8.4	8.4	PL RS	A	*
214	346-090-09	2.51	2.51	KCGP	8.4	8.4	PL RS	A	*
214	346-090-11	10.05	10.05	KCGP	8.3; 8.4	8.3; 8.4	A; A FP	A; A FP	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
214	346-090-12	10.05	10.05	KCGP	8.3; 8.4	8.3; 8.4	A FP	A FP	*
214	346-090-13	10.05	10.05	KCGP	8.3; 8.4	8.3; 8.4	A FP	A FP	*
214	346-090-14	10.05	10.05	KCGP	8.3; 8.4	8.3; 8.4	A FP	A FP	*
214	346-090-19	10.05	10.05	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-21	10.05	10.05	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-22	10.06	10.06	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-23	10.06	10.06	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-24	2.51	2.51	KCGP	8.4	8.4	A	A	*
214	346-090-28	2.51	2.51	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-29	2.51	2.51	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-30	5.03	5.03	KCGP	8.3	8.3	A FP	A FP	*
214	346-090-33	2.51	2.51	KCGP	8.4	8.4	A	A	*
214	346-090-35	2.51	2.51	KCGP	8.4	8.4	A	A	*
214	346-090-36	2.51	2.51	KCGP	8.4	8.4	A	A	*
214	346-090-41	2.51	2.51	KCGP	8.4	8.4	A	A	*
214	346-090-42	2.51	2.51	KCGP	8.4	8.4	A	A	*
214	346-132-18	2.51	2.21	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-19	10.03	9.5	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-22	2.51	2.51	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-23	2.51	2.51	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-24	2.51	2.51	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-25	2.51	2.51	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-26	5.02	5.02	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-27	10.04	10.04	KCGP	8.3	8.3	A FP	A FP	*
214	346-132-28	10.04	9.77	KCGP	8.3	8.3	A; A FP	A; A FP	*
CUP 50, MAP 214 TOTALS:		**3185.66**	**3164.18**						**89.83**
CUP 19, MAP 215									
215	474-010-04	648.95	648.95	KCGP	8.3	8.3	A	A	
215	474-010-29	107.89	107.89	KCGP	8.3	8.3	A	A	
215	474-010-30	111.23	111.23	KCGP	8.3	8.3	A	A	
215	474-010-31	107.88	107.88	KCGP	8.3	8.3	A	A	
215	474-021-04	40.31	40.31	KCGP	8.3	8.3	A	A	

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
215	474-021-05	40.25	40.25	KCGP	8.3	8.3	A	A	
215	474-021-06	40.27	40.27	KCGP	8.3	8.3	A	A	
215	474-021-18	40.19	40.19	KCGP	8.3	8.3	A; A WE	A; A WE	
215	474-021-19	40.12	40.12	KCGP	8.3	8.3	A WE	A WE	
215	474-021-20	40.19	40.19	KCGP	8.3	8.3	A; A WE	A; A WE	
215	474-021-21	40.12	40.12	KCGP	8.3	8.3	A WE	A WE	
215	474-040-09	81.1	81.1	KCGP	8.3	8.3	A	A	
215	474-040-15	10.25	10.25	KCGP	8.3	8.3	A	A	*
215	474-040-16	10.28	10.28	KCGP	8.3	8.3	A	A	*
215	474-040-17	10.08	10.08	KCGP	8.3	8.3	A	A	
215	474-040-19	40.31	40.31	KCGP	8.3	8.3	A	A	
215	474-040-20	40.37	40.37	KCGP	8.3	8.3	A	A	
215	474-051-04	14.5	14.5	KCGP	8.3	8.3	A	A	*
215	474-051-05	2.52	2.35	KCGP	8.3	8.3	A	A	*
215	474-051-06	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-07	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-08	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-09	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-10	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-12	4.99	4.99	KCGP	8.3	8.3	A	A	*
215	474-051-14	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-15	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-16	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-17	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-18	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-19	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-20	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-21	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-22	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-23	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-24	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-25	2.52	2.52	KCGP	8.3	8.3	A	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
215	474-051-26	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-27	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-28	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-29	2.52	2.52	KCGP	8.3	8.3	A	A	*
215	474-051-33	20.18	17.08	KCGP	8.3	8.3	A	A	
215	474-052-01	20.27	20.27	KCGP	8.3	8.3	A	A	
215	474-052-02	10.13	10.13	KCGP	8.3	8.3	A	A	*
215	474-052-03	10.13	10.13	KCGP	8.3	8.3	A	A	*
215	474-052-29	20.23	20.23	KCGP	8.3	8.3	A	A	
215	474-052-31	10.1	10.1	KCGP	8.3	8.3	A	A	*
215	474-052-32	7.59	7.59	KCGP	8.3	8.3	PL RS	A	7.59
215	474-052-33	2.53	2.53	KCGP	8.3	8.3	PL RS	A	2.53
215	474-060-03	10.16	10.16	KCGP	8.3	8.3	A	A	*
215	474-060-05	2.53	2.53	KCGP	8.3	8.3	PL RS	A	*
215	474-060-09	10.16	10.16	KCGP	8.3	8.3	A	A	*
215	474-060-11	10.16	10.16	KCGP	8.3	8.3	A	A	*
215	474-060-12	10.16	10.16	KCGP	8.3	8.3	A	A	*
215	474-060-13	7.62	7.62	KCGP	8.3	8.3	PL RS	A	*
215	474-060-14	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-15	5.08	5.08	KCGP	8.3	8.3	PL RS	A	*
215	474-060-16	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-17	121.74	121.74	KCGP	8.3	8.3	A	A	
215	474-060-19	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-20	5.08	5.08	KCGP	8.3	8.3	PL RS	A	*
215	474-060-21	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-22	40.65	40.65	KCGP	8.3	8.3	A	A	
215	474-060-24	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-060-25	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-060-26	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-060-27	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-060-30	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-31	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
215	474-060-32	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-33	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-34	5.08	5.08	KCGP	8.3	8.3	PL RS	A	*
215	474-060-35	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-36	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-38	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-39	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-40	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-41	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-42	10.16	10.16	KCGP	8.3	8.3	PL RS	A	*
215	474-060-43	5.08	5.08	KCGP	8.3	8.3	PL RS	A	*
215	474-060-44	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-060-45	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-071-01	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-071-02	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-071-03	10.16	10.16	KCGP	8.3	8.3	A	A	*
215	474-071-04	10.16	10.16	KCGP	8.3	8.3	A	A	*
215	474-071-05	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-071-06	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-071-07	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-071-08	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-071-09	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-071-10	2.54	2.54	KCGP	8.3	8.3	PL RS	A	*
215	474-071-11	7.62	7.62	KCGP	8.3	8.3	PL RS	A	*
215	474-071-12	10.17	10.17	KCGP	8.3	8.3	A	A	*
215	474-071-18	37.51	37.51	KCGP	8.3	8.3	A	A	
215	474-072-03	60.51	60.51	KCGP	8.3	8.3	A; A FPS	A; A FPS	
215	474-083-06	40.41	40.41	KCGP	8.3	8.3	A	A	
215	474-083-07	40.48	40.48	KCGP	8.3	8.3	A	A	
215	474-160-01	10.12	10.12	KCGP	8.3	8.3	A WE	A WE	*
215	474-160-02	10.12	10.12	KCGP	8.3	8.3	A WE	A WE	*
215	474-160-05	10.13	10.13	KCGP	8.3	8.3	A WE	A WE	*

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
215	474-160-06	10.13	10.13	KCGP	8.3	8.3	A	A	*
215	474-160-07	10.12	10.12	KCGP	8.3	8.3	A	A	*
215	474-160-08	10.11	10.11	KCGP	8.3	8.3	A; A WE	A; A WE	*
215	474-160-09	80.96	77.14	KCGP	8.3	8.3	A; A WE; A FP	A; A WE; A FP	
215	474-171-01	2.54	2.54	KCGP	8.3	8.3	A	A	*
215	474-172-13	40.58	40.58	KCGP	8.3	8.3	A	A	
215	474-172-14	20.3	20.3	KCGP	8.3	8.3	A	A	
215	474-180-02	5.07	5.07	KCGP	8.3	8.3	A WE	A WE	*
215	474-180-03	5.07	5.07	KCGP	8.3	8.3	A; A WE	A; A WE	*
215	474-180-04	50.63	50.63	KCGP	8.3	8.3	A; A WE	A; A WE	
215	474-180-05	132.39	131.96	KCGP	8.3	8.3	A; A WE; A FPS	A; A WE; A FPS	
215	474-180-06	60.74	60.74	KCGP	8.3	8.3	A; A WE	A; A WE	
215	474-180-07	20.22	20.22	KCGP	8.3	8.3	A; A WE	A; A WE	
215	474-180-08	10.11	10.11	KCGP	8.3	8.3	A WE	A WE	*
215	474-220-15	40.06	40.06	KCGP	8.3	8.3	A; A WE	A; A WE	
215	474-220-22	40.12	40.12	KCGP	8.3	8.3	A; A WE	A; A WE	
CUP 19, MAP 215 TOTALS:		**2780.61**	**2773.09**						**10.12**
Temporary Laydown Area CUP 51, MAP 214									
Temporary Laydown Area									
214	346-021-01	30.21	30.21	KCGP	8.3; 8.4/2.4	8.3; 8.4/2.4	A; A FP	N/A	
Medium-Voltage Transmission and Access Easement									
197	237-053-08	85.2	N/A	KCGP	8.5/2.5, 8.5	8.5/2.5, 8.5	A-1; A-1 FP WE; A-1 FP	N/A	
198	237-093-50	321.08	N/A	KCGP	8.5, 8.3	8.5, 8.3	A WE; E(20) RS; E(20) RS WE	N/A	
215	474-172-02	2.54	N/A	KCGP	8.3	8.3	A	N/A	*
215	474-172-03	2.54	N/A	KCGP	8.3	8.3	A	N/A	*
215	474-172-04	2.54	N/A	KCGP	8.3	8.3	A	N/A	*
215	474-172-05	2.54	N/A	KCGP	8.3	8.3	A	N/A	*
197	237-053-28	20	N/A	KCGP	8.5/2.5	8.5/2.5	A-1 FP	N/A	

Case Map/Section Detail	APN	Parcel Size (Acres CAD)	CUP Acres	General/ Specific Plan	Existing General Plan Designation	Proposed General Plan Designation	Existing Zoning	Proposed Zoning	Zone Variance Requested
197	237-054-38	20	N/A	KCGP	8.5/2.5, 8.5	8.5/2.5, 8.5	A-1	N/A	
Proposed Gen-Tie Line (new)									
197	237-332-11	10	N/A	KCGP	8.5	8.5	A-1	N/A	*
197	237-114-04	2.64	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-114-03	2.53	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-114-06	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-114-07	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-114-10	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-114-09	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-114-16	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-113-13	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-113-14	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-113-15	2.52	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-113-16	2.11	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-113-09	2.11	N/A	KCGP	8.5	8.5	PL RS	N/A	*
197	237-031-38	556.36	N/A	KCGP	8.5	8.5	A WE	N/A	
197	237-031-04	636.36	N/A	KCGP	8.4	8.4	A WE	N/A	
197	237-055-08	5	N/A	KCGP	8.5	8.5	A-1; A WE	N/A	*
197	237-055-09	5	N/A	KCGP	8.5	8.5	A-1	N/A	*
197	237-055-10	112.28	N/A	KCGP	8.5	8.5	A-1 WE; A-1	N/A	
197	237-055-12	119.37	N/A	KCGP	8.5	8.5	A-1 WE; A-1	N/A	

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

[a] Kern County General Plan (KCGP) and Specific Plan (SP) Map Code Designation:
1.1 (State and Federal Land)
2.4 (Steep Slope)
2.5 (Flood Hazard)
4.1 (Accepted County Plan Areas)
4.3 (Specific Plan Required)
7.3 (Heavy Industrial)
8.2 (Resource Agriculture)
8.3 (Extensive Agriculture)
8.4 (Mineral and Petroleum, Min 5 Acre Parcel Size)
8.5 (Resource Management, Min. 20 Acre Parcel Size)

[b] Kern County Zoning District:
A (Exclusive Agriculture); A-1 (Limited Agriculture); E (Estate); FP (Floodplain Combining); FPS (Floodplain Secondary Combining); M-3 (Heavy Industrial); MH (Mobile Home Combining); OS (Open Space); PL (Platted Lands); R-2 (Medium Density Residential); RS (Residential Suburban Combining); WE (Wind Energy Combining)

The project site is located within unincorporated Kern County and the administrative boundaries of the Kern County General Plan and Soledad Mountain Elephant Butte Specific 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 197, 198, 214, and 215. As shown in **Table 3-2**, *Proposed Project Site and Surrounding Land Uses***,** the project site consists of the following zoning districts: A (Exclusive Agriculture), A-1 (Limited Agriculture), Estate (E), and Platted Lands (PL). Many project parcels also contain one or multiple of the following combining districts: Floodplain (FP), Floodplain Secondary (FPS), Wind Energy (WE), and Residential Suburban (RS).

The project proponent also has requested a ZCC to change the existing zoning (excluding their combining zone classification) to Exclusive Agriculture. Solar energy electrical generators are authorized within the Exclusive Agriculture zoning district with approval of a CUP.

TABLE 3-2: PROPOSED 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, wind turbines and transmission lines, possible grazing.	8.3 8.3/2.5, 8.4, 8.4/2.4, 8.5/2.5, 4.1 (Low Density Residential)	A, A-1, PL, FP, FPS, RS, WE
North	Vacant land, wind and solar power facilities, Windhub Substation, CalPortland Mojave Cement Plant, Union Pacific Railroad	1.1, 7.3, 8.3, 8.4, 4.1 (Low Density Residential)	A, A-1, M-3, PL, R-2, WE, FP
East	Vacant land, residential properties	4.3, 8.3, 4.1 (Low Density Residential)	A, A-1, E, PL
South	Vacant land, Catalina Solar Project, Big Beau Solar Project, Holiday Rock Quarry, residential properties, possible grazing.	1.1, 8.2, 8.3, 8.4	A, A-1, E, FP, FPS, RS, MH, WE
West	Vacant land, residential properties, BLM land, possible grazing.	1.1, 8.2, 8.3, 8.4	A, E, OS, PL, RS, WE

[a] Kern County General Plan (KCGP) and Specific Plan (SP) Map Code Designation:
1.1 (State and Federal Land)
2.4 (Steep Slope)
2.5 (Flood Hazard)
4.1 (Accepted County Plan Areas)
4.3 (Specific Plan Required)
7.3 (Heavy Industrial)
8.2 (Resource Agriculture)
8.3 (Extensive Agriculture)
8.4 (Mineral and Petroleum, Min 5 Acre Parcel Size)
8.5 (Resource Management, Min. 20 Acre Parcel Size)

[b] Kern County Zoning District:
A (Exclusive Agriculture); A-1 (Limited Agriculture); E (Estate); FP (Floodplain Combining); FPS (Floodplain Secondary Combining); M-3 (Heavy Industrial); MH (Mobile Home Combining); OS (Open Space); PL (Platted Lands); R-2 (Medium Density Residential); RS (Residential Suburban Combining); WE (Wind Energy Combining)

3.3 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 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 the County and the State of California, as well as utilities, with a renewable energy source adjacent to other renewable (wind and solar) 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 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:
    - Locating generation facilities in areas which receive intense solar radiation;
    - Using existing electrical transmission facilities, rights-of-way, roads, and other existing infrastructure where practical;
    - Minimizing water use; and
    - 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), 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.

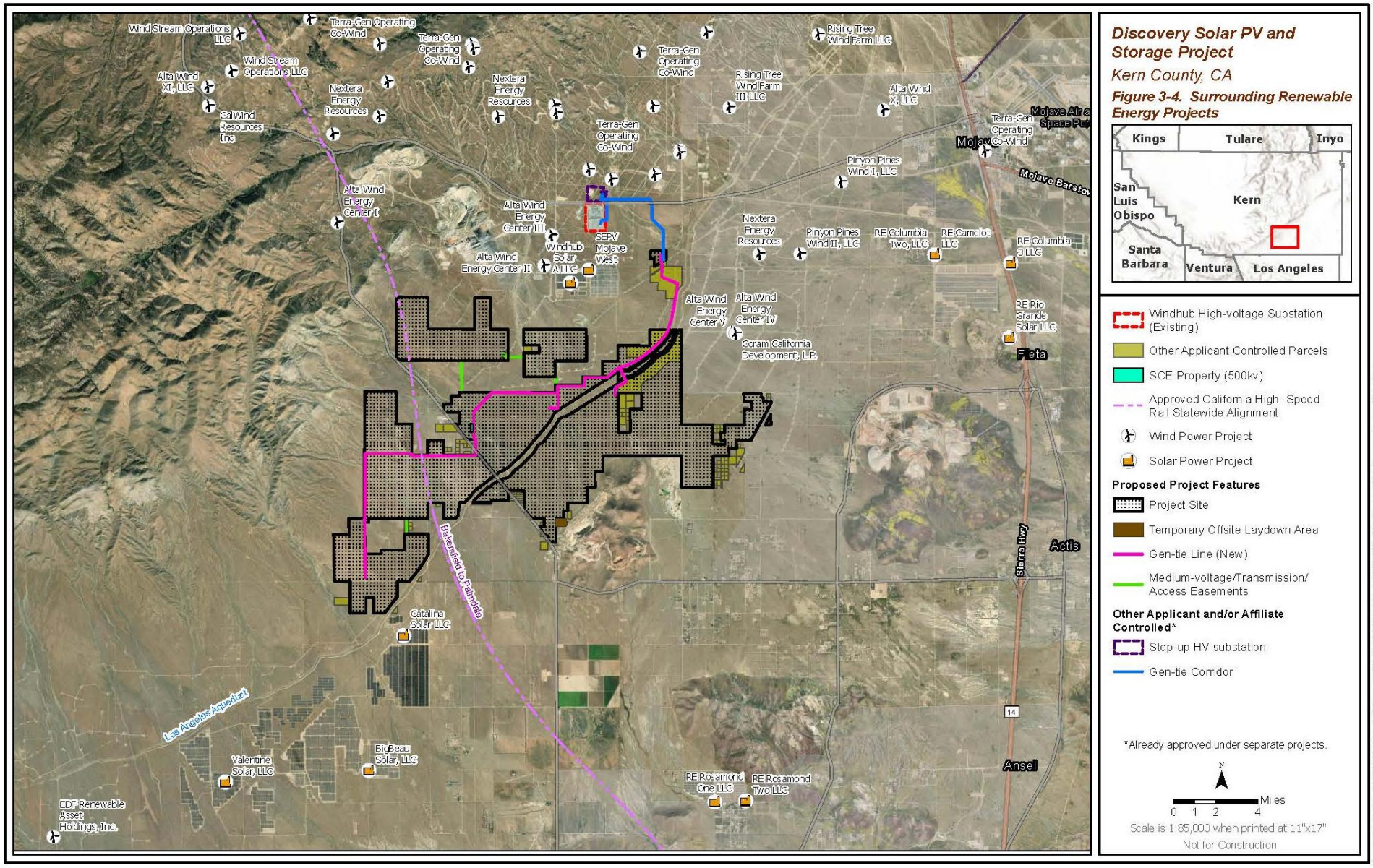
3.4 Environmental Setting

The project is situated in the southeastern corner of the desert region in unincorporated Kern County. The project site is generally undeveloped land in the Mojave Desert within the Antelope Valley in southern 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, rural residential development, livestock grazing, light and heavy industrial and mining uses, and undeveloped lands. Land owned by the Bureau of Land Management (BLM) is located immediately to the west but is located outside of the project site. Specific developments within the region include the Windhub Solar Project, the SEPV Mojave West Solar Project, the Big Beau Solar Project, the Catalina Solar Project, numerous wind farms (including the Alta Wind II Project), a small number of single-family residences, the Windswept Ranch Petting Zoo, numerous electrical substations (including the Windhub Substation), the CalPortland Mojave Plant (a cement manufacturing facility), and the Holiday Rock Quarry (a rock aggregate and cement mining facility). Except for those facilities accessing the paved Tehachapi Willows Springs Road, all other uses are served by unpaved rural roads. Renewable energy projects in the vicinity of the project site are included in **Figure 3-4**, *Surrounding Renewable Energy Projects.* Locations of renewable energy projects are available at https://kernplanning.com/planning/renewable-energy.

Additionally, the California High Speed Rail Authority (CHSRA) is planning and permitting a high-speed train corridor from northern to southern California. The Bakersfield to Palmdale section of the high-speed train corridor was evaluated in a joint CEQA/National Environmental Policy Act document, completed in August 2021. A portion of the approved and adopted alignment crosses through part of the project site (APNs 237-093-46, 237-093-49, 237-370-01, 237-370-16, 237-380-02, 237-380-04, 237-380-07, 237-380-08, 474-010-04, 474-071-01, and 474-071-12), and accommodation may need to be made to reconfigure panels in the area to meet necessary setbacks. However, the County has not yet received documentation indicating that the land currently required for this alignment has been secured or is controlled by the CHSRA. An expanded list of existing, approved, and pending projects in the project vicinity is provided at the end of this chapter.

The closest sensitive receptor to the project site, on land not owned by the project proponent, is a residential land use located approximately 303 feet east of APN 474-083-07, on APN 474-082-09, in Section 2, Township 10 North, Range 14 West, Zone Map 215. Additional sensitive receptors within 1,000 feet of the project site boundary, on land not owned by the project proponent, include residential land uses on APN 237-093-05, APN 346-132-06, APN 474-021-16, APN 474-040-18, APN 474-052-07, APN 474-071-13, APN 474-072-11, APN 474-081-12, and APN 474-081-27, located at distances ranging from immediately adjacent to 1,650 feet from the project site boundary. Current legal access for all existing residences will be preserved. Therefore, legal access to existing residences will not be hindered by the project.


Discovery Solar PV and Storage Project
Kern County, CA
Figure 3-4. Surrounding Renewable Energy Projects
Kings
Tulare
Inyo
San Luis Obispo
Kern
Santa Barbara
Ventura
Los Angeles
Windhub High-voltage Substation (Existing)
Other Applicant Controlled Parcels
SCE Property (500kv)
Approved California High- Speed Rail Statewide Alignment
Wind Power Project
Solar Power Project
Proposed Project Features
Project Site
Temporary Offsite Laydown Area
Gen-tie Line (New)
Medium-voltage/Transmission/ Access Easements
Other Applicant and/or Affiliate Controlled*
Step-up HV substation
Gen-tie Corridor
*Already approved under separate projects.
N
Miles
0 1 2 4
Scale is 1:85,000 when printed at 11"x17"
Not for Construction
Wind Stream Operations LLC
Terra-Gen Operating Co-Wind
Alta Wind XI, LLC
CalWind Resources Inc.
Nextera Energy Resources
Rising Tree Wind Farm LLC
Rising Tree Wind Farm III LLC
Alta Wind X, LLC
Mojave Air & Space Port
Mojave
Pinyon Pines Wind I, LLC
Mojave Barstow
Alta Wind Energy Center I
Alta Wind Energy Center III
SEPV Mojave West
Windhub Solar A LLC
Alta Wind Energy Center II
Pinyon Pines Wind II, LLC
RE Columbia Two, LLC
RE Camelot LLC
RE Columbia 3 LLC
Alta Wind Energy Center V
Alta Wind Energy Center IV
Coram California Development, L.P.
RE Rio Grande Solar LLC
Fleta
Sierra Hwy
Actis
Bakersfield to Palmdale
Catalina Solar LLC
Los Angeles Aqueduct
Valentine Solar, LLC
BigBeau Solar, LLC
RE Rosamond One LLC
RE Rosamond Two LLC
Ansel
EDF Renewable Asset Holdings, Inc.
14

As shown on **Figure 3-5**, *Floodplain Map,* a Federal Emergency Management Agency (FEMA)-designated flood zone, Flood Zone "A," extends through the central portion of the project, 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 2,970 and 3,760 feet above mean sea level due to being south of the Tehachapi Mountains where lands gradually slope downward from the northwest towards the southeast.

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, approximately 9 miles northeast of the project site. The nearest hospital is the Adventist Health Tehachapi Valley Hospital at 1100 Magellan Drive in the City of Tehachapi, which is approximately 9 miles northwest of the project site. The closest school is the Joshua Middle School, located approximately 4.4 miles north of the project site.

The Mojave Air & Space Port is located approximately 9 miles northeast of the project site (as measured from the approximate center of the project). No portion of the project site, or the 230-kV gen-tie line, is located within an area governed by the Kern County Airport Land Use Compatibility Plan (ALUCP).

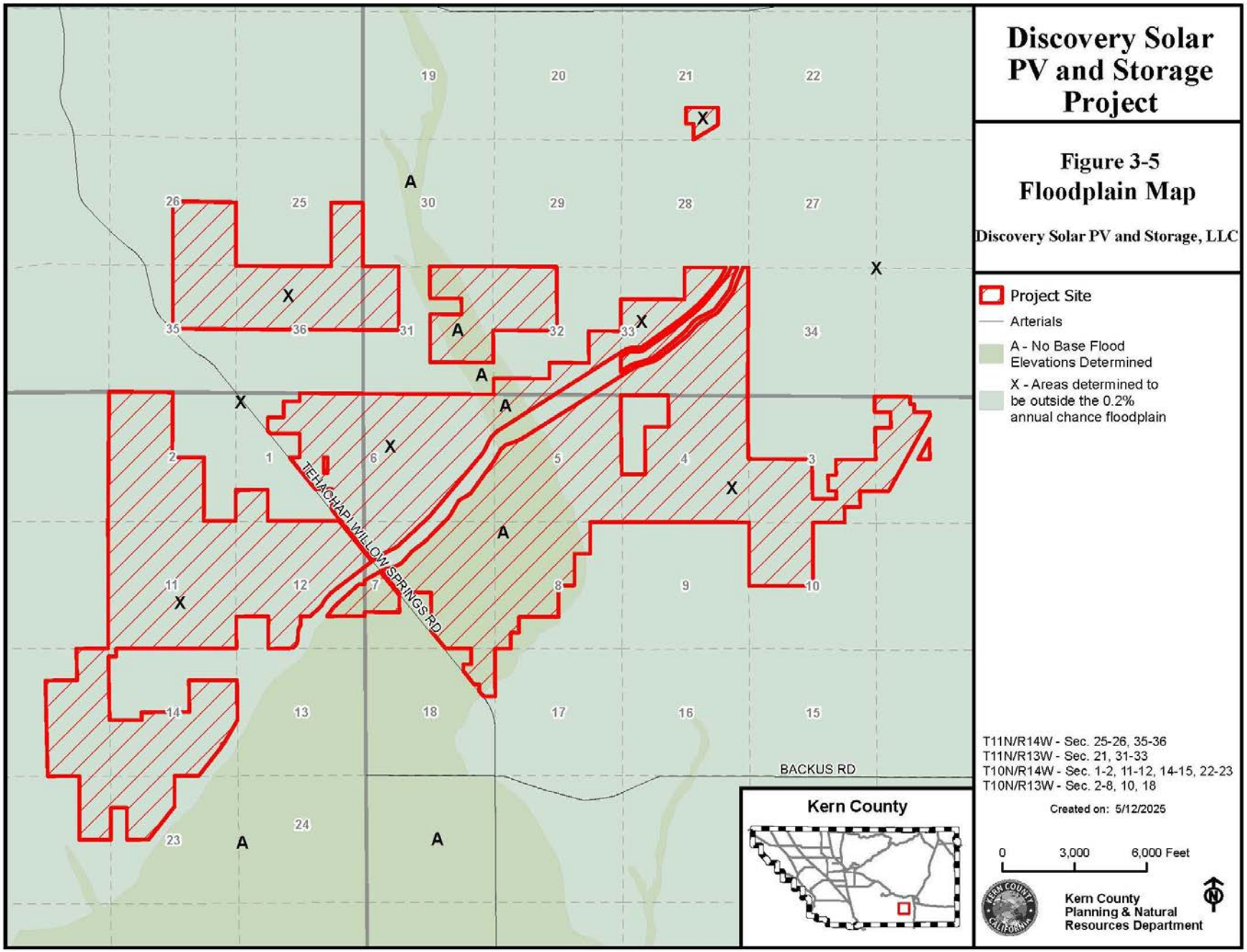
Approximately 5,238 acres (about 68 percent) of the project site are within the boundary of Kern County Agricultural Preserve Number 24. However, none of the land within the project site is subject to a Williamson Act land use contract. Although 5,238 acres of Kern County Agricultural Preserve are within the project site, a Petition for Exclusion is not required as solar facilities subject to a CUP are permitted on lands zoned for A (Exclusive Agriculture). California Department of Conservation designations within the project site include grazing land, Nonagricultural and Natural Vegetation, Urban and Built-Up Land, and Vacant or Disturbed Land. The project site is not designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.

3.5 Land Use and Zoning

The project site is governed by the Kern County General Plan. Additionally, a portion on the eastern side of the project site falls within the boundaries of the Soledad Mountain-Elephant Butte Specific 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.

3.5.1 Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan

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


Discovery Solar PV and Storage Project
Figure 3-5
Floodplain Map
Discovery Solar PV and Storage, LLC
Project Site
Arterials
A - No Base Flood Elevations Determined
X - Areas determined to be outside the 0.2% annual chance floodplain
T11N/R14W - Sec. 25-26, 35-36
T11N/R13W - Sec. 21, 31-33
T10N/R14W - Sec. 1-2, 11-12, 14-15, 22-23
T10N/R13W - Sec. 2-8, 10, 18
Created on: 5/12/2025
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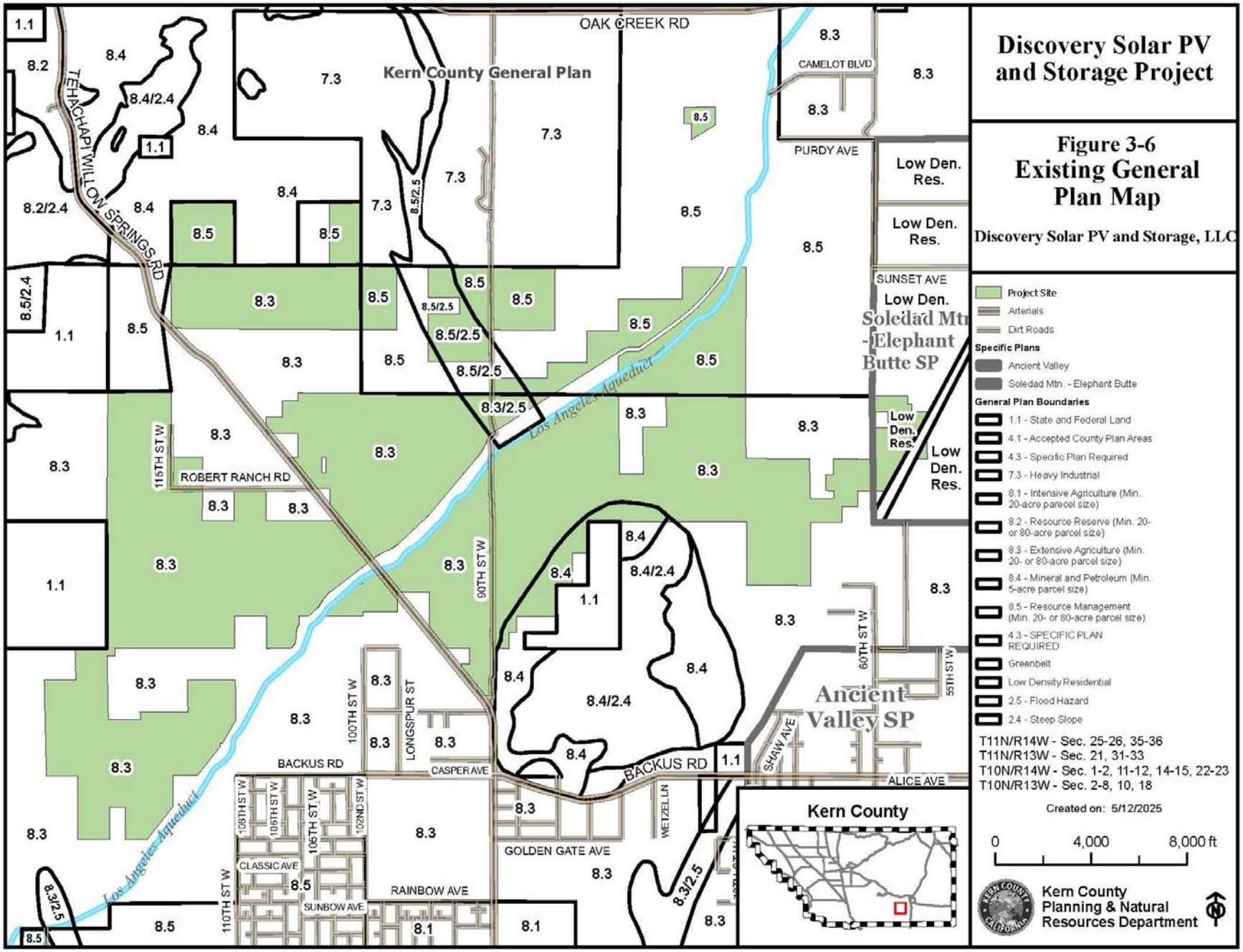
6,000 Feet
Kern County
Planning & Natural Resources Department
Kern County
TEHACHAPI WILLOW SPRINGS RD
BACKUS RD


Discovery Solar PV and Storage Project
Figure 3-6
Existing General Plan Map
Discovery Solar PV and Storage, LLC
Kern County General Plan
OAK CREEK RD
CAMELOT BLVD
PURDY AVE
SUNSET AVE
TEHACHAPI WILLOW SPRINGS RD
ROBERT RANCH RD
BACKUS RD
CASPER AVE
GOLDEN GATE AVE
RAINBOW AVE
SUNBOW AVE
CLASSIC AVE
ALICE AVE
SHAW AVE
WETZEL LN
LONGSPUR ST
115TH ST W
110TH ST W
108TH ST W
106TH ST W
105TH ST W
102ND ST W
100TH ST W
90TH ST W
60TH ST W
55TH ST W
Los Angeles Aqueduct
Low Den. Res.
Soledad Mtn. -Elephant Butte SP
Ancient Valley SP
Project Site
Arterials
Dirt Roads
Specific Plans
Ancient Valley
Soledad Mtn. - Elephant Butte
General Plan Boundaries
1.1 - State and Federal Land
4.1 - Accepted County Plan Areas
4.3 - Specific Plan Required
7.3 - Heavy Industrial
8.1 - Intensive Agriculture (Min. 20-acre parcel size)
8.2 - Resource Reserve (Min. 20- or 80-acre parcel size)
8.3 - Extensive Agriculture (Min. 20- or 80-acre parcel size)
8.4 - Mineral and Petroleum (Min. 5-acre parcel size)
8.5 - Resource Management (Min. 20- or 80-acre parcel size)
4.3 - SPECIFIC PLAN REQUIRED
Greenbelt
Low Density Residential
2.5 - Flood Hazard
2.4 - Steep Slope
T11N/R14W - Sec. 25-26, 35-36
T11N/R13W - Sec. 21, 31-33
T10N/R14W - Sec. 1-2, 11-12, 14-15, 22-23
T10N/R13W - Sec. 2-8, 10, 18
Created on: 5/12/2025
0 4,000 8,000 ft
Kern County
Kern County Planning & Natural Resources Department

3.5.2 Kern County Zoning Ordinance

The proposed project is subject to the provisions of the Kern County Zoning Ordinance and spans Zone Maps 197, 198, 214, and 215. The project site consists of the following zoning districts: A (Exclusive Agriculture), A-1 (Limited Agriculture), Estate (E), and Platted Lands (PL). Many project parcels also contain one or multiple of the following combining districts: Floodplain (FP), Floodplain Secondary (FPS), Wind Energy (WE), and Residential Suburban (RS). Solar energy facilities are not a permitted or conditionally permitted use within the E and PL zone districts. Additionally, per County policy to allow for zoning consistency with the existing General Plan designations for each parcel, the project includes a request for a zone change for all parcels to A. Accordingly, the project site would be rezoned to A (excluding the combining zone districts), with the exception of those parcels that are already in the A Zone District.

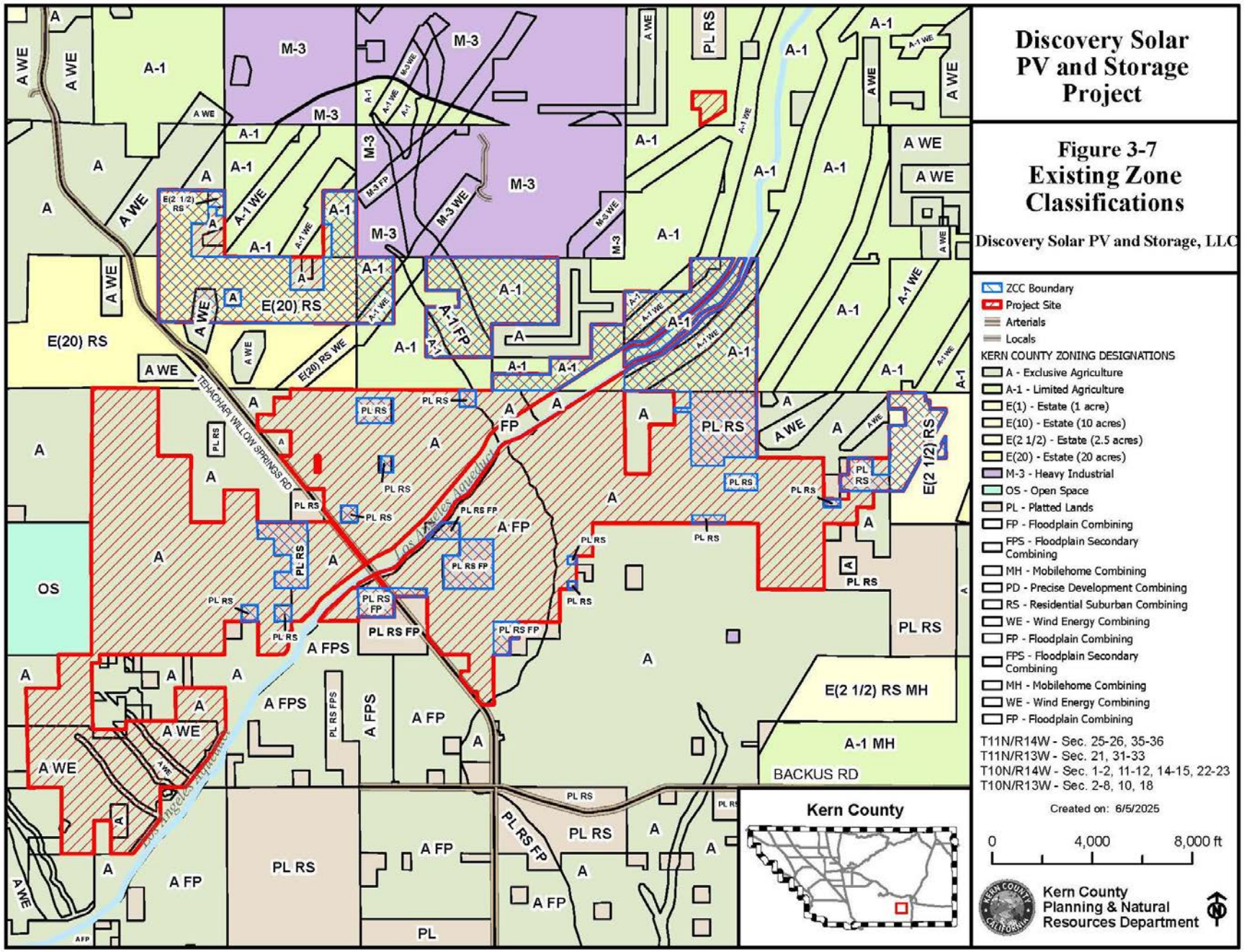
According to the Kern County Zoning Ordinance Section 19.12.030 G, solar energy electrical generators, when not accessory to a permitted or conditionally permitted use, are permitted within the A Zone District subject to the approval of a CUP. The existing and proposed zoning designations are as specified in **Table 3-1**, *Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages,* and depicted in **Figure 3-7**, *Existing Zone Classifications,* and **Figure 3-8**, *Proposed Zone Classifications*.

The project site is located approximately 20 miles west of 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. The project does not propose structures in conflict with these height limits.

3.6 Project Description

The project includes the construction, operation, maintenance, and eventual decommissioning of an approximately 1,400-MW PV solar facility with up to 1,000 MW of battery energy storage, or up to 8,000 megawatt-hours (MWh) of energy storage capacity approximately 7,700 acres across 473 privately owned parcels in an unincorporated area of southeastern Kern County, California. As previously mentioned, a portion of an additional parcel located adjacent to the southern portion of the project site is proposed for a temporary offsite construction laydown yard. Other laydown yards would be located within the project site boundary. The project would interconnect via new and existing gen-tie facilities to the Southern California Edison (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, up to three onsite collector substations (one of which has two alternate locations under consideration), a switch yard, grid interconnection, an O&M facility, telecommunication facilities, site access and security, which are described in further detail in Section 3.7 (“Project Characteristics”). Primary access to the project site would be from Tehachapi-Willow Springs Road, 90th Street West, and Oak Creek Road (to the proposed switchyard). The project site consists of six non-contiguous areas (five solar sites and a 230-kV switchyard). Implementation of the project as proposed includes the following requests as also shown on **Figure 3-9**, *Proposed Project CUP Boundary,* and **Figure 3-10**, *Proposed CUP vs. ZCC Boundaries*.


Discovery Solar PV and Storage Project
Figure 3-7
Existing Zone Classifications
Discovery Solar PV and Storage, LLC
ZCC Boundary
Project Site
Arterials
Locals
KERN COUNTY ZONING DESIGNATIONS
A - Exclusive Agriculture
A-1 - Limited Agriculture
E(1) - Estate (1 acre)
E(10) - Estate (10 acres)
E(2 1/2) - Estate (2.5 acres)
E(20) - Estate (20 acres)
M-3 - Heavy Industrial
OS - Open Space
PL - Platted Lands
FP - Floodplain Combining
FPS - Floodplain Secondary Combining
MH - Mobilehome Combining
PD - Precise Development Combining
RS - Residential Suburban Combining
WE - Wind Energy Combining
FP - Floodplain Combining
FPS - Floodplain Secondary Combining
MH - Mobilehome Combining
WE - Wind Energy Combining
FP - Floodplain Combining
T11N/R14W - Sec. 25-26, 35-36
T11N/R13W - Sec. 21, 31-33
T10N/R14W - Sec. 1-2, 11-12, 14-15, 22-23
T10N/R13W - Sec. 2-8, 10, 18
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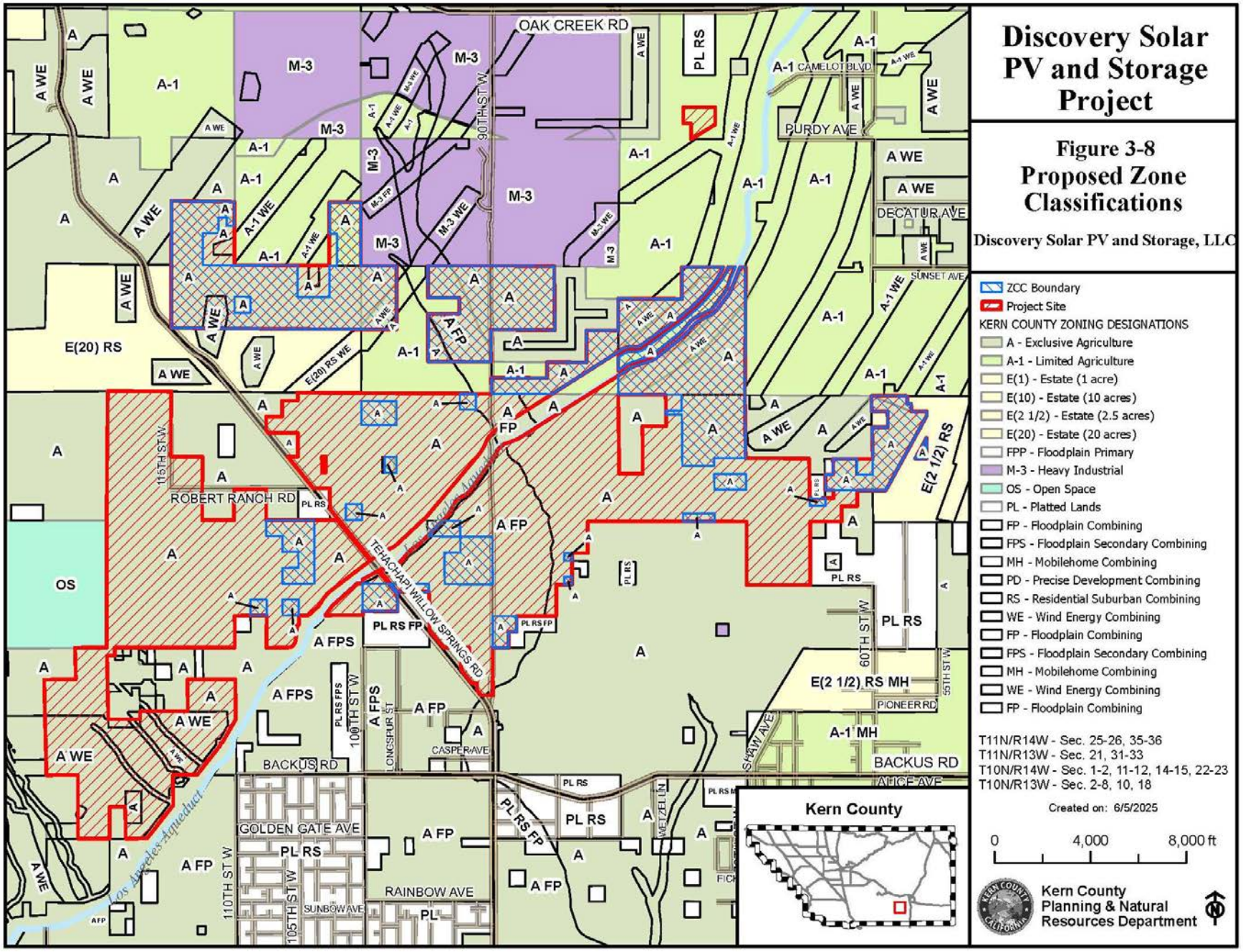
4,000
8,000 ft
Kern County
Planning & Natural Resources Department
Kern County
TEHACHAPI WILLOW SPRINGS RD
BACKUS RD
Los Angeles Aqueduct
E(20) RS
E(2 1/2) RS
E(2 1/2) RS MH
A-1 MH
OS
PL
PL RS
A FP
A FPS


Discovery Solar PV and Storage Project
Figure 3-8
Proposed Zone Classifications
Discovery Solar PV and Storage, LLC
ZCC Boundary
Project Site
KERN COUNTY ZONING DESIGNATIONS
A - Exclusive Agriculture
A-1 - Limited Agriculture
E(1) - Estate (1 acre)
E(10) - Estate (10 acres)
E(2 1/2) - Estate (2.5 acres)
E(20) - Estate (20 acres)
FPP - Floodplain Primary
M-3 - Heavy Industrial
OS - Open Space
PL - Platted Lands
FP - Floodplain Combining
FPS - Floodplain Secondary Combining
MH - Mobilehome Combining
PD - Precise Development Combining
RS - Residential Suburban Combining
WE - Wind Energy Combining
FP - Floodplain Combining
FPS - Floodplain Secondary Combining
MH - Mobilehome Combining
WE - Wind Energy Combining
FP - Floodplain Combining
T11N/R14W - Sec. 25-26, 35-36
T11N/R13W - Sec. 21, 31-33
T10N/R14W - Sec. 1-2, 11-12, 14-15, 22-23
T10N/R13W - Sec. 2-8, 10, 18
Created on: 6/5/2025
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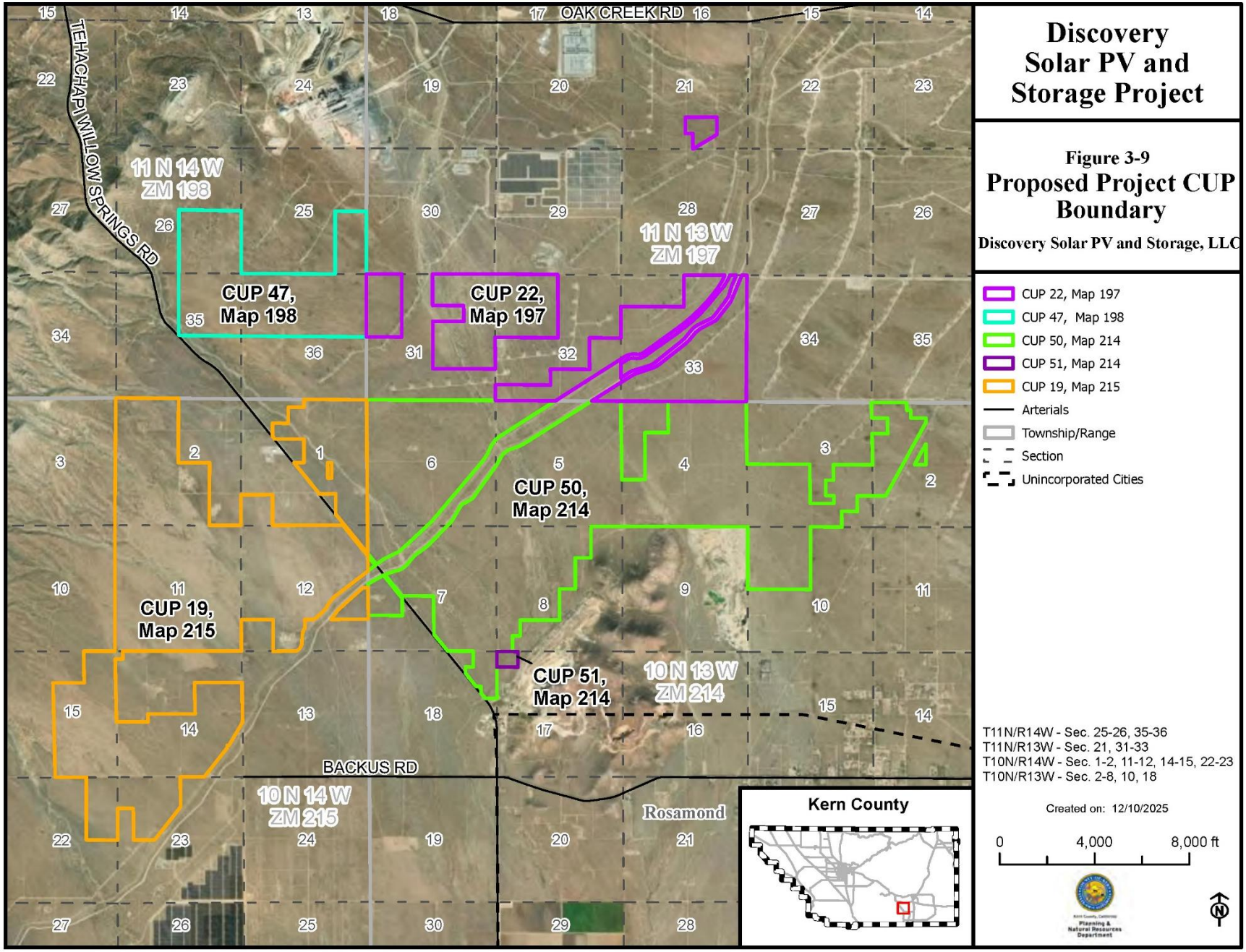
4,000
8,000 ft
Kern County
Planning & Natural Resources Department
OAK CREEK RD
PURDY AVE
CAMELOT BLVD
DECATUR AVE
SUNSET AVE
ROBERT RANCH RD
TEHACHAPI WILLOW SPRINGS RD
BACKUS RD
PIONEER RD
ALICE AVE
CASPER AVE
GOLDEN GATE AVE
RAINBOW AVE
SUNBOW AVE
90TH ST W
115TH ST W
110TH ST W
105TH ST W
100TH ST W
60TH ST W
55TH ST W
Los Angeles Aqueduct


Discovery Solar PV and Storage Project
Figure 3-9
Proposed Project CUP Boundary
Discovery Solar PV and Storage, LLC
CUP 22, Map 197
CUP 47, Map 198
CUP 50, Map 214
CUP 51, Map 214
CUP 19, Map 215
Arterials
Township/Range
Section
Unincorporated Cities
CUP 47, Map 198
CUP 22, Map 197
CUP 50, Map 214
CUP 19, Map 215
CUP 51, Map 214
11 N 14 W ZM 198
11 N 13 W ZM 197
10 N 13 W ZM 214
10 N 14 W ZM 215
OAK CREEK RD
TEHACHAPI WILLOW SPRINGS RD
BACKUS RD
Rosamond
Kern County
T11N/R14W - Sec. 25-26, 35-36
T11N/R13W - Sec. 21, 31-33
T10N/R14W - Sec. 1-2, 11-12, 14-15, 22-23
T10N/R13W - Sec. 2-8, 10, 18
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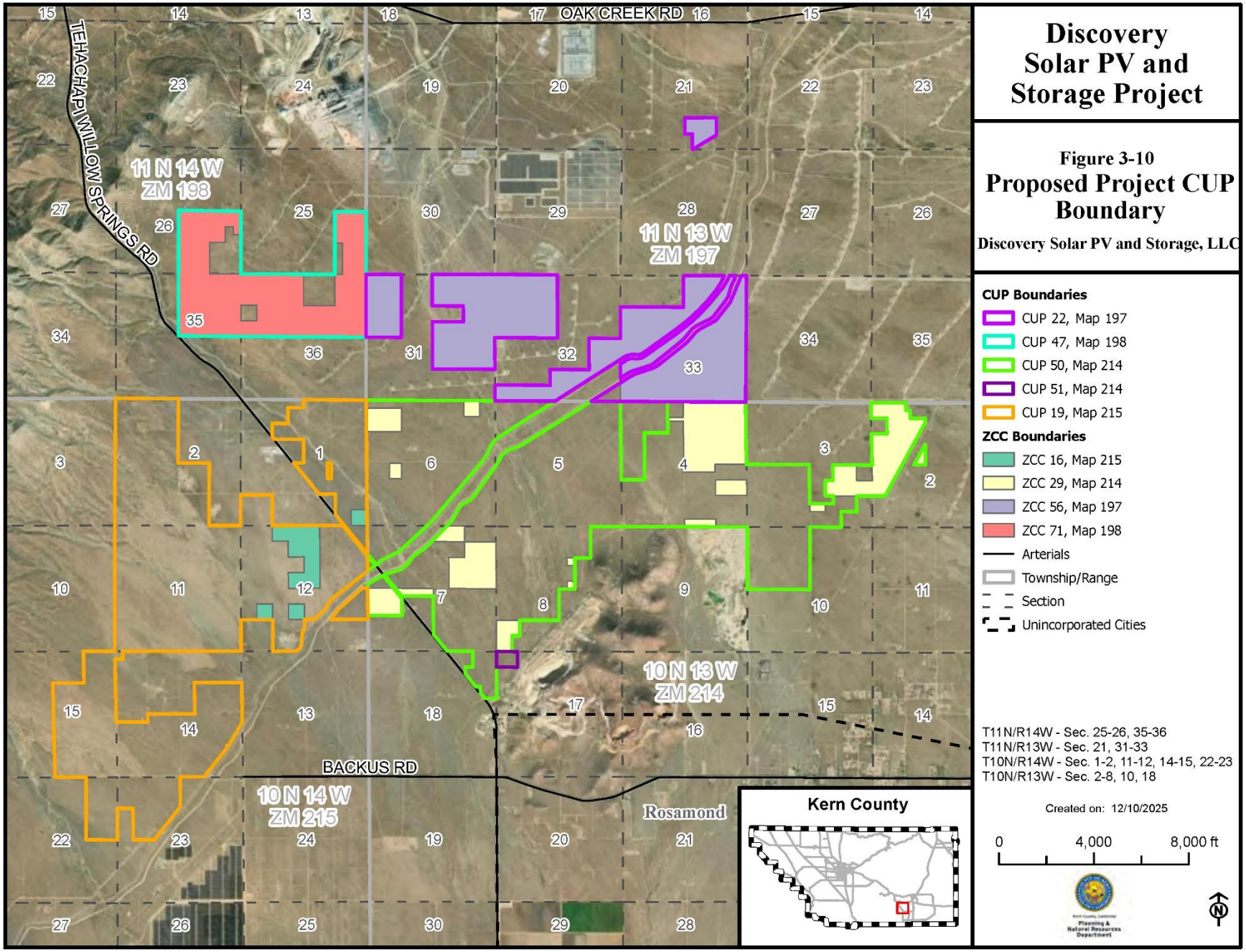
Planning & Natural Resources Department


Discovery Solar PV and Storage Project
Figure 3-10
Proposed Project CUP Boundary
Discovery Solar PV and Storage, LLC
CUP Boundaries
CUP 22, Map 197
CUP 47, Map 198
CUP 50, Map 214
CUP 51, Map 214
CUP 19, Map 215
ZCC Boundaries
ZCC 16, Map 215
ZCC 29, Map 214
ZCC 56, Map 197
ZCC 71, Map 198
Arterials
Township/Range
Section
Unincorporated Cities
T11N/R14W - Sec. 25-26, 35-36
T11N/R13W - Sec. 21, 31-33
T10N/R14W - Sec. 1-2, 11-12, 14-15, 22-23
T10N/R13W - Sec. 2-8, 10, 18
Created on: 12/10/2025
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4,000
8,000 ft
Kern County
OAK CREEK RD
TEHACHAPI WILLOW SPRINGS RD
BACKUS RD
Rosamond
11 N 14 W ZM 198
11 N 13 W ZM 197
10 N 13 W ZM 214
10 N 14 W ZM 215

Zone Change:

(a) Zone Classification Change No. 56, Map 197 from A-1 (Limited Agriculture) to A (Exclusive Agriculture) on approximately 357.88 acres, A-1 FP (Limited Agriculture, Floodplain Combining) to A FP (Exclusive Agriculture, Floodplain Combining) on approximately 10.02 acres, A-1 (Limited Agriculture) and A-1 FP (Limited Agriculture, Floodplain Combining) to A FP (Exclusive Agriculture, Floodplain Combining) on approximately 574.63 acres, and A-1 (Limited Agriculture) and A-1 WE (Limited Agriculture, Wind Energy Combining) to A (Exclusive Agriculture) and A WE (Exclusive Agriculture, Wind Energy Combining) on approximately 85.06 acres, for a total of approximately 1,027.59 acres.

(b) Zone Classification Change No. 71, Map 198 from A-1 (Limited Agriculture) to A (Exclusive Agriculture) on approximately 80.26 acres, E (2.5) RS (Estate 2.5 acres, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 10 acres, E (20) RS (Estate 20 Acres, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 493.64 acres, and A WE (Exclusive Agriculture, Wind Energy Combining) and E (20) RS (Estate 20 Acres, Residential Suburban Combining) to A WE (Exclusive Agriculture, Wind Energy Combining) on approximately 40.01 acres, and A (Exclusive Agriculture) on approximately 40 acres, for a total of approximately 623.91 acres.

(c) Zone Classification Change No. 29, Map 214 from E (2.5) RS (Estate 2.5 Acres, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 150.70 acres, PL RS (Platted Lands, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 308.69 acres and A-1 (Limited Agriculture) to A (Exclusive Agriculture), and PL RS FP (Platted Lands, Residential Suburban Combining, Floodplain Combining) to A FP (Exclusive Agriculture, Floodplain Combining) on approximately 170.39 acres, for a total of approximately 629.78 acres.

(d) Zone Classification Change No. 16, Map 215 from PL RS (Platted Lands, Residential Suburban Combining) to A (Exclusive Agriculture) on approximately 111.71 acres.

Conditional Use Permit:

(a) Conditional Use Permit No. 22, Map 197, to allow for the construction and operation of a solar facility up to 200 MW and associated infrastructure, including energy storage and a switchyard, on approximately 811.23 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.

(b) Conditional Use Permit No. 47, Map 198, to allow for the construction and operation of a solar facility up to 150 MW and associated infrastructure, including energy storage and temporary construction staging, on approximately 721.65 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.

(c) Conditional Use Permit No. 50, Map 214, to allow for the construction and operation of a solar facility up to 550 MW and associated infrastructure, including energy storage and temporary construction staging and equipment storage, on approximately 3,164.18 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) Conditional Use Permit No. 19, Map 215, to allow for the construction and operation of a solar facility up to 500 MW and associated infrastructure, including energy storage and temporary construction staging and equipment storage, on approximately 2,773.09 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.

General Plan Amendment (Circulation):

(a) General Plan Amendment No. 18, Map 197, to remove future road reservations on section and mid-section lines as called for within the Circulation Element of the Kern County General Plan; and to remove future road reservations on section and mid-section lines within the project boundary, as shown in **Table 3-3**, *Road Reservations Requested for Removal*.

(b) General Plan Amendment No. 5, Map 198, to remove road reservations on section and mid-section lines as called for within the Circulation Element of the Kern County General Plan; and to remove future road reservations on section and mid-section lines within the project boundary, as shown in **Table 3-3**, *Road Reservations Requested for Removal*.

(c) General Plan Amendment No. 10, Map 214, to remove road reservations on section and mid-section lines as called for within the Circulation Element of the Kern County General Plan; and to remove future road reservations on section and mid-section lines within the project boundary, as shown in **Table 3-3**, *Road Reservations Requested for Removal*.

(d) General Plan Amendment No. 7, Map 215, to remove road reservations on section and mid-section lines as called for within the Circulation Element of the Kern County General Plan; and to remove future road reservations on section and mid-section lines within the project boundary, as shown in **Table 3-3**, *Road Reservations Requested for Removal*.

Zone Variance:

(a) Zone Variance No. 20, 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 140.15 total acres.

(b) Zone Variance No. 36, Map 198, 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 or the E(20) (Estate - 20 acres) District to the A (Exclusive Agriculture) District across approximately 205.68 total acres.

(c) Zone Variance No. 15, Map 214, to authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning from the PL (Platted Lands) District to the A (Exclusive Agriculture) District across approximately 89.83 total acres.

(d) Zone Variance No. 3, Map 215, to authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning from the PL (Platted Lands) District to the A (Exclusive Agriculture) District across approximately 10.12 total acres.

Offsite Features:

a) Conditional Use Permit No. 51, Map 214, to allow for a temporary, offsite construction laydown area on approximately 13.7 acres of a 30.21-acre parcel.

b) Franchise Agreement for the right-of-way (ROW) along 90th Street to use for underground MV transmission.

Removal of Road Reservations:

The project includes a request for an amendment to the Circulation Element of the Kern County General Plan to eliminate road reservations designated for potential future arterial and collector roadways along section and mid-section lines within the project site. The majority of the road reservations within the General Plan are north of the LADWP aqueduct. **Table 3-3**, *Road Reservations Requested for Removal*, details the road reservations within the General Plan requested for removal. The proposed removal of mid-section and section future road reservations within the Circulation Element designated roadways is shown

on **Figure 3-11**, *Proposed General Plan Amendment (Circulation)*. Future section and mid-section road reservations that are designated for reservation but not included in the Circulation Element are summarized in **Table 3-3** and shown on **Figure 3-11**, *Proposed General Plan Amendment (Circulation)*.

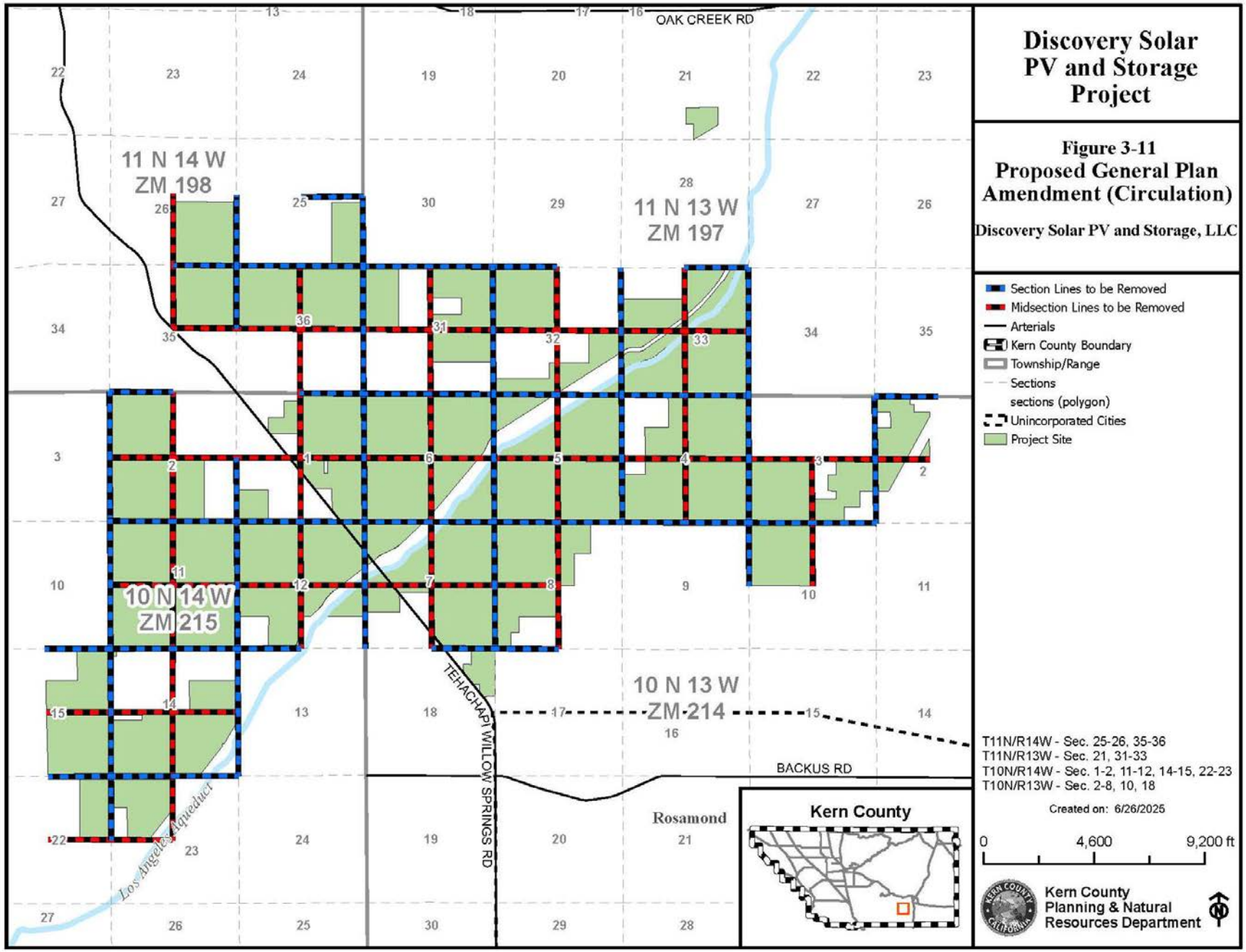
TABLE 3-3: ROAD RESERVATIONS REQUESTED FOR REMOVAL

Section/ Township/ Range	Type	Location	Description
Circulation Element			
26/11N/14W	Section	East	Southern half of the section line
26/11N/14W	Section	South	Eastern half of the section line
26/11N/14W	Mid-Section	East-West	Eastern half of mid-section line
26/11N/14W	Mid-Section	North-South	Southern half of mid-section line
25/11N/14W	Section	West	Southern half of the section line
25/11N/14W	Section	East	Southern half of the section line
25/11N/14W	Section	South	Southern section line
25/11N/14W	Mid-Section	East-West	Eastern half of the mid-section line
35/11N/14W	Section	East	Northern half of the eastern section line
35/11N/14W	Mid-Section	East-West	Eastern half of the mid-section line
35/11N/14W	Mid-Section	North-South	Northern half of the mid-section line
35/11N/14W	Section	South	Western half of the southern section line
35/11N/14W	Section	North	Eastern half of the northern section line
36/11N/14W	Section	North	Northern section line
36/11N/14W	Section	West	Northern half of the section line
36/11N/14W	Section	East	Eastern section line
36/11N/14W	Section	South	Eastern half of the section line
36/11N/14W	Mid-Section	East-West	Eastern and western mid-section lines
36/11N/14W	Mid-Section	North-South	Northern and southern mid-section lines
30/11N/13W	Section	South	Southern section line
30/11N/13W	Section	East	Southern half of section line
29/11N/13W	Section	South	Western half of the southern section line
28/11N/13W	Section	South	Eastern half of the section line
31/11N/13W	Section	North	Northern section line
31/11N/13W	Section	East	Eastern section line
31/11N/13W	Section	West	Western section line
31/11N/13W	Section	South	Southern section line
31/11N/13W	Mid-Section	East-West	Eastern and western mid-section lines
31/11N/13W	Mid-Section	North-South	Northern and southern mid-section lines
32/11N/13W	Section	North	Western half of the section line
32/11N/13W	Section	East	Eastern section line
32/11N/13W	Section	West	Western section line
32/11N/13W	Section	South	Southern section line
32/11N/13W	Mid-Section	East-West	Eastern and western mid-section lines
32/11N/13W	Mid-Section	North-South	Northern and southern mid-section lines
33/11N/13W	Section	North	Eastern half of the section line
33/11N/13W	Section	West	Western section line
33/11N/13W	Mid-Section	North-South	Northern half of the mid-section line
33/11N/13W	Mid-Section	East-West	Western half of the mid-section line
3/10N/14W	Section	East	Eastern section line
2/10N/14W	Section	West	Western section line
2/10N/14W	Section	East	Southern half of the section line
2/10N/14W	Section	North	Western half of the section line

Section/ Township/ Range	Type	Location	Description
2/10N/14W	Section	South	Southern section line
2/10N/14W	Mid-Section	East-West	Eastern and western mid-section lines
2/10N/14W	Mid-Section	North-South	Northern and southern mid-section lines
1/10N/14W	Section	East	Eastern section line
1/10N/14W	Section	West	Southern half of section line
1/10N/14W	Section	North	Eastern half of the section line
1/10N/14W	Section	South	Southern section line
1/10N/14W	Mid-Section	East-West	Eastern and western mid-section lines
1/10N/14W	Mid-Section	North-South	Northern and southern mid-section lines
10/10N/14W	Section	East	Eastern section line
10/10N/14W	Section	South	Eastern half of the section line
11/10N/14W	Section	North	Northern section line
11/10N/14W	Section	West	Western section line
11/10N/14W	Section	East	Eastern section line
11/10N/14W	Section	South	Southern section line
11/10N/14W	Mid-Section	East-West	Eastern and western mid-section lines
11/10N/14W	Mid-Section	North-South	Northern and southern mid-section lines
12/10N/14W	Section	East	Eastern section line
12/10N/14W	Section	North	Northern section line
12/10N/14W	Section	West	Western section line
12/10N/14W	Section	South	Western half of the section line
12/10N/14W	Mid-Section	East-West	Eastern and western mid-section lines
12/10N/14W	Mid-Section	North-South	Northern and southern mid-section line
15/10N/14W	Section	North	Eastern half of the section line
15/10N/14W	Section	East	Eastern section line
15/10N/14W	Section	South	Eastern half of the section line
15/10N/14W	Mid-Section	East-West	Eastern half of the mid-section line
15/10N/14W	Mid-Section	North-South	Northern and southern mid-section lines
14/10N/14W	Section	North	Northern section line
14/10N/14W	Section	West	Western section line
14/10N/14W	Section	East	Eastern section line
14/10N/14W	Section	South	Southern section line
14/10N/14W	Mid-Section	East-West	Eastern and western mid-section lines
14/10N/14W	Mid-Section	North-South	Northern and southern mid-section lines
13/10N/14W	Section	West	Western section line
13/10N/14W	Section	North	Western half of the section line
22/10N/14W	Section	North	Eastern half of the section line
22/10N/14W	Section	East	Northern half of the section line
23/10N/14W	Section	North	North section line
23/10N/14W	Section	West	Northern half of the section line
23/10N/14W	Mid-Section	North-South	Northern half of the mid-section line
7/10N/13W	Section	North	Northern section line
7/10N/13W	Section	West	Western section line
6/10N/13W	Section	North	Northern section line
6/10N/13W	Section	West	Western section line
6/10N/13W	Section	East	Eastern section line
6/10N/13W	Section	South	Southern section line
6/10N/13W	Mid-Section	East-West	Eastern and western mid-section lines
6/10N/13W	Mid-Section	North-South	Northern and southern mid-section lines

Section/ Township/ Range	Type	Location	Description
5/10N/13W	Section	North	Northern section line
5/10N/13W	Section	West	Northern half of the section line
Future Road Reservations			
33/11N/13W	Section	East	Eastern section line
33/11N/13W	Section	South	Southern section line
33/11N/13W	Mid-Section	North-South	Southern half of the mid-section line
33/11N/13W	Mid-Section	East-West	Eastern and western mid-section lines
34/11N/13W	Section	West	Western section line
35/11N/13W	Section	South	Western half of the section line
6/10N/13W	Section	East	Southern half of the section line
5/10N/13W	Section	East	Eastern section line
5/10N/13W	Section	South	Southern section line
5/10N/13W	Section	West	Western section line
5/10N/13W	Mid-Section	East-West	Eastern and western mid-section lines
5/10N/13W	Mid-Section	North-South	Northern and southern mid-section lines
4/10N/13W	Section	North	Northern section line
4/10N/13W	Section	West	Western section line
4/10N/13W	Section	East	Eastern section line
4/10N/13W	Section	South	Southern section line
4/10N/13W	Mid-Section	East-West	Eastern and western mid-section lines
4/10N/13W	Mid-Section	North-South	Northern and southern mid-section lines
3/10N/13W	Section	West	Western section line
3/10N/13W	Section	East	Eastern section line
3/10N/13W	Section	South	Southern section line
3/10N/13W	Mid-Section	East-West	Eastern and western mid-section lines
3/10N/13W	Mid-Section	North-South	Southern half of the mid-section lines
2/10N/13W	Section	North	Western half of the section line
2/10N/13W	Section	West	Western section line
2/10N/13W	Mid-Section	East-West	Western half of the mid-section lines
7/10N/13W	Section	West	Western section line
7/10N/13W	Section	East	Eastern section line
7/10N/13W	Section	South	Eastern half of the section line
7/10N/13W	Mid-Section	East-West	Eastern and western mid-section lines
7/10N/13W	Mid-Section	North-South	Northern and southern mid-section lines
8/10N/13W	Section	North	Northern section line
8/10N/13W	Section	West	Western section line
8/10N/13W	Section	South	Western half of the section line
8/10N/13W	Mid-Section	East-West	Eastern and western mid-section lines
8/10N/13W	Mid-Section	North-South	Northern and southern mid-section lines
9/10N/13W	Section	North	Northern section line
9/10N/13W	Section	East	Northern half of the section line
10/10N/13W	Section	North	Northern section line
10/10N/13W	Section	West	Northern half of the section line
10/10N/13W	Mid-Section	East-West	Western half of the mid-section lines
10/10N/13W	Mid-Section	North-South	Northern half of the mid-section lines
17/10N/13W	Section	North	Western half of the section line
17/10N/13W	Section	West	Northern half of the section line
18/10N/13W	Section	North	Eastern half of the section line
18/10N/13W	Section	East	Northern half of the section line

Section/ Township/ Range	Type	Location	Description
22/10N/14W	Mid-Section	East-West	Eastern half of the mid-section line
23/10N/14W	Mid-Section	East-West	Western half of the mid-section line


Discovery Solar PV and Storage Project
Figure 3-11
Proposed General Plan Amendment (Circulation)
Discovery Solar PV and Storage, LLC
11 N 14 W ZM 198
11 N 13 W ZM 197
10 N 14 W ZM 215
10 N 13 W ZM-214
OAK CREEK RD
BACKUS RD
TEHACHAPI WILLOW SPRINGS RD
Los Angeles Aqueduct
Rosamond
Kern County
Section Lines to be Removed
Midsection Lines to be Removed
Arterials
Kern County Boundary
Township/Range
Sections
sections (polygon)
Unincorporated Cities
Project Site
T11N/R14W - Sec. 25-26, 35-36
T11N/R13W - Sec. 21, 31-33
T10N/R14W - Sec. 1-2, 11-12, 14-15, 22-23
T10N/R13W - Sec. 2-8, 10, 18
Created on: 6/26/2025
0
4,600
9,200 ft
Kern County Planning & Natural Resources Department

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 public access easements are proposed to be vacated through parcel maps submitted separately to the Kern County Land Division Unit for review and approval.

The purpose of the request is to facilitate the optimal layout of solar panels by removal of record of unused/undeveloped public and private easements and other rights- of- way on vacant land. These easements and unaccepted offers of dedication have been created by grant deed or parcel maps, and some dirt roads exist within the project development footprint. As requested, the easement vacations would not eliminate any legal access for any property or persons in the area. In the cases where one of the proposed vacations removes primary access to a parcel, the project proponent would be responsible for recording private easements for access purposes prior to or concurrent with the vacation being recorded such that legal access remains. In most cases, the proposed private easements would be recorded along with the vacation of the original public easement. The parcel maps are summarized below, shown in **Figure 3-12**, *Parcel Maps and Easements*, **Figure 3-13**, *Proposed 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. 12587 – Proposing a merger and re-subdivision of five (5) parcels into one (1) parcel of Case Map 197, Section 31, Township 11, Range 13, Quarter of County of Kern, consisting of 220.32 acres (gross), resulting in a 220.32 acre (gross)
- parcel. Vesting Tentative Parcel Map No. 12589 – Proposing a merger and re-subdivision of four (4) parcels into one (1) parcel of Case Map 198, Parcel Map 3816, Lots 1-4 of County of Kern, consisting of 159.83 acres (gross), resulting in a 159.83 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12590 – Proposing a merger and re-subdivision of six (6) parcels into one (1) parcel of Case Map 198, Section 31, Township 11, Range 14, Quarter of County of Kern, consisting of 20.06 acres (gross), resulting in a 20.06 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12591 – Proposing a merger and re-subdivision of twenty-four (24) parcels into one (1) parcel of Case Map 198, Section 26, Township 11, Range 14, Quarter of County of Kern, consisting of 160.71 acres (gross), resulting in a 160.71 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12592 – Proposing a merger and re-subdivision of seventeen (17) parcels into one (1) parcel of Case Map 214, Section 2, Township 10, Range 13, Quarter of County of Kern, consisting of 140.76 acres (gross), resulting in a 140.76 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12593 – Proposing a merger and re-subdivision of ten (10) parcels into one (1) parcel of Case Map 214, Section 3, Township 10, Range 13, Quarter of County of Kern, consisting of 74.86 acres (gross), resulting in a 74.86 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12594 – Proposing a merger and re-subdivision of sixty-eight (68) parcels into one (1) parcel of Case Map 214, Section 4, Township 10, Range 13, Quarter of County of Kern, consisting of 502.73 acres (gross), resulting in a 502.73 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12595 – Proposing a merger and re-subdivision of fifty (50) parcels into one (1) parcel of Case Map 214, Section 6, Township 10, Range 13, Quarter of County of Kern, consisting of 530.27 acres (gross), resulting in a 530.27 acre (gross) parcel.

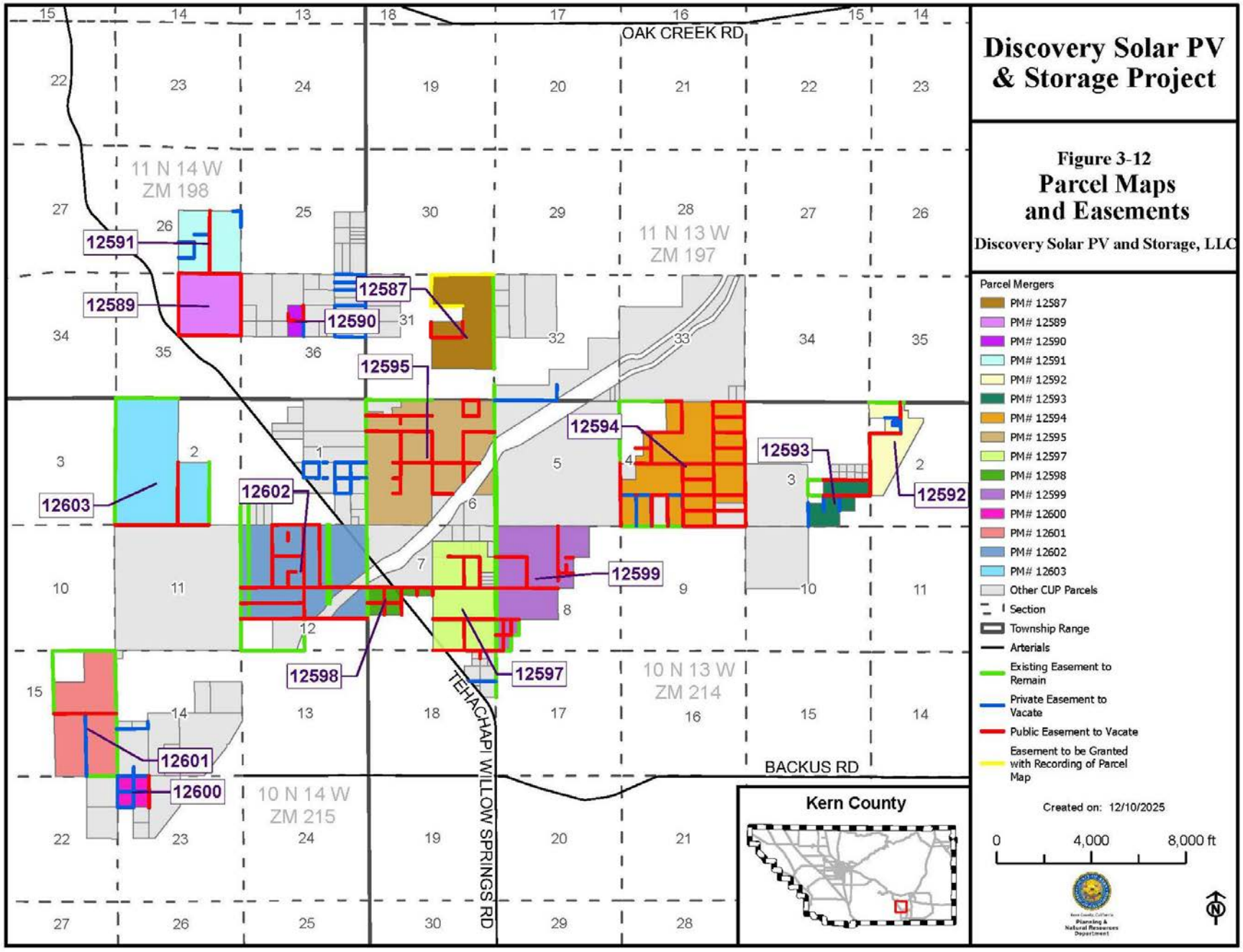
- Vesting Tentative Parcel Map No. 12597 – Proposing a merger and re-subdivision of twenty-three (23) parcels into one (1) parcel of Case Map 214, Section 7, Township 10, Range 13, Quarter of County of Kern, consisting of 231.36 acres (gross), resulting in a 266.74 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12598 – Proposing a merger and re-subdivision of nineteen (19) parcels into one (1) parcel of Case Map 214, Section 7, Township 10, Range 13, Quarter of County of Kern, consisting of 106.21 acres (gross), resulting in a 106.21 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12599 – Proposing a merger and re-subdivision of twenty-six (26) parcels into one (1) parcel of Case Map 214, Section 8, Township 10, Range 13, Quarter of County of Kern, consisting of 336.79 acres (gross), resulting in a 336.79 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12600 – Proposing a merger and re-subdivision of four (4) parcels into one (1) parcel of Case Map 215, Section 23, Township 10, Range 14, Quarter of County of Kern, consisting of 40.47 acres (gross), resulting in a 40.47 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12601 – Proposing a merger and re-subdivision of seven (7) parcels into one (1) parcel of Case Map 215, Section 15, Township 10, Range 14, Quarter of County of Kern, consisting of 281.45 acres (gross), resulting in a 281.45 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12602 – Proposing a merger and re-subdivision of forty-seven (47) parcels into one (1) parcel of Case Map 215, Section 12, Township 10, Range 14, Quarter of County of Kern, consisting of 503.38 acres (gross), resulting in a 501.78 acre (gross) parcel.
- Vesting Tentative Parcel Map No. 12603 – Proposing a merger and re-subdivision of five (5) parcels into one (1) parcel of Case Map 215, Section 2, Township 10, Range 14, Quarter of County of Kern, consisting of 407.89 acres (gross), resulting in a 407.89 acre (gross) parcel.

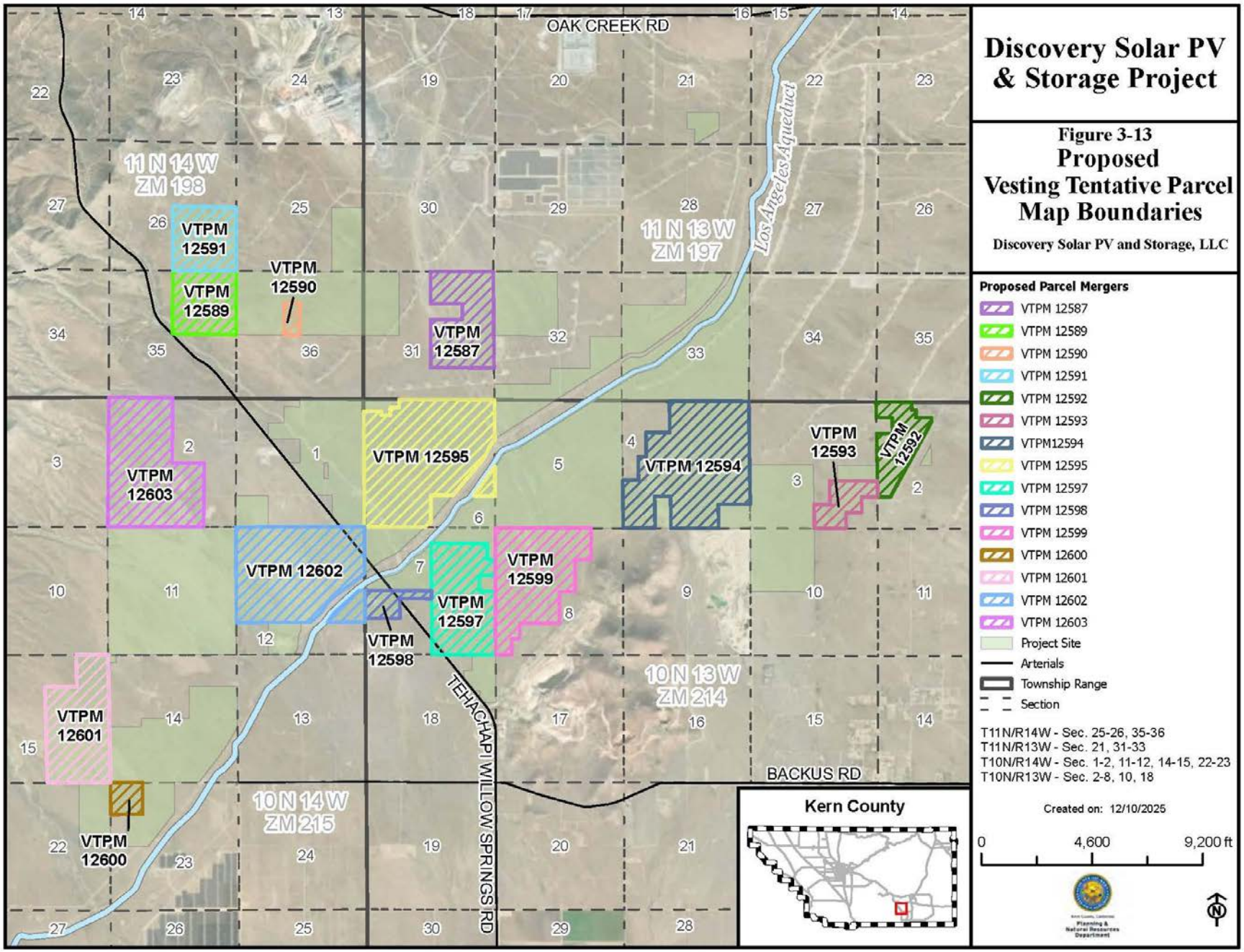
Franchise Agreements:

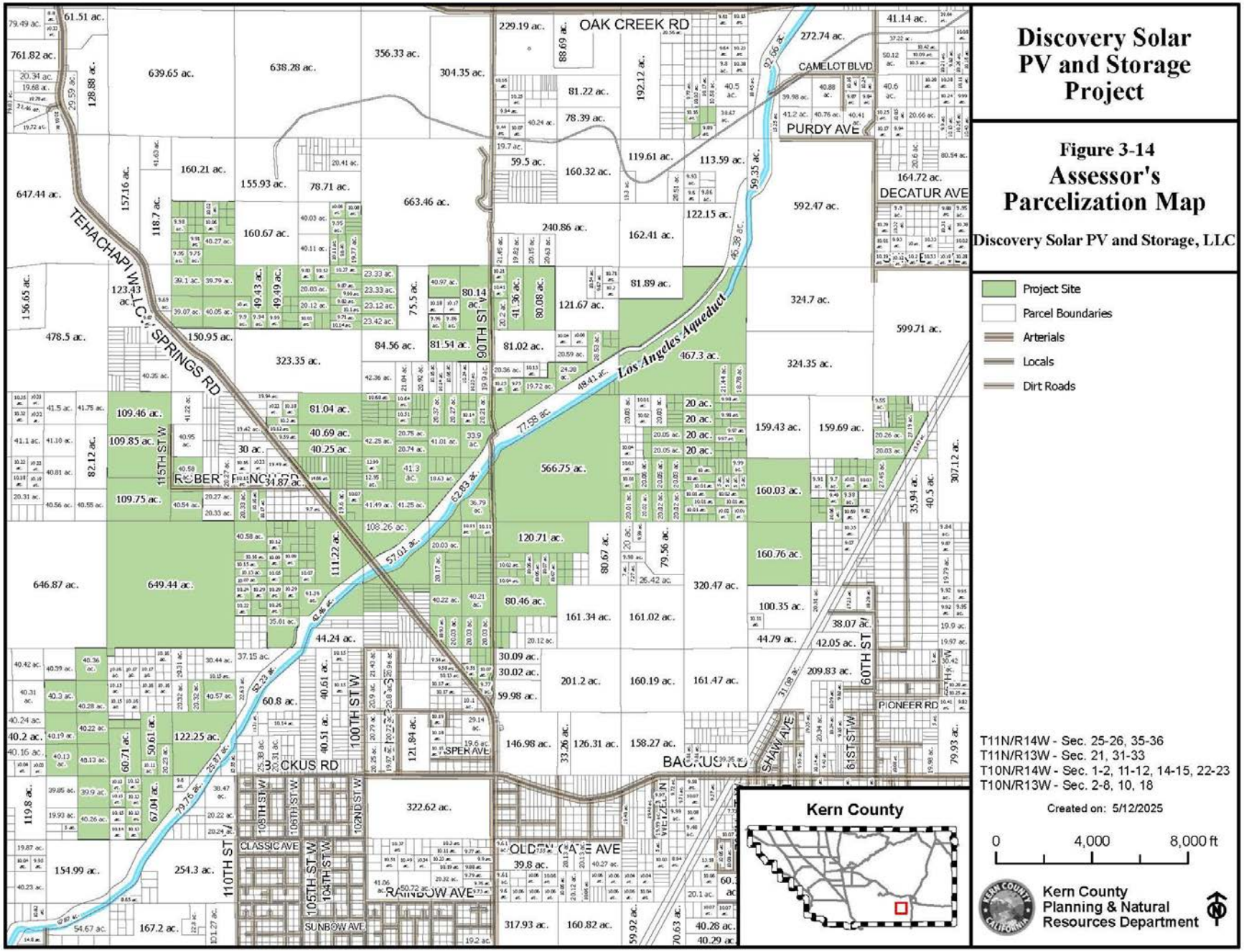
The project also intends to request approval of a franchise agreement for the ROW along 90th Street to use for underground MV transmission between two project site polygons (**Figure 3-3,** *Proposed Site Plan*). An application has been submitted to the County General Services-Property Management Division.

Decommissioning:

At the end of the proposed 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.


Discovery Solar PV & Storage Project
Figure 3-12
Parcel Maps and Easements
Discovery Solar PV and Storage, LLC
OAK CREEK RD
BACKUS RD
TEHACHAPI WILLOW SPRINGS RD
11 N 14 W ZM 198
11 N 13 W ZM 197
10 N 13 W ZM 214
10 N 14 W ZM 215
12591
12589
12587
12590
12595
12594
12593
12592
12603
12602
12599
12598
12597
12601
12600
Parcel Mergers
PM# 12587
PM# 12589
PM# 12590
PM# 12591
PM# 12592
PM# 12593
PM# 12594
PM# 12595
PM# 12597
PM# 12598
PM# 12599
PM# 12600
PM# 12601
PM# 12602
PM# 12603
Other CUP Parcels
Section
Township Range
Arterials
Existing Easement to Remain
Private Easement to Vacate
Public Easement to Vacate
Easement to be Granted with Recording of Parcel Map
Created on: 12/10/2025
0
4,000
8,000 ft
Kern County


Discovery Solar PV & Storage Project
Figure 3-13
Proposed Vesting Tentative Parcel Map Boundaries
Discovery Solar PV and Storage, LLC
OAK CREEK RD
BACKUS RD
TEHACHAPI WILLOW SPRINGS RD
Los Angeles Aqueduct
11 N 14 W ZM 198
11 N 13 W ZM 197
10 N 13 W ZM 214
10 N 14 W ZM 215
VTPM 12591
VTPM 12589
VTPM 12590
VTPM 12587
VTPM 12595
VTPM 12603
VTPM 12602
VTPM 12599
VTPM 12597
VTPM 12598
VTPM 12594
VTPM 12593
VTPM 12592
VTPM 12601
VTPM 12600
Proposed Parcel Mergers
VTPM 12587
VTPM 12589
VTPM 12590
VTPM 12591
VTPM 12592
VTPM 12593
VTPM12594
VTPM 12595
VTPM 12597
VTPM 12598
VTPM 12599
VTPM 12600
VTPM 12601
VTPM 12602
VTPM 12603
Project Site
Arterials
Township Range
Section
T11N/R14W - Sec. 25-26, 35-36
T11N/R13W - Sec. 21, 31-33
T10N/R14W - Sec. 1-2, 11-12, 14-15, 22-23
T10N/R13W - Sec. 2-8, 10, 18
Created on: 12/10/2025
0
4,600
9,200 ft
Kern County
Planning & Natural Resources Department


Discovery Solar PV and Storage Project
Figure 3-14
Assessor's Parcelization Map
Discovery Solar PV and Storage, LLC
Project Site
Parcel Boundaries
Arterials
Locals
Dirt Roads
OAK CREEK RD
CAMELOT BLVD
PURDY AVE
DECATUR AVE
TEHACHAPI WILLOW SPRINGS RD
Los Angeles Aqueduct
90TH ST W
115TH ST W
100TH ST W
105TH ST W
106TH ST W
102ND ST W
110TH ST W
104TH ST W
60TH ST W
61ST ST W
CLASSIC AVE
RAINBOW AVE
SUNBOW AVE
PIONEER RD
SHAW AVE
Kern County
T11N/R14W - Sec. 25-26, 35-36
T11N/R13W - Sec. 21, 31-33
T10N/R14W - Sec. 1-2, 11-12, 14-15, 22-23
T10N/R13W - Sec. 2-8, 10, 18
Created on: 5/12/2025
0
4,000
8,000 ft
Kern County Planning & Natural Resources Department

3.7 Project Characteristics

The overall project boundary consists of two distinct interior boundaries: (1) the CUP boundary, of which acreage specifies areas designated for proposed solar array portions of the project; and (2) the ZCC boundary, of which acreage specifies entirety of the parcels for which changes in zoning are requested. It should be noted that these two boundaries are not the same and are delineated by proposed legal descriptions. Additional project components that contribute to the overall project include areas affected by vesting tentative parcel maps, as well as accessory structures such as the MV and gen-tie corridors.

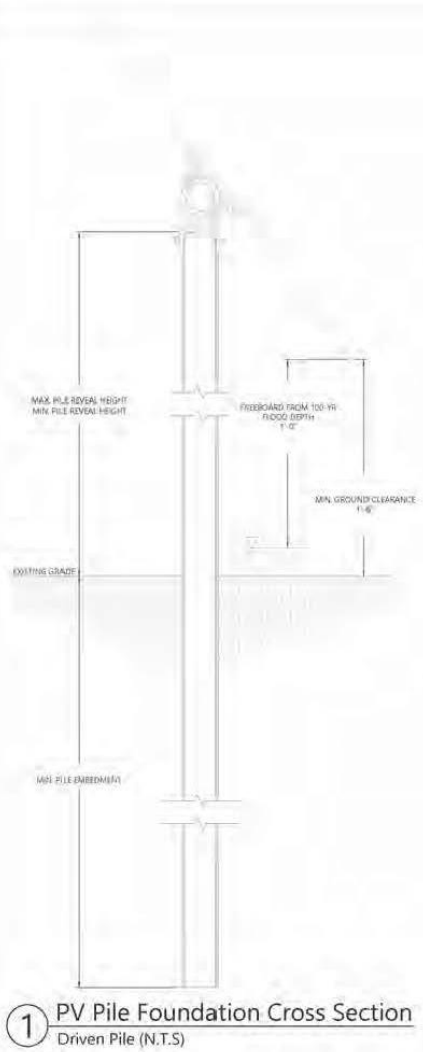
To deliver the project's power to the grid, a new, 230-kV gen-tie line extending from a collector substation located within the project boundaries south of the LADWP aqueduct would head north and cross the LADWP aqueduct and then combine with stepped-up generation from an additional collector substation(s) (north of the LADWP) via either a switchyard or direct connection. From there, the two circuits would be combined into a double circuit that would run north to a new 230-kV switchyard to connect and/or route the project gen-tie circuits into an existing gen-tie corridor, previously approved and constructed as part of the Sanborn Solar Project, and then west towards SCE's Windhub Substation. The proposed gen-tie line would have poles at a maximum height of up to 250 feet. A 230-kV to 500-kV step-up substation, constructed north of the Windhub Substation as part of the Kern County–approved Enterprise Solar Storage Project, would step up the voltage once again prior to interconnecting with SCE's grid. The final design, layout, and required interconnection components would be refined during the detailed engineering design stage.

The project would use PV solar technology designed in a collection of subarrays to convert solar energy directly to electrical power. The project is intended to operate year-round and would generate electricity during daylight hours to deliver renewable energy into the electric grid, and/or store the generated energy in onsite batteries and discharge it into the grid at various times when electricity demand is at its peak. Power generated by the project would assist the state in complying with the Renewables Portfolio Standard under Senate Bill 350 (2015), which requires 50 percent of all electricity sold in the state be generated from renewable energy sources by December 31, 2030, and Senate Bill 100 (2018), which requires that 100 percent of all electricity sold in the state be generated from renewable energy sources by 2045 (CPUC 2020). Power generated by the project would be sold to California investor-owned utilities, municipalities, community choice aggregators, or other purchasers in furtherance of the goals of the California Renewables Portfolio Standard. At the end of the project's operational term, the project proponent would determine whether the project site should be decommissioned and deconstructed, or if it would seek an extension of its CUPs. If any portion of the project site is decommissioned, it would be converted to other uses in accordance with applicable land use regulations in effect at that time. A typical solar facility, collector substation, and BESS are shown in **Figure 3-15,** *Solar Panel – Elevations (conceptual)*, and **Figure 3-16**, *Battery Energy Storage System*.

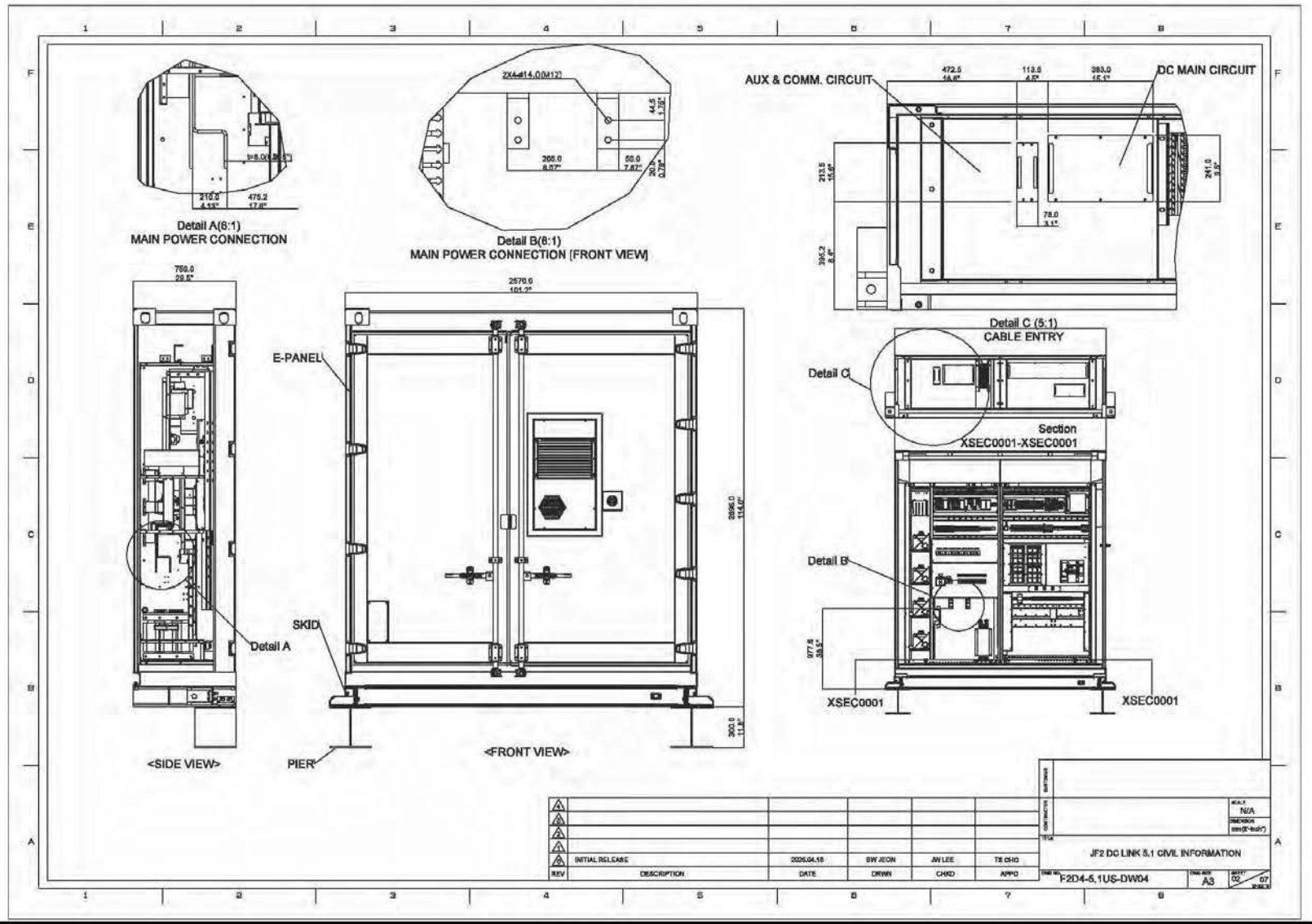
Project facilities would include the following components, which are described in more detail in the following subsections:

- Installation of up to 1,400 MW alternating current (AC) of solar PV modules, mounted on a single-axis racking and/or a fixed tilt system. The mounting systems for the modules would be mounted on steel support posts that would be pile-driven into the ground;

- Installation of energy storage facilities and accessory infrastructure that would provide energy storage capacity of up to 8 GWh for the electrical grid (approximately 1,000 MW);
- Up to three collector substations including circuit breakers, disconnect switches, metering protection equipment, and main step-up transformer(s);
- One 230-kV switchyard;
- Potential upgrades to, and installation of new circuits, lines, switches, utility poles, and other similar infrastructure at the 230-kV to 500-kV step-up substation located north of the SCE Windhub Substation (constructed as part of the County-approved Enterprise Solar Storage Project);
- Overhead and underground collection systems (the collection systems would be aggregated at multiple circuit breakers or MV switchgear positions within the project facilities, leading to the collector substations);
- Telecommunication equipment, including underground and overhead fiberoptics, and meteorological data collection systems or supervisory control and data acquisition (SCADA);
- Up to two O&M facilities with approximately six permanent, full-time employees;
- Onsite access roads;
- Perimeter security fencing and nighttime directional lighting; and
- Project design features to avoid, preserve, and minimize impacts to Western Joshua tree (WJT) and Joshua tree woodland at the project.



Discovery Solar PV and Storage Project by Discovery Solar PV and Storage, LLC	**Figure 3-15** **Solar Panel - Elevations (conceptual)**	Kern County Planning & Natural Resources Department 5/30/25



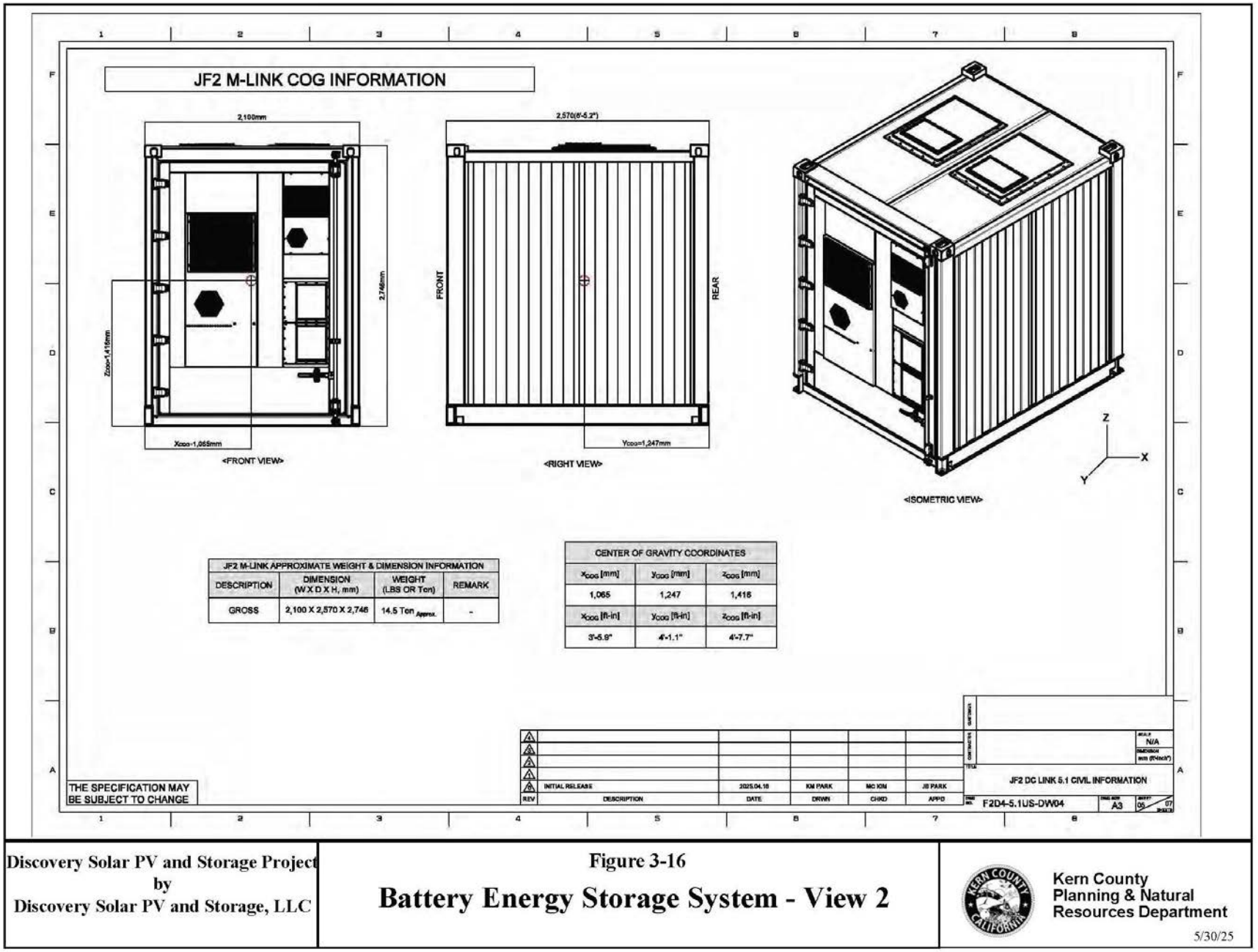
Discovery Solar PV and Storage Project
by
Discovery Solar PV and Storage, LLC

Figure 3-16

Battery Energy Storage System - View 1

Kern County
Planning & Natural Resources Department

5/30/25



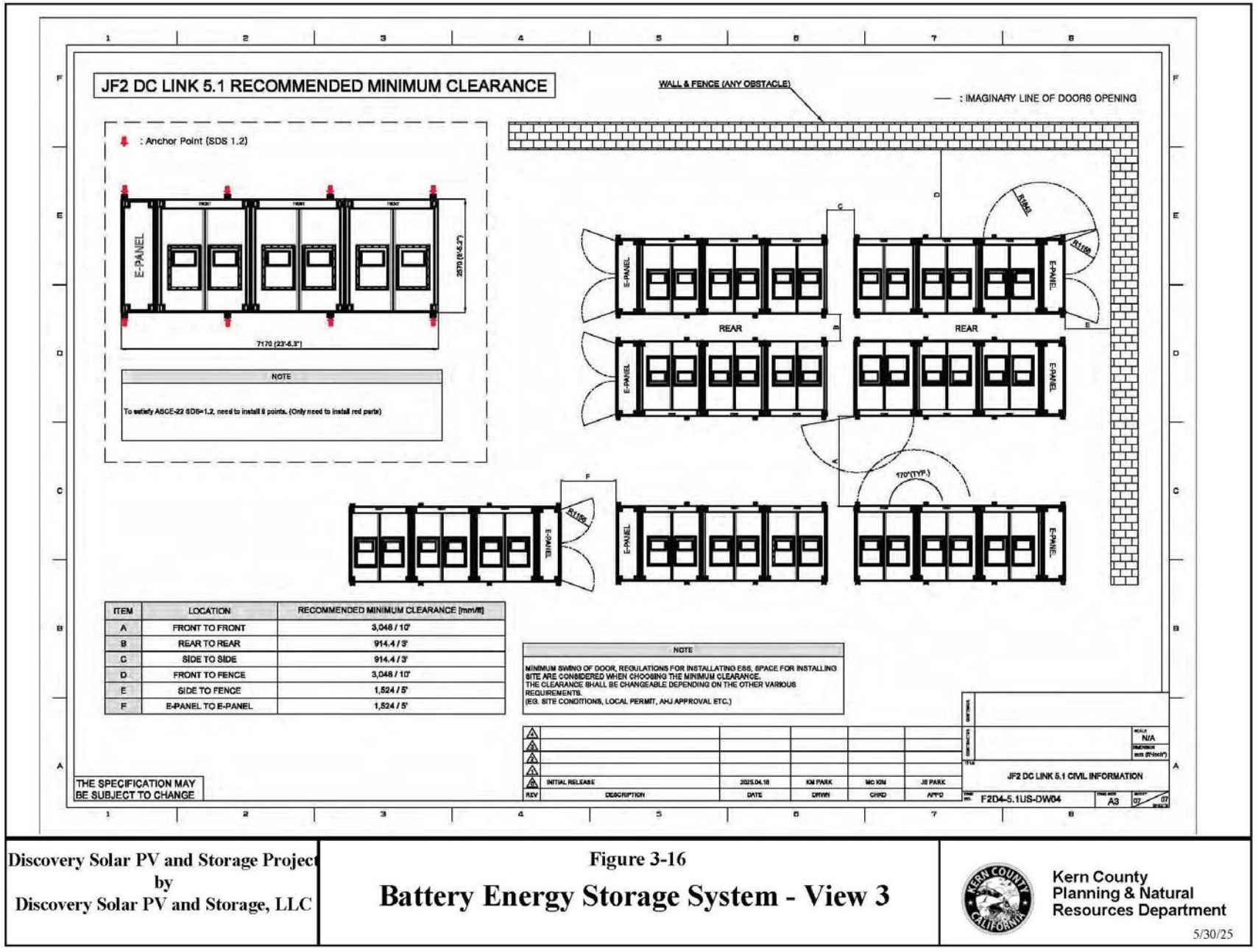
Discovery Solar PV and Storage Project
by
Discovery Solar PV and Storage, LLC

Figure 3-16

Battery Energy Storage System - View 2

Kern County
Planning & Natural Resources Department

5/30/25



Discovery Solar PV and Storage Project
by
Discovery Solar PV and Storage, LLC

Figure 3-16

Battery Energy Storage System - View 3

Kern County
Planning & Natural
Resources Department

5/30/25

3.7.1 Solar PV Generating Facilities and Solar Modules

The project would use PV solar technology designed in a collection of subarrays to convert solar energy directly to electrical power for eventual export to the electrical grid. The project would include installation of PV modules that would be mounted on a single-axis solar tracking system (and/or fixed tilt racking systems). The tracking system would be supported by steel posts that would be pile-driven into the ground. The modules would be made of a thin film material or crystalline silicon material, which would be dark in color, highly absorptive, and have minimum reflectivity. The modules would be manufactured at an offsite location and transported to the project site.

Depending on the type of technology (modules) used, the panels would typically measure approximately 4.5 feet wide and 8 feet long and the total height of the panel system, measured from the ground surface, would be approximately 9 to 12 feet. The length of each row of panels would be up to 550 feet and would be oriented in the north-south direction in order to maximize panel surface area relative to the sun, which is southerly in the northern hemisphere. As technology continues to advance, upgraded system dimensions that enable enhanced efficiency and output without expanding the project development footprint may be utilized.

Spacing between each row would be approximately 8 to 22 feet to allow access for maintenance and cleaning. Single-axis tracking systems would employ a motor mechanism that would allow the arrays to track the path of the sun from east to west throughout the day. In the morning, the panels would face east. The panels would slowly move to the upright position at noon and on to the west at sundown. The panels would reset to the east in the evening or early morning to receive sunlight at sunrise.

3.7.2 Battery Energy Storage System

The project includes a BESS using direct current (DC)-coupled and/or AC-coupled configurations. The DC energy storage system may be distributed and located throughout the solar arrays. The AC energy storage system may be centralized near one or more collector substations, or distributed within the solar arrays.

The energy storage batteries would be housed in factory-built, listed outdoor cabinet-type enclosures. These systems typically use lithium-ion battery modules installed in racks and housed in the outdoor BESS enclosures. A typical BESS cabinet houses on the order of dozens of battery modules, with an approximate energy capacity per cabinet of between approximately 0.4 to 6 MWh (manufacturer dependent). Modules are accessed for maintenance from the exterior cabinet doors only. To support safe and reliable operations, each module is monitored and controlled, and each enclosure is equipped with integrated operational management , fire-protection and life-safety systems, such as heating, ventilation, and air conditioning (HVAC); gas and smoke detection; deflagration prevention; and supervised 24/7/365 alarm monitoring with automated Authority Having Jurisdiction (AHJ) notification, in accordance with code and emergency response planning. BESS enclosures are paired with inverters to convert DC to AC (and vice versa during charging).

Beginning approximately five (5) years after initial installation, the project proponent may augment the system by installing additional battery modules and/or enclosures to offset normal capacity fade that occurs naturally as the batteries are used. Augmentation would occur within designated BESS areas shown on the site plans and would maintain, but not exceed, the total approved storage capacity under the CUP.

Typical enclosure dimensions vary by manufacturer and are deployed as repeated "blocks." Blocks may consist of a single enclosure or several smaller enclosures placed side-by-side to form banks with similar overall dimensions. Smaller enclosures may be closely spaced or physically attached; larger enclosures are placed in smaller groupings or individually. Consistent with National Fire Protection Association (NFPA) standard 855 and the California Fire Code (CFC), final layout will comply with applicable limits, clearances, spacing, and grouping criteria as approved by the fire AHJ. Regardless of manufacturer selection, the project's developed footprint and overall capability will remain substantially the same.

The project will be designed, constructed, and operated in accordance with applicable California Building Code, the CFC (including Section 1207 for Energy Storage Systems), and relevant NFPA standards (e.g., NFPA 855, 72, 69, 22), including requirements for product listings, large-scale fire testing, seismic/structural design, spacing and vehicle-impact protection, inspection/testing/maintenance, battery management system monitoring, emergency shutdown and notification, detection/deflagration controls, and reliable power to critical safety systems. Cabinet-type BESS will be listed to Underwriters Laboratories (UL) 9540 (energy storage systems), with fire-propagation testing per UL 9540A including "large scale fire testing." Large-scale fire testing is a critical safety feature to ensure any failures do not extend beyond a single enclosure. Battery assemblies will be evaluated to UL 1973 and inverters to UL 1741. Large-scale fire test data and listings are intended to demonstrate that a fire is not expected to propagate beyond a single enclosure under test conditions, including without active suppression, and that adjacent exposures are protected.

Power to critical safety systems will be supplied from the service side of a collector substation, with distribution via above- or below-grade feeders. Backup emergency power (e.g., generators) may be required by the AHJ to support fire-protection and monitoring systems. If required, generators would use diesel fuel, operate intermittently for testing and maintenance, comply with Eastern Kern Air Pollution Control District (EKAPCD) regulations, and obtain any necessary permits. The BESS will be unstaffed, with remote operations and periodic onsite inspection and maintenance.

Power to the critical safety systems would be provided via a connection to the service transformer of one of three onsite collector substations with connection lines installed above ground and/or below ground. Backup generators for the BESS may be required by the AHJ to provide backup emergency electricity for fire protection. If required, the generators would use diesel fuel and would need to be intermittently run for maintenance and testing purposes. The generators would operate in accordance with applicable EKAPCD regulations, and appropriate air permits would be obtained from EKAPCD. The energy storage system would be unstaffed, with remote operational control and periodic inspections and maintenance performed as necessary.

3.7.3 Power Collection System and Inverters

The solar panels would be electrically connected to each other via both aboveground and underground wiring. Underground electrical cables (underground collection system) would be installed from groups of solar arrays that would be arranged into power blocks. The cables would convey DC electricity to inverters, which convert the DC electricity to AC. Electrical inverters and associated transformers would be dispersed among the solar arrays and installed on prefabricated metal skids that would sit on steel pier foundations or concrete foundations, depending on the design. The inverter pad transformers would step up the voltage of the array output to 34.5 kV, which would be collected at the onsite circuit breakers or switchgear positions. From the circuit breakers or switchgear positions, the MV collector lines would be routed underground or aboveground to onsite collector substations.

3.7.4 Collector Substations

The onsite collector substations are the termination points of the collection system of 34.5-kV AC electricity. At the collector substations, the output of the field of interconnected arrays is passed through an interconnection step-up transformer to convert it from 34.5 kV to 230 kV. Up to three onsite collector substations (one of which has two alternate locations under consideration) would be needed for the project, pending final engineering. Project collector substations would be constructed in distinct project areas. Potential locations of onsite collector substations are shown within **Figure 3-3**, *Proposed Site Plan*. The collector substations would host the grid intertie safety equipment and switches required to interconnect to the high-voltage transmission system. Generators for backup emergency power would be required at the collector substations. Generators would use diesel fuel and would need to be intermittently run for maintenance and testing purposes. Generators would operate in accordance with applicable EKAPCD regulations, and appropriate air permits would be obtained from EKAPCD. The footprint for each collector substation, approximately 500 feet in length and 400 feet in width, would be sized to accommodate all required equipment with safety-related setbacks and would consist of components up to 75 feet in height.

3.7.5 Transmission, Switchyard, and Grid Interconnection

To connect the project to the grid, a new, 230-kV gen-tie line extending from an onsite collector substation located south of the LADWP aqueduct would head north and cross the LADWP aqueduct and then combine with stepped-up generation from the collector substation north of the LADWP via either a switchyard or direct connection. From there, the two circuits would be combined into a double circuit that would run north to a new 230-kV switchyard to connect and/or route the project gen-tie circuits into the previously constructed gen-tie corridor (approved as part of the Sanborn Solar Project) north and then west towards SCE's Windhub Substation. This switching area would consist of 230-kV breakers, poles and structures, disconnect switches, bus work, a control shelter, and other high-voltage equipment. The switchyard would be approximately 250 feet wide by 250 feet long in area and pole heights associated with the switchyard would be less than 250 feet tall. A 230-kV transmission line may also be constructed from the westernmost onsite collector substation through the project site, joining with the previously described gen-tie lines before continuing north as shown in **Figure 3-3**, *Proposed Site Plan*. The proposed transmission line(s) would have poles at a maximum height of up to 250 feet. The final design, layout, and required interconnection components would be refined during the detailed engineering design stage. A 230-kV to 500-kV step-up substation, constructed north of the Windhub Substation as part of the County-approved Enterprise Solar Storage Project, would step up the voltage once again prior to interconnecting with SCE's grid.

The new 230-kV switchyard also is expected to route gen-tie conductors for the proposed Galaxy Solar PV & Storage Project off of existing gen-tie poles and onto new transmission line poles that continue to the SCE Windhub Substation (to be permitted separately under the proposed Galaxy Solar PV & Storage Project). The Galaxy Solar PV & Storage Project is a separate solar energy project proposed by a separate legal entity (Galaxy Solar PV & Storage, LLC) on private lands under the County's land use jurisdiction. The Galaxy Solar PV & Storage Project is located approximately 9 miles east of the project and, if approved, would construct and operate a new gen-tie line and other associated infrastructure to interconnect to the SCE Windhub Substation. The projects are expected to have different off-takers under unique power purchase agreements and to have separate interconnection agreements. If both the project and Galaxy Solar PV & Storage Project are approved and proceed to construction, the projects would use the same 230-kV switchyard to route each project's gen-tie circuits north and then west to the SCE Windhub Substation. Using the same 230-kV switchyard for both projects would reduce the overall amount of new infrastructure

required for the projects and the corresponding environmental footprint of the two solar projects by constructing a single, shared facility. However, if only the project is approved, the 230-kV switchyard would be constructed to serve only the project. Similarly, if only the Galaxy Solar PV & Storage Project is approved, the 230-kV switchyard would be built to serve only the Galaxy Solar PV & Storage Project. Thus, if approved, each project could and would be built and operated independently of the other such that each of the projects includes a CUP for the switchyard. The County is preparing a separate EIR to support its review of the Galaxy Solar PV & Storage Project.

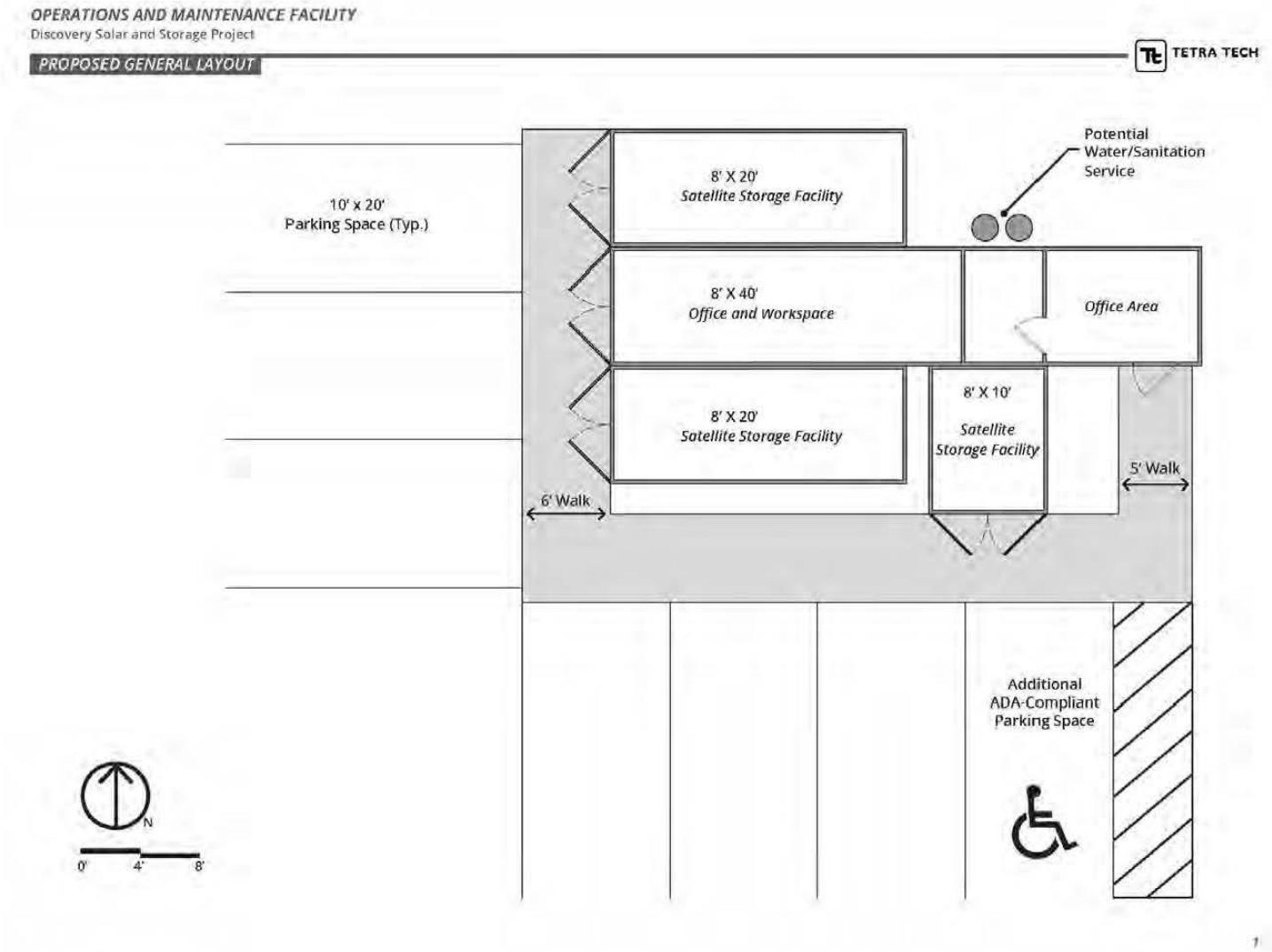
3.7.6 Telecommunication Facilities

The SCADA system is critical to the California Independent System Operator and SCE utility interconnection and provides for the proper operation and maintenance of the project. The system uses proprietary software; fiberoptic communication lines; and communication systems such as telephone and/or radio link. The SCADA system functions as a remote start, stop, reset, and safety lock out for the facility, and provides site diagnostic information from the energy generating facility. The SCADA system would also control the collector substations, allowing for fully centralized operation of the project to meet all California Independent System Operator and utility interconnection requirements.

The project would use local exchange carrier services for telecommunication to support remote monitoring requirements. The project would connect to telecommunication fiberoptic lines owned and managed by AT&T or an alternative provider. The cabinet holding the connection equipment would have a base of approximately 4 feet by 2 feet and would be approximately 5 feet in height. From the point of demarcation, an underground or overhead fiberoptic cable would be installed within the project footprint to connect the cabinet to the SCADA equipment within the onsite collector substations.

3.7.7 Operations & Maintenance Facility

It is anticipated that approximately six permanent, full-time employees would be needed to operate and maintain the project. Up to two permanent, onsite O&M facility(ies) and/or small satellite offices may be built onsite to facilitate rapid repair of equipment. Each O&M facility(ies) would be approximately 1,000 to 3,000 square feet and include offices, workshops and conference rooms. The O&M facility(ies) is expected to be a prefabricated commercial structure, as shown on **Figure 3-17**, *Operations and Maintenance Facility*. Permanent restroom facilities with a septic system/tank and/or a portable toilets would be used for sanitary purposes and water would be sourced from trucked water, well water, and/or bottled water would be provided for staff. Supplemental water may be sourced from RMR Water Trucks and Rental Equipment, Inc. (RMR) and Mojave Public Utilities District (MPUD). Proposed O&M facility(ies) would include the requisite number of parking spaces for staff and visitor vehicles and O&M equipment and would comply with Americans with Disabilities Act requirements. Power for the O&M facility(ies) would be provided by either the project's electrical generation or supplied by the local power provider. A back-up generator for critical and emergency facility services with a fuel storage tank would be installed. The O&M facility(ies) would also include an approved, non-occupied storage outbuilding for hazardous waste, including lithium-ion battery storage and associated containment for oil and fuels and vehicle maintenance. The O&M facility(ies) would be sited near one of the project entrances and/or in proximity to one of the project collector substations, on APN 346-061-05 and/or APN 474-060-17, and access to these proposed locations would be on project access roads from 90th Street West or Tehachapi Willow-Springs Road, respectively.



Discovery Solar PV and Storage Project by Discovery Solar PV and Storage, LLC	**Figure 3-17** **Operations & Maintenance Facility - General Layout**	**Kern County Planning & Natural Resources Department** 5/30/25



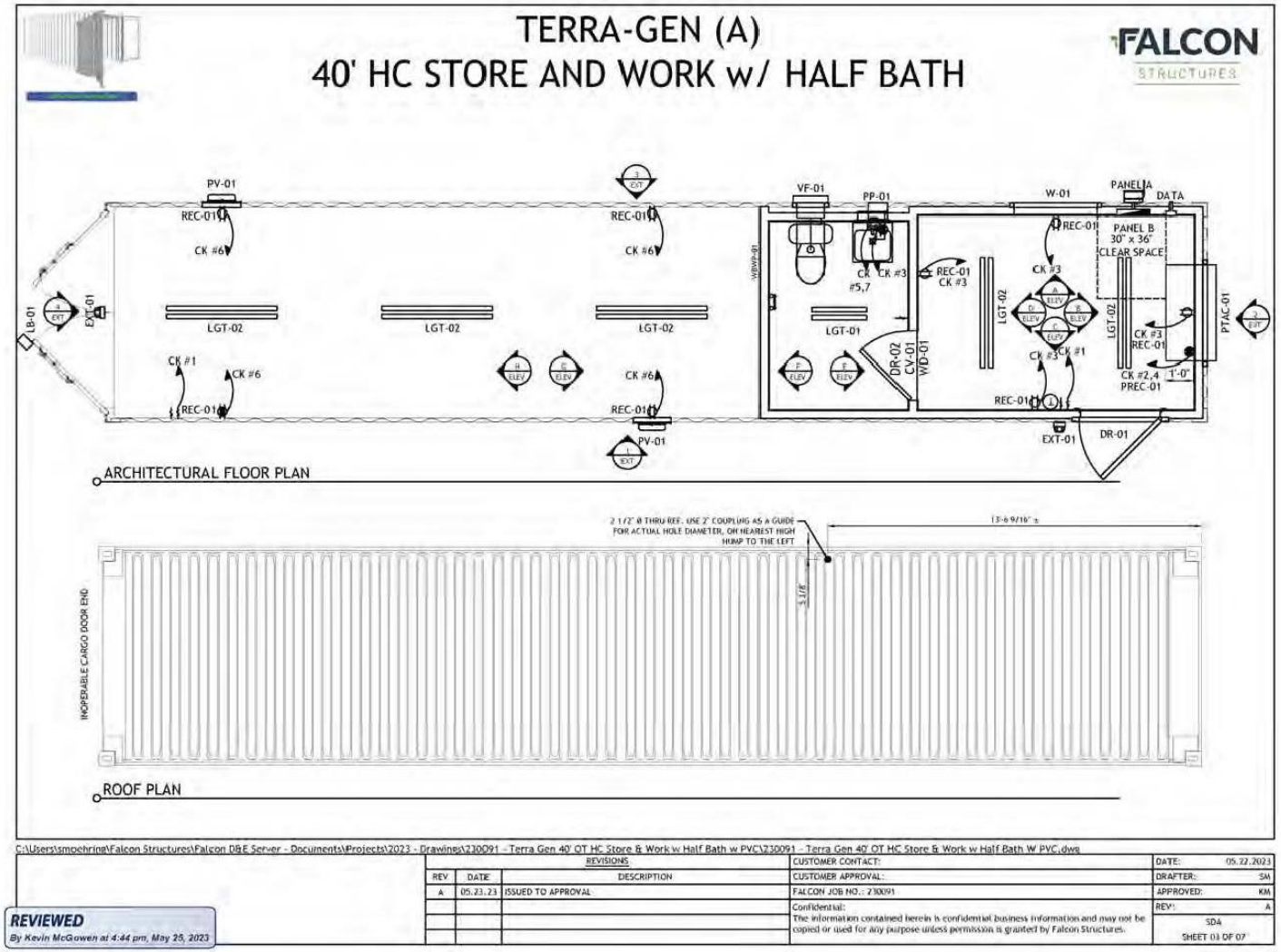
Discovery Solar PV and Storage Project
by
Discovery Solar PV and Storage, LLC

Figure 3-17

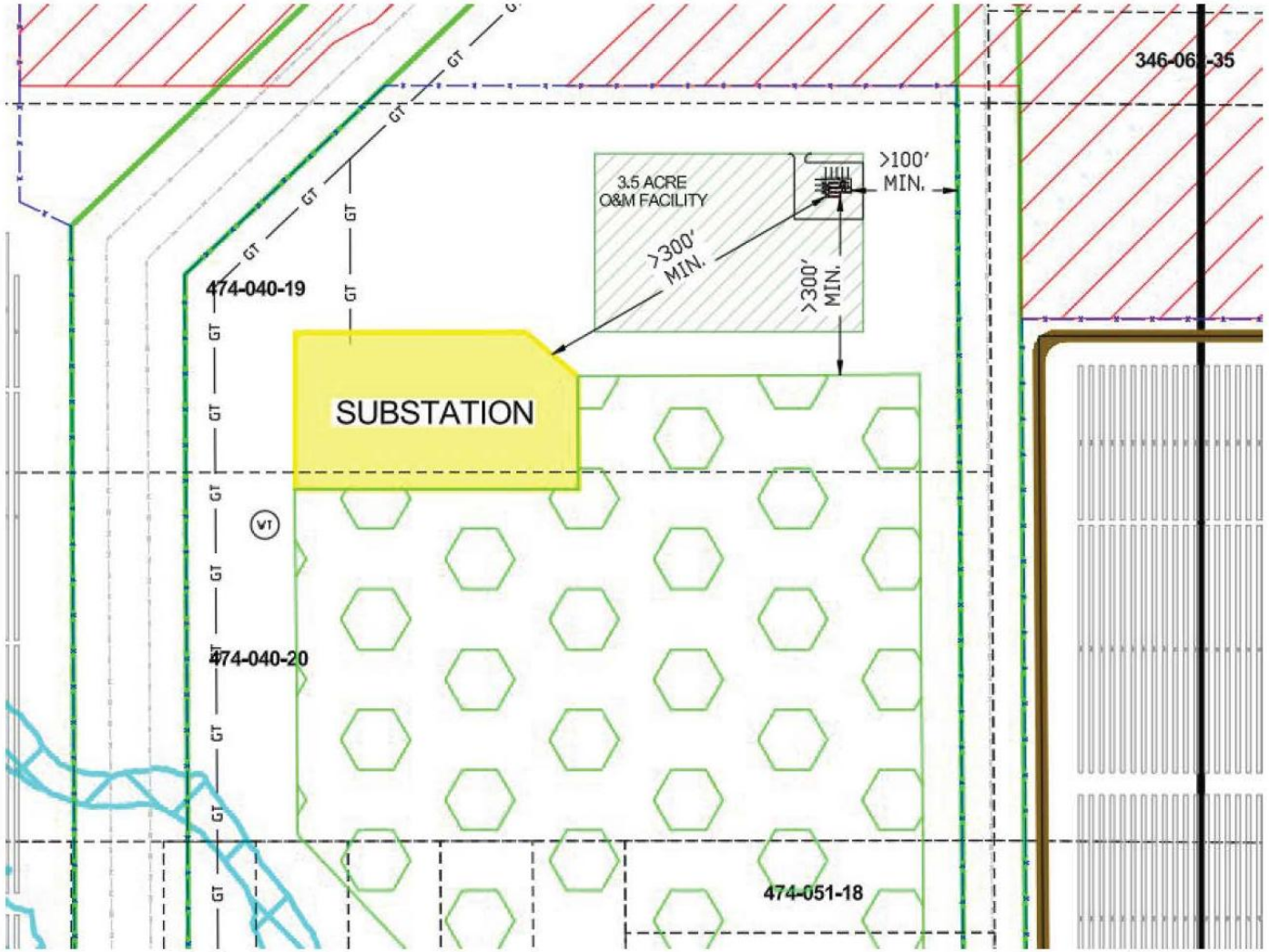
Operations & Maintenance Facility - Exterior Elevations

Kern County Planning & Natural Resources Department

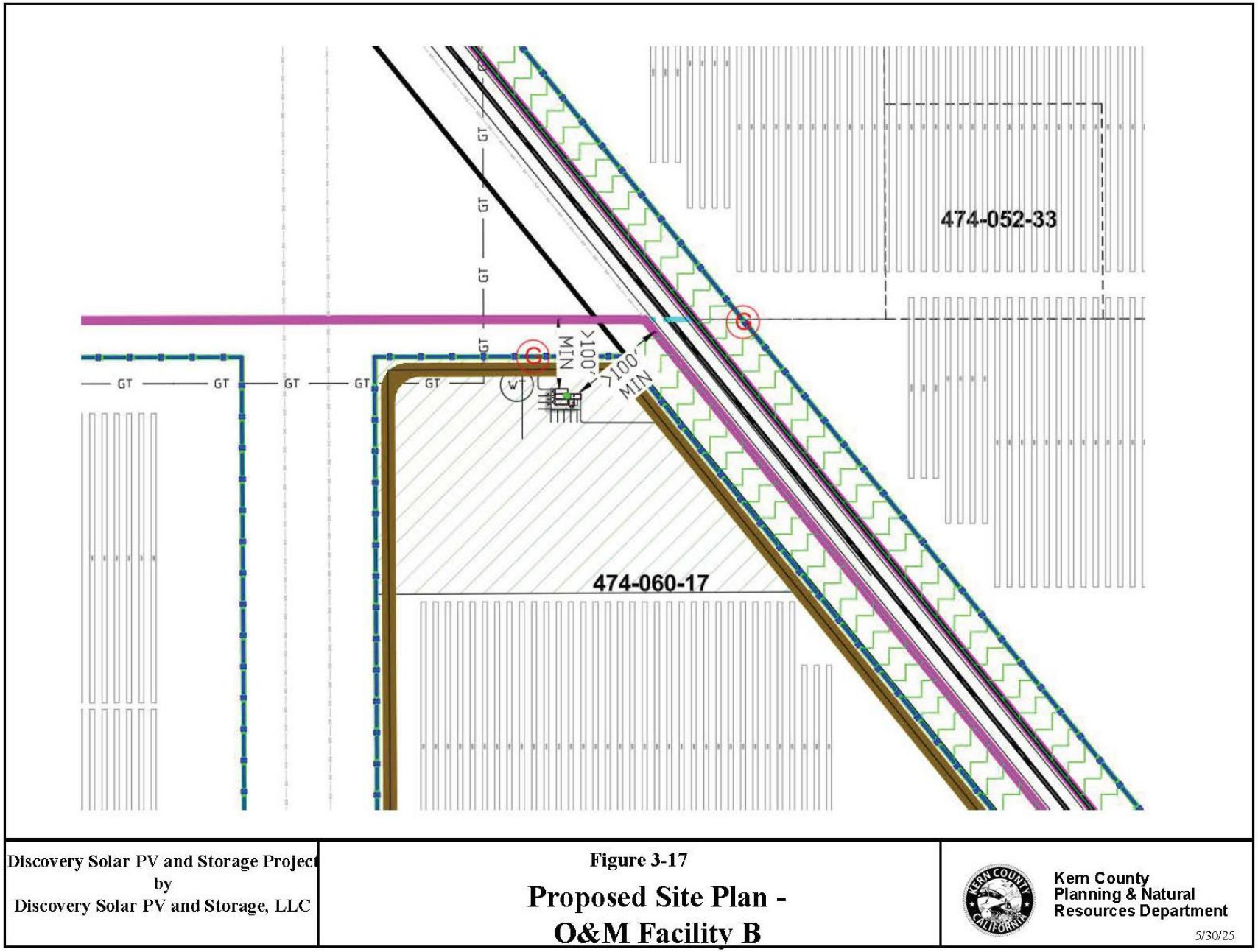
5/30/25



Discovery Solar PV and Storage Project by Discovery Solar PV and Storage, LLC	**Figure 3-17** **Operations & Maintenance Facility - Floorplan**	Kern County Planning & Natural Resources Department 5/30/25



Discovery Solar PV and Storage Project by Discovery Solar PV and Storage, LLC	**Figure 3-17** **Proposed Site Plan - O&M Facility A**	Kern County Planning & Natural Resources Department 5/30/25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Discovery Solar PV and Storage Project
by
Discovery Solar PV and Storage, LLC
Figure 3-17
Proposed Site Plan -
O&M Facility B
Kern County
Planning & Natural
Resources Department
5/30/25

3.7.8 Site Access

Access to the project site is provided via multiple existing roads; the primary roadways for local access include Tehachapi-Willow Springs Road, 90th Street West, and Backus Road. Tehachapi Willow-Springs Road bisects the project and would serve as the primary access to the project site driveways, particularly within the central and southern portions of the project site. 90th Street West, south off Oak Creek Road, would provide access to the northern portion of the project site. Backus Road would provide access to the southwestern portion of the project site. Interstate 5 is the largest highway that would provide regional access to the project vicinity from the north and the south, along with State Routes 14, 58, and 138. Anticipated facility ingress and egress locations are shown in **Figure 3-3,** *Proposed Site Plan*.

Internal project access roads would be up to 25 feet wide and would be cleared and compacted for access to solar blocks and equipment within the project site. These project access roads would remain in place for ongoing O&M activities after construction is completed. Dirt roads that are located within the boundaries of the project site, that are not the subject of a written easement, would be closed to third-party use for vehicular or other access. Any such third parties that may currently use these dirt roads would be rerouted to public access routes, which would remain open.

Final project access road alignments would depend on the final placement of solar panels and on the results of field investigations, including topography and any other site-specific details to be incorporated into final site design. Should project access roads be required to cross streambed areas under the jurisdiction of California Department of Fish and Wildlife and/or Regional Water Quality Control Board, appropriate crossings would be installed to minimize impacts to these jurisdictional areas and comply with all California Fish and Game Code requirements, including authorization through a Streambed Alteration Agreement, as appropriate.

3.7.9 Project Design Features to Avoid, Preserve, and Minimize Impacts to Western Joshua Tree and Joshua Tree Woodland at the Project

The project includes WJT removal and translocation (in accordance with the Western Joshua Tree Conservation Act). Given that WJT individuals would be impacted by the project, the project includes a number of design features to avoid, minimize, and preserve WJT and Joshua tree woodland at the project which would be enforced as mitigation measures (see **Section 4.4**, *Biological Resources*):

- An onsite 50-foot vegetated strip between the project site and Tehachapi Willow Springs Road will remain undeveloped as shown on **Figure 3-3**, *Proposed Site Plan*.
- The project includes restoration and enhancements of WJT habitats through relocation of a minimum of 10,000 onsite WJT stems to the onsite Woodland Habitat Preservation Areas, to the 50-foot vegetated strip along Tehachapi Willow Springs Road, and to other onsite or offsite conserved lands.
- Creation of 420 acres of Woodland Habitat Preservation Areas on the project site would avoid impacts to contiguous blocks of Joshua tree woodlands (preserving approximately 34,200 living and dead WJT stems).

- The 420 acres of Woodland Habitat Preservation Areas exceed the approximately 325 acres of mapped Joshua tree woodland at the project to allow space for relocation of WJT into less dense portions of these areas, and for the potential organic expansion of existing Joshua tree woodland into these areas.
- The Woodland Habitat Preservation Areas would be protected for the life of the project and are shown on **Figure 3-3**, *Proposed Site Plan*.
- The project proponent intends to obtain take coverage from CDFW for impacts to WJT and, prior to the issuance of grading or building permits, documentation of take authorizations will be provided to Kern County (**Mitigation Measure MM 4.4-7**). Mitigation for impacts to WJT would be coordinated with CDFW through take coverage permitting and is expected to include measures such as seed collection, WJT relocation requirements, and the acquisition of offsite compensatory mitigation lands with a focus on WJT refugia habitat.

3.8 Construction

Construction of the proposed project is expected to last for approximately 34 months and would proceed following receipt of all permits and agency approvals. The construction activities for the proposed project are categorized into three main phases:

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

Additional details for construction phases and their respective durations and required equipment can be found in **Table 3-4**, *Solar PV Construction Activity, Duration, and Equipment.*

TABLE 3-4: SOLAR PV CONSTRUCTION ACTIVITY, DURATION, AND EQUIPMENT

Construction Phase[a]	Months	Equipment
Perimeter Fence Installation	6	Skid Steer Loaders, Pickup Trucks, Water Trucks, Flatbed Trucks
Site Preparation, Clearing/Grading, and Roads	15	Water Trucks, Graders, Bulldozers, 10-ton Rollers, Scrapers, Sheepsfoot Rollers, Tractors with Mower Attachments, Pickup Trucks
Underground Work (Trenching)	15	Excavators, Sheepsfoot Rollers, Water Trucks, Generators, Aussie Padder Screening Machines, 4x4 Forklifts, Utility Tractors, Pickup Trucks
System Installation	24	4x4 Forklifts, Skid Steer Loaders, Utility Tractors, all-terrain vehicles, Pile Drivers, Pickup Trucks, Generators, School Buses
Gen-tie Construction	6	Line Truck with Spool Trailer, Boom Truck with Bucket, 80-ton Crane, Pickup Trucks
Energy Storage System	4-6	80-ton Crane, Grader, 4x4 Reach Lift, Skid Steer Loaders
Testing and Commissioning	22	Pickup Trucks
Site Cleanup and Reclamation	4	Graders, Skid Steer Loaders, Drill Seed Drums, Broadcast Seed Belts, Water Trucks

[a] Construction activities will overlap.

3.8.1 Schedule and Workforce

The project would be constructed by several specialized construction contractors. The onsite construction workforce is expected to peak at approximately 660 individuals; however, the average daily workforce is expected to be approximately 470 construction, supervisory, support, and construction management personnel onsite during construction. It is anticipated that the construction workforce would generally commute to the project site each day from local communities and report to designated construction laydown areas prior to the beginning of each workday. Construction staff not drawn from the local labor pool would stay in local hotels in Rosamond, Mojave, Lancaster, Tehachapi, or other local communities.

One or more of the temporary laydown areas may be used as a parking and meeting area for construction staff. It is anticipated that the construction workforce could use State Route 58, State Route 14, Tehachapi-Willow Springs Road, Oak Creek Road, or other local roads as points of ingress/egress to the project site and that, once onsite, would access various areas via internal project access roads.

Construction would primarily occur during daylight hours, Monday through Friday, between 6:00 a.m. and 6:00 p.m.; however, some work may occur on Saturday and Sunday, as required, to meet the construction schedule and/or to promote the health and safety of workers. The Kern County Noise Ordinance (Chapter 8.36) limits noise from construction from 9:00 p.m. and 6:00 a.m. on weekdays and 9:00 p.m. to 8:00 a.m. on weekends when occurring within 1,000 feet of an occupied residential dwelling, except in certain circumstances. Project construction work would conform to the County's ordinance. Any construction activities that may need extended hours would be coordinated with the County and appropriate agencies before the activity occurs.

3.8.2 Site Preparation

Site preparation activities would include trash removal, mowing, clearing, potential western Joshua tree translocation (in accordance with the Western Joshua Tree Conservation Act), fence installation, excavation, and grading of the site. All applicable local, state, and federal requirements and best management practices (BMPs) would be incorporated into site preparation and construction activities at the project site. Noise-generating construction activities would follow the construction hours noted above. Stationary equipment and machines with the potential to generate a significant increase in noise or vibration levels would be located away from noise receptors to the extent feasible. Initial work on the site would involve preparing the land for installation of arrays, energy storage facilities, related infrastructure, access driveways, and temporary construction laydown areas. Laydown yards used for temporary offices, equipment and material unloading and storage, worker parking, and other construction-related activities would be prepped by mowing and clearing existing vegetation and installation of temporary security fencing. In heavy use zones, crushed aggregate may be applied. The construction contractor would be required to incorporate BMPs consistent with the County zoning ordinance, including preparation of a Stormwater Pollution Prevention Plan (SWPPP) and a soil erosion and sedimentation control plan. Prior to initial construction mobilization, preconstruction surveys would be performed, and sediment and erosion controls would be installed in accordance with the approved SWPPP. Stabilized construction entrances and exits would be installed at driveways to reduce tracking of sediment onto adjacent public roadways.

Site preparation would be consistent with County BMPs and EKAPCD rules for dust control. The project would use construction techniques that minimize soil disturbance and allow water to continue to flow and percolate naturally across the site. Such techniques include clearing and mowing of the site, with minimal overall grading; use of disk-and-roll and micro-grading techniques; and reducing grading to the greatest

extent possible to areas where site topography requires smoothing for external fence lines, roads, and project equipment. These construction techniques avoid and minimize environmental impacts, including impacts to air quality, noise, and water quality.

Site preparation would involve the removal and proper disposal of existing vegetation and debris that would unduly interfere with project construction or the health and safety of onsite personnel. Dust-minimizing techniques would be employed, such as maintaining natural vegetation where possible, using a mow-and-roll vegetation clearance strategy, placing wind control fencing, applying water (additional details on water use are provided further below), and applying dust suppressants. Conventional grading would be performed throughout the project site but minimized to the maximum extent possible to reduce unnecessary soil movement that may result in dust. Earthwork scrapers, excavators, dozers, water trucks, haul vehicles, and graders may all be used to perform grading. Land-leveling equipment, such as a smooth steel drum roller, would be used to even the surface of the ground and to compact the upper layer of soil to a value recommended by a geotechnical engineer for structural support. Access roads may be additionally compacted to 90 percent or greater, as required, to support construction and emergency vehicles. Certain access roads may also require the use of aggregate or decomposed granite to meet emergency access requirements.

Trenching would be required for placement of underground electrical and communication lines, and may include the use of trenchers, backhoes, excavators, haul vehicles, compaction equipment, and water trucks. After preparation of the site, the pads for structures, equipment enclosures, and equipment vaults would be prepared per geotechnical engineer recommendations. The collector substations and switchyard areas would have a grounding grid installed and would be covered with aggregate surfacing for safe operation. Collection and transmission structures from the collector substations to the transmission line would require drilling for foundation support, and the soils removed would be spread across the site.

Site preparation also includes the demarcation of environmentally sensitive areas identified through the environmental review processes in, and adjacent to, the project site. Demarcation would include installing flags, stakes, or fencing to discourage workers from entering sensitive areas.

3.8.3 PV System Installation

Erection of the solar arrays would include support structures and associated electrical equipment and cabling. Steel foundation piles would be driven into the soil using vibratory techniques. The piles are typically spaced approximately 10 to 15 feet apart and installed to a revealed height of approximately four feet above grade. Once the piles have been installed, the horizontal cross-members would be placed and secured. The arrays would consist of a motorized single-axis tracking system. For a single-axis tracking system, the trackers and their associated motors would be mounted to the horizontal cross-members.

Concrete would be required for the footings and pads for the collector substation transformers and switchyard equipment. Concrete may also be required for pile foundation support in the event soils prevent some piles from being driven to appropriate depths or for inverter foundations. Final concrete specifications would be determined during detailed design engineering. Concrete would be purchased from an offsite supplier and trucked onto the site. No concrete batch plants would be required onsite.

During this work, there would be multiple crews working onsite with various equipment and vehicles, including special vehicles for transporting the modules and other equipment. As the solar arrays are installed, the collector substations, high-voltage components, and O&M facility would be constructed, and the electrical collection and communication systems would be installed. Within the solar fields, the

electrical and communication wiring would be installed in underground trenches or placed in aboveground cable trays or cable support systems, and some of the medium-voltage collection circuits and communication systems may be on overhead lines. The wiring would connect to the appropriate electrical and communication terminations and would be checked and commissioned prior to operation.

3.8.4 Energy Storage System Installation

Installation of the energy storage system would be specific to the manufacturer and model of the energy storage system selected. A typical lithium-ion, battery-based energy storage system would include installation of pour-in-place concrete footings, pad foundations, piers, and/or driven pilings. The foundations would then be backfilled and compacted as necessary prior to installation of power conversion systems, power distribution systems, pad-mounted transformers, and battery storage enclosures. Electrical cables would be installed to connect the equipment and above-ground utilities. The circuits and control systems would be checked and tested for proper installation and functionality during commissioning prior to operation.

3.8.5 Testing, Commissioning, and Cleanup

After each major electrical system component is completed, including interconnection, high-voltage transmission, electrical collection system, and the solar arrays, the system would be thoroughly inspected and tested to ensure it is ready to carry energy. The system would then be energized, and additional testing would be done to ensure safe operation.

During construction, the project site would be kept as clean as possible. After construction of the project is complete, all waste, debris, and construction equipment would be removed from the site. Temporary laydown areas or other areas disturbed during construction that are not needed for facility operations would be revegetated.

3.8.6 Construction Water Use

During project construction, water would be required for common construction-related purposes, including but not limited to dust suppression, soil compaction, and grading. Dust-control water may be used for ingress and egress of onsite construction vehicle equipment traffic and other construction purposes. A sanitary water supply would not be required during construction because restroom facilities would be provided by portable units to be serviced by licensed providers.

The overall construction water usage during the construction period is anticipated to be approximately 1,266 acre-feet over 34 months. Water is anticipated to be obtained from onsite wells or offsite source(s). Pipelines for water conveyance may be constructed above ground and/or below ground. The primary source of water used during construction and operations would be from two proposed wells (or any potential existing onsite wells) located on the project site. Supplemental water may be sourced from RMR and MPUD. Water sourced for the project would be derived from the unadjudicated Fremont Valley Groundwater Basin or potentially from supplemental, imported water through MPUD. Water demand during construction is expected to be the same if the project is constructed during a year with normal precipitation, a year with less-than-average precipitation, or a multiyear period of less-than-average precipitation.

3.8.7 Construction Electrical Supply

Power required for construction activities, such as temporary construction trailers, would be provided via portable generators or temporary local distribution. Generators used onsite for construction, for backup power supply, or for emergency fire protection would abide by California Air Resources Board and EKAPCD regulations.

3.8.8 Solid and Nonhazardous Waste

A small amount of solid waste would be produced from project construction activities. This may include paper, wood, glass, plastics from packing material, waste lumber, insulation, scrap metal and concrete, empty nonhazardous containers, and vegetation waste. These wastes would be segregated, where practical, for recycling. Nonrecyclable wastes would be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III landfill. Vegetation waste generated by site clearing and grubbing would be chipped/mulched and spread onsite or hauled offsite to an appropriate green waste facility. The closest Class III municipal landfill is the Mojave-Rosamond Recycling and Sanitary Landfill (RSLF), which is located approximately 5.25 miles east of the project site. The Mojave-Rosamond RSLF is an unlined, active, public, Class III sanitary landfill owned by the County and operated by the Kern County Public Works Department.

3.8.9 Hazardous Materials

The proposed energy storage system will likely use lithium-ion batteries. If utilized, the batteries would be delivered to the project site in U.S. Department of Transportation–certified vehicles and in compliance with all applicable requirements of the U.S. Department of Transportation, California Highway Patrol, and the California Department of Motor Vehicles.

Other hazardous materials used for construction would be typical for most construction projects of this type. Materials would include, but not be limited to, small quantities of gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliative, herbicides, and welding materials/supplies.

A Hazardous Materials Business Plan would be provided to the Kern County Environmental Health Division that would include a complete inventory of all hazardous materials temporarily stored onsite, information regarding how the materials would be transported, and emergency response/contingency plans and safety procedures. This information would be recorded to maintain safety and prevent possible environmental contamination or worker exposure from a release or threatened release of a hazardous material. During project construction, material Safety Data Sheets for all applicable materials present at the site would be made readily available to onsite personnel.

3.8.10 Hazardous Waste

Small quantities of hazardous waste would most likely be generated over the course of construction. These wastes may include, but not be limited to, waste paint, spent construction solvents, waste cleaners, waste oil, oily rags, waste batteries, and spent welding materials. Workers would be trained to properly identify and handle all hazardous materials. Hazardous waste would be either recycled or disposed of at a permitted and licensed treatment or disposal facility. All hazardous waste shipped offsite for recycling or disposal

would be transported by a licensed and permitted hazardous waste hauler and disposed of at an approved location.

3.9 Operations

The facility would operate year-round. It is anticipated that approximately six permanent, full-time employees would be needed to maintain the facility. An O&M facility and/or small satellite office may be built onsite to facilitate rapid repair of equipment. During project operations, solar panel washing is expected to occur one to two times per year and general labor (up to 10 individuals) may assist in the panel cleaning. Typical O&M activities that would occur at the project site during operation include, but are not limited to, liaison and remote monitoring; administration and reporting; semi-annual and annual services; remote operations of inverters and BESS; site security and management; additional communication protocol; repair and maintenance of solar facilities, battery storage facilities, collector substations, electrical transmission lines, and other project facilities; battery storage facility supplemental phasing and/or augmentation; mowing and vegetation control; and periodic panel washing. As technology continues to advance, existing systems may be upgraded or replaced during operations to enhance efficiency and output without expanding the project development footprint.

3.9.1 Operation Water Use

During project operations and maintenance, it is anticipated that water would be used for solar panel washing, equipment washing, and other miscellaneous water uses including O&M building use (if constructed). If an O&M facility is constructed, permanent restroom facilities with septic tanks and/or portable toilets would be used for sanitary purposes and a permanent water source in the form of trucked water, well water, or bottled water would be provided for staff.

Panel washing for a project of this size would require approximately 15 to 30 days to complete per wash cycle. Water consumption is expected to be approximately 0.28 gallon per square yard of panel, based on other similar operations. Although PV panel washing is expected to occur once per year, the panels may need to be washed up to twice a year based on site conditions. Assuming one or two solar panel wash cycle per year plus typical O&M activities, the annual water usage is expected to be approximately 20 acre-feet of water. This amount includes the water necessary for project operations, fire suppression, and site maintenance.

During operations, the water used is anticipated to be sourced from proposed new onsite wells, any potential existing onsite wells, offsite source(s), and/or from RMR and MPUD. Pipelines for water conveyance may be constructed above ground and/or below ground. Water sourced for the project would be derived from the unadjudicated Fremont Valley Groundwater Basin or potentially from supplemental, imported water through MPUD. Onsite water resources would also include a number of aboveground, 10,000- to 30,000-gallon fire protection tanks, which would be placed at designated locations throughout the project site, including near BESS locations. Final locations and tank volumes would be subject to coordination with the KCFD.

3.9.2 Operation Electrical Supply

Power for O&M activities would be provided by the project's electrical generation, supplied by the local power provider or via portable generators. The project would require power for the electrical enclosures,

collector substation equipment, tracker motors (if non-self-powered single-axis trackers are used), battery storage, and plant lighting and security. Batteries in the collector substation buildings would supply backup DC power for the protection equipment. In the event emergency backup generators are required for project facilities such as collector substations and BESS, these diesel-powered generators would meet applicable best available control technology and be operated in accordance with applicable California Air Resources Board and EKAPCD rules and regulations.

3.9.3 Solid and Nonhazardous Waste

The project would produce a small amount of waste associated with maintenance activities, which could include broken and rusted metal, defective or malfunctioning modules, electrical materials, empty containers, and other miscellaneous solid waste, including the typical refuse generated by workers. Most of these materials would be collected and returned to the manufacturer or delivered to recyclers. Nonrecyclable waste would be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III landfill. As previously described, the closest Class III municipal landfill is the Mojave-Rosamond RSLF, located approximately 5.25 miles east of the project site. Shipping materials, construction waste, and other general solid wastes would be separated for recycling where possible/available.

3.9.4 Hazardous Materials

Limited amounts of hazardous materials would be stored or used on the site during project operations, including, but not limited to, diesel fuel, gasoline, and motor oil for vehicles; mineral oil to be sealed within the transformers; and lead-acid-based or lithium-ion-based batteries for emergency backup. Appropriate spill containment and cleanup kits would be maintained during operation of the project. As mentioned above, a Hazardous Materials Business Plan would be provided to the Kern County Environmental Health Division that would include a complete inventory of all materials stored onsite, information regarding how the materials would be transported, and response/contingency plans and safety procedures. Safety Data Sheets for all applicable materials present at the site would be maintained and made readily available to onsite personnel.

3.9.5 Hazardous Waste

The project would produce a small amount of hazardous waste associated with maintenance activities, which could include, but not be limited to, defective or malfunctioning modules, electrical materials, unused paint, solvents, cleaners, waste oil, oily rags, and batteries. Workers would be trained to properly identify and handle all hazardous waste. Fuels and lubricants used in operations would be subject to the Spill Prevention, Control, and Countermeasures Plan to be prepared for the project. Solid waste, if generated during operations, would be subject to the Solid Waste Management Plan to be prepared for the project.

Hazardous waste would be recycled or disposed of at a permitted and licensed treatment and/or disposal facility. All hazardous waste shipped offsite for recycling or disposal would be transported by a licensed and permitted hazardous waste hauler and disposed of at an approved location.

3.9.6 Security and Lighting

Perimeter security fence installation requirements would be evaluated, and the best-fit scenario would be incorporated at the project site. Fencing would be installed around the perimeter of the project site and areas

requiring controlled access for safety and security purposes, as needed (i.e. collector substation, switchyard). Locking gates would be installed at access roads entering the site. Limiting access to the site would be necessary both to ensure the safety of the public and to protect the equipment from potential theft and vandalism. Fencing would remain for the life of the project. The project site may be fenced to keep terrestrial wildlife species from entering the project site temporarily during the project construction phase. Permanent perimeter fencing would be designed to allow for passage of small- and medium-sized wildlife with a gap at the bottom of the fence to allow permeability for wildlife and wildlife movement through and around the project site, while permanent exclusion fencing around collector substations and the switchyard may be required. Final fence design will be developed in consultation with appropriate agencies.

The project's lighting system would provide O&M personnel with illumination for both normal and emergency conditions. Lighting would be designed to provide the minimum illumination needed to achieve safety and security objectives. Permanent motion-sensitive, directional security lights would be installed to provide adequate illumination around the collector substation areas and points of ingress/egress. Lighting would be used from dusk to dawn once the project is operational. Motion-sensitive cameras may also be installed throughout the solar arrays at the inverters for added security. If installed, cameras would be mounted on poles approximately 20 feet in height. Additionally, lighting would be directed downward and shielded to the extent feasible to focus illumination on the desired areas only and to minimize light trespass in accordance with applicable County requirements. All lighting would conform to applicable County Dark Skies Ordinance requirements.

Vegetation is sparse with little potential for vegetative fuel buildup. Nevertheless, the project proponent would undertake a vegetation management program and prepare a fire prevention plan for the project in compliance with applicable Kern County regulations.

3.10 Decommissioning

The project has an anticipated operational life of up to 35 years, after which the project proponent may choose to update site technology and recommission, or to decommission the site and remove the systems and their components. Because the tracking system and supporting equipment for the PV arrays would be supported by steel posts that would be pile-driven into the ground, the land would be largely unaltered from its natural state when the arrays are removed after the project's lifetime. As discussed in more detail below, portions of the project site would require reclamation. The project site could then be converted to other uses in accordance with applicable land use regulations in effect at that time.

Decommissioning and reclamation activities would adhere to the requirements of the appropriate governing authorities as well as all applicable local, State, and federal requirements and BMPs. The project would include BMPs to ensure the collection and recycling of modules and batteries and to avoid the potential for modules or batteries to be disposed of as municipal waste. The project is anticipated to need approximately 1,266 acre-feet of water during the approximately 34-month decommissioning process.

It is anticipated that during project decommissioning, project structures, including an onsite O&M facility (if constructed), would be removed from the site. Above-ground equipment that would be removed includes module posts and support structures, onsite transmission poles that are not shared with third parties, and the overhead collection system within the site; inverters, transformers, electrical wiring, battery storage equipment, and equipment on the inverter pads. The collector substations would be removed unless a public

or private utility assumes ownership of the collector substations, in which case the equipment may remain onsite to be used as part of the utility service to supply other applications.

Equipment would be de-energized prior to removal, salvaged (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment offsite to be recycled or disposed of at an appropriately licensed disposal facility. Some materials may also be returned to the manufacturer.

Removal of the solar modules would include removing the racks on which the solar panels are attached and placing them in secure transport crates and a trailer for storage. Removal of the energy storage facility equipment would include removing the batteries, enclosures and associated inverters and control panels. Batteries would be placed in appropriate hazardous materials containers for proper handling and removal from the site. The equipment would ultimately be transported to another facility (possibly including an equipment manufacturer) or to a recycling or disposal facility. Once the solar modules have been removed, the racks would be disassembled and the structures supporting the racks would be removed. Site infrastructure would be removed, including the fences and the concrete pads that may support the inverters, transformers, and related equipment, and concrete posts would be removed to grade level. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried with the equipment being used. The fencing and gates would be removed, and all materials would be recycled to the extent feasible. Project roads would be restored to their preconstruction condition to the extent feasible, unless the landowner elected to retain the improved roads for access throughout that landowner's property. The area would be thoroughly cleaned, and all debris would be removed. A collection and recycling program would be executed to promote recycling of project components and minimize disposal in landfills.

As mentioned above, reclamation activities would occur as part of project decommissioning. Reclamation activities aim to bring the project site back to similar conditions as those that existed prior to construction of the project; the goal of reclamation activities is to return the land to a condition in which natural vegetation can successfully re-establish. Reclamation activities may include, but not be limited to, the following actions:

- Project drainage features (retention basins, etc.) would be reclaimed using suitable fill material.
- Roads, parking areas, and collector substations would be removed and reclaimed to their pre-construction conditions and topography.
- Soils would be de-compacted using a disking method, as needed.
- As needed, topsoil would be used to restore suitable conditions for vegetation growth.

3.11 Entitlements Required

The Kern County Planning and Natural Resources Department, as the CEQA Lead Agency (per CEQA *Guidelines* Section 15052), has discretionary responsibility for the Discovery Solar PV and Storage Project. To implement this project, the project proponent may need to obtain the following discretionary and ministerial permits/approvals, including but not be limited to:

- **Federal**
  - U.S. Fish and Wildlife Service Incidental Take Permit and Habitat Conservation Plan (if sought by project proponent).

- U.S. Army Corps of Engineers, Section 404 Permit (if required)

- **State**
  - California Public Utilities Commission
    - Public Utilities Crossing/Encroachment Agreements
  - CDFW
    - Section 2081 Permit (Incidental Take Permit for state listed or candidate species, including WJT under the Western Joshua Tree Conservation Act) (if sought by project proponent)
    - Section 1600 *et seq.* (Lake and Streambed Alteration Agreement) (if required)
  - Lahontan Regional Water Quality Control Board
    - Waste Discharge Requirements (if required)
    - Regional Water Quality Certification (401 Permit) (if required)
    - National Pollutant Discharge Elimination System Construction General Permit
  - California Department of Transportation (Caltrans)
    - Right-of-Way Encroachment Permit (if required)
    - Permit for Transport of Oversized Loads

- **Local**
  - Kern County
    - Approval of Amendments to the Kern County General Plan (Circulation Element)
    - Approval of Changes in Zone Classifications
    - Approval of Conditional Use Permits for the project site
    - Approval of Zone Variances
    - Approval of Kern County Demolition Permits
    - Approval of Kern County Grading and Building Permits
    - Approval of Kern County Encroachment Permits
    - Approval of Franchise Agreement for street ROW along 90th Street
    - Approval of Parcel Maps (parcel mergers) by the Kern County Land Division Unit
  - EKAPCD
    - Approval of Fugitive Dust Control Plan
    - Authority to Construct
    - Permit to Operate
  - LADWP
    - Crossing Agreement

The preceding actions/approvals are potentially required and do not necessarily represent a comprehensive list of all possible permits/approvals required. Other additional permits or approvals from responsible agencies may be required for the proposed project.

3.12 Cumulative Projects

CEQA requires that an EIR evaluate a project's cumulative impacts. Cumulative impacts are the project's impacts combined with the impacts of other related past, present, and reasonably foreseeable future projects. As set forth in the CEQA *Guidelines*, the discussion of cumulative impacts must reflect the severity of the impacts as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. As stated in CEQA, Title 14, Section 21083(b), "a project may have a significant effect on the environment if the possible effects of a project are individually limited but cumulatively considerable."

According to the CEQA *Guidelines:*

> "*Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable and which compound or increase other environmental impacts.*
>
> *(a) The individual effects may be changes resulting from a single project or a number of separate projects.*
>
> *(b) The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time* (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Section 15355).

In addition, as stated in CEQA *Guidelines*, it should be noted that:

> *The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the project's incremental effects are cumulatively considerable* (CCR, Title 14, Division 6, Chapter 3, Section 15064[h][5]).

Cumulative impact discussions for each environmental topic area are provided at the end of each technical analysis presented in Chapter 4 of this EIR. As previously stated, and as set forth in the CEQA *Guidelines*, related projects consist of "closely related past, present, and reasonably foreseeable probable future projects that would likely result in similar impacts and are located in the same geographic area" (CCR, Title 14, Division 6, Chapter 3, Section 15355).

Figure 3-18, *Cumulative Projects*, shows the approximate location of the proposed projects in Kern County considered in the cumulative analysis. A list and description of past, present, and reasonably foreseeable projects near the project can be found in **Table 3-5**, *Cumulative Projects List*.

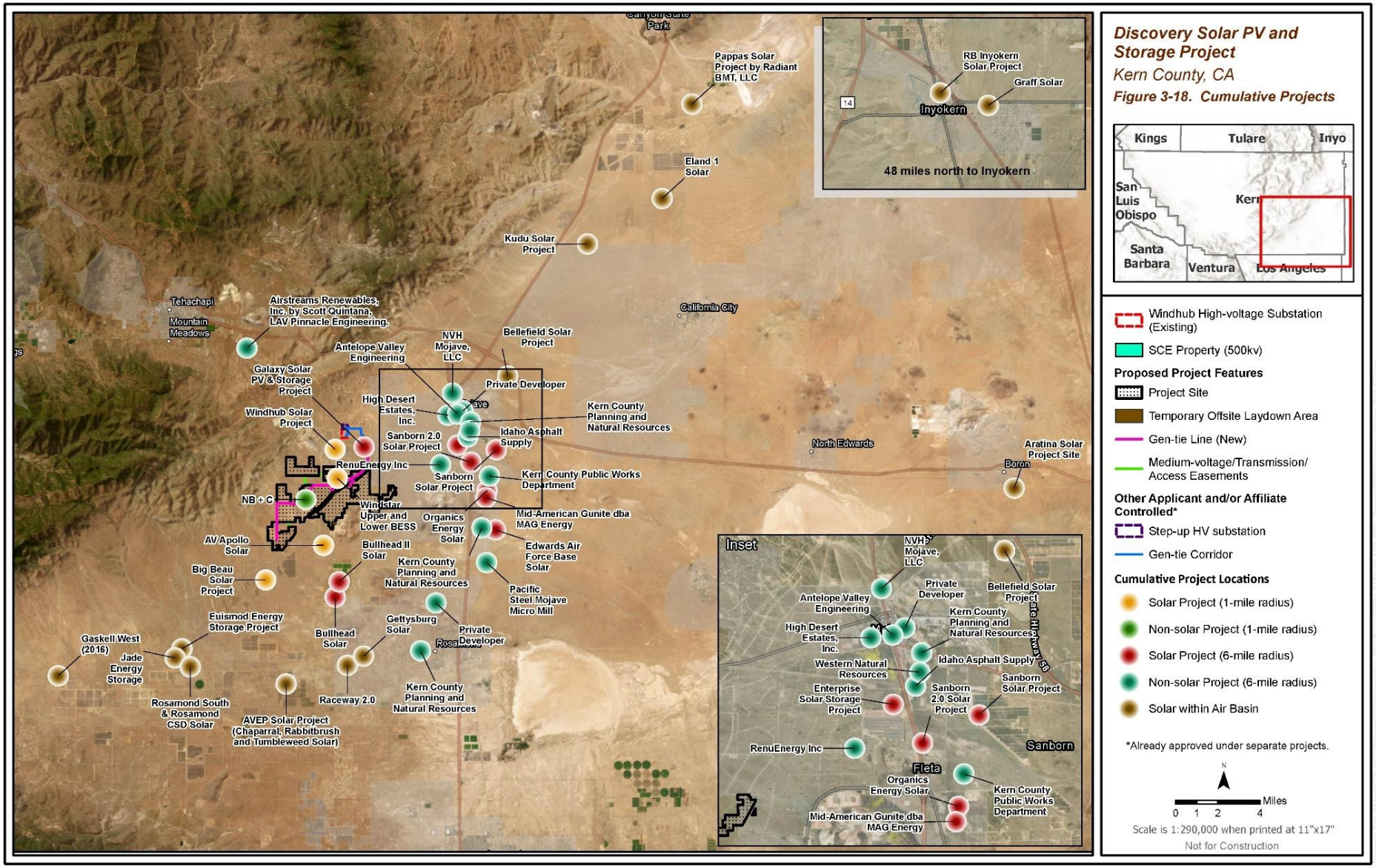
Discovery Solar PV and Storage Project
Kern County, CA
Figure 3-18. Cumulative Projects
Kings
Tulare
Inyo
San Luis Obispo
Kern
Santa Barbara
Ventura
Los Angeles
RB Inyokern Solar Project
Graff Solar
Inyokern
48 miles north to Inyokern
Pappas Solar Project by Radiant BMT, LLC
Eland 1 Solar
Kudu Solar Project
Tehachapi Mountain Meadows
Airstreams Renewables, Inc. by Scott Quintana, LAV Pinnacle Engineering.
California City
Antelope Valley Engineering
NVH Mojave, LLC
Bellefield Solar Project
Galaxy Solar PV & Storage Project
Private Developer
High Desert Estates, Inc.
Kern County Planning and Natural Resources
Windhub Solar Project
Idaho Asphalt Supply
Sanborn 2.0 Solar Project
North Edwards
Aratina Solar Project Site
Boron
RenuEnergy Inc
Sanborn Solar Project
Kern County Public Works Department
NB + C
WinStar Upper and Lower BESS
Organics Energy Solar
Mid-American Gunite dba MAG Energy
AV Apollo Solar
Bullhead II Solar
Edwards Air Force Base Solar
Big Beau Solar Project
Kern County Planning and Natural Resources
Pacific Steel Mojave Micro Mill
Euismod Energy Storage Project
Gettysburg Solar
Gaskell West (2016)
Bullhead Solar
Private Developer
Jade Energy Storage
Raceway 2.0
Kern County Planning and Natural Resources
Rosamond South & Rosamond CSD Solar
AVEP Solar Project (Chaparral, Rabbitbrush and Tumbleweed Solar)
Inset
NVH Mojave, LLC
Private Developer
Bellefield Solar Project
Antelope Valley Engineering
Kern County Planning and Natural Resources
High Desert Estates, Inc.
Western Natural Resources
Idaho Asphalt Supply
Enterprise Solar Storage Project
Sanborn 2.0 Solar Project
Sanborn Solar Project
RenuEnergy Inc
Sanborn
Fleta
Organics Energy Solar
Kern County Public Works Department
Mid-American Gunite dba MAG Energy
Windhub High-voltage Substation (Existing)
SCE Property (500kv)
Proposed Project Features
Project Site
Temporary Offsite Laydown Area
Gen-tie Line (New)
Medium-voltage/Transmission/ Access Easements
Other Applicant and/or Affiliate Controlled*
Step-up HV substation
Gen-tie Corridor
Cumulative Project Locations
Solar Project (1-mile radius)
Non-solar Project (1-mile radius)
Solar Project (6-mile radius)
Non-solar Project (6-mile radius)
Solar within Air Basin
*Already approved under separate projects.
N
Miles
0 1 2 4
Scale is 1:290,000 when printed at 11"x17"
Not for Construction

TABLE 3-5: CUMULATIVE PROJECTS LIST

No.	Project Name/Case ID	Project Location	Project Description	Case Type	Request	Project Site APN	Approx. Acreage	Project Status
1-MILE RADIUS SOLAR PROJECTS								
1	AV Apollo Solar	Southeast corner of Backus Road and 100th Street West, Northeast corner of Backus Road and 100th Street West	60 MW solar facility	CUP, GPA	CUP 37, Map 214; CUP 38, Map 214; CUP 39, Map 214; CUP 41, Map 214; GPA 5, Map 214	346-022-03; multiple	493.5 acres	Approved
2	Windhub Solar Project	6 miles west of SR-14, 5 miles south of SR-58, east of 90th St West	80 MW, 320 MWh solar facility	CUP	CUP 17, Map 197; CUP 18, Map 197	237-350-02; multiple	307.50	Partially Complete
3	Windstar Upper and Lower BESS	12490 90th Street West, Mojave, CA	102 MW, 480 MWh energy storage facility	BESS for existing wind farm	CUP, Map 197 & 198	237-054-20; 237-211-17	274.00	In Review
4	Big Beau Solar Project	Southeast portion of Kern County approximately 12 miles southwest of SR-58 and approximately 9 miles east of SR-14	128 MW solar facility and up to 60 MW energy storage capacity	GPA, ZCC, CUP	GPA 4, Map 215; ZCC 13, Map 215; CUP 13, Map 215; CUP 14, Map 215; CUP 15, Map 215; SPA 32, Map 232; ZCC 44, Map 232; CUP 41, Map 232; CUP 42; Map 232; CUP 43, Map 232	474-131-03; multiple	2562.03	Complete
1-MILE RADIUS NON-SOLAR PROJECTS								
5	NB + C	11253 Tehachapi-Willow Springs Rd, Tehachapi, CA	Satellite ground station	CUP	CUP	474-052-206	9.55	In Review
6-MILE RADIUS SOLAR PROJECTS								
6	Galaxy Solar PV & Storage Project	Appx. 6 miles southeast of Mojave, 8 miles northeast of Rosamond, 8 miles northwest of Edwards Air Force Base	600 MW solar facility and up to 4 GWh of energy storage capacity	GPA, ZCC, CUP, ZV, VTPM	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; GPA No. 6, Map 212; VTPM (Multiple)	237-332-18; multiple	3400.00	Processing
7	Organics Energy Solar	N/A	N/A	SPA, CUP, PD	SPA 27, Map 213; CUP 69, Map 213; PD 4, Map 213	429-101-36; multiple	119.64	Processing
8	Bullhead Solar	9678 Dawn Road,	270 MW, 1080 MW(h) solar	GPA, ZCC,	GPA, ZCC, CUP; Map 214, 215,	315-080-36;	1343.00	Approved

No.	Project Name/Case ID	Project Location	Project Description	Case Type	Request	Project Site APN	Approx. Acreage	Project Status
		Rosamond, CA	facility	CUP	231, 232	multiple		
9	Bullhead II Solar	Northeast corner of Tehachapi Willow Springs Road and Hamilton Road	50 MW, 200 MW(h) storage facility	N/A	N/A	346-032-55; multiple	544.00	Processing
10	Sanborn Solar Project	South of SR 58 and east of SR 14	300 MW solar facility and up to 3 GWh of energy storage capacity	SPA, ZCC, CUP	SPA 30, Map 196; ZCC 56, Map 196; ZCC 2, Map 212; ZCC 59, Map 213; CUP 45, Map 196; CUP 5, Map 212; CUP 66, Map 213	428-030-02; multiple	2006.00	In Construction
11	Mid-American Gunite dba MAG Energy	N/A	1,477 kW Commercial Solar	CUP	CUP, Map 213	429-102-14	156.36	Applied
12	Enterprise Solar Storage Project	Western edge of the Antelope Valley, Appx. 2 miles south of Mojave, 2 miles southwest of California City, 1 mile north of Edwards Air Force Base, and eight miles north of Rosamond	600 MW solar facility and up to 1000 MW battery storge	GPA, ZCC, CUP	GPA 4, ZCC 3, CUP 2, Map 195; GPA 34, ZCC 60, CUP 62, Map 196; GPA 3, GPA 4, SPA 5, ZCC 3, CUP 6, Map 212; CUP 1, Map 196-20	427-100-24; multiple	2200.00	In Compliance
13	Sanborn 2.0 Solar Project	Appx. 17 miles southeast of Tehachapi, 1 mile south of Mojave, and 10 miles north of Rosamond.	1000 MW, 4000 MWh solar facility	CUP	CUP 60 and CUP 61, Map 196	427-030-33; multiple	1200.00	In Construction
14	Edwards Air Force Base Solar	Northwest corner of Edwards Air Force Base, at the intersection of Lone Butte Road and East Trotter Avenue	600 MW solar facility on Edwards Air Force Base	Franchise Agreement	Franchise Agreement, Map 231	430-011-01; multiple	12754.00	Approved
6-MILE RADIUS NON-SOLAR PROJECTS								
15	Pacific Steel Mojave Micro Mill	506 Sopp Rd, Mojave, CA	Steel micro mill manufacturing facility	GPA, ZCC, PD, ZV, CUP	CUP 71, Map 213; CUP 72, MAP 213; GPA 3, Map 213; PD 3, Map 213; ZCC 62, Map 213; ZV 24, Map 213; ZV 25, Map 213	431-010-024; multiple	174.00	In construction
16	Private Developer	2000 Inyo St, Mojave, CA	Residential	TPM	TPM to divide a 22,611 sf (net) parcel of record into an 8,514 sf (net) parcel and a 14,097 sf (net)	236-192-019; 236-192-027	0.52	Applied

No.	Project Name/Case ID	Project Location	Project Description	Case Type	Request	Project Site APN	Approx. Acreage	Project Status
					parcel for residential use			
17	NVH Mojave, LLC	16825 Highway 14, Mojave, CA	N/A	LLA	LLA 43-22 proposing an adjustment of lot lines resulting in a 3.64 ac parcel	236-060-026, 236-060-349	3.64	Processing
18	Western Natural Resources	East side of SR 14, south of SR 58	N/A	LLA	LLA 8-23 proposing an adjustment of lot lines resulting in a 79.02 ac parcel and a 198.17 ac parcel	427-020-177; multiple	198.17	In Review
19	High Desert Estates, Inc.	N/A	N/A	TM	TTR 6545	236-080-081; multiple	40.00	Applied
20	Private Developer	East side of 35th Street West between Favorito Avenue and Beaudette Avenue	N/A	LLA	LLA 10-24 proposing an adjustment of lot lines to combine two parcels resulting in a 20.54-acre (gross) parcel	471-082-016; 471-082-024	20.54	In Review
21	Airstreams Renewables, Inc. by Scott Quintana, LAV Pinnacle Engineering.	N/A	Modification - Dormitory Bldg Veterans Training Facility	PD	PD 2, Map 167	224-120-14	N/A	Applied
22	Kern County Planning and Natural Resources	435 Panama Rd, Bakersfield, CA	Kern County Housing Element Implementation 2022	ZCC	ZCC 20, Map 196	236-360-186	0.92	Approved
23	Kern County Planning and Natural Resources	435 Panama Rd, Bakersfield, CA	Kern County Housing Element Implementation 2022	ZCC	ZCC 159, Map 231	252-161-492	2.51	Approved
24	Kern County Planning and Natural Resources	435 Panama Rd, Bakersfield, CA	Kern County Housing Element Implementation 2022	ZCC	ZCC 65, Map 213	430-030-106	6.97	Approved
25	Kern County Public Works Department	N/A	Expand landfill operations	GPA, ZCC, CUP	GPA from 8.5 to 3.4 and 3.4.1; ZCC from A-1 to A; CUP Mod (CUP 28, Map 196, CUP 7, Map 213)	428-181-044; multiple	22.23	Applied
26	RenuEnergy Inc	N/A	Unspecified solar facility	CUP	CUP for commercial solar	427-152-07; multiple	45.00	Applied
27	Antelope Valley Engineering	15764 Sierra Hy, Mojave, CA	Building expansion	PD	Modification to PD 8 Map 196-17 to allow for building expansion	236-251-013, 236-	0.7	Applied

No.	Project Name/Case ID	Project Location	Project Description	Case Type	Request	Project Site APN	Approx. Acreage	Project Status
						251-112		
28	Idaho Asphalt Supply	1673 Purdy Ave, Mojave	Addition of rail spur and roadway for renewable diesel railcar to the transloading area.	PD	Modification to PD Plan #14, Map 196	427-020-42	N/A	In Review
SOLAR PROJECTS WITHIN AIR BASIN								
29	AVEP Solar Project (Chaparral, Rabbitbrush and Tumbleweed Solar)	South of Dawn Road, west of 95th Street West, north Avenue A, and east of 130th Street West	375 MW solar facility	ZCC, CUP, SPA	ZCC 45, Map 232; CUP 48, Map 232; SPA 1, Map 231-18; ZCC 3, Map 231-18; SPA 2, Map 231-18; SPA 25, Map 232; SPA 27, Map 232; ZCC 40, Map 232; ZCC 41, Map 232; CUP 33, CUP 34, CUP 35, CUP 36, Map 232; SPA 26, Map 232; SPA 28, Map 232	359-183-02; multiple	2052.15	In Construction
30	Jade Energy Storage	N/A	100 MW, 400 MWh solar storage facility	ZCC, CUP	ZCC, CUP, Map 233	261-133-22; multiple	9.00	Processing
31	Pappas Solar Project by Radiant BMT, LLC	N/A	Unspecified solar facility	CUP	CUP 6, Map 134	181-321-04 & -05	37.00	Processing
32	Graff Solar	Southeast corner of Inyokern Road and Saguaro Street	N/A	GPA, ZCC, CUP	GPA# 4 and 5; CUP# 7, 8, 9; ZCC# 14 Map 47-28	352-201-49; multiple	80.00	Processing
33	Euismod Energy Storage Project	Northwest corner of Rosamond Blvd and 170th Street W	1,175 MW, 9,400 MWh energy storage facility	N/A	N/A	261-104-10; multiple	119.00	Processing
34	Raceway 2.0	Western extent of the Mojave Desert near Rosamond, between Rosamond Boulevard and Avenue A, and between 70th Street West and 90th Street West	291 MW solar renewable electrical energy and/or energy storage capacity	SPA, ZCC, CUP	SPA 33, 34, 35, 36, 37, 38, 39, Map 231; ZCC 154, 155, 156, Map 231; CUP 116, CUP 117, CUP 118, CUP 119, Map 231; CUP 4, SPA 3, Map 231-20; SPA 5, ZCC 3, CUP 3, SPA 7, ZCC 4, SPA 6, CUP 4, Map 231-21; SPA 5, ZCC 3, CUP 7, SPA 6, Map 231-28	374-011-04; multiple	1330.00	Near Complete

No.	Project Name/Case ID	Project Location	Project Description	Case Type	Request	Project Site APN	Approx. Acreage	Project Status
35	Gaskell West (2016)	South of Holiday Ave, west of 225th St, north of Avenue A	125 MW solar facility	CUP	CUP 1, Map 234-25; CUP 3, Map 234-26; CUP 4, Map 234-26; CUP 1, Map 234-27; CUP 3, Map 234; CUP 2, Map 234-27; CUP 1, Map 234-34; CUP 5, Map 234; CUP 3, Map 234-34	254-551-08; multiple	1463.00	In Construction
36	RB Inyokern Solar Project	East of North Brown Road and Inyokern Road intersection	Unspecified solar facility	CUP, SPA	CUP 23, Map 47; CUP 27, Map 47; SPA 4, Map 47	352-085-05; multiple	170.00	In Construction
37	Rosamond CSD Solar	South of Rosamond Boulevard to the north, east of 90th Street West, North of West Avenue A, east of 170th Street West	Unspecified solar project	CUP	CUP 36, Map 230	261-120-05; multiple	247.58	Approved
38	Bellefield Solar Project	Altus Ave and SR-58	750 MW solar facility and (up to) 2,000 MW-hour energy storage system	GPA, ZCC, CUP, SPA	GPA 2, Map 195; ZCC 2, Map 195; CUP 1, Map 195; ZCC 57, Map 196; CUP 57, Map 196; GPA 3, Map 195; SPA 31, Map 196	428-010-11; multiple	8375.90	In Construction
39	Rosamond South Solar (Golden Fields Solar)	Rosamond Blvd & 90th Street West	245 MW, 980 MWh solar facility	SPA, ZCC, CUP	SPA 40, Map 231; SPA 33, Map 232; SPA 31, Map 232; ZCC 157, Map 231; ZCC 43, Map 232; ZCC 18, Map 233; CUP 120, Map 231; CUP 40, Map 232; CUP 46, Map 232; CUP 44, Map 232; CUP 16, Map 233	261-120-05; multiple	1302.00	In Construction
40	Aratina Solar Project Site	SR-58 between Gephart Rd and San Bernadino County line	600 MW, 2400 MWh solar facility	ZCC, CUP, GPA	ZCC 6, CUP 16, CUP 17, GPA 6, MAP 192, GPA 2, MAP 192-35, ZCC 3, CUP 3, GPA 3, MAP 208-5, ZCC 6, CUP 7, GPA 3, MAP 208-6, ZCC 1, CUP 1, GPA 1, MAP 209-1, CUP 1, GPA 1, MAP 209-2	244-010-19; multiple	2554.00	In Construction
41	Gettysburg Solar	Southwest corner of Rosamond and 70th Street West	30 MW, 120 MWh solar facility	SPA, ZCC, CUP	SPA 8, Map 231-21; ZCC 5, Map 231-21; CUP 5, Map 231-21; CUP 6, Map 231-21; SPA 9, Map 231-21	374-011-06; multiple	158.00	In Compliance

No.	Project Name/Case ID	Project Location	Project Description	Case Type	Request	Project Site APN	Approx. Acreage	Project Status
42	Eland 1 Solar	South of Munsey Road, east and west of Neuralia Road, east of SR 14, and north and south of Phillips Road	500 MW solar facility	GPA, ZCC, CUP	GPA 9, Map 152; GPA 1, Map 152-28; ZCC 11, Map 152; ZCC 12, Map 152; ZCC 13, Map 152; ZCC 1, Map 152-28; CUP 23, Map 152; CUP 24, Map 152; CUP 25, Map 152; CUP 26, Map 152; CUP 3, Map 152-28	469-030-01; multiple	61.31	In Construction
43	Kudu Solar Project	Unincorporated Kern County and City of California City	500 MW solar facility and 600 MW energy storage system	ZCC, CUP, GPA	ZCC 14, Map 152; CUP 28, Map 152; GPA 10, Map 152	470-020-19; multiple	1954.94	In Construction

Notes:
APN = assessor parcel number
CUP = conditional use permit
GPA = General Plan amendment
GWh = gigawatt-hour
kW = kilowatt
MW = megawatt
MWh = megawatt-hour
SPA = Specific Plan amendment
ZCC = Zone Classification Change

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Exhibit 1

Vesting Tentative Parcel Maps

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VESTING TENTATIVE PARCEL MAP NO. 12587

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION OF THE NORTHEAST 1/4 OF AND THE NORTH HALF OF THE SOUTHEAST 1/4 OF SECTION 31, EXCLUDING THE NORTH HALF OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 31, TOWNSHIP 11 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 21000481385, DATED AUGUST 7, 2024, REPORT NO. 22000480465-94A, DATED AUGUST 7, 2024, REPORT NO. 220004809344, DATED AUGUST 7, 2024, REPORT NO. 22000481021A, DATED AUGUST 7, 2024.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE FIVE (5) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.
NOTE: ALL STRUCTURES WITHIN THE BOUNDARY OR WITHIN 150' FEET OF THIS MAP ARE SHOWN HEREON.

BASIS OF BEARINGS:

ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO.'S 06029C3275E AND 06029C3650E, ALL WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	237-053-09, 10, 13, 14 AND 16
ACCESS TO PARCELS:	PROPOSED PUBLIC ACCESS EASEMENTS SHOWN HEREON VIA 90TH STREET WEST
EXISTING NUMBER OF PARCELS:	5
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	A-1, A-1 FP
EXISTING GENERAL PLAN DESIGNATION:	8.5 (RESOURCE MANAGEMENT-MIN. 20 ACRE PARCEL SIZE); 8.5 (RESOURCE MANAGEMENT-MIN. 20 ACRE PARCEL SIZE) / 2.5 (FLOOD HAZARD)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A, A FP
PROPOSED GENERAL PLAN DESIGNATION:	8.5 (RESOURCE MANAGEMENT-MIN. 20 ACRE PARCEL SIZE); 8.5 (RESOURCE MANAGEMENT-MIN. 20 ACRE PARCEL SIZE) / 2.5 (FLOOD HAZARD)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL 'A' AREA:	220.38 ACRES
TOTAL PROJECT AREA:	220.38 ACRES

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

3	E 1/4 COR. SEC. 36, W 1/4 COR. SEC. 31, FD. 3" GLO BRASS CAP STAMPED "S31 S36", UP 0.60'
4	SW COR. SEC. 31, SE COR. SEC. 36, FD. IRON PIPE W/BRASS CAP "KCS", DN. 2.5'
5	NE COR. SEC. 31, NW COR. SEC. 32, FD. 2.5" GLO BRASS CAP STAMPED "S29 S30 S31 S32"
6	E 1/4 COR. SEC.,W 1/4 COR. SEC. 31, FD. BRASS CAP STAMPED "S31 S32"
7	SW COR. SEC. 32, SE COR. SEC. 31, FD. 3" GLO BRASS DISK
8	NE COR. SEC. 32, NW COR. SEC. 33, FD. 2.5" GLO BRASS DISK
9	E 1/4 COR. SEC. 32, S.F.N., CALCULATED PER BOOK 26, PAGE 152
10	SW COR. SEC. 33, SE COR. SEC. 32, FD. 3" GLO BRASS DISK STAMPED "S32 S5 S4 S33", FLUSH
14	S 1/4 COR. SEC. 32, FD. BRASS CAP STAMPED "S32, S5 USGLO RESET 1971 LAWD LS 3571" IN CONC.
26	SE COR. SEC. 25, 3" GLO DISK
30	S 1/4 COR. SEC. 31, N 1/4 COR. SEC. 6 FD. 3" GLO BRASS CAP STAMPED "S6 S31", UP 0.7'

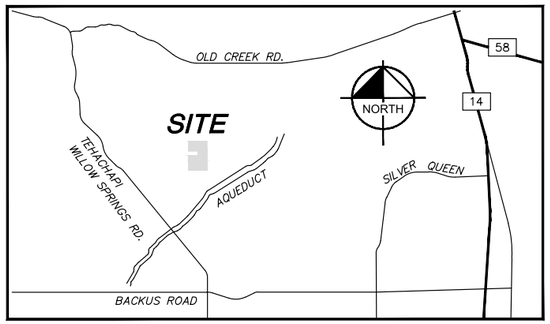
SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TERRA-GEN.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA



VICINITY MAP
NOT TO SCALE

LEGAL DESCRIPTON:

APN: 237-053-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000481021A, DATED AUGUST 7, 2024

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER SECTION 31, TOWNSHIP 11 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND.

EXCEPTING THEREFROM 50% OF ALL OIL, GAS AND MINERALS, BUT WITHOUT THE RIGHT OF ENTRY TO THE SURFACE OF SAID LAND, AS RESERVED BY BERNARD L. O'NEAL, A WIDOWER, BY DEED DATED SEPTEMBER 2, 1969 RECORDED SEPTEMBER 17, 1969.

APN: 237-053-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 220004809344, DATED AUGUST 7, 2024.

THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 31, TOWNSHIP 11 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF. SAID DESCRIPTION IS MADE PURSUANT TO THAT CERTIFICATE OF COMPLIANCE RECORDED MARCH 12, 1987, IN BOOK 5979, PAGE 1999 AS INSTRUMENT NO. 30038, OF OFFICIAL RECORDS.

EXCEPTING THEREFROM 50% OF ALL OIL, GAS AND MINERALS BUT WITHOUT THE RIGHT OF ENTRY TO THE SURFACE OF SAID LAND AS RESERVED IN DEED RECORDED SEPTEMBER 17, 1969, IN BOOK 4318, PAGE 195 AS INSTRUMENT NO. 60898, OF OFFICIAL RECORDS.

APN: 237-053-10 & 16

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 21000481385, DATED AUGUST 7, 2024.

TRACT 2:
PARCEL 1 (APN 237-053-10)
THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 31, TOWNSHIP 11 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM 50% OF ALL OIL, GAS AND MINERAL DEPOSITS LOCATED 500 OR MORE FEET BELOW THE SURFACE OF SAIS LAND WITHOUT SURFACE RIGHT OF ENTRY, AS RESERVED BY BERNARD L. O'NEAL, A WIDOWER, WHO ACQUIRED TITLE AS A MARRIED MAN, AS HIS SOLE AND SEPARATE PROPERTY, BY DEED RECORDED AUGUST 25, 1969, IN BOOK 4311, PAGE 316 AS INSTRUMENT NO. 55927.
FURTHER EXCEPTING THEREFROM ALL OIL, GAS AND MINERAL DEPOSITS LOCATED 500 OR MORE FEET BELOW THE SURFACE OF SAID LAND WITHOUT SURFACE RIGHT OF ENTRY, AS RESERVED BY RAYMOND J. MALONEY ET, UX, IN DEED RECORDED AUGUST 26, 1988, IN BOOK 6157, PAGE 290, KERN COUNTY RECORDS.

PARCEL 1A: (APN 237-053-10)
THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 31, TOWNSHIP 11 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM 50% OF ALL OIL, GAS AND MINERAL DEPOSITS LOCATED 500 OR MORE FEET BELOW THE SURFACE OF SAID LAND WITHOUT SURFACE RIGHT OF ENTRY, AS RESERVED BY BERNARD L. O'NEAL, A WIDOWER, WHO ACQUIRED TITLE AS A MARRIED MAN, AS HIS SOLE AND SEPARATE PROPERTY, BY DEED RECORDED AUGUST 25, 1969, IN BOOK 4311, PAGE 316 AS INSTRUMENT NO. 55927.
FURTHER EXCEPTING THEREFROM 50% OF ALL OIL, GAS AND MINERAL DEPOSITS LOCATED 500 OR MORE BELOW THE SURFACE OF SAID LAND, WITHOUT SURFACE RIGHT OF ENTRY, AS RESERVED BY RAYMOND J. MALONEY ET UX., IN DEED RECORDED AUGUST 26, 1988, IN BOOK 6157, PAGE 290, KERN COUNTY RECORDS.

PARCEL 2: (APN 237-053-16)
THE NORTH ONE-HALF OF THE SOUTHEAST ONE-QUARTER OF SECTION 31, TOWNSHIP 11 NORTH, RANGE 13 WEST, S.B.B.&M., IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 237-053-13

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-94A, DATED AUGUST 7, 2024.

THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 31, TOWNSHIP 11 NORTH, RANGE 13 WEST, S.B.B. M., ACCORDING TO THE OFFICIAL PLAT THEREOF, AS PER THAT CERTAIN CERTIFICATE OF COMPLIANCE RECODED MARCH 12, 1987 IN BOOK 5979 PAGE 1999 OF OFFICIAL RECORDS.

EXCEPTING THEREFROM ONE-HALF OF ALL MINERALS, OIL, GAS AND OTHER HYDROCARBON SUBSTANCE IN, UPON AND UNDER THE ABOVE DESCRIBED PROPERTY AND WHETHER IN PLACE OR REMOVED THEREFROM, OR OTHER CONSIDERATIONS FOR OR IN ANY MANNER GROWING OUT OF THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF SAID SUBSTANCE FORM THE LAND HEREBY CONVEYED OR ANY LEASE OR AGREEMENT RELATING THERETO. THIS RESERVATION AN ALL INCIDENTAL RIGHTS INCLUDED THEREIN SHELL TERMINATE AND END ON JULY 19, 1956, IN THE EVENT THERE IS NOT THEN OR HAS NOT THERETOFORE BEEN ANY PRODUCTION OF MINERALS, OIL, GAS OR HYDROCARBON SUBSTANCES FROM THE LAND ABOVE DESCRIBED, AND THERE IS NOT THEN WORK IN PROGRESS OR A LESE OR OTHER AGREEMENT OUTSTANDING OR IN COURSE OF NEGOTIATION FOR THE EXPLORATION, DISCOVERY DEVELOPMENT OR REMOVAL OF ANY SUCH SUBSTANCES OR PRODUCTS FROM SAID LAND, AND SAID LAND IS, OR HAS BEEN PROVEN TO BE, NEITHER MINERAL BEARING NOR OIL OR GAS PRODUCING LAND; OTHERWISE THIS RESERVATION, AND ALL RIGHTS CONNECTED THEREWITH OR INCIDENTAL THERETO, SHALL CONTINUE IN FULL FORCE AND EFFECT SO LONG AS ANY OF SAID SUBSTANCE OR MINERALS ARE PRODUCED OR CAPABLE OF BEING PRODUCED AND ALL OF THE CONDITIONS ABOVE, MENTIONED FOR A TERMINATION DO NOT EXIST, AND PROVIDED, FLATTER, THAT THE DATE JULY 19, 1956, SHALL BE EXTENDED UNDER THE CONDITIONS NEXT HEREINAFTER MENTIONED FOR THE PERIODS THERE STATED, AS RESERVED BY EDWARD P. ELLIOTT, A MARRIED MAN, AS HIS SOLE AND SEPARATE PROPERTY BY INSTRUMENT RECORDED OCTOBER 28, 1949 IN BOOK 1579 PAGE 388 OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM 50% OF ALL OIL, GAS AND MINERALS, BUT WITHOUT THE RIGHT OF ENTRY TO THE SURFACE OF SAID LAND, AS RESERVED BY BERNARD L. O'NEAL, A WIDOWER, BY INSTRUMENT RECORDED SEPTEMBER 17, 1969 IN BOOK 4318 PAGE 195 OF OFFICIAL RECORDS.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657-452-0200
jeff.lenherr@kimley-horn.com

VESTING TENTATIVE PARCEL MAP NO. 12587

NW COR SEC 31
N89°57'48"E 2789.98'
26
NORTH
GRAPHIC SCALE IN FEET
200 0 100 200 400
SCALE: 1" = 200'
N 1/4 SEC 31
S 1/4 COR. SEC. 30
N 1/4 COR. SEC. 31
FD. BRASS CAP STAMPED
"JES ENGINEERING R.C.E. 33249"
N89°57'51"E 2608.59'
1304.30'
1304.30'
5
NE COR SEC 31
PROPOSED PRIVATE ACCESS "A"
PROPOSED PRIVATE ACCESS "A"
PROPOSED PRIVATE ACCESS "A"
N89°57'05"W 1308.22'
S.F.N.
S.F.N.
S.F.N.
N89°54'34"W 1310.19'
S.F.N.
CNTR. SEC. 31
S.F.N.
N00°04'49"W 2651.94'
N00°04'54"W 2652.50'
W 1/4 SEC 31
2795.09'
N00°11'24"W 5320.67'
2660.20'
2660.47'
1330.24'
1330.10'
665.05'
665.05'
656.08'
656.08'
2624.31'
N89°52'04"W 5419.40'
1312.15'
N00°21'31"W 666.02'
N00°31'36"W 2667.59'
1333.99'
1333.99'
2667.98'
N00°31'36"W 2674.06'
74.1'
E 1/4 SEC 31
6
3
30'
55'
45'
110'
100'
ELECTRICAL TOWER
ELECTRICAL TOWER
OF10
OF13
OF16
OF18
OF19
BF8
BG11
BF3
BH10
BG12
BF4
BH11
BD6
BD7
BD14
BD15
BE10
BE11
BE12
PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)
PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)
PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)
PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)
PARCEL 1
220.38± ACRES
90TH ST. WEST
SEC. 31
T. 11 N.
R. 13 W., S.B.M.
3295
3290
3285
3280
3275
3270
3265
3260
3255
3250
3245
3240
3235
3250
3270
OHE
PP

SEE SHEET 3

VESTING TENTATIVE PARCEL MAP NO. 12587

SEE SHEET 2

N00°04'49"W 2651.94'

W 1/4 SEC 31

3

2795.09'

ELECTRICAL TOWER

2660.20'

663.05'

BD6

30'

BE10

BE11

BD7

30'

N89°52'04"W 5419.40'
2624.31'

E 1/4 SEC 31

N00°13'36"W 2667.69'

6

74.1'

110'

SUBSTATION

70.25'

31.2'

OF17

OF19

100'

100'

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

SEC. 31
T. 11 N.
R. 13 W., S.B.M.

PARCEL 1
220.38± ACRES

OF14

OF15

1330.24'

1333.99'

110'

N00°04'53"W 2652.50'

N00°11'24"W 5320.67'
2660.47'

S.F.N.

N89°47'15"W 2632.28'

S.F.N.

N00°31'52"W 2667.98'

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

4

N89°42'18"W 2800.18'

SW COR SEC 31

30

S 1/4 SEC 31

N89°42'28"W 2640.25'

7

SE COR SEC 31

VESTING TENTATIVE PARCEL MAP NO. 12587

EASEMENTS:

APN: 237-053-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000481021A, DATED AUGUST 7, 2024.

NO EASEMENTS

APN: 237-053-10 & 16

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 21000481385, AUGUST 7, 2024.

OF4 EASEMENT IS NOT PART OF THE PROJECT SITE.

OF6 EASEMENT IS NOT PART OF THE PROJECT SITE.

OF7 EASEMENT IS NOT PART OF THE PROJECT SITE.

(OF10) AN EASEMENT FOR GUY WIRES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION AS SET FORTH IN A DOCUMENT RECORDED JUNE 16, 1958 AS INSTRUMENT NO. 32594 IN BOOK 2965, PAGE 85 OF OFFICIAL RECORDS, AFFECTS AS DESCRIBED THEREIN. NO REPRESENTATION IS MADE AS TO THE CURRENT OWNERSHIP OF SAID EASEMENT. THE TERMS, CONDITIONS AND PROVISIONS AS CONTAINED IN THE DOCUMENT ENTITLED "CONSENT AGREEMENT", RECORDED JANUARY 18, 1991 AS INSTRUMENT NO. 91-81658; FEBRUARY 19, 1991 AS INSTRUMENT NO. 91-20241 IN BOOK 6488, PAGE 2325 AND MAY 16, 1991 AS INSTRUMENT NO. 91-61429 IN BOOK 6522, PAGE 1888, ALL OF OFFICIAL RECORDS.

(OF13) AN EASEMENT FOR POLE LINES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SAGEBRUSH AS SET FORTH IN A DOCUMENT RECORDED JULY 21, 1989 AS INSTRUMENT NO. 89-10106 IN BOOK 6267, PAGE 1260 OF OFFICIAL RECORDS, AFFECTS THE EAST 110 FEET. NO REPRESENTATION IS MADE AS TO THE CURRENT OWNERSHIP OF SAID EASEMENT.

(OF14) AN EASEMENT FOR POLE LINES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SAGEBRUSH AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 10, 1989 AS INSTRUMENT NO. 80-58996, IN BOOK 6301, PAGE 320, OF OFFICIAL RECORDS, AFFECTS THE EAST 10'. NO REPRESENTATION IS MADE AS TO THE PRESENT OWNERSHIP OF SAID EASEMENT.

(OF15) AN EASEMENT FOR POWER LINES WITH POLES AND WIRES AND APPURTENANCES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF TOYOWEST II, A CALIFORNIA GENERAL PARTNERSHIP AS SET FORTH IN A DOCUMENT RECORDED JANUARY 8, 1993 AS INSTRUMENT NO. 93-3628, IN BOOK 6787, PAGE 1725, OF OFFICIAL RECORDS, AFFECTS SAID LAND. NO REPRESENTATION IS MADE AS TO THE PRESENT OWNERSHIP OF SAID EASEMENT.

(OF16) AN EASEMENT FOR ERECTING, CONSTRUCTING, RE-CONSTRUCTING, REPLACING, REPAIRING, CHANGING, EXPANDING, UPGRADING, RELOCATING, ENLARGING, ALTERING, IMPROVING, ADDING TO, USING, REMOVING, INSPECTING AND MAINTAINING AT ANY TIME AND FROM TIME TO TIME A CERTAIN POWER LINE FOR THE TRANSMISSION OF ELECTRICITY AND A CERTAIN LINE FOR THE TRANSMISSION OF INFORMATION AND COMMUNICATIONS BOTH OVERHEAD AND UNDERGROUND, AND ALL NECESSARY, CONVENIENT OR DESIRABLE TOWERS, POLES, STRUCTURES INSULATORS AND CROSSARMS, PLACED ON SAID STRUCTURES, FOUNDATIONS AND FOOTINGS, WIRES, CABLES, INCLUDING GROUND WIRES AND ANCHORS, COMMUNICATION CIRCUITS, CONDUITS, VAULTS, PUMPS AND BRACES AND OTHER FIXTURES, APPLIANCES AND APPURTENANCES ASSOCIATED THEREWITH OR SUSPENDED THEREFROM, AND ANY AND ALL ASSOCIATED ACTIVITIES, INCLUDING THE MAKING OF ALL STUDIES AND SURVEYS ASSOCIATED THEREWITH, TOGETHER WITHY THE RIGHT OF INGRESS AND EGRESS AND RIGHTS INCIDENTAL THERETO IN FAVOR OF TOYOWEST II, A CALIFORNIA GENERAL PARTNERSHIP AS SET FORTH IN A DOCUMENT RECORDED JANUARY 8, 1993 AS INSTRUMENT NO. 93-3629 IN BOOK 6787, PAGE 1730 OF OFFICIAL RECORDS, AFFECTS SAID LAND. NO REPRESENTATION IS MADE AS TO THE CURRENT OWNERSHIP OF SAID EASEMENT.

(OF17) AN EASEMENT FOR PUBLIC UTILITIES EASEMENT AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, ITS SUCCESSORS AND ASSIGNS AS SET FORTH IN A DOCUMENT RECORDED MARCH 5, 2010 AS INSTRUMENT NO. 0210029752, OF OFFICIAL RECORDS, AFFECTS SAID LAND. REFERENCE IS MADE TO SAID DOCUMENT FOR FULL PARTICULARS.

(OF18) AN EASEMENT FOR PUBLIC UTILITY AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION AS SET FORTH IN A DOCUMENT RECORDED MARCH 5, 2010 AS INSTRUMENT NO. 0210029766 OF OFFICIAL RECORDS, AFFECTS SAID LAND.

(OF19) AN EASEMENT AFFECTING SAID LAND AND FOR THE PURPOSES STATED HEREIN, AND INCIDENTAL PURPOSES, CONDEMNED BY FINAL DECREE IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, FOR TRANSMISSION LINE, CASE NO. S-1500-CV-265431, RECORDED AUGUST 10, 2010 AS INSTRUMENT NO. 0210105737 OF OFFICIAL RECORDS, WHICH AFFECTS SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.

OF21 THE MATTERS CONTAINED IN AN INSTRUMENT ENTITLED "MEMORANDUM OF AGREEMENT" DATED DECEMBER 1, 2016, UPON THE TERMS THEREIN PROVIDED RECORDED DECEMBER 22, 2016 AS INSTRUMENT NO. 0216184261 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 237-053-13

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-94, DATED OCTOBER 14, 2022.

(BD6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MAY 28,1986 IN BOOK 5877 PAGE 557 OF OFFICIAL RECORDS. PUBLIC ROAD TO BE VACATED

(BD7) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY AND PACIFIC BELL, AS SET FORTH IN A DOCUMENT RECORDED MAY 28, 1986 IN BOOK 5877 PAGE 567 OF OFFICIAL RECORDS.

BD8 MATTERS CONTAINED IN DOCUMENT ENTITLED CERTIFICATE OF COMPLIANCE BY DEPARTMENT OF PLANNING AND DEVELOPMENT SERVICES RECORDED MARCH 12, 1987 IN BOOK 5979 PAGE 1999 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

(BD14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR TRANSMISSION LINE, AS SET FORTH IN A DOCUMENT R ECORDED JANUARY 28, 2010 AS INSTRUMENT NO. 0210010080 OF OFFICIAL RECORDS.

(BD15) MATTERS CONTAINED IN DOCUMENT ENTITLED JUDGMENT AND FINAL ORDER OF CONDEMNATION RECORDED JANUARY 28, 2010 AS INSTRUMENT NO. 0210010080 OF OFFICIAL RECORDS.

APN: 237-053-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480934A, DATED AUGUST 7, 2024.

(BE10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MAY 28, 1986, IN BOOK 5877, PAGE 559, OF OFFICIAL RECORDS. PUBLIC ROAD TO BE VACATED

(BE11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AND PACIFIC BELL, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MAY 28, 1986, IN BOOK 5877, PAGE 566, OF OFFICIAL RECORDS.

(BE12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 16, 2009 AS INSTRUMENT NO. 2009-6775 OF OFFICIAL RECORDS.

PROPOSED EASEMENT:

APN: 237-053-09 & 10

(A) PROPOSED 30 FEET PRIVATE ACCESS EASEMENT

ADJOINING PROPERTY EASEMENTS:

APN: 237-054-09 & 10

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465, DATED JULY 13, 2022.

(BF3) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS AND ROAD PURPOSES TO THE COUNTY OF KERN, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 15, 1978, IN BOOK 5132, PAGE 698 AS INSTRUMENT NO. 015412 OF OFFICIAL RECORDS.

(BF4) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS, INGRESS AND ROAD PURPOSES, RECORDED AUGUST 15, 1978, IN BOOK 5132, PAGE 698 AS INSTRUMENT NO. 015412 OF OFFICIAL RECORDS. RESOLUTION PROVIDES THE ACCEPTANCE OF ROAD, RECORDED APRIL 7, 2011 AS INSTRUMENT NO. 2011045919, OF OFFICIAL RECORDS. PUBLIC ROAD TO BE VACATED

(BF8) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES EASEMENT TO SOUTHERN CALIFORNIA EDISON COMPANY, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 26, 2010 AS INSTRUMENT NO. 0210010080 OF OFFICIAL RECORDS. SAID EASEMENTS DISCLOSED BY A FINAL ORDER OF CONDEMNATION AND SUBJECT TO CONDITIONS AND PROVISIONS AS THEREIN PROVIDED.

APN: 237-054-11

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480302, DATED APRIL 1, 2022.

BG10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED OCTOBER 16, 1895 IN BOOK 9, PAGE 207, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(BG11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS AND ROAD PURPOSES TO THE COUNTY OF KERN, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 15, 1978 AS INSTRUMENT NO. 015412 IN BOOK 5132, PAGE 698, OF OFFICIAL RECORDS. PUBLIC ROAD TO BE VACATED

(BG12) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS, EGRESS AND ROAD PURPOSES, RECORDED AUGUST 15, 1978 AS INSTRUMENT NO. 015412, IN BOOK 5132, PAGE 698, OF OFFICIAL RECORDS. PUBLIC ROAD TO BE VACATED

APN: 237-054-12

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465, DATED APRIL 25, 2022.

BH9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED OCTOBER 16, 1895 IN BOOK 7 PAGE 207 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(BH10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS AND ROAD PURPOSES TO THE COUNTY OF KERN, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 15, 1978 AS INSTRUMENT NO. 015412 IN BOOK 5132 PAGE 698 OF OFFICIAL RECORDS. PUBLIC ROAD TO BE VACATED

(BH11) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS AND EGRESS AND ROAD PURPOSES, RECORDED AUGUST 15, 1978 AS INSTRUMENT NO. 015412 IN BOOK 5132 PAGE 698 OF OFFICIAL RECORDS.
SAID OFFER WAS ACCEPTED BY RESOLUTION RECORDED APRIL 7, 2011 AS INSTRUMENT NO. 0211045919 OF OFFICIAL RECORDS. PUBLIC ROAD TO BE VACATED

VESTING TENTATIVE PARCEL MAP NO. 12589

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION OF THE NORTHEAST 1/4 OF SECTION 35, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 21000481397, DATED AUGUST 8, 2024, REPORT NO. 22000480465–29A, DATED AUGUST 8, 2024, REPORT NO. 22000480465–1A, DATED AUGUST 8, 2024 AND REPORT NO. 22000480465–40A, DATED AUGUST 8, 2024.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE FOUR (4) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.

BASIS OF BEARINGS:

ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

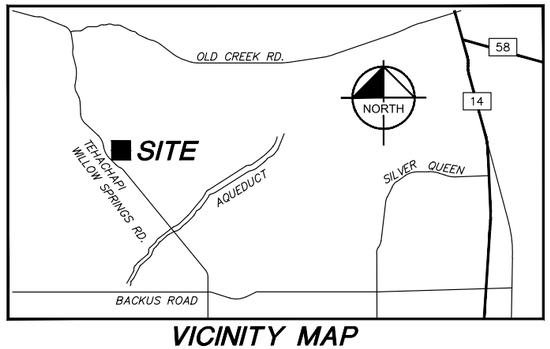
THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO.'S 06029C3275E WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

SURVEY NOTE:

I, JEFFREY J. LENHERR, HEREBY STATE THAT THERE ARE NO STRUCTURES WITHIN THIS MAP OR WITHIN 150 FEET OF THE MAPS BOUNDARY.

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	237–093–46 THROUGH 49
ACCESS TO PARCELS:	TEHACHAPI WILLOW SPRINGS ROAD
EXISTING NUMBER OF PARCELS:	4
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	A WE, E(20) RS
EXISTING GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE–MIN. 20 ACRE PARCEL SIZE)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A, A WE
PROPOSED GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE–MIN. 20 ACRE PARCEL SIZE)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL 'A' AREA:	159.83 ACRES
TOTAL PROJECT AREA:	159.83 ACRES



VICINITY MAP
NOT TO SCALE

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

[2] SE COR. SEC. 35, SW COR. SEC. 36, CALCULATED POSITION PER BOOK 26 OF SURVEYS, PAGE 153

[12] FD. 3" GLO BRASS DISK

[21] SE COR. SEC. 26, NE COR. SEC. 35, 2.5" BRASS CAP STAMPED "S26 S25 S35 S36" AND "RE 6549"

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TERRA–GEN.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA

LEGAL DESCRIPTON:

APN: 237-093-46

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 21000481397, DATED AUGUST 8, 2024.

PARCEL 1 IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS SHOWN ON PARCEL MAP NO. 3816, FILED FEBRUARY 25, 1971, IN BOOK 17, PAGE 168 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 237-093-47

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–29A, DATED AUGUST 8, 2024.

PARCEL 2 OF PARCEL MAP NO. 3816, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP RECORDED FEBRUARY 25, 1977 IN BOOK 17, PAGE 168 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF KERN COUNTY.

APN: 237-093-48

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–1A, DATED AUGUST 8, 2024.

PARCEL 3 OF PARCEL MAP 3816, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP RECORDED FEBRUARY 25, 1978, IN BOOK 17, PAGE 168 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 237-093-49

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–40A, DATED AUGUST 8, 2024.

PARCEL 4 IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS SHOWN ON PARCEL MAP NO. 3816, FILED FEBRUARY 25, 1977 IN BOOK 17, PAGE 168, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF KERN COUNTY.

EXCEPT ALL THAT PORTION OF SAID LAND DESCRIBED AS FOLLOWS:
BEGINNING AT THE SOUTHWEST CORNER OF SAID PARCEL 4 OF PARCEL MAP NO. 3816;
THENCE (1) NORTH 0° 02' 35" EAST ALONG THE WEST LINE OF SAID NORTHEAST QUARTER, A DISTANCE OF 15.635 FEET;
THENCE (2) SOUTH 43° 52' 28" EAST, A DISTANCE OF 21.942 FEET TO THE SOUTH LINE OF SAID NORTHEAST QUARTER;
THENCE (3) NORTH 89° 18' 50" WEST, ALONG SAID SOUTH LINE, A DISTANCE OF 15.22 FEET TO THE POINT OF BEGINNING, AS CONVEYED TO THE COUNTY OF KERN BY DEED RECORDED FEBRUARY 28, 1974 IN BOOK 4828, PAGE 1266, OF OFFICIAL RECORDS.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657–452–0200
jeff.lenherr@kimley–horn.com

VESTING TENTATIVE PARCEL MAP NO. 12589

SEC. 26, T. 11 N., R. 14 W., S.B.M.

NW COR SEC 35

N89°33'56"W 2637.75'

SW COR. SEC. 26
NW COR. SEC. 35
FD. 2.5" BRASS CAP
STAMPED "S27 S26
S34 S35 RE 6549"
IN ROCK MOUND

S 1/4 COR. SEC. 26
N 1/4 COR. SEC. 35
FD. 2.5" BRASS CAP
STAMPED "S26 S35 KCS"

N89°34'46"W 2638.46'

NE COR SEC 35

PUBLIC ROAD
(PROPOSED FOR ABANDONMENT
THROUGH THIS MAP)

PUBLIC ROAD
(PROPOSED FOR ABANDONMENT
THROUGH THIS MAP)

PARCEL A
159.83± ACRES

PARCEL 1

PARCEL 2

P.M. NO. 3816
P.M.B. 17 / 168

PARCEL 4

PARCEL 3

PUBLIC ROAD
(PROPOSED FOR ABANDONMENT
THROUGH THIS MAP)

PUBLIC ROAD
(PROPOSED FOR ABANDONMENT
THROUGH THIS MAP)

E 1/4 COR. SEC. 35
W 1/4 COR. SEC. 36
FD. BRASS CAP STAMPED
"S35 S36 KCS", FLUSH

SEC. 35, T. 11 N.
R. 14 W., S.B.M.

W 1/4 COR. SEC. 35
FD. 2.5" BRASS CAP STAMPED
"34 35 KCS"

W 1/4 SEC 35

CNTR. SEC. 35
S.F.N.

N43°52'19"W
21.94'

2639.78'

2640.82'
N89°18'38"W 5280.60'

2625.60'

N89°33'10"W 2642.12'

E 1/4 SEC 35

S 1/4 COR. SEC. 35
FD. 3" U.S.G.L.O. BRASS CAP

N89°34'32"W 2646.84'

SW COR SEC 35

SE COR SEC 35

N00°05'16"E 2619.85'

N00°11'59"E 2667.20'

N00°02'44"E 5286.63'
2655.02'

N00°00'55"E 2643.89'

N00°00'12"W 2641.01'

N.A.P.

N.A.P.

NORTH

GRAPHIC SCALE IN FEET
200 0 100 200 400

SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12589

EASEMENTS:

APN: 237-093-46

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 21000481397, DATED AUGUST 8, 2024.

OG3 AN EASEMENT AFFECTING SAID LAND FOR THE PURPOSES STATED HEREIN AND INCIDENTAL PURPOSES, IN FAVOR OF THE PUBLIC, FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THEN IN USE, DISCLOSED BY DEED FROM SOUTHERN PACIFIC RAILROAD COMPANY, A CORPORATION, RECORDED MARCH 22, 1912, IN BOOK 271, PAGE 1 OF DEEDS. (EASEMENT IS BLANKET IN NATURE). (PUBLIC ROAD TO BE VACATED)

OG4 AN EASEMENT FOR PUBLIC ROAD AND UTILITY PURPOSES AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT RECORDED IN BOOK 2510, PAGE 562, OF OFFICIAL RECORDS, WHICH AFFECTS SAID LAND. REFERENCE IS MADE TO SAID DOCUMENT FOR FULL PARTICULARS.

OG6 AN EASEMENT FOR INGRESS, EGRESS AND ROAD PURPOSES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF PUBLIC IN GENERAL AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 16, 1976, IN BOOK 4996, PAGE 1343, AS INSTRUMENT NO. 49425, OF OFFICIAL RECORDS, AFFECTS THE LAND. (PORTION OF PUBLIC ROAD TO BE VACATED)

OG7 AN IRREVOCABLE OFFER TO DEDICATE REAL PROPERTY RECORDED DECEMBER 16, 1976, IN BOOK 4996, PAGE 1343, AS INSTRUMENT NO. 49425, OF OFFICIAL RECORDS, WHEREIN A PORTION OF SAID LAND WAS OFFERED FOR DEDICATION TO PUBLIC USE FOR INGRESS, EGRESS AND ROAD PURPOSES, WHICH AFFECTS SAID LAND. (PORTION OF PUBLIC ROAD TO BE VACATED)

OG8 AN EASEMENT OR OTHER PROVISIONS FOR THE PURPOSE OF 110TH STREET WEST AND RIGHTS INCIDENTAL THERETO, AS SHOWN ON THE RECORDED MAP OF PARCEL MAP NO. 3816, WHICH AFFECTS THE LAND.

APN: 237-093-47

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 222000480465-29A, DATED AUGUST 8, 2024.

AC9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROADS TO THE PUBLIC IN GENERAL AND COUNTY OF KERN, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 16, 1976 IN BOOK 4996, PAGE 1343 OF OFFICIAL RECORDS. (PORTION OF PUBLIC ROAD TO BE VACATED)

AC10 MATTERS CONTAINED IN PARCEL MAP NO. 3816, BOOK 17, PAGE 168 OF PARCEL MAPS.

APN: 237-093-48

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-1A, DATED AUGUST 8, 2024.

AD10 A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL COUNTY ROADS THERETOFORE LAWFULLY ESTABLISHED AND THEN IN PUBLIC USE UPON AND ACROSS THE LAND HEREIN DESCRIBED, AS EXCEPTED IN DEED FROM SOUTHERN PACIFIC RAILROAD COMPANY, RECORDED MARCH 22, 1912, IN BOOK 271, PAGE 1 OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

AD11 AN EASEMENT FOR RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE AND RIGHTS INCIDENTAL THERETO IN FAVOR OF THE PUBLIC IN GENERAL AS SET FORTH IN A DOCUMENT RECORDED JUNE 27, 1925, IN BOOK 84, PAGE 88, OF OFFICIAL RECORDS, AFFECTS THE LAND. REFERENCE IS MADE TO SAID DOCUMENT FOR FULL PARTICULARS. (EASEMENT IS BLANKET IN NATURE). (PUBLIC ROAD TO BE VACATED)

AD12 AN EASEMENT FOR PUBLIC ROAD AND UTILITY PURPOSES AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT, RECORDED IN BOOK 2510, PAGE 562, OF OFFICIAL RECORDS, WHICH AFFECTS SAID LAND. REFERENCE IS MADE TO SAID DOCUMENT FOR FULL PARTICULARS.

AD14 AN EASEMENT FOR INGRESS, EGRESS AND ROAD PURPOSES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF PUBLIC IN GENERAL AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 16, 1976 IN BOOK 4996, PAGE 1343, AS INSTRUMENT/FILE NO. 49425, OF OFFICIAL RECORDS, AFFECTS THE LAND. (PORTION OF PUBLIC ROAD TO BE VACATED)

AD15 AN IRREVOCABLE OFFER TO DEDICATE REAL PROPERTY RECORDED DECEMBER 16, 1976 IN BOOK 4996, PAGE 1343, AS INSTRUMENT/FILE NO. 49425 OFFICIAL RECORDS WHEREIN A PORTION OF SAID LAND WAS OFFERED FOR DEDICATION TO PUBLIC USE FOR INGRESS, EGRESS AND ROAD PURPOSES, WHICH AFFECTS SAID LAND. (PORTION OF PUBLIC ROAD TO BE VACATED)

AD16 AN EASEMENT OR OTHER PROVISIONS FOR THE PURPOSE OF 110TH STREET WEST AND RIGHTS INCIDENTAL THERETO AS SHOWN ON THE RECORDED MAP OF PARCEL MAP NO. 3816, WHICH AFFECTS THE LAND.

AD17 THE MATTERS CONTAINED IN AN INSTRUMENT ENTITLED "MEMORANDUM OF WIND ENERGY SITE LEASE AND RENEWABLE ENERGY DEVELOPMENT AGREEMENT", BY AND BETWEEN BILL BOATMAN, AN UNMARRIED MAN AND ALTA WINDPOWER DEVELOPMENT, LLC, A DELAWARE LIMITED LIABILITY COMPANY UPON THE TERMS THEREIN PROVIDED RECORDED MAY 5, 2010 AS INSTRUMENT/FILE NO. 0210059066, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

AD18 MATTERS CONTAINED IN DOCUMENT ENTITLED "EASEMENT DEED AND PROJECT NEIGHBOR AGREEMENT" BY AND BETWEEN CAMCART HOLDINGS, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY AND ALTA WINDPOWER DEVELOPMENT, LLC, A DELAWARE LIMITED LIABILITY COMPANY RECORDED JULY 12, 2013 AS INSTRUMENT NO. 0213098116 OF OFFICIAL RECORDS.(EASEMENT IS BLANKET IN NATURE)

APN: 237-093-49

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-40A, DATED AUGUST 8, 2024.

AE9 ANY RESERVOIR SITES AND RIGHT OF WAY FOR WATER DITCHES, AQUEDUCTS OR PIPE LINES IN AND OVER SAID LAND, AS SET FORTH IN DEED TO THE OAK CREEK LAND AND WATER CO., A CORPORATION, RECORDED APRIL 14, 1892 IN BOOK 41, PAGE 188, OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

AE10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THEN IN USE TO THE PUBLIC, AS SET FORTH IN A DOCUMENT RECORDED MARCH 22, 1912 IN BOOK 271, PAGE 1, OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

AE11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO CHARLES P. ERICKSON, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 2, 1955 IN BOOK 2510, PAGE 562, OF OFFICIAL RECORDS.

AE12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 16, 1976 IN BOOK 4996, PAGE 1343, OF OFFICIAL RECORDS.
AFFECTS THE SOUTH 30 FEET AND THE WEST 30 FEET OF SAD LAND EXCEPT THAT PORTION GRANTED TO THE COUNTY OF KERN, BY DEED RECORDED FEBRUARY 28, 1974 IN BOOK 4828, PAGE 1266, OF OFFICIAL RECORDS. (PORTION OF PUBLIC ROAD TO BE VACATED)

AE13 MATTERS AS SHOWN ON THE PARCEL MAP NO. 3816 FILED IN BOOK 17, PAGE 168, OF MAPS, TOGETHER WITH ANY PROVISIONS AND RECITALS CONTAINED THEREIN.

ADJOINING PROPERTY EASEMENTS:

APN: 237-370-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480504, DATED JUNE 30, 2023.

B12 THE EFFECT OF AN EASEMENT FOR PUBLIC ROAD AND UTILITIES, AFFECTING A PORTION OF SAID LAND, AS DISCLOSED BY DEED RECORDED JULY 31, 2000 AS INSTRUMENT NO. 2000-93167 OF OFFICIAL RECORDS.

APN: 237-370-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-68, DATED MAY 18, 2023.

E9 AN EASEMENT FOR PUBLIC ROAD AND UTILITY PURPOSES AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT RECORDED JULY 18, 1969 IN BOOK 4299, PAGE 981, OF OFFICIAL RECORDS, AFFECTS SAID LAND. (PUBLIC ROAD TO BE VACATED)

APN: 237-380-01, 02, 03 & 04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-44, DATED JUNE 21, 2022.

M12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES RESERVED BY E.C. JENSEN AND ELSIE T. JENSEN, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 3, 1965 IN BOOK 3810, PAGE 618 OF OFFICIAL RECORDS; AFFECTING THE WESTERLY 30 FEET OF PARCELS 1 AND 3. (PUBLIC ROAD TO BE VACATED)

M13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES RESERVED BY DONALD F. MASON, AS SET FORTH IN A DOCUMENT RECORDED MAY 13, 1969 IN BOOK 4278, PAGE 13 OF OFFICIAL RECORDS; AFFECTING THE WESTERLY 30 FEET OF PARCELS 1 AND 3. (PUBLIC ROAD TO BE VACATED)

M14 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES RESERVED BY WALTER J. RIVERS, AS SET FORTH IN A DOCUMENT RECORDED MAY 13, 1969 IN BOOK 4278, PAGE 14 OF OFFICIAL RECORDS; AFFECTING THE WESTERLY 30 FEET OF PARCELS 1 AND 3. (PUBLIC ROAD TO BE VACATED)

APN: 237-380-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-52A, DATED AUGUST 15, 2024.

N11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PUBLIC PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 3, 1965, IN BOOK 3810, PAGE 618, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

N12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, AS SET FORTH IN A DOCUMENT RECORDED MAY 13, 1969, IN BOOK 4278, PAGE 13, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

N13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO WALTER J. RIVERS, AS SET FORTH IN A DOCUMENT RECORDED MAY 13, 1969, IN BOOK 4278, PAGE 14, OF OFFICIAL RECORDS; AFFECTING SAID LAND. (PUBLIC ROAD TO BE VACATED)

APN: 237-380-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480370A, DATED AUGUST 15, 2024.

Q10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 14, 1958 IN BOOK 2993 PAGE 216 OF OFFICIAL RECORDS.

APN: 237-380-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480004, DATED DECEMBER 28, 2022.

P20 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PUBLIC PURPOSES TO E.C. JENSEN AND ELSIE T. JENSEN, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 3, 1965 IN BOOK 3810 PAGE 618 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

P21 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PUBLIC PURPOSES TO BE USED IN COMMON WITH OTHERS TO DONALD F. MASON, AS SET FORTH IN A DOCUMENT RECORDED MAY 13, 1969 IN BOOK 4278 PAGE 13 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

P22 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PUBLIC PURPOSES TO BE USED IN COMMON WITH OTHERS TO WALTER J. RIVERS, AS SET FORTH IN A DOCUMENT RECORDED MAY 13, 1969 IN BOOK 4278 PAGE 14 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 237-380-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 220004805555A, DATED AUGUST 15, 2024.

Q5 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 3, 1965 IN BOOK 3810 PAGE 618 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

VESTING TENTATIVE PARCEL MAP NO. 12590

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION OF THE EAST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 36, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 22000480331, DATED PROFORMA, REPORT NO. 22000480465–75, DATED SEPTEMBER 29, 2022, REPORT NO. 22000480465–141 DATED DECEMBER 27, 2022, REPORT NO. 22000480465–16, DATED MAY 12, 2022, REPORT NO. 22000480465–73, DATED AUGUST 4, 2022 AND REPORT NO. 22000480465–25, DATED JUNE 8, 2022.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE SIX (6) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.

BASIS OF BEARINGS:

ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

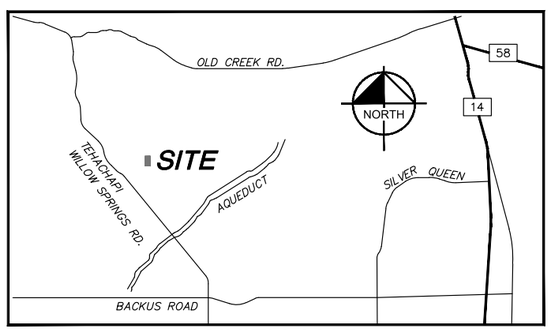
THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO.'S 06029C3275E WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

SURVEY NOTE:

I, JEFFREY J. LENHERR, HEREBY STATE THAT THERE ARE NO STRUCTURES WITHIN THIS MAP OR WITHIN 150 FEET OF THE MAPS BOUNDARY.

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	237–093–15, 16, 51, 53, 55, 56
ACCESS TO PARCELS:	PROPOSED PUBLIC ACCESS EASEMENTS SHOWN HEREON
EXISTING NUMBER OF PARCELS:	6
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	E(20) RS
EXISTING GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE–MIN. 20 ACRE PARCEL SIZE)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A
PROPOSED GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE–MIN. 20 ACRE PARCEL SIZE)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL "A" AREA:	20.05 ACRES
TOTAL PROJECT AREA:	20.05 ACRES



VICINITY MAP
NOT TO SCALE

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

2	SE COR. SEC. 35, SW COR. SEC. 36, CALCULATED POSITION PER BOOK 26 OF SURVEYS, PAGE 153
3	E 1/4 COR. SEC. 36, W 1/4 COR. SEC. 31, FD. 3" GLO BRASS CAP STAMPED "S31 S36", UP 0.60'
4	SW COR. SEC. 31, SE COR. SEC. 36, FD. IRON PIPE W/BRASS CAP "KCS", DN. 2.5'
21	SE COR. SEC. 26, NE COR. SEC. 35, 2.5" BRASS CAP STAMPED "S26 S25 S35 S36" AND "RE 6549"
25	S 1/4 COR. SEC. 25, N 1/4 COR. SEC. 36, FD. BRASS CAP STAMPED "JES ENGINEERING R.C.E. 33249"
27	E 1/4 COR. SEC. 35, W 1/4 COR. SEC. 36, FD. BRASS CAP STAMPED "S35 S36 KCS", FLUSH

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TERRA–GEN.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA

LEGAL DESCRIPTON:

APN: 237-093-51

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–73, DATED AUGUST 4, 2022.

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.
EXCEPT 1/2 OF OIL, GAS, MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR UNDER THAT PORTION OF SAID LAND LYING BELOW A DEPTH OF 500 FEET FROM THE SURFACE THEREOF, WITHOUT HOWEVER, ANY RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS RESERVED BY MARCELLE MATHERON BOREL, BLANCHE M. VERNON AND RICHARD CAVINS MATHERON, IN DEED RECORDED NOVEMBER 9, 1966 IN BOOK 3994 PAGE 331 OF OFFICIAL RECORDS.

APN: 237-093-53

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–75, DATED SEPTEMBER 29, 2022.

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.
EXCEPT 1/2 OF OIL, GAS, MINERALS AND OTHER HYDROCARBONS SUBSTANCES IN OR UNDER THAT PORTION OF SAID LAND, LYING BELOW A DEPTH OF 500 FEET FROM THE SURFACE THEREOF, WITHOUT HOWEVER, ANY RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS RESERVED BY MARCELLE MATHERON BOREL, BLANCHE M. VERNON AND RICHARD CAVINS MATHERON, IN DEED RECORDED NOVEMBER 9, 1966, IN BOOK 3994, PAGE 331, OF OFFICIAL RECORDS.

APN: 237-093-55

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–141 DATED DECEMBER 27, 2022.

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.
EXCEPT 1/2 OF OIL, GAS, MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR UNDER THAT PORTION OF SAID LAND LYING BELOW A DEPTH OF 500 FEET FROM THE SURFACE THEREOF, WITHOUT, HOWEVER, ANY RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS RESERVED BY MARCELLE MATHERON BOREL, BLANCHE M. VERNON AND RICHARD CAVINS HATHERON IN DEED RECORDED NOVEMBER 9, 1966 IN BOOK 3994 PAGE 331 OF OFFICIAL RECORDS.

APN: 237-093-56

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–16, DATED MAY 12, 2022.

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL MAP THEREOF.
EXCEPT ONE–HALF OF OIL, GAS, MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR UNDER THAT PORTION OF SAID LAND LYING BELOW A DEPTH OF 500 FEET FROM THE SURFACE THEREOF, WITHOUT, HOWEVER, ANY RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS RESERVED IN DEED RECORDED NOVEMBER 9, 1966 IN BOOK 3994 PAGE 331 OF OFFICIAL RECORDS.

APN: 237-093-15

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–25, DATED JUNE 8, 2022.

PARCEL 1:
THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA.

EXCEPT ONE HALF OF OIL, GAS MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR UNDER THAT PORTION OF SAID LAND LYING BELOW A DEPTH OF 500 FEET FROM THE SURFACE THEREOF, WITHOUT, HOWEVER, ANY RIGHT TO ENTER UPON THE SURFACE OF SAID
LAND, AS RESERVED IN DEED RECORDED IN BOOK 3994, PAGE 331 OF OFFICIAL RECORDS.

PARCEL 2:
AN EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS OVER THE EASTERLY 15 FEET OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 36.

PARCEL 3:
AN EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS OVER THE SOUTH 15 FEET OF THE NORTH HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 36.
EXCEPT THAT PORTION THEREOF INCLUDED IN PARCEL 1 ABOVE DESCRIBED.

APN: 237-093-16

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331, DATED PROFORMA.

PARCEL 6:
THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA.

EXCEPT ONE HALF OF OIL, GAS MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR UNDER THAT PORTION OF SAID LAND LYING BELOW A DEPTH OF 500 FEET FROM THE SURFACE THEREOF; WITHOUT, HOWEVER, ANY RIGHT TO ENTER UPON THE SURFACE OF SAID
LAND, AS RESERVED IN DEED RECORDED IN BOOK 3994, PAGE 331 OF OFFICIAL RECORDS.

PARCEL 6A:
AN EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS, OVER THE SOUTH 15 FEET OF THE NORTH HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 36, AND OVER THE NORTH 15 FEET OF THE SOUTH HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA.

EXCEPTING THEREFROM THAT PORTION INCLUDED IN PARCEL 6.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657–452–0200
jeff.lenherr@kimley–horn.com

VESTING TENTATIVE PARCEL MAP NO. 12590

NW COR SEC 36

SEC. 25, T. 11 N., R. 14 W., S.B.M.

N89°43'24"W 2637.78'

N 1/4 SEC 36

N89°43'27"W 2637.85'

NE COR SEC 36

SE COR. SEC. 25, 3" GLO DISK

SE COR. SEC. 25, 3" GLO DISK

21

25

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

N00°00'12"W 2641.01'

661.99'

1323.98'

661.99'

2647.96'

N00°02'25"W 5296.15'

N89°40'50"W 659.66'

AN4

330.99'

15'

661.99'

N00°01'52"W 661.74'

AO11

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

AO9 AP4 AM9 AO10 AB27 AK10

AP4 AO9 AM9 AB26 AK9 AO10

15'

330.89'

AO11

AP5

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

100'

230'

330.87'

PARCEL 'A'
20.05 ACRES

AB28

AB27 AK10

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

AK11

N00°01'52"W 661.74'

330.87'

330.99'

AK10 AB27

W 1/4 SEC 36

27

659.88'

659.88'

2639.52'

N89°38'16"W 5279.25'

659.88'

INSTRUMENT NO. 0210031697
RECORDED MARCH 10, 2010

659.88'

CNTR. SEC. 36, S.F.N.

3

E 1/4 SEC 36

2639.73'

N00°04'45"W 2651.94'

SEC. 31, T. 11 N., R. 13 W., S.B.M.

SEC. 36, T. 11 N., R. 14 W., S.B.M.

N00°00'55"E 2643.88'

SW COR SEC 36

2

N89°32'40"W 2642.12'

2648.19'

28

S 1/4 SEC 36

N89°32'41"W 2641.66'

4

N00°04'53"W 2652.59'

SE COR SEC 36

K:\ORA_SURV\2023\BOUNDARY\KERN COUNTY - DISCOVERY ALTA - 194388004\MAPPING\DWG\TPM\AREA A - MAP A2\194388004TPM-A2.DWG

VESTING TENTATIVE PARCEL MAP NO. 12590

EASEMENTS:

APN: 237-093-15

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-25, DATED JUNE 8, 2022.

AK9 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS, RESERVED BY STEVEN C. BASS, A MARRIED MAN AS HIS SOLE AND SEPARATE PROPERTY, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 12, 1970 IN BOOK 4354, PAGE 12, OF OFFICIAL RECORDS.

AK10 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 19, 1974 IN BOOK 4856, PAGE 102, OF OFFICIAL RECORDS; AFFECTING THE EASTERLY 15 FEET OF SAID LAND.

AK11 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 10, 2010 AS INSTRUMENT NO. 2010-31696, OF OFFICIAL RECORDS; AFFECTING SAID LAND.

APN: 237-093-16

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331, DATED PROFORMA.

AB26 — AN EASEMENT OVER SAID LAND FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS AND INCIDENTAL PURPOSES, AS RESERVED BY STEVEN C. BASS, A MARRIED MAN AS HIS SOLE AND SEPARATE PROPERTY, IN DEED RECORDED JANUARY 12, 1970, IN BOOK 4354 PAGE 12, OF OFFICIAL RECORDS. AFFECTS THE NORTH 15 FEET OF SAID LAND. NO REPRESENTATION IS MADE AS TO THE CURRENT OWNERSHIP OF SAID EASEMENT.

AB27 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSESF OR USE IN COMMON WITH OTHERS TO ROLLAND K. PREST AND ROSEMARY E. PREST, HUSBAND AND WIFE AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 19, 1974 IN BOOK 4856 PAGE 102 OF OFFICIAL RECORDS.

AB28 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MAY 14, 2010 AS INSTRUMENT NO. 0210064086 OF OFFICIAL RECORDS.

APN: 237-093-51

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-73, DATED AUGUST 4, 2022.

AM9 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS TO STEVEN C. BASS, AS SET FORTH IN A DOCUMENT RECORDED MAY 21, 1970 IN BOOK 4399, PAGE 694 OF OFFICIAL RECORDS.

APN: 237-093-53

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-75, DATED SEPTEMBER 29, 2022.

AN4 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 25, 1983, IN BOOK 5600, PAGE 428, OF OFFICIAL RECORDS.

APN: 237-093-55

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-141 DATED DECEMBER 27, 2022.

AO9 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS TO RICHARD J. LLOYD AND FRIEDA LLOYD, HUSBAND AND WIFE NO REPRESENTATION IN MADE TO THE PRESENT OWNERSHIP OF SAID EASEMENT, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 12, 1970 IN BOOK 4354, PAGE 12 OF OFFICIAL RECORDS; AFFECTING THE SOUTH 15 FEET OF SAID LAND.

AO10 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS TO STEVEN C. BASS, A MARRIED MAN AS HIS SEPARATE PROPERTY NO REPRESENTATION IN MADE TO THE PRESENT OWNERSHIP OF SAID EASEMENT, AS SET FORTH IN A DOCUMENT RECORDED MAY 21, 1970 IN BOOK 4399, PAGE 694 OF OFFICIAL RECORDS; AFFECTING THE SOUTH 15 FEET OF SAID LAND.

AO11 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS AND ROAD PURPOSES OVER THE WESTERLY 15 FEET AND THE SOUTHERLY 15 FEET OF SAID LAND., RESERVED BY DAVID E. LAWSON AND KAREN R. LAWSON, HUSBAND AND WIFE AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED JULY 30, 1985 AS INSTRUMENT NO. 010416 IN BOOK 5782, PAGE 276 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

AO13 — MATTERS CONTAINED IN DOCUMENT ENTITLED MEMORANDUM OF OPTION AGREEMENT FOR WIND ENERGY SITE LEASE AND RENEWABLE ENERGY DEVELOPMENT BY AND BETWEEN DAVID E. LAWSON, TRUSTEE OF THE DAVID AND STELLA LAWSON FAMILY TRUST DATED FEBRUARY 18, 2009, IN TRUST AS THE SOLE AND SEPARATE PROPERTY OF DAVID E. LAWSON AND ALTA WINDPOWER DEVELOPMENT, LLC, A DELAWARE LIMITED LIABILITY COMPANY RECORDED APRIL 30, 2010 AS INSTRUMENT NO. 0210056440 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 237-093-56

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-16, DATED MAY 12, 2022.

AP4 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS TO STEVEN C. BASS, AS SET FORTH IN A DOCUMENT RECORDED MAY 21, 1970 IN BOOK 4399, PAGE 694 OF OFFICIAL RECORDS.

AP5 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO DONALD TIVENS, DBA FORECAST LAND INVESTMENT COMPANY, AND MARILYN TIVENS, HIS WIFE, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 30, 1988 IN BOOK 6195, PAGE 2258 AS INSTRUMENT NO. 074455 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

VESTING TENTATIVE PARCEL MAP NO. 12591

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION OF THE SOUTHEAST 1/4 OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 22000480465–4, DATED APRIL 22, 2022, REPORT NO. 23000480504, DATED JUNE 30, 2023, REPORT NO. 22000480465–11, DATED MAY 6, 2022, REPORT NO. 23000480544, DATED JUNE 1, 2023, REPORT NO. 23000480040–68, DATED MAY 18, 2023, REPORT NO. 22000480465–102, DATED DECEMBER 23, 2022, REPORT NO. 22000480380, DATED APRIL 11, 2022, REPORT NO. 22000480308, DATED MARCH 31, 2022, REPORT NO. 22000480465–45, DATED JULY 8, 2022, REPORT NO. 23000480361, DATED MAY 4, 2023, REPORT NO. 22000480465–35, DATED JUNE 17, 2022, REPORT NO. 22000480465–123, DATED DECEMBER 8, 2022, REPORT NO. 22000480465–44A, DATED AUGUST 15, 2024, REPORT NO. 22000480465–52A, DATED AUGUST 15, 2024, REPORT NO. 22000480370A, DATED AUGUST 15, 2024, REPORT NO. 22000480004, DATED DECEMBER 28, 2022 AND REPORT NO. 22000480555A, DATED AUGUST 15, 2024.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE TWENTY–FIVE (25) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.

BASIS OF BEARINGS:

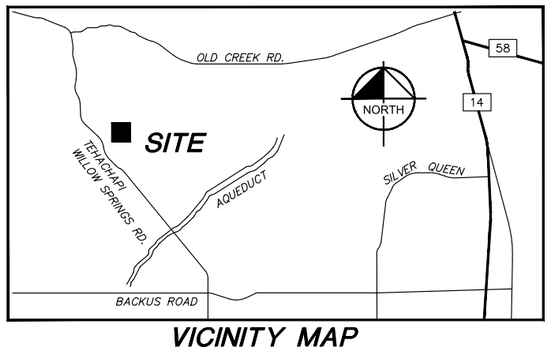
ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO.'S 06029C3275E WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	237–370–01 THROUGH 09, 237–370–11 THROUGH 18, 237–380–01 THROUGH 08
ACCESS TO PARCELS:	PROPOSED PUBLIC ACCESS EASEMENTS SHOWN HEREON
EXISTING NUMBER OF PARCELS:	25
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	E(20) RS, E(2 1/2) RS, A, A WE
EXISTING GENERAL PLAN DESIGNATION:	8.5 (RESOURCE MANAGEMENT–MIN. 20 ACRE PARCEL SIZE)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A
PROPOSED GENERAL PLAN DESIGNATION:	8.5 (RESOURCE MANAGEMENT–MIN. 20 ACRE PARCEL SIZE)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL 'A' AREA	160.75 ACRES
TOTAL PROJECT AREA:	160.75 ACRES



VICINITY MAP
NOT TO SCALE

SURVEY NOTE:

I, JEFFREY J. LENHERR, HEREBY STATE THAT THERE ARE NO STRUCTURES WITHIN THIS MAP OR WITHIN 150 FEET OF THE MAPS BOUNDARY.

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

1	E 1/4 COR. SEC 26, W 1/4 COR. SEC. 25, REBAR & BRASS CAP "JES ENGINEERING RCE 33249"
21	SE COR. SEC. 26, NE COR. SEC. 35, 2.5" BRASS CAP STAMPED "S26 S25 S35 S36" AND "RE 6549"
22	NW COR. SEC. 25, NE COR. SEC. 26, 2" BRASS CAP STAMPED "S24 S25 S23 S26" AND "RE 6549", UP 0.60'
23	N 1/4 COR. SEC. 26, 2.5" BRASS CAP STAMPED "JES ENGINEERING R.C.E. 33249"
24	NW COR. SEC. 26, 2" BRASS CAP STAMPED "R.E. 6549" IN ROCK MOUND

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TERRA–GEN.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA

LEGAL DESCRIPTON:

APN: 237-370-01, 02, 03 & 04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–4, DATED APRIL 22, 2022.

PARCEL 1:(237–370–01)
THE WEST HALF OF THE WEST HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/16TH OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312 PAGE 426 OF OFFICIAL RECORDS.

PARCEL 2:(237–370–02)
THE EAST HALF OF THE WEST HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/16TH OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312 PAGE 426 OF OFFICIAL RECORDS.

PARCEL 3:(237–370–03)
THE WEST HALF OF THE EAST HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/16TH OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312 PAGE 426 OF OFFICIAL RECORDS.

PARCEL 4:(237–370–04)
THE EAST HALF OF THE EAST HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/16TH OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312 PAGE 426 OF OFFICIAL RECORDS.

APN: 237-370-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480504, DATED JUNE 30, 2023.

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM 1/16TH OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 29, IN BOOK 312 PAGE 426 OF OFFICIAL RECORDS.

APN: 237-370-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–11, DATED MAY 6, 2022.

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/16TH OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA RECORDED JULY 13, 1929 IN BOOK 312 PAGE 426 OF OFFICIAL RECORD

LEGAL DESCRIPTON: (CONTINUED)

APN: 237-370-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480544, DATED JUNE 1, 2023.

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/16 OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA RECORDED JULY 13, 1929 IN BOOK 312 PAGE 426, OF OFFICIAL RECORDS.

APN: 237-370-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040–68, DATED MAY 18, 2023.

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/16TH OF ALL COAL, OIL, GAS AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929, IN BOOK 312, PAGE 426, OF OFFICIAL RECORDS.

APN: 237-370-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–102, DATED DECEMBER 23, 2022.

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/16 OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312 PAGE 426 OF OFFICIAL RECORDS.
APN: 237–370–09

APN: 237-370-11

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480380, DATED APRIL 11, 2022.

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/16 OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921, (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312, PAGE 426, OF OFFICIAL RECORDS. ALSO EXCEPT ALL THE OIL AND GAS DEPOSITS AND THE RIGHT TO PROSPECT FOR AND REMOVE SUCH OIL AND GAS DEPOSITS UPON COMPLIANCE WITH THE CONDITIONS AND SUBJECT TO THE PROVISIONS AND LIMITATIONS OF THE ACT OF CONGRESS APPROVED JULY 17, 1914 (38 STAT. 509) AND THE AMENDATORY ACT OF MARCH 4,1933 (47 STAT. 1570) AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929, IN BOOK 312, PAGE 426, OF OFFICIAL RECORDS.

APN: 237-370-12, 14 & 15

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480308, DATED MARCH 31, 2022.

PARCEL 1: APN'S: 237–370–12 AND 15
THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER AND THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT ALL THE OIL AND GAS DEPOSITS AND THE RIGHT TO PROSPECT FOR AND REMOVE SUCH OIL AND GAS DEPOSITS UPON COMPLIANCE WITH THE CONDITIONS AND SUBJECT TO THE PROVISIONS AND LIMITATIONS OF THE ACT OF CONGRESS APPROVED JULY 17, 1914 (38 STAT. 509) AND THE AMENDATORY ACT OF MARCH 4, 1933 (47 STAT. 1570) AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929, IN BOOK 312, PAGE 426, OF OFFICIAL RECORDS.

PARCEL 2: APN: 237–370–14
THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT ALL THE OIL AND GAS DEPOSITS AND THE RIGHT TO PROSPECT FOR AND REMOVE SUCH OIL AND GAS DEPOSITS UPON COMPLIANCE WITH THE CONDITIONS AND SUBJECT TO THE PROVISIONS AND LIMITATIONS OF THE ACT OF CONGRESS APPROVED JULY 17, 1914 (38 STAT. 509) AND THE AMENDATORY ACT OF MARCH 4, 1933 (47 STAT. 1570) AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312, PAGE 426, OF OFFICIAL RECORDS.
APN: 237–370–12; 237–370–14; 237–370–15

APN: 237-370-13

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–45, DATED JULY 8, 2022.

SOUTHEAST 1/4 OF SOUTHEAST 1/4 OF NORTHWEST 1/4 OF SOUTHEAST 1/4 OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, S.B.B.&M.

APN: 237-370-16

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480361, DATED MAY 4, 2023.

THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT ALL THE OIL AND GAS DEPOSITS AND THE RIGHT TO PROSPECT FOR AND REMOVE SUCH OIL AND GAS DEPOSITS UPON COMPLIANCE WITH THE CONDITIONS AND SUBJECT TO THE PROVISIONS AND LIMITATIONS OF THE ACT OF CONGRESS APPROVED JULY 17, 1914 (38 STAT. 509) AND THE AMENDATORY ACT OF MARCH 4, 1993 (47 STAT. 1570) AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312, PAGE 426, OF OFFICIAL RECORDS.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657–452–0200
jeff.lenherr@kimley–horn.com

VESTING TENTATIVE PARCEL MAP NO. 12591

LEGAL DESCRIPTON: (CONTINUED)

APN: 237-370-17

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-35, DATED JUNE 17, 2022.

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/16 OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA RECORDED JULY 13, 1929 IN BOOK 312 PAGE 426 OF OFFICIAL RECORDS.

APN: 237-370-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-123, DATED DECEMBER 8, 2022.

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11, NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THE NORTHEAST ¼ OF THE SOUTHEAST ¼ OF THE NORTHEAST ¼ OF THE SOUTHEAST ¼ OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF AS CONVEYED APRIL 30, 1981, AS INSTRUMENT NO. 44011, IN BOOK 5370, PAGE 2446.

EXCEPT 1/16 OF ALL COAL AND OTHER MINERALS DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA RECORDED JULY 13, 1929 IN BOOK 312, PAGE 426 OF OFFICIAL RECORDS.

APN: 237-380-01, 02, 03 & 04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-44A, DATED AUGUST 15, 2024.

PARCEL 1: APN: 237-380-01
THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/16 OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929, IN BOOK 312, PAGE 426 OF OFFICIAL RECORDS.

PARCEL 2: APN: 237-380-02
THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/6 OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312, PAGE 426 OF OFFICIAL RECORDS.

PARCEL 3: APN: 237-380-03
THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/6 OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312, PAGE 426 OF OFFICIAL RECORDS.

PARCEL 4: APN: 237-380-04
THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/6 OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, 1921) AND AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312, PAGE 426 OFFICIAL RECORDS.

APN: 237-380-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-52A, DATED AUGUST 15, 2024.

THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT ALL THE OIL AND GAS DEPOSITS AND RIGHT TO PROSPECT FOR AND REMOVE SUCH OIL AND GAS DEPOSITS UPON COMPLIANCE WITH THE CONDITIONS AND SUBJECT TO THE PROVISIONS AND LIMITATIONS OF THE ACT OF CONGRESS APPROVED JULY 17, 1914 (38 STAT. 509) AND THE AMENDATORY ACT OF MARCH 4, 1933 (47 STAT. 1570), AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929, IN BOOK 312, PAGE 426, OF OFFICIAL RECORDS.

APN: 237-380-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480370A, DATED AUGUST 15, 2024.

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND, APPROVED BY SURVEYOR GENERAL ON SEPTEMBER 19, 1856.

EXCEPTING THEREFROM 1/16 OF ALL COAL AND OTHER MINERAL DEPOSITS AS PROVIDED BY AN ACT OF THE LEGISLATURE APPROVED MAY 25, 1921 (CHAPTER 303, STATUTES OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312, PAGE 426 OF OFFICIAL RECORDS.
ALSO EXCEPTING THEREFROM ALL THE OIL AND GAS DEPOSITS AND THE RIGHT TO PROSPECT FOR AND REMOVE SUCH OIL AND GAS DEPOSITS UPON COMPLIANCE WITH THE CONDITIONS AND SUBJECT TO THE PROVISIONS AND LIMITATIONS OF ACT OF CONGRESS APPROVED JULY 17, 1914 (38 STAT. 509) AND THE AMENDATORY ACT OF MARCH 4, 1933, (47 STAT. 1570) AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312, PAGE 426 OF OFFICIAL RECORDS.

LEGAL DESCRIPTON: (CONTINUED)

APN: 237-380-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480004, DATED DECEMBER 28, 2022.

THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT ALL THE OIL AND GAS DEPOSITS AND THE RIGHT TO PROSPECT FOR AND REMOVE SUCH OIL AND GAS DEPOSITS UPON COMPLIANCE WITH THE CONDITIONS AND SUBJECT TO THE PROVISIONS AND LIMITATIONS OF THE ACT OF CONGRESS APPROVED JULY 17, 1914 (38 STAT. 509) AND THE AMENDATORY ACT OF MARCH 4, 1933 (4 STAT. 1570) AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312 PAGE 426 OF OFFICIAL RECORDS.

APN: 237-380-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480555A, DATED AUGUST 15, 2024.

THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 11 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL ON SEPTEMBER 19, 1856.

EXCEPT ALL OIL AND GAS DEPOSITS AND THE RIGHT TO PROSPECT FOR AND REMOVE SUCH OIL AND GAS DEPOSITS UPON COMPLIANCE WITH THE CONDITIONS AND SUBJECT TO THE PROVISIONS AND LIMITATIONS OF THE ACT OF CONGRESS APPROVED JULY 17, 1914 (38 STAT. 509) AND THE AMENDATORY ACT OF MARCH 4, 1933 (47 STAT. 1570) AS RESERVED IN THE PATENT FROM THE STATE OF CALIFORNIA, RECORDED JULY 13, 1929 IN BOOK 312 PAGE 426 OF OFFICIAL RECORDS.

VESTING TENTATIVE PARCEL MAP NO. 12591

NW COR SEC 26

N88°25'35"W 2626.93'

24

23

N88°25'41"W 2626.82'

NE COR SEC 26

22

N00°13'45"E 2696.31'

W 1/4 SEC 26

W 1/4 COR. SEC. 26
FD. 2" BRASS CAP STAMPED
"JES ENGINEERING R.C.E. 33249"

2632.14'

2670.03'

CNTR. SEC. 26
S.F.N.

N89°00'05"W 5264.65'
2632.51'

N00°01'40"W 2643.82'

E 1/4 SEC 26

1

SEC. 26, T. 11 N.
R. 14 W., S.B.M.

PUBLIC ROAD
(PROPOSED FOR ABANDONMENT
THROUGH THIS MAP)

PUBLIC ROAD
(PROPOSED FOR ABANDONMENT
THROUGH THIS MAP)

PUBLIC ROAD
(PROPOSED FOR ABANDONMENT
THROUGH THIS MAP)

PUBLIC ROAD
(PROPOSED FOR ABANDONMENT
THROUGH THIS MAP)

TO BE VACATED PER
SEPARATE INSTRUMENT

TO BE VACATED PER
SEPARATE INSTRUMENT

TO BE VACATED PER
SEPARATE INSTRUMENT

PUBLIC ROAD
(PROPOSED FOR ABANDONMENT
THROUGH THIS MAP)

PUBLIC ROAD
(PROPOSED FOR ABANDONMENT
THROUGH THIS MAP)

PUBLIC ROAD
(PROPOSED FOR ABANDONMENT
THROUGH THIS MAP)

PARCEL A
160.75± ACRES

N00°13'55"E 2696.22'

N00°06'25"E 5340.37'
2670.33'

N00°01'40"W 2643.82'

S 1/4 COR. SEC. 26
FD. 2.5" BRASS CAP
STAMPED "S26 S35 KCS"

N89°33'56"W 2637.75'

N89°34'46"W 2638.46'

SW COR SEC 26

SW COR. SEC. 26
NW COR. SEC. 35
FD. 2.5" BRASS CAP
STAMPED "S27 S26 S34
S35 RE 6549"
IN ROCK MOUND

SE COR SEC 26

21

NORTH

GRAPHIC SCALE IN FEET
200 0 100 200 400

SCALE: 1" = 200'

K:\ORA_SURV\2023\BOUNDARY\KERN COUNTY - DISCOVERY ALTA - 194388004\MAPPING\DWG\TPM\AREA A - MAP A1\194388004TPM-A1.DWG

VESTING TENTATIVE PARCEL MAP NO. 12591

EASEMENTS:

APN: 237-370-01, 02, 03 & 04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-4, DATED APRIL 22, 2022.

A9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED IN BOOK 312 PAGE 425 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

(A10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES, RESERVED BY E. C. JENSEN AND ELSIE T. JENSEN, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 3, 1965 AS INSTRUMENT NO. 6161 IN BOOK 3810 PAGE 620 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 237-370-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480504, DATED JUNE 30, 2023.

(B12) THE EFFECT OF AN EASEMENT FOR PUBLIC ROAD AND UTILITIES, AFFECTING A PORTION OF SAID LAND, AS DISCLOSED BY DEED RECORDED JULY 31, 2000 AS INSTRUMENT NO. 2000-93167 OF OFFICIAL RECORDS.

APN: 237-370-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-11, DATED MAY 6, 2022.
NO EASEMENTS IN REPORT

APN: 237-370-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480544, DATED JUNE 1, 2023.
NO EASEMENTS IN REPORT.

APN: 237-370-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-68, DATED MAY 18, 2023.

(E9) AN EASEMENT FOR PUBLIC ROAD AND UTILITY PURPOSES AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT RECORDED JULY 18, 1969 IN BOOK 4299, PAGE 981, OF OFFICIAL RECORDS, AFFECTS SAID LAND. (PUBLIC ROAD TO BE VACATED)

APN: 237-370-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-102, DATED DECEMBER 23, 2022.

F10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED JULY 13, 1929, IN BOOK 312, PAGE 426, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

F11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR THE ABSOLUTE RIGHT TO FISH AND INCIDENTAL PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED JULY 13, 1929, IN BOOK 312, PAGE 426, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

F12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHTS OF WAY OVER AND ACROSS SAID PROPERTY FOR DITCHES OR CANALS CONSTRUCTED BY THEIR AUTHORITY ALL AS DIRECTED AND REQUIRED BY ACT OF CONGRESS APPROVED AUGUST 30, 1890 (26 STAT. 391) AND INCIDENTAL PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED JULY 13, 1929, IN BOOK 312, PAGE 426, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 237-370-11

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480380, DATED APRIL 11, 2022.

G9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED JULY 13, 1929 IN BOOK 312, PAGE 426 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 237-370-12, 14 & 15

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480308, DATED MARCH 31, 2022.

(H9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 3, 1965, IN BOOK 3810, PAGE 620 AS INSTRUMENT NO. 6161 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(H10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 22, 1972, IN BOOK 4636, PAGE 112 AS INSTRUMENT NO. 12553 OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

(H13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 25, 1972, IN BOOK 4638, PAGE 621 AS INSTRUMENT NO. 14320 OF OFFICIAL RECORDS.

APN: 237-370-13

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-45, DATED JULY 8, 2022.

(I12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY E.C. JENSEN & ELSIE T. JENSEN, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 3, 1965 AS INSTRUMENT NO. 6161, BOOK 3810, PAGE 620 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(I13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES, RESERVED BY HENRY B. CHANDLER AND ROBERTA R. CHANDLER, AS SET FORTH IN A DOCUMENT RECORDED MARCH 1, 1972 IN BOOK 4643, PAGE 17 OF OFFICIAL RECORDS.

APN: 237-370-16

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480361, DATED MAY 4, 2023.

(J11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 3, 1965 AS INSTRUMENT NO. 6161 IN BOOK 3810, PAGE 620, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 237-370-17

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-35, DATED JUNE 17, 2022.
NO EASEMENTS IN REPORT.

APN: 237-370-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-123, DATED DECEMBER 8, 2022.

L16 EASEMENT AND RIGHTS INCIDENTAL THERETO TO ALTA WINDPOWER DEVELOPMENT, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AS SET FORTH IN A DOCUMENT RECORDED APRIL 30, 2010, AS INSTRUMENT NO. 0210056435 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 237-380-01, 02, 03 & 04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-44, DATED JUNE 21, 2022.

M8 RIGHTS OF WAY AS GRANTED BY AN ACT OF LEGISLATURE, APPROVED MAY 18, 1921 (CHAPTER 173 STATUTES OF CALIFORNIA, 1921) TO THE UNITED STATES, FOR THE USES PRESCRIBED IN THE ACT OF CONGRESS, APPROVED JUNE 17, 1902, RELATING TO IRRIGATION AND RECLAMATION AS DISCLOSED BY PATENT FROM THE STATE OF CALIFORNIA RECORDED JULY 13, 1929, IN BOOK 312, PAGE 426 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

M9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR THE ABSOLUTE RIGHT TO FISH, RESERVED IN THE PEOPLE, AS SET FORTH IN A DOCUMENT RECORDED JULY 13, 1929, IN BOOK 312, PAGE 426 OF OFFICIAL RECORDS. SAID EASEMENT'S SPECIFIC LOCATION IS NOT SUFFICIENTLY DEFINED. (EASEMENT IS BLANKET IN NATURE)

M10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR DITCHES OR CANALS, RESERVED UNTO THE UNITED STATES, AS SET FORTH IN A DOCUMENT RECORDED JULY 13, 1929, IN BOOK 312, PAGE 426 OF OFFICIAL RECORDS. SAID EASEMENT'S SPECIFIC LOCATION IS NOT SUFFICIENTLY DEFINED. (EASEMENT IS BLANKET IN NATURE)

(M12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES RESERVED BY E.C. JENSEN AND ELSIE T. JENSEN, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 3, 1965 IN BOOK 3810, PAGE 618 OF OFFICIAL RECORDS; AFFECTING THE WESTERLY 30 FEET OF PARCELS 1 AND 3. (PUBLIC ROAD TO BE VACATED)

(M13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES RESERVED BY DONALD F. MASON, AS SET FORTH IN A DOCUMENT RECORDED MAY 13, 1969 IN BOOK 4278, PAGE 13 OF OFFICIAL RECORDS; AFFECTING THE WESTERLY 30 FEET OF PARCELS 1 AND 3. (PUBLIC ROAD TO BE VACATED)

(M14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES RESERVED BY WALTER J. RIVERS, AS SET FORTH IN A DOCUMENT RECORDED MAY 13, 1969 IN BOOK 4278, PAGE 14 OF OFFICIAL RECORDS; AFFECTING THE WESTERLY 30 FEET OF PARCELS 1 AND 3. (PUBLIC ROAD TO BE VACATED)

(M15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, FUTURE ROAD AND PUBLIC UTILITY RESERVED BY CARSON D. BOONE AND PAULINE F. BOONE, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 5, 1971 IN BOOK 4483, PAGE 944 OF OFFICIAL RECORDS; AFFECTING THE NORTH AND WEST 30 FEET OF PARCEL 1 AND THE EAST AND SOUTH 30 FEET OF PARCEL 4. (TO BE VACATED PER SEPARATE INSTRUMENT)

(M16) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, FUTURE ROAD AND PUBLIC UTILITY RESERVED BY CARSON D. BOONE AND PAULINE F. BOONE, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 5, 1971 IN BOOK 4483, PAGE 946 OF OFFICIAL RECORDS; AFFECTING THE NORTH AND EAST 30 FEET OF PARCEL 2 AND THE WEST AND SOUTH 30 FEET OF PARCEL 3. (TO BE VACATED PER SEPARATE INSTRUMENT)

(M17) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, FUTURE ROAD AND PUBLIC UTILITY RESERVED BY DON ARNOLD BROWN AND BARBARA J. BROWN, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED MARCH 23, 1973 IN BOOK 4777, PAGE 1307 OF OFFICIAL RECORDS; AFFECTING THE NORTH AND WEST 30 FEET OF PARCEL 1 AND THE EAST AND SOUTH 30 FEET OF PARCEL 4. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 237-380-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-52A, DATED AUGUST 15, 2024.

(N11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PUBLIC PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 3, 1965, IN BOOK 3810, PAGE 618, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(N12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, AS SET FORTH IN A DOCUMENT RECORDED MAY 13, 1969, IN BOOK 4278, PAGE 13, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(N13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO WALTER J. RIVERS, AS SET FORTH IN A DOCUMENT RECORDED MAY 13, 1969, IN BOOK 4278, PAGE 14, OF OFFICIAL RECORDS; AFFECTING SAID LAND. (PUBLIC ROAD TO BE VACATED)

APN: 237-380-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480370A, DATED AUGUST 15, 2024.

O9 SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING OR OTHER PURPOSES, AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS, AND DECISIONS OF COURTS, AND THERE IS RESERVED FROM THE LANDS HEREBY GRANTED A RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES AND ALSO RESERVING IN THE PEOPLE THE ABSOLUTE RIGHT TO FISH THEREUPON AS PROVIDED BY SECTION 25 OF ARTICLE 1 OF THE CONSTITUTION OF THE STATE OF CALIFORNIA, AS RESERVED IN PATENT FROM THE UNITED STATES OF AMERICA, RECORDED JULY 13, 1929 IN BOOK 312, PAGE 426 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

(O10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 14, 1958 IN BOOK 2993 PAGE 216 OF OFFICIAL RECORDS.

O13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR WIND ENERGY GENERATION TO ALTA WINDPOWER DEVELOPMENT, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 10, 2010 AS INSTRUMENT NO. 0210171166 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

O14 MATTERS CONTAINED IN DOCUMENT ENTITLED EASEMENT DEED AND PROPERTY NEIGHBOR AGREEMENT BY AND BETWEEN CAMCART HOLDINGS, LLC, A DELAWARE LIMITED LIABILITY COMPANY AND ALTA WINDPOWER DEVELOPMENT, LLC, A DELAWARE LIMITED LIABILITY COMPANY RECORDED JULY 12, 2013 AS INSTRUMENT NO. 0213098116 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

O15 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR WIND ENERGY GENERATION FACILITIES TO ALTA WINDPOWER DEVELOPMENT, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AS SET FORTH IN A DOCUMENT RECORDED JULY 12, 2013 AS INSTRUMENT NO. 0213098116 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 237-380-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480555A, DATED AUGUST 15, 2024.

Q4 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED JULY 13, 1929 IN BOOK 312 PAGE 426 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

(Q5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 3, 1965 IN BOOK 3810 PAGE 618 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 237-380-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480004, DATED DECEMBER 28, 2022.

P18 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED JULY 13, 1929 IN BOOK 312 PAGE 426 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

(P20) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PUBLIC PURPOSES TO E.C. JENSEN AND ELSIE T. JENSEN, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 3, 1965 IN BOOK 3810 PAGE 618 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(P21) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PUBLIC PURPOSES TO BE USED IN COMMON WITH OTHERS TO DONALD F. MASON, AS SET FORTH IN A DOCUMENT RECORDED MAY 13, 1969 IN BOOK 4278 PAGE 13 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(P22) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PUBLIC PURPOSES TO BE USED IN COMMON WITH OTHERS TO WALTER J. RIVERS, AS SET FORTH IN A DOCUMENT RECORDED MAY 13, 1969 IN BOOK 4278 PAGE 14 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

ADJOINING PROPERTY EASEMENTS:

APN: 237-093-46

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 21000481397, DATED AUGUST 8, 2024.

(OG6) AN EASEMENT FOR INGRESS, EGRESS AND ROAD PURPOSES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF PUBLIC IN GENERAL AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 16, 1976, IN BOOK 4996, PAGE 1343, AS INSTRUMENT NO. 49425, OF OFFICIAL RECORDS, AFFECTS THE LAND. (PORTION OF PUBLIC ROAD TO BE VACATED)

(OG7) AN IRREVOCABLE OFFER TO DEDICATE REAL PROPERTY RECORDED DECEMBER 16, 1976, IN BOOK 4996, PAGE 1343, AS INSTRUMENT NO. 49425, OF OFFICIAL RECORDS, WHEREIN A PORTION OF SAID LAND WAS OFFERED FOR DEDICATION TO PUBLIC USE FOR INGRESS, EGRESS AND ROAD PURPOSES, WHICH AFFECTS SAID LAND. (PORTION OF PUBLIC ROAD TO BE VACATED)

(OG8) AN EASEMENT OR OTHER PROVISIONS FOR THE PURPOSE OF 110TH STREET WEST AND RIGHTS INCIDENTAL THERETO, AS SHOWN ON THE RECORDED MAP OF PARCEL MAP NO. 3816, WHICH AFFECTS THE LAND.

APN: 237-093-47

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 222000480465-29A, DATED AUGUST 8, 2024.

(AC9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROADS TO THE PUBLIC IN GENERAL AND COUNTY OF KERN, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 16, 1976 IN BOOK 4996, PAGE 1343 OF OFFICIAL RECORDS. (PORTION OF PUBLIC ROAD TO BE VACATED)

(AC10) MATTERS CONTAINED IN PARCEL MAP NO. 3816, BOOK 17, PAGE 168 OF PARCEL MAPS.

APN: 237-093-48

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-1A, DATED AUGUST 8, 2024.

(AD14) AN EASEMENT FOR INGRESS, EGRESS AND ROAD PURPOSES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF PUBLIC IN GENERAL AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 16, 1976 IN BOOK 4996, PAGE 1343, AS INSTRUMENT/FILE NO. 49425, OF OFFICIAL RECORDS, AFFECTS THE LAND. (PORTION OF PUBLIC ROAD TO BE VACATED)

(AD15) AN IRREVOCABLE OFFER TO DEDICATE REAL PROPERTY RECORDED DECEMBER 16, 1976 IN BOOK 4996, PAGE 1343, AS INSTRUMENT/FILE NO. 49425 OFFICIAL RECORDS WHEREIN A PORTION OF SAID LAND WAS OFFERED FOR DEDICATION TO PUBLIC USE FOR INGRESS, EGRESS AND ROAD PURPOSES, WHICH AFFECTS SAID LAND. (PORTION OF PUBLIC ROAD TO BE VACATED)

(AD16) AN EASEMENT OR OTHER PROVISIONS FOR THE PURPOSE OF 110TH STREET WEST AND RIGHTS INCIDENTAL THERETO AS SHOWN ON THE RECORDED MAP OF PARCEL MAP NO. 3816, WHICH AFFECTS THE LAND.

APN: 237-093-49

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-40A, DATED AUGUST 8, 2024.

(AE12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 16, 1976 IN BOOK 4996, PAGE 1343, OF OFFICIAL RECORDS.
AFFECTS THE SOUTH 30 FEET AND THE WEST 30 FEET OF SAD LAND EXCEPT THAT PORTION GRANTED TO THE COUNTY OF KERN, BY DEED RECORDED FEBRUARY 28, 1974 IN BOOK 4828, PAGE 1266, OF OFFICIAL RECORDS. (PORTION OF PUBLIC ROAD TO BE VACATED)

(AE13) MATTERS AS SHOWN ON THE PARCEL MAP NO. 3816 FILED IN BOOK 17, PAGE 168, OF MAPS, TOGETHER WITH ANY PROVISIONS AND RECITALS CONTAINED THEREIN.

VESTING TENTATIVE PARCEL MAP NO. 12592

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION PORTIONS OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 23000480466A, DATED AUGUST 15, 2024, REPORT NO. 23000480466A, DATED AUGUST 15, 2024, REPORT NO. 22000480465-36A, DATED AUGUST 15, 2024, REPORT NO. 23000480192A, DATED AUGUST 15, 2024, REPORT NO. 23000480193A, DATED AUGUST 16, 2024, REPORT NO. 23000480366A, DATED AUGUST 16, 2024, REPORT NO. 22000480465-26A, DATED AUGUST 16, 2024, REPORT NO. 23000480367A, DATED AUGUST 16, 2024, REPORT NO. 23000480785A, DATED AUGUST 16, 2024, REPORT NO. 23000480458A, DATED AUGUST 16, 2024, REPORT NO. 23000480368A, DATED AUGUST 30, 2024, REPORT NO. 22000480465-90A, DATED AUGUST 16, 2024, REPORT NO. 22000480465-97A, DATED AUGUST 16, 2024, REPORT NO. 22000480465-90, DATED OCTOBER 3, 2022, REPORT NO. 23000480369A, DATED AUGUST 16, 2024,

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE EIGHTEEN (18) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.

BASIS OF BEARINGS:

ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

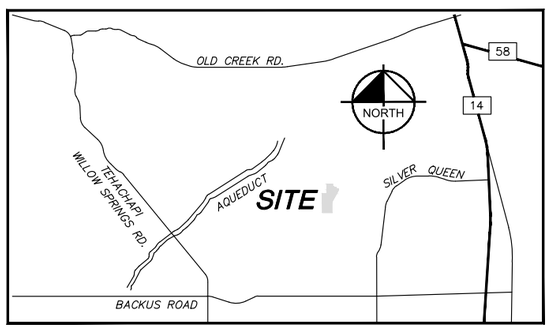
THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO. 06029C3675E, WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	345-062-01, 02, 03, 04, 05, 07, 08, 26, 27, 28, 29, 30, 31, 39, 40, 42, 56 345-063-29
ACCESS TO PARCELS:	JACKPINE AVENUE
EXISTING NUMBER OF PARCELS:	18
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	E(2 1/2) RS
EXISTING GENERAL PLAN DESIGNATION:	4.1 LOW DENSITY RESIDENTIAL
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A, E(2 1/2) RS
PROPOSED GENERAL PLAN DESIGNATION:	4.1 LOW DENSITY RESIDENTIAL
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL 'A' AREA:	135.93 ACRES
TOTAL PROJECT AREA:	135.93 ACRES

SURVEY NOTE:

I, JEFFREY J. LENHERR, HEREBY STATE THAT THERE ARE NO STRUCTURES WITHIN THIS MAP OR WITHIN 150 FEET OF THE MAPS BOUNDARY.



VICINITY MAP
NOT TO SCALE

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TERRA-GEN.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA

LEGAL DESCRIPTON:

APN: 345-062-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480543, DATED JUNE 7, 2023.

PARCEL 1:

THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 2:

THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 3:

THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 4:

THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 345-062-02, 03, 04 & 05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480466A, DATED AUGUST 15, 2024.

PARCEL 1:

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 2:

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 3:

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 4:

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 345-062-07

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 23000480466A, DATED AUGUST 15, 2024.

THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL ON FEBRUARY 19, 1856

APN: 345-062-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-36A, DATED AUGUST 15, 2024.

THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THE PARCEL OF LAND DESCRIBED IN THE DEED TO THE CITY OF LOS ANGELES, RECORDED JANUARY 26, 1973, IN BOOK 4767 PAGE 272, OFFICIAL RECORDS.

APN: 345-062-26

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480192A, DATED AUGUST 15, 2024.

THE NORTH-HALF OF THE NORTH-HALF OF THE EAST-HALF OF THE EAST-HALF OF THE SOUTH-HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP10 NORTH, RANGE 13 WEST, SB AND M., IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 345-062-27

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480193A, DATED AUGUST 16, 2024.

THE SOUTH 1/2 OF NORTH 1/2 OF EAST 1/2 OF EAST 1/2 OF SOUTH 1/2 OF NORTHWEST 1/4 OF NORTHWEST 1/4 LOCATED IN SECTION 2, TOWNSHIP 10 NORTH RANGE 13 WEST, M.D.B.M.

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

[11] FD. 2.5" GLO BRASS DISK

LEGAL DESCRIPTON: (CONTINUED)

APN: 345-062-28

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480366A, DATED AUGUST 16, 2024.

THE NORTH HALF OF THE SOUTH HALF OF THE EAST HALF OF THE EAST HALF OR THE SOUTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 345-062-29

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-26A, DATED AUGUST 16, 2024.

THE SOUTH HALF OF THE SOUTH HALF OF THE EAST HALF OF THE EAST HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 345-062-30

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480367A, DATED AUGUST 16, 2024.

THE EAST HALF OF THE WEST HALF OF THE EAST HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, AS PER THE OFFICIAL PLAT THEREOF ON FILE IN THE OFFICE OF THE SURVEYOR GENERAL.

EXCEPTING THEREFROM 50% OF ALL OIL, GAS, MINERALS AND HYDROCARBON SUBSTANCES BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT TO ENTER UPON ANY PORTION OF THE SURFACE ABOVE A DEPTH OF 500 FEET FOR ANY PURPOSE WHATSOEVER AS DEEDED TO HYDROM-GASS INC., A CALIFORNIA CORPORATION, IN DOCUMENT RECORDED JUNE 18, 1991 AS DOCUMENT NO. 074779, IN BOOK 6533, PAGE 2286, OF OFFICIAL RECORDS.

APN: 345-062-31

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480785A, DATED AUGUST 16, 2024.

THE WEST HALF OF THE WEST HALF OF THE EAST HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, AS PER THE OFFICIAL PLAT THEREOF ON FILE IN THE OFFICE OF THE SURVEYOR GENERAL.

EXCEPTING THERE FROM 50% OF ALL OIL, GAS, MINERALS AND HYDROCARBON SUBSTANCES BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT TO ENTER UPON ANY PORTION OF THE SURFACE ABOVE A DEPTH OF 500 FEET FOR ANY PURPOSE WHATSOEVER AS DEEDED TO HYDROM-GASS INC., A CALIFORNIA CORPORATION, RECORDED JUNE 18, 1991 IN BOOK 6533, PAGE 2289, OF OFFICIAL RECORDS.

APN: 345-062-39

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480458A, DATED AUGUST 16, 2024.

THE NORTH HALF OF THE SOUTH HALF OF THE WEST HALF OF THE WEST HALF OF THE NORTH HALF OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN ACCORDING TO THE OFFICIAL PLAT.

APN: 345-062-40

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480368A, DATED AUGUST 30, 2024.

PARCEL 1:
THE SOUTH HALF OF THE SOUTH HALF OF THE WEST HALF OF THE NORTH HALF OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.
SUBJECT TO AN EASEMENT FOR INGRESS, EGRESS AND/OR PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS OVER THE WESTERLY 30 FEET OF SAID LAND AS RESERVED IN DEED RECORDED CONCURRENTLY HEREWITH.

PARCEL 2:
AN EASEMENT FOR INGRESS, EGRESS AND/OR PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS OVER THE WESTERLY 30 FEET OF THE NORTH HALF OF THE SOUTH HALF OF THE WEST HALF OF THE WEST HALF OF THE NORTH HALF OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, AS RESERVED BY HOLAND LAND COMPANY, A CALIFORNIA CORPORATION, IN DEED RECORDED JUNE 29, 1981, IN BOOK 5385 PAGE 946, OFFICIAL RECORDS.

PARCEL 3:
AN EASEMENT FOR INGRESS, EGRESS AND/OR PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS OVER THE WESTERLY 30 FEET AND THE NORTHERLY 30 FEET OF THE WEST HALF OF THE WEST HALF OF THE NORTH HALF OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, AS RESERVED BY HOLAND LAND COMPANY, A CALIFORNIA CORPORATION, IN DEED RECORDED JULY 26, 1983, IN BOOK 5573 PAGE 1540, OFFICIAL RECORDS.

APN: 345-062-42

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-90A, DATED AUGUST 16, 2024.

THE WEST HALF OF THE NORTH HALF OF THE WEST HALF OF THE WEST HALF OF THE NORTH HALF OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657-452-0200
jeff.lenherr@kimley-horn.com

VESTING TENTATIVE PARCEL MAP NO. 12592

LEGAL DESCRIPTON: (CONTINUED)

APN: 345-062-56

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-97A, DATED AUGUST 16, 2024.

THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER AND THE SOUTH HALF OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM, THE EAST 350 FEET THEREOF.

ALSO EXCEPTING THEREFROM THAT PORTION AS CONTAINED IN THE "FINAL ORDER IN CONDEMNATION" FILED OCTOBER 11, 2016, SUPERIOR COURT, COUNTY OF KERN, CASE NO. S-1500-CV-284309, RECORDED OCTOBER 21, 2016, AS INSTRUMENT NO. 0216148554, OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM, ONE-HALF OF OIL, GAS, MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR UNDER THAT PORTION OF SAID LAND LYING BELOW A DEPTH OF 500 FEET FROM THE SURFACE THEREOF; WITHOUT, HOWEVER, ANY LIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS RESERVED BY MARCELLE MATHERON BEREL, BLANCHE M. VERNON AND RICHARD CAVIN MATHERSON IN DEED RECORDED NOVEMBER 9, 1966, IN BOOK 3994 PAGE 331 OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM, ONE-QUARTER OF OIL, GAS, MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR UNDER THAT PORTION OF SAID LAND LYING BELOW A DEPTH OF 500 FEET FROM THE SURFACE THEREOF; WITHOUT, HOWEVER, ANY RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS RESERVED BY HELEN NOREGAARD, A WIDOW IN DEED RECORDED JULY 24, 1992, IN BOOK 6705 PAGE 13, INSTRUMENT NO. 104645 OFFICIAL RECORDS.

APN: 345-063-29

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480369A, DATED AUGUST 16, 2024.

THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 2, T. 10 N., R. 13 W., S.B.M., IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, DESCRIBED IN DEED RECORDED ON JULY 31, 1990 AS INSTRUMENT NO. 014415, IN BOOK 6413, PAGE 365, OF OFFICIAL RECORDS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657-452-0200
jeff.lenherr@kimley-horn.com

VESTING TENTATIVE PARCEL MAP NO. 12592

NW COR SEC 2
660.33'
825.42'
N89°42'18"W 2641.33'
SEC. 35, T. 11 N., R. 13 W., S.B.M.
1155.58'
N89°44'51"W 2640.83'
NE COR SEC 2
N 1/4 SEC 2
N 1/4 SEC 2
PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)
30'
N01°05'10"W 1308.95'
PARCEL 'A' 135.93 ACRES
N01°00'32"W 325.21'
N89°50'43"W 164.99'
N00°59'33"W 324.80'
N89°59'09"W 639.31'
N01°09'50"W 2636.85'
1315.46'
TO BE VACATED PER SEPARATE INSTRUMENT
PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)
350.00'
N00°54'01"W 170.41'
TO BE VACATED PER SEPARATE INSTRUMENT
PARCEL 'A' 135.93 ACRES
175'
75'
1265.51'
N89°43'57"E 658.81'
PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)
PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)
N01°00'35"W 2591.10'
SEC. 1, T. 10 N., R. 13 W., S.B.M.
2612.88'
N28°41'22"E 1834.06'
N28°41'22"E 1476.86'
350.00'
N00°54'01"W 1292.89'
1325.59'
N00°54'01"W 5250.23'
SEC. 3, T. 10 N., R. 13 W., S.B.M.
1318.43'
PARCEL 'A' 135.93 ACRES
W 1/4 SEC 2
1314.79'
1313.20'
2626.40'
N00°04'30"W
1314.79'
729.31'
N89°46'43"E 5275.01'
235.46'
350.02'
2645.43'
E 1/4 SEC 2
2637.34'
2649.40'
N00°30'13"E
SEE SHEET 4
SEC. 2 T. 10 N. R. 13 W., S.B.M.

NORTH

GRAPHIC SCALE IN FEET
200 0 100 200 400
SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12592

SEE SHEET 3

W 1/4 SEC 2

N01°09'50"W 2638.85' 1318.43'

1314.79'

235.46'

1314.79'

729.31'

N89°46'43"E 5275.01'

350.02'

2612.88'

2645.43'

N01°00'35"W 2591.10' 1325.59'

E 1/4 SEC 2

SEC. 2
T. 10 N.
R. 13 W., S.B.M.

N00°54'01"W 5250.23'

PARCEL 'A'
135.93 ACRES

N00°43'03"W 1315.93'

KQ10
KQ11

LB14
LB12
LB11

KK12
KK10
KK11

1313.20'

2965'
2960'
2955'

175'
75'

55'

30'

N89°53'45"E 1319.02'

N00°32'03"W 2626.40'

1313.20'

2637.34'

N00°30'13"E 2649.40'

SEC. 3, T. 10 N., R. 13 W., S.B.M.

SEC. 1, T. 10 N., R. 13 W., S.B.M.

SW COR SEC 2

N89°59'16"W 2646.52'

S 1/4 SEC 2

2580.68'
N89°57'16"W

SE COR SEC 2

SEC. 11, T. 10 N., R. 13 W., S.B.M.

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

K:\ORA_SURV\2023\BOUNDARY\KERN COUNTY - DISCOVERY ALTA - 194388004\MAPPING\DWG\TPM\AREA D - MAP OF PARCEL 8\194388004TPM-MAP-PCL 8.DWG

VESTING TENTATIVE PARCEL MAP NO. 12592

EASEMENTS:

APN: 345-062-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480543, DATED JUNE 7, 2023.

(AB47) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND INCIDENTAL PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED MAY 1, 1967, AS INSTRUMENT NO. 21647, IN BOOK 4047, PAGE 979, OF OFFICIAL RECORDS.

APN: 345-062-02, 03, 04 & 05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480466A, DATED AUGUST 15, 2024.

(KO12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND INCIDENTAL PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED MAY 1, 1967, AS INSTRUMENT NO. 21647, IN BOOK 4047, PAGE 979, OF OFFICIAL RECORDS.

APN: 345-062-07

STEWART TITLE GUARANTY COMPANY TITLE REPORT NO. 210004813 99A, DATED AUGUST 15, 2024.

(OH9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES RESERVED BY ROBERT A. BREWER AND BETTY J. BREWER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED MAY 19, 1967 AS INSTRUMENT NO. 25759 IN BOOK 4054, PAGE 369 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 345-062-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-36A, DATED AUGUST 15, 2024.

KQ9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED JANUARY 5, 1921 IN BOOK 20, PAGE 325 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(KQ10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR TRANSMISSION LINE TO DEPARTMENT OF WATER AND POWER OF THE CITY OF LOS ANGELES, AS SET FORTH IN A DOCUMENT RECORDED APRIL 13, 1950 IN BOOK 1696 PAGE 164 OF OFFICIAL RECORDS.

(KQ11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 9, 1996 AS INSTRUMENT NO. 0196102169 OF OFFICIAL RECORDS.

APN: 345-062-26

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480192A, DATED AUGUST 15, 2024.

KR10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED JANUARY 5, 1921, IN BOOK 20, PAGE 325, OF PATENTS. (NOT LOCATABLE FROM RECORD)

(KR11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS OVER THE WESTERLY 30 FEET AND THE SOUTHERLY 30 FEET OF SAID LAND, RESERVED BY ROBERT A. BREWER AND BETTY J. BREWER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED MAY 19, 1967, IN BOOK 4054 PAGE 368, OF OFFICIAL RECORDS. AFFECTS THE LAND AND OTHER PROPERTY.

(KR12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, TO G. POTHAS DEVELOPMENT CORPORATION, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MAY 19, 1967, IN BOOK 4054, PAGE 368, OF OFFICIAL RECORDS.

(KR13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, TO JOSEPH A. ZACCARIA AND HELEN M. ZACCARIA, HUSBAND AND WIFE, AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 8, 1967, IN BOOK 4111 PAGE 450, OF OFFICIAL RECORDS. AFFECTS THE LAND AND OTHER PROPERTY.

(KR14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, TO HELEN M. ZACCARIA, AS HER SOLE AND SEPARATE PROPERTY, AS SET FORTH IN A DOCUMENT RECORDED MARCH 30, 1973, IN BOOK 4777, PAGE 2269, OF OFFICIAL RECORDS. AFFECTS THE LAND AND OTHER PROPERTY.

(KR15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS FOR ROAD AND UTILITY PURPOSES, RESERVED BY JOSEPH A. ZACCARIA AND HELEN M. ZACCARIA, HUSBAND AND WIFE AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED MARCH 5, 1975, IN BOOK 4885 PAGE 494, OF OFFICIAL RECORDS. AFFECTS THE LAND AND OTHER PROPERTY. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 345-062-27

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480193A, DATED AUGUST 16, 2024.

(KS5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO ROBERT A. BREWER AND BETTY J. BREWER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED MAY 19, 1967, IN BOOK 4054 PAGE 368, OF OFFICIAL RECORDS.

(KS12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS RESERVED BY HILLARY & SHEP ZEBBERMAN, AS SET FORTH IN A DOCUMENT RECORDED, FEBRUARY 7, 1989, IN BOOK 6207 PAGE 213, OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 345-062-28

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480366A, DATED AUGUST 16, 2024.

(KT9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO ROBERT A. BREWER AND BETTY J. BREWER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED MAY 19, 1967 IN BOOK 4054, PAGE 368 OF OFFICIAL RECORDS.

(KT10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS FOR ROAD AND UTILITY PURPOSES TO JOSEPH A. ZACCARIA AND HELEN M. ZACCARIA, HUSBAND AND WIFE AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED MARCH 5, 1975 AS INSTRUMENT NO. 15398, IN BOOK 4885, PAGE 494 OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 345-062-29

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-26A, DATED AUGUST 16, 2024.

KU9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED JANUARY 15, 1921 IN BOOK 20, PAGE 325, OF PATENT. (EASEMENT IS BLANKET IN NATURE)

(KU10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY ROBERT A. BREWER AND BETTY J. BREWER, HW, AS SET FORTH IN A DOCUMENT RECORDED MAY 19, 1967 IN BOOK 4054, PAGE 368, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(KU11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS FOR ROAD AND UTILITY PURPOSES, RESERVED BY JOSEPH A. ZACCARIA AND HELEN M. ZACCARIA, HUSBAND AND WIFE AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED MARCH 5, 1975 AS INSTRUMENT NO. 15398 IN BOOK 4885, PAGE 494, OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 345-062-30

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480367A, DATED AUGUST 16, 2024.

(KV12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS, EGRESS, PUBLIC UTILITY TO ROBERT A. BREWER AND BETTY J. BREWER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED MAY 19, 1967 IN BOOK 4054, PAGE 368, OF OFFICIAL RECORDS; AFFECTING THE SOUTHERLY 30 FEET OF SAID LAND. (PUBLIC ROAD TO BE VACATED)

(KV13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS FOR ROAD AND UTILITY TO JOSEPH A. ZACCARIA AND HELEN M. ZACCARIA, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED JUNE 27, 1975 IN BOOK 4902, PAGE 442 OF OFFICIAL RECORDS; AFFECTING THE NORTHERLY 30 FEET OF SAID LAND. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 345-062-31

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480785A, DATED AUGUST 16, 2024.

(KW9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY ROBERT A. BREWER AND BETTY J. BREWER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED MAY 19, 1967, IN BOOK 4054, PAGE 368, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(KW10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS FOR ROAD UTILITY PURPOSES, RESERVED BY JOSEPH A. ZACCARIA AND HELEN M. ZACCARIA, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED JUNE 27, 1975, IN BOOK 4902, PAGE 442, OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 345-062-39

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480458A, DATED AUGUST 16, 2024.

KX5 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED JANUARY 25, 1921 IN BOOK 20 PAGE 325 OF PATENTS. (NOT LOCATABLE FROM RECORD)

(KX6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES TO ROLAND LAND COMPANY, AS SET FORTH IN A DOCUMENT RECORDED JUNE 29, 1981 IN BOOK 5385 PAGE 946 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 345-062-40

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480368A, DATED AUGUST 30, 2024.

(KY10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, FOR ROAD AND/OR PUBLIC UTILITY PURPOSES AND INCIDENTAL PURPOSES TO ROLAND LAND COMPANY , A CALIFORNIA CORPORATION, FORMERLY ROLAND CALIFORNIA LAND CORPORATION, A CALIFORNIA CORPORATION, DBA ROLAND CALIFORNIA LAND CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JULY 26, 1983 IN BOOK 5573 PAGE 1540 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 345-062-42

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-90A, DATED AUGUST 16, 2024.

(KZ10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS FOR ROAD AND/OR PUBLIC UTILITY PURPOSES, TO BE USED IN COMMON WITH OTHERS TO DAVID C. HUDSON AND DORA E. HUDSON, HUSBAND AND WIFE, AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED JUNE 29, 1981 IN BOOK 5385, PAGE 946 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(KZ11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS FOR ROAD AND/OR PUBLIC UTILITY PURPOSES, RESERVED BY ROLAND LAND COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 21, 1981 IN BOOK 5405, PAGE 919 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 345-062-56

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-97A, DATED AUGUST 16, 2024.

LA10 RESERVATIONS CONTAINED IN THE PATENT; FROM: THE UNITED STATES OF AMERICA; TO: NORA M. LOCKWOOD, FORMERLY NORA M. THANKE; RECORDING DATE: JANUARY 5, 1921; RECORDING NO.: BOOK 20, PAGE 325 OF PATENTS WHICH AMONG OTHER THINGS RECITES AS FOLLOWS:

SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING, OR OTHER PURPOSES AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS, AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS AND DECISIONS OF THE COURTS, AND THE RESERVATION FROM THE LANDS HEREBY GRANTED, A RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES.
(NOT LOCATABLE FROM RECORD)

(LA11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PERMANENT EASEMENTS AND RIGHTS OF WAY TO BE USED AT ANY TIME AND FROM TIME TO TIME TO CONSTRUCT, RECONSTRUCT, MAINTAIN, OPERATE USE, INSPECT, RENEW AND ENLARGE ONE OR MORE ELECTRICAL TRANSMISSION LINES TO THE CITY OF LOS ANGELES, A MUNICIPAL CORPORATION OF THE STATE OF CALIFORNIA, ITS SUCCESSORS AND ASSIGNS, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 1, 1950 AS INSTRUMENT NO. 58273, IN BOOK 2489, PAGE 381 OF OFFICIAL RECORDS. TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS.

APN: 345-063-29

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480369A, DATED AUGUST 16, 2024.

LB10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED MARCH 3, 1891 IN BOOK 20, PAGE 325 OF PATENTS. (BLANKET IN NATURE)

(LB11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ELECTRICAL TRANSMISSION LINES TO THE CITY OF LOS ANGELES, A MUNICIPAL CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 1, 1950 IN BOOK 1749, PAGE 566 OF OFFICIAL RECORDS.

(LB12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PIPELINE AND UTILITY, RESERVING ALL WATER, OIL, TO THE CITY OF LOS ANGELES, AS SET FORTH IN A DOCUMENT RECORDED MAY 4, 1972 IN BOOK 4672, PAGE 222 OF OFFICIAL RECORDS.

(LB14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR AN EASEMENT FOR INGRESS AND EGRESS TO THE CITY OF LOS ANGELES, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 28, 2014 AS INSTRUMENT NO. 000214133853 OF OFFICIAL RECORDS.

ADJOINING PROPERTY EASEMENTS:

APN: 345-011-41

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480190, DATED MARCH 21, 2023.

(KK10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES, TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL NO REPRESENTATION IS MADE TO THE PRESENT OWNERSHIP OF SAID EASEMENT, AS SET FORTH IN A DOCUMENT, RECORDED AUGUST 20, 1974, IN BOOK 4856, PAGE 987 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(KK11) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR FUTURE STREET OR HIGHWAY PURPOSES, RECORDED AUGUST 20, 1974, IN BOOK 4856, PAGE 987, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(KK12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES, TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL NO REPRESENTATION IS MADE TO THE PRESENT OWNERSHIP OF SAID EASEMENT, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 23, 1974, IN BOOK 4857, PAGE 5, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

VESTING TENTATIVE PARCEL MAP NO. 12593

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION PORTIONS OF SECTION 3, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 23000480186A, DATED AUGUST 16, 2024, REPORT NO. 22000480465-112A, DATED AUGUST 16, 2024, REPORT NO. 22000480465-142, DATED DECEMBER 22, 2022, REPORT NO. 23000480187, DATED MARCH 16, 2023, REPORT NO. 23000480040-8A, DATED AUGUST 16, 2024, REPORT NO. 23000480188-A, DATED AUGUST 15, 2024, REPORT NO. 23000480037-A, DATED AUGUST 15, 2024, REPORT NO. 22000480465-138, DATED DECEMBER 16, 2022, REPORT NO. 23000480190, DATED MARCH 21, 2023 AND REPORT NO. 23000480365, DATED MAY 4, 2023.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE TEN (10) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.

BASIS OF BEARINGS:

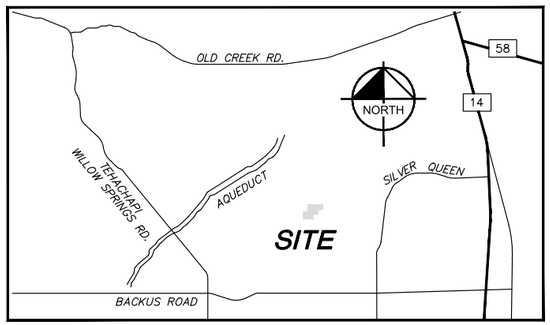
ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO. 06029C3675E, WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

SURVEY NOTE:

I, JEFFREY J. LENHERR, HEREBY STATE THAT THERE ARE NO STRUCTURES WITHIN THIS MAP OR WITHIN 150 FEET OF THE MAPS BOUNDARY.



VICINITY MAP

NOT TO SCALE

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	345-011-24, 25, 26, 31, 36, 37, 39, 40, 41, 42
ACCESS TO PARCELS:	JACKPINE AVENUE AND 60TH STREET WEST
EXISTING NUMBER OF PARCELS:	10
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	A, PL RS
EXISTING GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A
PROPOSED GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL 'A' AREA:	74.86 ACRES
TOTAL PROJECT AREA:	74.86 ACRES

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

11 FD. 2.5" GLO BRASS DISK

12 FD. 3" GLO BRASS DISK

15 FD. REBAR & CAP STAMPED "JES ENGINEERING RCE 33249"

17 FD. 2.5" GLO BRASS DISK, DISTURBED, UP 0.5', NOT HELD. CALCULATED POSITION BOOK 26, PAGE 152

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TERRA-GEN.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE



LEGAL DESCRIPTON:

APN: 345-011-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480186A, DATED AUGUST 16, 2024.

THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 3, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM 50% OF ALL CRUDE OIL AND MINERALS BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF SURFACE ENTRY ONTO SAID LAND, AS RESERVED BY MILTON L. ROSE, A MARRIED MAN, IN DEED RECORDED NOVEMBER 18, 1968 IN BOOK 4217, PAGE 715, OF OFFICIAL RECORDS.

APN: 345-011-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-112A, DATED AUGUST 16, 2024.

THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 3, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL CRUDE OIL AND MINERALS BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, BUT WITHOUT RIGHT OF SURFACE ENTRY ONTO SAID LAND, AS RESERVED BY MILTON L. ROSE, A MARRIED MAN, IN DEED RECORDED NOVEMBER 18, 1968, IN BOOK 4217, PAGE 715 OF OFFICIAL RECORDS.

APN: 345-011-26

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-142A, DATED AUGUST 16, 2024.

THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF FRACTIONAL SECTION 3, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL CRUDE OIL AND MINERALS BELOW A DEPTH OF 500 FEET, FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF SURFACE ENTRY ONTO SAID LAND, AS RESERVED BY MILTON L. ROSE, A MARRIED MAN, IN DEEDS RECORDED NOVEMBER 18, 1968 IN BOOK 4217, PAGE 715, OFFICIAL RECORDS.

LEGAL DESCRIPTON: (CONTINUED)

APN: 345-011-31

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480187A, DATED AUGUST 16, 2024.
THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF FRACTIONAL SECTION 3, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL CRUDE OIL AND MINERALS BELOW A DEPTH OF 500 FEET, FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF SURFACE ENTRY ONTO SAID LAND, AS RESERVED BY MILTON L. ROSE, A MARRIED MAN, IN DEED RECORDED NOVEMBER 18, 1968 IN BOOK 4217 PAGE 715, OF OFFICIAL RECORDS.

APN: 345-011-36

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-8A, DATED AUGUST 16, 2024.

THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF FRACTIONAL SECTION 3, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL CRUDE OIL AND MINERALS BELOW A DEPTH OF 500 FEET, FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF SURFACE ENTRY ONTO SAID LAND, AS RESERVED BY MILTON L. ROSE, IN DEED RECORDED NOVEMBER 18, 1968, IN BOOK 4217 PAGE 717, OFFICIAL RECORDS.

APN: 345-011-37

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480188-A, DATED AUGUST 15, 2024.

THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF FRACTIONAL SECTION 3, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THE NORTHEAST QUARTER THEREOF.
ALSO EXCEPT 50% OF ALL CRUDE OIL AND MINERALS BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF SURFACE ENTRY ONTO SAID LAND, AS RESERVED BY MILTON L. ROSE, A MARRIED MAN, IN DEED RECORDED NOVEMBER 18, 1968 IN BOOK 4217, PAGE 717, OF OFFICIAL RECORDS.

APN: 345-011-39

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-88A, DATED AUGUST 16, 2024.

PARCEL 2 IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER PARCEL MAP NO. 2467, FILED SEPTEMBER 9, 1974, IN THE BOOK 11, PAGE 79, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT 50% OF ALL CRUDE OIL AND MINERALS BELOW A DEPTH OF 500 FEET, FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF SURFACE ENTRY ONTO SAID LAND AS RESERVED BY MILTON L. ROSE, A MARRIED MAN, IN DEED RECORDED NOVEMBER 18, 1968 IN BOOK 4217, PAGE 711, OF OFFICIAL RECORDS.

APN: 345-011-40

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-138A, DATED AUGUST 16, 2024.

PARCEL 3, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER PARCEL MAP NO. 2467, FILED SEPTEMBER 9, 1974 IN BOOK 11 PAGE 79 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT 50% OF ALL CRUDE OIL AND MINERALS BELOW A DEPTH OF 500 FEET, FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF SURFACE ENTRY ONTO SAID LAND, AS RESERVED BY MILTON L. ROSE, A MARRIED MAN, IN DEED RECORDED NOVEMBER 18, 1968 IN BOOK 4217 PAGE 711, OF OFFICIAL RECORDS.

APN: 345-011-41

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480190, DATED MARCH 21, 2023.

PARCEL 4 IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER PARCEL MAP NO. 2467, FILED SEPTEMBER 9, 1974 IN BOOK 11 PAGE 79 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT 50% OF ALL CRUDE OIL AND MINERALS BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF SURFACE ENTRY ONTO SAID LAND, AS RESERVED BY MILTON L. ROSE, A MARRIED MAN, IN DEED RECORDED NOVEMBER 18, 1968 IN BOOK 4217 PAGE 711, OF OFFICIAL RECORDS.

APN: 345-011-42

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480365, DATED MAY 4, 2023.

THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 3, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL CRUDE OIL AND MINERALS BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF SURFACE ENTRY ONTO SAID LAND, AS RESERVED BY MILTON L. ROSE, A MARRIED MAN, IN DEED RECORDED NOVEMBER 18, 1968 IN BOOK 4217, PAGE 7171, OFFICIAL RECORDS.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657-452-0200
jeff.lenherr@kimley-horn.com

VESTING TENTATIVE PARCEL MAP NO. 12593

SEC. 34, T. 11 N., R. 13 W., S.B.M.

SEC. 3 T. 10 N. R. 13 W., S.B.M.

SEC. 4, T. 10 N., R. 13 W., S.B.M.

SEC. 2, T. 10 N., R. 13 W., S.B.M.

SEC. 10, T. 10 N., R. 13 W., S.B.M.

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

N89°41'18"W 2640.82'

NW COR SEC 3

N 1/4 SEC 3

NE COR SEC 3

N89°44'14"W 2641.03'

2629.91' N00°41'27"W

2632.77'

N01°28'50"W 2638.85'

2648.33'

W 1/4 SEC 3

N89°38'33"W 5302.97'

2654.63'

E 1/4 SEC 3

N89°40'26"W 1988.21'

30'

45'

P.M. NO. 2467

PARCEL 1

PARCEL 2

PARCEL 3

PARCEL 4

P.M.B. 11 / 79

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

N00°51'13"W 5264.64'

2632.47'

1645.29'

N00°48'26"W 986.60'

656.60'

55'

N89°42'19"W 661.81'

N00°44'31"W 2641.29'

N00°39'51"W 656.98'

N00°32'03"W 2626.40'

1313.20'

N89°43'16"W 661.35'

TO BE VACATED PER SEPARATE INSTRUMENT

TO BE VACATED PER SEPARATE INSTRUMENT

N89°44'12"W 660.89'

PARCEL A
74.86± ACRES

987.18'

N00°41'39"W 657.36'

TO BE VACATED PER SEPARATE INSTRUMENT

℄ 70TH ST. WEST

SW COR SEC 3

2653.31' N89°50'07"W

S 1/4 SEC 3

1319.94'

N89°46'06"W 2639.87'

1319.94'

SE COR SEC 3

KE11 KE12 KJ12 KK12 KK10 KK11 KH11 KL6 KF7 KM6

VESTING TENTATIVE PARCEL MAP NO. 12593

EASEMENTS:

APN: 345-011-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480186A, DATED AUGUST 16, 2024.

KF5 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR THE USE AND DEVELOPMENT OF THE MINERAL INTERESTS RESERVED BY MILTON L. ROSE, AS SET FORTH IN A DOCUMENT RECORDED, NOVEMBER 18, 1968, IN BOOK 4217 PAGE 715, OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

(KF7) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD AND PUBLIC UTILITIES RESERVED BY LUVRE PROPERTIES, INC., AS SET FORTH IN A DOCUMENT RECORDED, NOVEMBER 18, 1968, AS INSTRUMENT NO. 073473 IN BOOK 6459 PAGE 909, OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 345-011-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-112A, DATED AUGUST 16, 2024.

NO EASEMENTS

APN: 345-011-26

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-112A, DATED AUGUST 16, 2024.

(KH11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, ROAD AND PUBLIC UTILITY PURPOSES TO LUVRE PROPERTIES, INC., A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 1, 1990 AS INSTRUMENT NO. 046296, IN BOOK 6437, PAGE 1636, OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 345-011-31

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480187A, DATED AUGUST 16, 2024.

(KL6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, ROAD AND PUBLIC UTILITY RESERVED BY LUVRE PROPERTIES INC., A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED, JUNE 4, 1997, AS INSTRUMENT NO. 0197073887, OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 345-011-36

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-8A, DATED AUGUST 16, 2024.

NO EASEMENTS

APN: 345-011-37

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480188-A, DATED AUGUST 15, 2024.

(KM6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO LUVRE PROPERTIES, INC., A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 29, 1990, IN BOOK 6447 PAGE 2446, OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 345-011-39

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480037-A, DATED AUGUST 15, 2024.

KE9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 20, 1974 AS INSTRUMENT NO. 13918 IN BOOK 4856, PAGE 987, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

KE10 IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR ROAD PURPOSES, RECORDED AUGUST 20, 1974 AS INSTRUMENT NO. 13918 IN BOOK 4856, PAGE 987, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(KE11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR AN EASEMENT 30 FEET IN WIDTH, FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 23, 1974 IN BOOK 4857, PAGE 5, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(KE12) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS, EGRESS, ROAD PURPOSES, RECORDED AUGUST 23, 1974 IN BOOK 4857, PAGE 5, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 345-011-40

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-138A, DATED AUGUST 16, 2024.

KJ11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO COUNTY OF KERN, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 20, 1974, IN BOOK 4856 PAGE 987, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

(KJ12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 23, 1974, IN BOOK 4857 PAGE 5, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 345-011-41

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480190, DATED MARCH 21, 2023.

(KK10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES, TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL NO REPRESENTATION IS MADE TO THE PRESENT OWNERSHIP OF SAID EASEMENT, AS SET FORTH IN A DOCUMENT, RECORDED AUGUST 20, 1974, IN BOOK 4856, PAGE 987 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(KK11) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR FUTURE STREET OR HIGHWAY PURPOSES, RECORDED AUGUST 20, 1974, IN BOOK 4856, PAGE 987, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(KK12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES, TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL NO REPRESENTATION IS MADE TO THE PRESENT OWNERSHIP OF SAID EASEMENT, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 23, 1974, IN BOOK 4857, PAGE 5, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 345-011-42

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480365, DATED MAY 4, 2023.

NO EASEMENTS

VESTING TENTATIVE PARCEL MAP NO. 12594

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION PORTIONS OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 21000481387, DATED DECEMBER 22, 2021, REPORT NO. 21000481387, DATED DECEMBER 22, 2021, REPORT NO. 23000480379, DATED MAY 4, 2023, REPORT NO. 22000480372, DATED APRIL 6, 2022, REPORT NO. 23000480482, DATED JUNE 14, 2023, REPORT NO. 22000480376A, DATED AUGUST 16, 2024, REPORT NO. 23000480040-31A, DATED AUGUST 16, 2024, REPORT NO. 22000480331, DATED PROFORMA, REPORT NO. 23000480501, DATED MAY 26, 2023, REPORT NO. 22000480465-119, DATED DECEMBER 7, 2022, REPORT NO. 23000480040-31A, DATED AUGUST 16, 2024, REPORT NO. 22000480317, DATED APRIL 5, 2022, EPORT NO. 22000480317, DATED APRIL 5, 2022, REPORT NO. 22000480465-21A, DATED AUGUST 16, 2024, REPORT NO. 23000480374, DATED MAY 4, 2023, REPORT NO. 22000480465-82A, DATED AUGUST 16, 2024, REPORT NO. 23000480375, DATED MAY 4, 2023, REPORT NO. 23000480376, DATED MAY 4, 2023, REPORT NO. 22000480465-131A, DATED DECEMBER 16, 2022, REPORT NO. 23000480205, DATED JUNE 2, 2023, STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480207, DATED MARCH 16, 2023, REPORT NO. 23000480036, DATED JANUARY 20, 2023, REPORT NO. 22000480465-20A, DATED AUGUST 16, 2024, STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-87, DATED SEPTEMBER 29, 2022, REPORT NO. 22000480465-86A, DATED AUGUST 15, 2024, REPORT NO. 23000480209, DATED APRIL 15, 2024, REPORT NO. 23000480210, DATED AUGUST 15, 2024, REPORT NO. 22000480465-56A, DATED AUGUST 15, 2024, REPORT NO. 22000480465-24A DATED AUGUST 15, 2024, REPORT NO. 23000480037-A, DATED AUGUST 15, 2024, REPORT NO. 22000480465-42, DATED JUNE 21, 2022, REPORT NO. 22000480465-145, DATED DECEMBER 21, 2022, REPORT NO. 23000480526, DATED JUNE 12, 2023, REPORT NO. 23000480575, DATED JUNE 7 2023, REPORT NO. 23000480040-13, DATED FEBRUARY 2, 2023, REPORT NO. 23000480778, DATED AUGUST 11, 2023, REPORT NO. 23000480788, DATED AUGUST 14, 2023, REPORT NO. 23000480789, DATED AUGUST 10, 2023, REPORT NO. 22000480465-144, DATED DECEMBER 16, 2022, REPORT NO. 22000480465-148, DATED DECEMBER 21, 2022, REPORT NO. 22000480465-46, DATED JULY 7, 2022, REPORT NO. 22000480465-28, DATED JUNE 9, 2022, REPORT NO. 23000480212, DATED AUGUST 4, 2023, REPORT NO. 22000480465-118, DATED DECEMBER 2, 2022, REPORT NO. 22000480465-40A, DATED AUGUST 8, 2024, REPORT NO. 22000480465-77, DATED DECEMBER 23, 2022, REPORT NO. 23000480040-1, DATED MARCH 3, 2023, REPORT NO. 22000480465-77, DATED DECEMBER 23, 2022, REPORT NO. 22000480465-77, DATED DECEMBER 23, 2022, REPORT NO. 22000480465-77, DATED DECEMBER 23, 2022, REPORT NO. 23000480040-10, DATED JANUARY 30, 2023, REPORT NO. 23000480474, DATED JUNE 30, 2023, REPORT NO. 22000480316, DATED AUGUST 26, 2022, REPORT NO. 22000480465-135, DATED DECEMBER 28, 2022, REPORT NO. 22000480465-63 DATED FEBRUARY 3, 2022, REPORT NO. 22000480465-48, DATED JULY 7, 2022, REPORT NO. 23000480214, DATED MAY 1, 2023, REPORT NO. 22000480465-15, DATED MAY 16, 2022, REPORT NO. 23000480208, DATED MAY 1, 2023, REPORT NO. 2200480465-72A, DATED AUGUST 16, 2024 AND REPORT NO. 23000480213, DATED MAY 1, 2023.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE SIXTY-EIGHT (68) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.

BASIS OF BEARINGS:

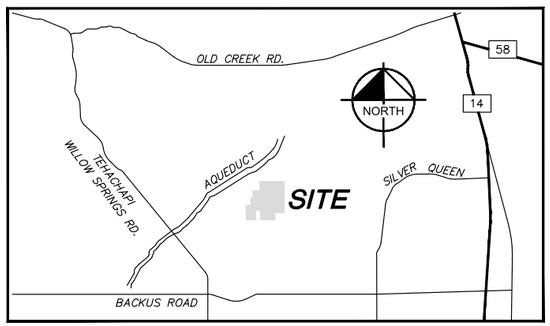
ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO. 06029C3650E, WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

SURVEY NOTE":

I, JEFFREY J. LENHERR, HEREBY STATE THAT THERE ARE NO STRUCTURES WITHIN THIS MAP OR WITHIN 150 FEET OF THE MAPS BOUNDARY.



VICINITY MAP
NOT TO SCALE

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	346-011-07, 09, 12, 13, 15, 17, 18 346-041-05, 07, 08, 18, 19, 21, 22, 23, 24, 25, 28, 29, 32 346-042-35, 37, 39, 40, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62 346-050-03, 04, 05, 06, 07, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 28, 29, 30, 31, 32, 33, 35, 36
ACCESS TO PARCELS:	PROPOSED PUBLIC ACCESS EASEMENTS SHOWN HEREON
EXISTING NUMBER OF PARCELS:	68
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	A, A WE, PL RS
EXISTING GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE); 8.4 (MINERAL AND PETROLEUM-MIN. 5 ACRE PARCEL SIZE); 8.4 (MINERAL AND PETROLEUM-MIN. 5 ACRE PARCEL SIZE) / 2.4 (FLOOD HAZARD)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A
PROPOSED GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE); 8.4 (MINERAL AND PETROLEUM-MIN. 5 ACRE PARCEL SIZE); 8.4 (MINERAL AND PETROLEUM-MIN. 5 ACRE PARCEL SIZE) / 2.4 (FLOOD HAZARD)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL 'A' AREA:	393.08 ACRES
TOTAL PROJECT AREA:	393.08 ACRES

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

10 SW COR. SEC. 33, SE COR. SEC. 32, FD. 3" GLO BRASS DISK STAMPED "S32 S5 S4 S33", FLUSH

11 FD. 2.5" GLO BRASS DISK

12 FD. 3" GLO BRASS DISK

16 FD. 3" GLO BRASS DISK, DISTURBED, UP 0.5', NOT HELD. CALCULATED POSITION BOOK 26, PAGE 152

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF EDWARDS SANBORN LAND HOLDINGS, LLC.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA

LEGAL DESCRIPTON:

APN: 346-042-59, 60, 61 & 62

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 21000481387, DATED DECEMBER 22, 2021.

PARCEL ONE:

THE NORTH HALF OF THE WEST HALF OF LOT 1, IN THE NORTHEAST QUARTER OF FRACTIONAL SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL TWO:

THE SOUTH HALF OF THE WEST HALF OF LOT 1 OF THE NORTHEAST QUARTER OF FRACTIONAL SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL THREE:

THE NORTH HALF OF THE WEST HALF OF LOT 2 IN THE NORTHEAST QUARTER OF FRACTIONAL SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL FOUR:

THE SOUTH HALF OF THE WEST HALF OF LOT 2 OF THE NORTHEAST QUARTER OF FRACTIONAL SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-050-17

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480379, DATED MAY 4, 2023.

PARCEL 1 OF PARCEL MAP NO. 2708, FILED JULY 7, 1976, IN BOOK 16 OF PARCEL MAPS AT PAGE 66, KERN COUNTY RECORDS.

APN: 346-050-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480372, DATED APRIL 6, 2022.

PARCEL 2 OF PARCEL MAP NO. 2708, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP RECORDED JULY 7, 1976, IN BOOK 16, PAGE(S) 66 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-050-36

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480482, DATED JUNE 14, 2023.

THE EAST 1/2 OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN.

APN: 346-011-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480376A, DATED AUGUST 16, 2024.

THE EAST HALF OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.M., IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER THE OFFICIAL PLAT THEREOF ON FILE IN THE OFFICE OF THE SURVEYOR GENERAL, APPROVED FEBRUARY 19, 1856. EXCEPTING THEREFROM 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS, HYDROCARBON SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, AS RESERVED IN THE DEED FROM HERMAN DAU SCHMIDT, A WIDOWER, RECORDED NOVEMBER 3, 1960 IN BOOK 3317 PAGE 105OF OFFICIAL RECORDS.

APN: 346-011-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-31A, DATED AUGUST 16, 2024.

THE WEST HALF OF THE WEST HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B. &M., ACCORDING TO PLAT OF SAID TOWNSHIP APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1856.

EXCEPTING THEREFROM THE NORTH HALF THEREOF.

ALSO EXCEPTING THEREFROM 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS, HYDROCARBON SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS RESERVED IN THE DEED FROM HERMAN DAU SCHMIDT, RECORDED NOVEMBER 3, 1960, IN BOOK 3317 PAGE 103, OFFICIAL RECORDS.

APN: 346-011-12 & 13

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331, DATED PROFORMA.

PARCEL 10:
THE WEST HALF OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.M, ACCORDING TO THE OFFICIAL PLAT OF SAID TOWNSHIP APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1856.

EXCEPT THEREFROM 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS, HYDROCARBON SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS RESERVED IN THE DEED FROM HERMAN DAU SCHMIDT, A WIDOWER, RECORDED NOVEMBER 3, 1960, IN BOOK 3317, PAGE 105 OF OFFICIAL RECORDS.

PARCEL 11:
THE EAST HALF OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.M., ACCORDING TO THE OFFICIAL PLAT OF SAID TOWNSHIP APPROVED BY THE SURVEYOR GENERAL FEBURARY 19, 1856.

EXCEPTING THEREFROM 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS, HYDROCARBON SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS RESERVED IN THE DEED FROM HERMAN DAU SCHMIDT, A WIDOWER, RECORDED NOVEMBER 3, 1960, IN BOOK 3317, PAGE 105 OFFICIAL RECORDS.

APN: 346-011-15

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331, DATED PROFORMA.

PARCEL 12:

THE EAST ½ OF THE WEST ½ OF THE NORTH ½ OF THE SOUTHWEST ¼ OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL ON FEBRUARY 19, 1856.

EXCEPT THEREFROM 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS, HYDROCARBONS SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS SET FORTH IN DEED RECORDED NOVEMBER 3, 1960 IN BOOK 3317, PAGE 103 OF OFFICIAL RECORDS.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657-452-0200
jeff.lenherr@kimley-horn.com

VESTING TENTATIVE PARCEL MAP NO. 12594

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-011-17 & 18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-119, DATED DECEMBER 7, 2022.

PARCEL ONE:
THE WEST HALF OF THE EAST HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.M, ACCORDING TO THE OFFICIAL PLAT OF SAID TOWNSHIP APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1856.

EXCEPT THEREFROM 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS, HYDROCARBON SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS RESERVED IN THE DEED FROM HERMAN DAU SCHMIDT, A WIDOWER, RECORDED NOVEMBER 3, 1960, IN BOOK 3317, PAGE 103 OF OFFICIAL RECORDS.

PARCEL TWO:
THE EAST HALF OF THE EAST HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.M., ACCORDING TO THE OFFICIAL PLAT OF SAID TOWNSHIP APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1856.

EXCEPTING THEREFROM 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS, HYDROCARBON SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS RESERVED IN THE DEED FROM HERMAN DAU SCHMIDT, A WIDOWER, RECORDED NOVEMBER 3, 1960, IN BOOK 3317 PAGE 103 OFFICIAL RECORDS.

APN: 346-041-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-147A, DATED AUGUST 16, 2024.

THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-041-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480317, DATED APRIL 5, 2022.

THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.&M., IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS, HYDROCARBON SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS RESERVED IN DEED FROM HERMAN DAU SCHMIDT, A WIDOWER, RECORDED NOVEMBER 3, 1960 IN BOOK 3317 PAGE 101 OF OFFICIAL RECORDS.

APN: 346-041-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-21A, DATED AUGUST 16, 2024.

THE SOUTH ONE-HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS, HYDROCARBON SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS RESERVED IN DEED FROM HERMAN DAU SCHMIDT, A WIDOWER, RECORDED NOVEMBER 3, 1960, IN BOOK 3317 OF OFFICIAL RECORDS.

APN: 346-041-18 & 19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480374, DATED MAY 4, 2023.

PARCEL 1
THE SOUTHWEST ¼, OF THE NORTHEAST ¼, OF THE NORTHEAST ¼, OF THE NORTHWEST ¼, OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN BEING TWO AND ONE HALF ACRES MORE OR LESS. RESERVING THEREFROM A 20 FOOT EASEMENT ALONG THE SOUTHERN BORDER AND A 20 FOOT, EASEMENT ALONG THE WESTERLY BORDER FOR ROADS AND UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS.

PARCEL 2
THE SOUTHEAST ¼, OF THE NORTHEAST ¼, OF THE NORTHEAST ¼, OF THE NORTHWEST ¼, OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST S.B.B.M, BEING 2½, ACRES MORE OR LESS.

RESERVING THEREFROM A 20 FOOT EASEMENT ALONG THE SOUTHERLY BORDER, AND A 20 FOOT EASEMENT ALONG THE EASTERLY BORDER FOR ROADS UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS.

APN: 346-041-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-82A, DATED AUGUST 16, 2024.

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-041-22

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480375, DATED MAY 4, 2023.

THE NORTH HALF OF THE EAST HALF OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN.

APN: 346-041-23

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480376, DATED MAY 4, 2023.

THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-041-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-131A, DATED DECEMBER 16, 2022.

THE SOUTH HALF OF THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS AND HYDROCARBON SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS RESERVED BY HERMAN DAU SCHMIDT, A WIDOWER, IN DEED RECORDED NOVEMBER 3, 1960 IN BOOK 3317, PAGE 99, OF OFFICIAL RECORDS.

APN: 346-041-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480205, DATED JUNE 2, 2023.

THE NORTH HALF OF THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-041-28

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-27A, DATED AUGUST 16, 2024.

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THERE FROM 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS, HYDROCARBON SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS RESERVED IN DEED FROM HERMAN DAU SCHMIDT, A WIDOWER, RECORDED NOVEMBER 3, 1960, IN BOOK 3317 PAGE 101 OF OFFICIAL RECORDS.

APN: 346-041-29-00-5

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480036, DATED JANUARY 20, 2023.

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, ALSO DISCLOSED BY CERTIFICATE OF COMPLIANCE NO. 792 RECORDED NOVEMBER 5, 1984 IN BOOK 5707, PAGE 2465, FILE NO. 047702, OFFICIAL RECORDS.

EXCEPTING THEREFROM 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS, HYDROCARBON SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS RESERVED IN DEAD FROM HERMAN DAN SCHMIDT A WIDOWER, RECORD NOVEMBER 3, 1960 IN BOOK 3317, PAGE 101 OF OFFICIAL RECORDS.

APN: 346-041-32

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 2200480465-20A, DATED AUGUST 16, 2024.

THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 AND THE SOUTH 1/2 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST S.B.B. & M., IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% INTEREST IN AND TO ALL MINERAL RIGHTS, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AND ALSO A 50% INTEREST OF ALL OIL, GAS, HYDROCARBON SUBSTANCES BELOW 700 FEET BENEATH THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS RESERVED IN DEED FROM HERMAN DAU SCHMIDT, A WIDOWER, RECORDED NOVEMBER 3, 1960 IN BOOK 3317 PAGE 101 OF OFFICIAL RECORDS. A PER CERTIFICATE OF COMPLIANCE NO. 797, BEING RECORDED IN BOOK 5707 PAGE 2470 OF OFFICIAL RECORDS.

APN: 346-042-35

ITEM NUMBERS AND LEGAL DESCRIPTION SHOWN HEREON CORRESPOND TO STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-87A, DATED AUGUST 16, 2024.

PARCEL 1, AS SHOWN ON PARCEL MAP NO. 2898, FILED MAY 22, 1975 IN BOOK 13 OF PARCEL MAPS AT PAGE 147, KERN COUNTY RECORDS.

APN: 346-042-40

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-86A, DATED AUGUST 15, 2024.

PARCEL 2 OF PARCEL MAP 2909 IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP RECORDED JUNE 3, 1975, IN BOOK 13, PAGE 160 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-042-43

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480209, DATED APRIL 15, 2024.

PARCEL 1, PARCEL MAP 3439, RECORDED MAY 3, 1976, IN BOOK 15, PAGE 176 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF KERN, STATE OF CALIFORNIA.

APN: 346-042-44

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480210, DATED AUGUST 15, 2024.

PARCEL 2, OF PARCEL MAP 3439 RECORDED MAY 3, 1976 IN BOOK 15, PAGE 176 OF PARCEL MAPS IN THE OFFICE OF COUNTY RECORDERS OF THE COUNTY OF KERN, STATE OF CALIFORNIA.

APN: 346-042-45

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-56A, DATED AUGUST 15, 2024.

PARCEL 3 OF PARCEL MAP 3439 RECORDED MAY 3, 1976, IN BOOK 15, PAGE 176 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF KERN, STATE OF CALIFORNIA.

APN: 346-042-46

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-24A, DATED AUGUST 15, 2024.

PARCEL 4 OF PARCEL MAP NO. 3439 ACCORDING TO THE MAP THEREOF RECORDED MAY 3, 1976 IN BOOK 15, PAGE 176 OF PARCEL MAPS, KERN COUNTY RECORDS.

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-042-47-00-4

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480037-A, DATED AUGUST 15, 2024.

PARCEL 1 OF PARCEL MAP 3438, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 15, PAGE 175 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-042-48

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-42, DATED JUNE 21, 2022.

PARCEL 2 OF PARCEL MAP 3438, FILED MAY 3, 1975, IN BOOK 15, PAGE 175OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-042-49

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-145, DATED DECEMBER 21, 2022.

PARCEL 3 OF PARCEL MAP 3438, FILED MAY 3, 1975, IN BOOK 15, PAGE 175 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-042-50

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480526, DATED JUNE 12, 2023.

PARCEL 4 OF PARCEL MAP 3438, FILED MAY 3, 1975, IN BOOK 15, PAGE 175 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-042-51

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480575, DATED JUNE 7 2023.

PARCEL 1 OF PARCEL MAP NO. 3291 IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA AS PER MAP RECORDED AUGUST 20, 1976, IN BOOK 16, PAGE 125 OF PARCEL MAPS IN THE OFFICE OF THE COUNTY RECORDER.

APN: 346-042-52

ITEM NUMBERS AND LEGAL DESCRIPTION SHOWN HEREON CORRESPOND TO STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-13, DATED FEBRUARY 2, 2023.

THE SE 1/4, OF THE NW 1/4, OF THE NE 1/4, OF THE NE 1/4, OF SEC. 4, TP 10N, R 13W, S.B. B.M. BEING PARCEL #2 OF PARCEL MAP #3291, RECORDED IN KERN COUNTY.

APN: 346-042-53

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480778, DATED AUGUST 11, 2023.

PARCEL 3 OF PARCEL MAP NO. 3291 IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA AS PER MAP RECORDED AUGUST 20, 1976, IN BOOK 16, PAGE 125, OF PARCEL MAPS IN THE OFFICE OF THE COUNTY RECORDER.

APN: 346-042-54

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480788, DATED AUGUST 14, 2023.

2 1/2 ACRES, MORE OR LESS, BEING THE SOUTH 1/2 OF THE NORTH 1/2 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SEC. 4, TP 10N, R 13W, S.B.B.M. PARCEL #4, OF PARCEL MAP # 3291 RECORDED IN KERN COUNTY.

APN: 346-042-55

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480789, DATED AUGUST 10, 2023.

PARCEL 1 OF PARCEL MAP 3322 IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP RECORDED AUGUST 12, 1976 IN BOOK 16, PAGE 115 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-042-56

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-144, DATED DECEMBER 16, 2022.

PARCEL 2 OF PARCEL MAP 3322 IN THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP RECORDED AUGUST 12, 1976 IN BOOK 16, PAGE 115 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-042-57

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-148, DATED DECEMBER 21, 2022.

PARCEL 3, OF PARCEL MAP NO. 3322, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, RECORDED AUGUST 12, 1976 IN BOOK 16, PAGE 115, IN THE COUNTY OF KERN, STATE OF CALIFORNIA.

APN: 346-042-58

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-46, DATED JULY 7, 2022.

PARCEL 4 OF PARCEL MAP NO. 3322, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED AUGUST 12, 1976 IN BOOK 16 PAGE 115 OF PARCEL MAPS, KERN COUNTY RECORDS.

APN: 346-050-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-28, DATED JUNE 9, 2022.

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1856.

VESTING TENTATIVE PARCEL MAP NO. 12594

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-050-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480212, DATED AUGUST 4, 2023.

THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER IN SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA.

APN: 346-050-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-118, DATED DECEMBER 2, 2022.

THE EAST HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM 1/2 OF OIL, GAS, MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR UNDER THAT PORTION OF SAID LAND LYING BELOW A DEPTH OF 500 FEET FROM THE SURFACE THEREOF; WITHOUT, HOWEVER, ANY RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS EXCEPTED IN THE DEED FROM MARCELLE MATHERON BOREL WHO ACQUIRED TITLE AS MARCELLE A. MATHERON, ET AL RECORDED NOVEMBER 9, 1966, IN BOOK 3994 PAGE 331, OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM 1/2 OF OIL, GAS, MINERALS AND OTHER HYDROCARBONS SUBSTANCES IN OR UNDER THAT PORTION OF SAID LAND LYING BELOW A DEPTH OF 500 FEET FROM THE SURFACE THEREOF; WITHOUT, HOWEVER, ANY RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, AS EXCEPTED IN THE DEED FROM MARIAN MARTIN BROWN, RECORDED FEBRUARY 8, 1967, IN BOOK 4023 PAGE 457 OFFICIAL RECORDS.

APN: 346-050-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-40A, DATED AUGUST 8, 2024.

THE WEST HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL, FEBRUARY 19, 1856.

APN: 346-050-13 & 14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-77, DATED DECEMBER 23, 2022.

PARCELS 1 AND 2 OF PARCEL MAP NO. 2726, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, FILED MAY 29, 1975, IN BOOK 13 OF PARCEL MAPS, AT PAGE 152, KERN COUNTY RECORDS.
APN: 346-050-13; 346-050-14

APN: 346-050-15

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-1, DATED MARCH 3, 2023.

PARCEL NO. 3 OF PARCEL MAP 2726, ACCORDING TO THE MAP THEREOF FILED MAY 29, 1975, IN BOOK 13, OF PARCEL MAPS, AT PAGE 152 IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY. PROPERTY IS LOCATED IN SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST.

APN: 346-050-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-77, DATED DECEMBER 23, 2022.

PARCEL 3, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS SHOWN ON PARCEL MAP NO. 2708, FILED IN BOOK 16 PAGE 66 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-050-20

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-77, DATED DECEMBER 23, 2022.

PARCEL 4 OF PARCEL NO. 2708, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, FILED IN BOOK 16 PAGE 66 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-050-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-77, DATED DECEMBER 23, 2022.

PARCEL 1 OF PARCEL MAP NO 2972, FILED JULY 7, 1976, IN BOOK 16 OF PARCEL MAPS AT PAGE 67, BEING THE SOUTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 16 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN.

APN: 346-050-22

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-10, DATED JANUARY 30, 2023.

PARCEL 2 OF PARCEL MAP NO. 2972, BEING THE SOUTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13, WEST, S. B. B. & M.

APN: 346-050-23

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480474, DATED JUNE 30, 2023.

PARCEL 3 OF PARCEL MAP NO. 2972, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN BOOK 16, PAGE 67 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, BEING THE SOUTH HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.&M.

APN: 346-050-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480316, DATED AUGUST 26, 2022.

PARCEL 1, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS SHOWN ON PARCEL MAP NO. 3001, FILED JULY 30, 1976, IN BOOK 16, PAGE 101, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF KERN COUNTY.

APN: 346-050-28

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-135, DATED DECEMBER 28, 2022.

PARCEL 1 IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS SHOWN ON PARCEL MAP 3553, FILED IN BOOK 16 PAGE 169 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-050-29, 30 & 31

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-63 DATED FEBRUARY 3, 2022.

PARCELS 2, 3 AND 4 OF PARCEL MAP NO. 3553, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP RECORDED SEPTEMBER 24, 1976, IN BOOK 16 PAGE 169, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID KERN COUNTY.

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-050-32

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-48, DATED JULY 7, 2022.

THE EAST HALF OF THE EAST HALF OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA.

APN: 346-050-33

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480214, DATED MAY 1, 2023.

THE WEST HALF OF THE EAST HALF OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA.

APN: 346-050-35-00-8

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-15, DATED MAY 16, 2022.

THE WEST HALF OF THE WEST HALF OF THE NORTHWEST ONE QUARTER OF THE NORTHEAST ONE QUARTER OF THE SOUTHEAST ONE QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SBBM.

APN: 346-042-37

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480208, DATED MAY 1, 2023.

PARCEL 3 OF PARCEL MAP NO. 2898, FILED MAY 22, 1975, IN BOOK 13 OF MAPS AT PAGE 147, KERN COUNTY RECORDS.

APN: 346-042-39

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-72A, DATED AUGUST 16, 2024.

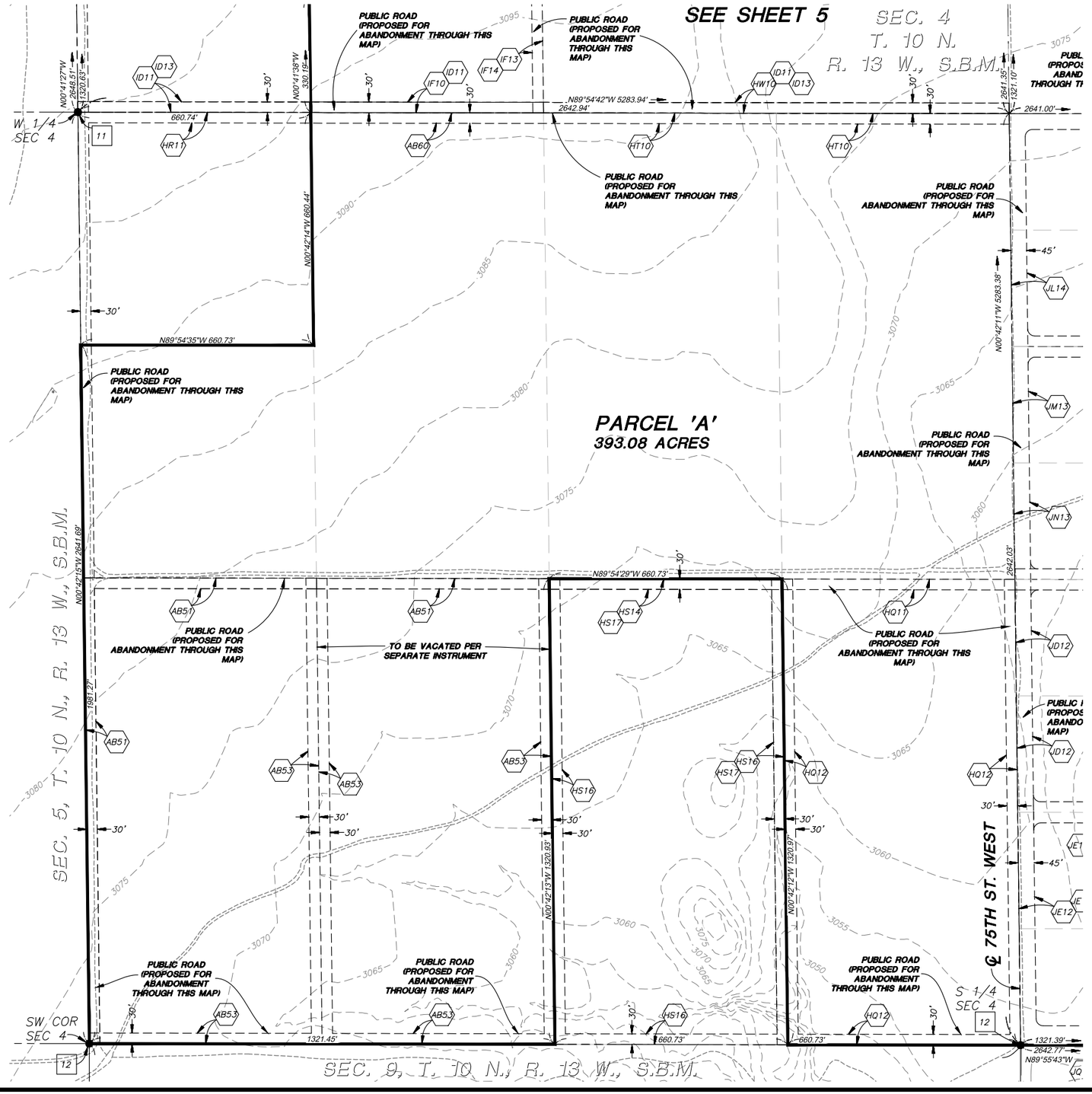
PARCEL 1 OF PARCEL MAP 2909 IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP RECORDED JUNE 3, 1975, IN BOOK 13, PAGE 160 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-050-05

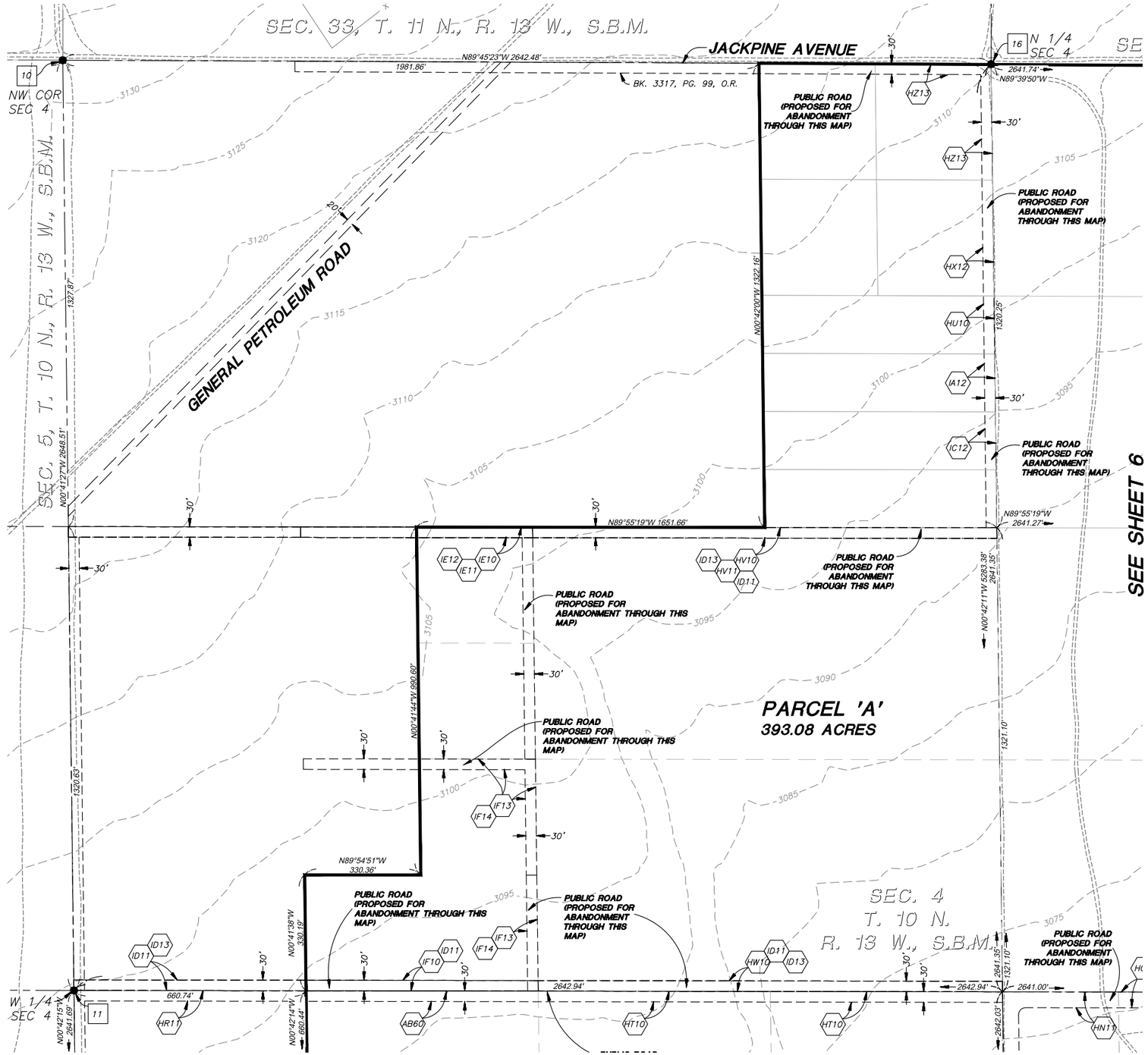
STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480213, DATED MAY 1, 2023.

THE WEST ONE-HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

VESTING TENTATIVE PARCEL MAP NO. 12594



VESTING TENTATIVE PARCEL MAP NO. 12594



VESTING TENTATIVE PARCEL MAP NO. 12594

SEE SHEET 5

SEE SHEET 7

PARCEL 'A'
393.08 ACRES

℄ SILVER QUEEN ROAD

℄ HENDERSON AVENUE

℄ WILSHIRE AVENUE

℄ HANCOCK AVENUE

℄ LAGUNA AVENUE

℄ 70TH ST. WEST

N89°45'23"W 2642.48'

N89°39'50"W 2641.74'

N89°55'19"W 1651.66'

N89°55'19"W 2641.27'

N89°54'42"W 5283.94'

N00°42'11"W 5283.39'

N00°41'29"W 2629.91'

N00°44'31"W 2641.29'

1320.25'

1321.10'

1308.35'

1321.56'

2642.94'

2642.03'

2641.00'

1650.80'

BOOK 3379, PAGE 647, O.R.

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

P.M. NO. 2898
PARCEL 1
P.M.B. 13 / 147

PCL 1 P.M. NO. 3291
PCL 2
P.M.B. 16 / 125

P.M. NO. 2898
P.M.B. 13 / 147

PCL 1 P.M. NO. 3322
PCL 2
P.M.B. 16 / 115

PARCEL 1
P.M. NO. 2909
P.M.B. 13 / 160

PARCEL 2

PCL 1 P.M. NO. 3439 P.M.B. 15 / 176
PCL 2 PCL 3 PCL 4

P.M. NO. 3438 P.M.B. 15 / 175
PCL 1 PCL 2 PCL 3 PCL 4

PARCEL 3

SEC. 33, T. 11 N., R. 13 W., S.B.M.

SEC. 4 T. 10 N. R. 13 W., S.B.M.

SEC. 3 T. 10 N. R. 13 W. S.B.M.

16 N 1/4 SEC 4

12 NE COR SEC 4

11 E 1/4 SEC 4

NORTH

GRAPHIC SCALE IN FEET
200 0 100 200 400

SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12594

SEE SHEET 5

SEE SHEET 4

T. 10 N., R. 13 W., S.B.M.

℄ LAGUNA AVENUE

℄ ROSA AVENUE

℄ NORMAN AVENUE

℄ REED AVENUE

℄ 75TH ST. WEST

℄ 72TH ST. WEST

℄ 70TH ST. WEST

℄ LYLE AVE.

℄ LYLE AVE.

P.M. NO. 3438

P.M. NO. 2708

P.M. NO. 2972

P.M. NO. 2726

P.M. NO. 3553

P.M.B. 15 / 175

P.M.B. 16 / 66

P.M.B. 16 / 67

P.M.B. 13 / 152

P.M.B. 16 / 169

P.M.B. 16 / 101

PCL 1 PCL 2 PCL 3 PCL 4

PARCEL 1

PARCEL 2

PARCEL 3

PARCEL 4

PARCEL 'A'
393.08 ACRES

PUBLIC ROAL (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

S 1/4 SEC 4

E 1/4 SEC 4

SEC. 9, T. 10 N., R. 13 W., S.B.M.

SE COR SEC 4

N89°54'42"W 5283.94'

N00°42'11"W 5283.38'

N89°55'20"W 1321.05'

N00°44'31"W 2642.28'

N00°41'27"W 2629.16'

N89°54'15"W 2642.90'

2642.94'

2641.00'

1321.39'

1650.80'

990.48'

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12594

EASEMENTS:

APN: 346-042-59, 60, 61 & 62

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 21000481387, DATED DECEMBER 22, 2021.

HM10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 24, 1917 IN BOOK 19 PAGE 135 OF PATENTS. (NOT LOCATABLE FROM RECORD)

APN: 346-050-17

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480379, DATED MAY 4, 2023.

HN10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED NOVEMBER 17, 1914, IN BOOK 18, PAGE 101, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(HN11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES AND INCIDENTAL PURPOSES TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 22, 1974, IN BOOK 4865 PAGE 1301, OFFICIAL RECORDS. AFFECTS THE NORTH 45 FEET, THE WEST 45 FEET AND A NORTHWESTERLY PORTION.

(HN12) MATTERS AS SHOWN ON THE PARCEL MAP NO. 2708, FILED IN BOOK 16, PAGE 66, OF MAPS, TOGETHER WITH ANY PROVISIONS AND RECITALS CONTAINED THEREIN.

APN: 346-050-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480372, DATED APRIL 6, 2022.

(HO9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS AND ROAD PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 22, 1974 AS INSTRUMENT NO. 29201 IN BOOK 4865, PAGE 1301 OF OFFICIAL RECORDS.

(HO10) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS AND EGRESS AND ROAD PURPOSES, RECORDED OCTOBER 22, 1974 AS INSTRUMENT NO. 29201 IN BOOK 4865, PAGE 1301 OF OFFICIAL RECORDS.

APN: 346-050-36

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480482, DATED JUNE 14, 2023.

NO EASEMENTS

APN: 346-011-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480376A, DATED AUGUST 16, 2024.

HQ10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING OR OTHER PURPOSES, RESERVED BY HERMAN D. SCHMIDT, AS SET FORTH IN A DOCUMENT RECORDED JUNE 28, 1915 IN BOOK 16, PAGE 420 OF PATENTS. (NOT LOCATABLE FROM RECORD)

(HQ11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND ROAD PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 3, 1960 IN BOOK 3317 PAGE 105 AS INSTRUMENT NO. 64328 OF OFFICIAL RECORDS.

(HQ12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR FUTURE ROAD AND PUBLIC UTILITY PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED JULY 6, 1965 AS INSTRUMENT NO. 36083 IN BOOK 3854 PAGE 770 OF OFFICIAL RECORDS.

APN: 346-011-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-31A, DATED AUGUST 16, 2024.

HR10 RIGHT OF WAY FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES, AS RESERVED IN THE PATENT FROM THE UNITED STATES OF AMERICA, RECORDED JUNE 28, 1915, IN BOOK 16 OF PATENTS PAGE 420. THE SPECIFIC LOCATION OF WHICH IS NOT DISCLOSED OF RECORD. (NOT LOCATABLE FROM RECORD)

(HR11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND ROAD AND INCIDENTAL PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 3, 1960, IN BOOK 3317 PAGE 103, OF OFFICIAL RECORDS.

APN: 346-011-12 & 13

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331, DATED PROFORMA.

AB49 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED JUNE 28, 1915 IN BOOK 16 OF PATENTS PAGE 420. (EASEMENT IS BLANKET IN NATURE)

AB50 RIGHT OF WAY FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES, AS RESERVED IN THE PATENT FROM THE UNITED STATES OF AMERICA, RECORDED JUNE 28, 1915 IN BOOK 16 OF PATENTS PAGE 420. THE SPECIFIC LOCATION OF WHICH IS NOT DISCLOSED OF RECORD. (NOT LOCATABLE FROM RECORD)

(AB51) AN EASEMENT OVER SAID LAND FOR PUBLIC UTILITIES AND ROAD AND INCIDENTAL PURPOSES, AS RESERVED BY HERMAN DAU SCHMIDT, IN DEED RECORDED NOVEMBER 3, 1960, IN BOOK 3317 PAGE 105, OF OFFICIAL RECORDS. AFFECTS THE WESTERLY 30 FEET OF PARCEL 10 AND THE NORTHERLY 30 FEET OF PARCELS 10 AND 11. NO REPRESENTATION IS MADE AS TO THE CURRENT OWNERSHIP OF SAID EASEMENT.

(AB53) AN EASEMENT OVER SAID LAND FOR FUTURE ROAD AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES, AS RESERVED BY LOUIS P. AMENDOLA, ET UX, IN DEED RECORDED JULY 6, 1965, IN BOOK 3854 PAGE 770, OF OFFICIAL RECORDS, AFFECTS THE SOUTH AND EAST 30 FEET OF PARCEL 10 AND THE SOUTH AND EAST 30 FEET OF PARCEL 11. NO REPRESENTATION IS MADE AS TO THE CURRENT OWNERSHIP OF SAID EASEMENT.

AB54 AN EASEMENT OVER SAID LAND FOR INGRESS, EGRESS AND ROAD AND INCIDENTAL PURPOSES, AS GRANTED TO THE PUBLIC IN GENERAL, IN DEED RECORDED MAY 6, 1988 IN BOOK 6119, PAGE 1841 OF OFFICIAL RECORDS. AFFECTS THE NORTHERLY AND WESTERLY 30 FEET OF PARCEL 10. NO REPRESENTATION IS MADE AS TO THE CURRENT OWNERSHIP OF SAID EASEMENT. (DOES NOT AFFECT SUBJECT PARCEL)

AB55 AN EASEMENT OVER SAID LAND FOR INGRESS, EGRESS AND ROAD AND INCIDENTAL PURPOSES, AS GRANTED TO THE PUBLIC IN GENERAL, IN DEED RECORDED MAY 6, 1988 IN BOOK 6119, PAGE 1843 OF OFFICIAL RECORDS. AFFECTS THE NORTHERLY 30 FEET OF PARCEL 11. NO REPRESENTATION IS MADE AS TO THE CURRENT OWNERSHIP OF SAID EASEMENT. (DOES NOT AFFECT SUBJECT PARCEL)

AB57 MATTERS DISCLOSED BY RECORD OF SURVEY MAP, FILED ON FEBRUARY 9, 2011 IN BOOK 26 PAGES 152 - 201 OF RECORD OF SURVEY. THE PURPOSE OF THE SURVEY, AS RECITED ON THE MAP.

APN: 346-011-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480501, DATED MAY 26, 2023.

HS13 RIGHT OF WAY FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES, AS RESERVED IN THE PATENT FROM THE UNITED STATES OF AMERICA, RECORDED JUNE 28, 1915, IN BOOK 16 OF PATENTS PAGE 420. THE SPECIFIC LOCATION OF WHICH IS NOT DISCLOSED OF RECORD. (NOT LOCATABLE FROM RECORD)

(HS14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND ROAD AND INCIDENTAL PURPOSES TO HERMAN DAU SCHMIDT, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 03, 1960, IN BOOK 3317 PAGE 105, OFFICIAL RECORDS.

(HS16) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR FUTURE ROAD AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES TO LOUIS P. AMENDOLA, ET UX, AS SET FORTH IN A DOCUMENT RECORDED JULY 6, 1965 IN BOOK 3854 PAGE 770, OFFICIAL RECORDS.

(HS17) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD AND INCIDENTAL PURPOSES TO PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MAY 6, 1988, IN BOOK 6119, PAGE 1839, OF OFFICIAL RECORDS.

APN: 346-011-15

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331, DATED PROFORMA.

AB59 THE FOLLOWING RESERVATIONS AND/OR PROVISIONS CONTAINED IN THE PATENT FROM THE UNITED STATES OF AMERICA, RECORDED JUNE 28, 1915, IN BOOK 16, PAGE 420 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING OR OTHER PURPOSES, AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS AND DECISIONS OF COURTS; ALSO A RIGHT OF WAY FOR DITCHES OR CANALS CONSTRUCTED BY AUTHORITY OF THE UNITED STATES AS RESERVED IN SAID PATENT.

(AB60) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES EASEMENT AND ROAD PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 3, 1960, IN BOOK 3317, PAGE 103, OF OFFICIAL RECORDS.

APN: 346-011-17 & 18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-119, DATED DECEMBER 7, 2022.

HT9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED JUNE 28, 1915, IN BOOK 16, PAGE 420 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(HT10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND ROAD AND INCIDENTAL PURPOSES TO HERMAN DAU SCHMIDT, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 3, 1960, IN BOOK 3317, PAGE 103, OF OFFICIAL RECORDS.

HT18 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO AND FROM THE PROPERTY INCLUDING ROAD ACCESS AND THE RIGHT TO INSTALL, MAINTAIN AND REPAIR ROADS AND ROADWAYS ON THE PROPERTY TO POWER PARTNERS SOUTHWEST, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 24, 2010 AS INSTRUMENT NO. 210115372, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-041-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-31A, DATED AUGUST 16, 2024.

HU9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920, IN BOOK 20, PAGE 155 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

(HU10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, FOR FUTURE ROAD AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES, RESERVED BY ROBERT A. MOORE, ET UX, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 30, 1969, IN BOOK 4322 PAGE 225, OF OFFICIAL RECORDS.

HU12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR A NON-EXCLUSIVE ON, OVER AND ACROSS ANY AND FOR PURPOSES OF INGRESS AND EGRESS TO ENXCO DEVELOPMENT CORPORATION, A DELAWARE CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JULY 20, 2010 AS INSTRUMENT NO. 210095186, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-041-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480317, DATED APRIL 5, 2022.

HV9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920, IN BOOK 20, PAGE 155 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(HV10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND ROAD PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY HERMAN DAU SCHMIDT, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 3, 1960 IN BOOK 3317, PAGE 101 AS INSTRUMENT NO. 64324 OF OFFICIAL RECORDS.

(HV11) NON-EXCLUSIVE EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO BE USED IN COMMON WITH OTHERS, RESERVED BY JOHN R. BANOCZI AND JEANNETTE B. BANOCZI, HIS WIFE, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 25, 1966 IN BOOK 3998, PAGE 352 AS INSTRUMENT NO. 62165 OF OFFICIAL RECORDS.

APN: 346-041-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-21A, DATED AUGUST 16, 2024.

HW9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND ROAD PURPOSES TO HERMAN DAU SCHMIDT, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 3, 1960 IN BOOK 3317 PAGE 101 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(HW10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO BE USED IN COMMON WITH OTHERS OVER THE NORTHERLY AND SOUTHERLY 30 FEET OF SAID LAND, RESERVED BY JOHN R. BANOCZI AND JEANNETTE B. BANOCZI, HIS WIFE, AS SET FORTH IN A DOCUMENT RECORDED RECORDED NOVEMBER 25, 1966 IN BOOK 3998 PAGE 352 OF OFFICIAL RECORDS.

APN: 346-041-18 & 19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480374, DATED MAY 4, 2023.

HX10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 2, 1920, IN BOOK 20, PAGE 155, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(HX12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR FUTURE ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY ROBERT A. MOORE AND SHIRLEY MAE MOORE, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 30, 1969, IN BOOK 4322 PAGE 225, OF OFFICIAL RECORDS.

APN: 346-041-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-82A, DATED AUGUST 16, 2024.

HY9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920 IN BOOK 20, PAGE 155, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-041-22

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480375, DATED MAY 4, 2023.

HZ12 RESERVATIONS AND EXCEPTIONS IN THE PATENT RECORDED APRIL 3, 1920, IN BOOK 20, PAGE 155, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(HZ13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR FUTURE ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 30, 1969, AS INSTRUMENT NO. 63810, IN BOOK 4322 PAGE 225, OF OFFICIAL RECORDS.

APN: 346-041-23

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480376, DATED MAY 4, 2023.

IA10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920 IN BOOK 20 PAGE 155 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

IA11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND ROAD PURPOSES, RESERVED BY HERMAN DAU SCHMIDT, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 3, 1960, IN BOOK 3317 PAGE 99 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(IA12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR FUTURE ROAD AND PUBLIC UTILITY PURPOSES, RESERVED BY ROBERT A. MOORE AND SHIRLEY MAE MOORE, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 30, 1969 IN BOOK 4322 PAGE 225 OF OFFICIAL RECORDS.

APN: 346-041-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-131A, DATED DECEMBER 16, 2022.

IB11 A RIGHT OF WAY FOR DITCHES AND CANALS AS RESERVED BY THE UNITED STATES OF AMERICA IN THE PATENT RECORDED APRIL 2, 1920 IN BOOK 20 OF PATENTS, PAGE 155. (EASEMENT IS BLANKET IN NATURE)

IB12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PIPELINES TO GENERAL PIPE LINE COMPANY OF CALIFORNIA, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 12, 1929, IN BOOK 317 PAGE 220, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

APN: 346-041-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480205, DATED JUNE 2, 2023.

IC11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND ROAD PURPOSES TO BE USED IN COMMON WITH OTHERS RESERVED BY HERMAN DAU SCHMIDT, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED, NOVEMBER 3, 1960, IN BOOK 3317 PAGE 99, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(IC12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS OVER THE NORTHERLY 30 FEET AND THE EASTERLY 30 FEET OF SAID LAND FOR FUTURE ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS RESERVED BY ROBERT A. MOORE AND SHIRLEY MAE MOORE, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED, SEPTEMBER 30, 1969, IN BOOK 4322 PAGE 225, OF OFFICIAL RECORDS.

APN: 346-041-28

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-27A, DATED AUGUST 16, 2024.

ID10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND ROAD PURPOSES RESERVED BY HERMAN DAU SCHMIDT, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED, NOVEMBER 3, 1960, IN BOOK 3317 PAGE 101, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(ID11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO JOE M. MILLION AND BETTY L. MILLION, HIS WIFE AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 25, 1966 IN BOOK 3998, PAGE 352, OF OFFICIAL RECORDS.

ID12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS RESERVED BY JOHN R. BANOCZI AND JEANNETTE B. BANOCZI, HIS WIFE, AS SET FORTH IN A DOCUMENT RECORDED, NOVEMBER 25, 1966, IN BOOK 3998 PAGE 353, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(ID13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO DOUGLAS B. SCHWEFLER AND KAREN ANN SCHWEFLER, HIS WIFE, AND JOSEPH I. TAMBLYN AND ANNA TAMBLY, HIS WIFE, ALL AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 25, 1966 IN BOOK 3998, PAGE 354 OF OFFICIAL RECORDS.

APN: 346-041-29-00-5

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480036, DATED JANUARY 20, 2023.

IE9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920 IN BOOK 20, PAGE 155 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(IE10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND ROAD PURPOSES TO HERMAN DAU SCHMIDT, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 3, 1960, IN BOOK 3317, PAGE 101, OF OFFICIAL RECORDS.

(IE11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO BE USED IN COMMON WITH OTHERS TO JOE M. MILLION AND BETTY L. MILLION, HIS WIFE, AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 25, 1966 IN BOOK 3998, PAGE 352 OF OFFICIAL RECORDS.

(IE12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO JOHN R. BANOCZI, ET UX, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 25, 1966, IN BOOK 3998, PAGE 353 OF OFFICIAL RECORDS.

IE13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO BE USED IN COMMON WITH OTHERS TO DOUGLAS B. SCHWEFLER AND KAREN ANN SCHWEFLER, HIS WIFE AND JOSEPH I. TAMBLYN AND ANNA TAMBLYN, HIS WIFE, ALL AS JOINT TENANTS , AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 25, 1966 IN BOOK 3998, PAGE 354 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

VESTING TENTATIVE PARCEL MAP NO. 12594

EASEMENTS:

APN: 346-041-32

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 2200480465-20A, DATED AUGUST 16, 2024.

IF9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND ROAD PURPOSES TO HERMAN DAU SCHMIDT, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 3, 1960 IN BOOK 3317 PAGE 101 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

(IF10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR A NONE-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS TO BE USED IN COMMON WITH OTHERS, RESERVED BY JOHN R. BANOCZI AND JEANNETTE B. BANOCZI, HIS WIFE, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 25, 1966 IN BOOK 3998 PAGE 353 OF OFFICIAL RECORDS.

(IF13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR A NONE-EXCLUSIVE EASEMENT OVER THE NORTH 30 FEET AND THE EAST 30 FEET OF SAID LAND FOR INGRESS, EGRESS ROAD AND UTILITY PURPOSES, TO BE USED IN COMMON WITH OTHERS, RESERVED BY CARLYLE MICHELMAN, TRUSTEE IN BANKRUPTCY FOR UNITED CALIFORNIA DEVELOPMENT CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 23, 1975 IN BOOK 4920 PAGE 2349 OF OFFICIAL RECORDS.

(IF14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR FOR A NONE-EXCLUSIVE EASEMENT OVER THE NORTH 30 FEET AND THE EAST 30 FEET OF SAID LAND FOR INGRESS, EGRESS ROAD AND UTILITY PURPOSES, TO BE USED IN COMMON WITH OTHERS, RESERVED BY RICHARD J. GALBRAITH AND SONDRA ANN GALBRAITH, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED MARCH 31, 1976 IN BOOK 4947 PAGE 2427 OF OFFICIAL RECORDS.

IF20 MATERS DISCLOSED BY RECORD OF SURVEY MAP, FILED ON FEBRUARY 9, 2011 IN BOOK 26 PAGES 152-201 OF RECORD OF SURVEY. THE PURPOSE OF THE SURVEY, AS RECITED ON THE MAP.

APN: 346-042-35

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 2200480465-87A, DATED AUGUST 16, 2024.

IG10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED FEBRUARY 24, 1917 IN BOOK 19, PAGE 135, OF PATENTS. SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING OR OTHER PURPOSES, AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS, AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS AND DECISIONS OF COURTS, AND THERE IS RESERVED FROM THE LANDS HEREBY GRANTED, A RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES. (EASEMENT IS BLANKET IN NATURE)

(IG11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO THE ADJACENT PROPERTY OWNERS, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975 IN BOOK 4884, PAGE 2190 AND RERECORDED APRIL 3, 1975 IN BOOK 4889, PAGE 1575, BOTH OF OFFICIAL RECORDS.

(IG12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO ADJACENT PROPERTY OWNERS, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1048, OF OFFICIAL RECORDS.

(IG13) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR ROAD PURPOSES, RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1048, OF OFFICIAL RECORDS.

APN: 346-042-40

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-86A, DATED AUGUST 15, 2024.

IH9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED FEBRUARY 24, 1917 IN BOOK 19, PAGE 1350F PATENTS. (EASEMENT IS BLANKET IN NATURE)

(IH10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975 IN BOOK 4884 PAGE 2188 OF OFFICIAL RECORDS.

(IH11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 IN BOOK 4886 PAGE 1050 OF OFFICIAL RECORDS.

APN: 346-042-43

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480209, DATED APRIL 15, 2024.

(II10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES, TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL NO REPRESENTATION IS MADE TO THE PRESENT OWNERSHIP OF SAID EASEMENT, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975 IN BOOK 4884 PAGE 2188, OF OFFICIAL RECORDS.

APN: 346-042-44

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480210, DATED AUGUST 15, 2024.

IJ5 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR DITCHES AND CANALS RESERVED BY UNITED STATES OF AMERICA, AS SET FORTH IN A DOCUMENT RECORDED, FEBRUARY 24, 1917, IN BOOK 19 OF PATENTS PAGE 135. (NOT LOCATABLE FROM RECORD)

(IJ6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975, IN BOOK 4884 PAGE 2188, OF OFFICIAL RECORDS.

APN: 346-042-45

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-56A, DATED AUGUST 15, 2024.

IK10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED FEBRUARY 24, 1917 IN BOOK 19, PAGE 135 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(IK11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975 IN BOOK 4884, PAGE 2188 OF OFFICIAL RECORDS.

IK12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1050 OF OFFICIAL RECORDS. (DOES NOT AFFECT)

(IK13) EASEMENTS AND OTHER MATTERS SHOWN AND/OR DEDICATED ON PARCEL MAP NO. 3439 FILED MAY 3, 1976, IN BOOK 15, PAGE 176 OF PARCEL MAPS, IN THE OFFICIAL COUNTY RECORDS.

APN: 346-042-46

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-24A DATED AUGUST 15, 2024.

(IL9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975 AS INSTRUMENT NO. 14831, BOOK 4884, PAGE 2188 OF OFFICIAL RECORDS.

(IL10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 AS INSTRUMENT NO. 17265, BOOK 4886, PAGE 1050 OF OFFICIAL RECORDS.

(IL11) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR FUTURE STREET OR HIGHWAY PURPOSES, RECORDED MARCH 13, 1975 AS INSTRUMENT NO. 17265, BOOK 4886, PAGE 1050 OF OFFICIAL RECORDS.

APN: 346-042-47-00-4

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480037-A, DATED AUGUST 15, 2024.

IM10 RESERVATIONS AND EXCEPTIONS IN THE PATENT BY UNITES STATES OF AMERICA RECORDED FEBRUARY 24, 1917 IN BOOK 19, PAGE 135, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

IM11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR DITCHES OR CANALS RESERVED BY UNITES STATES OF AMERICA, AS SET FORTH IN A DOCUMENT RECORDED, FEBRUARY 24, 1917, IN BOOK 19 PAGE 135, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(IM12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975, IN BOOK 4884, PAGE 2188, OF OFFICIAL RECORDS.

(IM13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975, IN BOOK 4886, PAGE 1050, OF OFFICIAL RECORDS.

(IM14) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE PROPERTY FOR FUTURE STREET OR HIGHWAY PURPOSES, RECORDED MARCH 13, 1975, IN BOOK 4886, PAGE 1050, OF OFFICIAL RECORDS.

APN: 346-042-48

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-42, DATED JUNE 21, 2022.

IN9 RESERVATIONS AND PROVISIONS AS CONTAINED IN THE PATENT FROM UNITED STATES OF AMERICA TO IDA E. HOEPNER RECORDED IN BOOK 19, PAGE 135, OF PATENTS.

SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR, MINING, AGRICULTURAL, MANUFACTURING, OR OTHER PURPOSES, AND RIGHTS TO DITCHES AND RESERVOIRS USE IN CONNECTION WITH SUCH WATER RIGHTS AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY LOCAL CUSTOMS, LAWS AND DECISIONS OF COURTS.

ALSO THE RIGHT OF PROPRIETOR OF A VEIN OR LODE TO EXTRACT AND REMOVE HIS ORE THEREFROM SHOULD THE SAME BE FOUND TO PENETRATE OR INTERSECT THE PREMISES HEREBY GRANTED AS PROVIDED BY LAW. AND THERE IS RESERVED FROM THE LANDS HEREBY GRANTED A RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES.
(EASEMENT IS BLANKET IN NATURE)

(IN10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 AS INSTRUMENT NO. 17265 BOOK 4886 PAGE 1050 OF OFFICIAL RECORDS;

AFFECTING THE EAST 55 FEET AND THE SOUTH 45 FEET OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4, OF FRACTIONAL SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.& M.

(IN11) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR FUTURE STREET OR HIGHWAY PURPOSES, RECORDED MARCH 13, 1975 AS INSTRUMENT NO. 17265 BOOK 4886 PAGE 1050 OF OFFICIAL RECORDS.

APN: 346-042-49

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-145, DATED DECEMBER 21, 2022.

IO10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED FEBRUARY 24, 1917 IN BOOK 19, PAGE 135 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

IO11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES AND INCIDENTAL PURPOSES TO UNITED STATES OF AMERICA, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 24, 1917 IN BOOK 19, PAGE 135 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(IO12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD AND INCIDENTAL PURPOSES TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1050 OF OFFICIAL RECORDS.

(IO13) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR ROAD AND INCIDENTAL PURPOSES, RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1050 OF OFFICIAL RECORDS.

IO16 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO ENXCO DEVELOPMENT CORPORATION, A DELAWARE CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JULY 2, 2010 AS INSTRUMENT NO. 0210088065 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-042-50

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480526, DATED JUNE 12, 2023.

PARCEL 4 OF PARCEL MAP 3438, FILED MAY 3, 1975, IN BOOK 15, PAGE 175 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

IP10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED FEBRUARY 24, 1917 IN BOOK 19, PAGE 135 OF PATENTS. (NOT LOCATABLE FROM RECORD)

IP11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES AND INCIDENTAL PURPOSES TO UNITED STATES OF AMERICA, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 24, 1917 IN BOOK 19, PAGE 135 OF PATENTS. (NOT LOCATABLE FROM RECORD)

(IP12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD AND INCIDENTAL PURPOSES TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1050 OF OFFICIAL RECORDS.

(IP13) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR ROAD AND INCIDENTAL PURPOSES, RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1050 OF OFFICIAL RECORDS.

APN: 346-042-51

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480575, DATED JUNE 7 2023.

(IQ3) AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT:
PURPOSE : INGRESS, EGRESS AND ROAD PURPOSES
RECORDED : MARCH 3, 1975 IN BOOK 4884 PAGE 2190, OFFICIAL RECORDS
AFFECTS : THE WEST AND EAST 30 FEET
SAID DOCUMENT WAS RE-RECORDED APRIL 3, 1975, IN BOOK 4884 PAGE 1575, OF OFFICIAL RECORDS.

APN: 346-042-52

ITEM NUMBERS AND LEGAL DESCRIPTION SHOWN HEREON CORRESPOND TO STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-13, DATED FEBRUARY 2, 2023.

(IR11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975 IN BOOK 4884, PAGE 2190, OFFICIAL RECORDS.

IR12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1048, OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

IR13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1048, OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

IR15 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PURPOSES OF A NON-EXCLUSIVE EASEMENT ON, OVER AND ACROSS ANY PURPOSES OF INGRESS AND EGRESS TO POWER PARTNERS SOUTHWEST, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 23, 2009 AS INSTRUMENT NO. 209009267, OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-042-53

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480778, DATED AUGUST 11, 2023.

IS8 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED FEBRUARY 24, 1917, IN BOOK 19, PAGE 135, OF PATENTS. (NOT LOCATABLE FROM RECORD)

IS10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975 IN BOOK 4884, PAGE 2190, OFFICIAL RECORDS AND RE-RECORDED APRIL 13, 1975, IN BOOK 4889, PAGE 1575, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

(IS11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1048, OFFICIAL RECORDS.

IS12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1050, OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

EASEMENTS:

APN: 346-042-54

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480788, DATED AUGUST 14, 2023.

IT11 RIGHTS OF ACCESS TO OR FROM THE PUBLIC ROAD OR STREET, HIGHWAY OR FREEWAY ADJACENT TO THE LAND WERE RELINQUISHED OR SEVERED AS DISCLOSED ON MAP NO. 3291, BOOK 16, PAGE 125, OF OFFICIAL RECORDS.

IT12 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED FEBRUARY 24, 1917, IN BOOK 19, PAGE 135 OF PATENTS. (NOT LOCATABLE FROM RECORD)

(IT13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975 IN BOOK 4884 PAGE 2190, OFFICIAL RECORDS.

(IT14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1048, OFFICIAL RECORDS.

IT15 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 IN BOOK 4886, PAGE 1050, OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

APN: 346-042-55

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480789, DATED AUGUST 10, 2023.

IU4 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THEN IN USE TO THE PUBLIC, AS SET FORTH IN A DOCUMENT RECORDED MARCH 22, 1912, IN BOOK 271 PAGE 1, OF DEEDS. (NOT LOCATABLE FROM RECORD)

IU5 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975, IN BOOK 4886 PAGE 1048, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(IU6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975, IN BOOK 4884 PAGE 2190 AND RE- RECORDED APRIL 3, 1975 IN BOOK 4889, PAGE 1575, BOTH OF OFFICIAL RECORDS.

APN: 346-042-56

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-144, DATED DECEMBER 16, 2022.

(IV9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS,EGRESS AND ROAD PURPOSES TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975 IN BOOK 4884, PAGE 2190 OF OFFICIAL RECORDS. SAID INSTRUMENT WAS RE-RECORDED APRIL 3, 1975 IN BOOK 4889, PAGE 1575 OF OFFICIAL RECORDS.

(IV10) MATTERS AS SHOWN ON THE PARCEL MAP NO.3322 FILED IN BOOK 16, PAGE 115 OF MAPS, TOGETHER WITH ANY PROVISIONS AND RECITALS CONTAINED THEREIN.

APN: 346-042-57

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-148, DATED DECEMBER 21, 2022.

IW10 RESERVATIONS AND EXCEPTIONS IN THE PATENT BY UNITED STATES OF AMERICA RECORDED FEBRUARY 24, 1917, IN BOOK 19, PAGE 135. (NOT LOCATABLE FROM RECORD)

(IW11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO ADJACENT PROPERTY OWNERS, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975, AS INSTRUMENT NO. 17264 IN BOOK 4886 PAGE 1048, OF OFFICIAL RECORDS.

(IW12) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE PROPERTY FOR FUTURE STREET OR HIGHWAY PURPOSES, RECORDED MARCH 13, 1975, AS INSTRUMENT NO. 17264 IN BOOK 4886 PAGE 1048, OF OFFICIAL RECORDS.

APN: 346-042-58

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-46, DATED JULY 7, 2022.

IX3 RESERVATIONS CONTAINED IN THE PATENT FROM: THE UNITED STATES OF AMERICA; TO: IDA E. HOEPNER RECORDED: FEBRUARY 24, 1917 IN BOOK 19 PAGE 135 OF PATENTS. WHICH AMONG OTHER THINGS RECITES AS FOLLOWS: SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING, OR OTHER PURPOSES AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS, AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS AND DECISIONS OF THE COURTS, AND THE RESERVATIONS FROM THE LANDS HEREBY GRANTED, A RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES. (EASEMENT IS BLANKET IN NATURE)

(IX4) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975 AS INSTRUMENT NO. 14832 IN BOOK 4884, PAGE 2190 OF OFFICIAL RECORDS.
AND RECORDED: APRIL 3, 1975 AS INSTRUMENT NO. 22520, IN BOOK 4889, PAGE 1575 OF OFFICIAL RECORDS.

(IX5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975 AS INSTRUMENT NO. 17264 IN BOOK 4886, PAGE 1048 OF OFFICIAL RECORDS.

(IX6) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS, EGRESS AND ROAD PURPOSES, RECORDED MARCH 13, 1975 AS INSTRUMENT NO. 17264 IN BOOK 4886, PAGE 1048 OF OFFICIAL RECORDS.

APN: 346-050-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-28, DATED JUNE 9, 2022.

NO EASEMENTS

APN: 346-050-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480212, DATED AUGUST 4, 2023.

JA8 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED NOVEMBER 17, 1914, IN BOOK 10, PAGE 101, OF PATENTS.

APN: 346-050-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-118, DATED DECEMBER 2, 2022.

JB11 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED NOVEMBER 17, 1914 IN BOOK 18, PAGE 101 OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

APN: 346-050-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-40A, DATED AUGUST 8, 2024.

JC21 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED IN BOOK 10, PAGE 101, OF PATENTS. (NOT LOCATABLE FROM RECORD)

JC22 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED IN BOOK 20, PAGE 310, OF PATENTS. (NOT LOCATABLE FROM RECORD)

APN: 346-050-13 & 14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-77, DATED DECEMBER 23, 2022.

JD10 RESERVATIONS AND EXCEPTIONS IN THE PATENT FROM THE UNITED STATES OF AMERICA, RECORDED NOVEMBER 17, 1914, IN BOOK 18 OF PATENTS PAGE 101. (NOT LOCATABLE FROM RECORD)

(JD11) AN EASEMENT FOR INGRESS, EGRESS AND ROAD AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 11, 1974, IN BOOK 4864, PAGE 304, OF OFFICIAL RECORDS, AFFECTS THE EAST 30 FEET AND A NORTHWESTERLY AND NORTHEASTERLY PORTION OF PARCEL 1.

(JD12) AN IRREVOCABLE OFFER TO DEDICATE REAL PROPERTY RECORDED OCTOBER 22, 1974, IN BOOK 4865, PAGE 1301, OF OFFICIAL RECORDS, WHEREIN A PORTION OF SAID LAND WAS OFFERED FOR DEDICATION TO PUBLIC USE FOR INGRESS, EGRESS AND ROAD PURPOSES PURPOSES, WHICH AFFECTS THE WEST 45 FEET OF PARCELS 1 AND 2.

(JD13) AN EASEMENT FOR INGRESS, EGRESS AND ROAD PURPOSES AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT RECORDED APRIL 8, 1975, IN BOOK 4890, PAGE 490, OF OFFICIAL RECORDS, AFFECTS THE SOUTH 30 FEET AND A SOUTHWESTERLY AND SOUTHEASTERLY PORTION OF PARCEL 2.

APN: 346-050-15

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-1, DATED MARCH 3, 2023.

JE9 RIGHTS OF THE PUBLIC AND OF THE COUNTY OF KERN, AS TO THAT PORTION OF THE HEREIN DESCRIBED PROPERTY LYING WITHIN 72ND STREET WEST, 75TH STREET WEST AND LYLE AVENUE, PUBLIC ROADS.

JE10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED NOVEMBER 17, 1914, IN BOOK 18 PAGE 101, OF PATENTS. (NOT LOCATABLE FROM RECORD)

(JE11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD AND INCIDENTAL PURPOSES, TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 11, 1974, IN BOOK 4864 PAGE 304, OF OFFICIAL RECORDS.

(JE12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES AND INCIDENTAL PURPOSES, TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 22, 1974, IN BOOK 4865 PAGE 1301, OF OFFICIAL RECORDS.

(JE13) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR ROAD AND INCIDENTAL PURPOSES, RECORDED OCTOBER 22, 1974, IN BOOK 4865 PAGE 1301, OF OFFICIAL RECORDS.

(JE14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD AND INCIDENTAL PURPOSES TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED APRIL 08, 1975, IN BOOK 4890, PAGE 490, OF OFFICIAL RECORDS.

APN: 346-050-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-77, DATED DECEMBER 23, 2022.

JF5 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED NOVEMBER 17, 1914, IN BOOK 18, PAGE 101 OF PATENTS. (NOT LOCATABLE FROM RECORD)

(JF13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 22, 1974, IN BOOK 4865 PAGE 1301, OF OFFICIAL RECORDS.

(JF14) MATTERS AS SHOWN ON THE PARCEL MAP NO. 2708 FILED IN BOOK 16, PAGE 66, OF PARCEL MAPS TOGETHER WITH ANY PROVISIONS AND RECITALS CONTAINED THEREIN.

APN: 346-050-20

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-77, DATED DECEMBER 23, 2022.

(JK10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 11, 1974 IN BOOK 4864 PAGE 304 OF OFFICIAL RECORDS.

(JK11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 22, 1974 IN BOOK 4865 PAGE 1301 OF OFFICIAL RECORDS.

APN: 346-050-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-77, DATED DECEMBER 23, 2022.

(JL13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 11, 1974, IN BOOK 4864 PAGE 304, OF OFFICIAL RECORDS.

(JL14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 22, 1974, IN BOOK 4865 PAGE 1301, OF OFFICIAL RECORDS.

(JL15) MATTERS AS SHOWN ON THE PARCEL MAP NO.2972 FILED IN BOOK 16, PAGE 67 OF MAPS, TOGETHER WITH ANY PROVISIONS AND RECITALS CONTAINED THEREIN.

APN: 346-050-22

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-10, DATED JANUARY 30, 2023.

JM11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR DITCHES OR CANALS RESERVED BY THE UNITED STATES OF AMERICA, AS SET FORTH IN A DOCUMENT RECORDED, NOVEMBER 17, 1914, IN BOOK 18 OF PATENTS, PAGE 101. (EASEMENT IS BLANKET IN NATURE)

(JM12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 11, 1974, IN BOOK 4864 PAGE 304, OF OFFICIAL RECORDS.

(JM13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 22, 1974, IN BOOK 4865 PAGE 1301, OF OFFICIAL RECORDS.

APN: 346-050-23

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480474, DATED JUNE 30, 2023.

PARCEL 3 OF PARCEL MAP NO. 2972, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN BOOK 16, PAGE 67 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, BEING THE SOUTH HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.&M.

(JN12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 11, 1974 IN BOOK 4864, PAGE 304, OFFICIAL RECORDS.

(JN13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR AN EASEMENT FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 22, 1974 IN BOOK 4865, PAGE 1301, OF OFFICIAL RECORDS.

APN: 346-050-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480316, DATED AUGUST 26, 2022.

(JO9) EASEMENTS AND OTHER MATTERS SHOWN AND/OR DEDICATED ON THE PARCEL MAP FILED IN BOOK 16, PAGE 101, IN THE OFFICIAL COUNTY RECORDS.

(JO10) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS, EGRESS AND ROAD PURPOSES, RECORDED OCTOBER 11, 1974 AS INSTRUMENT NO. 26922 IN BOOK 4864, PAGE 304, OF OFFICIAL RECORDS.

(JO11) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS, EGRESS AND ROAD PURPOSES, RECORDED OCTOBER 22, 1974 AS INSTRUMENT NO. 29201 IN BOOK 4865, PAGE 1301, OF OFFICIAL RECORDS.

JO12 IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS, EGRESS AND ROAD PURPOSES, RECORDED MAY 13, 1976 AS INSTRUMENT NO. 36526 IN BOOK 4955, PAGE 660, OF OFFICIAL RECORDS. (TITLE REPORT INCORRECTLY LISTS DOCUMENT AS BOOK 4855, PAGE 660, O.R.) (DOES NOT AFFECT SUBJECT PARCEL)

APN: 346-050-28

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-135, DATED DECEMBER 28, 2022.

JQ10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED AUGUST 27, 1907, IN BOOK 18, PAGE 101 OF PATENTS. (NOT LOCATABLE FROM RECORD)

JQ11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 11, 1974, IN BOOK 4864, PAGE 304 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(JQ12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 22, 1974, IN BOOK 4865, PAGE 1301 OF OFFICIAL RECORDS.

JQ13 MATTERS AS SHOWN ON THE PARCEL MAP NO. 2525, 2726, AND 3553 OF MAPS, TOGETHER WITH ANY PROVISIONS AND RECITALS CONTAINED THEREIN. (DOES NOT AFFECT SUBJECT PARCEL)

JQ14 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED APRIL 8, 1975, BOOK 4890, PAGE 490 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

APN: 346-050-29, 30 & 31

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-63 DATED FEBRUARY 3, 2022.

PARCELS 2, 3 AND 4 OF PARCEL MAP NO. 3553, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP RECORDED SEPTEMBER 24, 1976, IN BOOK 16 PAGE 169, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID KERN COUNTY.

JR3 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED NOVEMBER 17, 1914 IN BOOK 18 PAGE 105 OF PATENTS. (NOT LOCATABLE FROM RECORD)

(JR4) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 11, 1974 AS INSTRUMENT NO. 26922 IN BOOK 4864 PAGE 304 OF OFFICIAL RECORDS. MATTERS CONTAINED THEREIN AFFECT: PARCEL 4.

(JR5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 22, 1974 AS INSTRUMENT NO. 29201 IN BOOK 4865 PAGE 1301 OF OFFICIAL RECORDS. MATTERS CONTAINED THEREIN AFFECT: PORTION OF LAND.

(JR6) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS AND EGRESS AND ROAD PURPOSES, RECORDED OCTOBER 22, 1974 AS INSTRUMENT NO. 29201 IN BOOK 4865 PAGE 1301 OF OFFICIAL RECORDS.

APN: 346-050-32

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-48, DATED JULY 7, 2022.

JS11 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED IN BOOK 18 PAGE 101 OF PATENTS. (NOT LOCATABLE FROM RECORD)

APN: 346-050-33

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480214, DATED MAY 1, 2023.

JT12 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED NOVEMBER 17, 1914 AS PATENT NO. 84585, IN BOOK 18, PAGE 101, OF PATENTS. (NOT LOCATABLE FROM RECORD)

APN: 346-050-35-00-8

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-15, DATED MAY 16, 2022.

NO EASEMENTS

VESTING TENTATIVE PARCEL MAP NO. 12594

VESTING TENTATIVE PARCEL MAP NO. 12594

EASEMENTS:

APN: 346-042-37

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480208, DATED MAY 1, 2023.

(JV10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD AND INCIDENTAL PURPOSES TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975, BOOK 4884, PAGE 2190, AND RE-RECORDED APRIL 3, 1975, IN BOOK 4889 PAGE 1575, OFFICIAL RECORDS.

(JV11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD AND INCIDENTAL PURPOSES TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 13, 1975, IN BOOK 4886, PAGE 1048, OFFICIAL RECORDS.

(JV12) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR ROAD AND INCIDENTAL PURPOSES PURPOSES, RECORDED MARCH 13, 1975, IN BOOK 4886, PAGE 1048, OFFICIAL RECORDS.

APN: 346-042-39

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 2200480465-72A, DATED AUGUST 16, 2024.

JW9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED FEBRUARY 24, 1917 IN BOOK 19, PAGE 135 OF PATENTS.

(JW10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975 IN BOOK 4884, PAGE 2188 OF OFFICIAL RECORDS.

(JW11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MARCH 3, 1975 IN BOOK 4886, PAGE 1050 OF OFFICIAL RECORDS.

SUBJECT TO AN IRREVOCABLE OFFER OF DEDICATION OF AN EASEMENT TO THE COUNTY OF KERN FOR ROAD PURPOSES, AS SET FORTH IN SAID DOCUMENT.

APN: 346-050-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480213, DATED MAY 1, 2023

JX12 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED NOVEMBER 17, 1914 IN BOOK 18 PAGE 1010 OF PATENTS.

VESTING TENTATIVE PARCEL MAP NO. 12595

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION PORTIONS OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 23000480777, DATED AUGUST 11, 2023, REPORT NO. 22000480411, DATED APRIL 11, 2022, REPORT NO. 22000480331 DATED PROFORMA, REPORT NO. 22000480465–100 DATED JANUARY 24, 2023, REPORT NO. 22000480465–54, DATED JULY 7, 2022, REPORT NO. 22000480465, DATED OCTOBER 31, 2022, REPORT NO. 22000480411, DATED APRIL 11, 2022, REPORT NO. 22000480465–43, DATED JUNE 14, 2022, REPORT NO. 22000480465–9, DATED MAY 5, 2022, REPORT NO. 22000480411, DATED APRIL 11, 2022, REPORT NO. 23000480436, REPORT NO. 23000480534 DATED JUNE 12, 2023, REPORT NO. 23000480534 DATED JUNE 12, 2023, REPORT NO. 23000480453, DATED MAY 25, 2023, REPORT NO. 23000480040–65, DATED MAY 26, 2023, REPORT NO. 23000480009, DATED DECEMBER 29, 2022, REPORT NO. 22000480465–108, DATED DECEMBER 23, 2022, REPORT NO. 23000480040–65, DATED MAY 26, 2023, REPORT NO. 22000480465–69, DATED JULY 26, 2022, REPORT NO. 23000480040–50, DATED APRIL 17, 2023, REPORT NO. 230004800464, DATED MAY 25, 2023, REPORT NO. 220004800465–139, DATED DECEMBER 23, 2022, REPORT NO. 23000480510, DATED MAY 25, 2023, REPORT NO. 23000480222, DATED MARCH 16, 2023, REPORT NO. 22000480407, DATED MAY 4, 2022, REPORT NO. 23000480040–26, DATED MARCH 2, 2023, REPORT NO. 23000480502, DATED JUNE 8, 2023, REPORT NO. 230004806531, DATED JUNE 12, 2023, REPORT NO. 22000480410, DATED APRIL 12, 2022, REPORT NO. 23000480542, DATED JULY 28, 2023, REPORT NO. 22000480465–41 DATED, JUNE 21, 2022, REPORT NO. 23000480040–70, DATED MAY 16, 2023, REPORT NO. 23000480383, DATED MAY 4, 2023, REPORT NO. 23000480550, DATED JUNE 8, 2023, REPORT NO. 23000480492, DATED MAY 25, 2023, REPORT NO. 22000480465–104, DATED NOVEMBER 30, 2022, REPORT NO. 23000480487, DATED JUNE 8, 2023, REPORT NO. 23000480556, DATED JUNE 8, 2023, REPORT NO. 22000480553, DATED MAY 12, 2022, REPORT NO. 23000480497, DATED MAY 25, 2023, REPORT NO. 23000480384, DATED MAY 4, 2023, REPORT NO. 23000480539, DATED JUNE 8, 2023, REPORT NO. 22000480465–94A, DATED AUGUST 7, 2024, REPORT NO. 23000480484, DATED MAY 25, 2023, REPORT NO. 22000480299, FEBRUARY 10, 2023.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE FIFTY–ONE (51) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.

BASIS OF BEARINGS:

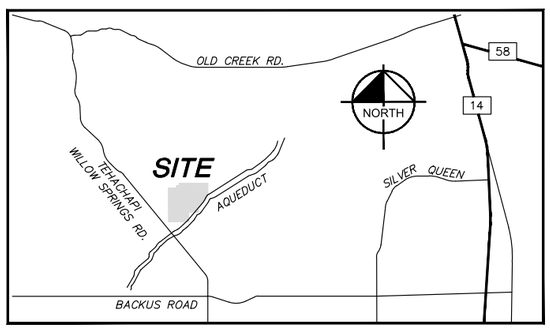
ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO. 06029C3650E, WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

SURVEY NOTE:

I, JEFFREY J. LENHERR, HEREBY STATE THAT THERE ARE NO STRUCTURES WITHIN THIS MAP OR WITHIN 150 FEET OF THE MAPS BOUNDARY.



VICINITY MAP
NOT TO SCALE

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	346–061–01, 04, 05, 06, 08, 35, 37, 39, 40, 45, 46, 47, 48, 53, 54, 55, 56 346–062–03, 04, 06, 07, 12, 14, 16, 17, 18, 19, 24, 25, 26, 27, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 47, 48, 50, 51, 52, 53
ACCESS TO PARCELS:	90TH STREET WEST
EXISTING NUMBER OF PARCELS:	51
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	A, A FP, PL RS
EXISTING GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE–MIN. 20 ACRE PARCEL SIZE); 8.3 (EXTENSIVE AGRICULTURE–MIN. 20 ACRE PARCEL SIZE) / 2.5 (FLOOD HAZARD)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A, A FP, A WE
PROPOSED GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE–MIN. 20 ACRE PARCEL SIZE); 8.3 (EXTENSIVE AGRICULTURE–MIN. 20 ACRE PARCEL SIZE) / 2.5 (FLOOD HAZARD)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PROJECT 'A' AREA:	522.28 ACRES
TOTAL PROJECT AREA:	522.28 ACRES

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

4 SW COR. SEC. 31, SE COR. SEC. 36, FD. IRON PIPE W/BRASS CAP "KCS", DN. 2.5'

7 SW COR. SEC. 32, SE COR. SEC. 31, FD. 3" GLO BRASS DISK

11 FD. 2.5" GLO BRASS DISK

12 FD. 3" GLO BRASS DISK

13 FD. 3.5" LADWP BRASS DISK

15 FD. REBAR & CAP STAMPED "JES ENGINEERING RCE 33249"

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TERRA–GEN.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA

LEGAL DESCRIPTON:

APN: 346-061-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480777, DATED AUGUST 11, 2023.

ALL OF THE EAST HALF OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL, FEBRUARY 19, 1856.

APN: 346-061-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480411, DATED APRIL 11, 2022.

PARCEL 1:
THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.M., IN THE UNINCORPORATED AREA, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND APPROVED FEBRUARY 19, 1856 BY THE SURVEYOR GENERAL AND ON FILE IN THE OFFICE OF THE BUREAU OF LAND MANAGEMENT.

PARCEL 2:
THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.M., IN THE UNINCORPORATED AREA, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND APPROVED FEBRUARY 19, 1856 BY THE SURVEYOR GENERAL AND ON FILE IN THE OFFICE OF THE BUREAU OF LAND MANAGEMENT.

APN: 346-061-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–100 DATED JANUARY 24, 2023.

NORTH 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE & MERIDIAN ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1856.

EXCEPTING ANY PORTION LYING WITHIN THE LOS ANGELES AQUEDUCT.
ALSO EXCEPTING AND RESERVING THEREFROM 1/4 THE OIL, GAS AND MINERAL RIGHTS RESERVED IN GRANT DEED BY FREDERICK ANDREWS IN DOCUMENT RECORDED IN BOOK 2633 PAGE 307, OF OFFICIAL RECORDS.

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-061-05

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331 DATED PROFORMA.

PARCEL 17:
THE EAST HALF OF LOT 1 OF THE NORTHEAST QUARTER OF FRACATIONAL SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THAT PORTION LYING SOUTHEASTERLY OF A LINE THAT LIES 100 FEET NORTHWESTERLY OF, PARALLEL WITH AND MEASURED ALONG RIGHT ANGLES FROM THE FOLLOWING DESCRIBED LINE AND ITS NORTHEASTERLY PROLONGATION.

BEGINNING AT A POINT IN THE SOUTHERLY LINE OF SAID SECTION 6 DISTANT THEREON SOUTH 89 DEGREES 33'11" EAST 2665.96 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION, THENCE NORTH 46 DEGREES 54'19" EAST 116.96 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 1000.15 FEET, THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH AN ANGLE OF 6 DEGREES 50'15" AN ARC LENGTH OF 119.35 FEET, THENCE NORTH 40 DEGREES 04'04" EAST 3200.38 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 2255.23 FEET, THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH AN ANGLE OF 17 DEGREES 36'41" AN ARC LENGTH OF 693.21 FEET TO A POINT OF REVERSE CURVATURE WITH A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 1100.17 FEET, A RADIAL LINE AT SAID POINT OF REVERSE CURVATURE BEARS SOUTH 67 DEGREES 32'37" EAST, THENCE NORTHEASTERLY ALONG SAID REVERSE CURVE THROUGH AN ANGLE OF 16 DEGREES 47'43" AN ARC LENGTH OF 322.50 FEET TO A POINT IN THE EASTERLY LINE OF SAID SECTION 6 DISTANT THEREON SOUTH 0 DEGREES 22'52" EAST 1803.41 FEET FROM THE NORTHEAST CORNER OF SAID SECTION, A RADIAL LINE OF SAID CURVE TO SAID POINT BEARS NORTH 50 DEGREES 44'54" WEST, AS CONVEYED TO THE CITY OF LOS ANGELES IN DEED RECORDED FEBRUARY 21, 1968, IN BOOK 4131 PAGE 135, OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM AN UNDIVIDED ONE–HALF OF ALL OIL, MINERALS, GAS HYDROCARBON AND ALLED SUBSTANCES IN AND UNDER SAID LAND BELOW A DEPTH OF 500 FEET MEASURED FROM THE SURFACE OF SAID LAND WITHOUT THE RIGHT OF SURFACE ENTRY, AS RESERVED BY W.P. DEAKINS AND PEARL E. DEAKINS , HUSBAND AND WIFE IN DEED RECORDED JUNE 3, 1963, IN BOOK 3612 PAGE 508, OFFICIAL RECORDS.

APN: 346-061-37

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331, DATED PROFORMA.

PARCEL 18:
THE WEST HALF OF LOT 1 OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL, SEPTEMBER 19, 1856.
SAID LAND ALSO BEING DESCRIBED OF RECORD AS THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.M., COUNTY OF KERN, STATE OF CALIFORNIA.

EXCEPTING THEREFROM AN UNDIVIDED 1/2 OF ALL OIL, MINERAL, GAS, HYDROCARBONS AND ALLIED SUBSTANCES IN AND UNDER SAID LAND, BELOW A DEPTH OF 500 FEET MEASURED FROM THE SURFACE OF SAID LAND, WITHOUT RIGHT OF SURFACE ENTRY, AS RESERVED IN DEED FROM W.P. DEAKINS, ET UX, RECORDED MARCH 2, 1962, IN BOOK 3468 PAGE 440, OFFICIAL RECORDS.

APN: 346-061-35

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–54, DATED JULY 7, 2022.

THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF. EXCEPT AN UNDIVIDED ONE–HALF OF ALL OIL, MINERAL, GAS, HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND, BELOW A DEPTH OF 500 FEET MEASURED FROM THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF SURFACE OF SAID LAND, WITHOUT THE RIGHT OF SURFACE ENTRY, AS EXCEPTED AND RESERVED IN THE DEED FROM W. P. DEAKINS AND PEARL E. DEAKINS, HUSBAND AND WIFE, TO ROBERT W. GIBEAUT AND BARBARA K. GIBEAUT, HUSBAND AND WIFE AS JOINT TENANTS, RECORDED JUNE 3, 1963 IN BOOK 3612, PAGE 504, OF OFFICIAL RECORDS.

EXCEPT THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF, AS CONVEYED IN GRANT DEED RECORDED MARCH 10, 1970 IN BOOK 4376, PAGE 421, OF OFFICIAL RECORDS.

APN: 346-061-39

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465, DATED OCTOBER 31, 2022.

THE WEST HALF OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO SURVEYOR GENERAL FEBRUARY 19, 1856.

APN: 346-061-40

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480411, DATED APRIL 11, 2022.

THE EAST HALF (1/2) OF THE NORTHWEST ONE FOURTH (1/4) OF THE NORTHEAST ONE FOURTH (1/4) OF SECTION SIX (6), TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BAE ON MERIDIAN, IN THE COUNTY OF KERN AD STATE OF CALIFORNIA.

APN: 346-061-45

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–43, DATED JUNE 14, 2022.

THE EAST HALF OF THE EAST HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT AN UNDIVIDED 1/2 OF ALL MINERAL, GAS, HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND, BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF SURFACE ENTRY, AS RESERVED BY W.P. DEAKINS, ET UX, IN DEED RECORDED JUNE 3, 1963 IN BOOK 3612 PAGE 504OF OFFICIAL RECORDS.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657–452–0200
jeff.lenherr@kimley–horn.com

VESTING TENTATIVE PARCEL MAP NO. 12595

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-061-47

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-9, DATED MAY 5, 2022.

THE EAST HALF OF THE WEST HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL SEPTEMBER 19, 1856.

EXCEPTING THEREFROM AN UNDIVIDED 1/2 OF ALL OIL, MINERAL, GAS, HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND, BELOW A DEPTH OF 500 FEET MEASURED FROM THE SURFACE OF SAID LAND, WITHOUT RIGHT OF SURFACE ENTRY, AS RESERVED IN DEED FROM W.P. DEAKINS, ET UX, RECORDED JUNE 3, 1963, IN BOOK 3612 PAGE 504, OFFICIAL RECORDS.

APN: 346-061-48

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480411, DATED APRIL 11, 2022.

THE WEST HALF OF THE WEST HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.M.

EXCEPT AN UNDIVIDED ONE-HALF OF ALL OIL, MINERAL, GAS, HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND, BELOW A DEPTH OF 500 FEET MEASURED FROM THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF SURFACE ENTRY, AS EXCEPTED AND RESERVED IN THE DEED FROM W.P. DEAKINS AND PEARL E. DEAKINS, HUSBAND AND WIFE, TO ROBERT W. GIBEAUT AND BARBARA K. GIBEAUT, HUSBAND AND WIFE AS JOINT TENANTS, RECORDED JUNE 3, 1963, IN BOOK 3612 PAGE 504 OF OFFICIAL RECORDS.

APN: 346-062-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480436, DATED MAY 24, 2023.

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF FRACTIONAL SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-062-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480534 DATED JUNE 12, 2023.

THE NORTH HALF OF LOT 1 OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT ONE HALF OF ALL OIL, GAS, MINERALS AND ALL OIL, GAS AND MINERAL RIGHTS UPON UNDER SAID LAND, AS RESERVED BY RICHARD F. COERBER ET UX, IN DEED RECORDED JUNE 11, 1956.

APN: 346-062-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480534 DATED JUNE 12, 2023.

THE SOUTH HALF OF LOT 1 OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 1/2 OF ALL OIL, GAS, MINERALS AND ALL OIL, GAS AND MINERAL RIGHTS UPON AND UNDER SAID LAND, AS RESERVED BY RICHARD F. COERBER ET UX. IN DEED RECORDED JUNE 11, 1956 IN BOOK 2626, PAGE 137, OF OFFICIAL RECORDS.

APN: 346-062-12

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480453, DATED MAY 25, 2023.

THE SOUTH ONE-HALF OF LOT 2 OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1856.

EXCEPTING THEREFROM ONE-HALF OF ALL, OIL, GAS, MINERALS AND ALL OIL, GAS AND MINERAL RIGHTS UPON AND UNDER SAID LAND, AS RESERVED BY RICHARD R. COERBER, ET UX, IN DEED RECORDED JUNE 11, 1956, IN BOOK 2620, PAGE 137, OFFICIAL RECORDS.

APN: 346-062-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-65, DATED MAY 26, 2023.

THE NORTH HALF OF THE NORTH HALF OF LOT 2 OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1856.

EXCEPTING THEREFROM THE EAST SEVEN AND ONE HALF ACRES THEREOF.

ALSO EXCEPTING THEREFROM ONE-HALF OF ALL, OIL, GAS, MINERALS AND ALL OIL, GAS AND MINERAL RIGHTS UPON AND UNDER SAID LAND, AS RESERVED BY RICHARD F. COERBER, ET UX, IN DEED RECORDED JUNE 11, 1956, IN BOOK 2620, PAGE 137, OFFICIAL RECORDS.

APN: 346-062-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480009, DATED DECEMBER 29, 2022.

THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF FRACTIONAL SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1856.
SAID PROPERTY IS ALSO DESCRIBED AS THE WEST HALF OF LOT 1 IN THE NORTHWEST QUARTER OF FRACTIONAL SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SBB&M.

APN: 346-062-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-108, DATED DECEMBER 23, 2022.

THE N1/2 OF THE EAST 5 ACRES OF THE S1/2 OF THE N1/2 OF LOT 2 OF THE SW1/4 OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.M., IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT ⅛ OF ALL OIL, GAS, MINERALS AND ALL OIL, GAS, AND MINERAL RIGHTS UPON AND UNDER SAID LAND, AS RESERVED BY RICHARD F. COERBER, ET UX, IN DEED RECORDED JUNE 11, 1956 IN BOOK 2620, PAGE 137 OF OFFICIAL RECORDS.

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-062-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-94A, DATED AUGUST 7, 2024.

PARCEL 2:
THE SOUTH HALF OF THE EAST FIVE ACRES OF THE SOUTH HALF OF THE NORTH HALF OF LOT 2 OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.&M., IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-062-26

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-69, DATED JULY 26, 2022.

THE WEST TWO AND ONE-HALF ACRES OF THE EAST SEVEN AND ONE-HALF ACRES OF THE SOUTH ONE-HALF OF THE NORTH ONE-HALF OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1856.

EXCEPTING THEREFROM ONE-HALF OF ALL OIL, GAS, MINERALS AND ALL OIL, GAS AND MINERAL RIGHTS UPON AND UNDER SAID LAND, AS RESERVED BY RICHARD R. COERBER, ET UX, IN DEED RECORDED JUNE 11, 1956, IN BOOK 2620, PAGE 137, OF OFFICIAL RECORDS.

APN: 346-062-38

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-50, DATED APRIL 17, 2023.

PARCEL 1:
THE EAST HALF OF THE EAST HALF OF THE EAST HALF OF THE EAST HALF OF THE NORTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF FRACTIONAL SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 2:
EASEMENT FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS OVER THE NORTHERLY 30 FEET OF THE NORTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, EXCEPT ANY PORTION OR PORTIONS LYING WITHIN THE LINES OF THE EAST HALF OF THE EAST HALF OF THE NORTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 6, FOR THE UNRESTRICTED USE AND BENEFIT OF THE OWNER OR OWNERS OF ALL OR ANY PORTION OR PORTIONS OF THE EAST HALF OF THE NORTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 6, AS GRANTED TO ROLAND LAND COMPANY, A CALIFORNIA CORPORATION IN DEED RECORDED NOVEMBER 4, 1966 IN BOOK 3993, PAGE 439 OF OFFICIAL RECORDS, EXCEPT THAT PORTION LYING WITHIN PARCEL 1.

APN: 346-062-39

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 230004800464, DATED MAY 25, 2023.

PARCEL 1:

THE WEST HALF OF THE EAST HALF OF THE EAST HALF OF THE EAST HALF OF THE NORTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF FRACTIONAL SECTION 6, TOWNSHIP 10 NORTH, RANGE 19 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 2:

AN EASEMENT FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS OVER THE NORTHERLY 30 FEET OF THE NORTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, EXCEPT ANY PORTION OR PORTIONS LYING WITHIN THE LIVES OF THE EAST HALF OF THE EAST HALF OF THE NORTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 6, FOR THE UNRESTRICTED USE AND BENEFIT OF THE OWNER OR OWNERS OF ALL OR ANY PORTION OR PORTIONS OF THE EAST HALF OF THE EAST OF THE NORTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 6

APN: 346-062-40

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 220004800465-139, DATED DECEMBER 23, 2022.

PARCEL 1:
THE EAST HALF OF THE WEST HALF OF THE EAST HALF OF THE EAST HALF OF THE NORTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF FRACTIONAL SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 2:
AN EASEMENT FOR INGRESS AND EGRESS FOR ROAD AND/OR UTILITY PURPOSES, TO BE USED IN COMMON WITH OTHERS, OVER THE NORTHERLY 30 FEET OF THE WEST HALF OF THE WEST HALF OF THE EAST HALF OF THE EAST HALF OF THE NORTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF FRACTIONAL SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 3:
AN EASEMENT FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES, TO BE USED IN COMMON WITH OTHERS OVER THE NORTHERLY 30 FEET OF THE NORTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF FRACTIONAL SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, MOUNT DIABLO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT ANY PORTION THEREOF, LYING WITHIN THE LINES OF THE EAST HALF OF THE EAST HALF OF THE NORTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SAID FRACTIONAL SECTION 6.

APN: 346-062-42

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480510, DATED MAY 25, 2023.

PARCEL 1:
THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 2:
AN EASEMENT FOR INGRESS AND EGRESS FOR AND /OR UTILITY PURPOSES, TO BE USED IN COMMON WITH OTHERS, OVER THE SOUTHERLY 30 FEET OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-062-50

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480222, DATED MARCH 16, 2023.

PARCEL 1:
THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 2:
AN EASEMENT FOR INGRESS AND EGRESS FOR ROAD AND/OR UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, OVER THE SOUTHERLY 30 FEET OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-061-53

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480407, DATED MAY 4, 2022.

PARCEL 1, OF PARCEL MAP NO. 2707, RECORDED APRIL 14, 1975 IN BOOK 13 OF PARCEL MAPS, AT PAGE 91, KERN COUNTY RECORDS.

APN: 346-062-51

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-26, DATED MARCH 2, 2023.

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-061-54

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480502, DATED JUNE 8, 2023.

PARCEL 2, OF PARCEL MAP NO. 2707, RECORDED APRIL 14, 1975 IN BOOK 13 OF PARCEL MAPS, AT PAGE 91, KERN COUNTY RECORDS.

APN: 346-061-55, 56

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480531, DATED JUNE 12, 2023.

PARCELS 3 AND 4 OF PARCEL MAP NO. 2707, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, RECORDED IN BOOK 13, PAGE 91 OF PARCEL MAPS IN THE COUNTY OF KERN, STATE OF CALIFORNIA AND ALSO KNOWN AS:

THE WEST HALF OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED FEBRUARY 19, 1856 BY THE SURVEYOR GENERAL AND ON FILE IN THE OFFICE OF THE BUREAU OF LAND MANAGEMENT.

APN: 346-062-16, 17, 18 & 27

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480410, DATED APRIL 12, 2022.

PARCEL 1:

THE WEST 2 1/2 ACRES OF THE EAST 7 1/2 ACRES OF THE NORTH HALF OF THE NORTH HALF OF LOT 2 OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 EAST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM ONE HALF OF ALL OIL, GAS, MINERALS AND ALL OIL, GAS AND MINERAL RIGHTS UPON AND UNDER SAID LAND, AS RESERVED BY RICHARD F. COERBER, ET UX, RECORDED JUNE 11, 1956 IN BOOK 2626 PAGE 137 OF OFFICIAL RECORDS.

PARCEL IA:

A 20 FOOT EASEMENT FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS AVER THE NORTH HALF OF THE NORTH HALF OF LOT 2 OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 EAST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THE EAST 7 1/2 ACRES.

THE NORTH HALF OF THE EAST 5 ACRES OF THE NORTH HALF OF THE NORTH HALF OF LOT 2 OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 EAST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLOT THEREOF.

EXCEPTING THEREFROM ONE HALF OF ALL OIL, GAS, MINERALS AND ALL OIL, GAS AND MINERAL RIGHTS UPON AND UNDER SAID LAND, AS RESERVED BY RICHARD F. COERBER, ET UX, RECORDED JUNE 11, 1956 IN BOOK 2626 PAGE 137 OF OFFICIAL RECORDS.

PARCEL 3:

THE SOUTH HALF OF THE EAST 5 ACRES OF THE NORTH HALF OF THE NORTH HALF OF LOT 2 OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 FAST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM ONE HALF OF ALL OIL, GAS, MINERALS AND ALL OIL, GAS AND MINERAL RIGHTS UPON AND UNDER SAID LAND, AS RESERVED BY RICHARD F. COERBER, ET UX, RECORDED JUNE 11, 1956 IN BOOK 2626 PAGE 137 OF OFFICIAL RECORDS.

PARCEL 4:

THE SOUTH HALF OF THE NORTH HALF OF LOT 2 OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 EAST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THE EAST 7 1/2 ACRES.

EXCEPTING THEREFROM ONE HALF OF ALL OIL, GAS, MINERALS AND ALL OIL, GAS AND MINERAL RIGHTS UPON AND UNDER SAID LAND, AS RESERVED BY RICHARD F. COERBER, ET UX, RECORDED JUNE 11, 1956 IN BOOK 2626 PAGE 137 OF OFFICIAL RECORDS.

APN: 346-062-30

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480542, DATED JULY 28, 2023.

THE EAST HALF OF THE EAST HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KEM, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-062-31

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-41 DATED, JUNE 21,2022.

PARCEL 4, IN THE UNINCORPORATED AREA F THE COUNTY OF KERN, STATE OF CALIFORNIA, AS SHOWN ON PARCEL MAP NO. 3138, FILED MARCH 26, 1976 IN BOOK 15 PAGE 125, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF KERN COUNTY.

APN: 346-062-32

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-70, DATED MAY 16, 2023.

PARCEL 3, AS SHOWN ON THE PARCEL MAP NO. 3138, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, FILED MARCH 26, 1976, IN BOOK 15 OF PARCEL MAPS AT PAGE 125, KERN COUNTY RECORDS.

APN: 346-062-34

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480383, DATED MAY 4, 2023.

THE NORTH ONE-HALF OF THE WEST ONE-HALF OF THE SOUTH ONE HALF OF THE SOUTH ONE-HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SBBM., IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND.

VESTING TENTATIVE PARCEL MAP NO. 12595

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-062-36

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480550, DATED JUNE 8, 2023.

PARCEL 1 OF PARCEL MAP NO. 3138, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, FILED MARCH 26, 1976, IN BOOK 15 PAGE 125, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.
APN: 346-062-36

APN: 346-062-37

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480492, DATED MAY 25, 2023.

PARCEL 2 OF PARCEL MAP NO. 3138, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, FILED MARCH 26, 1976, IN BOOK 15 PAGE 125, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-062-48

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-104, DATED NOVEMBER 30, 2022.

THE EAST HALF OF THE EAST HALF OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF FRACTIONAL SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-061-46

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480487, DATED JUNE 8, 2023.

THE WEST HALF OF THE EAST HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 6 TOWNSHIP 10 NORTH, RANGE, 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT AN UNDIVIDED 1/2 OF ALL OIL, MINERAL GAS HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND, BELOW A DEPTH OF 500 FEET MEASURED FROM THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF SURFACE ENTRY, AS RESERVED BY W. P. DEAKINS, ET UX, IN DEED RECORDED JUNE 3, 1963 IN BOOK 3612 PAGE 504, OF OFFICIAL RECORDS.

APN: 346-062-41

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480556, DATED JUNE 8, 2023.

THE WEST 1/2 OF THE WEST 1/2 OF THE EAST 1/2 OF THE EAST 1/2 OF THE NORTH 1/2 OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF FRACTIONAL SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SBBM, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-061-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480553, DATED MAY 12, 2022.

THE SOUTH 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, ACCORDING TO THE OFFICIAL PLAT OF SAID APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1856.

EXCEPTING THEREFROM ALL THAT PORTION OF SAID LAND AND OTHER RIGHTS CONVEYED TO THE CITY OF LOS ANGELES IN THE DEED RECORDED MARCH 16, 1967 IN BOOK 4034 PAGE 925 OF OFFICIAL RECORDS, KERN COUNTY RECORDS.

ALSO EXCEPTING AND THEREFROM 1/2 THE OIL, GAS AND MINERAL RIGHTS RESERVED IN GRANT DEED FREDRICK ANDREWS IN DOCUMENT RECORDED IN BOOK 2633 PAGE 307 OF OFFICIAL RECORDS.

APN: 346-062-29

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480497, DATED MAY 25, 2023.

THE WEST HALF OF THE EAST HALF OF THE SOUTH HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-062-35

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480384, DATED MAY 4, 2023.

THE SOUTH HALF OF THE WEST HALF OF THE SOUTH HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-062-44

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480539, DATED JUNE 8, 2023.

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-062-52

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480484, DATED MAY 25, 2023.

PARCEL 1 OF PARCEL MAP NO. 9568, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF, FILED IN THE OFFICE OF THE COUNTY RECORDER OF KERN COUNTY, 9/25/91 BOOK 42 PAGES 168-169.
EXCEPT AN UNDIVIDED 1/2 OF ALL OIL, MINERAL, GAS, HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND, BELOW A DEPTH OF 500FT. MEASURED FROM THE SURFACE OF SAID LAND WITHOUT THE RIGHT OF SURFACE ENTRY AS RESERVED BY W.P. DEAKINS & PEARL E. DEAKINS, HUSBAND & WIFE, IN DEED RECORDED 5/31/63 IN BOOK 3611 PAGE 827 OFFICIAL RECORDS.

APN: 346-062-53

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480299, FEBRUARY 10, 2023.

PARCEL 2 OF PARCEL MAP NO. 9568 IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF, FILED IN THE OFFICE OF THE COUNTY RECORDER OF KERN COUNTY, SEPTEMBER 25, 1991, BOOK 42 PAGES 168 THROUGH 169.

EXCEPT: AN UNDIVIDED 1/2 OF ALL OIL, MINERAL, GAS HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND, BELOW A DEPTH OF 500 FT. MEASURED FROM THE SURFACE OF SAID LAND WITHOUT THE RIGHT OF SURFACE ENTRY, AS RESERVED BY W.P. DEAKINS AND PEARL E. DEAKINS, HUSBAND AND WIFE, IN DEED RECORDED MAY 31, 1963, IN BOOK 3611, PAGE 827, OFFICIAL RECORDS.

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-062-47

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480460, DATED MAY 24, 2023.

THE SOUTH HALF OF THE WEST HALF OF THE SOUTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF FRACTIONAL SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN.

APN: 346-062-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-47, DATED JULY 07, 2022.

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

VESTING TENTATIVE PARCEL MAP NO. 12595

SEC. 31, T. 11 N., R. 13 W., S.B.M.

SEC. 1, T. 10 N., R. 14 W., S.B.M.

NW COR SEC. 6

INSTRUMENT NO. 0208174798, O.R. RECORDED NOVEMBER 7, 2008

N89°42'18"W 2800.18'

1482.06'

N89°42'18"W 1318.12'

N89°42'28"W 2640.25'

N 1/4 COR. SEC. 6 FD. 3" GLO BRASS CAP STAMPED "S6 S31", UP 0.7'

N00°01'30"W 332.25'

N89°39'26"W 369.96'

N00°07'16"W 331.94'

N89°38'01"W 739.37'

N00°13'02"W 165.82'

N89°36'34"W 369.41'

BOOK 6348, PAGE 0581, O.R.

BOOK 6407, PAGE 0754, O.R.

℄ HENDERSON AVENUE

℄ 100TH ST. W.

℄ 97TH STREET WEST

℄ WILSHIRE AVENUE

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

P.M. NO. 3138 PCL. 1

P.M. NO. 3138 PCL. 3

P.M. NO. 3138 PCL. 4

PARCEL 2 P.M.B. 15 / 125

PARCEL 'A' 522.28± ACRES

PARCEL 1 P.M.B. 42 / 168-169

P.M. NO. 19568 PARCEL 2

N00°23'49"W 2642.64'

N00°01'57"W 5298.72'

2656.63'

2782.77'

N89°32'37"W 5438.83'

1324.82'

W 1/4 SEC 6

SEE SHEET 5

SEE SHEET 6

SEC. 6, T. 10 N., R. 13 W., S.B.M.

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

K:\ORA_SURV\2023\BOUNDARY\KERN COUNTY - DISCOVERY ALTA - 194388004\MAPPING\DWG\TPM\AREA C - MAP 5\194388004TPM-MAP5B-PCL11.DWG

VESTING TENTATIVE PARCEL MAP NO. 12595

SEE SHEET 4

SEC. 31, T. 11 N., R. 13 W., S.B.M.

℄ SILVER QUEEN ROAD

S89°42'18"E 1318.12'

N89°42'28"W 2640.25'

N 1/4 COR. SEC. 6
FD. 3" GLO BRASS CAP
STAMPED "S6 S31", UP 0.7'

NE COR SEC 6

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

℄ ANGEL STREET

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

℄ PROSPECT STREET

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

℄ HENDERSON AVENUE

PARCEL 'A'
522.28± ACRES

BOOK 6104, PAGE 856, O.R.

1342.41'

N00°01'57"W 5298.72'
2656.63'

PARCEL 'A'
522.28± ACRES

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

SEC. 6, T. 10 N., R. 13 W., S.B.M.

2005.81'
2656.07'
S89°32'37"E 5438.83'

N00°22'17"W 2664.37'

313.22'

1658.63'

679.83'

AQUEDUCT

1008.74'

E 1/4 SEC 6

650.26'

N40°04'38"E 101.86'

1049.24'
N40°04'38"E

AQUEDUCT

SEC. 5, T. 10 N., R. 13 W., S.B.M.

SEE SHEET 7

VESTING TENTATIVE PARCEL MAP NO. 12595

SEE SHEET 4

SEE SHEET 7

SEC. 1, T. 10 N., R. 14 W., S.B.M.

SEC. 6, T. 10 N., R. 13 W., S.B.M.

SEC. 7, T. 10 N., R. 13 W., S.B.M.

N00°24'37"W 2648.96'

N89°32'37"W 5438.83'

2782.77'

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PARCEL 'A'
522.28± ACRES

5' WIDE

50'

20'

N00°23'45"W 2642.94'

N00°01'57"W 5298.72'

2642.09'

N89°31'45"W 1331.99'

1320.54'

SW COR SEC 6

S 1/4 SEC 6

1447.13'

2519.34'
N89°33'26"W 2765.94'

1318.81'

246.60'

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12595

SEE SHEET 5

SEE SHEET 6

PARCEL 'A'
522.28± ACRES

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

AQUEDUCT

AQUEDUCT

AQUEDUCT

AQUEDUCT

E 1/4 SEC 6

S 1/4 SEC 6

SE COR SEC 6

SEC. 6, T. 10 N., R. 13 W., S.B.M.

SEC. 7, T. 10 N., R. 13 W., S.B.M.

S89°32'37"E 5438.83'
2656.07'
2005.81'
650.26'

N00°01'57"W 5298.72'
2642.09'
1321.55'

N40°04'38"E 1048.24'
857.72'
190.52'

N00°12'14"W 519.94'

N89°31'45"W 1331.99'

N89°31'45"W 884.53'

N35°46'15"E 1978.80'
1499.42'

N00°22'32"W 2643.64'
1321.82'
1223.87'
497.95'

1320.54'

1335.95'
N89°30'52"W 2671.91'
1335.95'

3180
3175
3170
3165
3160
3155

BM11 AB69 BP8 BQ11 BR10 EJ13

BL10

13 15 11 12

OHE

NORTH

GRAPHIC SCALE IN FEET
200 0 100 200 400
SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12595

EASEMENTS:

APN: 346-061-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480777, DATED AUGUST 11, 2023.

NO EASEMENTS

APN: 346-061-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480411, DATED APRIL 11, 2022.

BJ8 ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING OR OTHER PURPOSES AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS, AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS AND DECISIONS OF COURTS; AND THE RESERVATION FROM THE LANDS THEREBY GRANTED OF A RIGHT-OF-WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES, AS RESERVED IN THE PATENT FROM THE UNITED STATES OF AMERICA RECORDED SEPTEMBER 13, 1916 IN BOOK 19, PAGE 68, OF PATENTS, KERN COUNTY RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-061-05

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331 DATED PROFORMA.

AB66 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920 IN BOOK 20, PAGE 156 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

AB67 AN EASEMENT OVER SAID LAND FOR TRANSMISSION LINE IN FAVOR OF THE CITY OF LOS ANGELES AS DISCLOSED IN THE PATENT FROM THE UNITED STATES OF AMERICA RECORDED APRIL 3, 1920 IN BOOK 20 OF PATENTS AT PAGE 156. SAID EASEMENT'S SPECIFIC LOCATION IS NOT SUFFICIENTLY DEFINED. (NOT LOCATABLE FROM RECORD)

AB68 RIGHTS INCIDENTAL TO THE OWNERSHIP FOR THE USE AND DEVELOPMENT OF THE MINERAL INTERESTS RESERVED IN DEED BY W. P. DEAKINS AND PEARL E. DEAKINS, HUSBAND AND WIFE, RECORDED JUNE 3, 1963, IN BOOK 3612 PAGE 508 OF OFFICIAL RECORDS. MINERAL RIGHTS NOT SHOWN FURTHER. (EASEMENT IS BLANKET IN NATURE)

(AB69) AN EASEMENT OVER SAID LAND FOR PUBLIC ROAD AND UTILITIES AND FOR INGRESS AND EGRESS AND INCIDENTAL PURPOSES, AS RESERVED BY W. P. DEAKINS AND PEARL E. DEAKINS, HUSBAND AND WIFE, IN DEED RECORDED JUNE 3, 1963, IN BOOK 3612 PAGE 508, OF OFFICIAL RECORDS. AFFECTS THE NORTH , SOUTH, EAST AND WEST 30 FEET. NO REPRESENTATION IS MADE AS TO THE CURRENT OWNERSHIP OF SAID EASEMENT.

APN: 346-061-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-100 DATED JANUARY 24, 2023.

BK10 A CONTRACT OF SETTLEMENT OF WATER RIGHTS BETWEEN HENRY MILLER AND OTHERS AND JAMES B. HAGGIN AND OTHERS DATED JULY 28, 1888, AND RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID KERN COUNTY IN BOOK 2 OF AGREEMENTS AT PAGES 40 THROUGH 99, AND ALL AMENDMENTS THEREOF AND SUPPLEMENTS THERETO. (EASEMENT IS BLANKET IN NATURE)

BK12 RIGHTS, RIGHTS OF WAY, RESERVATIONS AND EXCEPTIONS IN THE PATENT RECORDED AUGUST 23, 1922 IN BOOK 21, PAGE 230 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-061-37

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331, DATED PROFORMA.

AB73 SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING, OR OTHER PURPOSES, AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS, AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS AND DECISIONS OF COURTS AS SET FORTH IN THE PATENT FROM THE UNITED STATES OF AMERICA, RECORDED APRIL 3, 1920, IN BOOK 20, PAGE 156 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

AB74 RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES AS RESERVED IN THE PATENT FROM THE UNITED STATES OF AMERICA, RECORDED APRIL 3, 1920, IN BOOK 20, PAGE 156 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

AB75 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR TRANSMISSION LINE TO THE CITY OF LOS ANGELES, AS SET FORTH IN A DOCUMENT RECORDED APRIL 3, 1920 IN BOOK 20 OF PATENTS AT PAGE 156. SAID EASEMENT'S SPECIFIC LOCATION IS NOT SUFFICIENTLY DEFINED. (NOT LOCATABLE FROM RECORD)

(AB76) RIGHTS INCIDENTAL TO THE OWNERSHIP FOR THE USE AND DEVELOPMENT OF THE MINERAL INTERESTS RESERVED IN DEED BY W.P. DEAKINS AND PEARL E. DEAKINS, HUSBAND AND WIFE, RECORDED MARCH 2, 1962, IN BOOK 3468 PAGE 440, OFFICIAL RECORDS.
MINERAL RIGHTS NOT SHOWN FURTHER.

APN: 346-061-35

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-54, DATED JULY 7, 2022.

BM10 RIGHT OF WAY FOR TRANSMISSION LINE AS THE CITY OF LOS ANGELES MAY HAVE ACQUIRED UNDER THE ACT OF MARCH 4, 1911. (NO RECORD DOCUMENT REFERENCED)

(BM11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROADS AND UTILITIES AND FOR INGRESS AND EGRESS TO USED TO BE USED IN COMMON WITH OTHERS TO W. P. DEAKINS AND PEARL E. DEAKINS, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED JUNE 3, 1963 IN BOOK 3612, PAGE 504, OF OFFICIAL RECORDS.

BM12 A RESERVATION OF AN UNDIVIDED ONE-HALF OF ALL OIL, MINERALS, GAS, HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND, BELOW A DEPTH OF 500 FEET MEASURED FROM THE SURFACE OF SAID LAND, WITHOUT THE RIGHT OF SURFACE ENTRY, AS EXCEPTED AND RESERVED IN THE DEED FROM W. P. DEAKINS AND PEARL E. DEAKINS, HUSBAND AND WIFE, TO ROBERT W. GIBEAUT AND BARBARA K. GIBEAUT, HUSBAND AND WIFE AS JOINT TENANTS, IN DEED RECORDED JUNE 3, 1963 IN BOOK 3612, PAGE 504, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-061-39

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465, DATED OCTOBER 31, 2022.

BN9 A RIGHT OF WAY FOR DITCHES OR CANALS, GRANTED AND RESERVED IN BOOK 19, PAGES 68 & 69 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-061-40

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480411, DATED APRIL 11, 2022.

NO EASEMENTS

APN: 346-061-45

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-43, DATED JUNE 14, 2022.

(BP8) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROADS AND UTILITIES AND FOR INGRESS, EGRESS TO BE USED IN COMMON WITH OTHERS TO W.P. DEAKINS AND PEARL E. DEAKINS, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED JUNE 3, 1963 IN BOOK 3612 PAGE 504 OF OFFICIAL RECORDS.

APN: 346-061-47

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-9, DATED MAY 5, 2022.

BQ8 RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES AS RESERVED IN THE PATENT FROM THE UNITED STATES OF AMERICA, RECORDED APRIL 3, 1920, IN BOOK 20 PAGE 156 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

BQ9 AN EASEMENT OVER SAID LAND FOR TRANSMISSION LINE IN FAVOR OF THE CITY OF LOS ANGELES AS DISCLOSED IN THE PATENT FROM THE UNITED STATES OF AMERICA RECORDED APRIL 3, 1920, IN BOOK 20 PAGE 156 OF PATENTS. THE EXACT LOCATION OF THE EASEMENT IS NOT DISCLOSED BY THE INSTRUMENT. (NOT LOCATABLE FROM RECORD)

BQ10 RIGHTS INCIDENTAL TO THE OWNERSHIP FOR THE USE AND DEVELOPMENT OF THE MINERAL INTERESTS RESERVED IN DEED BY W.P. DEAKINS, ET UX, RECORDED JUNE 3, 1963, IN BOOK 3612 PAGE 504, OFFICIAL RECORDS. MINERAL RIGHTS NOT SHOWN FURTHER. (EASEMENT IS BLANKET IN NATURE)

(BQ11) AN EASEMENT FOR ROAD, INGRESS, EGRESS AND UTILITY PURPOSES AND RIGHTS INCIDENTAL THERETO AS RESERVED BY W.P. DEAKINS, ET UX AS SET FORTH IN A DOCUMENT RECORDED JUNE 3, 1963, IN BOOK 3612 PAGE 504, OF OFFICIAL RECORDS.

APN: 346-061-48

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480411, DATED APRIL 11, 2022.

BR9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920 IN BOOK 20, PAGE 156 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(BR10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROADS AND UTILITIES AND FOR INGRESS AND EGRESS TO BE USED IN COMMON WITH OTHERS, RESERVED BY W.P. DEAKINS AND PEARL E. DEAKINS, HUSBAND AND WIFE, RECORDED AS SET FORTH IN A DOCUMENT RECORDED JUNE 3, 1963, IN BOOK 3612 PAGE 504 OF OFFICIAL RECORDS OF OFFICIAL RECORDS.

APN: 346-062-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480436, DATED MAY 24, 2023.

(BS11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITIES TO BURT T. CHURCH, A SINGLE MAN, ALSO KNOWN AS AND WHO ACQUIRED TITLE AS BURT THOMAS CHURCH, AS SET FORTH IN A DOCUMENT RECORDED MARCH 30, 1966, IN BOOK 3932, PAGE 798, OF OFFICIAL RECORDS.

APN: 346-062-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-47, DATED JULY 7, 2022.

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

BT9 RESERVATIONS CONTAINED IN THE PATENT FROM THE UNITED STATES OF AMERICA RECORDED NOVEMBER 12, 1917 IN BOOK 19 PAGE 278 OF PATENTS. WHICH AMONG OTHER THINGS RECITES AS FOLLOWS: SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING, OR OTHER PURPOSES AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS, AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS AND DECISIONS OF THE COURTS, AND THE RESERVATIONS FROM THE LANDS HEREBY GRANTED, A RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES. (EASEMENT IS BLANKET IN NATURE)

(BT10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES, RESERVED BY JULIA I. CHURCH, AS SET FORTH IN A DOCUMENT RECORDED MARCH 16, 1966 IN BOOK 3928 PAGE 254, OFFICIAL RECORDS.

APN: 346-062-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480534 DATED JUNE 12, 2023.

NO EASEMENTS

APN: 346-062-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480534 DATED JUNE 12, 2023.

BV9 ANY RIGHT OF WAY FOR TRANSMISSION LINES AS THE CITY OF LOS ANGELES MAY HAVE UNDER THE ACT OF MARCH 4, 1911, AS DISCLOSED BY THE PATENT FROM THE UNITED STATES OF AMERICA TO MATHILDA C. DAU SCHMIDT, RECORDED APRIL 3, 1920 IN BOOK 20, PAGE 156, OF PATENTS. (NOT LOCATABLE FROM RECORD)

BV10 MATTERS DISCLOSED BY RECORD OF SURVEY MAP, FILED ON JULY 10, 2012 IN BOOK 28, PAGE 55, OF RECORD OF SURVEY. THE PURPOSE OF THE SURVEY, AS RECITED ON THE MAP.

APN: 346-062-12

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480453, DATED MAY 25, 2023.

BW5 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920 IN BOOK 20 PAGE 156 OF PATENTS. (NOT LOCATABLE FROM RECORD)

(BW6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR POLE LINES AND INCIDENTAL PURPOSES TO SOUTHERN CALIFORNIA EDISON COMPANY, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 27, 1955 IN BOOK 2508 PAGE 141 OF OFFICIAL RECORDS.

APN: 346-062-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-65, DATED MAY 26, 2023.

BX12 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920 IN BOOK 20 PAGE 156 OF PATENTS. (NOT LOCATABLE FROM RECORD)

BX13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR TRANSMISSION LINE AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1920, AS BOOK 20 PAGE 156 OF PATENTS. (NOT LOCATABLE FROM RECORD)

APN: 346-062-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480009, DATED DECEMBER 29, 2022.

(BY10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 20, 1990 AS INSTRUMENT NO. 022236 IN BOOK 6348 PAGE 0583 OF OFFICIAL RECORDS.

APN: 346-062-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-108, DATED DECEMBER 23, 2022.

CA9 A RESERVATION OF AN UNDIVIDED 1/2 INTEREST IN ALL OIL, GAS, MINERALS AND ALL OIL, GAS, AND MINERAL RIGHTS, BY RICHARD F. COERBER, ET UX, IN DEED RECORDED JUNE 11, 1956 IN BOOK 2620, PAGE 137, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

CA10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920 IN BOOK 20 PAGE 156, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

CA11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR TRANSMISSION LINE TO CITY OF LOS ANGELES, AS SET FORTH IN A DOCUMENT RECORDED APRIL 3, 1920 IN BOOK 20, PAGE 156 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(CA12) THE EFFECT OF A RESERVATION TO THE RIGHT TO A 20 FOOT EASEMENT ALONG THE NORTH AND EAST SIDES OF SUBJECT PROPERTY FOR ROAD AND PUBLIC UTILITY PURPOSES RECORDED MARCH 9, 1972 IN BOOK 4649, PAGE 283.

APN: 346-062-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-65, DATED MAY 26, 2023.

CB4 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920 IN BOOK 20 PAGE 156 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(CB5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY TO STEPHEN P. GLUCK, A MARRIED MAN AS HIS SOLE AND SEPARATE PROPERTY, AS SET FORTH IN A DOCUMENT RECORDED IN BOOK 4649 PAGE 282 OF OFFICIAL RECORDS.

CB6 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO PUBLIC IN GENERAL AS SET FORTH IN A DOCUMENT RECORDED MAY 28, 1986 IN BOOK 5877, POAGE 557, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

APN: 346-062-26

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-69, DATED JULY 26, 2022.

CC9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920, IN BOOK 20, PAGE 156 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

CC10 A RESERVATION OF AN UNDIVIDED MINERAL INTEREST IN DEED, BY RICHARD F. COERBER, ET. UX. IN DEED RECORDED JUNE 11, 1956, IN BOOK 2620, PAGE 137, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

CC11 CERTIFICATE OF COMPLIANCE BY THE COUNTY OF KERN, THAT THE HEREIN DESCRIBED PROPERTY COMPLIES WITH THE PROVISIONS OF HTE SUBDIVISION MAP ACT OF THE STATE OF CALIFORNIA, REGULATING DIVISIONS OF LAND RECORDED OCTOBER 20, 1989, IN BOOK 6174, PAGE 851, OF OFFICIAL RECORDS.

CC12 MATTERS CONTAINED IN A SURVEY MAP NO. 3259, FILED IN BOOK 28, PAGE 55 OF RECORDS OF SURVEY.

APN: 346-062-38

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-50, DATED APRIL 17, 2023.

(CE11) EASEMENTS AND RIGHTS OF WAY FOR INGRESS AND EGRESS AND UTILITIES AFFECTING THE EASEMENT PARCEL(S) DESCRIBED IN THE LEGAL DESCRIPTION AS CONVEYED AND RESERVED BY VARIOUS DEEDS OF RECORD.

(CE12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS FOR ROAD AND/OR UTILITY RESERVED BY ROLAND LAND COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED, JUNE 11, 1979, IN BOOK 5204 PAGE 1461, OF OFFICIAL RECORDS.

APN: 346-062-39

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480464, DATED MAY 25, 2023.

(CF11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO ROLAND LAND COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 8, 1979 IN BOOK 5219 PAGE 1572 OF OFFICIAL RECORDS.

APN: 346-062-40

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 220004800465-139, DATED DECEMBER 23, 2022.

(CG10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY ROLAND LAND COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 9, 1979 IN BOOK 5234 PAGE 2292 OF OFFICIAL RECORDS.

APN: 346-062-42

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480510, DATED MAY 25, 2023.

(CH12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY AND INCIDENTAL PURPOSES, RESERVED BY JULIA I. CHURCH, A WIDOW, ALSO KNOWN AS AND WHO ACQUIRED TITLE AS JULIA IRENE CHURCH, AS SET FORTH IN A DOCUMENT RECORDED MARCH 16, 1966 IN BOOK 3928, PAGE 254 OF OFFICIAL RECORDS. AFFECTS: THE NORTH 30' AND THE SOUTH 30'

(CH13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS EGRESS FOR ROAD AND/OR PUBLIC UTILITY PURPOSES, RESERVED BY ROLAND LAND COMPANY, A CALIFORNIA CORPORATION, FORMERLY ROLAND ESTATES, A CALIFORNIA CORPORATION DBA ROLAND ESTATES, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 25, 1981 AS INSTRUMENT NO. 018874 IN BOOK 5354, PAGE 1462 OF OFFICIAL RECORDS. AFFECTS: THE NORTH 30'

APN: 346-062-50

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480222, DATED MARCH 16, 2023.

(CI5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHER RESERVED BY JULIA I. CHURCH, A WIDOW, ALSO KNOWN AS, AND WHO ACQUIRED TITLE AS JULIA IRENE CHURCH, AS SET FORTH IN A DOCUMENT RECORDED, MARCH 16, 1966, IN BOOK 3928, PAGE 254, OF OFFICIAL RECORDS.

VESTING TENTATIVE PARCEL MAP NO. 12595

EASEMENTS:

APN: 346-061-53

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480407, DATED MAY 4, 2022.

(DT5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AD ROAD PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED IN BOOK 4889, PAGE 2407, OF OFFICIAL RECORDS.

(DT6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED IN BOOK 4890, PAGE 492, OF OFFICIAL RECORDS.

APN: 346-062-51

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-26, DATED MARCH 2, 2023.

(CJ11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY JULIA I. CHURCH, A WIDOW, ALSO KNOWN AS AND WHO ACQUIRED TITLE AS JULIA IRENE CHURCH, AS SET FORTH IN A DOCUMENT RECORDED MARCH 16, 1966 IN BOOK 3928 PAGE 254 OF OFFICIAL RECORDS.

APN: 346-061-54

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480502, DATED JUNE 8, 2023.

(DU4) EASEMENTS AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY AND INCIDENTAL PURPOSES, TO GAELON R. HEDERSON, ET UX, AS SET FORTH IN A DOCUMENT RECORDED JULY 21, 1966, IN BOOK 3965, PAGE 519, OF OFFICIAL RECORDS.

(DU5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AD ROAD PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED IN BOOK 4889, PAGE 2407, OF OFFICIAL RECORDS.

(DU6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED IN BOOK 4890, PAGE 492, OF OFFICIAL RECORDS.

(DU7) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR ROAD AND INCIDENTAL PURPOSES RECORDED APRIL 8, 1975, IN BOOK 4890, PAGE 492, OF OFFICIAL RECORDS.

APN: 346-061-55, 56

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480531, DATED JUNE 12, 2023.

(DV3) EASEMENTS AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY AND INCIDENTAL PURPOSES, TO GAELON R. HEDERSON, ET UX, AS SET FORTH IN A DOCUMENT RECORDED JULY 21, 1966, IN BOOK 3965, PAGE 519, OF OFFICIAL RECORDS.

APN: 346-062-16, 17, 18 & 27

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480410, DATED APRIL 12, 2022.

DW9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 3, 1920 IN BOOK 20 PAGE 156 OF PATENTS.

DW10A RIGHT OF WAY FOR TRANSMISSION LINE, AS THE CITY OF LOS ANGELES MAY HAVE UNDER THE ACT OF MARCH 4, 1911, AS DISCLOSED IN THE PATENT FROM THE UNITED STATES OF AMERICA TO MATHILDA C. DAU SCHMIDT, RECORDED APRIL 3, 1920 IN BOOK 20 PAGE 156 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(DW11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 27, 1955 IN BOOK 2508 PAGE 141 OF OFFICIAL RECORDS.

(DW13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY LILLA WEISE, AN UNMARRIED WOMAN, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 23, 1972 AS INSTRUMENT NO. 13010 IN BOOK 4636 PAGE 782 OF OFFICIAL RECORDS.

(DW14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY LILLA WEISE, AN UNMARRIED WOMAN, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 23, 1972 AS INSTRUMENT NO. 13011 IN BOOK 4636 PAGE 783 OF OFFICIAL RECORDS.

APN: 346-062-30

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480542, DATED JULY 28, 2023.

(DX12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITIES TO JACK C. WOLLESON AND ELEANOR G. WOLLESON, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 25, 1966 AS INSTRUMENT NO. 57200, IN BOOK 3990 PAGE 633, OF OFFICIAL RECORDS.

(DX13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS FOR ROAD AND/OR UTILITY PURPOSES TO ROLAND LAND COMPANY, AS SET FORTH IN A DOCUMENT RECORDED JUNE 12, 1979 AS INSTRUMENT NO. 58616, IN BOOK 5204 PAGE 2229 OF OFFICIAL RECORDS.

APN: 346-062-31

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-41 DATED, JUNE 21,2022.

(DY9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY TO BE USES IN COMMON WITH OTHERS, AS SET FORTH IN A DOCUMENT RECORDED MARCH 16, 1966 IN BOOK 3928 PAGE 254 OF OFFICIAL RECORDS. CONDITIONS AS THEREIN CONTAINED.

(DY10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 16, 1976 IN BOOK 4934 PAGE 1478 OF OFFICIAL RECORDS.

APN: 346-062-32

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-70, DATED MAY 16, 2023.

DZ12 RESERVATIONS AND EXCEPTIONS IN THE PATENT BY THE UNITED STATES OF AMERICA RECORDED NOVEMBER 12, 1917, IN BOOK 19 PAGE 278, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(DZ13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITIES RESERVED BY JULIA I. CHURCH, AS SET FORTH IN A DOCUMENT RECORDED, MARCH 16, 1966, IN BOOK 3928 PAGE 254, OF OFFICIAL RECORDS.

(DZ14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, ROAD AND PUBLIC UTILITIES RESERVED BY ROLAND LAND COMPANY, AS SET FORTH IN A DOCUMENT RECORDED, JUNE 28, 1974, IN BOOK 4848 PAGE 322, OF OFFICIAL RECORDS.

(DZ15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 16, 1976, IN BOOK 4934 PAGE 1478, OF OFFICIAL RECORDS.

APN: 346-062-34

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480383, DATED MAY 4, 2023.

EA10 MATTERS CONTAINED IN A SURVEY FILED IN BOOK 26 PAGE 152, OF RECORDS OF SURVEY.

APN: 346-062-36

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480550, DATED JUNE 8, 2023.

(EB12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO THE ADJACENT PROPERTY OWNERS & TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 16, 1976, IN BOOK 4934 PAGE 1478, OF OFFICIAL RECORDS.

(EB13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS & TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 21, 1976, IN BOOK 4935 PAGE 495, OF OFFICIAL RECORDS.

(EB14) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE PROPERTY FOR FUTURE STREET OR HIGHWAY PURPOSES, RECORDED JANUARY 21, 1976, IN BOOK 4935 PAGE 495, OF OFFICIAL RECORDS.

APN: 346-062-37

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480492, DATED MAY 25, 2023.

(EC11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO THE ADJACENT PROPERTY OWNERS AND THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 21, 1976, AS INSTRUMENT NO. 04781 IN BOOK 4935 PAGE 495, OF OFFICIAL RECORDS.

(EC12) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE PROPERTY FOR FUTURE STREET OR HIGHWAY PURPOSES, RECORDED JANUARY 21, 1976, AS INSTRUMENT NO. 04781 IN BOOK 4935 PAGE 495, OF OFFICIAL RECORDS.

APN: 346-062-48

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-104, DATED NOVEMBER 30, 2022.

(EF10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, TO BURT T. CHURCH, A SINGLE MAN, ALSO KNOWN AS AND WHO ACQUIRED TITLE AS BURT THOMAS CHURCH, AS SET FORTH IN A DOCUMENT RECORDED MARCH 30, 1966, IN BOOK 3932, PAGE 798, OF OFFICIAL RECORDS.

(EF11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD PURPOSES TO DONALD TIVENS, DBA FORECAST LAND INVESTMENT COMPANY, AND MARILYN TIVENS, HIS WIFE, AS SET FORTH IN A DOCUMENT RECORDED APRIL 28, 1983, IN BOOK 5546, PAGE 685, OF OFFICIAL RECORDS.

APN: 346-061-46

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480487, DATED JUNE 8, 2023.

EJ12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHT OF WAY THEREON FOR DITCHES AND CANALS, RESERVED BY THE UNITED STATES, AS SET FORTH IN A DOCUMENT RECORDED APRIL 3, 1920, IN BOOK 20, PAGE 156, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(EJ13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR 30 FOOT EASEMENT PUBLIC ROADS AND UTILITIES AND INGRESS AND EGRESS, TO ROBERT W. GIBEAUT AND BARBARA K. GIBEAUT, HUSBAND AND WIFE, AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED JUNE 3, 1963, IN BOOK 3612, PAGE 504, OF OFFICIAL RECORDS.

APN: 346-062-41

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480556, DATED JUNE 8, 2023.

(EK5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY PURPOSES RESERVED BY BURT T. CHURCH, A SINGLE MAN, AS SET FORTH IN A DOCUMENT RECORDED, MARCH 30, 1966 IN BOOK 3932 PAGE 798, OF OFFICIAL RECORDS.

APN: 346-061-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480553, DATED MAY 12, 2022.

NO EASEMENTS

APN: 346-062-29

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480497, DATED MAY 25, 2023.

(EM11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO JACK W. WOLLESON AND ELEANOR G. WOLLESON, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 25, 1966, INSTRUMENT NO. 57200, BOOK 3990, PAGE 633 OF OFFICIAL RECORDS.

(EM12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS, ROAD AND/OR UTILITY PURPOSES, TO BE USED IN COMMON WITH OTHERS TO ROLAND LAND COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MAY 23, 1973, INSTRUMENT NO. 37544, BOOK 4786, PAGE 1120 OF OFFICIAL RECORDS.

APN: 346-062-35

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480384, DATED MAY 4, 2023.

(EP10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS, EGRESS AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES TO ROLAND LAND COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 25, 1966 IN BOOK 3990 PAGE 633 OF OFFICIAL RECORDS.

(EP11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD, INGRESS AND EGRESS AND INCIDENTAL PURPOSES TO REV. U. VAUGHN TRAVIS AND ELIZABETH TRAVIS, HUSBAND AND WIFE, AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED JUNE 12, 1979 IN BOOK 5204 PAGE 2229 OF OFFICIAL RECORDS.

(EP12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES TO HOWARD HSIN WEN AND MONA M. T. WEN, HUSBAND AND WIFE, AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 4, 1979 IN BOOK 5226 PAGE 68 OF OFFICIAL RECORDS.

APN: 346-062-44

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480539, DATED JUNE 8, 2023.

(EQ5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY TO BE USED IN COMMON WITH OTHERS RESERVED BY JULIA I. CHURCH, A WIDOW, ALSO KNOWN AS AND WHO ACQUIRED TITLE AS JULIA IRENE CHURCH, AS SET FORTH IN A DOCUMENT RECORDED, MARCH 16, 1966, IN BOOK 3928 PAGE 254, OF OFFICIAL RECORDS.

(EQ6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS FOR ROAD AND/OR PUBLIC UTILITY RESERVED BY ROLAND LAND COMPANY, A CALIFORNIA CORPORATION FORMERLY ROLAND ESTATES, A CALIFORNIA CORPORATION DBA ROLAND ESTATES, AS SET FORTH IN A DOCUMENT RECORDED, APRIL 13, 1981, AS INSTRUMENT NO. 037370 IN BOOK 5366 PAGE 1582, OF OFFICIAL RECORDS.

APN: 346-062-52

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480484, DATED MAY 25, 2023.

(CK12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROADS AND UTILITIES AND FOR INGRESS AND EGRESS RESERVED BY W. P. DEAKINS AND PEARL E. DEAKINS, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED, MAY 31, 1963 IN BOOK 3611 PAGE 827, OF OFFICIAL RECORDS.

(CK14) EASEMENTS AND OTHER MATTERS SHOWN AND/OR DEDICATED ON THE PARCEL MAP NO. 9568 FILED IN BOOK 42, PAGES 168-169, IN THE OFFICIAL COUNTY RECORDS.

APN: 346-062-53

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480299, FEBRUARY 10, 2023.

AD9 A RIGHT OF WAY FOR TRANSMISSION LINE AS THE CITY OF LOS ANGELES MAY HAVE ACQUIRED UNDER THE ACT OF MARCH 4, 1911. (NO RECORD DOCUMENT REFERENCED)

(CL10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITIES TO W.P. DEAKINS AND PEARL E. DEAKINS, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED MAY 31, 1963 AS BOOK 3611, PAGE 827 OF OFFICIAL RECORDS. NO REPRESENTATION IS MADE TO THE PRESENT OWNERSHIP OF SAID EASEMENT.

(CL13) EASEMENT(S) OF THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS DELINEATED OR AS OFFERED FOR DEDICATION, ON THE MAP OF SAID TRACT. PURPOSE: PUBLIC ACCESS OFFERED AS DEDICATION. AFFECTS: EAST 30 FEET, WEST 30 FEET, SOUTH 30 FEET AND EAST 15 FEET, WEST 15 FEET AND SOUTH 15 FEET.

APN: 346-062-47

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480460, DATED MAY 24, 2023.

WW12 RESERVATIONS AND EXCEPTIONS IN THE PATENT BY THE UNITED STATES OF AMERICA RECORDED NOVEMBER 12, 1917, IN BOOK 19 PAGE 278 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(EE13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITIES RESERVED BY BURT T. CHURCH, A SINGLE MAN, ALSO KNOWN AS AND WHO ACQUIRED TITLE AS BURT THOMAS CHURCH, AS SET FORTH IN A DOCUMENT RECORDED, MARCH 30, 1966, AS INSTRUMENT NO. 17048 IN BOOK 3932 PAGE 798, OF OFFICIAL RECORDS.

EE14 MATTERS CONTAINED IN A DOCUMENT ENTITLED "CERTIFICATE OF COMPLIANCE (SECTION 66499.35, GOVERNMENT CODE)", BY COUNTY OF KERN RECORDED APRIL 17, 1989, AS INSTRUMENT NO. 045317 IN BOOK 6229 PAGE 1386, OF OFFICIAL RECORDS.

(EE15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD RESERVED BY DONALD TIVENS, DBA FORECAST LAND INVESTMENT COMPANY, & MARILYN TIVENS, HIS WIFE, AS SET FORTH IN A DOCUMENT RECORDED, APRIL 25, 1989, AS INSTRUMENT NO. 048992 IN BOOK 6232 PAGE 421, OF OFFICIAL RECORDS.

ADJOINING PROPERTY EASEMENTS:

APN: 474-051-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-140, DATED FEBRUARY 10, 2022.

(CZ13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD, AS SET FORTH IN A DOCUMENT RECORDED MAY 23, 1979 AS INSTRUMENT NO. 51126, IN BOOK 5200, PAGE 86 OF OFFICIAL RECORDS.

APN: 474-051-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480525, DATED JUNE 7, 2023.

(DA12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MAY 24, 1955, IN BOOK 2429 PAGE 167, OF OFFICIAL RECORDS.

(DA14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND INCIDENTAL PURPOSES TO MONT BLANC REALTY, N.V., A NETHERLANDS ANTILLES CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MAY 23, 1979, IN BOOK 5200 PAGE 82, OF OFFICIAL RECORDS.

APN: 474-051-20

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480440, DATED MAY 25, 2023.

(DB12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MAY 24, 1955 IN BOOK 2429 PAGE 167 OF OFFICIAL RECORDS.

(DB13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND INCIDENTAL PURPOSES TO BANK OF CALIFORNIA, N.A., AS TRUSTEE UNDER TRUST 85008, AS SET FORTH IN A DOCUMENT RECORDED MAY 23, 1979 IN BOOK 5200 PAGE 78 OF OFFICIAL RECORDS.

APN: 474-051-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480231, DATED JUNE 9, 2023.

(DC4) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ELECTRIC LINE TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 24, 1955, IN BOOK 2429 PAGE 167, OF OFFICIAL RECORDS.

(DC6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD PURPOSES RESERVED BY SECURITY TITLE INSURANCE COMPANY, AS SET FORTH IN A DOCUMENT RECORDED, MARCH 13, 1975, AS INSTRUMENT NO. 17034, OF OFFICIAL RECORDS.

VESTING TENTATIVE PARCEL MAP NO. 12595

ADJOINING PROPERTY EASEMENTS CONTINUED:

APN: 474-051-22

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-22, DATED JUNE 3, 2022.

(DD9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MAY 24, 1955 IN BOOK 2429 PAGE 167 OF OFFICIAL RECORDS.

APN: 474-051-23

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480516, DATED JULY 1, 2023.

(DE3) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES, TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MAY 24, 1955, IN BOOK 2429 PAGE 167, OFFICIAL RECORDS.

(DE5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 18, 1980, IN BOOK 5259 PAGE 477, OF OFFICIAL RECORDS.

APN: 474-051-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-64, DATED APRIL 25, 2023.

(DF13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND INCIDENTAL PURPOSES TO MONT BLANC REALTY, N.V., A NETHERLANDS ANTILLES CORPORATION AS SET FORTH IN A DOCUMENT RECORDED MAY 23, 1979 IN BOOK 5200 PAGE 74, OF OFFICIAL RECORDS.

APN: 474-051-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480233, DATED JUNE 16, 2023.

(DG10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MAY 24, 1955 IN BOOK 2429, PAGE 167 OF OFFICIAL RECORDS.

APN: 474-051-29-00-2

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-18, DATED MAY 16, 2022.

(DI9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MAY 24, 1955 IN BOOK 2429 PAGE 167 OF OFFICIAL RECORDS.

APN: 474-051-16, 17, 26 & 27

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480435, DATED MAY 23, 2023.

(CY21) EASEMENT AND RIGHTS INCIDENTAL THERETO TO SOUTHERN CALIFORNIA EDISON COMPANY AS SET FORTH IN A DOCUMENT RECORDED MAY 24, 1955, IN BOOK 2429, PAGE 167, OF OFFICIAL RECORDS.

APN: 474-051-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-140, DATED FEBRUARY 10, 2022.

(CZ17) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MAY 24, 1955, IN BOOK 2429 PAGE 167, OF OFFICIAL RECORDS.

VESTING TENTATIVE PARCEL MAP NO. 12597

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION OF THE SOUTHEAST 1/4 AND THE SOUTH 1/2 OF THE NORTHEAST 1/4 OF SECTION 7, EXCLUDING THEREFROM THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 22000480465-64, DATED AUGUST 25, 2022, REPORT NO. 22000480465-27, DATED JUNE 9, 2022, REPORT NO. 23000480220, DATED APRIL 10, 2023, REPORT NO. 22000480465-7, DATED MAY 16, 2022, REPORT NO. 18000481481, DATED MARCH 2 2022, REPORT NO. 22000480465-6, DATED MAY 4 2022, REPORT NO. 23000480462, DATED MAY 24, 2023, REPORT NO. 22000480405, DATED JULY 26, 2022, REPORT NO. 23000480438, DATED MAY 24, 2023, REPORT NO. 23000480498, DATED JUNE 1, 2023, REPORT NO. 23000480530, DATED JUNE 30, 2023, REPORT NO. 22000480465-17, DATED MAY 16, 2023, REPORT NO. 23000480512, DATED JUNE 1, 2023, STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480782, DATED AUGUST 10, 2023, REPORT NO. 22000480465-126, DATED FEBRUARY 9, 2023, REPORT NO. 22000480465-65 DATED JULY 26, 2022, REPORT NO. 23000480217, DATED AUGUST 4, 2023, REPORT NO. 22000480465-132, DATED JANUARY 26, 2023, REPORT NO. 22000480331, DATED PROFORMA, REPORT NO. 22000480465-59, DATED NOVEMBER 4, 2022, REPORT NO. 22000480465-137, DATED DECEMBER 27, 2022, REPORT NO. 23000480554, DATED JULY 14, 2023, REPORT NO. 23000480437, DATED MAY 23, 2023, REPORT NO. 23000480216, DATED MARCH 16, 2023, REPORT NO. 23000480218, DATED MARCH 1, 2023, REPORT NO. 23000480215, DATED JUNE 2, 2023, REPORT NO. 22000480465-10, DATED MAY 6, 2022, REPORT NO. 23000480538, DATED JUNE 5, 2023, AND REPORT NO. 23000480221, MARCH 17, 2023.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE TWENTY-THREE (23) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.

BASIS OF BEARINGS:

ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO. 06029C3650E, WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

SURVEY NOTE:

I, JEFFREY J. LENHERR, HEREBY STATE THAT THERE ARE NO STRUCTURES WITHIN THIS MAP OR WITHIN 150 FEET OF THE MAPS BOUNDARY.

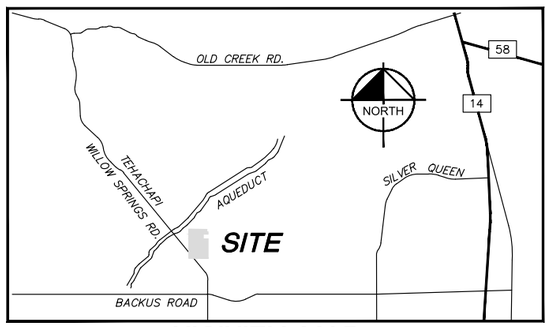
MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

11 FD. 2.5" GLO BRASS DISK

12 FD. 3" GLO BRASS DISK



VICINITY MAP

NOT TO SCALE

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	346-012-06, 07. 09, 10, 11, 12 346-061-14, 15, 16, 17, 18, 19, 24, 25, 28, 29, 49, 50, 51, 52, 58, 59, 60
ACCESS TO PARCELS:	90TH STREET WEST
EXISTING NUMBER OF PARCELS:	23
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	A FP, PL RS FP
EXISTING GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A FP
PROPOSED GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL "A" AREA:	266.74 ACRES
TOTAL PROJECT AREA:	266.74 ACRES

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TERRA-GEN.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA

LEGAL DESCRIPTON:

APN: 346-012-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-7, DATED MAY 16, 2022.

THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 7, TOWNSHIP NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AD OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND THE SUBSURFACE THEREOF TO AD DEPTH OF 500 FEET, AS RESERVED BY HEREBERT H. SPENCER, ET UX, IN DEED RECORDED APRIL 12, 1961 IN BOOK 3368 PAGE 830 OF OFFICIAL RECORDS.

APN: 346-012-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 18000481481, DATED MARCH 2 2022.

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.M., IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THEREFROM 50% OF ALL COAL, OIL, GAS, PETROLEUM, MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND AND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET AS RESERVED BY HERBERT HUGH SPENCER, ET UX, IN DEED RECORDED IN BOOK 3368, PAGE 830, OF OFFICIAL RECORDS.

APN: 346-012-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-6, DATED MAY 4 2022.

PARCEL 1 OF PARCEL MAP NO. 2828, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP RECORDED JULY 10, 1975, IN BOOK 13, PAGE 198, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 346-012-10

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480462, DATED MAY 24, 2023.

PARCEL 2 OF PARCEL MAP 2828 IN THE UNINCORPORATED AREA, OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP FILED JULY 10, 1975 IN BOOK 13 PAGE 198 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER, ET UX IN DEED RECORDED APRIL 12, 1961, IN BOOK 3368 PAGE 830 OF OFFICIAL RECORDS.

APN: 346-012-11

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480405, DATED JULY 26, 2022.

PARCEL 3 OF PARCEL MAP 2828, IN THE UNINCORPORATED AREA, OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP FILED JULY 10, 1975 IN BOOK 13 PAGE 198OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER, ET UX IN DEED RECORDED APRIL 12, 1961, IN BOOK 3368 PAGE 830OF OFFICIAL RECORDS.

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-012-12

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480438, DATED MAY 24, 2023.

PARCEL 4 OF PARCEL MAP NO. 2828, IN THE UNINCORPORATED AREA, OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER MAP FILED JULY 10, 1975 IN BOOK 13, PAGE 198 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCE LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND THE SUBSURFACE THEREOF TO DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER, ET UX IN DEED RECORDED APRIL 12, 1961 IN BOOK 3368 PAGE 830 OF OFFICIAL RECORDS.

APN: 346-061-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480498, DATED JUNE 1, 2023.

LEGAL DESCRIPTION:

THE WEST HALF OF THE EAST HALF OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND AS RESERVED BY HERBERT HUGH SPENCER, A MARRIED MAN, IN DEED RECORDED OCTOBER 30, 1957, IN BOOK 2861 PAGE 551, OF OFFICIAL RECORDS.

APN: 346-061-15

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-64, DATED AUGUST 25, 2022.

LEGAL DESCRIPTION:

THE EAST HALF OF THE WEST HALF OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND AS RESERVED BY HERBERT HUGH SPENCER, A MARRIED MAN, IN DEED RECORDED OCTOBER 30, 1957, IN BOOK 2861 PAGE 551 OF OFFICIAL RECORDS.

APN: 346-061-16

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480216, DATED MARCH 16, 2023.

THE WEST HALF OF THE WEST HALF OF THE FOLLOWING DESCRIBED PROPERTY:
THE SOUTH HALF OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL, FEBRUARY 19, 1856.

EXCEPT 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND AS RESERVED BY HERBERT HUGH SPENCER, A MARRIED MAN, IN DEED RECORDED OCTOBER 30, 1957, IN BOOK 2861, PAGE 551, OFFICIAL RECORDS.

APN: 346-061-17

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480530, DATED JUNE 30, 2023.

THE NORTHWEST QUARTER OF THE WEST HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST S.B.B.N.

EXCEPT 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM & ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND AS RESERVED BY HERBERT HUGH SPENCER, A MARRIED MAN, IN DEED RECORDED OCTOBER 30, 1957 IN BOOK 2861, PAGE 551 OF OFFICIAL RECORDS.

ALSO EXCEPT THEREFROM 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND TO MARIO PREVEDELLO AND/OR EMMA PREVEDELLO, HUSBAND AND WIFE, IN THE DEED RECORDED JULY 16, 1969. IN BOOK 4299, PAGE 150 OF OFFICIAL RECORDS.

APN: 346-061-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-17, DATED MAY 16, 2023.

THE NORTHEAST QUARTER OF THE WEST HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.M., IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND, AS RESERVED BY HERBERT HUGH SPENCER, A MARRIED MAN, IN DEED RECORDED OCTOBER 30, 1957, IN BOOK 2861, PAGE 551, OF OFFICIAL RECORDS.

ALSO EXCEPT THEREFROM 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND TO MARIO PREVEDELLO AND/OR EMMA PREVEDELLO, HUSBAND AND WIFE, IN THE DEED RECORDED JULY 16, 1969, IN BOOK 4299, PAGE 150, OF OFFICIAL RECORDS.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657-452-0200
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VESTING TENTATIVE PARCEL MAP NO. 12597

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-061-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480512, DATED JUNE 1, 2023.

THE NORTH HALF OF THE NORTH HALF OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND AS RESERVED BY HERBERT HUGH SPENCER, A MARRIED MAN, IN DEED RECORDED OCTOBER 30, 1957, IN BOOK 2861 PAGE 551 OF OFFICIAL RECORDS.
ALSO EXCEPTING THEREFROM 25% OF ALL OIL, GAS, MINERALS AND HYDROCARBON SUBSTANCES BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT TO ENTER UPON ANY PORTION OF THE SURFACE ABOVE A DEPTH OF 500 FEET FOR ANY PURPOSE WHATSOEVER IN AND TO SAID PROPERTY AS GRANTED IN THE DEED TO HYDROM-GASS INC, RECORDED AUGUST 27, 1992, IN BOOK 6719 PAGE 568, OFFICIAL RECORDS.

APN: 346-061-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-65 DATED JULY 26, 2022.

PARCEL NO. 1: (APN: 346-061-24)
THE SOUTH HALF OF THE EAST HALF OF THE WEST HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL, FEBRUARY 19, 1856, WHICH WAS ERRONOUSLY DESCRIBED OF RECORD AS THE SOUTHEAST QUARTER OF THE WEST HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN.

EXCEPTING THEREFROM 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND AS RESERVED BY HERBERT HUGH SPENCER, A MARRIED MAN, IN DEED RECORDED OCTOBER 30, 1957, IN BOOK 2861 PAGE 551 OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM 25% OF ALL CRUDE, OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND, AS RESERVED IN THE DEED FROM MARIO PARADISO, ET UX RECORDED JULY 16, 1969, IN BOOK 4299 PAGE 150 OFFICIAL RECORDS.

APN: 346-061-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480217, DATED AUGUST 4, 2023.

PARCEL 1: THE SOUTHWEST QUARTER OF THE WEST HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN.

EXCEPT 25% OF THE CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND AS RESERVED BY HERBERT HUGH SPENCER, A MARRIED MAN IN DEED RECORDED OCTOBER 30, 1957 IN BOOK 2861 PAGE 551 OF OFFICIAL RECORDS.

APN: 346-061-28

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480218, DATED MARCH 1, 2023.

LEGAL DESCRIPTION:

PARCEL 1:
THE WEST ONE HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.M., IN THE UNINCORPORATED AREA OF COUNTY OF KERN, STATE OF CALIFORNIA; EXCEPT OIL AND GAS AN UNDIVIDED 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCE AND OTHER MINERALS UNDER AND IN SAID LAND, AS RESERVED IN GRANT DEED RECORDED OCTOBER 30, 1957 IN BOOK 2861 PAGE 554 OF OFFICIAL RECORDS.

PARCEL 2:
AN EASEMENT FOR PUBLIC ROAD, INGRESS AND EGRESS PURPOSES TO BE USED IN COMMON WITH OTHERS OVER THE SOUTHERLY 15 FEET OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 7, AND OVER THE SOUTHERLY 15 FEET OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7.

APN: 346-061-29

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-27, DATED JUNE 9, 2022.

THE SOUTH HALF OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND ON FILE IN THE BUREAU OF LAND MANAGEMENT AND APPROVED BY THE SURVEYOR GENERAL ON FEBRUARY 19, 1856.

EXCEPT THEREFROM THAT PORTION CONVEYED TO THE CITY OF LOS ANGELES, BY DEED RECORDED MARCH 13, 1920 IN BOOK 346 PAGE 421 OF DEEDS.

ALSO EXCEPT 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM, AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND, AS RESERVED IN THE DEED FROM HERBERT SPENCER, A MARRIED MAN, RECORDED OCTOBER 30, 1957 IN BOOK 2861, PAGE 554 OF OFFICIAL RECORDS.

APN: 346-061-49

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-132, DATED JANUARY 26, 2023.

PARCEL 1 OF PARCEL MAP NO. 994, IN THE COUNTY OF KERN, STATE OF CALIFORNIA AS PER MAP THEREOF RECORDED JUNE 25, 1974 IN BOOK 6 PAGE 23 OF PARCEL MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND, AS RESERVED IN THE DEED FROM HERBERT SPENCER, A MARRIED MAN, RECORDED OCTOBER 30, 1957, IN BOOK 2861 PAGE 554 OF OFFICIAL RECORDS.

APN: 346-061-50

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331, DATED PROFORMA.

PARCEL 19:
PARCEL 2 OF PARCEL MAP NO. 994 FILED JUNE 25, 1973, IN BOOK 6 PAGE 23 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF KERN COUNTY.

EXCEPTING THEREFROM 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND, AS RESERVED IN THE DEED FROM HERBERT HUGH SPENCER, A MARRIED MAN, RECORDED OCTOBER 30, 1957, IN BOOK 2861, PAGE 554, OF OFFICIAL RECORDS.

APN: 346-061-51 & 52

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-59, DATED NOVEMBER 4, 2022.

PARCEL ONE: (APN: 346-061-51)
PARCEL 3 OF PARCEL MAP NO. 994 FILED JUNE 25, 1973, IN BOOK 6 PAGE 23 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF KERN COUNTY.

EXCEPTING THEREFROM 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND, AS RESERVED IN THE DEED FROM HERBERT HUGH SPENCER, A MARRIED MAN, RECORDED OCTOBER 30, 1957, IN BOOK 2861, PAGE 554, OF OFFICIAL RECORDS.

PARCEL TWO: (APN: 346-061-52)
PARCEL 4 OF PARCEL MAP NO. 994 FILED JUNE 25, 1973, IN BOOK 6 PAGE 23 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF KERN COUNTY.

EXCEPTING THEREFROM 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND, AS RESERVED IN THE DEED FROM HERBERT HUGH SPENCER, A MARRIED MAN, RECORDED OCTOBER 30, 1957, IN BOOK 2861, PAGE 554, OF OFFICIAL RECORDS.

APN: 346-061-58

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-137, DATED DECEMBER 27, 2022.

THE NORTH HALF OF THE SOUTH HALF OF THE NORTH HALF OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND, AS RESERVED IN THE DEED FROM HERBERT HUGH SPENCER, A MARRIED MAN RECORDED OCTOBER 30, 1957 IN BOOK 2861 PAGE 551 OF OFFICIAL RECORDS.

APN: 346-061-59

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480219, DATED JUNE 2, 2023.

THE SOUTH HALF OF THE NORTH HALF OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 25% OF ALL CRUDE OIL, PETROLEUM, GAS, BREA, ASPHALTUM AND ALL KINDRED SUBSTANCES AND OTHER MINERALS UNDER AND IN SAID LAND, AS RESERVED IN THE DEED FROM HERBERT HUGH SPENCER, A MARRIED MAN, RECORDED OCTOBER 30, 1957 IN BOOK 2861 PAGE 551 OF OFFICIAL RECORDS.

APN: 346-061-60

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-19, DATED JULY 8, 2022.

THE SOUTH HALF OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM ALL OIL, GAS, OTHER HYDROCARBON SUBSTANCES AND MINERALS OF ANY KIND OR CHARACTER, IN, ON, OR THEREUNDER, AS RESERVED IN DEEDS OF RECORD.

VESTING TENTATIVE PARCEL MAP NO. 12597

SEE SHEET 3

PARCEL 'A'
266.74+/- ACRES

SEC. 7, T. 10 N., R. 13 W., S.B.M.

SEC. 12, T. 10 N., R. 14 W., S.B.M.

SEC. 13, T. 10 N., R. 14 W., S.B.M.

SEC. 8, T. 10 N., R. 13 W., S.B.M.

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

NORTH

GRAPHIC SCALE IN FEET
200 0 100 200 400
SCALE: 1" = 200'

W 1/4 SEC 7

E 1/4 SEC

SW COR SEC 7

S 1/4 SEC 7

SE COR SEC

N00°27'23"W 2645.67'
2768.96'
N00°31'19"W 5289.75'
2644.42'
1322.21'
N89°35'03"W 5427.58'
2658.63'
N89°35'03"W 664.66'
660.35'
2641.00'
N00°14'08"W
N00°27'26"W 2646.36'
N00°31'19"W 5289.75'
2645.33'
N89°36'23"W 2771.93'
N89°41'31"W 2639.85'
N00°06'39"W 2640.11'

VESTING TENTATIVE PARCEL MAP NO. 12597

SHEET 4 OF 7

SEC. 8, T. 10 N., R. 14 W., S.B.M.

NW COR SEC 7
N89°33'26"W 2765.94'
N 1/4 SEC 7
N89°30'52"W 2671.91'
NE COR SEC 7
12
11
12
3150'
3140'
3130
3120
3110'
3100'
3090
3075
3060
1320.50'
PP
OHE
OHE
OHE

VESTING TENTATIVE PARCEL MAP NO. 12597

EASEMENTS:

APN: 346-012-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-7, DATED MAY 16, 2022.

FB9 A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL COUNTY ROADS THERETOFORE LAWFULLY ESTABLISHED AND THEN IN PUBLIC USE UPON AND ACROSS THE LAND HEREIN DESCRIBED, AS EXCEPTED IN DEED FROM SOUTHERN PACIFIC RAILROAD COMPANY, RECORDED JUNE 20, 1921 IN BOOK 365 PAGE 177 OF DEEDS. (NOT LOCATABLE FROM RECORD)

FB10 ANY EASEMENT FOR POLE LINE AND ROAD RUNNING NORTHEASTERLY THROUGH SAID LAND, AS SHOWN ON THE DEFENDANT RESURVEY OF SAID LAND FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1936. (NOT PLOTTABLE FROM RECORD)

FB11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR A PRIVATE TELEPHONE LINE, OR LINES TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534 PAGE 355 OF OFFICIAL RECORDS. (EASEMENT DOES NOT AFFECT SUBJECT PROPERTY)

FB12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO HEREBERT HIGH SPENCER ET UX, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368 PAGE 355 OF OFFICIAL RECORDS. (EASEMENT DOES NOT AFFECT SUBJECT PARCEL)

FB13 MATTERS DISCLOSED RECORD OF SURVEY MAP, FILED ON FEBRUARY 9, 2011 IN BOOK 26 PAGES 152-201 OF RECORD OF SURVEY. THE PURPOSE OF THE SURVEY, AS RECITED ON THE MAP.

APN: 346-012-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 18000481481, DATED MARCH 2 2022.

FC3 A RIGHT OF WAY OF LAWFUL WIDTH, IN FAVOR OF SOUTHERN PACIFIC RAILROAD COMPANY, A CORPORATION, FOR COUNTY ROADS THEREFORE LAWFULLY ESTABLISHED AND THEN IN PUBLIC USE, RECORDED JUNE 20, 1921, IN BOOK 365, PAGE 177 OF DEEDS AND AUGUST 24, 1921, IN BOK 370, PAGE 234 OF DEEDS, AFFECTS SAID LAND. (EASEMENT IS BLANKET IN NATURE)

FC4 ANY EASEMENT FOR POLE LINE RUNNING NORTHEASTERLY THROUGH SAID LAND, AS SHOWN ON THE DEPENDENT RESURVEY OF SAID LAND FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1935, AFFECTS SAID LAND. (NOT LOCATABLE FROM RECORD)

(FC5) AN EASEMENT FOR THE CONSTRUCTION AND MAINTENANCE OF A PRIVATE TELEPHONE LINE OR LINES INCLUDING NECESSARY POLES, CROSSARMS, WIRES AND APPURTENANCES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF CACTUS NINES COMPANY, A CALIFORNIA CORPORATION AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534, PAGE 355, OF OFFICIAL RECORDS, AFFECTS SAID LAND.

(FC6) AN EASEMENT FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS AND RIGHTS INCIDENTAL THERETO IN FAVOR OF HERBERT HUGH SPENCER ET UX. AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961, IN BOOK 3368, PAGE 830, OF OFFICIAL RECORDS, AFFECTS THE NORTH 30 FEET, SOUTH 30 FEET, EAST 30 FEET AND WEST 30 FEET OF SAID LAND.

APN: 346-012-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-6, DATED MAY 4 2022.

FD3 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THEN IN USE TO THE PUBLIC, AS SET FORTH IN A DOCUMENT RECORDED JUNE 20, 1921, IN BOOK 365, PAGE 177, OF DEEDS. (NOT LOCATABLE FROM RECORD)

FD5 ANY EASEMENT FOR POLE LINE RUNNING NORTHEASTERLY THROUGH SAID LAND, AS SHOWN ON THE DEPARTMENT RESURVEY OF SAID LAND FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1936. (NOT LOCATABLE FROM RECORD)

FD6 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR CONSTRUCTION AND MAINTENANCE OF A PRIVATE TELEPHONE LINE TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534, PAGE 355, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

FD7 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES EASEMENT TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 15, 1956, IN BOOK 2577, PAGE 497, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(FD8) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC HIGHWAY PURPOSES TO COUNTY OF KERN, AS SET FORTH IN A DOCUMENT RECORDED JUNE 28, 1956, IN BOOK 2629, PAGE 74, OF OFFICIAL RECORDS.

(FD9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES EASEMENT TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JUNE 25, 1959, IN BOOK 3153, PAGE 125, OF OFFICIAL RECORDS.

FD10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO HERBERT H. SPENCER ET UX., AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961, IN BOOK 3568, PAGE 830, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

(FD11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1975, IN BOOK 4881, PAGE 1818, OF OFFICIAL RECORDS.

(FD13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MAY 9, 1975, IN BOOK 4894, PAGE 2150, OF OFFICIAL RECORDS.

APN: 346-061-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-17, DATED MAY 16, 2023.

FM9 AN EASEMENT FOR A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE, AND INCIDENTAL PURPOSES, IN THE DOCUMENT RECORDED SEPTEMBER 1, 1921, IN BOOK 370, PAGE 263 OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

FM10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR TELEPHONE, TELEGRAPH LINE AND AQUEDUCT TO CITY OF LOS ANGELES, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 1, 1921, IN BOOK 370, PAGE 263 OF DEEDS. (DOES NOT AFFECT SUBJECT PROPERTY)

(FM11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR A SINGLE LINE OF POLES, TELEPHONE AND TELEGRAPH LINES TO GENERAL PIPE LINE COMPANY OF CALIFORNIA, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED APRIL 18, 1930, IN BOOK 344, PAGE 220, OF OFFICIAL RECORDS.

(FM12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO WILLIAM C. BERGAMO, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED MARCH 31, 1966, IN BOOK 3933, PAGE 217, OF OFFICIAL RECORDS.

APN: 346-012-10

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480462, DATED MAY 24, 2023.

FE11 ANY EASEMENT AFFECTING SAID LAND AND FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THEN IN USE, IN FAVOR OR THE PUBLIC, DISCLOSED BY DEED FROM SOUTHERN PACIFIC RAILROAD COMPANY, A CORPORATION, RECORDED JUNE 20, 1921 IN BOOK 365 PAGE 177 OF DEEDS. (NOT LOCATABLE FROM RECORD)

FE12 ANY EASEMENT FOR POLE LINE RUNNING NORTHEASTERLY THROUGH SAID LAND, AS SHOWN ON THE DEPENDENT RESURVEY OF SAID LAND FILED IN THE DISTRICT LAND OFFICE, OCTOBER 7, 1936. (NOT LOCATABLE FROM RECORD)

FE13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR CONSTRUCTION AND MAINTENANCE OF A PRIVATE TELEPHONE LINE TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534 PAGE 355 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(FE14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHT OF WAY TO CONSTRUCT, USE, MAINTAIN, ALTER, ADD TO, REPLACE, REPAIR AND/OR REMOVE AN ELECTRIC LINE TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JUNE 25, 1959, IN BOOK 3153, PAGE 125 OF OFFICIAL RECORDS.

FE15 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO HERBERT J. SPENCER ET UX, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(FE16) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1975 IN BOOK 4881, PAGE 1818 OF OFFICIAL RECORDS.

(FE17) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES ON, OVER AND ACROSS SAID LAND TO PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MAY 9, 1975 IN BOOK 4894, PAGE 2150 OF OFFICIAL RECORDS.

FE18 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHT OF INGRESS AND EGRESS TO SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 11, 1988 IN BOOK 6083, PAGE 1876 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

APN: 346-012-11

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480405, DATED JULY 26, 2022.

FF9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THEN IN USE TO THE PUBLIC, AS SET FORTH IN A DOCUMENT RECORDED JUNE 20, 1921 IN BOOK 365 PAGE 177 OF DEEDS. (NOT LOCATABLE FROM RECORD)

FF10 ANY EASEMENT FOR POLE LINE RUNNING NORTHEASTERLY THROUGH SAID LAND, AS SHOWN ON THE DEPENDENT RESURVEY OF SAID LAND FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1936. (NOT LOCATABLE FROM RECORD)

FF11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR CONSTRUCTION AND MAINTENANCE OF A PRIVATE TELEPHONE LINE TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534 PAGE 355 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

(FF12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ELECTRIC LINES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JUNE 25, 1959 IN BOOK 3153, PAGE 125 OF OFFICIAL RECORDS.

FF13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO HERBERT H. SPENCER, ET UX, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(FF14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1975 IN BOOK 4881 PAGE 1818 OF OFFICIAL RECORDS.

(FF15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES ON, OVER AND ACROSS SAID LAND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MAY 9, 1975 IN BOOK 4894, PAGE 2150 OF OFFICIAL RECORDS.

FF16 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 11, 1988 IN BOOK 6083, PAGE 1876 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

APN: 346-012-12

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480438, DATED MAY 24, 2023.

FG9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THE IN USE TO THE PUBLIC, AS SET FORTH IN A DOCUMENT RECORDED JUNE 20, 1921 IN BOOK 365 PAGE 177 OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

FG10 ANY EASEMENT FOR POLE LINE RUNNING NORTHEASTERLY THROUGH SAID LAND, AS SHOWN ON THE DEPENDENT RESURVEY OF SAID LAND FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1936. (NOT LOCATABLE FROM RECORD)

(FG11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR CONSTRUCTION AND MAINTENANCE OF A PRIVATE TELEPHONE TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534 PAGE 355 OF OFFICIAL RECORDS.

(FG12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JUNE 25, 1959 IN BOOK 3153 PAGE 125 OF OFFICIAL RECORDS.

FG13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO HERBERT H. SPENCER ET UX., AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368 PAGE 830 OF OFFICIAL RECORDS. DOES NOT AFFECT SUBJECT PARCEL)

(FG14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1975 IN BOOK 4861 PAGE 1818 OF OFFICIAL RECORDS.

(FG15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES ON, OVER AND ACROSS SAID LAND TO PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MAY 9, 1975 IN BOOK 4894 PAGE 2150 OF OFFICIAL RECORDS.

(FG16) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHT OF INGRESS AND EGRESS TO SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 11, 1988 IN BOOK 6083 PAGE 1876 OF OFFICIAL RECORDS.

APN: 346-061-17

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480530, DATED JUNE 30, 2023.

FL4 LACK OF ACCESS AND/OR LACK OF RIGHT OF ACCESS.

FL5 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THEN IN USE RESERVED BY SOUTHERN PACIFIC RAILROAD COMPANY, AS SET FORTH IN A DOCUMENT RECORDED, MARCH 22, 1912, IN BOOK 271 PAGE 1, OF DEEDS. (NOT LOCATABLE FROM RECORD)

FL6 AN EASEMENT FOR A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE, AND INCIDENTAL PURPOSES, IN THE DOCUMENT RECORDED SEPTEMBER 1, 1921, IN BOOK 370, PAGE 263 OF DEEDS. (NOT LOCATABLE FROM RECORD)

FL7 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR TELEPHONE, TELEGRAPH LINE AND AQUEDUCT TO CITY OF LOS ANGELES, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 1, 1921, IN BOOK 370, PAGE 263 OF DEEDS. (NOT LOCATABLE FROM RECORD)

FL8 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR A SINGLE LINE OF POLES, TELEPHONE AND TELEGRAPH LINES TO GENERAL PIPE LINE COMPANY OF CALIFORNIA, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED APRIL 18, 1930, IN BOOK 344, PAGE 220, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

FL9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR THE CONSTRUCTION, MAINTENANCE, OPERATION AND REPAIR OF A PRIVATE TELEPHONE LINE TO CACTUS MINES COMPANY, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534, PAGE 355 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

SAID EASEMENT GRANTED TO GEORGE B. KIMBALL BY DEED RECORDED OCTOBER 19, 1948 IN BOOK 1542, PAGE 233 OF OFFICIAL RECORDS.

SAID EASEMENT GRANTED TO DESERT ACRES, INC., BY DEED RECORDED DECEMBER 27, 1958 IN BOOK 1573 PAGE 331 OF OFFICIAL RECORDS.

FL11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS TO THEODORE ELIOPULOS, A MARRIED MAN AS HIS SEPARATE PROPERTY, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 2, 1964, AS INSTRUMENT NO. 24 IN BOOK 3677 PAGE 185, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

(FL12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO WILLIAM C. BERGAMO, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED MARCH 31, 1966, IN BOOK 3933, PAGE 217, OF OFFICIAL RECORDS.

APN: 346-061-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480512, DATED JUNE 1, 2023.

FN12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THEN IN USE AND INCIDENTAL PURPOSES, TO SOUTHERN PACIFIC RAILROAD COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 22, 1912, IN BOOK 271 PAGE 1, OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

(FN13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PRIVATE TELEPHONE LINES OR LINES AND INCIDENTAL PURPOSES, TO CACTUS MINES COMPANY, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534 PAGE 355, OF OFFICIAL RECORDS.

(FN15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES, TO ROLAND LAND COMPANY, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 06, 1980, IN BOOK 5290, PAGE 1071, OF OFFICIAL RECORDS.

APN: 346-061-24, 30 & 31

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-65 DATED JULY 26, 2022.

FQ9 THE RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE OVER AND ACROSS ANY OF SAID LAND AS RESERVED IN THE DEED FROM SOUTHERN PACIFIC RAILROAD COMPANY RECORDED MARCH 22, 1912, IN BOOK 271 OF DEEDS PAGE 1. THE SPECIFIC LOCATION OF WHICH IS NOT DISCLOSED. (EASEMENT IS BLANKET IN NATURE)

(FQ10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS, EGRESS AND PUBLIC UTILITIES TO WILLIAM C. BERGAMO, AS SET FORTH IN A DOCUMENT RECORDED MARCH 31, 1966 IN BOOK 3933, PAGE 217 OF OFFICIAL RECORDS.

APN: 346-061-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480217, DATED AUGUST 4, 2023.

FR9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE TO SOUTHERN PACIFIC LAND COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 1, 1921 IN BOOK 370, PAGE 263 OF DEEDS. (NOT LOCATABLE FROM RECORD)

FR10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR POLES TO CORONADO COPPER AND ZINC COMPANY, A CORPORATION, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534 PAGE 355 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(FR11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO WILLIAM C. BERGAMO, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED MARCH 31, 1966 IN BOOK 3933 PAGE 217 OF OFFICIAL RECORDS.

APN: 346-061-60

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-19, DATED JULY 8, 2022.

FW4 A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE UPON AND ACROSS SAID LAND, AS EXCEPTED IN DEED FROM SOUTHERN PACIFIC LAND COMPANY, A CALIFORNIA CORPORATION, RECORDED SEPTEMBER 1, 1921, IN BOOK 370, PAGE 263, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

FW6 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR CONSTRUCTION, MAINTENANCE, OPERATION AND REPAIR OF A PRIVATE TELEPHONE LINE, OR LINES, INCLUDING ALL NECESSARY POLES, CROSS ARMS, WIRES AND APPURTENANCES, TOGETHER WITH THE RIGHT OF ENTRY THEREON TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534, PAGE 255, OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

VESTING TENTATIVE PARCEL MAP NO. 12597

EASEMENTS:

APN: 346-061-49

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-132, DATED JANUARY 26, 2023.

FS11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR COUNTY ROAD TO SOUTHERN PACIFIC LAND COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JUNE 10, 1921, IN BOOK 365, PAGE 177, OF DEEDS. (NOT LOCATABLE FROM RECORD)

(FS12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO WILLIAM C. BERGAMO, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED MARCH 31, 1966, IN BOOK 3933, PAGE 217, OF OFFICIAL RECORDS.

(FS13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED APRIL 25, 1973, IN BOOK 4782, PAGE 181, OF OFFICIAL RECORDS.

APN: 346-061-50

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331, DATED PROFORMA.

AB78 AN EASEMENT OVER SAID LAND FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE UPON AND ACROSS SAID LAND EXCEPTED IN THE DEED FROM SOUTHERN PACIFIC LAND COMPANY, IN DEED RECORDED SEPTEMBER 1, 1921 IN BOOK 370, PAGE 263 OF DEEDS. THE SPECIFIC LOCATION OF WHICH IS NOT DISCLOSED OF RECORD. NO REPRESENTATION IS MADE AS TO THE CURRENT OWNERSHIP OF SAID EASEMENT. (EASEMENT IS BLANKET IN NATURE)

AB79 RIGHTS INCIDENTAL TO THE OWNERSHIP FOR THE USE AND DEVELOPMENT OF THE MINERAL INTERESTS RESERVED IN DEED BY HERBERT HUGH SPENCER, RECORDED OCTOBER 30, 1957 IN BOOK 2861 PAGE 554 OF OFFICIAL RECORDS. MINERAL RIGHTS NOT SHOWN FURTHER. (EASEMENT IS BLANKET IN NATURE)

(AB80) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS, EGRESS AND ROAD PURPOSES, RECORDED APRIL 25, 1973 IN BOOK 4782, PAGE 181 OF OFFICIAL RECORDS.

(AB81) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED APRIL 25, 1973 IN BOOK 4782, PAGE 181 OF OFFICIAL RECORDS.

AB82 IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS, EGRESS AND ROAD PURPOSES, RECORDED APRIL 30, 1973 IN BOOK 4782, PAGE 2219 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

AB83 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED APRIL 30, 1973 IN BOOK 4782, PAGE 2219 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

APN: 346-061-51 & 52

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-59, DATED NOVEMBER 4, 2022.

FT9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE UPON AND ACROSS SAID LAND TO SOUTHERN PACIFIC LAND COMPANY, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 1, 1921, IN BOOK 370, PAGE 263, OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

FT10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR THE USE AND DEVELOPMENT OF THE MINERAL INTERESTS RESERVED BY HERBERT HUGH SPENCER, AS SET FORTH IN A DOCUMENT RECORDED, OCTOBER 30, 1957, IN BOOK 2861, PAGE 554, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

(FT11) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS, EGRESS AND ROAD PURPOSES, RECORDED APRIL 25, 1973, IN BOOK 4782, PAGE 181 OF OFFICIAL RECORDS.

(FT12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED APRIL 25, 1973, IN BOOK 4782, PAGE 181, OF OFFICIAL RECORDS.

(FT13) IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR INGRESS, EGRESS AND ROAD PURPOSES, RECORDED APRIL 30, 1973, IN BOOK 4782 PAGE 2219 OF OFFICIAL RECORDS.

(FT14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED APRIL 30, 1973, IN BOOK 4782 PAGE 2219, OF OFFICIAL RECORDS.

APN: 346-061-58

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-137, DATED DECEMBER 27, 2022.

FU10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE TO SOUTHERN PACIFIC LAND COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JUNE 10, 1921 IN BOOK 365, PAGE 177 OF DEEDS. AND RECORDED: AUGUST 24, 1921 IN BOOK 370, PAGE 234 OF DEEDS. AND RECORDED: SEPTEMBER 1, 1921 IN BOOK 370, PAGE 263 OF DEEDS. (NOT LOCATABLE FROM RECORD)

(FU11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PRIVATE TELEPHONE LINE OR LINES INCLUDING NECESSARY POLES TO CACTUS MINES COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534, PAGE 355 OF OFFICIAL RECORDS.

(FU12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO ROLAND LAND COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 17, 1979 AS INSTRUMENT NO. 64685 IN BOOK 5252, PAGE 702 OF OFFICIAL RECORDS.

APN: 346-061-59

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480219, DATED JUNE 2, 2023.

FV5 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE TO SOUTHERN PACIFIC LAND COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JUNE 10, 1921, IN BOOK 365 PAGE 177, AUGUST 24, 1921 IN BOOK 370 PAGE 234, AND SEPTEMBER 1, 1921 IN BOOK 370 PAGE 263, ALL OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

(FV6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PRIVATE TELEPHONE LINE OR LINES INCLUDING NECESSARY POLES TO CACTUS MINES COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534 PAGE 355, OF OFFICIAL RECORDS.

(FV8) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS RESERVED BY ROLAND LAND COMPANY, AS SET FORTH IN A DOCUMENT RECORDED, JULY 10, 1984, AS INSTRUMENT NO. 002536 IN BOOK 5674 PAGE 941, OF OFFICIAL RECORDS.

APN: 346-061-11

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480215 DATED JUNE 2, 2023.

FH8 LACK OF ACCESS AND/OR LACK OF RIGHT OF ACCESS.

FH11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR COUNTY ROADS TO SOUTHERN PACIFIC LAND COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JUNE 10, 1921 IN BOOK 365 PAGE 177 OF DEEDS. (NOT LOCATABLE FROM RECORD)

APN: 346-061-12

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-10, DATED MAY 6. 2022.

FI9 A RIGHT OF WAY FOR DITCHES AND CANALS AS RESERVED BY THE UNITED STATES OF AMERICA IN THE PATENT RECORDED JANUARY 19, 1895 IN BOOK 10 PAGE 14 OF PATENTS. (NOT LOCATABLE FROM RECORD)

FI10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534 PAGE 355 OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

FI11 LACK OF ACCESS AND/OR LACK OF RIGHT OF ACCESS.

APN: 346-061-13

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480538, DATED JUNE 5, 2023.

FJ4 LACK OF ACCESS AND/OR LACK OF RIGHT OF ACCESS.

(FJ5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PRIVATE TELEPHONE LINES OR LINES TO CACTUS MINES COMPANY, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534 PAGE 355, OF OFFICIAL RECORDS.

FJ7 THE TERMS, PROVISIONS AND CONDITIONS CONTAINED IN THAT CERTAIN DOCUMENT, ENTITLED "CERTIFICATE OF COMPLIANCE", RECORDED APRIL 16, 1986, IN BOOK 5863 PAGE 1021, OF OFFICIAL RECORDS.

APN: 346-061-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480498, DATED JUNE 1, 2023.

FK11 LACK OF ACCESS AND/OR LACK OF RIGHT OF ACCESS.

FK12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE TO SOUTHERN PACIFIC LAND COMPANY, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 01, 1921, IN BOOK 370 PAGE 263, OF DEEDS. (NOT LOCATABLE FROM RECORD)

FK14 MATTERS CONTAINED IN DOCUMENT ENTITLED CERTIFICATE OF COMPLIANCE (SECTION 66499.35 GOVERNMENT CODE) BY COUNTY OF KERN, RECORDED APRIL 16, 1986, IN BOOK 5863 PAGE 1021, OFFICIAL RECORDS.

APN: 346-061-15

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-64, DATED AUGUST 25, 2022.

EY10 MATTERS WHICH RELATE TO THE LOCATION OF THE BOUNDARIES OF THE LAND DESCRIBED DISCLOSED BY THE DEPENDENT RESURVEY OF TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, THE PLAT OF WHICH WAS APPROVED JUNE 1, 1935, ACCEPTED JUNE 19, 1935 AND FILED IN THE DISTRICT LAND OFFICE ON OCTOBER 7, 1936.

EY11 AN EASEMENT OVER SAID LAND FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE UPON AND ACROSS SAID LAND EXCEPTED IN THE DEED FROM SOUTHERN PACIFIC LAND COMPANY, IN DEED RECORDED SEPTEMBER 01, 1921 IN BOOK 370 OF DEEDS PAGE 263. (NOT LOCATABLE FROM RECORD)

EY13 PROVISIONS EMBODIED IN THE CERTIFICATE OF COMPLIANCE (SECTION 66499.35 GOVERNMENT CODE) BY THE COUNTY OF KERN, RECORDED APRIL 16, 1986, IN BOOK 5863 PAGE 1021, OFFICIAL RECORDS.

EY15 LACK OF ACCESS AND/OR LACK OF RIGHT OF ACCESS.

APN: 346-061-16

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480216, DATED MARCH 16, 2023.

GK10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THEN IN USE RESERVED BY SOUTHERN PACIFIC RAILROAD COMPANY, AS SET FORTH IN A DOCUMENT RECORDED, MARCH 22, 1912, IN BOOK 271 PAGE 1, OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

GK11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THEN IN USE RESERVED BY SOUTHERN PACIFIC LAND COMPANY, AS SET FORTH IN A DOCUMENT RECORDED, SEPTEMBER 1, 1921, IN BOOK 370 PAGE 263, OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

(GK13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS TO THEODORE ELIOPULOS, A MARRIED MAN AS HIS SEPARATE PROPERTY, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 2, 1964, AS INSTRUMENT NO. 24 IN BOOK 3677 PAGE 185, OF OFFICIAL RECORDS.

APN: 346-061-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480782, DATED AUGUST 10, 2023.

FO4 LACK OF ACCESS AND/OR LACK OF RIGHT OF ACCESS.

FO5 AN EASEMENT OVER SAID LAND FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE UPON AND ACROSS SAID LAND EXCEPTED IN THE DEED FROM SOUTHERN PACIFIC LAND COMPANY, IN DEED RECORDED SEPTEMBER 01, 1921, IN BOOK 370 OF DEEDS PAGE 263. (NOT LOCATABLE FROM RECORD)

(FO6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR A PRIVATE TELEPHONE LINES OR LINES TO CACTUS MINES COMPANY, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534 PAGE 355, OF OFFICIAL RECORDS.

(FO8) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS, EGRESS AND PUBLIC UTILITIES RESERVED BY WILLIAM C. BERGAMO, AS SET FORTH IN A DOCUMENT RECORDED, MARCH 31, 1966, IN BOOK 3933 PAGE 228, OF OFFICIAL RECORDS.

APN: 346-061-22

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-126, DATED FEBRUARY 9, 2023.

(FP10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PRIVATE TELEPHONE LINES OR LINES INCLUDING NECESSARY POLES, WIRES, AND APPURTENANCES, TOGETHER WITH THE RIGHT OF ENTRY THEREON TO CACTUS MINES COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534 PAGE 355, OF OFFICIAL RECORDS.

FP13 MATTERS CONTAINED IN AN UNRECORDED LEASE DATED MAY 17, 2011, EXECUTED BY VICENTE A. BECERRA, A SINGLE MAN, AS LESSOR AND ENXCO DEVELOPMENT CORPORATION, A DELAWARE CORPORATION AS LESSEE, AS DISCLOSED BY INSTRUMENT NO. 0211068711, RECORDED MAY 26, 2011 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-061-28

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480218, DATED MARCH 1, 2023.

GL13 A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IS PUBLIC USE UPON AND ACROSS SAID LAND AS EXCEPTED IN DEED FROM SOUTHERN PACIFIC LAND COMPANY, A CORPORATION RECORDED JUNE 10, 1921 IN BOOK 364 PAGE 177 OF DEEDS, IN DEED RECORDED AUGUST 24, 1921 IN BOOK 370 PAGE 234 OF DEEDS AND IN DEED RECORDED SEPTEMBER 1, 1921 IN BOOK 370 PAGE 263 OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-061-29

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-27, DATED JUNE 9, 2022.

EZ3 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL COUNTY ROADS, HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 1, 1921 IN BOOK 370 PAGE 263 OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

(EZ4) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 2, 1964 IN BOOK 3677 PAGE 186, OF OFFICIAL RECORDS.

APN: 346-061-61

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480220, DATED APRIL 10, 2023.

(FA4) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PRIVATE TELEPHONES LINES OR LINES INCLUDING NECESSARY POLES, WIRES AND APPURTENANCES, TOGETHER WITH THE RIGHT OF ENTRY TO CACTUS MINES COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, AS BOOK 1534 PAGE 355, OF OFFICIAL RECORDS.

(FA7) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO WILLIAM C. BERGAND, A WIDOWER, AS SET FORTH IN A DOCUMENT RECORDED MARCH 31, 1966 IN BOOK 3933 PAGE 228, OF OFFICIAL RECORDS.

APN: 346-061-62

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480221, DATED MARCH 17, 2023.

(FX10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PRIVATE TELEPHONE LINES INCLUDING NECESSARY POLES, WIRES AND APPURTENANCES TOGETHER WITH THE RIGHT OF ENTRY THEREON TO CACTUS MINES COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534 PAGE 355 OF OFFICIAL RECORDS.

ADJOINING PROPERTY EASEMENTS:

APN: 346-071-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480449, DATED JUNE 9, 2023.

(GM23) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY HERBERT H. SPENCER AND DONNA M. SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961, IN BOOK 3368 PAGE 830, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

EASEMENT AND RIGHTS INCIDENTAL THERETO FOR EXCEPTING THEREFROM 50% OF OIL & MINERAL RIGHTS RESERVING THEREFROM THE NORTH 0 FT., THE SOUTH 0 FT., THE WEST 32 FT., AND THE EAST 40 FT., FOR ROAD PURPOSES, RESERVED BY L.P.J. GUBERTS, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 29, 1977, IN BOOK 5078 PAGE 2308, OF OFFICIAL RECORDS.

(GM24) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RESERVING THEREFROM THE NORTH 0 FT., THE SOUTH 0 FT., THE WEST 32 FT., AND THE EAST 40 FT., FOR ROAD PURPOSES, RESERVED BY L.P.J. GUBERTS, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 29, 1977, IN BOOK 5078 PAGE 2313, OF OFFICIAL RECORDS.

(GM25) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR N1/2 OF N ½ OF NE 1/4 OF NE 1/4 OF SW 1/4 OF SECTION 7, T10N, R13W, SBBM. RESERVING THEREFROM THE NORTH 40 FT., THE WEST 32 FT., AND THE EAST 40 FT., FOR ROAD PURPOSES. S 1/2 OF N 1/2 OF NE 1/4 OF NE 1/4 OF SW 1/4 OF SECTION 7, T10N, R13W,

RESERVING THEREFROM THE WEST 32 FT., AND THE EAST 40 FT. FOR ROAD PURPOSES, RESERVED BY MONT BLANC REALTY, N.V., A NETHERLANDS ANTILLES CORPORATION AND M.J.W. VAN DER HORST, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 1, 1981, IN BOOK 5421 PAGE 748, OF OFFICIAL RECORDS.

(GM26) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RESERVING THEREFROM THE WEST 32 FT., AND THE EAST 40 FT., FOR ROAD PURPOSES, RESERVED BY MONT BLANC REALTY, N.V., A NETHERLANDS ANTILLES CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 1, 1981, IN BOOK 5421 PAGE 763, OF OFFICIAL RECORDS.

(GM27) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RESERVING THEREFROM THE WEST 32 FT., AND THE EAST 40 FT., FOR ROAD PURPOSES, RESERVED BY MONT BLANC REALTY, N.V., A NETHERLANDS ANTILLES CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 1, 1981, IN BOOK 5421 PAGE 765, OF OFFICIAL RECORDS.

VESTING TENTATIVE PARCEL MAP NO. 12597

ADJOINING PROPERTY EASEMENTS CONTINUED:

APN: 346-071-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480536, DATED JUNE 8, 2023.

(FZ30) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD, RESERVED BY MONT BLANC REALTY., N.V., AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 29, 1977, IN BOOK 5078 PAGE 2396, OF OFFICIAL RECORDS.

APN: 346-081-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480223, DATED JUNE 16, 2023.

(GP11) AN EASEMENT FOR ROADWAY AND PUBLIC UTILITIES PURPOSES AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT RECORDED APRIL 25, 1989 AS INSTRUMENT NO. 049028 IN BOOK 6232, PAGE 0486, OF OFFICIAL RECORDS, AFFECTS SAID LAND.

(GP12) AN EASEMENT FOR ERECTING, CONSTRUCTING, RECONSTRUCTING, REPLACING, REPAIRING, CHANGING, OPERATING, INSPECTING AND MAINTAINING A CERTAIN POWER LINE FOR THE TRANSMISSION OF ELECTRICITY, ALL NECESSARY TOWERS, POLES, STRUCTURES, FOUNDATIONS AND FOOTINGS, WIRES, CABLES AND BRACES ASSOCIATED THEREWITH AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP AS SET FORTH IN A DOCUMENT RECORDED JANUARY 29, AS INSTRUMENT NO. 010335 IN BOOK 6089, PAGE 1063, OF OFFICIAL RECORDS, AFFECTS SAID LAND.
THE MATTERS CONTAINED IN AN INSTRUMENT ENTITLED NOTICE OF RECEIPT OF PAYMENT AND COMPLIANCE WITH TERMS OF EASEMENT DATED JULY 15, 1989 BY AND BETWEEN JOSEPH J. DOLNY AND SAGEBRUSH A CALIFORNIA GENERAL PARTNERSHIP UPON THE TERMS THEREIN PROVIDED RECORDED JULY 26, 1989 AS INSTRUMENT NO. 012081, IN BOOK 6268, PAGE 2325, OF OFFICIAL RECORDS.

APN: 346-012-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480315, DATED APRIL 12, 2022

(GO8) AN EASEMENT FOR PUBLIC UTILITIES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 18, 1987 AS INSTRUMENT NO. 071746 IN BOOK 6077 PAGE 0261 OF OFFICIAL RECORDS, AFFECTS PORTIONS OF THE HEREIN DESCRIBED LAND, THE EXACT LOCATION OF WHICH CAN BE DETERMINED BY EXAMINATION OF THE ABOVE—MENTIONED INSTRUMENT, WHICH CONTAINS A COMPLETE LEGAL DESCRIPTION OF THE AFFECTED PORTIONS OF SAID LAND.

APN: 346-081-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480437, DATED MAY 23, 2023.

(GT11) AN EASEMENT FOR RIGHT OF WAY AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT, RECORDED APRIL 25, 1989, IN BOOK 6232, PAGE 484, AS INSTRUMENT NO. 049027, WHICH AFFECTS SAID LAND.

APN: 346-090-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480225, DATED MARCH 16, 2023.

(HA9) AN EASEMENT FOR PUBLIC ROAD, INGRESS, EGRESS AND PUBLIC UTILITIES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF LAWRENCE E. SPENCER AND CAROLE JEANNE SPENCER, HUSBAND AND WIFE AS SET FORTH IN A DOCUMENT RECORDED MAY 23, 1968 IN BOOK 4163, PAGE 394 OF OFFICIAL RECORDS, AFFECTS THE NORTHERLY 32 FEET OF PARCEL 1 AND THE WESTERLY 50 FEET OF PARCELS 1 AND 2.

(HA10) AN EASEMENT FOR CERTAIN POWER LINE FOR THE TRANSMISSION OF ELECTRICITY AND ALL NECESSARY TOWERS, POLES, STRUCTURES, FOUNDATIONS, FOOTINGS WIRES, CABLES AND BRACES ASSOCIATED THEREWITH AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP AS SET FORTH IN A DOCUMENT RECORDED JANUARY 11, 1988 IN BOOK 6083, PAGE 1873 OF OFFICIAL RECORDS, AFFECTS THE WESTERLY 110 FEET OF SAID LAND.

THE TERMS, CONDITIONS AND PROVISIONS AS CONTAINED IN SAID GRANT OF EASEMENT.

MATTERS CONTAINED IN DOCUMENT ENTITLED MEMORANDUM OF OPTION AND RIGHT TO CONSTRUCT SECOND CIRCUIT BY AND BETWEEN SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP AND TOYOWEST II, A CALIFORNIA GENERAL PARTNERSHIP RECORDED JULY 12, 1991 AS INSTRUMENT NO. 087086 IN BOOK 6544 PAGE 0553 OF OFFICIAL RECORDS.

APN: 346-090-22

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480226, DATED MARCH 16, 2023.

(HB5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY RESERVED BY LAWRENCE E. SPENCER AND CAROLE JEANNE SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED, MAY 23, 1968, IN BOOK 4163 PAGE 394, OF OFFICIAL RECORDS.

(HB7) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ERECTING, CONSTRUCTING, RECONSTRUCTING, REPLACING, REPAIRING, CHANGING, OPERATING, INSPECTING AND MAINTAINING A CERTAIN POWER LINE FOR THE TRANSMISSION OF ELECTRICITY, ALL NECESSARY TOWERS, STRUCTURES, FOUNDATIONS AN FOOTINGS, WIRES, CABLES AND BRACES ASSOCIATED THEREWITH OR SUSPENDED THEREFROM AND ANY AND ALL ASSOCIATED ACTIVITIES, INCLUDING THE MAKING OF ALL STUDIES AND SURVEYS ASSOCIATED THEREWITH TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS OVER AND ACROSS SAID EASEMENT AND ADJACENT LANDS TO SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 11, 1988, IN BOOK 6083 PAGE 1873, OF OFFICIAL RECORDS.

APN: 346-090-23

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480227, DATED MARCH 16, 2023.

(HC5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY RESERVED BY LAWRENCE E. SPENCER AND CAROLE JEANNE SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED, MAY 23, 1968, IN BOOK 4163 PAGE 394, OF OFFICIAL RECORDS.

(HC7) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ERECTING, CONSTRUCTING, RECONSTRUCTING, REPLACING, REPAIRING, CHANGING, OPERATING, INSPECTING AND MAINTAINING A CERTAIN POWER LINE FOR THE TRANSMISSION OF ELECTRICITY, ALL NECESSARY TOWERS, STRUCTURES, FOUNDATIONS AN FOOTINGS, WIRES, CABLES AND BRACES ASSOCIATED THEREWITH OR SUSPENDED THEREFROM AND ANY AND ALL ASSOCIATED ACTIVITIES, INCLUDING THE MAKING OF ALL STUDIES AND SURVEYS ASSOCIATED THEREWITH TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS OVER AND ACROSS SAID EASEMENT AND ADJACENT LANDS TO SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 11, 1988, IN BOOK 6083 PAGE 1873, OF OFFICIAL RECORDS.

VESTING TENTATIVE PARCEL MAP NO. 12598

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION OF PORTIONS OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST AND SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 22000480465-76, DATED SEPTEMBER 29, 2022, REPORT NO. 23000480437, DATED MAY 23, 2023, REPORT NO. 22000480465-83 DATED DECEMBER 23, 2022, REPORT NO. 23000480385, DATED JUNE 2, 2023, REPORT NO. 23000480386, DATED MAY 4, 2023, REPORT NO. 23000480388, DATED MAY 4, 2023, REPORT NO. 23000480514, DATED MAY 26, 2023, REPORT NO. 22000480465-111 DATED DECEMBER 23, 2022, REPORT NO. 23000480488, DATED MAY 25, 2023, REPORT NO. 23000480554, DATED JULY 14, 2023, REPORT NO. 23000480216, DATED MARCH 16, 2023, REPORT NO. 23000480035, DATED JUNE 23, 2023, REPORT NO. 23000480536, DATED JUNE 8, 2023, REPORT NO. 23000480449, DATED JUNE 9, 2023, REPORT NO. 22000480465-19, DATED JULY 8, 2022 AND REPORT NO. 23000480387, DATED MAY 5, 2023.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE EIGHTEEN (18) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.
NOTE: ALL STRUCTURES WITHIN THE BOUNDARY OF THIS MAP OR WITHIN 150 FEET OF THIS MAP BOUNDARY ARE SHOWN HEREON.

BASIS OF BEARINGS:

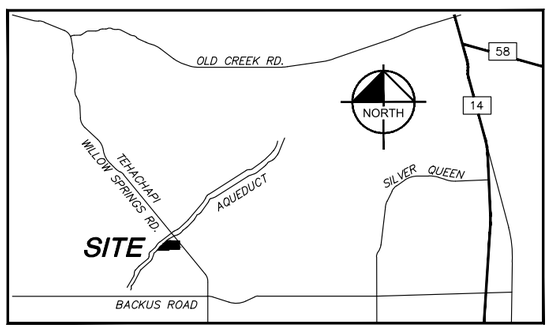
ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO. 06029C3650E, WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	346-071-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 15, 16, 17, 18, 23, 24, 25, 26
ACCESS TO PARCELS:	PROPOSED PUBLIC ACCESS EASEMENTS SHOWN HEREON
EXISTING NUMBER OF PARCELS:	18
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	A, A FPS, PL RS FP, A WE
EXISTING GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A, A FP, A FPS
PROPOSED GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWER DISPOSAL:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL 'A' AREA:	48.49 ACRES
TOTAL PROJECT AREA:	48.49 ACRES



VICINITY MAP
NOT TO SCALE

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

11 FD. 2.5" GLO BRASS DISK

12 FD. 3" GLO BRASS DISK

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF EDWARDS SANBORN LAND HOLDINGS, LLC.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA

LEGAL DESCRIPTON:

APN: 346-071-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-83 DATED DECEMBER 23, 2022.

THE N 1/2 OF THE N 1/2 OF THE NW 1/4 OF THE NW 1/4 OF THE SW 1/4 OF SECTION 7, T10N, R13W, SBM.
APN: 346-071-01

APN: 346-071-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480035, DATED JUNE 23, 2023.

THE LAND REFERRED TO HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF KERN UNINCORPORATED AND DESCRIBED AS FOLLOWS:

THE NORTH ONE-HALF OF THE NORTH ONE-HALF OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO UNITED STATES GOVERNMENT SURVEY THEREOF.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT HUGH SPENCER, ET UX, IN DEED RECORDED APRIL 12, 1961, IN BOOK 3368, PAGE 830 OF OFFICIAL RECORDS.

APN: 346-071-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480449, DATED JUNE 9, 2023.

PARCEL 2:
SOUTH ONE-HALF OF THE NORTH ONE-HALF OF THE NORTHEAST ONE-QUARTER OF THE NORTHEAST ONE-QUARTER OF THE SOUTHWEST ONE-QUARTER SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST S.B.B.&M.,
EXCEPTING THEREFROM 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND AND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET AS RESERVED IN DEED RECORDED APRIL 12, 1961, IN BOOK 3368 PAGE 830 KERN COUNTY RECORDS.

APN: 346-071-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-19, DATED JULY 8, 2022.

THE SOUTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER, ET UX, IN DEED RECORDED APRIL 12, 1961, IN BOOK 3368, PAGE 830, OF OFFICIAL RECORDS.

APN: 346-071-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480385, DATED JUNE 2, 2023.

THE SOUTH 1/2 OF THE NORTH 1/2 OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE & MERIDIAN.

EXCEPTING THEREFROM THE WEST 32 FEET AND THE EAST 32 FEET FOR ROAD EASEMENT PURPOSES.

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-071-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480386, DATED MAY 4, 2023.

THE SOUTH HALF OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER THE OFFICIAL PLAT THEREOF, ALSO DESCRIBED AS PARCEL 34 OF CERTIFICATE OF COMPLIANCE RECORDED OCTOBER 6, 1986 IN BOOK 5923, PAGE 1384 OF OFFICIAL RECORDS, AND RE-RECORDED OCTOBER 16, 1986 IN BOOK 5927, PAGE 211 OF OFFICIAL RECORDS.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM, MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND AND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT HUGH SPENCER, ET UX IN DEED RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830 OF OFFICIAL RECORDS.

APN: 346-071-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480387, DATED MAY 5, 2023.

THE NORTH HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

THE PLAT OF A DEPENDENT RESURVEY OF SAID LAND WAS FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1936.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND AND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER, ET UX, IN DEED RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830 OF DEEDS.
AS PER CERTIFICATE OF COMPLIANCE RECORDED OCTOBER 6, 1986 IN BOOK 5923, PAGE 1384 AND RE-RECORDED OCTOBER 16, 1986 IN BOOK 5927, PAGE 211 OF OFFICIAL RECORDS.

APN: 346-071-02, 04, 10, & 15

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480536, DATED JUNE 8, 2023.

PARCEL 2: APN 346-071-02
THE NORTH HALF OF THE NORTH HALF OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.
THE PLAT OF A DEPENDENT RESURVEY OF SAID LAND WAS FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1936.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER, ET UX, IN DEED RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830 OF DEEDS.
AS PER CERTIFICATE OF COMPLIANCE RECORDED OCTOBER 6, 1986, IN BOOK 5923, PAGE 1384 AND RE-RECORDED OCTOBER 16, 1986 IN BOOK 5927, PAGE 211, OF OFFICIAL RECORDS.

PARCEL 3: APN 346-071-04
THE NORTH HALF OF THE NORTH HALF OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.
THE PLAT OF A DEPENDENT RESURVEY OF SAID LAND WAS FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1936.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT MY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER, ET UX, IN DEED RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830 OF DEEDS.
AS PER CERTIFICATE OF COMPLIANCE RECORDED OCTOBER 6, 1986, IN BOOK 5923, PAGE 1384, AND RE-RECORDED OCTOBER 16, 1986 IN BOOK 5927, PAGE 211 OF OFFICIAL RECORDS.

PARCEL 4: APN 346-071-10
THE NORTH HALF OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND.
THE PLAT OF A DEPENDENT RESURVEY OF SAID LAND WAS FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1936.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND AND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER ET UX, IN DEED RECORDED APRIL 12, 1961, IN BOOK 3368 PAGE 830 OF OFFICIAL RECORDS.
AS PER CERTIFICATE OF COMPLIANCE RECORDED OCTOBER 6, 1986, IN BOOK 5923, PAGE 1384, AND RE-RECORDED OCTOBER 16, 1986 IN BOOK 5927, PAGE 211 OF OFFICIAL RECORDS.

PARCEL 5: APN 346-071-15
THE SOUTH HALF OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.
THE PLAT OF A DEPENDENT RESURVEY OF SAID LAND WAS FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1936.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, AL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAND LAND AND WITHOUT ANY NIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER, ET UX, IN DEED RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830, OF DEED.
AS PER CERTIFICATE OF COMPLIANCE RECORDED OCTOBER 6, 1986, IN BOOK 5923, PAGE 1384, AND RE-RECORDED OCTOBER 16, 1986 IN BOOK 5927, PAGE 211 OF OFFICIAL RECORDS.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657-452-0200
jeff.lenherr@kimley-horn.com

VESTING TENTATIVE PARCEL MAP NO. 12598

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-071-16

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480388, DATED MAY 4, 2023.

THE SOUTH 1/2 OF THE SOUTH 1/2 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND ON FILE IN THE BUREAU OF LAND MANAGEMENT;

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM, MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND AND THE SUB-SURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT HUGH SPENCER, ET UX. IN DEED RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830 OF OFFICIAL RECORDS.

APN: 346-071-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-111 DATED DECEMBER 23, 2022.

NORTH ONE-HALF OF NORTH ONE-HALF OF SOUTHEAST ONE-QUARTER OF THE NORTHWEST ONE-QUARTER OF SOUTHWEST ONE QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF. THE PLAT OF A DEPENDENT RESURVEY OF SAID LAND WAS FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1936.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER, ET UX, IN DEED RECORDED APRIL 12, 1961, IN BOOK 3368, PAGE 830 OF OFFICIAL RECORDS.

APN: 346-071-23

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480488, DATED MAY 25, 2023.

THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA

EXCEPTING THEREFROM 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY, UPON THE SURFACE OF SAID LAND AND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET AS RESERVED IN THE DEED FROM HERBERT SPENCER AND DONNA M. SPENCER RECORDED APRIL 12, 1961 IN BOOK 3368 OF OFFICIAL RECORDS
PAGE 830.

APN: 346-071-17 & 24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480514, DATED MAY 26, 2023.

PARCEL 1:
THE NORTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND.

EXCEPT 50% OF ALL COAL, OIL, GAS PETROLEUM, MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND AND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER ET UX, IN DEED RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830 OF OFFICIAL RECORDS.

PARCEL 2:
THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND.

EXCEPT 50% OF ALL COAL, OIL, GAS PETROLEUM, MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND AND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER ET UX, IN DEED RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830 OF OFFICIAL RECORDS.

APN: 346-071-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480554, DATED JULY 14, 2023.

THE NORTH HALF OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER TO SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND.

THE PLAT OF A DEPENDENT RESURVEY OF SAID LAND WAS FILED IN THE DISTRICT LAND OFFICE, OCTOBER 7, 1936.

EXCEPT 50% OF ALL COAL, OIL, GAS PETROLEUM, MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, A RESERVED BY HERBERT H. SPENCER ET UX, IN DEED RECORDED APRIL 12, 1961 IN BOOK 3368 PAGE 830, OF OFFICIAL RECORDS.

APN: 346-071-26

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480437, DATED MAY 23, 2023.

THE NORTH HALF OF THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND AND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER ET UX, IN DEED RECORDED APRIL 12, 1961, IN BOOK 3368 PAGE 830 OF OFFICIAL RECORDS.

VESTING TENTATIVE PARCEL MAP NO. 12598

SEC. 6, T. 10 N., R. 14 W., S.B.M.

SEC. 12, T. 10 N., R. 14 W., S.B.M.

SEC. 7, T. 10 N., R. 13 W., S.B.M.

SEC. 18, T. 10 N., R. 14 W., S.B.M.

NE COR SEC 12

SE COR SEC 12

NE COR SEC 7

SE COR SEC 7

N 1/4 SEC 7

S 1/4 SEC 7

E 1/4 SEC 12

E 1/4 SEC 7

N89°33'26"W 2765.94'

N89°30'52"W 2671.91'

N89°35'03"W 5427.58'

2768.96'

N89°48'32"E 228.21'

N00°27'23"W 2645.67'

2644.42'

2641.09'

N00°14'06"W

2658.63'

330.67'

N89°35'13"W 1323.81'

N00°25'32"W 826.70'

N00°27'26"W 2646.36'

1160.25'

N89°41'45"W 1445.03'

2314.66'

2645.33'

N00°31'19"W 5288.75'

N00°06'59"W 2640.11'

1444.24'

N89°36'23"W 2771.93'

1327.69'

N89°41'31"W 2639.85'

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PARCEL 'A'
48.49± ACRES

5' OFFSET
2' ESMT

APN:
346-012-07

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

K:\ORA_SURV\2023\BOUNDARY\KERN COUNTY - DISCOVERY ALTA - 194388004\MAPPING\DWG\TPM\AREA CD - MAP 7\194388004TPM-MAP7.DWG

VESTING TENTATIVE PARCEL MAP NO. 12598

EASEMENTS:

APN: 346-071-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-83 DATED DECEMBER 23, 2022.

FY10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ALL COUNTY ROADS THERETOFORE LAWFULLY ESTABLISHED AND THEN IN PUBLIC USE TO SOUTHERN PACIFIC RAILROAD COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 22, 1912, IN BOOK 271, PAGE 1, OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

(FY11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES EASEMENT TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 15, 1956, IN BOOK 2577, PAGE 497, OF OFFICIAL RECORDS.

(FY12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO HERBERT HUGH SPENCER, ET UX, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961, IN BOOK 3368, PAGE 830, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(FY13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 29, 1978, IN BOOK 5165, PAGE 531, OF OFFICIAL RECORDS.

APN: 346-071-02, 04, 10, & 15

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480536, DATED JUNE 8, 2023.

FZ18 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHT OF WAY, RESERVED BY SOUTHERN PACIFIC LAND COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 24, 1921, IN BOOK 370, PAGE 234, OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

(FZ21) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY HERBERT H. SPENCER, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961, IN BOOK 3368, PAGE 830, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

(FZ22) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD, RESERVED BY MONT BLANC REALTY, N.V., A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 29, 1977, IN BOOK 5078 PAGE 2271, OF OFFICIAL RECORDS.

(FZ23) MATTERS CONTAINED IN DOCUMENT ENTITLED MEMORANDUM OF ACCESS EASEMENT AGREEMENT, BY AND BETWEEN ROMULO F. DAMASO AND DOLORES G. DAMASO, CO-TRUSTEES OF THE ROMULO F. AND DOLORES G. DAMASO TRUST, DATED JUNE 24, 2001 AND EDF RENEWABLE DEVELOPMENT, INC., A DELAWARE CORPORATION AND POWER PARTNERS SOUTHWEST, LLC, A DELAWARE LIMITED LIABILITY COMPANY RECORDED MARCH 8, 2016, AS INSTRUMENT NO. 0216028241, OF OFFICIAL RECORDS.

FZ25 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHT OF WAY, RESERVED BY SOUTHERN PACIFIC LAND COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 24, 1921, IN BOOK 370, PAGE 234, OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

FZ28 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR THE CONSTRUCTION AND MAINTENANCE OF A PRIVATE TELEPHONE LINE OF LINES INCLUDING NECESSARY POLES, CROSSARMS, WIRE AND APPURTENANCES TOGETHER WITH RIGHT TO ENTRY THEREON AND INCIDENTS PURPOSES, TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534 PAGE 355, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL 3)

(FZ29) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY HERBERT H. SPENCER AND DONNA M. SPENCER, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961, IN BOOK 3368 PAGE 830, OF OFFICIAL RECORDS.

(FZ30) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD, RESERVED BY MONT BLANC REALTY., N.V., AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 29, 1977, IN BOOK 5078 PAGE 2396, OF OFFICIAL RECORDS.

FZ33 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHT OF WAY, RESERVED BY SOUTHERN PACIFIC LAND COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 24, 1921, IN BOOK 370 PAGE 234, OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

FZ36 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY HERBERT HUGH. SPENCER AND DONNA M. SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961, IN BOOK 3368 PAGE 830 OF OFFICIAL RECORDS. (DOES NOT AFFECT PARCEL 4)

(FZ37) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD EASEMENT AND INCIDENTAL PURPOSES, RESERVED BY THE BANK OF CALIFORNIA, N.A., AS TRUSTEE UNDER TRUST 85003, AS SET FORTH IN A DOCUMENT RECORDED MAY 29, 1979, IN BOOK 5201 PAGE 169, OF OFFICIAL RECORDS.

FZ39 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHT OF WAY, RESERVED BY SOUTHERN PACIFIC LAND COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 24, 1921, IN BOOK 370, PAGE 234, OF DEEDS.
(EASEMENT IS BLANKET IN NATURE)

FZ42 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY HERBERT HUGH SPENCER AND DONNA M. SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961, IN BOOK 3368 PAGE 830 OF OFFICIAL RECORDS. (DOES NOT AFFECT PARCEL 5)

(FZ43) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD, RESERVED BY MONT BLANC REALTY, N.V., A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 29, 1977, IN BOOK 5078 PAGE 2335, OF OFFICIAL RECORDS.

APN: 346-071-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480385, DATED JUNE 2, 2023.

GB10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THEN IN USE TO THE PUBLIC, AS SET FORTH IN A DOCUMENT RECORDED MARCH 22, 1912 IN BOOK 271 PAGE 1, OF DEEDS.
(EASEMENT IS BLANKET IN NATURE)

GB11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROADS TO EUGENE J. SPENCER, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 24, 1921 IN BOOK 370, PAGE 234 OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

GB12 ANY EASEMENT FOR A POLE LINE RUNNING NORTHEASTERLY THROUGH SAID LAND, AS SHOWN ON THE DEPENDENT RESURVEY OF SAID LAND FILED IN THE DISTRICT LAND OFFICE ON OCTOBER 7, 1936. (NOT LOCATABLE FROM RECORD)

GB13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR POLES TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534, PAGE 355 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

GB14 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR POLE LINES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 15, 1956 IN BOOK 2577, PAGE 497 OF OFFICIAL RECORDS.
(DOES NOT AFFECT SUBJECT PARCEL)

GB15 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO BIRDSELL A. KEITHLEY AND MARIE KEITHLEY, HUSBAND AND WIFE, AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 831 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(GB16) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD EASEMENT PURPOSES TO CLARENCE H. KARST AND MARGARET L. KARST, HUSBAND AND WIFE AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 15, 1982 IN BOOK 5496, PAGE 2389 OF OFFICIAL RECORDS.

APN: 346-071-16

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480388, DATED MAY 4, 2023.

GD11 A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW PUBLIC USE UPON AND ACROSS SAID LAND, AS EXCEPTED IN DEED FROM SOUTHERN PACIFIC LAND COMPANY, A CORPORATION, RECORDED AUGUST 24, 1921 IN BOOK 370 PAGE 234, OF DEEDS. (EASEMENT BLANKET IN NATURE)

(GD13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY RESERVED BY HERBERT HUGH SPENCER AND DONNA M. SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED, APRIL 12, 1961, AS INSTRUMENT NO. 22467 IN BOOK 3368 PAGE 830, OF OFFICIAL RECORDS.

GD14 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY RESERVED BY HERBERT H. SPENCER AND DONNA M. SPENCER, HUSBAND AND WIFE AS SET FORTH IN A DOCUMENT RECORDED, APRIL 12, 1961, AS INSTRUMENT NO. 22468 IN BOOK 3368 PAGE 831, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

(GD15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD RESERVED BY SECURITY TITLE INSURANCE COMPANY, AS TRUSTEE UNDER TRUST NO: P.T. 2064-1296-4 AS SET FORTH IN A DOCUMENT RECORDED, FEBRUARY 3, 1976, AS INSTRUMENT NO. 07830 IN BOOK 4937 PAGE 217, OF OFFICIAL RECORDS.

APN: 346-071-17 & 24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480514, DATED MAY 26, 2023.

GE12 A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE UPON AND ACROSS SAID LAND, AS RESERVED IN DEED FROM SOUTHERN PACIFIC LAND COMPANY, A CALIFORNIA CORPORATION, RECORDED AUGUST 24, 1921, IN BOOK 370 PAGE 234 OF DEEDS. MATTERS CONTAINED THEREIN AFFECT BOTH PARCELS 1 AND 2. (EASEMENT IS BLANKET IN NATURE)

(GE15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD RESERVED BY HERBERT HUGH SPENCER AND DONNA M. SPENCER, AS SET FORTH IN A DOCUMENT RECORDED, APRIL 12, 1961, IN BOOK 3368 PAGE 830, OF OFFICIAL RECORDS. MATTERS CONTAINED THEREIN AFFECT BOTH PARCELS 1 AND 2

(GE16) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD RESERVED BY THE BANK OF CALIFORNIA, N.A., AS TRUSTEE UNDER TRUST 85008, AS SET FORTH IN A DOCUMENT RECORDED, MAY 30, 1979, AS INSTRUMENT NO. 053459 IN BOOK 5201 PAGE 1275, OF OFFICIAL RECORDS. MATTERS CONTAINED THEREIN AFFECT BOTH PARCELS 1 AND 2

APN: 346-071-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-111 DATED DECEMBER 23, 2022.

GF9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ALL COUNTY ROADS THERETOFORE LAWFULLY ESTABLISHED AND THEN IN PUBLIC USE TO SOUTHERN PACIFIC RAILROAD COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 22, 1912 IN BOOK 271 PAGE 1, OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

GF10 A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE UPON AND ACROSS SAID LAND, AS EXCEPTED IN DEED FROM SOUTHERN PACIFIC LAND COMPANY, A CALIFORNIA CORPORATION, RECORDED AUGUST 24, 1921, IN BOOK 370, PAGE 234, OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

GF13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR POLES TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534 PAGE 355, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

GF14 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR POLE LINES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION AS SET FORTH IN A DOCUMENT RECORDED MARCH 15, 1956 IN BOOK 2577 PAGE 497, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

GF17 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC HIGHWAY PURPOSES TO COUNTY OF KERN, AS SET FORTH IN A DOCUMENT RECORDED JUNE 28, 1956 IN BOOK 2629 PAGE 74, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

GF18 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO HERBERT HUGH SPENCER, ET UX, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368 PAGE 830, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

GF19 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO HERBERT H. SPENCER AND DONNA M. SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 831, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

GF25 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PURPOSES OF INGRESS AND EGRESS TO AND FROM THE PROPERTY INCLUDING ROAD ACCESS AND THE RIGHT TO INSTALL, MAINTAIN AND REPAIR ROADS AND ROADWAYS ON THE PROPERTY TO POWER PARTNERS SOUTHWEST, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 12, 2009, AS INSTRUMENT NO. 0209149645, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-071-23

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480488, DATED MAY 25, 2023.

GG12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHT OF WAY FOR ANY AND ALL COUNTY ROADS FOR PUBLIC USE, AS SET FORTH IN A DOCUMENT RECORDED MARCH 22, 1912, IN BOOK 271 PAGE 1, OF DEEDS. (NOT LOCATABLE FROM RECORD)

GG14 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, UTILITY AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961, AS INSTRUMENT NO. 22467 IN BOOK 3368 PAGE 830, OF OFFICIAL RECORDS.
(DOES NOT AFFECT SUBJECT PROPERTY)

(GG15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD, AS SET FORTH IN A DOCUMENT RECORDED JUNE 16, 1997, AS INSTRUMENT NO. 0197079052, OF OFFICIAL RECORDS.

APN: 346-071-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480554, DATED JULY 14, 2023.

GH5 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY AND ALL COUNTY ROADS THERETOFORE LAWFULLY ESTABLISHED AND THE IN PUBLIC USE UPON AND ACROSS SAID LAND RESERVED BY SOUTHERN PACIFIC RAILROAD COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED, JUNE 20, 1921, IN BOOK 365 PAGE 177 AND AUGUST 24, 1921, IN BOOK 370 PAGE 234, BOTH OF DEEDS. (NOT LOCATABLE FROM RECORD)

(GH6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES RESERVED BY HERBERT HUGH SPENCER, ET UX, AS SET FORTH IN A DOCUMENT RECORDED, APRIL 12, 1961, IN BOOK 3368 PAGE 830, OF OFFICIAL RECORDS.

APN: 346-071-26

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480437, DATED MAY 23, 2023.

GI5 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN PACIFIC LAND COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 24, 1921 IN BOOK 370, PAGE 234 OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

GI6 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES, RESERVED BY HEBERT HUGH SPENCER AND DONNA M. SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(GI8) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND INCIDENTAL PURPOSE TO THE BANK OF CALIFORNIA, AS TRUSTEE UNDER TRUST 85007, IN DEED, AS SET FORTH IN A DOCUMENT RECORDED MAY 30, 1979 IN BOOK 5201, PAGE 1251, OF OFFICIAL RECORDS.

APN: 346-071-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480387, DATED MAY 5, 2023.

THE NORTH HALF OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

THE PLAT OF A DEPENDENT RESURVEY OF SAID LAND WAS FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1936.

EXCEPT 50% OF ALL COAL, OIL, GAS, PETROLEUM MINERALS, OIL AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND AND WITHOUT ANY RIGHTS OF ENTRY UPON THE SURFACE OF SAID LAND AND THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET, AS RESERVED BY HERBERT H. SPENCER, ET UX, IN DEED RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830 OF DEEDS.
AS PER CERTIFICATE OF COMPLIANCE RECORDED OCTOBER 6, 1986 IN BOOK 5923, PAGE 1384 AND RE-RECORDED OCTOBER 16, 1986 IN BOOK 5927, PAGE 211 OF OFFICIAL RECORDS.

GN10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE UPON AND ACROSS SAID LAND, TO SOUTHERN PACIFIC LAND COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 24, 1921 IN BOOK 370, PAGE 234, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

(GN12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES, RESERVED BY HERBERT H. SPENCER, ET UX, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830, OF OFFICIAL RECORDS.

GN13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES, RESERVED BY HERBERT H. SPENCER AND DONNA M. SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 831, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

(GN14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROADS AND INCIDENTAL PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 29, 1977, IN BOOK 5078, PAGE 2209, OF OFFICIAL RECORDS.

APN: 346-071-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480386, DATED MAY 4, 2023.

GC8 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY LAWFULLY ESTABLISHED COUNTY ROADS THEN IN USE TO SOUTHERN PACIFIC RAILROAD COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 22, 1912 IN BOOK 271, PAGE 1, OF DEEDS. (EASEMENT IS BLANKET IN NATURE)

GC9 ANY EASEMENT FOR A POLE LINE RUNNING NORTHEASTERLY THROUGH SAID LAND, AS SHOWN ON THE DEPENDENT RESURVEY OF SAID LAND FILED IN THE DISTRICT LAND OFFICE ON OCTOBER 7, 1936.
(NOT LOCATABLE FROM RECORD)

GC10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR POLES TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534, PAGE 355 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(GC11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR POLE LINES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 15, 1956 IN BOOK 2577, PAGE 497 OF OFFICIAL RECORDS.

(GC12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO HERBERT HUGH SPENCER, ET UX, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368, PAGE 830 OF OFFICIAL RECORDS.

(GC13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 19, 1989 IN BOOK 6326 (6356 IN TITLE REPORT), PAGE 1156, AS INSTRUMENT NO. 91750 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

VESTING TENTATIVE PARCEL MAP NO. 12598

EASEMENTS:

APN: 346-071-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480035, DATED JUNE 23, 2023.

OJ9 ANY INTERESTS (INCLUDING RIGHTS OF THE PUBLIC) IN AND TO ANY PORTION OF THE LAND LYING WITHIN ROADS, STREETS, ALLEYS OR HIGHWAYS.

OJ10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY AND ALL COUNTY ROADS, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 24, 1921 IN BOOK 370 PAGE 234 OF DEEDS. (NOT LOCATABLE FROM RECORD)

(OJ11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368 PAGE 830 OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

OJ12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961 IN BOOK 3368 PAGE 831 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(OJ13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROADS, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 29, 1977, IN BOOK 5078, PAGE 2316 OF OFFICIAL RECORDS.

APN: 346-071-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480449, DATED JUNE 9, 2023.

GM19 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHT OF WAY, RESERVED BY SOUTHERN PACIFIC LAND COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 24, 1921, IN BOOK 370 PAGE 234, OF DEEDS. (NOT LOCATABLE FROM RECORD)

GM20 ANY ADVERSE INTEREST OR CLAIM OF RIGHT OR TITLE BASED UPON THE ASSERTION THAT THE BOUNDARIES OF THE SOUTH HALF OF SECTION 7, TOWNSHIP 10 NORTH, RANGE 1 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEY OF GENERAL FEBRUARY 19, 1856 ARE NOT IDENTICAL WITH THE BOUNDARIES OF THE CORRESPONDING HALF OF SAID SECTION 2, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND FILED IN THE DISTRICT LAND OFFICE OCTOBER 7, 1936.

GM22 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR THE CONSTRUCTION AND MAINTENANCE OF A PRIVATE TELEPHONE LINE OF LINES INCLUDING NECESSARY POLES, CROSSARMS, WIRE AND APPURTENANCES TOGETHER WITH RIGHT TO ENTRY THEREON AND INCIDENTS PURPOSES, TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534 PAGE 355, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(GM23) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, RESERVED BY HERBERT H. SPENCER AND DONNA M. SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961, IN BOOK 3368 PAGE 830, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY)

EASEMENT AND RIGHTS INCIDENTAL THERETO FOR EXCEPTING THEREFROM 50% OF OIL & MINERAL RIGHTS RESERVING THEREFROM THE NORTH 0 FT., THE SOUTH 0 FT., THE WEST 32 FT., AND THE EAST 40 FT., FOR ROAD PURPOSES, RESERVED BY L.P.J. GUBERTS, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 29, 1977, IN BOOK 5078 PAGE 2308, OF OFFICIAL RECORDS.

(GM24) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RESERVING THEREFROM THE NORTH 0 FT., THE SOUTH 0 FT., THE WEST 32 FT., AND THE EAST 40 FT., FOR ROAD PURPOSES, RESERVED BY L.P.J. GUBERTS, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 29, 1977, IN BOOK 5078 PAGE 2313, OF OFFICIAL RECORDS.

(GM25) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR N1/2 OF N ½ OF NE 1/4 OF NE 1/4 OF SW 1/4 OF SECTION 7, T10N, R13W, SBBM. RESERVING THEREFROM THE NORTH 40 FT., THE WEST 32 FT., AND THE EAST 40 FT., FOR ROAD PURPOSES. S 1/2 OF N 1/2 OF NE 1/4 OF NE 1/4 OF SW 1/4 OF SECTION 7, T10N, R13W,

RESERVING THEREFROM THE WEST 32 FT., AND THE EAST 40 FT. FOR ROAD PURPOSES, RESERVED BY MONT BLANC REALTY, N.V., A NETHERLANDS ANTILLES CORPORATION AND M.J.W. VAN DER HORST, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 1, 1981, IN BOOK 5421 PAGE 748, OF OFFICIAL RECORDS.

(GM26) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RESERVING THEREFROM THE WEST 32 FT., AND THE EAST 40 FT., FOR ROAD PURPOSES, RESERVED BY MONT BLANC REALTY, N.V., A NETHERLANDS ANTILLES CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 1, 1981, IN BOOK 5421 PAGE 763, OF OFFICIAL RECORDS.

(GM27) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RESERVING THEREFROM THE WEST 32 FT., AND THE EAST 40 FT., FOR ROAD PURPOSES, RESERVED BY MONT BLANC REALTY, N.V., A NETHERLANDS ANTILLES CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 1, 1981, IN BOOK 5421 PAGE 765, OF OFFICIAL RECORDS.

APN: 346-071-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-19, DATED JULY 8, 2022.

GA11 A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE UPON AND ACROSS SAID LAND, AS RESERVED IN DEED FROM SOUTHERN PACIFIC LAND COMPANY, A CALIFORNIA CORPORATION, RECORDED AUGUST 24, 1921, IN BOOK 370 PAGE 234, OF DEEDS. (NOT LOCATABLE FROM RECORD)

(GA12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC HIGHWAY TO THE COUNTY OF KERN, AS SET FORTH IN A DOCUMENT RECORDED JUNE 28, 1956, AS BOOK 2629 PAGE 74, OF OFFICIAL RECORDS.

(GA14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD RESERVED BY BANK OF CALIFORNIA, N.A., AS TRUSTEE UNDER TRUST 85004, AS SET FORTH IN A DOCUMENT RECORDED, MAY 30, 1979, AS BOOK 5201 PAGE 1295, OF OFFICIAL RECORDS.

ADJOINING PROPERTY EASEMENTS:

APN: 474-071-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-17, DATED FEBRUARY 17, 2023.

(NE8) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES AS DISCLOSED BY DEED OF TRUST, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 5, 1965, IN BOOK 3890 PAGE 163, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

VESTING TENTATIVE PARCEL MAP NO. 12599

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION OF PORTIONS OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 22000480331, DATED PROFORMA, REPORT NO. 22000480465–59, DATED NOVEMBER 4, 2022, REPORT NO. 22000480315, DATED APRIL 12, 2022, REPORT NO. 23000480223, DATED JUNE 16, 2023, REPORT NO. 23000480465–89, DATED SEPTEMBER 29, 2022, REPORT NO. 22000480465–67, REPORT NO. 23000480437, DATED MAY 23, 2023, REPORT NO. 23000480434, DATED MAY 25 2023, REPORT NO. 23000480040–43, DATED MARCH 30, 2023, REPORT NO. 22000480465–5, DATED SEPTEMBER 7, 2022, REPORT NO. 22000480371, DATED FEBRUARY 3, 2023, REPORT NO. 22000480294, DATED MARCH 29, 2022, REPORT NO. 23000480224, DATED MARCH 17, 2023, REPORT NO. 23000480225, DATED MARCH 16, 2023, REPORT NO. 23000480226, DATED MARCH 16, 2023, REPORT NO. 23000480227, DATED MARCH 16, 2023, REPORT NO. 23000480507, DATED MAY 25, 2023, REPORT NO. 23000480040–82, DATED OCTOBER 5, 2023, REPORT NO. 23000480040–53, DATED APRIL 17, 2023, REPORT NO. 23000480040–53, DATED APRIL 17, 2023, REPORT NO. 23000480032, DATED JANUARY 5, 2023, AND REPORT NO. 22000480465–40A, DATED AUGUST 8, 2024.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE TWENTY–SIX (26) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.

BASIS OF BEARINGS:

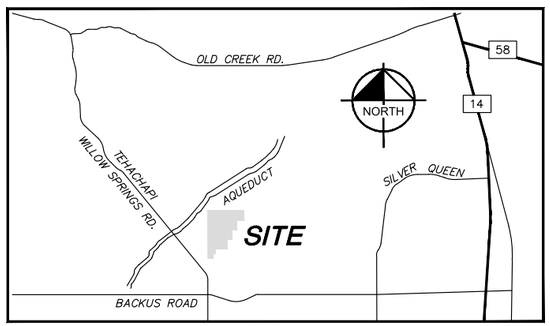
ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO. 06029C3650E, WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

SURVEY NOTE:

I, JEFFREY J. LENHERR, HEREBY STATE THAT THERE ARE NO STRUCTURES WITHIN THIS MAP OR WITHIN 150 FEET OF THE MAPS BOUNDARY.



VICINITY MAP
NOT TO SCALE

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	346–012–04, 346–081–01, 02, 03, 13, 14 346–090–01, 07, 09, 11, 12, 13, 14, 19, 21, 22, 23, 24, 28, 29, 30, 33, 35, 36, 41, 42
ACCESS TO PARCELS:	90TH STREET WEST
EXISTING NUMBER OF PARCELS:	26
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	A, A FP, A WE, PL RS
EXISTING GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE–MIN. 20 ACRE PARCEL SIZE); 8.4 (MINERAL AND PETROLEUM–MIN. 5 ACRE PARCEL SIZE)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A, A FP
PROPOSED GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE–MIN. 20 ACRE PARCEL SIZE); 8.4 (MINERAL AND PETROLEUM–MIN. 5 ACRE PARCEL SIZE)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL 'A' AREA:	326.77 ACRES
TOTAL PROJECT AREA:	326.77 ACRES

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

11 FD. 2.5" GLO BRASS DISK

12 FD. 3" GLO BRASS DISK

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF EDWARDS SANBORN LAND HOLDINGS, LLC.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA

LEGAL DESCRIPTON:

APN: 346-090-01

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331, DATED PROFORMA.

THE NORTH HALF OF THE NORTHWEST ONE–QUARTER AND NORTHWEST ONE–QUARTER OF THE NORTHEAST ONE–QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT BY THE SURVEYOR GENERAL ON FILE IN THE BUREAU OF LAND MANAGEMENT.

APN: 346-090-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480434, DATED MAY 25 2023.

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.M. RE–SERVING AN EASEMENT OF THIRTY TWO FEET OVER THE EASTERLY AND SOUTHERLY BOUNDARIES FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES, ALSO RESERVING AN EASEMENT OF THIRTY TWO FEET OVER THE WESTERLY BOUNDARY OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.M., ACCORDING TO THE OFFICIAL PLAT OF SAID LAND, THIS PROPERTY IS LOCATED IN THE UN–INCORPORATED AREA, OF THE COUNTY OF KERN.

APN: 346-090-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040–43, DATED MARCH 30, 2023.

THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-090-11 & 12, 346-090-33

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465–5, DATED SEPTEMBER 7, 2022.

PARCEL 1:
THE EAST 1/2, OF THE SOUTHEAST 1/4, OF THE NORTHWEST 1/4, OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT BY THE SURVEYOR GENERAL ON FILE IN THE BUREAU OF LAND MANAGEMENT.
EXCEPTING THEREFROM 50% OF ALL CRUDE OIL AND MINERALS BELOW A DEPTH OF 500 FEET, FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF SURFACE ENTRY THERETO, AS RESERVED BY FRED W. PIWENITZKY AND SACHIKO PIWENITZKY, TRUSTEES OF THE FRED W. PIWENITZKY AND SACHIKO PIWENITZKY TRUST UTA DATED JULY 12, 1997, AS AMENDED IN GRANT DEED RECORDED SEPTEMBER 11, 2008 AS INSTRUMENT NO. 0208144206 OF OFFICIAL RECORDS.

PARCEL 2:
THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.
EXCEPTING THEREFROM ALL MINERAL RIGHTS, OIL, GAS AND OTHER OR INTEREST, AS RESERVED BY METROPOLITAN LAND INVESTMENT, INC., IN THE DEED RECORDED JUNE 8, 1983 IN BOOK 5558 PAGE 727 OF OFFICIAL RECORDS.

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-090-13

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480371, DATED FEBRUARY 3, 2023.

THE EAST HALF OF THE WESTS HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA.

EXCEPT THEREFROM 50% OF ALL OIL, GAS, MINERALS AND OTHER HYDROCARBON SUBSTANCES LYING BELOW A DEPTH OF 500 FEET, BUT WITH NO RIGHT OF SURFACE ENTRY, AS PROVIDED IN DEED RECORDED DECEMBER 8, 1982, IN BOOK 5508, PAGE 2114, OF OFFICIAL RECORDS.

APN: 346-090-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480294, DATED MARCH 29, 2022.

THE WEST HALF OF THE WEST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 10, NORTH, RANGE 13 WEST IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THEREFROM THE OIL, GAS, MINERALS, AND OTHER HYDROCARBON SUBSTANCES LYING BELOW THE SURFACE OF SAID LAND, AS PROVIDED IN DEEDS OF RECORD.

APN: 346-090-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480224, DATED MARCH 17, 2023.

THE SOUTH HALF OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THEREFROM AN UNDIVIDED 50% OF ALL OIL, MINERALS, GAS HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND, AND WITH NO RIGHT OF SURFACE ENTRY, AS RESERVED IN THE DEED FROM LAWRENCE E. SPENCER AND HIS WIFE, RECORDED MAY 23, 1968, IN BOOK 4163 PAGE 394 OF OFFICIAL RECORDS.

APN: 346-090-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480225, DATED MARCH 16, 2023.

THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THEREFROM AN UNDIVIDED 50% OF ALL OIL, MINERALS, GAS, HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND, AND WITH NO RIGHT OF SURFACE ENTRY, AS RESERVED IN THE DEED FROM LAWRENCE E. SPENCER AND HIS WIFE, RECORDED MAY 23, 1968, IN BOOK 4163, PAGE 394 OF OFFICIAL RECORDS.

APN: 346-090-22

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480226, DATED MARCH 16, 2023.

THE NORTH ONE–HALF OF THE NORTH ONE–HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THEREFROM AN UNDIVIDED 50% OF ALL OIL, MINERALS, GAS HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND, AND WITH NO RIGHT OF SURFACE ENTRY, AS RESERVED IN THE DEED FROM LAWRENCE E. SPENCER AND HIS WIFE, RECORDED MAY 23, 1968, IN BOOK 4163, PAGE 394, OF OFFICIAL RECORDS.

APN: 346-090-23

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480227, DATED MARCH 16, 2023.

THE NORTH ONE–HALF OF THE NORTH ONE–HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THEREFROM AN UNDIVIDED 50% OF ALL OIL, MINERALS, GAS HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND, AND WITH NO RIGHT OF SURFACE ENTRY, AS RESERVED IN THE DEED FROM LAWRENCE E. SPENCER AND HIS WIFE, RECORDED MAY 23, 1968, IN BOOK 4163, PAGE 394, OF OFFICIAL RECORDS.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657–452–0200
jeff.lenherr@kimley–horn.com

VESTING TENTATIVE PARCEL MAP NO. 12599

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-090-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480507, DATED MAY 25, 2023.

LEGAL DESCRIPTION:

PARCEL 1:
THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 2:
AN EASEMENT FOR INGRESS EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS OVER THE WESTERLY 32 FEET OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.M., ACCORDING TO THE OFFICIAL PLAT OF SAID LAND.

PARCEL 3:
AN EASEMENT FOR INGRESS EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS OVER THE NORTHERLY 32 FEET OF THE WEST HALF OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 4:
AN EASEMENT FOR INGRESS EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS OVER THE WESTERLY 32 FEET OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.B.M., ACCORDING TO THE OFFICIAL PLAT OF SAID LAND.

TITLE EXCEPTIONS:

HD11 LACK OF ACCESS AND/OR LACK OF RIGHT OF ACCESS.

HD12 EASEMENTS AND RIGHTS OF WAY FOR INGRESS AND EGRESS AND UTILITIES AFFECTING THE EASEMENT PARCEL(S) DESCRIBED IN THE LEGAL DESCRIPTION AS CONVEYED AND RESERVED BY VARIOUS DEEDS OF RECORD.

HD13 RESERVATIONS AND EXCEPTIONS IN THE PATENT BY THE UNITED STATES OF AMERICA RECORDED DECEMBER 7, 1920 IN BOOK 20, PAGE 310, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-090-28, 29 & 30

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-82, DATED OCTOBER 5, 2023.

PARCEL ONE:

THE SOUTH ONE-HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THE PARCEL OF LAND DESCRIBED IN THE DEED TO UNIFIED LAND INTERNATIONAL RECORDED MAY 30, 1972 IN BOOK 4681, PAGE 435, OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM THE PARCEL OF LAND DESCRIBED IN THE DEED TO ANGELA K. ANDERSON, RECORDED FEBRUARY 5, 1983 IN BOOK 5529, PAGE 497, OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM AN UNDIVIDED 50% OF ALL OIL, MINERALS, GAS, HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND, AND WITH NO RIGHT OF SURFACE ENTRY, AS RESERVED IN THE DEED FROM LAWRENCE E. SPENCER AND HIS WIFE, RECORDED MAY 23, 1968 IN BOOK 4163, PAGE 394, OF OFFICIAL RECORDS.

PARCEL TWO:

THE WEST HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM AN UNDIVIDED 50% OF ALL OIL, MINERALS, GAS, HYDROCARBON AND ALLIED SUBSTANCES IN AND UNDER SAID LAND BELOW A DEPTH OF 500 FEET, MEASURED FROM THE SURFACE OF SAID LAND, AND WITH NO RIGHT OF SURFACE ENTRY, AS RESERVED IN THE DEED FROM LAWRENCE E. SPENCER AND HIS WIFE, RECORDED MAY 23, 1968, IN BOOK 4163, PAGE 394 OF OFFICIAL RECORDS.

APN: 346-090-35

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-53, DATED APRIL 17, 2023.

THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-090-36

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-53, DATED APRIL 17, 2023.

LEGAL DESCRIPTION:

THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

TITLE EXCEPTIONS:

HG11 LACK OF ACCESS AND/OR LACK OF RIGHT OF ACCESS.

HG12 RESERVATIONS AND EXCEPTIONS IN THE PATENT BY THE UNITED STATES OF AMERICA RECORDED DECEMBER 7, 1920, IN BOOK 20, PAGE 310 OF PATENTS. (NOT LOCATABLE FROM RECORD)

HG13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITIES RESERVED BY METROPOLITAN LAND INVESTMENTS, INC., AS SET FORTH IN A DOCUMENT RECORDED, JUNE 29, 1983, IN BOOK 5565 PAGE 2056, AS INSTRUMENT NO. 067709, OF OFFICIAL RECORDS.

LEGAL DESCRIPTON: (CONTINUED)

APN: 346-090-42

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-40A, DATED AUGUST 8, 2024.

THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 346-012-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480315, DATED APRIL 12, 2022

THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THEREFROM 50% OF CRUDE, OIL, GAS, MINERALS, AND OTHER HYDROCARBON SUBSTANCES LYING BELOW 500 FEET, FROM THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF SURFACE ENTRY THERETO, AS RESERVED IN GRANT DEED RECORDED JANUARY 12, 1984 IN BOOK 5622 PAGE 1880 OF OFFICIAL RECORDS.

APN: 346-081-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480223, DATED JUNE 16, 2023.

THE WEST HALF OF THE NORTHWEST QUARTER OF THE SOUTHWEST OF THE SOUTHWEST QUARTER OF SECTION 8 TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM ALL OIL, GAS, OTHER HYDROCARBON SUBSTANCES AND MINERALS OF ANY KIND OR CHARACTER, IN, ON, OR THEREUNDER, AS RESERVED BY THE UNITED STATES OF AMERICA IN THE PATENT RECORDED APRIL 25, 1989 AS INSTRUMENT NO. 49028, IN BOOK 6232, PAGE 486, OF OFFICIAL RECORDS.

APN: 346-081-02

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480465-89, DATED SEPTEMBER 29, 2022.

THE EAST HALF OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 8 TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM ALL OIL, GAS, OTHER HYDROCARBON SUBSTANCES AND MINERALS OF ANY KIND OR CHARACTER, IN, ON, OR THEREUNDER, AS RESERVED BY THE UNITED STATES OF AMERICA IN THE PATENT RECORDED FEBRUARY 29, 1984 AS INSTRUMENT NO. 84-1205570, OF OFFICIAL RECORDS.

APN: 346-081-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-67, DATED JULY 26, 2022.

THE WEST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 8 TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THE UNITED STATES ALL OIL, GAS AND OTHER MINERAL DEPOSITS, IN THE LAND SO PATENTED, TOGETHER WITH THE RIGHT TO PROSPECT FOR MINE AND REMOVE THE SAME ACCORDING TO THE PROVISIONS OF SAID ACT OF JUNE 1, 1938, AS RESERVED IN A DOCUMENT RECORDED JUNE 3, 1985 IN BOOK 5765 PAGE 812 OF OFFICIAL RECORDS.

APN: 346-081-13

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-93, DATED OCTOBER 21, 2022.

THE EAST ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHWEST ONE QUARTER OF SECTION 8, TOWNSHIP 10 NORTH RANGE 13 WEST, SAN BERNARDINO BASE AND MERIDIAN.

EXCEPTING THEREFROM, ALL OIL, OIL RIGHTS, NATURAL GAS RIGHTS, MINERAL RIGHTS, ALL OTHER HYDROCARBON SUBSTANCES BY WHATSOEVER NAME KNOWN, AND ALL WATER, CLAIMS OR RIGHTS TO WATER, TOGETHER WITH APPURTENANT RIGHTS THERETO AS RESERVED BY PATENT RECORDED IN BOOK 3292 PAGE 378 IN OFFICIAL RECORDS OF SAID COUNTY.

APN: 346-081-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480437, DATED MAY 23, 2023.

THE WEST ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHWEST ONE QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM ALL OIL, GAS AND OTHER MINERAL DEPOSITS, IN THE LAND SO PATENTED, TOGETHER WITH THE RIGHT TO PROSPECT FOR, MINE AND REMOVE THE SAME ACCORDING TO THE PROVISIONS OF THE ACT OF CONGRESS APPROVED JUNE 1, 1938 (52 STAT. 609) AS RESERVED BY THE UNITED STATES OF AMERICA, IN PATENT DATED JANUARY 14, 1960 AND RECORDED APRIL 25, 1989, IN BOOK 6232, PAGE 484, OF OFFICIAL RECORDS.

APN: 346-090-41

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480032, DATED JANUARY 5, 2023.

PARCEL 1: THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER TO THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.M., ACCORDING TO THE OFFICIAL PLAT APPROVED FEBRUARY 19, 1856, BY THE SURVEYOR GENERAL AND ON FILE IN THE BUREAU OF LAND MANAGEMENT.

PARCEL 2: AN EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS OVER THE WESTERLY 32 FEET OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 13 WEST, S.B.M., ACCORDING TO THE OFFICIAL PLAT APPROVED FEBRUARY 19, 1856, BY THE SURVEYOR GENERAL AND ON FILE IN THE BUREAU OF LAND MANAGEMENT.

VESTING TENTATIVE PARCEL MAP NO. 12599

SEE SHEET 4

W 1/4 SEC 8

2641.00' N00°14'06"W

N89°52'40"W 5301.38'
2652.07'

S 1/4 SEC 8

2640.50'

N89°52'40"W 662.33'

E 1/4 SEC 8

2649.31'

SEC. 8, T. 10 N., R. 13 W., S.B.M.

PARCEL 'A'
326.77± ACRES

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

GO10 GO8 FC6 FC5 FG15 GP12 GP11 GQ9 GR10 FG16 GT12 FG11 GT11 GS10

110' 55' 30' 12' 33'

N00°10'59"W 2640.17'

994.62'

N89°51'33"W 2652.33'
1657.70'

N00°07'14"W 660.19'

N89°51'00"W 331.56'

N00°07'09"W 660.13'

1320.91'

N00°07'39"W 5282.32'

N00°00'32"W 2635.47'

3050 3040 3030 3020 3010

NORTH

GRAPHIC SCALE IN FEET
200 0 100 200 400
SCALE: 1" = 200'

663.15'

1989.44'
N89°50'27"W 2652.59'

N89°59'06"E 2643.84'

SW COR SEC 8

S 1/4 SEC 8

SE COR SEC 8

SEC. 17, T. 10 N., R. 14 W., S.B.M.

SEC. 7, T. 10 N., R. 14 W., S.B.M.

SEC. 9, T. 10 N., R. 13 W., S.B.M.

VESTING TENTATIVE PARCEL MAP NO. 12599

SEC. 5, T. 10 N., R. 13 W., S.B.M.

NW COR SEC 8

N89°52'04"W 2657.03'

N 1/4 SEC 8

N89°54'19"W 1328.37'

12

PARCEL 'A'
326.77± ACRES

60777/255, O.R.

AB89

AB87

110'

20'

10'

10'

3100

3090

3080

3070

3060

3050

FJ5

N00°10'06"W 2641.00'

FN15

FN13

FV8

FV6

HC5

HC7

HB5

HB7

50'

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

32'

HC5

FU11

FU12

12'

30'

HA9

HA10

50'

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

HE9

HE10

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

50'

GZ11

GZ10

32'

GY5

30'

2640.50'
N00°07'39"W 5282.32'

SEE SHEET 5

W 1/4 SEC 8

11

N00°06'59"W 2640.11'

2652.07'
N89°52'40"W 5301.38"

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

S 1/4 SEC 8

N89°52'40"W 662.33'

1320.91'
N00°07'39"W

SEC. 8, T. 10 N., R. 13 W., S.B.M.

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

SEE SHEET 3

K:\ORA_SURV\2023\BOUNDARY\KERN COUNTY - DISCOVERY ALTA - 194388004\MAPPING\DWG\TPM\AREA CD - MAP 7\1943880004TPM-MAP7C.DWG

VESTING TENTATIVE PARCEL MAP NO. 12599

SEE SHEET 4

SEC. 5, T. 10 N., R. 14 W., S.B.M.

N 1/4 SEC 8
N89°52'04"W 2657.03'
1328.37'
N89°54'19"W 2656.75'
1328.37'
NE COR SEC 8
12
AB88
AB87
10
10
20
3080
32'
1320.25'
PARCEL 'A'
326.77± ACRES
N00°02'48"W 1320.57'
HD12
HH12
3070
N00°07'39"W 5282.32'
2640.30'
PUBLIC ROAD
(PROPOSED FOR
ABANDONMENT
THROUGH THIS MAP)
TO BE VACATED PER
SEPARATE INSTRUMENT
N89°53'30"W 1326.51'
663.26'
663.26'
GV11
32'
32'
32'
HD12
HG13
N00°05'14"W 1320.41'
32'
3060
1320.25'
TO BE VACATED PER
SEPARATE INSTRUMENT
GW12
HD12
32'
GW14
32'
32'
3050
S 1/4 SEC 8
662.33'
1986.98'
2649.31'
N89°52'40"W 5301.38'
E 1/4 SEC 8
N00°12'02"E 2641.77'
N00°07'39"W 1320.15'
2635.47'
N00°12'02"E

SEC. 9, T. 10 N., R. 13 W., S.B.M.

SEC. 8, T. 10 N., R. 13 W., S.B.M.

NORTH

GRAPHIC SCALE IN FEET
200 0 100 200 400

SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12599

EASEMENTS:

APN: 346-090-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480434, DATED MAY 25 2023.

GU6 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED DECEMBER 7, 1920 IN BOOK 20, PAGE 310 OF PATENTS. (NOT LOCATABLE FROM RECORD)

APN: 346-090-01

STEWART TITLE GUARANTY COMPANY PROFORMA TITLE REPORT NO. 22000480331, DATED PROFORMA.

AB86 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED DECEMBER 7, 1920 IN BOOK 20, PAGE 310 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

AB87 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PIPE FOR THE TRANSPORTATION AND DISTRIBUTION OF PETROLEUM AND OTHER MINERAL OIL, GAS AND WATER AND A SINGLE LINE OF POLES, TELEGRAPH AND TELEPHONE LINES TO GENERAL PIPE LINE COMPANY OF CALIFORNIA, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED APRIL 18, 1930 IN BOOK 344, PAGE 219 OF OFFICIAL RECORDS.

AB88 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO METROPOLITAN LAND INVESTMENTS, INC., A UTAH CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 2, 1970 IN BOOK 4463, PAGE 326 OF OFFICIAL RECORDS.

AB89 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR POWER LINE FOR THE TRANSMISSION OF ELECTRICITY TO SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 18, 1987 IN BOOK 6077, PAGE 255 OF OFFICIAL RECORDS.

APN: 346-090-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-43, DATED MARCH 30, 2023.

GV10 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED DECEMBER 7, 1920 AS PATENT NO. 41142, IN BOOK 20, PAGE 310 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

GV11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY, RESERVED BY DEAN CHRISTENSEN AND JUNE H. CHRISTENSEN HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED IN FEBRUARY 29, 1972 AS INSTRUMENT NO. 16014, BOOK 4641 PAGE 810, OF OFFICIAL RECORD. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 346-090-11 & 12, 346-090-33

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-5, DATED SEPTEMBER 7, 2022.

GW9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED DECEMBER 7, 1920 IN BOOK 20 PAGE 310 OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

GW10 MATTERS CONTAINED IN DOCUMENT ENTITLED LODE LOCATION NOTICE RECORDED MAY 8, 1974 IN BOOK 4840 PAGE 168 OF OFFICIAL RECORDS. (EASEMENT IS NOT LOCATABLE FROM RECORD)

GW11 MATTERS CONTAINED IN DOCUMENT ENTITLED LODE LOCATION NOTICE RECORDED MAY 8, 1974 IN BOOK 4840 PAGE 170 OF OFFICIAL RECORDS. (EASEMENT NOT LOCATABLE FROM RECORD)

GW12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY TO BARBARA R. SCHILLING, AS SET FORTH IN A DOCUMENT RECORDED SEPTEMBER 29, 1977 IN BOOK 5058 PAGE 1390 OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

GW13 RIGHTS INCIDENTAL TO THE OWNERSHIP FOR THE USE AND DEVELOPMENT OF THE MINERAL INTERESTS RESERVED IN DEED BY METROPOLITAN LAND INVESTMENT, INC., RECORDED JUNE 8, 1983 IN BOOK 5558 PAGE 727 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

GW14 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD , AS SET FORTH IN A DOCUMENT RECORDED JUNE 8, 1983 IN BOOK 5558 PAGE 727 OF OFFICIAL RECORDS.

APN: 346-090-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480294, DATED MARCH 29, 2022.

GY4 MATTERS CONTAINED IN AN UNRECORDED LEASE DATED JULY 12, 2008, EXECUTED BY CHRISTIANNE TIEMANN,TRUSTEE OF TRUST A OF THE TIEMANN FAMILY TRUST DATED APRIL 14, 1989, AS LESSOR, AND POWER PARTNERS SOUTHWEST, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AS LESSEE, A MEMORANDUM OF WHICH IS RECORDED OCTOBER 16, 2012 AS INSTRUMENT NO. 0212146831, OF OFFICIAL RECORDS. CURRENT OWNER OF LEASEHOLD AND ANY OTHER MATTERS AFFECTING THE INTEREST OF THE LESSEE ARE NOT SET FORTH HEREIN. (EASEMENT IS BLANKET IN NATURE)

GY5 MATTERS CONTAINED IN DOCUMENT ENTITLED "MEMORANDUM OF ACCESS EASEMENT AGREEMENT" BY AND BETWEEN CHRISTIANNE TIEMANN,TRUSTEE OF TRUST A OF THE TIEMANN FAMILY TRUST DATED APRIL 14, 1989 AND EDF RENEWABLE DEVELOPMENT, INC., A DELAWARE CORPORATION AND POWER PARTNERS SOUTHWEST, LLC. A DELAWARE LIMITED LIABILITY COMPANY RECORDED JANUARY 22, 2016 AS INSTRUMENT NO. 0216007898 OF OFFICIAL RECORDS.

APN: 346-090-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480224, DATED MARCH 17, 2023.

GZ10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS AND RIGHTS INCIDENTAL TO LAWRENCE E. SPENCER AND CAROLE JEANNE SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED MAY 23, 1968 IN BOOK 4163 PAGE 394 OF OFFICIAL RECORDS.

GZ11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ERECTING, CONSTRUCTING, RECONSTRUCTING, REPLACING, REPAIRING, CHANGING, OPERATING, INSPECTING AND MAINTAINING A CERTAIN POWER LINE FOR THE TRANSMISSION OF ELECTRICITY, ALL NECESSARY TOWERS, STRUCTURES, FOUNDATIONS AN FOOTINGS, WIRES, CABLES AND BRACES, TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS OVER AND ACROSS SAID EASEMENT AND RIGHTS INCIDENTAL TO SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 29, 1988 IN BOOK 6089 PAGE 1053 OF OFFICIAL RECORDS.

APN: 346-090-41

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480032, DATED JANUARY 5, 2023.

HH9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED IN BOOK 20, PAGE 310, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

HH12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, AND PUBLIC UTILITY PURPOSES TO METROPOLITAN LAND INVESTMENTS, INC., A UTAH CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 2, 1970, IN BOOK 4463, PAGE 326, OF OFFICIAL RECORDS.

APN: 346-090-42

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-40A, DATED AUGUST 8, 2024.

HI21 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED IN BOOK 10, PAGE 101, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

HI22 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED IN BOOK 20, PAGE 310, OF PATENTS. (EASEMNET IS BLANKET IN NATURE)

APN: 346-090-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480225, DATED MARCH 16, 2023.

HA9 AN EASEMENT FOR PUBLIC ROAD, INGRESS, EGRESS AND PUBLIC UTILITIES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF LAWRENCE E. SPENCER AND CAROLE JEANNE SPENCER, HUSBAND AND WIFE AS SET FORTH IN A DOCUMENT RECORDED MAY 23, 1968 IN BOOK 4163, PAGE 394 OF OFFICIAL RECORDS, AFFECTS THE NORTHERLY 32 FEET OF PARCEL 1 AND THE WESTERLY 50 FEET OF PARCELS 1 AND 2.

HA10 AN EASEMENT FOR CERTAIN POWER LINE FOR THE TRANSMISSION OF ELECTRICITY AND ALL NECESSARY TOWERS, POLES, STRUCTURES, FOUNDATIONS, FOOTINGS WIRES, CABLES AND BRACES ASSOCIATED THEREWITH AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP AS SET FORTH IN A DOCUMENT RECORDED JANUARY 11, 1988 IN BOOK 6083, PAGE 1873 OF OFFICIAL RECORDS, AFFECTS THE WESTERLY 110 FEET OF SAID LAND.

THE TERMS, CONDITIONS AND PROVISIONS AS CONTAINED IN SAID GRANT OF EASEMENT.

MATTERS CONTAINED IN DOCUMENT ENTITLED MEMORANDUM OF OPTION AND RIGHT TO CONSTRUCT SECOND CIRCUIT BY AND BETWEEN SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP AND TOYOWEST II, A CALIFORNIA GENERAL PARTNERSHIP RECORDED JULY 12, 1991 AS INSTRUMENT NO. 087086 IN BOOK 6544 PAGE 0553 OF OFFICIAL RECORDS.

APN: 346-090-22

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480226, DATED MARCH 16, 2023.

HB5 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY RESERVED BY LAWRENCE E. SPENCER AND CAROLE JEANNE SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED, MAY 23, 1968, IN BOOK 4163 PAGE 394, OF OFFICIAL RECORDS.

HB7 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ERECTING, CONSTRUCTING, RECONSTRUCTING, REPLACING, REPAIRING, CHANGING, OPERATING, INSPECTING AND MAINTAINING A CERTAIN POWER LINE FOR THE TRANSMISSION OF ELECTRICITY, ALL NECESSARY TOWERS, STRUCTURES, FOUNDATIONS AN FOOTINGS, WIRES, CABLES AND BRACES ASSOCIATED THEREWITH OR SUSPENDED THEREFROM AND ANY AND ALL ASSOCIATED ACTIVITIES, INCLUDING THE MAKING OF ALL STUDIES AND SURVEYS ASSOCIATED THEREWITH TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS OVER AND ACROSS SAID EASEMENT AND ADJACENT LANDS TO SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 11, 1988, IN BOOK 6083 PAGE 1873, OF OFFICIAL RECORDS.

APN: 346-090-23

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480227, DATED MARCH 16, 2023.

HC5 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY RESERVED BY LAWRENCE E. SPENCER AND CAROLE JEANNE SPENCER, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED, MAY 23, 1968, IN BOOK 4163 PAGE 394, OF OFFICIAL RECORDS.

HC7 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ERECTING, CONSTRUCTING, RECONSTRUCTING, REPLACING, REPAIRING, CHANGING, OPERATING, INSPECTING AND MAINTAINING A CERTAIN POWER LINE FOR THE TRANSMISSION OF ELECTRICITY, ALL NECESSARY TOWERS, STRUCTURES, FOUNDATIONS AN FOOTINGS, WIRES, CABLES AND BRACES ASSOCIATED THEREWITH OR SUSPENDED THEREFROM AND ANY AND ALL ASSOCIATED ACTIVITIES, INCLUDING THE MAKING OF ALL STUDIES AND SURVEYS ASSOCIATED THEREWITH TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS OVER AND ACROSS SAID EASEMENT AND ADJACENT LANDS TO SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 11, 1988, IN BOOK 6083 PAGE 1873, OF OFFICIAL RECORDS.

APN: 346-090-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480507, DATED MAY 25, 2023.

HD12 EASEMENTS AND RIGHTS OF WAY FOR INGRESS AND EGRESS AND UTILITIES AFFECTING THE EASEMENT PARCEL(S) DESCRIBED IN THE LEGAL DESCRIPTION AS CONVEYED AND RESERVED BY VARIOUS DEEDS OF RECORD.

HD13 RESERVATIONS AND EXCEPTIONS IN THE PATENT BY THE UNITED STATES OF AMERICA RECORDED DECEMBER 7, 1920 IN BOOK 20, PAGE 310, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-090-28, 29 & 30

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-82, DATED OCTOBER 5, 2023.

HE8 RESERVATIONS AND PROVISIONS AFFECTING SAID LAND HEREIN DESCRIBED, CONTAINED IN THE PATENTS FROM THE UNITED STATES OF AMERICA, RECORDED DECEMBER 7, 1920 IN BOOK 20, PAGE 310, OF PATENTS, WHICH STATED AS FOLLOWS:

SAID LAND IS SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINE, AGRICULTURAL, MANUFACTURING OR OTHER PURPOSES, AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS, AS MAY RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAW AND DECISIONS OF COURTS, A RIGHT OF WAY THEREON FOR DITCHES AND CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES.

HE9 AN EASEMENT FOR PUBLIC ROAD, INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT RESERVED BY LAWRENCE E. SPENCER AND CAROLE JEANNE SPENCER, HUSBAND AND WIFE, RECORDED MAY 23, 1968 AS INSTRUMENT NO. 30715 IN BOOK 4163, PAGE 394, OF OFFICIAL RECORDS, WHICH AFFECTS WESTERLY 50 FEET. OF PARCEL ONE

HE10 AN EASEMENT FOR POWER LINES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP AS SET FORTH IN A DOCUMENT RECORDED JANUARY 11, 1988 AS INSTRUMENT NO.002529 IN BOOK 6083, PAGE 1870, OF OFFICIAL RECORDS, AFFECTS PORTION OF SAID LAND.

THE MATTERS CONTAINED IN AN INSTRUMENT ENTITLED MEMORANDUM OF OPTION AND RIGHT TO CONSTRUCT SECOND CIRCUIT DATED SEPTEMBER 1, 1989, BY AND BETWEEN SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP AND TOYOWEST II, A CALIFORNIA GENERAL PARTNERSHIP UPON THE TERMS THEREIN PROVIDED RECORDED JULY 12, 1991 AS INSTRUMENT NO. 087086 IN BOOK 6544, PAGE 0553, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-090-35

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-53, DATED APRIL 17, 2023.

HF12 RESERVATIONS AND EXCEPTIONS IN THE PATENT BY THE UNITED STATES OF AMERICA RECORDED DECEMBER 7, 1920, IN BOOK 20 PAGE 310, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

APN: 346-090-36

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-54 DATED APRIL 17, 2023.

HG12 RESERVATIONS AND EXCEPTIONS IN THE PATENT BY THE UNITED STATES OF AMERICA RECORDED DECEMBER 7, 1920, IN BOOK 20, PAGE 310 OF PATENTS. (NOT LOCATABLE FROM RECORD)

HG13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITIES RESERVED BY METROPOLITAN LAND INVESTMENTS, INC., AS SET FORTH IN A DOCUMENT RECORDED, JUNE 29, 1983, IN BOOK 5565 PAGE 2056, AS INSTRUMENT NO. 067709, OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 346-090-13

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480371, DATED FEBRUARY 3, 2023.

NO EASEMENTS

APN: 346-012-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480315, DATED APRIL 12, 2022

GO7 AN EASEMENT IN FAVOR OF THE PUBLIC OVER ANY EXISTING ROADS LYING WITHIN SAID LAND. (EASEMENT IS BLANKET IN NATURE)

GO8 AN EASEMENT FOR PUBLIC UTILITIES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 18, 1987 AS INSTRUMENT NO. 071746 IN BOOK 6077 PAGE 0261 OF OFFICIAL RECORDS, AFFECTS PORTIONS OF THE HEREIN DESCRIBED LAND, THE EXACT LOCATION OF WHICH CAN BE DETERMINED BY EXAMINATION OF THE ABOVE-MENTIONED INSTRUMENT, WHICH CONTAINS A COMPLETE LEGAL DESCRIPTION OF THE AFFECTED PORTIONS OF SAID LAND.

GO9 TERMS AND PROVISIONS OF A LEASE, EXECUTED BY MANLEY LEROY DOHRMAN & LINDA KAY DOHRMAN, HUSBAND AND WIFE AS JOINT TENANTS, AS LESSOR, AND POWER PARTNERS SOUTHWEST, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AS LESSEE, A MEMORANDUM OF WHICH IS RECORDED AUGUST 21, 2008 AS INSTRUMENT NO. 0208133912 OF OFFICIAL RECORDS. THE PRESENT OWNERSHIP OF THE LEASEHOLD CREATED BY SAID LEASE AND OTHER MATTERS AFFECTING THE INTEREST OF THE LESSEE ARE NOT SHOWN HEREIN. (EASEMENT IS BLANKET IN NATURE)

GO10 THE MATTERS CONTAINED IN AN INSTRUMENT ENTITLED "MEMORANDUM OF ACCESS EASEMENT AGREEMENT" DATED MARCH 31, 2016, BY AND BETWEEN MANLEY LEROY DOHRMAN AND LINDA KAY DOHRMAN, HUSBAND AND WIFE AS JOINT TENANTS AND EFD RENEWABLE DEVELOPMENT, INC., A DELAWARE CORPORATION AND POWER PARTNERS SOUTHWEST, LLC A DELAWARE LIMITED LIABILITY COMPANY UPON THE TERMS THEREIN PROVIDED RECORDED APRIL 15, 2016 AS INSTRUMENT NO. 0216046898 OF OFFICIAL RECORDS.

APN: 346-081-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480223, DATED JUNE 16, 2023.

GP10 RESERVATIONS AND EXCEPTIONS IN THE PATENT BY THE UNITED STATES OF AMERICA RECORDED APRIL 25, 1989 AS INSTRUMENT NO. 049028 IN BOOK 6232, PAGE 0486, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

GP11 AN EASEMENT FOR ROADWAY AND PUBLIC UTILITIES PURPOSES AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT RECORDED APRIL 25, 1989 AS INSTRUMENT NO. 049028 IN BOOK 6232, PAGE 0486, OF OFFICIAL RECORDS, AFFECTS SAID LAND.

GP12 AN EASEMENT FOR ERECTING, CONSTRUCTING, RECONSTRUCTING, REPLACING, REPAIRING, CHANGING, OPERATING, INSPECTING AND MAINTAINING A CERTAIN POWER LINE FOR THE TRANSMISSION OF ELECTRICITY, ALL NECESSARY TOWERS, POLES, STRUCTURES, FOUNDATIONS AND FOOTINGS, WIRES, CABLES AND BRACES ASSOCIATED THEREWITH AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP AS SET FORTH IN A DOCUMENT RECORDED JANUARY 29, AS INSTRUMENT NO. 010335 IN BOOK 6089, PAGE 1063, OF OFFICIAL RECORDS, AFFECTS SAID LAND.
THE MATTERS CONTAINED IN AN INSTRUMENT ENTITLED NOTICE OF RECEIPT OF PAYMENT AND COMPLIANCE WITH TERMS OF EASEMENT DATED JULY 15, 1989 BY AND BETWEEN JOSEPH J. DOLNY AND SAGEBRUSH A CALIFORNIA GENERAL PARTNERSHIP UPON THE TERMS THEREIN PROVIDED RECORDED JULY 26, 1989 AS INSTRUMENT NO. 012081, IN BOOK 6268, PAGE 2325, OF OFFICIAL RECORDS.

GP13 ANY DISCREPANCIES IN BOUNDARY OR AREA OR ANY RIGHTS WHICH MAY ARISE OR EXIST WHICH ARE DISCLOSED BY A MAP OF SURVEY ON SAID PROPERTY. RECORDED: JANUARY 10, 1997 IN BOOK 19, PAGE 138, OF RECORD OF SURVEYS IN THE COUNTY RECORDER OF SAID COUNTY.

GP14 LACK OF A RIGHT OF ACCESS TO AND FROM THE LAND.

GP15 MATTERS CONTAINED IN A RECORD OF SURVEY MAP RECORDED FEBRUARY 9, 2011 IN BOOK 26, PAGE 152, OF RECORD OF SURVEY.

APN: 346-081-02

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480465-89, DATED SEPTEMBER 29, 2022.

GO9 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED FEBRUARY 29, 1984 AS INSTRUMENT NO. 84-205570 OF OF PATENTS.

APN: 346-081-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-67, DATED JULY 26, 2022.

GR9 SAID LAND IS SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS OF MINING, AGRICULTURAL, MANUFACTURING, OR OTHER PURPOSES AND RIGHTS TO DITCHES AND RESERVOIRS AND RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY AUTHORITY OF UNITED STATES, AS RECORDED JUNE 3, 1985 IN BOOK 5765 PAGE 812 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

GR10 RIGHT OF WAY NOT EXCEEDING 33 FEET IN WIDTH, FOR ROADWAY AND PUBLIC UTILITIES PURPOSES, TO BE LOCATED ALONG THE BOUNDARIES OF SAID LAND, RESERVED BY RECORDED JUNE 3, IN BOOK 5765 PAGE 812 OF OFFICIAL RECORDS.

GR14 LACK OF ACCESS AND/OR LACK OF RIGHT OF ACCESS.

APN: 346-081-13

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-93, DATED OCTOBER 21, 2022.

GS10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROADS AND PUBLIC UTILITIES, RESERVED BY UNITED STATES OF AMERICA, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 9, 1960 AS INSTRUMENT NO. 46343 IN BOOK 3291, PAGE 378 OF OFFICIAL RECORDS.

GS11 MATTERS CONTAINED IN A SURVEY FILED IN BOOK 26, PAGE 152 OF RECORDS OF SURVEY.

GS13 LACK OF ACCESS AND/OR LACK OF RIGHT OF ACCESS.

APN: 346-081-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480437, DATED MAY 23, 2023.

GT9 LACK OF A RIGHT OF ACCESS TO AND FROM THE LAND.

GT10 RESERVATIONS AND EXCEPTIONS IN THE PATENT BY THE UNITED STATES OF AMERICA, RECORDED APRIL 25, 1989, IN BOOK 6232, PAGE 484, AS INSTRUMENT NO. 049027. (EASEMENT IS BLANKET IN NATURE)

GT11 AN EASEMENT FOR RIGHT OF WAY AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT, RECORDED APRIL 25, 1989, IN BOOK 6232, PAGE 484, AS INSTRUMENT NO. 049027, WHICH AFFECTS SAID LAND.

GT12 AN EASEMENT FOR UTILITIES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP AS SET FORTH IN A DOCUMENT RECORDED JANUARY 29, 1988 AS INSTRUMENT NO. 010336, IN BOOK 6089, PAGE 1066, OF OFFICIAL RECORDS, AFFECTS SAID LAND. NOTICE OF RECEIPT OF PAYMENT AND COMPLIANCE WITH TERMS OF EASEMENT RECORDED AUGUST 31, 1989 AS INSTRUMENT NO. 038031, IN BOOK 6285, PAGE 1799, OF OFFICIAL RECORDS.

GT13 MATTERS DISCLOSED BY RECORD OF SURVEY MAP, FILED ON FEBRUARY 9, 2011, IN BOOK 26, PAGES 152 TO 201 OF RECORD OF SURVEY. THE PURPOSE OF THE SURVEY, AS RECITED ON THE MAP.

VESTING TENTATIVE PARCEL MAP NO. 12599

ADJOINING PROPERTY EASEMENTS:

APN: 346-012-12

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480438, DATED MAY 24, 2023.

(FG11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR CONSTRUCTION AND MAINTENANCE OF A PRIVATE TELEPHONE TO CACTUS MINES COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534 PAGE 355 OF OFFICIAL RECORDS.

(FG15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES ON, OVER AND ACROSS SAID LAND TO PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED MAY 9, 1975 IN BOOK 4894 PAGE 2150 OF OFFICIAL RECORDS.

(FG16) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHT OF INGRESS AND EGRESS TO SAGEBRUSH, A CALIFORNIA GENERAL PARTNERSHIP, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 11, 1988 IN BOOK 6083 PAGE 1876 OF OFFICIAL RECORDS.

APN: 346-012-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 18000481481, DATED MARCH 2 2022.

(FC5) AN EASEMENT FOR THE CONSTRUCTION AND MAINTENANCE OF A PRIVATE TELEPHONE LINE OR LINES INCLUDING NECESSARY POLES, CROSSARMS, WIRES AND APPURTENANCES AND RIGHTS INCIDENTAL THERETO IN FAVOR OF CACTUS NINES COMPANY, A CALIFORNIA CORPORATION AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534, PAGE 355, OF OFFICIAL RECORDS, AFFECTS SAID LAND.

(FC6) AN EASEMENT FOR PUBLIC ROAD AND UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS AND RIGHTS INCIDENTAL THERETO IN FAVOR OF HERBERT HUGH SPENCER ET UX. AS SET FORTH IN A DOCUMENT RECORDED APRIL 12, 1961, IN BOOK 3368, PAGE 830, OF OFFICIAL RECORDS, AFFECTS THE NORTH 30 FEET, SOUTH 30 FEET, EAST 30 FEET AND WEST 30 FEET OF SAID LAND.

APN: 346-061-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480512, DATED JUNE 1, 2023.

(FN13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PRIVATE TELEPHONE LINES OR LINES AND INCIDENTAL PURPOSES, TO CACTUS MINES COMPANY, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534 PAGE 355, OF OFFICIAL RECORDS.

(FN15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES, TO ROLAND LAND COMPANY, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 06, 1980, IN BOOK 5290, PAGE 1071, OF OFFICIAL RECORDS.

APN: 346-061-13

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480538, DATED JUNE 5, 2023.

(FJ5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PRIVATE TELEPHONE LINES OR LINES TO CACTUS MINES COMPANY, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534 PAGE 355, OF OFFICIAL RECORDS.

APN: 346-061-59

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480219, DATED JUNE 2, 2023.

(FV6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PRIVATE TELEPHONE LINE OR LINES INCLUDING NECESSARY POLES TO CACTUS MINES COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948, IN BOOK 1534 PAGE 355, OF OFFICIAL RECORDS.

(FV8) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS RESERVED BY ROLAND LAND COMPANY, AS SET FORTH IN A DOCUMENT RECORDED, JULY 10, 1984, AS INSTRUMENT NO. 002536 IN BOOK 5674 PAGE 941, OF OFFICIAL RECORDS.

APN: 346-061-58

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-137, DATED DECEMBER 27, 2022.

(FU11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PRIVATE TELEPHONE LINE OR LINES INCLUDING NECESSARY POLES TO CACTUS MINES COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 19, 1948 IN BOOK 1534, PAGE 355 OF OFFICIAL RECORDS.

(FU12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS TO ROLAND LAND COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 17, 1979 AS INSTRUMENT NO. 64685 IN BOOK 5252, PAGE 702 OF OFFICIAL RECORDS.

VESTING TENTATIVE PARCEL MAP NO. 12600

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 23000480481, DATED JUNE 9, 2023, REPORT NO. 23000480040-76, DATED MAY 31, 2023, REPORT NO. 23000480040-88, DATED FEBRUARY 2, 2024, REPORT NO. 23000480836, DATED SEPTEMBER 1, 2023.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS THE MERGE FOUR (4) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.

BASIS OF BEARINGS:

ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO. 06029C3650E, WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

SURVEY NOTE:

I, JEFFREY J. LENHERR, HEREBY STATE THAT THERE ARE NO STRUCTURES WITHIN THIS MAP OR WITHIN 150 FEET OF THE MAPS BOUNDARY.

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	474-160-01, 02, 07 & 08
ACCESS TO PARCELS:	BACKUS ROAD
EXISTING NUMBER OF PARCELS:	4
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	A, A WE
EXISTING GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A, A WE
PROPOSED GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL 'A' AREA:	40.47 ACRES
TOTAL PROJECT AREA:	40.47 ACRES

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

11 FD. 2.5" GLO BRASS DISK

12 FD. 3" GLO BRASS DISK

19 FD. 2" IRON PIPE W/TAG "LS 7813", FLUSH

LEGAL DESCRIPTION:

APN: 474-160-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480647-4, DATED AUGUST 3, 2023.

THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 10 N., RANGE 14 W, SAN BERNARDINO MERIDIAN, KERN COUNTY, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1856.

APN: 474-160-02

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-76, DATED MAY 31, 2023.

THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 10 NORTH, RANGE 14 WEST OF THE SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA ACCORDING TO THE OFFICIAL PLAT OF SAID LAND ON FILE IN BUREAU OF LAND MANAGEMENT.

APN: 474-160-07

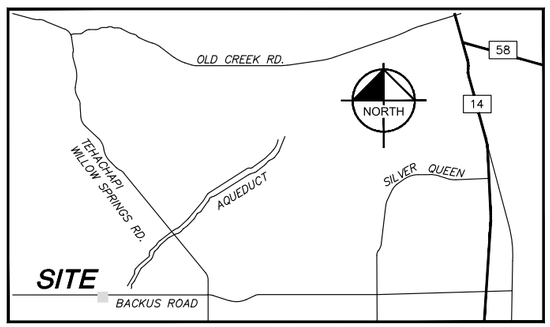
STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-88, DATED FEBRUARY 2, 2024.

THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL ON FEBRUARY 19, 1856.

APN: 474-160-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480836, DATED SEPTEMBER 1, 2023.

THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL ON FEBRUARY 19, 1856.



VICINITY MAP
NOT TO SCALE

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TERRA-GEN.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
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jeff.lenherr@kimley-horn.com

VESTING TENTATIVE PARCEL MAP NO. 12600

SEC. 14, T. 10 N., R. 14 W., S.B.M.

19

NW COR SEC 23

663.34'

40'

663.34'

N89°50'19"E 2653.36'

1326.68'

N 1/4 SEC 23

11

N89°50'08"E 2653.19'

FD. 2" GLO BRASS DISK, DN. 1.0'

NE COR SEC 23

NU14

NW4

TO BE VACATED PER SEPARATE INSTRUMENT

30'

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

NV12

NV13

NV14

PARCEL 'A'
40.47± ACRES

N00°08'54"W 1327.80'

1328.29'

N00°04'44"W 2656.57'

2654.64'

N00°13'03"W 5285.57'

N00°23'50"W 2652.87'

SEC. 24, T. 10 N., R. 14 W., S.B.M.

SEC. 22, T. 10 N., R. 14 W., S.B.M.

SEC. 23
T. 10 N.
R. 14 W., S.B.M.

N89°49'04"E 1328.29'

W 1/4 SEC 23

2659.79'

N89°47'49"E 5321.29'

E 1/4 SEC 23

2661.50'

N00°03'24"W 2658.65'

2640.93'

N00°24'12"W 2649.86'

12

11

N89°24'59"E 2667.31'

N89°59'18"E 2670.11'

SW COR SEC 23

SEC. 26, T. 10 N., R. 14 W., S.B.M.

S 1/4 SEC 23

SE COR SEC 23

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12600

EASEMENTS:

APN: 474-160-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480481, DATED JUNE 9, 2023.

NU11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR POLE LINES AND INCIDENTAL PURPOSES TO GENERAL PIPE LINE COMPANY, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 21, 1930 IN BOOK 384, PAGE 245, OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

NU12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR POLE LINES AND INCIDENTAL PURPOSES TO THE CITY OF LOS ANGELES, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 21, 1930 IN BOOK 384, PAGE 245, OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

NU13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROADS AND INCIDENTAL PURPOSES TO SOUTHERN PACIFIC LAND COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 21, 1930 IN BOOK 384, PAGE 245, OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

(NU14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR EASEMENTS FOR ROAD AND PUBLIC UTILITY PURPOSES, RESERVED BY FRANK T. AND DOROTHY J. LINTON, HUSBAND AND WIFE AS JOINT TENANTS, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 5, 1977 IN BOOK 5000 PAGE 305, OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 474-160-02

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-76, DATED MAY 31, 2023.

(NV12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO EDITH KING, AS SET FORTH IN A DOCUMENT RECORDED JUNE 21, 1957, IN BOOK 2804 PAGE 543, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY), (PUBLIC ROAD TO BE VACATED)

(NV13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD AND UTILITY PURPOSES TO RUDOLPH JUCHEM AND WILHELMINE JUCHEM, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED MARCH 10, 1961, IN BOOK 3357 PAGE 929, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY), (PUBLIC ROAD TO BE VACATED)

(NV14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITIES, AS SET FORTH IN A DOCUMENT RECORDED APRIL 8, 1977, IN BOOK 5019 PAGE 1344, OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

APN: 474-160-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-88, DATED FEBRUARY 2, 2024.

OC8 A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL EXISTING AND LAWFULLY ESTABLISHED COUNTY ROADS AS EXCEPTED IN THE DEED FROM SOUTHERN PACIFIC LAND COMPANY, RECORDED NOVEMBER 21, 1930, IN BOOK 384 PAGE 245, OFFICIAL RECORDS. THE SPECIFIC LOCATION OF WHICH IS NOT DISCLOSED OF RECORD.

APN: 474-160-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480836, DATED SEPTEMBER 1, 2023.

NW3 A RIGHT OF WAY OF LAWFUL WIDTH FOR ANY AND ALL EXISTING AND LAWFULLY ESTABLISHED COUNTY ROADS AS EXCEPTED IN THE DEED FROM SOUTHERN PACIFIC LAND COMPANY, RECORDED NOVEMBER 21, 1930, IN BOOK 384 PAGE 245, OFFICIAL RECORDS.

THE SPECIFIC LOCATION OF WHICH IS NOT DISCLOSED OF RECORD.

(NW4) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND PUBLIC UTILITY AND INCIDENTAL PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 17, 1977, IN BOOK 5008 PAGE 1736, OF OFFICIAL RECORDS. (TO BE VACATED PER SEPARATE INSTRUMENT)

VESTING TENTATIVE PARCEL MAP NO. 12601

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION OF THE EAST HALF OF SECTION 15, EXCLUDING THEREFROM THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 15, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 23000480443, DATED MAY 23, 2023, REPORT NO. 23000480506, DATED JUNE 1, 2023, REPORT NO. 23000480647-3, DATED JUNE 29, 2023, REPORT NO. 23000480533, DATED JUNE 9, 2023, REPORT NO. 23000480677, DATED JUNE 29, 2023, REPORT NO. 23000480448, DATED MAY 25, 2023, REPORT NO. 23000480721, DATED JULY 20, 2023.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS THE MERGE SEVEN (7) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.

BASIS OF BEARINGS:

ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO. 06029C3650E, WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

SURVEY NOTE:

I, JEFFREY J. LENHERR, HEREBY STATE THAT THERE ARE NO STRUCTURES WITHIN THIS MAP OR WITHIN 150 FEET OF THE MAPS BOUNDARY.

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	474-021-04, 05, 06, 18, 19, 20 & 21
ACCESS TO PARCELS:	BACKUS ROAD
EXISTING NUMBER OF PARCELS:	7
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	A, A WE
EXISTING GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A, A WE
PROPOSED GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL 'A' AREA:	281.45 ACRES
TOTAL PROJECT AREA:	281.45 ACRES

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

11 FD. 2.5" GLO BRASS DISK

15 FD. REBAR & CAP STAMPED "JES ENGINEERING RCE 33249"

19 FD. 2" IRON PIPE W/TAG "LS 7813", FLUSH

20 S.F.N., CALCULATED POSITION BOOK 26, PAGE 152

LEGAL DESCRIPTION:

APN: 474-021-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480443, DATED MAY 23, 2023.

PARCEL 4 OF PARCEL MAP NO. 5478, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN BOOK 25, PAGE 114 OF PARCEL MAPS, KERN COUNTY RECORDS.

APN: 474-021-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480506, DATED JUNE 1, 2023.

PARCEL 5 IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER PARCEL MAP NO. 5478, FILED SEPTEMBER 3, 1980, IN BOOK 25 PAGE 114, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT AN UNDIVIDED ½ INTEREST IN ALL MINERALS, OILS, GASES AND OTHER HYDROCARBONS BY WHATSOEVER NAME KNOWN THAT MAY BE WITHIN OR UNDER THE PARCEL OF LAND HEREINABOVE DESCRIBED, WITHOUT, HOWEVER, THE RIGHT TO DRILL, DIG OR MINE THROUGH THE SURFACE THEREOF AS EXCEPTED BY ALFRED KNAUFMAN IN DEED RECORDED OCTOBER 6, 1976, IN BOOK 4982, PAGE 1608, OF OFFICIAL RECORDS.

ALSO EXCEPT AN UNDIVIDED ½ INTEREST IN ALL MINERALS, OILS, GASES AND OTHER HYDROCARBONS BY WHATSOEVER NAME KNOWN THAT MAY BE WITHIN OR UNDER THE PARCEL OF LAND HEREINABOVE DESCRIBED, WITHOUT, HOWEVER, THE RIGHT TO DRILL, DIG OR MINE THROUGH THE SURFACE THEREOF, AS EXCEPTED BY SYLVIA F. KNAUFMAN IN DEED RECORDED OCTOBER 6, 1976, IN BOOK 4982, PAGE 1607, OF OFFICIAL RECORDS.

APN: 474-021-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480647-3, DATED JUNE 29, 2023.

PARCEL 6 IN THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER PARCEL MAP NO. 5478, FILED SEPTEMBER 3, 1980 IN BOOK 25 PAGE 114 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT AN UNDIVIDED 1/2 INTEREST IN ALL MINERALS, OILS, GASES AND OTHER HYDROCARBONS BY WHATSOEVER NAME KNOWN THAT MAY BE WITHIN OR UNDER THE PARCEL OF LAND HEREINABOVE DESCRIBED, WITHOUT, HOWEVER, THE RIGHT TO DRILL, DIG OR MINE THROUGH THE SURFACE THEREOF AS EXCEPTED BY ALFRED KAUFMAN IN DEED RECORDED OCTOBER 6, 1976 IN BOOK 4982 PAGE 1608 OFFICIAL RECORDS.

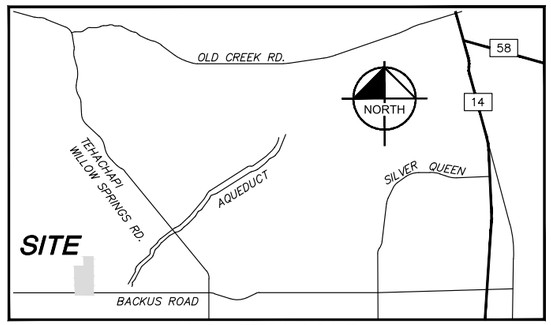
ALSO EXCEPT AN UNDIVIDED 1/2 INTEREST IN ALL MINERALS, OIL, GASES AND OTHER HYDROCARBONS BY WHATSOEVER NAME KNOWN THAT MAY BE WITHIN OR UNDER THE PARCEL OF LAND HEREINABOVE DESCRIBED, WITHOUT, HOWEVER, THE RIGHT TO DRILL, DIG OR MINE THROUGH THE SURFACE THEREOF, AS EXCEPTED BY SYLVIA F. KAUFMAN IN DEED RECORDED OCTOBER 6, 1976 IN BOOK 4982 PAGE 1607, OFFICIAL RECORDS.

APN: 474-021-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480533, DATED JUNE 9, 2023.

THE NORTH HALF OF THE WEST HALF OF THE SOUTHEAST QUARTER OF SECTION 15, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND ON FILE IN THE BUREAU OF LAND MANAGEMENT.

RESERVING AN EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS OVER THE EAST 45 FEET OF SAID LAND.



VICINITY MAP

NOT TO SCALE

LEGAL DESCRIPTION: (CONTINUED)

APN: 474-021-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480677, DATED JUNE 29, 2023.

THE SOUTH HALF OF THE WEST HALF OF THE SOUTHEAST QUARTER OF SECTION 15, TOWNSHIP 10 NORTH, RANGE 14 WEST SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND ON FILE IN THE BUREAU OF LAND MANAGEMENT.

EXCEPTING THEREFROM TWENTY FIVE PERCENT OF ALL OIL, GAS AND MINERALS ON AND UNDER SAID LAND, AS RESERVED IN THE DEED FROM VIOLET C. LAYLANDER, RECORDED APRIL 27, 1956, IN BOOK 2600 PAGE 68, OFFICIAL RECORDS.

APN: 474-021-20

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480448, DATED MAY 25, 2023.

PARCEL 1 IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS SHOWN ON PARCEL MAP NO. 1349 FILED SEPTEMBER 11, 1973 IN BOOK 7, PAGE 17 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF KERN COUNTY.

EXCEPT 25% OF ALL OIL, GAS AND MINERALS ON AND UNDER SAID LAND, AS RESERVED BY VIOLET C. LAYLANDER, AN UNMARRIED WOMAN, IN DEED RECORDED APRIL 27, 1956 IN BOOK 2600, PAGE 68, OF OFFICIAL RECORDS.

APN: 474-021-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480721, DATED JULY 20, 2023.

PARCEL 2, AS PER PARCEL MAP NO. 1349, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, FILED IN BOOK 7, PAGE 17 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF KERN COUNTY.

EXCEPTING THEREFROM 25% OF ALL OIL, GAS AND MINERALS ON AND UNDER SAID LAND, AS RESERVED IN THE DEED FROM VIOLET C. LAYLANDER, RECORDED APRIL 27, 1956, IN BOOK 2600, PAGE 68, OFFICIAL RECORDS.

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TERRA-GEN.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA

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K:\ORA_SURV\2023\BOUNDARY\KERN COUNTY - DISCOVERY ALTA - 194388004\MAPPING\DWG\TPM\AREA E - MAP 8\194388004TPM-E8-PCL 17.DWG

VESTING TENTATIVE PARCEL MAP NO. 12601

NW COR SEC 15
FD. 2.5" GLO BRASS DISK, UP 0.75'
N89°49'58"E 2648.09'
℄ TROTTER AVENUE
N 1/4 SEC 15
SEC. 10, T. 10 N., R. 14 W., S.B.M.
N89°52'17"E 2646.06'
1323.03'
20
11
NE COR SEC 15
30'
55'
1323.03'
NO8
NO7
PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)
337.06'
55'
30'
℄ 120TH ST. WEST
℄ 130TH ST. WEST
℄ 125TH ST. WEST
1329.66'
PARCEL 3
PARCEL 4
N01°18'14"W 1328.94'
P.M. NO. 5478
N89°50'32"E 2641.86'
1320.93'
1320.93'
2659.31'
N01°12'50"W 2656.46'
N01°12'33"W 5317.16'
N01°39'11"W 2660.50'
SEC. 16, T. 10 N., R. 14 W., S.B.M.
SEC. 14, T. 10 N., R. 14 W., S.B.M.
P.M.B. 25 / 114
PARCEL 'A'
281.45± ACRES
PARCEL 6
PARCEL 5
NP12
NQ12
1329.65'
30'
55'
30'
PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)
PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)
45'
30'
N89°48'47"E 5273.68'
2637.65'
OD3
45'
NS12
PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)
E 1/4 SEC 15
S01°11'25"E 332.24'
11
15
W 1/4 SEC
2636.03'
N01°38'18"W 2658.32'
1328.92'
SEC. 15
T. 10 N.
R. 14 W., S.B.M.
SEE SHEET 3

NORTH

GRAPHIC SCALE IN FEET
200 0 100 200 400
SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12601

SEE SHEET 2

℄ MAXWELL AVENUE

N01°39'11"W 2660.50'

2636.03'

W 1/4 SEC

15

SEC. 15
T. 10 N.
R. 14 W., S.B.M.

N89°48'47"E 5273.68'

2637.65'

E 1/4 SEC 15

N01°12'50"W 2656.45'

11

332.24'

PUBLIC ROAD - (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

TO BE VACATED PER SEPARATE INSTRUMENT

TO BE VACATED PER SEPARATE INSTRUMENT

N01°23'37"W 5317.16'

2657.85'

PARCEL 1

PARCEL 'A'
281.45± ACRES

P.M. NO. 1349

P.M.B. 7 / 17

PARCEL 2

996.73'

1328.99'

1314.09'

1314.10'

N89°49'10"E 2628.19'

N89°48'31"E 2624.67'

S 1/4 SEC 15

FD. 2.5" GLO BRASS DISK, BENT

SW COR SEC

11

19

SE COR SEC 15

SEC. 22, T. 10 N., R. 14 W., S.B.M.

SEC. 16, T. 10 N., R. 14 W., S.B.M.

SEC. 14, T. 10 N., R. 14 W., S.B.M.

N01°38'18"W 2656.32'

NP12 NP12 NO12 ND12 NS12 OD3 OD3 NS12 NR13 NT12 NT13 NT12 NT13

45' 30' 55' 15'

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12601

APN: 474-021-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480443, DATED MAY 23, 2023.

NO7 — EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: GENERAL PUBLIC
PURPOSE: INGRESS, EGRESS AND ROAD PURPOSES RECORDING DATE: AUGUST 18, 1980
RECORDING NO.: BOOK 5306, PAGE 1536, OF OFFICIAL RECORDS AFFECTS: A PORTION OF SAID LAND.

NO8 — AN IRREVOCABLE OFFER TO DEDICATE AN EASEMENT OVER A PORTION OF SAID LAND FOR PURPOSE(S): INGRESS, EGRESS AND ROAD PURPOSES
RECORDING DATE: AUGUST 18, 1980
RECORDING NO.: BOOK 5306, PAGE 1536, OF OFFICIAL RECORDS AFFECTS: A PORTION OF SAID LAND.

APN: 474-021-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480506, DATED JUNE 1, 2023.

NQ12 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 15, 1980 IN BOOK 5306, PAGE 1536 OF OFFICIAL RECORDS. PORTION OF PUBLIC ROAD TO BE VACATED.

NQ13 — EASEMENTS AND OTHER MATTERS SHOWN AND/OR DEDICATED ON THE PARCEL MAP NO. 5478 FILED IN BOOK 25, PAGE 114, IN THE OFFICIAL COUNTY RECORDS.

APN: 474-021-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480647-3, DATED JUNE 29, 2023.

NP12 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 15, 1980 IN BOOK 5306 PAGE 1536, OF OFFICIAL RECORDS. PORTION OF PUBLIC ROAD TO BE VACATED.

NP13 — MATTERS AS SHOWN ON THE PARCEL MAP NO. 5478 FILED IN BOOK 25, PAGE 114, OF OFFICIAL RECORDS TOGETHER WITH ANY PROVISIONS AND RECITALS CONTAINED THEREIN.

APN: 474-021-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480533, DATED JUNE 9, 2023.

OD3 — AN EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES OVER THE EAST 45 FEET OF THE HEREIN DESCRIBED PROPERTY AS DISCLOSED IN DEED EXECUTED BY MYRON T. STRECKER AND GRACE E. STRECKER, HUSBAND AND WIFE, RECORDED APRIL 14, 1989, IN BOOK 6229, PAGE 521, OFFICIAL RECORDS. TO BE VACATED PER SEPARATE INSTRUMENT.

APN: 474-021-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480677, DATED JUNE 29, 2023.

NR10 — AN UNRECORDED EASEMENT FOR UNDISCLOSED PURPOSES IN FAVOR OF KERN RIVER COMPANY BY DEED NO. 2-A, DATED JUNE 22, 1903, AS DISCLOSED IN THE DEED FROM SOUTHERN PACIFIC LAND COMPANY, RECORDED DECEMBER 6, 1924, IN BOOK 44 PAGE 303, OFFICIAL RECORDS. THE SPECIFIC LOCATION OF WHICH IS NOT DISCLOSED OF RECORD.

NR11 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY AND ALL COUNTY ROADS HERETOFORE LAWFULLY ESTABLISHED AND NOW IN PUBLIC USE TO SOUTHERN PACIFIC LAND COMPANY , AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 6, 1924, IN BOOK 44 PAGE 303, OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

NR13 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES, RESERVED BY LARRY M. GILLIGAN, AS SET FORTH IN A DOCUMENT RECORDED JUNE 06, 1969, IN BOOK 4286 PAGE 495 AND RE-RECORDED MARCH 19, 1970, BOOK 4379 PAGE 703, OFFICIAL RECORDS. TO BE VACATED PER SEPARATE INSTRUMENT.

APN: 474-021-20

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480448, DATED MAY 25, 2023.

NS12 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO THE ADJACENT PROPERTY OWNERS AND TO THE PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 28, 1973 IN BOOK 4801, PAGE 2042 OF OFFICIAL RECORDS.

APN: 474-021-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480721, DATED JULY 20, 2023.

NT10 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ANY AND ALL COUNTY ROADS RESERVED BY SOUTHERN PACIFIC LAND COMPANY, AS SET FORTH IN A DOCUMENT RECORDED, DECEMBER 6, 1924, IN BOOK 44 PAGE 303, OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

NT12 — EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD TO ADJACENT PROPERTY OWNERS AND TO THE PUBLIC, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 28, 1973 IN BOOK 4801 PAGE 2042, OF OFFICIAL RECORDS.

NT13 — IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE PROPERTY FOR FUTURE STREET OR HIGHWAY PURPOSES, RECORDED AUGUST 28, 1973 IN BOOK 4801 PAGE 2042, OF OFFICIAL RECORDS.

NT14 — MATTERS AS SHOWN ON THE PARCEL MAP NO. 1349 FILED IN BOOK 7, PAGE 17, OF OFFICIAL RECORDS TOGETHER WITH ANY PROVISIONS AND RECITALS CONTAINED THEREIN.

VESTING TENTATIVE PARCEL MAP NO. 12602

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION OF PORTIONS OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 22000480465-76, DATED SEPTEMBER 29, 2022, REPORT NO. 23000480395, DATED MAY 4, 2023, REPORT NO. 23000480396, DATED MAY 4, 2023, REPORT NO. 23000480034, DATED JANUARY 9, 2023, REPORT NO. 22000480465-120, DATED DECEMBER 16, 2022, REPORT NO. 23000480040-20, DATED FEBRUARY 22, 2023, REPORT NO. 23000480402, DATED MAY 4, 2023, REPORT NO. 22000480465-127, DATED DECEMBER 16, 2022, REPORT NO. 23000480040-11, DATED JANUARY 30, 2023, REPORT NO. 22000480465-105, DATED DECEMBER 1, 2022, REPORT NO. 22000480465-115, DATED DECEMBER 22, 2022, REPORT NO. 23000480392, DATED MAY 4, 2023, REPORT NO. 22000480465-117, DATED DECEMBER 7, 2022, REPORT NO. 22000480465-121, DECEMBER 9, 2022, REPORT NO. 23000480390, DATED MAY 4, 2023, REPORT NO. 23000480403, DATED JUNE 30, 2023, REPORT NO. 23000480404, DATED MAY 5, 2023, REPORT NO. 23000480524, DATED JUNE 12, 2023, REPORT NO. 23000480549, DATED JUNE 8, 2023, REPORT NO. 23000480237, DATED MARCH 21, 2023, REPORT NO. 23000480234, DATED MAY 12, 2023, REPORT NO. 22000480465-128, DATED JANUARY 26, 2023, REPORT NO. 22000480465-78, DATED AUGUST 22, 2022, REPORT NO. 22000480465-114, DATED DECEMBER 22, 2022, REPORT NO. 23000480400, DATED MAY 4, 2023, REPORT NO. 23000480236, DATED MARCH 20, 2023, REPORT NO. 23000480779, DATED AUGUST 11, 2023, REPORT NO. 23000480780, DATED AUGUST 11, 2023, REPORT NO. 22000480465-95, DATED NOVEMBER 28, 2022, REPORT NO. 23000480391, DATED MAY 4, 2023, REPORT NO. 22000480465-103, DATED DECEMBER 23, 2022, REPORT NO. 23000480511, DATED JUNE 16, 2023, REPORT NO. 23000480040-23 DATED FEBRUARY 17, 2023, REPORT NO. 23000480398, DATED MAY 4, 2023, REPORT NO. 23000480399, DATED MAY 4, 2023, REPORT NO. 23000480040-67, DATED APRIL 25, 2023, REPORT NO. 23000480393, DATED MAY 4, 2023, REPORT NO. 23000480394, DATED MAY 4, 2023, REPORT NO. 23000480040-17, DATED FEBRUARY 17, 2023, REPORT NO. 22000480465-98, DATED MARCH 3, 2023, AND REPORT NO. 22000480465-143, DATED DECEMBER 23, 2022.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE FORTY-SEVEN (47) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.

BASIS OF BEARINGS:

ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO.'S 06029C3275E AND 06029C3650E, ALL WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

SURVEY NOTE:

I, JEFFREY J. LENHERR, HEREBY STATE THAT THERE ARE NO STRUCTURES WITHIN THIS MAP OR WITHIN 150 FEET OF THE MAPS BOUNDARY.

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	474-060-03, 05, 09, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 24, 25, 26, 27, 30, 31, 32, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45 474-071-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 18 474-072-03
ACCESS TO PARCELS:	TEHACHAPI WILLOW SPRINGS ROAD
EXISTING NUMBER OF PARCELS:	47
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	A, PL RS, A FPS, A WE
EXISTING GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A, A FPS
PROPOSED GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE DISPOSAL:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL 'A' AREA:	497.07 ACRES
TOTAL PROJECT AREA:	497.07 ACRES

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

[11] FD. 2.5" GLO BRASS DISK

[12] FD. 3" GLO BRASS DISK

[13] FD. 3.5" LADWP BRASS DISK

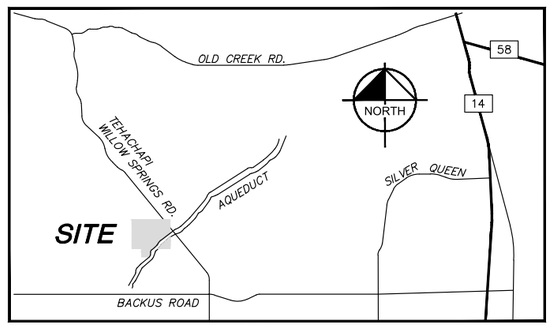
SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TERRA-GEN.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA



VICINITY MAP
NOT TO SCALE

LEGAL DESCRIPTON:

APN: 474-072-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-76, DATED SEPTEMBER 29, 2022.

LEGAL DESCRIPTION:

THE NORTH 1/2 OF THE SOUTHEAST 1/4 OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, S.B.M., COUNTY OF KERN, STATE OF CALIFORNIA, EXCEPT:

THAT PORTION OF THE SOUTHWEST 1/4 AND THE NORTH 1/2 OF THE SOUTHEAST 1/4 OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, S.B.M., IN THE COUNTY OF KERN, STATE OF CALIFORNIA ACCORDING TO THE OFFICIAL PLAT THEREOF, INCLUDED WITHIN STRIP OF LAND OF VARYING WIDTH THE NORTHWESTERLY LINE OF WHICH LIES 100 FEET NORTHWESTERLY OF, PARALLEL WITH AND MEASURED AT RIGHT ANGLES FROM THE FOLLOWING DESCRIBED LINE:

BEGINNING AT A POINT IN THE SOUTHERLY LINE OF SAID SECTION 12 DISTANT THEREON NORTH 89° 45' 36" EAST 2499.0 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION, SAID POINT BEING THE BEGINNING OF A NON TANGENT CURVE, CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 500.08 FEET, A RADIAL LINE OF SAID CURVE TO SAID POINT OF BEGINNING BEARS SOUTH 44° 33' 23" EAST; THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH AN ANGLE OF 12° 10' 18", AN ARC LENGTH OF 368.08 FEET; THENCE NORTH 3° 16' 19" EAST 340.26 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 400.06 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE, THROUGH AN ANGLE 44° 23' 38", AN ARC LENGTH OF 309.97 FEET; THENCE NORTH 47° 39' 57" EAST 992.66 FEET; TO THE BEGINNING OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 688.82 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 19° 58' 34" AN ARC LENGTH OF 240.16 FEET TO A POINT OF REVERSE CURVATURE WITH A CURVE CONCAVE SOUTHEASTERLY AND HAVING RADIUS OF 1500.23 FEET, A RADIAL LINE AT SAID POINT OF REVERSE CURVATURE BEARS SOUTH 62° 18' 36" EAST; THENCE NORTHEASTERLY ALONG SAID REVERSE CURVE THROUGH AN ANGLE OF 24° 46' 51", AN ARC LENGTH OF 648.86 FEET; THENCE NORTH 52° 28' 15" EAST 1558.93 FEET TO POINT IN THE EASTERLY LINE OF SAID SECTION 12 DISTANT THEREON SOUTH 0° 27' 34" EAST 2063.96 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 12.

THE SOUTHEASTERLY LINE OF SAID VARIABLE WIDTH STRIP OF LAND LIES 100 FEET SOUTHEASTERLY OF, PARALLEL WITH, AND MEASURED AT RIGHT ANGLES FROM THE FOLLOWING DESCRIBED LINE:

BEGINNING AT A POINT IN THE SOUTHERLY LINE OF SAID SECTION 12, DISTANT THEREON NORTH 89° 45' 36" EAST 182.14 FEET FROM THE QUARTER CORNER THEREIN; THENCE NORTH 20° 09' 12" EAST 853.96 FEET TO THE BEGINNING OF CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 347.52 FEET THENCE NORTHEASTERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 25° 36' 49", AN ARC LENGTH OF 155.36 FEET; THENCE NORTH 45° 46' 00" EAST 540.25 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 808.87 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 9° 19' 46", AN ARC LENGTH OF 131.71 FEET; THENCE NORTH 36° 26' 21" EAST 418.02 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 487.69 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 11° 14' 33", AN ARC LENGTH OF 95.69 FEET; THENCE NORTH 47° 40' 54" EAST 1293.63 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 1833.58 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH AN ANGLE OF 13° 22' 32" AN ARC LENGTH OF 428.05 FEET, THENCE NORTH 61° 03' 26" EAST 2.61 FEET TO A POINT IN SAID EASTERLY LINE SECTION 12, DISTANT THEREON NORTH 0° 27' 34" WEST 278.84 FEET FROM THE QUARTER CORNER THEREIN.

THE SIDELINES OF SAID STRIP OF LAND SHALL BE PROLONGED OR SHORTENED SO AS TO BEGIN SOUTHWESTERLY IN SAID SOUTHERLY LINE AND TO TERMINATE NORTHEASTERLY IN SAID EASTERLY LINE OF SECTION 12.

ALL CURVES HEREINABOVE DESCRIBED ARE TANGENT TO THE STRAIGHT LINES THEY JOIN, EXCEPT AS OTHERWISE NOTED.

APN: 474-060-22

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480395, DATED MAY 4, 2023.

THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, COUNTY OF KERN, STATE OF CALIFORNIA ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 474-060-17

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-98, DATED MARCH 3, 2023.

THE LAND REFERRED TO HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF KERN UNINCORPORATED AND DESCRIBED AS FOLLOWS:

THE NORTH QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA.
EXCEPTING THEREFROM THE WEST HALF OF THE WEST HALF OF SAID NORTHEAST QUARTER.
EXCEPT THAT PORTION OF THE EAST HALF AND THE EAST HALF OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, LYING SOUTHEASTERLY OF A LINE THAT LIES 100 FEET NORTHWESTERLY OF, PARALLEL WITH AND MEASURED AT RIGHT ANGLES FROM THE FOLLOWING DESCRIBED LINE AND PROLONGATION;

BEGINNING AT A POINT IN THE SOUTHERLY LINE OF SAID SECTION 12, DISTANT THEREON NORTH 89 DEGREES 45 MINUTES 36 SECONDS EAST 1499.04 FEET, FROM THE SOUTHWEST CORNER OF SAID SECTION, SAID POINT BEING THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 500.08 FEET, A RADIAL LINE OF SAID CURVE TO SAID POINT OF BEGINNING BEARS SOUTH 44 DEGREES 33 MINUTES 23 SECONDS EAST; THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH AN ANGLE OF 42 DEGREES 10 MINUTES 18 SECONDS, AN ARC LENGTH OF 368.08 FEET; THENCE NORTH 3 DEGREES 16 MINUTES 19 SECONDS EAST 340.26 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A, RADIUS OF 400.06 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE, THROUGH AN ANGLE 44 DEGREES 23 MINUTES 38 SECONDS, AN ARC LENGTH OF 309.97 FEET; THENCE NORTH 47 DEGREES 39 MINUTES 57 SECONDS EAST 992.66 FEET; TO THE BEGINNING OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 688.82 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 19 DEGREES 58 MINUTES 34 SECONDS, AN ARC LENGTH OF 240.16 FEET TO A POINT OF REVERSE CURVATURE WITH A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 1500.23 FEET, A RADIAL LINE AT SAID POINT OF REVERSE CURVATURE BEARS SOUTH 62 DEGREES 18 MINUTES 36 SECONDS EAST; THENCE NORTHEASTERLY ALONG SAID REVERSE CURVE THROUGH AN ANGLE OF 24 DEGREES 46 MINUTES 51 SECONDS, AN ARC LENGTH OF 648.86 FEET; THENCE NORTH 52 DEGREES 28 MINUTES 15 SECONDS EAST 1558.93 FEET TO A POINT IN THE EASTERLY LINE OF SAID SECTION 12, DISTANT THEREON SOUTH 0 DEGREES 27 MINUTES 34 SECONDS EAST 2063.96 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 12.

ALL CURVES HEREINABOVE DESCRIBED ARE TANGENT TO THE STRAIGHT LINES THEY JOIN, EXCEPT AS OTHERWISE NOTED.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657-452-0200
jeff.lenherr@kimley-horn.com

VESTING TENTATIVE PARCEL MAP NO. 12602

LEGAL DESCRIPTON: (CONTINUED)

APN: 474-060-24

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480396, DATED MAY 4, 2023.

THE NORTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 474-060-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480396, DATED MAY 4, 2023.

THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 474-060-27

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-120, DATED DECEMBER 16, 2022.
LEGAL DESCRIPTION:

THE SOUTH HALF OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 474-071-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-20, DATED FEBRUARY 22, 2023.

THE WEST HALF OF THE WEST HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL SUBSURFACE OIL, GAS AND OTHER HYDROCARBONS AND MINERALS NOW OR AT ANY TIME HEREAFTER SITUATED THEREIN AND THERE UNDER OR PRODUCEABLE THEREFROM PROVIDING HOWEVER NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS, OR ASSIGNS SHALL HAVE OR OBTAIN ANY RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTION OF THE SURFACE OF SAID LAND FOR THE EXPLORATION OR RECOVERY OF ANY OR SUCH REVERSE SUBSTANCES OR TO DRILL, MINE OR IN ANY OTHER MANNER USE ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSE OF EXPLOITING OR RECOVERING ANY OF SUCH SUBSTANCES, AS RESERVED BY JEROME H. PEARLMAN AND FAITH PEARLMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, IN DEED RECORDED JANUARY 14, 1969, IN BOOK 4233 PAGE 760, OFFICIAL RECORDS.

APN: 474-071-02

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480402, DATED MAY 4, 2023.

PARCEL 1. (APN: 474-071-02)

THE EAST HALF OF THE WEST HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL SUBSURFACE OIL, GAS, AND OTHER HYDROCARBONS AND MINERALS NOW OR AT ANYTIME HEREAFTER SITUATED THEREIN AND THEREUNDER OR PRODUCEABLE THEREFROM, PROVIDING, HOWEVER NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS, OR ASSIGNS SHALL HAVE OR OBTAIN ANY RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTION OF THE SURFACE OF SAID LAND FOR THE EXPLORATION OR RECOVERY OF ANY OR SUCH REVERSE SUBSTANCES OR TO DRILL MINE, OR IN ANY OTHER MANNER USE ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSE OF EXPLOITING OR RECOVERING ANY OF SUCH SUBSTANCES. AS RESERVED BY JEROME H. PEARLMAN AND FAITH PEARLMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, IN DEED RECORDED JANUARY 14, 1969 IN BOOK 4391, PAGE 2 OF OFFICIAL RECORDS

PARCEL 2:

AN EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS OVER THE SOUTHERLY 15 FEET OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER AND THE NORTHERLY 15 FEET OF THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, EXCEPT THOSE PORTIONS LYING WITHIN THE LINES OF PARCEL 1 ABOVE

APN: 474-071-12

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-127, DATED DECEMBER 16, 2022.

THE WEST HALF OF THE WEST HALF OF THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL SUBSURFACE OIL, GAS, AND OTHER HYDROCARBONS AND MINERALS NOW OR AT ANY TIME HEREAFTER SITUATED THEREIN AND THEREUNDER OR PRODUCEABLE THEREFROM, PROVIDING, HOWEVER, NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS, OR ASSIGNS SHALL HAVE OR OBTAIN ANY RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTION OF THE SURFACE OF SAID LAND FOR THE EXPLOITATION OR RECOVERY OF ANY OR SUCH REVERSE SUBSTANCES OR TO DRILL, MINE, OR IN ANY OTHER MANNER USE ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSE OF EXPLOITING OR RECOVERING ANY OF SUCH SUBSTANCES, AS RESERVED BY JEROME H. PEARLMAN AND FAITH PEARLMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, IN DEED RECORDED JANUARY 14, 1969.

APN: 474-071-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-11, DATED JANUARY 30, 2023.

THE WEST ONE-HALF OF THE EAST ONE-HALF OF THE SOUTH ONE-HALF OF THE NORTH ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, S.B. M., ACCORDING TO THE PLAT THEREOF.

RESERVING THEREFROM 50% OF ALL SUBSURFACE OIL, GAS AND OTHER HYDROCARBONS AND MINERALS NOW OR AT ANY TIME HEREAFTER SITUATED THEREIN AND THEREUNDER OR PRODUCEABLE THEREFROM PROVIDING, HOWEVER, NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS, OR ASSIGNS SHALL HAVE OR OBTAIN AND RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTIONS OF THE SURFACE OF SAID LAND FOR THE EXPLOITATION OR RECOVERY OF ANY OR SUCH RESERVE SUBSTANCES OR TO DRILL, MINE, OR IN ANY OTHER MANNER USE
ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSES OF EXPLOITING OR RECOVERING ANY SUCH SUBSTANCES, AS RESERVED BY JEROME H. PEARLMAN AND FAITH PEARLMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, IN DEED RECORDED JANUARY 14, 1969, IN BOOK 4233 PAGE 760 KERN COUNTY RECORDS.

LEGAL DESCRIPTON: (CONTINUED)

APN: 474-071-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-105, DATED DECEMBER 1, 2022.

PARCEL 1:
THE WEST HALF OF THE EAST HALF OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, S. B. M., ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 1A:
AN EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS OVER THE SOUTHERLY 15 FEET OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER AND THE NORTHERLY 15 FEET OF THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST. EXCEPT THOSE PORTIONS LYING WITHIN THE LINES OF PARCEL 1 ABOVE.
EXCEPT 50% OF ALL SUBSURFACE OIL, GAS, AND OTHER HYDROCARBONS AND MINERALS NOW OR AT ANY TIME HEREAFTER SITUATED THEREIN AND THEREUNDER OR PRODUCEABLE THEREFROM, PROVIDING, HOWEVER, NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS, OR ASSIGNS SHALL HAVE OR OBTAIN ANY RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTION OF THE SURFACE OF SAID LAND FOR THE EXPLOITATION OR RECOVERY OF ANY OR SUCH REVERSE SUBSTANCES OR TO DRILL, MINE, OR IN ANY OTHER MANNER USE ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSE OF EXPLOITING OR RECOVERING ANY OF SUCH SUBSTANCES, AS RESERVED BY JEROME H. PEARLMAN AND FAITH PEARLMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, IN DEED RECORDED JANUARY 14, 1969.

APN: 474-071-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-115, DATED DECEMBER 22, 2022.

PARCEL 1:
THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL SUBSURFACE OIL, GAS, AND OTHER HYDROCARBONS AND MINERALS NOW OR AT ANY TIME HEREAFTER SITUATED THEREIN AND THEREUNDER OR PRODUCEABLE THEREFROM, PROVIDING, HOWEVER, NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS, OR ASSIGNS SHALL HAVE OR OBTAIN ANY RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTION OF THE SURFACE OF SAID LAND FOR THE EXPLOITATION OR RECOVERY OF ANY OR SUCH REVERSE SUBSTANCES OR TO DRILL, MINE, OR IN ANY OTHER MANNER USE ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSE OF EXPLOITING OR RECOVERING ANY OF SUCH SUBSTANCES, AS RESERVED BY JEROME H. PEARLMAN AND FAITH PEARLMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, IN DEED RECORDED JANUARY 14, 1969, BOOK 4233, PAGE 760 OF OFFICIAL RECORDS.

PARCEL 1A:
AN EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS OVER THE SOUTHERLY 15 FEET OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER AND THE NORTHERLY 15 FEET OF THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, EXCEPT THOSE PORTIONS LYING WITHIN THE LINES OF PARCEL 1 ABOVE.

APN: 474-060-11

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480392, DATED MAY 4, 2023.

THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTH-WEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APP-ROVED BY THE SURVEYOR GENERAL, FEBRUARY 19, 1856.

APN: 474-060-12

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-117, DATED DECEMBER 7, 2022.

THE NORTHWEST QUARTER OR THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL ON FEBRUARY 19, 1856.

APN: 474-060-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480390, DATED MAY 4, 2023.

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 474-071-10

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480403, DATED JUNE 30, 2023.

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL SUBSURFACE OIL, GAS AND OTHER HYDROCARBONS AND MINERALS NOW OR AT ANY TIME HEREAFTER SITUATED THEREIN AND THEREUNDER OR PRODUCIBLE THEREFROM, PROVIDING HOWEVER NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS, OR ASSIGNS SHALL HAVE OR OBTAIN ANY RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTION OF THE SURFACE OF SAID LAND FOR THE EXPLORATION OR RECOVERY OF ANY OR SUCH REVERSE SUBSTANCES OR TO DRILL, MINE OR IN ANY OTHER MANNER USE ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSE OF EXPLOITING OR RECOVERING ANY OF SUCH SUBSTANCES, AS RESERVED BY JEROME H. PEARLMAN AND FAITH PEARLMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, IN DEED RECORDED JANUARY 14, 1969, IN BOOK 4233 PAGE 760, OFFICIAL RECORDS.

APN: 474-071-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480524, DATED JUNE 12, 2023.

THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL SUBSURFACE OIL, GAS AND OTHER HYDROCARBONS AND MINERALS NOW OR AT ANY TIME HEREAFTER SITUATED THEREIN AND THEREUNDER OR PRODUCIBLE THEREFROM, PROVIDING HOWEVER NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS, OR ASSIGNS SHALL HAVE OR OBTAIN ANY RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTION OF THE SURFACE OF SAID LAND FOR THE EXPLORATION OR RECOVERY OF ANY OR SUCH REVERSE SUBSTANCES OR TO DRILL, MINE OR IN ANY OTHER MANNER USE ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSE OF EXPLOITING OR RECOVERING ANY OF SUCH SUBSTANCES, AS RESERVED BY JEROME H. PEARLMAN AND FAITH PEARMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, IN DEED RECORDED JANUARY 14, 1969, IN BOOK 4233 PAGE 760, OFFICIAL RECORDS.

LEGAL DESCRIPTON: (CONTINUED)

APN: 474-071-11

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480404, DATED MAY 5, 2023.

PARCEL 1

THE EAST HALF OF THE WEST HALF OF THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, S.B.M., ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THE NORTHEAST ONE-QUARTER THEREOF. PARCEL 1A
AN EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS OVER THE SOUTHERLY 15 FEET OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER AND THE NORTHERLY 15 FEET OF THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST.

EXCEPT THOSE PORTIONS LYING WITHIN THE LINES OF PARCEL 1 ABOVE.

EXCEPT 50% OF ALL SUBSURFACE OIL, GAS AND OTHER HYDROCARBONS AND MINERALS NOW OR AT ANY TIME HEREAFTER SITUATED THEREIN AND THEREUNDER OR PRODUCEABLE THEREFROM, PROVIDING, HOWEVER, NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS, OR ASSIGNS SHALL HAVE OR OBTAIN ANY RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTION OF THE SURFACE OF SAID LAND FOR THE EXPLOITATION OR RECOVERY OF ANY OR SUCH REVERSE SUBSTANCES OR TO DRILL, MINE, OR IN ANY OTHER MANNER USE ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSE OF EXPLOITING OR RECOVERING ANY OF SUCH SUBSTANCES, AS RESERVED BY JEROME H. PEARLMAN & FAITH PEARLMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, IN DEED RECORDED JANUARY 14, 1969, IN BOOK 4233, PAGE 760 OF OFFICIAL RECORDS.

APN: 474-071-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480549, DATED JUNE 8, 2023.

THE SOUTHWEST OF THE SOUTHEAST OF THE NORTHEAST OF THE SOUTHWEST SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, S. B.H, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL SUBSURFACE OIL, GAS OTHER HYDROCARBONS AND MINERALS NOW OR AT ANY TIME HEREAFTER SITUATED THEREIN AND THEREUNDER OR PRODUCABLE THEREFROM, PROVIDING, HOWEVER, NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS OR ASSIGNS SHALL HAVE OR OBTAIN ANY RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTION OF THE SURFACE OF SAID LAND FOR THE EXPLOITATION OR RECOVERY OF ANY OR SUCH REVERSE SUBSTANCES OR TO DRILL, MINE, OR IN ANY OTHER MANNER, USE ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSE OF EXPLOITING OR RECOVERING ANY OF SUCH SUBSTANCES, AS RESERVED BY JEROME H. PEARLMAN AND FAITH PEARLMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, IN DEED RECORDED JANUARY 14, 1969, IN BOOK 4233 PAGE 760, OFFICIAL RECORDS.

APN: 474-071-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480237, DATED MARCH 21, 2023.

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT FILED IN SAID COUNTY.

EXCEPT 50% OF ALL SUBSURFACE OIL, GAS OTHER HYDROCARBONS AND MINERALS NOW OR AT ANY TIME HEREAFTER SITUATED THEREIN AND THEREUNDER OR PRODUCABLE THEREFROM, PROVIDING, HOWEVER, NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS OR ASSIGNS SHALL HAVE OR OBTAIN ANY RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTION OF THE SURFACE OF SAID LAND FOR THE EXPLOITATION OR RECOVERY OF ANY OR SUCH REVERSE SUBSTANCES OR TO DRILL, MINE, OR IN ANY OTHER MANNER, USE ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSE OF EXPLOITING OR RECOVERING ANY OF SUCH SUBSTANCES, AS RESERVED BY JEROME H. PEARLMAN AND FAITH PEARLMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, IN DEED RECORDED JANUARY 14, 1969, IN BOOK 4233 PAGE 760, OFFICIAL RECORDS.

APN: 474-060-30

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480234, DATED MAY 12, 2023.

THE NE 1/4 OF THE SE OF THE SE 1/4 OF THE NW 1/4 SECTION 12, T10N, R14W, SBBM.

APN: 474-060-31, 32 AND 33

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-128, DATED JANUARY 26, 2023.

PARCEL NO. 1: (APN: 474-060-31-00-3)

THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND APPROVED BY THE SURVEYOR GENERAL ON FEBRUARY 19, 1856.

PARCEL NO. 2: (APN: 474-060-32-006)

THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND APPROVED BY THE SURVEYOR GENERAL ON FEBRUARY 19, 1856.

PARCEL NO. 3: (APN: 474-060-33-00-9)

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND APPROVED BY THE SURVEYOR GENERAL ON FEBRUARY 19, 1856.

APN: 474-060-42

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-78, DATED AUGUST 22, 2022.

THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEYOR OF SAID LAND ON FILE IN THE BUREAU OF LAND MANAGEMENT AND APPROVED ON FEBRUARY 19, 1856.

APN: 474-060-43

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-114, DATED DECEMBER 22, 2022.

THE N 1/2 OF THE NW 1/4 OF THE SW 1/4 OF THE NE 1/4 OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST S.B.B.&M., IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

VESTING TENTATIVE PARCEL MAP NO. 12602

LEGAL DESCRIPTON: (CONTINUED)

APN: 474-060-44

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480400, DATED MAY 4, 2023.

THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST S.B.B.M. ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND ON FILE WITH THE BUREAU OF LAND MANAGEMENT AND APPROVED ON FEBRUARY 19, PURSUANT TO CERTIFICATE OF COMPLIANCE RECORDED NOVEMBER 5, 1984 IN BOOK 5707, PAGE 2462, OFFICIAL RECORDS.

APN: 474-060-45

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480236, DATED MARCH 20, 2023.

THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THERE OF THE SURVEY OF SAID LAND ON FILE IN THE BUREAU OF LAND MANAGEMENT AND APPROVED ON FEBRUARY 19, 1856.

APN: 474-060-13

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480779, DATED AUGUST 11, 2023.

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OR KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND ON FILE IN THE BUREAU OF LAND MANAGEMENT.

EXCEPTING THEREFROM THE SOUTHEAST QUARTER.

APN: 474-060-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480780, DATED AUGUST 11, 2023.

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THE SOUTHEAST QUARTER.

APN: 474-060-38, 39, 40 & 41

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-95, DATED NOVEMBER 28, 2022.

THE SOUTH HALF OF THE NORTH HALF OF THE WEST HALF OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 474-060-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480391, DATED MAY 4, 2023.

THE SOUTH 165 FEET OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL ON FEBRUARY 19, 1856.

APN: 474-060-15

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-103, DATED DECEMBER 23, 2022.

THE EASTERLY TWO-THIRDS OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SBBM. EXCEPT THEREFROM THE SOUTHERLY 165 FEET.

APN: 474-060-16

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480511, DATED JUNE 16, 2023.

THE WEST ONE-THIRD OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND ON FILE IN THE BUREAU OF LAND MANAGEMENT AND APPROVED ON FEBRUARY 19, 1856.

EXCEPT THE SOUTH 165 FEET THEREOF.

APN: 474-060-20

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-23 DATED FEBRUARY 17, 2023.

THE WEST HALF OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 474-060-34

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480398, DATED MAY 4, 2023.

THE WEST HALF OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

APN: 474-060-35

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480399, DATED MAY 4, 2023.

NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER, SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND ON FILE IN THE BUREAU OF LAND MANAGEMENT.

EXCEPTING THEREFROM CERTAIN SUBSURFACE MINERAL RIGHTS, BUT WITHOUT RIGHT OF SURFACE ENTRY, AS EXCEPTED IN THE DEED FROM P. BOGART DBA GARIN COMPANY, RECORDED AUGUST 22, 1980, IN BOOK 5308 PAGE 1271, OFFICIAL RECORDS.

APN: 474-060-36

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-67, DATED APRIL 25, 2023.

SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER, SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND ON FILE IN THE BUREAU OF LAND MANAGEMENT.

APN: 474-060-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480393, DATED MAY 4, 2023.

THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDIINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND OF FILE IN THE BUREAU OF LAND MANAGEMENT AND APPROVED OF FEBRUARY 19, 1856.

LEGAL DESCRIPTON: (CONTINUED)

APN: 474-060-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480394, DATED MAY 4, 2023.

THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND ON FILE IN THE BUREAU OF LAND MANAGEMENT AND APPROVED ON FEBRUARY 19, 1856.

APN: 474-060-26

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480034, DATED JANUARY 9, 2023.

THE NORTH HALF OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, S.B.B.M. IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER THE OFFICIAL PLAT THEREOF ON FILE IN THE OFFICE OF THE SURVEYOR GENERAL.

APN: 474-060-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-121, DECEMBER 9, 2022.

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF THE SURVEY OF SAID LAND APPROVED BY THE SURVEYOR GENERAL ON FEBRUARY 19, 1856

APN: 474-071-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-17, DATED FEBRUARY 17, 2023.

THE EAST HALF OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THEREFROM THAT PORTION OF SAID LAND LYING WITHIN THE BOUNDARIES OF THE PROPERTY DESCRIBED IN THE EMINENT DOMAIN LIS PENDENS ACTION IN FAVOR OF THE CITY OF LOS ANGELES, CASE NO. 97076 IN THE SUPERIOR COURT OF THE COUNTY OF KERN, STATE OF CALIFORNIA, RECORDED SEPTEMBER 19, 1966 IN BOOK 3981 PAGE 827 OF OFFICIAL RECORDS.

ALSO EXCEPT 50% OF ALL SUBSURFACE OIL, GAS, AND OTHER HYDROCARBONS AND MINERALS NOW OR AT ANY TIME HEREAFTER SITUATED THEREIN AND THEREUNDER OR PRODUCEABLE THEREFROM, PROVIDING, HOWEVER, NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS, OR ASSIGNS SHALL HAVE OR OBTAIN ANY RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTION OF THE SURFACE OF SAID LAND FOR THE EXPLOITATION OR RECOVERY OF ANY OR SUCH RESERVE SUBSTANCES OR TO DRILL, MINE, OR IN ANY OTHER MANNER USE ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSE OF EXPLOITING OR RECOVERING ANY OF SUCH SUBSTANCES, AS RESERVED BY JEROME H. PEARLMAN AND FAITH PEARLMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, BY DEED DATED SEPTEMBER 25, 1968 AND RECORDED JANUARY 14, 1969 IN BOOK 4233 PAGE 741 OF OFFICIAL RECORDS.

APN: 474-071-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-143, DATED DECEMBER 23, 2022.

THE LAND REFERRED TO HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF KERN UNINCORPORATED AND DESCRIBED AS FOLLOWS:

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT 50% OF ALL SUBSURFACE OIL, GAS AND OTHER HYDROCARBONS AND MINERALS NOW OR AT ANY TIME HEREAFTER SITUATED THEREIN AND THEREUNDER OR PRODUCEABLE THEREFROM, PROVIDING, HOWEVER, NEITHER GRANTORS NOR THEIR HEIRS, SUCCESSORS, OR ASSIGNS SHALL HAVE OR OBTAIN ANY RIGHT OR PRIVILEGE TO MAKE USE OF ANY PORTION OF THE SURFACE OF SAID LAND FOR THE EXPLOITATION OR RECOVERY OF ANY OR SUCH REVERSE SUBSTANCES OR TO DRILL, MINE, OR IN ANY OTHER MANNER USE ANY PORTION OF SAID PROPERTY LYING LESS THAN 500 FEET BENEATH THE SURFACE THEREOF FOR THE PURPOSE OF EXPLOITING OR RECOVERING ANY OF SUCH SUBSTANCES, AS RESERVED BY JEROME H. PEARLMAN AND FAITH PEARLMAN, AS TRUSTEES FOR THE JEROME H. PEARLMAN AND FAITH PEARLMAN TRUST NO. 2, IN DEED RECORDED JANUARY 14, 1969 IN BOOK 4233 PAGE 760, OFFICIAL RECORDS.

VESTING TENTATIVE PARCEL MAP NO. 12602

NW COR SEC 12

N 1/4 SEC 12
N89°53'55"E 2669.68'

N89°51'32"E 2670.36'

1335.18'

1335.18'

PARCEL 'A'
497.07± ACRES

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

BOOK 2886, PAGE 418 O.R.

N00°20'23"W 2652.17'

2649.84'
N00°23'51"W 5298.19'

W 1/4 SEC 12

N00°16'14"W
2650.47'
1325.23'

2673.03'
N89°48'32"E 5345.41'

668.08'
1741.84'
5345.41'
N89°48'32"E

1324.55'

PARCEL 'A'
497.07± ACRES

SEC. 12,
T. 10 N.,
R. 14 W.,
S.B.M.

SEE SHEET 5

SEE SHEET 7

NORTH

GRAPHIC SCALE IN FEET
200 0 100 200 400

SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12602

SEE SHEET 4

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

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PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PARCEL 'A'
497.07± ACRES

PARCEL 'A'
497.07± ACRES

SEC. 12, T. 10 N., R. 14 W., S.B.M.

W 1/4 SEC 12

SW COR SEC 12

S 1/4 SEC 12

SEE SHEET 6

BOOK 2886, PAGE 418 O.R.

N00°20'23"W 2652.17'

N89°48'32"E 5345.41' 2673.03'

N00°23'51"W 5298.19'

N89°48'32"E 5345.41'

668.08'

1741.84'

2649.64'

662.27'

331.14'

373.37'

403.00'

N00°18'14"W 2650.47'

N89°47'38"E 1337.60'

N89°45'47"E 2677.35'

1338.68'

1005.74'

332.93'

1326.28'

N00°21'02"W 1324.52'

N03°15'38"E 340.02'

N50°08'00"E 78.09'

N52°11'50"W

Δ=34°32'32"
R=399.91'
L=241.11'

Δ=46°52'32"
R=399.91'
L=327.29'

RAD.

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12602

SEE SHEET 7

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

SEC. 12, T. 10 N., R. 14 W., S.B.M.

PARCEL 'A'
497.07± ACRES

PARCEL 'A'
497.07± ACRES

AQUEDUCT

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP)

SEE SHEET 5

E 1/4 SEC 12

S 1/4 SEC 12

SE COR SEC 12

N89°48'32"E 5345.41'
2672.38'
1073.75'

N89°48'32"W
228.21'

N89°46'46"E 1568.28'

N89°45'58"E 2675.13'

N52°28'06"E 1634.32'
468.03'

N48°05'35"E 1265.16'

N47°39'13"E 529.80'

N38°08'39"E 300.59'

N00°23'51"W 5298.35'
2648.35'

N00°27'26"W 2646.36'

N00°27'23"W
2645.67'

N03°15'39"E
340.02'

N52°11'50"W
RAD.

L=569.21'
R=1602.43'
Δ=20°44'49"

L=719.56'20"
R=588.69'
L=2014.66'

L=258.19'
R=1431.79'
Δ=11°57'05"

Δ=2°29'20"
R=1435.39'
L=62.35'

Δ=34°39'32"
R=485.95'
L=401.41'

Δ=6°52'32"
R=1995.95'
L=347.23'

2649.84'

2673.03'

668.08'

1741.84'

930.54'

707.41'

1324.55'

1323.18'

373.37'

950.43'

403.00'

332.93'

30'

100'

3210

3190

3185

3180

3175

3170

3165

3160

3155

3150

3145

3140

3135

3130

3125

3120

3115

3110

3100

3090

3080

EN3

LR12

LQ12

MC10

EX5

NE8

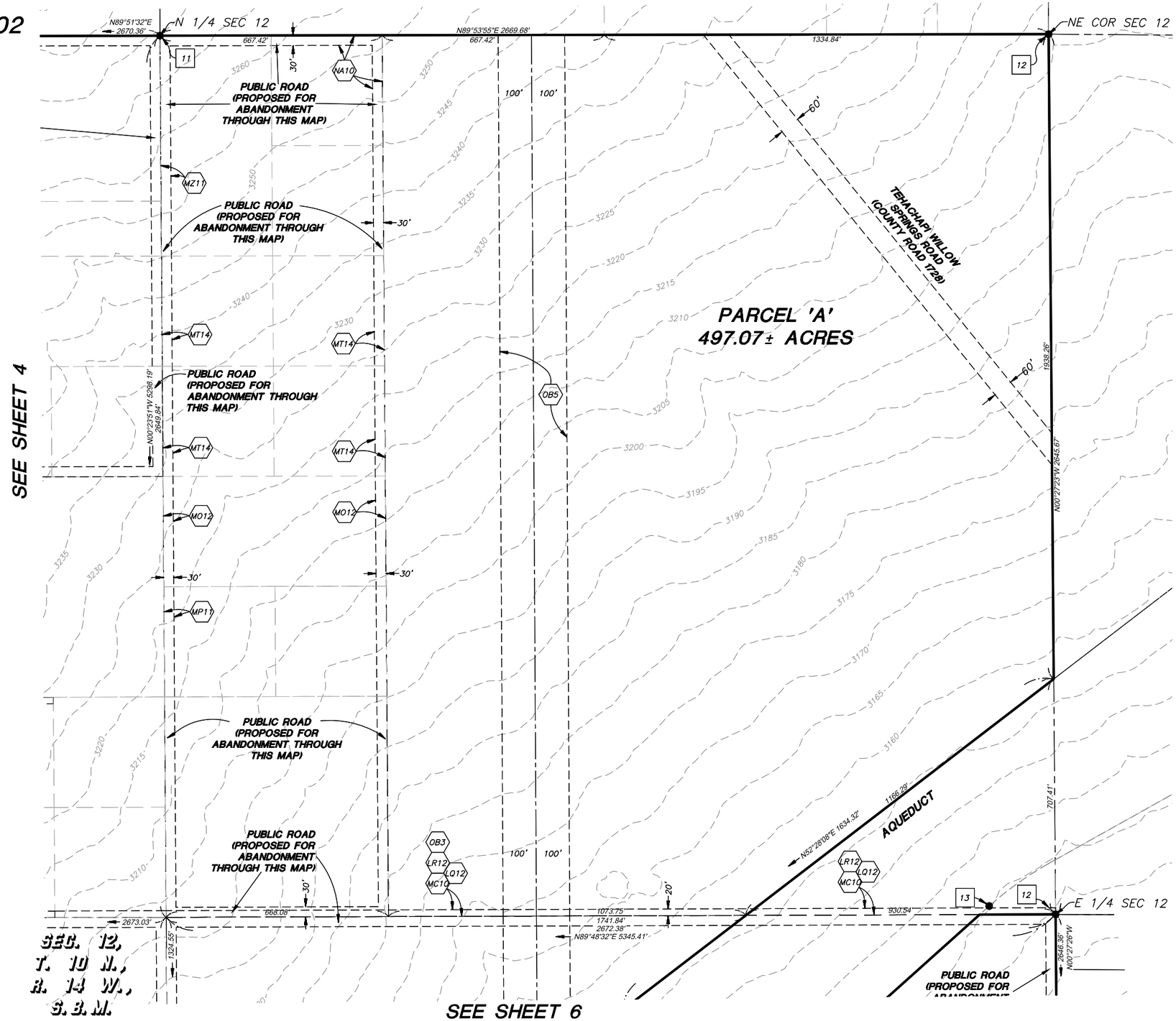
12

13

11

K:\ORA_SURV\2023\BOUNDARY\KERN COUNTY - DISCOVERY ALTA - 194388004\MAPPING\DWG\TPM\AREA CDE - MAP 4\194388004TPM-MAP4B.DWG

VESTING TENTATIVE PARCEL MAP NO. 12602



SEE SHEET 4

SEE SHEET 6

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12602

EASEMENTS:

APN: 474-072-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-76, DATED SEPTEMBER 29, 2022.

EX4 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED JANUARY 10, 1895 IN BOOK 10, PAGE 4, OF PATENTS. (EASEMENT IS BLANKET IN NATURE)

(EX5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED JUNE 23, 2010 AS INSTRUMENT NO. 0210082439, OF OFFICIAL RECORDS.

APN: 474-060-22

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480395, DATED MAY 4, 2023.

(LQ12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PERPETUAL ROAD-WAY, RESERVED BY LEE K. STROBEL AND ALBERTA M. STROBEL, AS SET FORTH IN A DOCUMENT RECORDED JULY 30, 1918 IN BOOK 336, PAGE 200 OF DEEDS RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

(LQ13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION TO CONSTRUCT, OPERATE, USE, MAINTAIN, INSPECT, REPAIR, RENEW, REPLACE, RECONSTRUCT, ENLARGE, ALTER, ADD TO, IMPROVE, RELOCATE AND REMOVE, AT ANY TIME AND FROM TIME TO TIME, ELECTRIC LINES, CONSISTING OF ONE OR MORE LINES OF TOWERS, POLES AND OTHER STRUCTURES, WIRES, CABLES, INCLUDING GROUND WIRES AND COMMUNICATION CIRCUITS, BOTH OVERHEAD AND UNDERGROUND, WITH NECESSARY AND CONVENIENT FOUNDATIONS, CONDUITS, PULLBOXES, GUY WIRES AND ANCHORS, INSULATORS AND CROSSARMS PLACED ON SAID STRUCTURES, AND OTHER FIXTURES, APPLIANCES AND APPURTENANCES CONNECTED THEREWITH, NECESSARY OR CONVENIENT FOR THE CONSTRUCTION, OPERATION, REGULATION, CONTROL, GROUNDING AND MAINTENANCE OF ELECTRIC LINES AND COMMUNICATION CIRCUITS, FOR THE PURPOSE OF TRANSMITTING, DISTRIBUTING, REGULATING AND CONTROLLING ELECTRIC ENERGY TO BE USED FOR LIGHT, HEAT, POWER, COMMUNICATION, AND OTHER PURPOSES, TOGETHER WITH THE EASEMENT AND RIGHT OF WAY FOR ROADS, INGRESS, EGRESS AND OTHER CONVENIENT PURPOSES NEEDED OR DESIRED AT ANY TIME AND FROM TIME TO TIME BY GRANTEE, AND THE RIGHT TO CLEAR AND TO KEEP CLEAR SAID EASEMENTS AND RIGHTS OF WAY AND THE REAL PROPERTY AFFECTED THEREBY, FREE FROM EXPLOSIVES, BUILDINGS, STRUCTURES, EQUIPMENT, TREES, VINES, BRUSH, COMBUSTIBLE MATERIALS AND ANY AND ALL OTHER OBSTRUCTIONS OF ANY KIND, INCLUDING, BUT NOT IN ANY WAY IN LIMITATION OF THE GENERALITY OF THE FOREGOING, SWIMMING POOLS AND APPURTENANCES, FENCES (OTHER THAN FARM, GRAZING OR PASTURE FENCES), AND THE PARKING OF AUTOMOBILES, TRUCKS OR OTHER MECHANICAL EQUIPMENT, FOR PROTECTION FROM FIRE AND OTHER HAZARDS AND FROM INTERFERENCE WITH INGRESS AND EGRESS AND WITH THE UNOBSTRUCTED USE OF SAID EASEMENTS AND RIGHTS OF WAY AND EVERY PART THEREOF, AND FOR ANY AND ALL PURPOSES HEREIN MENTIONED; IN, UNDER, ON, OVER, ALONG AND ACROSS A STRIP OF LAND THREE HUNDRED AND THIRTY (330) FEET WIDE, AS SET FORTH IN A DOCUMENT RECORDED MARCH 11, 2010 AS INSTRUMENT NO. 0210032230 OF OFFICIAL RECORDS.

APN: 474-060-24 OWNER(S): DONALD J. ARMSTRONG JR., AS TRUSTEE OF THE DONALD J. ARMSTRONG JR. LIVING TRUST

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480396, DATED MAY 4, 2023.

(LR12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PERPETUAL ROAD-WAY, RESERVED BY LEE K. STROBEL AND ALBERTA M. STROBEL, AS SET FORTH IN A DOCUMENT RECORDED JULY 30, 1918 IN BOOK 336, PAGE 200, OF DEEDS. (DOES NOT AFFECT SUBJECT PROPERTY)

(LR13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR CONSTRUCT, OPERATE, USE, MAINTAIN, INSPECT, REPAIR, RENEW, REPLACE, RECONSTRUCT, ENLARGE, ALTER, ADD TO, IMPROVE, RELOCATE AND REMOVE, AT ANY TIME AND FROM TIME TO TIME, ELECTRIC LINES, CONSISTING OF ONE OR MORE LINES OF TOWERS, POLES AND OTHER STRUCTURES, WIRES, CABLES, INCLUDING GROUND WIRES AND COMMUNICATION CIRCUITS, BOTH OVERHEAD AND UNDERGROUND, WITH NECESSARY AND CONVENIENT FOUNDATIONS, CONDUITS, PULLBOXES, GUY WIRES AND ANCHORS, INSULATORS AND CROSSARMS PLACED ON SAID STRUCTURES, AND OTHER FIXTURES, APPLIANCES AND APPURTENANCES CONNECTED THEREWITH, NECESSARY OR CONVENIENT FOR THE CONSTRUCTION, OPERATION, REGULATION, CONTROL, GROUNDING AND MAINTENANCE OF ELECTRIC LINES AND COMMUNICATION CIRCUITS, BOTH OVERHEAD AND UNDERGROUND, WITH NECESSARY AND CONVENIENT FOUNDATIONS, CONDUITS, PULLBOXES, GUY WIRES AND ANCHORS, INSULATORS AND CROSSARMS PLACED ON SAID STRUCTURES, AND OTHER FIXTURES, APPLIANCES AND APPURTENANCES CONNECTED THEREWITH, NECESSARY OR CONVENIENT FOR THE CONSTRUCTION, OPERATION, REGULATION, CONTROL, GROUNDING AND MAINTENANCE OF ELECTRIC LINES AND COMMUNICATION CIRCUITS, FOR THE PURPOSE OF TRANSMITTING, DISTRIBUTING, REGULATING AND CONTROLLING ELECTRIC ENERGY TO BE USED FOR LIGHT, HEAT, POWER, COMMUNICATION, AND OTHER PURPOSES, TOGETHER WITH THE EASEMENT AND RIGHT OF WAY FOR ROADS, INGRESS, EGRESS AND OTHER CONVENIENT PURPOSES NEEDED OR DESIRED AT ANY TIME AND FROM TIME TO TIME BY GRANTEE, AND THE RIGHT TO CLEAR AND TO KEEP CLEAR SAID EASEMENTS AND RIGHTS OF WAY AND THE REAL PROPERTY AFFECTED THEREBY, FREE FROM EXPLOSIVES, BUILDINGS, STRUCTURES, EQUIPMENT, TREES, VINES, BRUSH, COMBUSTIBLE MATERIALS AND ANY AND ALL OTHER OBSTRUCTIONS OF ANY KIND, INCLUDING, BUT NOT IN ANY WAY IN LIMITATION OF THE GENERALITY OF THE FOREGOING, SWIMMING POOLS AND APPURTENANCES, FENCES (OTHER THAN FARM, GRAZING OR PASTURE FENCES), AND THE PARKING OF AUTOMOBILES, TRUCKS OR OTHER MECHANICAL EQUIPMENT, FOR PROTECTION FROM FIRE AND OTHER HAZARDS AND FROM INTERFERENCE WITH INGRESS AND EGRESS AND WITH THE UNOBSTRUCTED USE OF SAID EASEMENTS AND RIGHTS OF WAY AND EVERY PART THEREOF, TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 18, 2010, AS INSTRUMENT NO. 0210035549, OF OFFICIAL RECORDS.

APN: 474-060-25

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480396, DATED MAY 4, 2023.

(LS12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR TRANSMISSION LINES, TO SOUTHERN CALIFORNIA EDISON COMPANY, AS SET FORTH IN A DOCUMENT RECORDED DECEMBER 8, 2010, AS INSTRUMENT NO. 0210169435, OF OFFICIAL RECORDS.

APN: 474-060-26

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480034, DATED JANUARY 9, 2023.

(LT9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR TRANSMISSION LINES AND ROADS TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, ITS SUCCESSORS AND ASSIGNS, AS SET FORTH IN A DOCUMENT RECORDED MARCH 03, 2010 AS INSTRUMENT NO. 0210027894 OF OFFICIAL RECORDS.

APN: 474-060-27

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-120, DATED DECEMBER 16, 2022.

(LU10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROADWAY TO ROLLAND H. HESS AND LULA I. HESS, HUSBAND AND WIFE, AS JOINT TENANTS WITH RIGHT OF SURVIVORSHIP, AS SET FORTH IN A DOCUMENT RECORDED JULY 30, 1918, IN BOOK 336 PAGE 200, DEEDS.

(LU11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROADWAY TO LULA I. HOLBROOK AND LESLIE M. HOLBROOK, A SINGLE MAN, HER SON, AS JOINT TENANTS WITH RIGHT OF SURVIVORSHIP, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 3, 1944, IN BOOK 1195 PAGE 354, OF OFFICIAL RECORDS.

(LU12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROADWAY TO MYRTLE NEUMAN, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 3, 1944, IN BOOK 1195, PAGE 354, OF OFFICIAL RECORDS.

(LU13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 11, 2010, AS INSTRUMENT NO. 0210032248, OF OFFICIAL RECORDS.

APN: 474-071-12

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-127, DATED DECEMBER 16, 2022.

(LY11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO WILLIAM ROSENTHAL AND SELMA ROSENTHAL, AS SET FORTH IN A DOCUMENT RECORDED APRIL 8, 1970, IN BOOK 4392 PAGE 475, OF OFFICIAL RECORDS.

(LY12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO WILLIAM ROSENTHAL AND SELMA ROSENTHAL, HIS WIFE, AS SET FORTH IN A DOCUMENT RECORDED APRIL 23, 1970, IN BOOK 4390 PAGE 994, OF OFFICIAL RECORDS.

(LY13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO TITLE INSURANCE AND TRUST COMPANY, A CALIFORNIA CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED APRIL 23, 1970, IN BOOK 4390 PAGE 995, OF OFFICIAL RECORDS.

(LY16) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 11, 2010, AS INSTRUMENT NO. 0210032238, OF OFFICIAL RECORDS.

APN: 474-071-01

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-20, DATED FEBRUARY 22, 2023.

LV11 RESERVATIONS AND EXCEPTIONS IN THE PATENT BY UNITED STATES OF AMERICA RECORDED MAY 10, 1948, BOOK 1515, PAGE 361, OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

LV12 A RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES, AS RESERVED IN THE PATENT FROM THE UNITED STATES OF AMERICA, RECORDED MAY 10, 1948, IN BOOK 1515 PAGE 361, OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

LV13 RIGHTS FOR TELEPHONE TRANSMISSION LINE AS THE CITY OF LOS ANGELES MAY HAVE UNDER THE ACT OF MARCH 4, 1911, AS SET FORTH IN THE PATENT FROM THE UNITED STATES OF AMERICA, RECORDED MAY 10, 1948, BOOK 1515 PAGE 361, OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

(LV15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITIES RESERVED BY WILLIAM ROSENTHAL, ET UX, AS SET FORTH IN A DEED RECORDED, APRIL 28, 1970, IN BOOK 4392 PAGE 475, OF OFFICIAL RECORDS.

(LV17) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITIES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 19, 2010, AS INSTRUMENT NO. 0210021543, OF OFFICIAL RECORDS.

APN: 474-071-02

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480402, DATED MAY 4, 2023.

(LX8) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES, RESERVED BY WILLIAM ROSENTHAL AND SELMA ROSENTHAL, HIS WIFE, AS SET FORTH IN A DOCUMENT RECORDED APRIL 23, 1970 IN BOOK 4391 PAGE 2 OF OFFICIAL RECORDS.

APN: 474-071-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-11, DATED JANUARY 30, 2023.

(LZ10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY TO ALLISON B. SQUIRES & MARGARET F. SQUIRES, HUSBAND AND WIFE, AS JOINT TENANTS , AS SET FORTH IN A DOCUMENT RECORDED MARCH 23, 1989 AS INSTRUMENT NO. 031518 IN BOOK 6220 PAGE 0797 OF OFFICIAL RECORDS.

(LZ11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS AND PUBLIC UTILITY TO PETERSON TRUST NOVEMBER 1, 1985, AS SET FORTH IN A DOCUMENT RECORDED JUNE 17, 1995 AS INSTRUMENT NO. 0195099205 OF OFFICIAL RECORDS.

APN: 474-071-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-105, DATED DECEMBER 1, 2022.

(MA10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES, AS SET FORTH FILE IN A DOCUMENT RECORDED APRIL 23, 1970, IN BOOK 4390, PAGE 997, OF OFFICIAL RECORDS.

APN: 474-071-04

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-115, DATED DECEMBER 22, 2022.

(MB9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO WILLIAM ROSENTHAL AND SELMA ROSENTHAL, HIS WIFE, AS SET FORTH IN A DOCUMENT RECORDED APRIL 23, 1970, IN BOOK 4390, PAGE 991, OF OFFICIAL RECORDS.

(MB10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES TO WILLIAM ROSENTHAL AND SELMA ROSENTHAL, AS SET FORTH IN A DOCUMENT RECORDED APRIL 30, 1970, IN BOOK 4390, PAGE 228, OF OFFICIAL RECORDS.

APN: 474-060-11

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480392, DATED MAY 4, 2023.

(MC10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD WAY AND INCIDENTAL PURPOSES TO ROLLAND H. HESS AND LULA I. HESS, HUSBAND AND WIFE AS JOINT TENANTS , AS SET FORTH IN A DOCUMENT RECORDED JULY 30, 1918 IN BOOK 336 PAGE 200, OF DEEDS.

MC11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC HIGHWAY OVER AND ACROSS SAID PROPERTY AS SET FORTH IN A DOCUMENT RECORDED JUNE 18, 1924 IN BOOK 26 PAGE 179, OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD), PUBLIC ROAD TO BE VACATED.

(MC12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES FOR USE IN COMMON WITH OTHER, OVER THE WEST 30 FEET AND THE SOUTH 30 FEET OF SAID LAND, RESERVED BY M.J. FINN AND PAULINE W. FINN, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1958 IN BOOK 2908 PAGE 354, OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

APN: 474-060-12

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-117, DATED DECEMBER 7, 2022.

MD9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC HIGHWAY OVER AND ACROSS SAID PROPERTY, AS SET FORTH IN A DOCUMENT RECORDED JUNE 18, 1924 IN BOOK 26 PAGE 179, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE), PUBLIC ROAD TO BE VACATED.

(MD11) EASEMENTS FOR ROAD AND UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS, OVER THE WEST 30 FEET, THE NORTH 30 FEET, AS RESERVED BY M. J. FINN AND PAULINE W. FINN, HUSBAND AND WIFE, RECORDED FEBRUARY 13, 1958 IN BOOK 2908 PAGE 355, OF OFFICIAL RECORDS.

MD13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO AND FROM THE PROPERTY INCLUDING ROAD ACCESS AND THE RIGHT TO INSTALL, MAINTAIN AND REPAIR ROADS AND ROADWAYS ON THE PROPERTY TO ENXCO DEVELOPMENT CORPORATION, A DELAWARE CORPORATION AS SET FORTH IN A DOCUMENT RECORDED OCTOBER 7, 2009 AS INSTRUMENT NO. 0209147646, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 474-060-09

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-121, DECEMBER 9, 2022.

ME9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC HIGHWAY, AS SET FORTH IN A DOCUMENT RECORDED JUNE 18, 1924 IN BOOK 26 PAGE 179 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE), PUBLIC ROAD TO BE VACATED.

(ME11) EASEMENTS FOR ROAD AND UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS, OVER THE NORTH 30 FEET AND THE EAST 30 FEET OF SAID LAND AS RESERVED BY M.J. FINN AND PAULINE W. FINN, HUSBAND AND WIFE, RECORDED FEBRUARY 13, 1958.

ME13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS TO AND FROM THE PROPERTY INCLUDING ROAD ACCESS AND THE RIGHT TO INSTALL, MAINTAIN AND REPAIR ROADS AND ROADWAY ON THE PROPERTY TO ENXCO DEVELOPMENT CORPORATION, A DELAWARE CORPORATION AS SET FORTH IN A DOCUMENT RECORDED MARCH 1, 2012 AS INSTRUMENT NO. 0212027588 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 474-060-03

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480390, DATED MAY 4, 2023.

MF11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC HIGHWAY OVER AND ACROSS, AS SET FORTH IN A DOCUMENT RECORDED JUNE 18, 1924 IN BOOK 26 PAGE 179 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE), PUBLIC ROAD TO BE VACATED.

(MF12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR OVER SAID LAND FOR ROAD AND UTILITY PURPOSES TO BE USE IN COMMON WITH OTHERS AND INCIDENTAL PURPOSES, RESERVED BY M.J. FINN AND PAULINE W. FINN, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1958, IN BOOK 2908 PAGE 354 OF OFFICIAL RECORDS.

APN: 474-071-10

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480403, DATED JUNE 30, 2023.

MG8 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED MAY 10, 1948 IN BOOK 1515, PAGE 361 OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

MG9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR THE USE AND DEVELOPMENT OF THE MINERAL INTERESTS, RESERVED BY JEROME H. PEARLMAN, TRUSTEE, AS SET FORTH IN A DOCUMENT RECORDED JANUARY 14, 1969 IN BOOK 4233, PAGE 760 OF OFFICIAL RECORDS. (BLANKET IN NATURE)

(MG10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES TO WILLIAM ROSENTHAL, ET UX, AS SET FORTH IN A DOCUMENT RECORDED MAY 26, 1970 IN BOOK 4400 PAGE 900 OF OFFICIAL RECORDS.

APN: 474-071-11

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480404, DATED MAY 5, 2023.

NO EASEMENTS

APN: 474-071-08

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480524, DATED JUNE 12, 2023.

MI3 RESERVATIONS CONTAINED IN THE PATENT FROM UNITED STATES OF AMERICA TO JOSEPH C. ORTH RECORDED MAY 10, 1948, BOOK 1515 PAGE 361, OFFICIAL RECORDS

WHICH AMONG OTHER THING RECITES AS FOLLOWS:

SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING, OR OTHER PURPOSES AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS, AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS AND DECISIONS OF THE COURTS. (NOT LOCATABLE FROM RECORD)

MI4 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR DITCHES OR CANALS TO UNITED STATES OF AMERICA AS SET FORTH IN A DOCUMENT RECORDED MAY 10, 1948 IN BOOK 1515 PAGE 361, OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

MI5 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR TELEPHONE TRANSMISSION LINE TO UNITED STATES OF AMERICA, AS SET FORTH IN A DOCUMENT RECORDED MAY 10, 1948 IN BOOK 1515 PAGE 361, OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

(MI7) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES TO WILLIAM ROSENTHAL, ET UX, AS SET FORTH IN A DOCUMENT RECORDED APRIL 23, 1970 IN BOOK 4390 PAGE 991, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 474-071-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480549, DATED JUNE 8, 2023.

NO EASEMENTS

APN: 474-071-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480237, DATED MARCH 21, 2023.

MK10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS AND EGRESS AS DISCLOSED BY MEMORANDUM OF TRUST TO ENXCO DEVELOPMENT CORPORATION, A DELAWARE CORPORATION , AS SET FORTH IN A DOCUMENT RECORDED JULY 21, 2011 AS INSTRUMENT NO. 0211092230 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 474-060-30

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480234, DATED MAY 12, 2023.

ML9 A RIGHT OF WAY FOR DITCHES AND CANALS AS RESERVED BY THE UNITED STATES OF AMERICA IN THE PATENT RECORDED APRIL 16, 1918 IN BOOK 19, PAGE 330 OF PATENTS. (NOT LOCATABLE FROM RECORD)

ML10 AN EASEMENT FOR TRANSMISSION LINE AS THE CITY OF LOS ANGELES MAY HAVE UNDER THE ACT OF MARCH 4, 1911 AND INCIDENTAL PURPOSES, AS DISCLOSED IN PATENT RECORDED APRIL 16, 1918 IN BOOK 19, PAGE (S) 330 OF PATENTS. (NOT LOCATABLE FROM RECORD)

ML11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR A PUBLIC HIGHWAY TO JULIA HARRIS, A SINGLE WOMAN, AS SET FORTH IN A DOCUMENT RECORDED JUNE 18, 1924 IN BOOK 26 PAGE 179 OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD), PUBLIC ROAD TO BE VACATED.

(ML12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITIES AND INCIDENTAL PURPOSES TO STEPHAN P. GLUCK A MARRIED MAN AS HIS SOLE AND SEPARATE PROPERTY, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 23, 1972 IN BOOK 4636, PAGE 767 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PARCEL)

VESTING TENTATIVE PARCEL MAP NO. 12602

EASEMENTS:

APN: 474-060-42

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-78, DATED AUGUST 22, 2022.

MN9 AN EASEMENT FOR PUBLIC HIGHWAY PURPOSES OVER THAT PORTION OF SAID LAND LYING WITHIN THE COUNTY ROAD 60 FEET IN WIDTH, AS DECLARED BY ORDER OF THE BOARD OF SUPERVISORS MADE ON JUNE 14, 1894 IN MINUTE BOOK 6, PAGE 398. (DOCUMENT NOT PROVIDED BY TITLE COMPANY), PUBLIC ROAD TO BE VACATED.

APN: 474-060-31, 32 AND 33

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-128, DATED JANUARY 26, 2023.

MM9 A RIGHT OF WAY FOR DITCHES AND CANALS AS RESERVED BY THE UNITED STATES OF AMERICA IN THE PATENT RECORDED APRIL 16, 1918 IN BOOK 19, PAGE 330 OF PATENTS.

THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION.

MM10 AN EASEMENT FOR TRANSMISSION LINE AS THE CITY OF LOS ANGELES MAY HAVE UNDER THE ACT OF MARCH 4, 1911 AND INCIDENTAL PURPOSES, AS DISCLOSED IN PATENT RECORDED APRIL 16, 1918 AS BOOK 19, PAGE 330 OF PATENTS.

THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION.

MM11 AN EASEMENT OVER SAID LAND FOR A PUBLIC HIGHWAY AS SET FORTH IN THE DEED FROM MARCUS HOHMANN, IN DEED RECORDED JUNE 18, 1924, IN BOOK 26 PAGE 179, OFFICIAL RECORDS.

THE SPECIFIC LOCATION OF WHICH IS NOT DEFINED OF RECORD

NO REPRESENTATION IS MADE AS TO THE CURRENT OWNERSHIP OF SAID EASEMENT. PUBLIC ROAD TO BE VACATED.

(MM12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY AND INCIDENTAL PURPOSES TO M.J. FINN, ET UX AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1958 IN BOOK 2908 PAGE 355, OF OFFICIAL RECORDS.

MATTERS CONTAINED THEREIN AFFECT: PARCEL 2 AND 3.

(MM13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITIES AND INCIDENTAL PURPOSES, TO SARA A. STEINBERGER, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 23, 1972 IN BOOK 4636 PAGE 765, OF OFFICIAL RECORDS.

MATTERS CONTAINED THEREIN AFFECT: PARCEL 2.

(MM14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITIES AND INCIDENTAL PURPOSES, TO SARA A. STEINBERGER, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 23, 1972 IN BOOK 4636, PAGE 766 OF OFFICIAL RECORDS.

MATTERS CONTAINED THEREIN AFFECT: PARCEL 3.

(MM15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITIES AND INCIDENTAL PURPOSES, TO SARA A. STEINBERGER, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 23, 1972 IN BOOK 4636, PAGE 767 OF OFFICIAL RECORDS.

MATTERS CONTAINED THEREIN AFFECT: PARCEL 1

APN: 474-060-43

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-114, DATED DECEMBER 22, 2022.

MO9 AN EASEMENT FOR PUBLIC HIGHWAY PURPOSES OVER THAT PORTION OF SAID LAND LYING WITHIN THE COUNTY ROAD 60 FEET IN WIDTH, AS DECLARED BY ORDER OF THE BOARD OF SUPERVISORS MADE ON JUNE 14, 1894 IN MINUTE BOOK 6, PAGE 398. (NOT LOCATABLE FROM RECORD), PUBLIC ROAD TO BE VACATED.

MO11 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 16, 1918 IN BOOK 19, PAGE 330 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

(MO12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, PUBLIC ROADS AND PUBLIC UTILITIES TO JOSEPH D. VILARD AND ANNA R. VILARD, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 24, 1970 IN BOOK 4460, PAGE 609 OF OFFICIAL RECORDS.

APN: 474-060-44

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480400, DATED MAY 4, 2023.

(MP11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, PUBLIC ROADS AND PUBLIC UTILITIES, RESERVED BY KEITH THOMPSON, ET UX, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 24, 1970, AS INSTRUMENT NO. 72356 IN BOOK 4460 PAGE 609, OF OFFICIAL RECORDS.

APN: 474-060-45

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480236, DATED MARCH 20, 2023.

MQ10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC HIGHWAY PURPOSES OVER THAT PORTION OF SAID LAND LYING WITHIN THE COUNTY ROAD 60 FEET IN WIDTH, AS SET FORTH IN A DOCUMENT RECORDED JUNE 14, 1894, IN MINUTE BOOK 6, PAGE 398. PUBLIC ROAD TO BE VACATED.
>>> A COPY OF THE REFERENCED DOCUMENT WAS NOT PROVIDED TO THE SURVEYOR FOR HIS REVIEW <<<

MQ12 COVENANTS, CONDITIONS AND RESTRICTIONS AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 05, 1984 AS INSTRUMENT NO. 47710, BOOK 5707, PAGE 2473 OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 474-060-13

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480779, DATED AUGUST 11, 2023.

MR8 RESERVATIONS AND OTHER MATTERS CONTAINED IN THE PATENT RECORDED APRIL 16, 1918 IN BOOK 19, PAGE 330 OF PATENTS.

MR9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC HIGHWAY OVER AND ACROSS AS SET FORTH IN A DOCUMENT RECORDED JUNE 18, 1924 IN BOOK 26, PAGE 179 OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD), PUBLIC ROAD TO BE VACATED.

(MR10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES FOR USE IN COMMON WITH OTHERS, RESERVED BY M. J. FINN AND PAULINE W. FINN, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1958 AS INSTRUMENT NO. 8441 OF OFFICIAL RECORDS.

APN: 474-060-14

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480780, DATED AUGUST 11, 2023.

(MS5) ANY EASEMENT FOR PUBLIC HIGHWAY OVER AND ACROSS SAID PROPERTY AS RECITED IN DEEDS OF RECORD, AMONG THEM BEING A DEED RECORDED FEBRUARY 13, 1958, IN BOOK 2908 PAGE 354, OF OFFICIAL RECORDS. PUBLIC ROAD TO BE VACATED.

(MS6) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES TO BE USE IN COMMON WITH OTHERS RESERVED BY M. J. FINN AND PAULINE W. FINN, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED, FEBRUARY 13, 1958, IN BOOK 2908 PAGE 354, OF OFFICIAL RECORDS.

APN: 474-060-38, 39, 40 & 41

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-95, DATED NOVEMBER 28, 2022.

MT11 SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING, OR OTHER PURPOSES AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS AND AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS AND DECISIONS OF COURTS, AS SET FORTH IN THE PATENT FROM THE UNITED STATES OF AMERICA RECORDED APRIL 16, 1918, IN BOOK 19 OF PATENTS PAGE 330. (EASEMENT IS BLANKET IN NATURE)

MT12 A RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES, AS RESERVED IN THE PATENT FROM THE UNITED STATES OF AMERICA, RECORDED APRIL 16, 1918, IN BOOK 19 OF PATENTS PAGE 330. (NOT LOCATABLE FROM RECORD)
THE SPECIFIC LOCATION OF WHICH IS NOT DEFINED OF RECORD.

MT13 RIGHT OF WAY FOR TRANSMISSION LINE AS THE CITY OF LOS ANGELES MAY HAVE UNDER THE ACT OF MARCH 4, 1911, AS SET FORTH IN THE PATENT FROM THE UNITED STATES OF AMERICA RECORDED APRIL 16, 1918, IN BOOK 19 OF PATENTS PAGE 330.
THE SPECIFIC LOCATION OF WHICH IS NOT DEFINED OF RECORD.

(MT14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, PUBLIC ROADS AND PUBLIC UTILITIES TO KEITH C. THOMPSON AND ALICE M. THOMPSON, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 24, 1970 IN BOOK 4460 PAGE 609, OF OFFICIAL RECORDS; AFFECTING THE EAST AND WEST 30 FEET.

APN: 474-060-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480391, DATED MAY 4, 2023.

MU12 THE PROVISIONS AND RESERVATIONS CONTAINED IN THE PATENT FROM THE UNITED STATES OF AMERICA RECORDED APRIL 16,1918, IN BOOK 19, PAGE(S) 330 OF PATENTS IN THE OFFICE OF THE COUNTY RECORDER KERN COUNTY, CALIFORNIA SAID PROVISIONS AND RESERVATIONS ARE AS FOLLOW: "SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING, OR OTHER PURPOSES. AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS, AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS AND DECISIONS OF COURTS; AND THERE IS RESERVED FROM THE LANDS HEREBY GRANTED A RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES. (NOT LOCATABLE FROM RECORD)

MU13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR TRANSMISSION LINE, AS SET FORTH IN A DOCUMENT RECORDED APRIL 16, 1918 IN BOOK19, PAGE(S) 330, OF PATENTS. (NOT LOCATABLE FROM RECORD)

(MU14) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY TO M.J. FINN, ET UX, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1958 IN BOOK 2908 PAGE 354 OF OFFICIAL RECORDS.

APN: 474-060-15

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-103, DATED DECEMBER 23, 2022.

MW10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC HIGHWAY PURPOSES TO AS SET FORTH IN A DOCUMENT RECORDED JUNE 14, 1894 IN BOOK 6, PAGE 398. PUBLIC ROAD TO BE VACATED.
>>> A COPY OF THE RECORD DOCUMENT WAS NOT PROVIDED TO THE SURVEYOR FOR HIS REVIEW <<<

MW12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED, RESERVED BY THE UNITED STATES OF AMERICA, AS SET FORTH IN A DOCUMENT RECORDED APRIL 16, 1918 IN BOOK 19 PAGE 330, OF PATENTS. (NOT LOCATABLE FROM RECORD)

(MW13) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1958 IN BOOK 2908 PAGE 354, OF OFFICIAL RECORDS.

APN: 474-060-16

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480511, DATED JUNE 16, 2023.

MX12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC HIGHWAY PURPOSES OVER THAT PORTION OF SAID LAND LYING WITHIN THE COUNTY ROAD, 60 FEET IN WIDTH, AS SET FORTH IN A DOCUMENT RECORDED JUNE 14, 1894, IN MINUTE 6, PAGE 398. (NO DOCUMENT PROVIDED BY TITLE COMPANY), PUBLIC ROAD TO BE VACATED.

MX13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR MINING, AGRICULTURAL, MANUFACTURING, OR OTHER PURPOSES AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS, RESERVED BY THE UNITED STATES OF AMERICA, AS SET FORTH IN A DOCUMENT RECORDED APRIL 16, 1918, IN BOOK 19, PAGE 330, OF PATENTS. (NOT LOCATABLE FROM RECORD)

(MX15) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES TO USE WITH OTHERS TO M.J. FINN, ET UX, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1958, IN BOOK 2908, PAGE 354, OF OFFICIAL RECORDS.

APN: 474-060-20

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-23 DATED FEBRUARY 17, 2023.

MY10 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC HIGHWAY OVER AND ACROSS, AS SET FORTH IN A DOCUMENT RECORDED JUNE 18, 1924, IN BOOK 26 PAGE 179 OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD), PUBLIC ROAD TO BE VACATED.

(MY11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES TO BE USE IN COMMON WITH OTHERS AND INCIDENTAL PURPOSES TO M.J. FINN AND PAULINE W. FINN, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1958, IN BOOK 2908 PAGE 354 OF OFFICIAL RECORDS.

APN: 474-060-34

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480398, DATED MAY 4, 2023.

(MZ11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR FOR INGRESS, EGRESS, PUBLIC ROADS AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES TO KEITH C. THOMPSON AND ALICE M. THOMPSON, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 24, 1970, IN BOOK 4460 PAGE 609 OF OFFICIAL RECORDS.

APN: 474-060-35

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480399, DATED MAY 4, 2023.

NA9 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES AND INCIDENTAL PURPOSES TO UNITED STATES OF AMERICA, AS SET FORTH IN A DOCUMENT RECORDED APRIL 16, 1918 IN BOOK 19 OF PATENTS PAGE 330, OF OFFICIAL RECORDS. (NOT LOCATABLE FROM RECORD)

(NA10) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS, PUBLIC ROADS AND PUBLIC UTILITIES AND INCIDENTAL PURPOSES TO KEITH C. THOMPSON, ET UX, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 24, 1970 IN BOOK 4460 PAGE 609, OF OFFICIAL RECORDS.

NA11 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR THE USE AND DEVELOPMENT OF THE MINERAL INTEREST, RESERVED BY P. BOGART DBA GARIN COMPANY, AS SET FORTH IN A DOCUMENT RECORDED AUGUST 22, 1980 IN BOOK 5308 PAGE 1271, OF OFFICIAL RECORDS. (EASEMENT IS BLANKET IN NATURE)

APN: 474-060-36

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-67, DATED APRIL 25, 2023.

NO EASEMENTS

APN: 474-060-19

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480393, DATED MAY 4, 2023.

(NC11) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES FOR THE USE IN COMMON WITH OTHERS AND INCIDENTAL PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED MAY 03, 1985 IN BOOK 5757, PAGE 555, OF OFFICIAL RECORDS.

APN: 474-060-21

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480394, DATED MAY 4, 2023.

(ND12) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR USE IN COMMON WITH OTHERS OVER THE WEST 30 FEET AND THE NORTH 30 FEET OF SAID LAND, RESERVED BY M.J. FINN AND PAULINE W. FINN, HUSBAND AND WIFE, AS SET FORTH IN A DOCUMENT RECORDED FEBRUARY 13, 1958, IN BOOK 2908 PAGE 354 OF OFFICIAL RECORDS.

APN: 474-060-17

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-98, DATED MARCH 3, 2023.

(OB3) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR A PERPETUAL ROADWAY TO ROLLAND H. HESS AND LULA I. HESS, HUSBAND AND WIFE NO REPRESENTATION IS MADE TO THE PRESENT OWNERSHIP OF SAID EASEMENT, AS SET FORTH IN A DOCUMENT RECORDED JULY 30, 1918 IN BOOK 336, PAGE 200 OF DEEDS.

OB4 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC ROAD PURPOSES, AS SET FORTH IN A DOCUMENT RECORDED MARCH 1957 IN BOOK 114, PAGE 429 OF OFFICIAL RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY. WRONG DOCUMENT MAY HAVE BEEN PROVIDED BY TITLE COMPANY AS NO ROADWAY EASEMENT IS MENTIONED AND PROPERTY REFERENCED IN DOCUMENT IS IN THE WRONG SECTION.)

(OB5) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR FINAL ORDER OF CONDEMNATION, AS SET FORTH IN A DOCUMENT RECORDED MARCH 18, 2011 AS INSTRUMENT NO. 000211035581 OF OFFICIAL RECORDS.

APN: 474-071-18

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480040-17, DATED FEBRUARY 17, 2023.

(NE8) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR ROAD AND UTILITY PURPOSES AS DISCLOSED BY DEED OF TRUST, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 5, 1965, IN BOOK 3890 PAGE 163, OF OFFICIAL RECORDS. (PUBLIC ROAD TO BE VACATED)

APN: 474-071-05

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 22000480465-143, DATED DECEMBER 23, 2022.

(OI9) EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND PUBLIC UTILITY PURPOSES, RESERVED BY WILLIAM ROSENTHAL AND SELMA ROSENTHAL, AS SET FORTH IN A DOCUMENT RECORDED APRIL 23, 1970 IN BOOK 4390, PAGE 991 OF OFFICIAL RECORDS.

VESTING TENTATIVE PARCEL MAP NO. 12603

IN THE UNINCORPORATED AREA, COUNTY OF KERN STATE OF CALIFORNIA

BEING A MERGER AND RE-SUBDIVISION OF SECTION 2, EXCLUDING THE NORTHEAST 1/4 AND THE EAST 1/2 OF THE SOUTHEAST 1/4 OF SECTION 2, ALL BEING IN TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA

EASEMENT TABLE:

THE EASEMENTS SHOWN HEREON HAVE BEEN PLOTTED SOLELY ON INFORMATION CONTAINED IN THE FOLLOWING STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORTS: REPORT NO. 23000480505, DATED MAY 25, 2023, REPORT NO. 23000480480, DATED MAY 25, 2023, REPORT NO. 23000480456, DATED MAY 24, 2023, REPORT NO. 23000480451, DATED MAY 24, 2023.

DESCRIPTION OF PROJECT:

THE PURPOSE OF THIS TENTATIVE PARCEL MAP IS TO MERGE FIVE (5) EXISTING PARCELS IN TO ONE (1) PARCEL.
NOTE: THIS PARCEL MAP WILL NOT BE RECORDED IN PHASES.
NOTE: ALL STRUCTURES WITHIN THE BOUNDARY OR WITHIN 150 FEET OF THIS MAP ARE SHOWN HEREON.

BASIS OF BEARINGS:

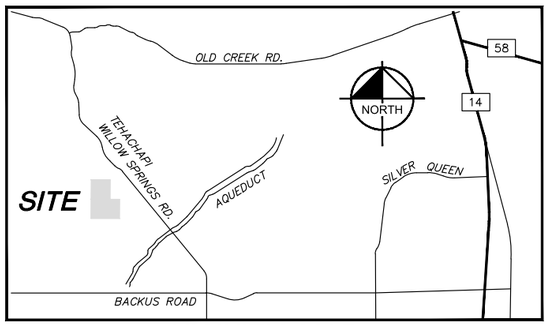
ALL BEARINGS SHOWN HEREON ARE GRID DISTANCES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5, EPOCH 2010.00, AND WAS ESTABLISHED BETWEEN NATIONAL GEODETIC SURVEY (NGS) LOCAL CONTROL STATIONS TEHA (SOPAC) AND ELTN (SOPAC) HAVING A BEARING OF SOUTH 04°27'38" EAST.

FLOOD HAZARD NOTE:

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE X AND ZONE A. FLOOD ZONE X IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AND ZONE A IS DEFINED AS "SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION (BFE)" ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM (FLOOD INSURANCE RATE MAP) MAP NO.'S 06029C3275E AND 06029C3650E, ALL WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2008.

STATISTICS:

ASSESSOR'S PARCEL NUMBERS:	474-010-29, 30, 31 474-083-06, 07
ACCESS TO PARCELS:	ROBERT RANCH ROAD
EXISTING NUMBER OF PARCELS:	5
PROPOSED NUMBER OF PARCELS:	1
EXISTING WATER SUPPLY:	N/A (RAW LAND)
EXISTING SEWAGE DISPOSAL:	N/A (RAW LAND)
EXISTING POWER:	SOUTHERN CALIFORNIA EDISON
EXISTING GAS:	SOCAL GAS
EXISTING ZONING:	A
EXISTING GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
EXISTING USE:	VACANT LAND
PROPOSED ZONING:	A
PROPOSED GENERAL PLAN DESIGNATION:	8.3 (EXTENSIVE AGRICULTURE-MIN. 20 ACRE PARCEL SIZE)
PROPOSED USE:	SOLAR ENERGY ELECTRIC GENERATORS (SOLAR FARM)
PROPOSED WATER SUPPLY:	WELL SITE (IF REQUIRED)
PROPOSED SEWAGE SUPPLY:	SEPTIC (IF REQUIRED)
IMPROVEMENTS REQUIRED:	N/A
PARCEL 'A' AREA:	407.90 ACRES
TOTAL PROJECT AREA:	407.90 ACRES



VICINITY MAP
NOT TO SCALE

MONUMENT NOTES:

● FOUND MONUMENT AS SHOWN

SEARCHED FOUND NOTHING AT ALL PROPERTY CORNERS UNLESS SHOWN OTHERWISE.

[2] NW COR. SEC. 2, SW COR. SEC. 36, CALCULATED POSITION PER BOOK 26 OF SURVEYS, PAGE 153

[11] FD. 2.5" GLO BRASS DISK

[12] FD. 3" GLO BRASS DISK

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TERRA-GEN.

FOR EXAMINATION ONLY

JEFFREY J. LENHERR, L.S. 9305 DATE

PROFESSIONAL LAND SURVEYOR
JEFFREY J. LENHERR
NO. 9305
STATE OF CALIFORNIA

LEGAL DESCRIPTON:

APN: 474-010-29 & 30

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480505, DATED MAY 25, 2023.

PARCEL ONE:
474-010-29-00

THE NORTHERLY 107.88 ACRES OF THE WEST HALF OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 14 WEST, MOUNT SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF, AS PER CERTIFICATE OF COMPLIANCE #963, RECORDED DECEMBER 24, 1985 IN BOOK 5828, PAGE 732, OF OFFICIAL RECORDS.

PARCEL TWO:
474-010-30-00

THE WEST HALF OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 14 WEST, MOUNT SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF, AS PER CERTIFICATE OF COMPLIANCE #963, RECORDED DECEMBER 24, 1985 IN BOOK 5828, PAGE 732, OF OFFICIAL RECORDS.

EXCEPTING THEREFROM THE NORTHERLY 107.88 ACRES OF SAID WEST HALF, AS PER CERTIFICATE OF COMPLIANCE #963, RECORDED DECEMBER 24, 1985 IN BOOK 5828, PAGE 732, OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM THE SOUTHERLY 107.88 ACRES OF SAID WEST HALF, AS PER CERTIFICATE OF COMPLIANCE #963, RECORDED DECEMBER 24, 1985 IN BOOK 5828, PAGE 732, OF OFFICIAL RECORDS.

APN: 474-010-31

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480480, DATED MAY 25, 2023.

THE SOUTHERLY 107.88 ACRES OF THE WEST HALF OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 14 WEST, MOUNT SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF, AS PER CERTIFICATE OF COMPLIANCE #963, RECORDED DECEMBER 24, 1985 IN BOOK 5828 PAGE 732, OF OFFICIAL RECORDS.

APN: 474-083-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480456, DATED MAY 24, 2023.

THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL FEBRUARY 19, 1956, AND BY CERTIFICATE COMPLIANCE RECORDED NOVEMBER 6, 1985 IN BOOK 5934, PAGE 1882, OF OFFICIAL RECORDS.

RESERVING THEREFROM A 100% OF ALL OIL AND MINERAL RIGHTS BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF THE GROUND WITH NO RIGHT OF SURFACE ENTRY AS RESERVED BY GARY E. SMITH AND GAE A. MORAN.

APN: 474-083-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480541, DATED JUNE 2, 2023.

THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPT THEREFROM 50% OF ALL OIL AND MINERAL RIGHTS BELOW DEPTH OF 500 FEET FROM THE SURFACE OF THE GROUND, WITH NO RIGHT OF SURFACE ENTRY AS RESERVED BY GAE A. HEISER MORAN AND GARY EDWARD SMITH, AS JOINT TENANTS.

ALSO RESERVING 50% OF ALL OIL AND MINERAL RIGHTS BELOW DEPTH OF 500 FEET FROM THE SURFACE OF THE GROUND, WITH NO RIGHT OF SURFACE ENTRY AS RESERVED BY WAYNE L. COX, A MARRIED MAN AS HIS SOLE AND SEPARATE PROPERTY.

Kimley»Horn
1100 W TOWN & COUNTRY ROAD, SUITE 700, ORANGE, CALIFORNIA 92868
Phone : 657-452-0200
jeff.lenherr@kimley-horn.com

VESTING TENTATIVE PARCEL MAP NO. 12603

NW COR SEC 2

SEC. 35, T. 11 N., R. 14 W., S.B.M.

BOOK 2510, PAGE 562, O.R.

N89°34'32"W 2646.84'

12

LL13

30'

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP

S 1/4 COR. SEC. 35
FD. 3" U.S.G.L.O. BRASS CAP

N 1/4 SEC 2

N89°33'10"W 2642.12'

2

NE COR SEC 2

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP

1385.19'

1383.23'

LL14

30'

LL14

30'

1050.56'

1041.15'

1450.79'

1431.63'

2710.51'

STRUCTURES TO BE REMOVED PER KERN COUNTY CODE

N00°29'34"E 2723.75'

1/16TH SECTION LINE

PARCEL 1
407.9± ACRES

1370.22'

N00°11'30"E 2696.22'

SEC. 1, T. 10 N., R. 14 W., S.B.M.

1328.56'

1327.28'

1326.00'

PUBLIC ROAD (PROPOSED FOR ABANDONMENT THROUGH THIS MAP

NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

11

W 1/4 SEC 2

N89°51'43"W 5303.23'
2650.55'

SEC. 2
T. 10 N.
R. 14 W., S.B.M.

N00°24'56"E 5363.87"

2653.36'

1326

11

E 1/4 SEC 2

2652.68'

2648.87'

N00°13'08"E

N00°13'08"E 2660.13'

SEE SHEET 3

SEE SHEET 4

VESTING TENTATIVE PARCEL MAP NO. 12603

SEE SHEET 2

N00°29'34"E 2723.75' 1328.56'

W 1/4 SEC 2

N89°51'43"W 5303.23'
2650.55'

SEC. 2
T. 10 N.
R. 14 W., S.B.M.

11

LL14

30'

PUBLIC ROAD
(PROPOSED FOR
ABANDONMENT
THROUGH THIS MAP

PARCEL 1
407.9± ACRES

N00°30'27"E 2660.13'

PUBLIC ROAD
(PROPOSED FOR
ABANDONMENT
THROUGH THIS MAP

LM12

30'

PUBLIC ROAD
(PROPOSED FOR
ABANDONMENT
THROUGH THIS MAP

11

30'

LM12

N89°59'33"E 2654.87'

SW COR SEC 2

SEC. 11, T. 10 N., R. 14 W., S.B.M.

11

1330.90'
2661.79'
N89°57'28"W

S 1/4 SEC 2

N00°24'56"E 2652.68' 5363.97'

2652.68'
1326.34'

380.03'

LL14

30'

STRUCTURES TO BE REMOVED
PER KERN COUNTY CODE

70'

PUBLIC ROAD
(PROPOSED FOR
ABANDONMENT
THROUGH THIS MAP

453.64'

2653.36'

243.97'

STRUCTURES TO BE REMOVED
PER KERN COUNTY CODE

PUBLIC ROAD
(PROPOSED FOR
ABANDONMENT
THROUGH THIS MAP

LO12

30'

SEE SHEET 4

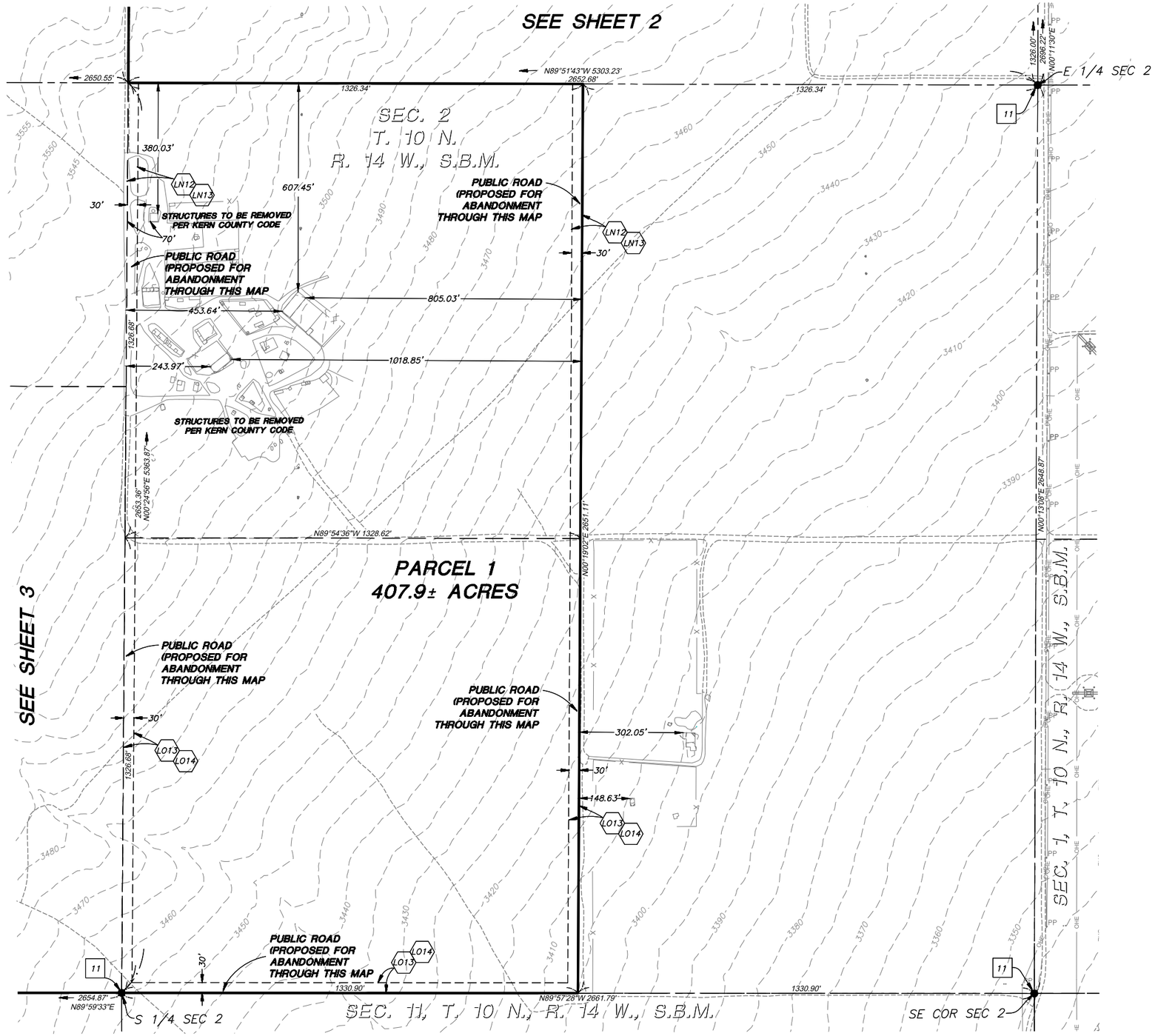
NORTH

GRAPHIC SCALE IN FEET
200 0 100 200 400

SCALE: 1" = 200'

K:\ORA_SURV\2023\BOUNDARY\KERN COUNTY - DISCOVERY ALTA - 194388004\MAPPING\DWG\TPM\AREA CDE - MAP 4\194388004TPM-MAP4.DWG

VESTING TENTATIVE PARCEL MAP NO. 12603



NORTH

GRAPHIC SCALE IN FEET

200 0 100 200 400

SCALE: 1" = 200'

VESTING TENTATIVE PARCEL MAP NO. 12603

EASEMENTS:

APN: 474-010-29 & 30

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480505, DATED MAY 25, 2023.

LL12 RESERVATIONS CONTAINED IN THE PATENT FROM: THE UNITED STATES OF AMERICA TO: HUGO WILHELM HERRMANN RECORDING DATE: APRIL 1, 1921
RECORDING NO.: BOOK 20, PAGE 360, OF PATENTS WHICH AMONG OTHER THINGS RECITES AS FOLLOWS: SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING OR OTHER PURPOSES AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS, AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS AND DECISIONS OF THE COURTS; AND ALSO SUBJECT TO THE RIGHT OF THE PROPRIETOR OF A VEIN OR LODE TO EXTRACT AND REMOVE HIS ORE THEREFROM SHOULD THE SAME BE FOUND TO PENETRATE OR INTERSECT THE PREMISES HEREBY GRANTED, AS PROVIDED BY LAW; AND THE RESERVATION FROM THE LANDS HEREBY GRANTED OF A RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES.
(NOT LOCATABLE FROM RECORD)

LL13 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: UNITED CONTINENTAL DEVELOPMENT CORP., A CALIFORNIA CORPORATION PURPOSE: INGRESS, EGRESS AND PUBLIC UTILITIES
RECORDING DATE: MARCH 5, 1969
RECORDING NO.: BOOK 4252, PAGE 530, OF OFFICIAL RECORDS AFFECTS: THE NORTHERLY 30 FEET

LL14 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: THE PUBLIC IN GENERAL PURPOSE: INGRESS, EGRESS AND ROAD
RECORDING DATE: DECEMBER 31, 1985
RECORDING NO.: BOOK 5830, PAGE 412, OF OFFICIAL RECORDS AFFECTS: AS SET FORTH THEREIN
(PORTION OF PUBLIC ROAD TO BE VACATED)

APN: 474-010-31

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480480, DATED MAY 25, 2023.

LM12 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: THE PUBLIC IN GENERAL PURPOSE: INGRESS, EGRESS AND ROAD
RECORDING DATE: DECEMBER 31, 1985
RECORDING NO.: BOOK 5830, PAGE 412, OF OFFICIAL RECORDS
AFFECTS: THE WESTERLY 30 FEET AND THE SOUTHERLY 30 FEET AND THE EASTERLY 30 FEET OF LOTS 1 AND 2 OF THE NORTHWEST QUARTER AND THE SOUTHWEST QUARTER OF SECTION 2.
(PORTION OF PUBLIC ROAD TO BE VACATED)

APN: 474-083-06

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480456, DATED MAY 24, 2023.

LN11 RESERVATIONS CONTAINED IN THE PATENT
FROM: THE UNITED STATES OF AMERICA TO: JOHN F. ROWAN
RECORDED: JUNE 9, 1922, BOOK 21, PAGE 166, OF PATENTS WHICH AMONG OTHER THINGS RECITES AS FOLLOWS:
SUBJECT TO ANY VESTED AND ACCRUED WATER RIGHTS FOR MINING, AGRICULTURAL, MANUFACTURING, OR OTHER PURPOSES AND RIGHTS TO DITCHES AND RESERVOIRS USED IN CONNECTION WITH SUCH WATER RIGHTS, AS MAY BE RECOGNIZED AND ACKNOWLEDGED BY THE LOCAL CUSTOMS, LAWS AND DECISIONS OF THE COURTS, AND THE RESERVATION FROM THE LANDS HEREBY GRANTED, A RIGHT OF WAY THEREON FOR DITCHES OR CANALS CONSTRUCTED BY THE AUTHORITY OF THE UNITED STATES. (EASEMENT IS NOT LOCATABLE FROM RECORD)

LN12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR INGRESS, EGRESS AND ROAD PURPOSES TO PUBLIC IN GENERAL, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 26, 1986 AS INSTRUMENT NO. 068651 IN BOOK 5942, PAGE 1719, OF OFFICIAL RECORDS. (PORTION OF PUBLIC ROAD TO BE VACATED)

LN13 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR OVERHEAD AND UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AND PACIFIC BELL, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 26, 1986 AS INSTRUMENT NO. 068652 IN BOOK 5942, PAGE 1721, OF OFFICIAL RECORDS.

APN: 474-083-07

STEWART TITLE GUARANTY COMPANY PRELIMINARY TITLE REPORT NO. 23000480456, DATED MAY 24, 2023.

LO12 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR RIGHTS OF WAY, AS SET FORTH IN A DOCUMENT RECORDED JUNE 9, 1922 IN BOOK 21, PAGE 166, OF PATENTS. (NOT LOCATABLE FROM RECORD)

LO13 IRREVOCABLE OFFER TO DEDICATE A PORTION OF THE LAND FOR FUTURE STREET OR HIGHWAY PURPOSES, RECORDED NOVEMBER 26, 1986 IN BOOK 5942, PAGE 1722, OF OFFICIAL RECORDS.

LO14 EASEMENT AND RIGHTS INCIDENTAL THERETO FOR PUBLIC UTILITY AND INCIDENTAL PURPOSES TO SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, AS SET FORTH IN A DOCUMENT RECORDED NOVEMBER 26, 1986 IN BOOK 5942, PAGE 1724, OF OFFICIAL RECORDS.

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Chapter 4
Environmental Setting, Impacts, and Mitigation Measures

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Section 4.1
Aesthetics

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Section 4.1
Aesthetics

4.1.1 Introduction

This section of the Environmental Impact Report (EIR) discusses the potential for the proposed Discovery Solar PV and Storage Project (project) to degrade the existing visual character or quality of the project site and its surroundings through changes in the existing landscape. Potential impacts are evaluated relative to important visual features (e.g., scenic highways, scenic features) and the existing visual landscape and its users. Potential impacts are assessed through an evaluation of changes to the aesthetic characteristics of the existing environment, and the project-related modifications that would alter the visual setting. Visual simulations were created to illustrate various views of the project site at project buildout. The terms and concepts in the discussion below are used to describe and assess the aesthetic setting and impacts from the project. Potential effects associated with lighting and glare are also evaluated.

Visual Concepts and Terminology

Visual or aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character and quality of the environment, a visual or aesthetic impact may occur.

The following terms and concepts are used in the discussion below to describe and assess the aesthetic setting and impacts from the proposed project:

- **Glare:** The introduction of features with reflective surfaces has the potential to result in visual impacts. Reflected light can cause glint (a quick reflection) and glare (reflection that lasts for a longer duration), which depending on the intensity and duration, can create hazards for pilots, air traffic control personnel, motorists, and other potential receptors. Glare can also draw greater attention to objects in a landscape and contribute to visual effects. For the purposes of the EIR discussion, any light reflected off project facilities is referred to as glare.
- **Viewshed:** Defined as the surrounding geographic area from which the project is likely to be seen, based on topography, atmospheric conditions, land use patterns, and roadway orientations.
- **Key Observation Point (KOP):** One or a series of points on a travel route or at a sensitive use area, such as a public park, where the view of a project would be the most revealing.
- **Scenic vista:** An area identified or known for high scenic quality. Scenic vistas may be designated by a federal, state, or local agency. Scenic vistas can also include an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing.
- **Scenic highway:** Any stretch of public roadway that is designated as a scenic corridor by a federal, state, or local agency.
- **Scenic quality:** Refers to the visual appeal of a landscape relative to desired scenic values and the abundance or scarcity of similar qualities in the region. Scenic quality can be measured by

evaluating the presence or absence of scenic features and the intrusion of other features that detract from the scenic features.

- **Sensitive receptors or sensitive viewpoints:** Viewer responses to visual settings are inferred from a variety of factors, including distance and viewing angle, type of viewers, number of viewers, duration of view, and viewer activities. The viewer type and associated viewer sensitivity are distinguished among project viewers in recreational, residential, commercial, military, and industrial areas. Viewer activities can range from a circumstance that encourages a viewer to observe the surroundings more closely (such as recreational activities), to discouraging close observation (such as commuting in heavy traffic). Residential viewers typically have extended viewing periods and are generally considered to have high visual sensitivity. For this reason, residential views are typically considered sensitive. Viewers from public parks, recreational trails, and/or culturally important sites also have high visual sensitivities; therefore, such locations are considered sensitive viewpoints. Viewers in commercial, military, and industrial areas are not typically focused on the views and the areas do not promote enjoyment of views; therefore, viewers in these locations are assumed to have low sensitivity.
- **Viewing distance zones:** Perception of details (e.g., form, line, color, and texture) diminishes with increasing distance. The landscape is subdivided into three distance zones based on relative visibility from travel routes or observation points: foreground, middle ground, and background. The foreground zone includes areas less than ¼ mile away, the middle ground zone includes areas ¼ mile to 3 to 5 miles away, and the background zone includes areas beyond middle ground (FHWA 2015).
- **Visual sensitivity:** The overall measure of an existing landscape's susceptibility to adverse visual changes. When viewing the same landscape, people may have different responses to that landscape and any proposed visual changes, based on their values, familiarity, concern, or expectations for that landscape and its scenic quality. Because each person's attachment to and value for a particular landscape is unique, visual changes to that landscape inherently affect viewers differently. Nonetheless, generalizations can be made about viewer sensitivity to scenic quality and visual changes.

  Residents and recreational users (e.g., hikers, equestrians, tourists, etc.) are expected to be highly concerned with scenery and landscape character. Local motorists who commute daily through the same landscape may have a moderate concern for scenery, while people who work within highly urbanized areas may generally have a lower concern for scenic quality or changes to existing landscape character.

  The visual sensitivity of a landscape is affected by the viewing distances at which it is seen. The visual sensitivity of a landscape also is affected by the travel speed at which a person is viewing the landscape (high speeds on a highway, low speeds on a hiking trail, or stationary at a residence).

  The same feature of a project can be perceived differently by people depending on the distance between the observer and the viewed object. When a viewer is closer to a viewed object in the landscape, more detail can be seen, and there is greater potential influence of the object on visual quality because of its form or scale (relative size of the object in relation to the viewer). When the same viewed object is viewed at background distances, details may be imperceptible but overall forms of terrain and vegetation are evident, and the horizon and skyline are dominant. In the middle ground, some detail is evident in the foreground and landscape elements are seen in context with

landforms and vegetation patterns in the background. The same levels of sensitivity apply in this case as with close-up and further away views; views from cars at high speeds would be less sensitive to changes than views at low speeds because more details can be drawn from the landscape at lower speeds.

- **Visual quality** – visual quality is the study of pleasing perceptual experiences as seen by humans. Visual quality is a function of what the viewer wants or expects to see and what they actually do see. If people see what they want or expect to see, then the visual quality is good or high because the viewer is pleased. However, if what they see is lacking or not what is expected, then visual quality is poor or low because the viewer is disappointed. Expectations can be predictable for things like roadways and commercial development within a certain area. However, self-interest factors into visual preferences based on whether the viewer is a neighbor or user of a project site and how they may be personally benefited or affected. Different viewers and viewer groups value visual resources in different ways; therefore, there are different appraisals of visual quality. The following viewer responses aid in evaluating the overall landscape composition and vividness of both natural and cultural environments.
  - **Natural harmony:** The natural environment creates a sense of natural harmony in people. The visual character of the natural environment's visual resources and viewer preferences affect the perception of natural harmony, and the viewers inherently evaluate and determine if the composition is harmonious or inharmonious.
  - **Cultural order:** The cultural environment creates a sense of cultural order in people. The visual character of the cultural environment's visual resources and viewer preferences affect the perception of order, and the viewers inherently evaluate and determine if the composition is orderly or disorderly.
  - **Project coherence:** The project environment creates a sense of project coherence in people. The visual character of the project environment in combination with viewer preferences affect the perception of project coherence; viewers consciously or unconsciously evaluate the composition of the viewscape and determine if it is coherent or incoherent.
  - **Visual quality:** The natural and cultural environment are elements that determine the overall visual quality for a complete visual landscape. The value placed on visual resources correlates to whether those resources meet the viewer's preferred concepts of natural harmony and cultural order. The more visual preferences and expectations are met by the landscape composition, the more that landscape is revered for its views and the more memorable, or vivid, it becomes. Visual features do not intrude but belong to a landscape of a harmonious nature in an orderly society.

Viewer preferences are established using a professional observational or public involvement approach. Professional observation is used on projects with average complexity and minimal controversy by identifying standard visual preferences associated with affected viewer groups that are adjusted to reflect state and local regulations protecting visual resources.

4.1.2 Environmental Setting

Regional Character

The project is located in an unincorporated area in southeastern Kern County, California, at the western edge of the Antelope Valley and southwest of the unincorporated community of Mojave, as shown in **Figure 3-1**, *Vicinity Map*. Portions of the project are adjacent to and on both sides of Tehachapi Willow Springs Road, and the Los Angeles Department of Water and Power (LADWP) aqueduct. The project site is located approximately 6 miles southwest of the unincorporated community of Mojave, approximately 8 miles northwest of the unincorporated community of Rosamond, approximately 20 miles west of Edwards Air Force Base (AFB), and approximately 9 miles southeast of the City of Tehachapi.

The Antelope Valley encompasses approximately 2,400 square miles in northern Los Angeles County, southern Kern County, and western San Bernardino County. The region is on the south side of the Tehachapi Mountains and is dominated by desert vegetation. Topography in the Antelope Valley is relatively flat, with elevations gradually rising toward the northwest, providing open, expansive views of hills and mountains that surround the valley. Land uses in the Antelope Valley include a mix of undeveloped land, agriculture, solar and wind energy production facilities and transmission facilities, low-density residential development, and other uses. 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 aesthetic features of the Antelope Valley include the southeastern flank of the Tehachapi Mountains, characterized by terrain that gradually slopes form northwest to southeast. The Pacific Crest National Scenic Trail (commonly known as the Pacific Crest Trail, or PCT) is designated as a National Scenic Trail, and located 2.5 miles northwest of the project site. Forest, parkland, and preserve areas in or near Antelope Valley include the Angeles National Forest located approximately 17 miles southwest, the Desert Pines Wildlife Sanctuary located 16 miles southwest, the Arthur B. Ripley Desert Woodland State Park located 15 miles southwest, and the Antelope Valley California Poppy Reserve located 13 miles south of the project site.

There are several planned, existing, and permitted solar energy and transmission projects in the region where the project site is located. In total, there are over 40,000 acres of existing large-scale commercial solar projects in Eastern Kern County desert areas. Renewable energy projects in the vicinity of the project include the Windhub Solar Project, the Solar Electric Power Venture (SEPV) Mojave West Solar Project, the Big Beau Solar Project, and the Catalina Solar Project (see **Figure 3-4,** *Surrounding Renewable Energy Projects*).

Local Character

The nearest populated areas to the project site are the unincorporated community of Mojave approximately 6 miles to the northeast; the unincorporated community of Rosamond approximately 8 miles to the southeast; the City of Tehachapi approximately 9 miles to the northwest; and California City approximately 17 miles to the northeast. Scattered rural residences are located to the south and east of the project, see **Figure 4.1-1**, *Key Observation Point (KOP) Locations*.

Surrounding land uses are comprised primarily of renewable energy development, rural residential development, livestock grazing, light and heavy industrial and mining uses, and undeveloped lands. Land owned by Bureau of Land Management (BLM) is located immediately to the west but is located outside of

the project site. Specific developments within the region include the Windhub Solar Project, the SEPV Mojave West Solar Project, the Big Beau Solar Project, the Catalina Solar Project, numerous wind farms (including the Alta Wind II Project), a small number of single-family residences, numerous electrical substations (including the Windhub Substation), the CalPortland Mojave Plant (a cement manufacturing facility), and the Holiday Rock Quarry (a rock aggregate and cement mining facility). Except for those facilities accessing the paved Tehachapi Willows Springs Road, all other uses are served by unpaved rural roads. Renewable energy projects in the vicinity of the project site are included in **Figure 3-4**, *Surrounding Renewable Energy Projects*.

The project site has a relatively flat terrain with elevations ranging between 2,970 and 3,760 feet above mean sea level due to being south of the Tehachapi Mountains where lands gradually slope downward from the northwest towards the southeast.

The project site is privately owned or controlled, generally undeveloped land, and, as described in more detail in **Section 4.4**, *Biological Resources*, comprised of both disturbed and undisturbed native and nonnative habitats. Much of the project site is highly disturbed from domestic sheep grazing. Desert vegetation dominates the regional landscape of the area. The project site includes multiple abandoned and/or previously occupied structures, as well as associated non-occupied accessory structures, and the Windswept Ranch Petting Zoo.

Affected Viewer Groups

There are three overarching groups of viewers affected by a project: residents, recreationists, and travelers. Residential viewers can be owners or renters that live within viewing distance of a proposed project or within project boundaries. Residential viewers generally have a desire to maintain the existing landscape as-is because how their neighborhood looks is a contributing factor for residents choosing to live there. Therefore, residential viewers tend to be uninterested in change unless they have been able to participate in defining the change. Recreationists include cyclists, off-highway vehicle users, hikers, and campers. Travelers can include pedestrians, cyclists, motorists, and rail users who use various modes of transportation for commuting, touring, and shipping. Pedestrians use only their feet (or a wheelchair or other device), most often on a sidewalk or trail. Cyclists use bicycles at greater speeds than pedestrian travel and may use trails, traffic lanes, and sidewalks. Motorists use vehicles with engines (e.g., cars, trucks, buses, motorcycles, mopeds, or any other technology that is not self-propelled, regardless of fuel source). Motorists move at higher speeds than other groups. By necessity, the driver of a motor vehicle focuses less on the view outside the vehicle. The driver's primary interest is in project coherence, although natural harmony and cultural order also provide resources used for wayfinding. Good natural harmony and cultural order can increase driver attentiveness. Passengers within vehicles and rail cars move at high rates of speed and may be focused on views outside the vehicle or rail car or on activities within the vehicle or rail car, such talking, reading, working, eating, people-watching, or napping. Passengers prefer evidence of good natural harmony and cultural order. Commuters travel the same route regularly, have a repeated routine, and are often single drivers, but they may also be passengers, and trips can include commuting to work or to a favorite or frequent destination (e.g., campground, cabin, sports arena, relative's home).

Views for affected viewer groups consist largely of natural desert vegetation, dirt and paved roadways, transmission lines, solar and wind facilities, scattered rural residences, and the surrounding mountains and hills. Local roadways to be used for the project, residential locations within the vicinity of the project site, and the PCT are shown on **Figure 4.1-1**, *Key Observation Points*. Rural residents, roadway travelers, and recreationists using local roadways have background views over the project site to the surrounding

Tehachapi and Soledad mountains along with background views of Willow Springs Butte and the tops of the Rosamond Hills. Low-lying vegetation of moderate variety and relatively flat terrain with little interesting landscape features, can allow for expansive to slightly limited views out and over the vicinity toward the mountains and hills in the background. While views of the mountains and hills are distinctive, these views are fairly common within the region. The landscape colors are muted earth tones of green, brown, and tan, subtle in variation and contrast. These visual conditions contribute to an existing visual quality in the project area that ranges from average to above average. The project site has above average visual quality because it is largely undeveloped and in a natural state. Portions of the project vicinity have an average visual quality due to existing anthropogenic developments. Overall, the existing visual quality associated with the project site is above average (see Section 4.1.4, *Methodology*).

No officially designated scenic vistas or scenic vistas identified by signage and accessible to the public have been identified in the project vicinity (Kern County 2009). However, the flat terrain allows for expansive views out and over the desert landscape. Views from the surrounding hills and mountains, including a segment of the PCT, also allow for viewpoints out and over the landscape. These views comprise the surrounding rolling hills and mountains, which transition to the patchwork agricultural and solar arrays on the valley's flat floor. Overall, these views have high visual quality. However, many views are interrupted by intervening wind turbines and steel lattice transmission towers, which can detract from the views. While the project site is largely undeveloped and in a natural state, views of the project site from the PCT are limited due to the distance of the project site from the PCT along with intervening topography, wind turbines, and transmission towers.

Scenic Highways

According to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System, there are no Officially Designated State Scenic Highways within Kern County (see **Section 4.1.3**, *Regulatory Setting*, below for more information on the State Scenic Highway Mapping System). The closest Eligible Scenic Highways are SR-58 (portion east of SR-14), located 8 miles north from the project site, and SR-14 (portion north of SR-58), located 5 miles east of the project site (Caltrans, 2024). Prominent views along SR-14 and SR-58 add to the scenic elements in the landscape for motorists include panoramic views of the open Mojave Desert landscapes and surrounding mountains, including the Tehachapi Mountains, San Gabriel Mountains, and the southeastern extent of the Sierra Nevada Mountains.

In addition to the State Scenic Highway Mapping System, the Kern County General Plan Circulation Element designates scenic routes and defines a scenic route as any freeway, highway, road, or other public right-of-way, which traverses an area of exceptional scenic quality and must be officially set as a Scenic Route by the Kern County Board of Supervisors or the State of California. The Kern County General Plan Circulation Element identifies that Kern County has the discretion to designate local scenic routes if circumstances warrant. The General Plan Circulation Element also identifies three State highways in Kern County as Eligible State Scenic Highways including the approximately 50 mile portion of portion of SR-14 beginning north of Mojave to a the Inyo County line, and the portion of SR-58 between Mojave and Boron, each with their closest portion 6 miles from the project, and SR-41 in northwest Kern County more than 100 miles from the project site.

As part of the Kern County General Plan Circulation Element goals, policies, and implementation measures, Kern County adopted a Scenic Corridor Combining (SC) District within the Kern County Zoning Ordinance to designate areas which contain unique visual and scenic resources as viewed from a major highway or freeway. The project site is not within the SC District.

Lighting Environment

Currently, the project site only contains minimal lighting associated with a few residential structures and former onsite petting zoo; and neither Tehachapi Willow Springs Road or the dirt roads bordering or traversing the project site include street lighting. Parcels with the existing residence and petting zoo within the project site have been acquired by the project proponent, and existing structures will be demolished as part of project construction, in accordance with Kern County demolition permits and other applicable regulations, Minimal offsite fixed lighting in the area immediately surrounding the project site includes lighting fixtures associated with nearby residences, which contain small lighting fixtures installed on building exteriors, and main driveways or gates. Located directly adjacent to and west of SR-58, existing wind turbine facilities, including the Rising Tree Wind Farm, and existing solar generating facilities contribute lighting and potential sources of glare. Required Federal Aviation Administration (FAA) obstruction lighting tops wind turbines and the regular slow pulsing red lights operate during nighttime hours. The main source of nighttime lighting is from motorists passing through the area with headlights on.

Solar Array Glare Potential

A solar array comprises numerous solar cells. A solar cell differs from a typical reflective surface in that its surface is microscopically irregular and designed to trap the rays of sunlight for the purposes of energy production. The intent of solar technology is to increase efficiency by absorbing as much light as possible (which further reduces reflection and glare).

A common misconception about solar photovoltaic (PV) arrays is that they inherently cause or create substantial glare, posing a nuisance to neighbors and a safety risk for pilots. In certain situations, the glass surfaces of solar PV systems can produce glint (a momentary flash of bright light) and glare (a reflection of bright light for a longer duration); however, light absorption, rather than reflection, is central to the function of a solar PV array so that it may absorb solar radiation and convert it to electricity. Solar PV arrays are constructed of dark-colored (usually blue or black) materials and are covered with anti-reflective coatings. Modern PV arrays reflect as little as 2 percent of incoming sunlight, which is similar to water and less than soil and wood shingles. Some of the concerns and misconceptions are likely due to the confusion between solar PV systems and concentrated solar power systems. Concentrated solar power systems, such as the Ivanpah Solar Power Facility scheduled to be deactivated in 2026 (MSN 2025), typically use an array of mirrors to reflect sunlight to heat water or other fluids to create steam that turns an electric generator (Palmer and Laurent, 2014).

Despite their low potential to create glare, solar PV arrays can reflect sunlight skyward toward the light source, creating a potential glare impact for aircraft in the area. The effect is similar to what a motorist experiences when the sun is low in the sky and the car passes between the sun and a glass-fronted building that has been treated with an anti-reflective coating. If the motorist is heading directly toward the building, the glare would be in the motorist's eyes. Otherwise, any glare would be in the periphery to the direction of travel of the motorist. In the vicinity of the project, effects on eastbound motorists would likely be greatest in the early evening hours, when the sun is at its lowest arc in the western horizon. Glare would have its greatest potential impact on westbound travelers in the early morning hours, when the sun is rising in the east.

Because aircraft typically travel at a higher rate of speed than vehicles, the glare effect on those aboard an aircraft is momentary, lasting only as long as the angle between the sun, solar arrays, and aircraft is

maintained. Unless an aircraft were descending at an angle sloped directly at the solar array with the sun directly behind the aircraft, any glare that might occur from solar arrays would be below the pilot's horizon.

4.1.3 Regulatory Setting

Federal

National Scenic Byways Program

The National Scenic Byways Program is part of the U.S. Department of Transportation, Federal Highway Administration (FHWA). Under the program, the U.S. Secretary of Transportation recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities (FHWA, 2024a). There are no National Scenic Byways or All-American Roads within the vicinity of the project site (FHWA, 2024b).

U.S. Department of the Interior, National Park Service, National Trails System Act

The National Trails System Act of 1968 seeks to preserve scenic and natural qualities along trails. The National Trails System Act assigns management responsibility for trails to various federal resource agencies, depending on which agency holds jurisdiction over the land on which the trail is located in a given area. The PCT was created under the National Trails System Act to provide for outdoor recreation opportunities and the conservation of significant scenic, historic, natural, or cultural qualities (National Park Service 2019). PCT's southern terminus is on the U.S. border with Mexico, just south of Campo, California, and its northern terminus on the Canada–U.S. border on the edge of Manning Park in British Columbia; its corridor through the United States is in the states of California, Oregon, and Washington. As stated previously, the closest segment of the PCT is located approximately 2.5 miles northwest of the project site. Views of project components from the PCT would be limited given the project components are between 2.5 and 8 miles from the PCT and intervening topography between viewers along PCT and the project would obscure views of the project components (see **Figure 4.1-8,** *KOP 7 - Existing and Simulated Views from PCT Looking Southeast Towards the Project)*.

U.S. Federal Aviation Administration

The Federal Aviation Administration (FAA) has crafted a policy regarding the ocular hazards posed by solar projects to federally obligated airports. Initially, it was assumed that solar energy systems might generate new glint and glare effects for pilots during the final approach. However, FAA has since concluded that in most instances, the glint and glare from solar energy systems experienced by pilots during final approach are comparable to those routinely encountered from water bodies, glass facade buildings, parking lots, and similar features. Therefore, FAA has retracted its prior interim guidance, which mandated airports to analyze potential glint and glare effects for pilots on final approach (86 *Federal Register* [FR] 25801–25803). Instead, FAA has determined that its policy should primarily focus on the impact of on-airport solar energy systems on federally obligated towered airports, especially the airport's air traffic control tower cab (86 FR 25801–25803).

Per FAA Policy 86 FR 25801–25803, the following criterion must be met for solar energy systems on airport property:

- No glare of any kind for air traffic control tower(s) at cab height

This policy only applies to proposed solar energy systems on federally obligated airport property and only those airports with control towers. Though the Mojave Air and Space Port is a federally obligated airport, the project does not fall on airport property. For that reason, this policy does not apply to the project; however, it is included here to describe the standard methodologies used to assess solar glare near operating airports.

State

California Scenic Highway Program

Caltrans manages the California Scenic Highway Program, which was created in 1963 by the California legislature to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. The program includes a list of highways that are designated or eligible for designation as scenic highways. A highway may be designated as scenic based on certain criteria, including how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes on the traveler's enjoyment of the view. State laws governing the Scenic Highway Program are found in Sections 260 through 263 of the Streets and Highways Code.

As described in **Section 4.1.2**, *Environmental Setting*, there are no Designated State Scenic Highways within Kern County. The closest Eligible Scenic Highways are SR-58 (portion east of SR-14), 8 miles north of the project site, and SR-14 (portion north of SR-58), located 5 miles east of the project site (Caltrans, 2024).

Local

Construction and operation of the project would be subject to policies and regulations contained within the general and specific plans, including the Kern County General Plan, Soledad Mountain Elephant Butte Specific Plan, Kern County Zoning Ordinance, and the Kern County Code of Building Regulations, which include policies, goals, and implementation measures related to aesthetics. The policies, goals, and implementation measures in the Kern County General Plan related to aesthetics that are applicable to the proposed project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the proposed project. These measures are not listed below, but as stated in **Chapter 2**, *Introduction*, of this EIR, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Kern County General Plan

The Land Use, Open Space, and Conservation Element of the Kern County General Plan (County of Kern, 2009) evaluates the visual and aesthetic setting of Kern County and assesses the potential for visual impacts. The Kern County General Plan Energy Element sets forth policies to encourage orderly energy development in visually sensitive areas.

The Kern County General Plan Circulation Element also provides a discussion regarding Scenic Routes. A Scenic Route is defined in the Kern County General Plan as any freeway, highway, road, or other public right-of-way which traverses an area of exceptional scenic quality. A roadway can only be designated as a

scenic route by direct action of the Kern County Board of Supervisors or the State of California. A route may not be selected as scenic until a visual assessment of the route has been conducted to determine if the route meets the current scenic highway criteria as mentioned above and to what extent development has encroached on the scenic views. The County also has to prepare and adopt a plan and program for the protection and enhancement of adjacent roadside viewshed land. As such, goals, policies, and implementation measures regarding Scenic Routes in the Circulation Element are focused on the need for the County to further develop their Scenic Route program and measures to protect scenic resources, which are not applicable to the proposed project.

The Kern County General Plan acknowledges the three routes identified as part of the California Scenic Highways Master Plan that are designated "Eligible State Scenic Highway" within the County. Route 1, which begins north of Mojave and continues to the Inyo County Line, consists of SR-14 and State Highway 395. Route 2 consists of SR-58 between Mojave and Boron. Route 3 consists of 5 miles of SR-41 in northwest Kern County. The project would potentially be visible from segments of Route 1 and Route 2. The Circulation element provides County procedures for obtaining a designation for any these routes of Officially Designated State Scenic Highways. This has not happened for any of the identified routes to date.

As part of the Kern County General Plan Circulation Element goals, policies, and implementation measures, Kern County adopted a Scenic Corridor Combining (SC) District to designate areas which contain unique visual and scenic resources as viewed from a major highway or freeway. As noted previously, the project site is not within the SC District.

As SR-58 and SR-14 are not officially designated, they are not considered scenic highways for this analysis; therefore, no policies regarding development within Scenic Routes would be applicable to the project. However, the Kern County General Plan provides general goals and policies for design features of development projects in order to reduce their impacts to scenic resources. The policies and implementation measures in the Kern County General Plan for aesthetic resources applicable to the proposed project are provided below. The Kern County General Plan contains goals, policies, and implementation measures that are more general in nature and are not specific to development such as the project. They are therefore not included below, but all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Chapter 1: Land Use, Open Space, and Conservation Element

1.10.7 Light and Glare

Policies

Policy 47: Ensure that light and glare from discretionary new development projects are minimized in rural as well as urban areas.

Policy 48: Encourage the use of low-glare lighting to minimize nighttime glare effects on neighboring properties.

Implementation Measures

Measure AA: The County shall utilize California Environmental Quality Act (CEQA) guidelines and the provisions of the Zoning Ordinance to minimize the impacts of light and glare on adjacent properties and in rural undeveloped areas.

Chapter 5: Energy Element

5.4.7 Transmission Lines

Goal

Goal: To encourage the safe and orderly development of transmission lines to access Kern County's electrical resources along routes, which minimize potential adverse environmental effects.

Policy

Policy 5: The County should discourage the siting of above-ground transmission lines in visually sensitive areas.

Soledad Mountain Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. The recommendations, analysis, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan for aesthetics applicable to the project are provided below. The Soledad Mountain Elephant Butte Specific Plan contains additional recommendations, analysis, and implementation measures that are more general in nature and are not specific to development such as the project. They are therefore not included below, but all policies, goals, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan are incorporated by reference.

Item 4. Scenic Lands

Recommendation: All possible safeguards should be made to protect the scenic lands along State Route 14, designated as a proposed Scenic Highway, and other County roadways.

Analysis: No billboards or unsightly construction should be allowed within the scenic lands along roadways. All utilities along the route should be underground. State Route 14 provides an excellent example of scenic desert lands for visitors traveling through eastern Kern County and should be protected.

Implementation: Compliance with existing Zoning Ordinance, where applicable.

Kern County Zoning Ordinance

Chapter 19.74 Scenic Corridor Combining District

The purpose of the Scenic Corridor (SC) combining district is to designate areas which contain unique visual and scenic resources as viewed from a major highway or freeway wherein the siting of off-site advertising signs needs to be reviewed on a case-by-case basis to safeguard the scenic qualities of the natural environment and the visual qualities of primary entranceways into the county. The regulations established by the SC district shall be in addition to the regulations of the base commercial or industrial zoning district with which the SC district is combined. The project site is not in a designated Scenic Corridor.

Chapter 19.81, Dark Skies Ordinance (Outdoor Lighting)

In November 2011, Kern County approved a Dark Skies Ordinance. The purpose of this ordinance is to maintain the existing character of Kern County by requiring a minimal approach to outdoor lighting, recognizing that excessive illumination can create a glow that may obscure the night sky and excessive

illumination or glare may constitute a nuisance. The ordinance provides requirements for outdoor lighting within specified unincorporated areas of Kern County in order to accomplish the following objectives:

Objective 1: Encourage a safe, secure, and less light-oriented night-time environment for residents, businesses and visitors.

Objective 2: Promote a reduction in unnecessary light intensity and glare, and to reduce light spillover onto adjacent properties.

Objective 3: Protect the ability to view the night sky by restricting unnecessary upward projections of light.

Objective 4: Promote a reduction in the generation of greenhouse gases by reducing wasted electricity that can result from excessive or unwanted outdoor lighting.

The ordinance provides requirements for outdoor lighting within specified unincorporated areas of Kern County; the proposed project would comply with the requirements, which include:

- All outdoor lighting fixtures which utilize one hundred (100) watts or more (based on an incandescent bulb) or emit one thousand six hundred (1,600) lumens or more per fixture, shall be fully shielded per the definition listed in this chapter, unless the fixture is exempted by this chapter. All floodlights which utilize less than one hundred (100) watts per fixture must be at least partially shielded to reduce light spillover onto adjacent properties. Additionally, the light source (bulb) within all lighting fixtures shall be oriented downward to prevent direct up lighting.
- Lighting fixtures (such as carriage lights, under-eave lights and porch lights) that utilize less than one hundred (100) watts and emit less than one thousand six hundred (1,600) lumens per fixture and that do not project light above the horizontal plane shall not be subject to an illumination curfew.
- Security lighting fixtures that utilize one hundred (100) watts or more (or emit one thousand six hundred (1,600) lumens or more) shall be controlled by a motion-sensor device if used after 11:00 p.m., and the fixture shall only be illuminated when activated by the device. The motion sensor device shall be programmed so that the fixture remains illuminated for no more than ten (10) minutes if activated by the device. Each fixture shall conform to all other provisions of this chapter, including shielding requirements.
- All other non-exempt outdoor lighting fixtures shall be turned off between the hours of 11:00 p.m. and sunrise.
- Outdoor lighting fixtures located outside of a residential zone district (E, R-1, R-2, R-3), or located more than twenty-five (25) feet from any existing single-family residence within any other zone district shall be subject to the shielding provisions but are not subject to an illumination curfew.
- Metal halide, mercury vapor, and quartz exterior light source types shall be prohibited in and within twenty-five (25) feet of all residential zone districts (E, R-1, R-2, and R-3).
- Outdoor light fixtures shall be kept in good working order and shall be continuously maintained in a manner that serves the original design intent of the system and ensures continued compliance with this chapter.
- All light fixtures that are mounted on a building or structure (attached lighting) and all lighting fixtures that are not attached (freestanding lighting) shall conform to the mounting height

limitations as listed in Table 19.81.050.C.1 of the ordinance. Maximum fixture height shall be measured from the finished interior grade of the mounting area to the top point of the lighting fixture.

- Even fixtures shown as fully shielded must be installed and aimed properly to comply with ordinance.
- Low voltage landscape lighting such as that used to illuminate fountains, shrubbery, trees, walkways, etc., shall be permitted provided that such lighting is limited to fixtures utilizing a maximum of sixty (60) watts (or seven hundred fifty (750) lumens, whichever is or less), per fixture, the fixture is not mounted to poles or buildings, and the fixture is shielded to eliminate glare and light spillover onto adjacent properties.

Kern County Development Standards

The Kern County Development Standards have specific regulations pertaining to lighting standards including the requirement that lighting must be designed so that light is reflected away from surrounding land uses so as not to affect or interfere with vehicular traffic, pedestrians, or adjacent properties.

Kern County Airport Land Use Compatibility Plan

Projects within the influence area of Mojave Airport are subject to the policies outlined in the Kern County Airport Land Use Compatibility Plan (County of Kern, 2012). The distance between the nearest proposed solar panel and the airport is approximately 6.5 miles, demonstrating the project does not fall on airport property, within its sphere of influence or the boundaries of the Kern County Airport Land Use Compatibility Plan. No portion of the project site, or the 230-kV gen-tie, is located within the Mojave Airport influence area or any other airport influence area governed by the Kern County Airport Land Use Compatibility Plan. None of the policies apply to the project (County of Kern, 2012).

4.1.4 Impacts and Mitigation Measures

Methodology

The project's potential impacts to aesthetics have been evaluated using a variety of resources. This evaluation identifies and assesses any potential long-term adverse visual impacts on aesthetics and visual resources that might result from implementation of the project during construction and operation. This assessment is based on the approved visual assessment practices employed by the BLM (BLM, 1986). This method includes:

- Defining the project and its visual setting by assessing the project proponent's submitted project application materials, including plans and descriptions, and reviewing Google Earth Pro aerial photographs and street-level photography, Kern County geographic information system (GIS) topographic and land use data, and U.S. Geological Survey (USGS) topographic data;
- Conducting field visits to the project site and its vicinity in June 2023 and October 2024 to document the following:
  - Project site's visual characteristics
  - Project vicinity's visual characteristics

  - Location of visual (sensitive) receptors in the vicinity;

- Establishing seven Key Observation Points (KOPs) within the vicinity from which to evaluate potential visual impacts resulting from implementation of the proposed project;
- Preparing visual simulations of post-development views from the KOPs;
- Assessing the project's impacts to sensitive views by applying the BLM's visual quality rating system to each of the visual simulations;
- Assessing the project's impacts related to lighting and glare; and
- Proposing methods to mitigate any potentially significant visual impacts identified.

The evaluation of project impacts is based on professional judgment, analysis of the Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan goals and policies related to visual resources, and the significance criteria established by Appendix G of the CEQA Guidelines. More detailed information on the methodology behind the selection of KOPs and rating visual quality is provided below.

Selection of Key Observation Points (KOPs)

The process of identifying KOPs focused on selecting viewpoints that could be used to accurately represent views from a broader range of viewpoints, particularly viewpoints from sensitive receptors. The nature of solar fields, with large numbers of nearly identical and relatively low-lying PV arrays, means that the views encountered from differing angles would often be quite similar. Sensitive receptors near the project site include motorists and views to the project site available from public locations along local roads. In addition, recreational users of the PCT are analyzed as sensitive receptors.

The familiarity with the view also influences how much attention is spent on the visual environment. Regular motorists may be highly familiar with the view and sometimes pay less attention; however, these motorists tend to be much more sensitive to changes in that view. People who are less familiar with the view may spend more time looking at the surrounding land but would not notice changes in the view. The majority of existing motorists are likely to be residents driving to and from home. While SR-58 and SR-14 are not officially designated State Scenic Highways, each is an eligible scenic highway, so they were considered within the viewshed of the project that would attract recreational drivers.

The project site is located in a rural area. As described in **Section 4.1.2**, *Environmental Setting*, above, scattered rural residences are found to the south and east of the project site. These residents tend to have much more familiarity with the existing viewshed and a heightened sensitivity to any visual changes within the landscape. Seven KOPs were selected to represent views that would be experienced from sensitive viewpoints. These seven KOPs were also selected for visual simulation to create post-development views. The evaluated KOPs are mapped on **Figure 4.1-1**, *Key Observation Point (KOP) Locations*, and described below in **Table 4.1-1**, *Key Observation Points*. KOPs are single viewpoints that appropriately reflect the potential impact implementation the project may have on sensitive receptors. Sensitive receptors near the project site fall into the following categories: motorists, residents, and recreationists. KOPs were identified based on review of available land use data, preliminary viewshed analysis, and a review of aerial maps.

TABLE 4.1-1: KEY OBSERVATION POINTS

KOP	Location	Representative Sensitive Viewers
1	From southwest bound travel lanes of Oak Creek Road, west of SR-14, looking southwest.	Residents, southwest bound motorists on Oak Creek Road, southbound motorists on SR-14.
2	From southbound travel lanes of Proteus Road, west of SR-58, near 30th Street, looking southwest.	Southbound motorists on SR-58 and Proteus Road.
3	From 57th Street W, south of intersection with Balboa Avenue looking northwest.	Residents, northbound motorists on 57th Street.
4	From northbound travel lanes of Tehachapi Willow Springs Road, south of Trotter Avenue, looking northwest.	Northbound motorists on Tehachapi Willow Springs.
5	From southbound travel lanes of Tehachapi Willow Springs Road, north of Trotter Avenue, looking southeast.	Southbound motorists on Tehachapi Willow Springs.
6	From southbound travel lanes of 110 Street W near Tehachapi Willow Springs Road, looking south.	Residents, southbound motorists on 110 Street W.
7	From the PCT looking southeast toward the project.	Hikers on the PCT.

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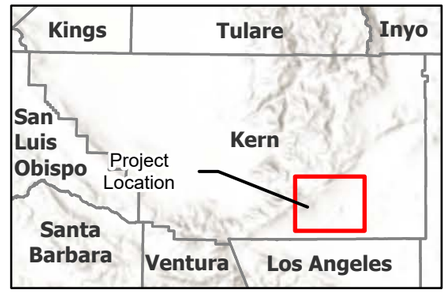
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-1. Key Observation Point (KOP) Locations



- Willow Springs International Raceway
- Residence (R)
- KOP Location
- Windhub High-voltage Substation (Existing)
- SCE Property (500kv)

Proposed Project Features

- Project Site
- Temporary Offsite Laydown Area
- Gen-tie Line (New)
- Medium-voltage/Transmission/ Access Easements

Other Applicant and/or Affiliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

Transportation

- County and Local Roads
- Pacific Crest Trail

*Already approved under separate projects.

N

0 0.5 1 2 Miles

Scale is 1:150,000 when printed at 11"x17"

Not for Construction

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Visual Simulation Preparation

Visual simulations of the project from the identified KOPs were prepared to provide a comparison of pre- and post-project conditions as well as context for qualitative description of the aesthetic changes that would result from development of the project. Photographs were taken during site visits in October 2024 and June 2023 and simulations were prepared by using the assumptions and methodologies listed below in **Table 4.1-2**, *Visual Simulation Methodology and Assumptions*, below.

TABLE 4.1-2: VISUAL SIMULATION METHODOLOGY AND ASSUMPTIONS

Component	Details
Photography from KOPs	Photographs were taken in October 2024 and June 2023. Canon 5D Mark III digital camera with a 35 to 52 mm zoom.
Visual simulation assumptions	Solar modules up to 12 feet in height and separated by approximately 8 to 22 feet. Solar modules on single-axis tracking system were used to show worst-case scenario. Collector substations are included, covering an area of approximately 500 feet by 400 feet each with components up to 75 feet in height. Battery energy storage structure up to 35 feet in height. Gen-tie poles up to 250 feet in height. Fencing is 6 to 8 feet in height.
Methods	Following the data gathering phase, the process begins with a determination of proposed camera locations or KOPs. A site visit is then conducted to take digital photographs from the selected locations. This includes identification of reference points with Global Positioning System (GPS) coordinates and specific fields of vision for each view. Three-dimensional visual simulations from representative KOP photographs were rendered to approximate the visual conditions resulting with project implementation. Using the photographs acquired at each KOP, a three-dimensional physical massing model was created that incorporated the PV scale model, placed in array configurations. The model was then georeferenced and placed on GPS-controlled site-specific photographs to create simulations that demonstrate visual changes from the project.

A comparison of existing views from the KOPs, with visual simulations depicting visible project features, aided in determining potential project-related impacts. The simulations present a representative sample of the existing landscape setting contained within the project site, as well as an illustration of how the project may look from the identified KOPs. Solar arrays are visually similar regardless of the manufacturer. Therefore, the solar arrays shown in the visual simulations are not necessarily identical to those that would be developed on the project site but are similar enough to evaluate potential project impacts to aesthetics.

Rating Visual Quality

"Visual quality" is a measure of a landscape or view's visual appeal. While there are a number of standardized methods for rating visual quality, the "Scenic Quality Rating Criteria" method utilized by the BLM is believed to be superior because it allows the various landscape elements that comprise visual quality to be easily quantified and rated with a minimum of ambiguity or subjectivity.

According to this method, visual quality is rated according to the presence and characteristics of seven key components of the landscape: landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications.

1. The ***landform*** component of the visual quality rating criteria takes into account the fact that topography becomes more interesting visually as it gets steeper or more massive, or more severely or universally sculptured. Outstanding landforms may be monumental (as found in Yosemite Valley), or they may be exceedingly artistic and subtle (such as certain badlands, pinnacles, arches, and other extraordinary formations).
2. The ***vegetation*** component of the rating criteria gives primary consideration to the variety of patterns, forms, and textures created by plant life. Short-lived displays are given consideration when they are known to be recurring or spectacular. Consideration is also given to smaller scale vegetation features that add striking and intriguing detail elements to the landscape (e.g., gnarled or wind beaten trees, Joshua trees, etc.).
3. The ***water*** component of the rating criteria recognizes that visual quality is largely tied to the presence of water in scenery, as it is that ingredient which adds movement or serenity to a scene. The degree to which water dominates the scene is the primary consideration in selecting the rating score for the water component.
4. The ***color*** component of the visual quality rating criteria considers the overall color(s) of the basic components of the landscape (e.g., soil, rock, vegetation, etc.). Key factors that are used when rating the color of scenery are variety, contrast, and harmony.
5. The ***adjacent scenery*** component of the rating criteria takes into account the degree to which scenery outside the view being rated enhances the overall impression of the scenery under evaluation evaluated. The distance of influence for adjacent scenery normally ranges from zero to 5 miles, depending on the characteristics of the topography, the vegetation cover, and other such factors. This factor is generally applied to views that would normally rate very low in score, but the influence of the adjacent high visual quality would enhance the visual quality and raise the score.
6. The ***scarcity*** component of the visual quality rating criteria provides an opportunity to give added importance to one or all of the scenic features that appear to be relatively unique or rare within a region. There may also be cases where a separate evaluation of each of the key factors does not give a true picture of the overall scenic quality of an area. Often, it is a number of not so spectacular elements in the proper combination that produces the most pleasing and memorable scenery – the scarcity factor can be used to recognize this type of area and give it the added emphasis it should have.
7. The ***cultural modifications*** component of the visual quality rating criteria takes into account any man-made modifications to the landform, water, vegetation, and/or the addition of man-made structures. Depending on their character, these cultural modifications may detract from the scenery in the form of a negative intrusion or they may complement and improve the scenic quality of a view.

Based on the above criteria, views are rated numerically and a total score of visual quality can be tabulated. Based on the BLM's rating system, there are a total of 32 points possible. Views that score a total of 19 points or more are typically considered very high in visual quality. Views that score a total of 15 to 19 points are typically considered to have a high level of visual quality. Views that score a total of 12 to

15 points are typically considered to have an above average level of visual quality. Finally, views that score a total of 11 points or less are typically considered to have average visual quality. See **Table 4.1-3**, *Visual Quality Rating System,* for the point values associated with the various criteria.

TABLE 4.1-3: VISUAL QUALITY RATING SYSTEM

Key Factors	Rating Criteria and Score		
Landform	High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops, or severe surface variation or highly eroded formations including major badlands or dune systems; or detail features dominant and exceptionally striking and intriguing such as glaciers.	Steep canyons, mesas, buttes, cinder cones, and drumlins; or interesting erosional patterns or variety in size and shape of landforms; or detail features which are interesting though not dominant or exceptional.	Low rolling hills, foothills, or flat valley bottoms; or few or no interesting landscape features.
	Score 5	**Score** 3	**Score** 1
Vegetation	A variety of vegetative types as expressed in interesting forms, textures, and patterns.	Some variety of vegetation, but only one or two major types.	Little or no variety or contrast in vegetation.
	Score 5	**Score** 3	**Score** 1
Water	Clear and clean appearing, still, or cascading white water, any of which are a dominant factor in the landscape.	Flowing, or still, but not dominant in the landscape.	Absent, or present but not noticeable.
	Score 5	**Score** 3	**Score** 1
Color	Rich color combinations, variety or vivid color; or pleasing contrasts in the soil, rock, vegetation, water or snow fields.	Some intensity or variety in colors and contrast of the soil, rock, and vegetation, but not a dominant scenic element.	Subtle color variations, contrast, or interest; generally muted tones.
	Score 5	**Score** 3	**Score** 1
Influence of Adjacent Scenery	Adjacent scenery greatly enhances visual quality.	Adjacent scenery moderately enhances overall visual quality.	Adjacent scenery has little or no influence on overall visual quality.
	Score 5	**Score** 3	**Score** 1
Scarcity	One of a kind; or unusually memorable, or very rare within region. Consistent chance for exceptional wildlife or wildflower viewing, etc.	Distinctive, though somewhat similar to others within the region.	Interesting within its setting but fairly common within the region.
	Score 5*	**Score** 3	**Score** 1

Key Factors	Rating Criteria and Score		
Cultural Modifications	Modifications add favorably to visual variety while promoting visual harmony.	Modifications add little or no visual variety to the area, and introducing no discordant elements.	Modifications add variety but are very discordant and promote strong disharmony.
	Score 2	**Score 0**	**Score -4**

Source: BLM 1986

Notes:

*A rating greater than 5 can be given but must be supported by written justification.

An important premise of this evaluation method is that views with the most variety and most harmonious composition have the greatest scenic value. Another important concept is that man-made features within a landscape do not necessarily detract from the scenic value. In fact, certain man-made features that complement the natural landscape may actually enhance the visual quality. In making this determination, it is therefore important to assess project effects relative to the "visual character" of the project setting. Visual character is qualitatively defined by four primary components: form, line, color, and texture.

Projects that create a high level of contrast to the existing visual character of a project setting are more likely to generate adverse visual impacts due to visual incompatibility. Conversely, projects that create a low level of contrast to the existing visual character are less likely to generate adverse visual impacts due to inherent visual compatibility. On this basis, project modifications are quantified and evaluated for impact assessment purposes.

By comparing the difference in visual quality ratings from the baseline ("before" condition) to post-project ("after" condition) visual conditions, the severity of project related visual impacts can be quantified. However, in some cases, visual changes caused by projects may actually have a beneficial visual effect and may enhance scenic quality. The following designations are used to rank the significance of impacts according to the pre- and post-project differences in numerical visual quality scores:

- **Potentially Significant Impact:** Any impact that could potentially lower the visual quality of an identified sensitive (greater than average) viewpoint by two points or more, and for which no feasible or effective mitigation can be identified.
- **Less-than-Significant Impact with Mitigation Incorporated:** Any impact that could potentially lower the visual quality of an identified sensitive viewpoint by two points or more but can be reduced to less than two points with mitigation incorporated. Therefore, specific mitigation measures are provided to reduce the impact to a less-than-significant level.
- **Less-than-Significant Impact:** Any impact that could potentially lower the visual quality of an identified sensitive viewpoint by one point or less. In visual impact analysis, a less-than-significant impact usually occurs when a project's visual modifications can be seen but do not dominate, contrast with, or strongly degrade a sensitive viewpoint.
- **No Impact:** The project would not have an impact from an identified sensitive viewpoint. In visual impact analysis, there is no impact if the project's potential visual modifications cannot be seen from an identified sensitive viewpoint.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA Guidelines, to determine if a project could potentially have a significant adverse effect on aesthetic resources.

A project would have a significant impact on aesthetics if it would:

a. Have a substantial adverse effect on a scenic vista;

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

c. In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points) If the project is in an urbanized area, would the project conflicts with applicable zoning and other regulations governing scenic quality; or

d. Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.

Project Impacts

Impact 4.1-1: The project would have a substantial adverse effect on a scenic vista.

Scenic vistas are areas identified or known for high scenic quality, whether from a designated viewpoint or natural outlook, that offer expansive and visually appealing views of natural or cultural landscapes. Scenic vistas may be designated by a federal, state, or local agency. Scenic vistas can also include designated scenic highways, expansive views, and views of public parks, recreational areas, and culturally important locations in which the proposed project could be visible.

There are no local areas that are designated as scenic vistas within the vicinity of the project site. However, the PCT, an important regional recreational facility and long-distance hiking and equestrian trail, is located approximately 2.5 miles northwest of the project site at the nearest segment. Views of the project site from the PCT are limited due to intervening terrain, as depicted in **Figure 4.1-8b,** *KOP 7 – Simulated View from the PCT Looking Southeast Towards the Project* (see **Impact 4.1-3** for figures).

The areas surrounding the project site have been modified by a number of existing anthropogenic developments. Specific developments within the region include the Windhub Solar Project, the SEPV Mojave West Solar Project, the Big Beau Solar Project, the Catalina Solar Project, the Holiday Rock Quarry, and rural residential developments, as discussed in **Section 4.1.2**, *Environmental Setting*. Traversing a modified mountainous and desert landscape, the PCT is separated from the project site by the CalPortland Mojave Plant, Windhub Solar Project, the SEPV Mojave West Solar Project, Oak Creek Road, and numerous wind facilities.

Existing views from the PCT are dominated by mountainous terrain and cultural modifications in the foreground and mountains in the distant background. While implementation of the project would add new human-made elements to views from the PCT, the distance of the project site from the PCT along with intervening topography would allow only limited middle ground to background views of project

components. Located in the valley portion of Eastern Kern's desert region, project solar arrays would be visually subordinate and would not degrade views of the mountain terrain in the foreground and in the background. The vertical lines of project gen-tie poles in the middle ground would blend in with existing transmission lines.

Due to distance, topography, and the developed nature of the landscape visible from the PCT in the general vicinity, project development would not have a substantial adverse effect on existing views from the PCT. Therefore, impacts to scenic vistas affiliated with the PCT would be less than significant and no mitigation would be required.

Mitigation Measures

No mitigation would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.1-2: The project would substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

According to the California Scenic Highway Mapping System, there are no Officially Designated State Scenic Highways within Kern County. The California Scenic Highway Mapping System identifies both SR-58 east of Mojave and SR-14 north of Mojave as eligible State Scenic Highways (Caltrans, 2024). Although they are designated as Eligible for State Scenic Highway status, they have not yet been Officially Designated. The project would not be visible from any Officially Designated State or County Scenic Highway. Therefore, construction and operation of the proposed project would not change the viewshed from any Officially Designated Scenic Highway and no impacts would occur.

The following analysis is provided for informational purposes regarding the sections of eligible scenic highways near the project site. As stated previously, from north of Mojave to the Inyo County Line, SR-14 is an Eligible State Scenic Highway. Due to the presence of clustered development around the community of Mojave, distance, and intervening terrain and vegetation, views of the project site would be mostly obscured from the eligible scenic segment of SR-14. Please see **Figure 4.1-2,** *KOP 1 – Existing and Simulated View from Oak Creek Road Looking Southwest,* which provides existing and simulated views from a point near SR-14. Project fencing and solar arrays would display a low vertical profile and would not obstruct or interrupt available views of mountainous terrain or other scenic features. Where visible, project facilities would appear as a continuation of existing solar facilities and electrical distribution infrastructure and impacts would be less than significant.

Views of the project are potentially available from SR-58. Please see **Figure 4.1-3,** *KOP 2 – Existing Simulated View from Proteus Road Looking Southwest,* which provides existing and simulated views from a point near SR-58. The eligible scenic segment of SR-58 within the County is approximately 31 miles in length from SR-14 near Mojave east to Boron. Project fencing and solar arrays would display a low vertical profile and, therefore, components of the project would not substantially alter existing long-distance views of the mountain terrain and valley landscape visible from eligible scenic segments of SR-58. In addition to solar arrays and fencing, the easternmost onsite collector substation, energy storage facility, and gen-tie would be potentially visible from SR-58. Although the easternmost onsite collector substation (components up to 75 feet high), the energy storage facility building (up to 35 feet high), and gen-tie poles (poles up to

250 feet high) would have greater vertical prominence, these components cover a relatively small area and would blend into the visual landscape as part of the surrounding electrical/transmission facilities and would not substantially obstruct or interrupt available views of mountainous terrain or other scenic features. Impacts to views from SR-58 would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

No impact.

Impact 4.1-3: The project would, in nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage points) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.

As described in **Chapter 3**, *Project Description* and above under **Section 4.1.2**, *Environmental Setting*, existing development in the project vicinity includes single-family homes, rural access roads, scattered rural residences, wind and solar energy, electrical transmission infrastructure, and scattered commercial uses. As the project is located within a nonurbanized area, the analysis below will focus on whether development of the project would substantially change the existing visual character or quality of public views of the site and its surroundings.

Construction

Construction activities associated with the project would create temporary changes in views of the project site. Furthermore, construction activities would introduce heavy equipment, including backhoes, compactors, tractors, and trucks, into the viewshed of all viewer groups. During construction, there would be multiple crews working on the site with various equipment and vehicles, including special vehicles for transporting the solar modules and other equipment. The influx of construction vehicles, equipment, and worker vehicles would create visible contrast within the rural and primarily undeveloped setting of the project site. However, vehicles, equipment, and construction activity would be temporary in nature (approximately 34 months) and would be limited to active areas of construction as opposed to the entirety of the project site at the same time.

Local viewers are likely accustomed to seeing heavy machinery associated with other construction activities in the area. In addition, visual effects associated with presence of construction vehicles, equipment, and workers in the project area landscape would be limited in duration and would be spatially limited at any given time to the active area of construction. Therefore, potential impacts to existing visual character or quality of the project site and surrounding area during construction of the project would be less than significant.

Operation

In order to determine whether the project would substantially degrade the existing visual quality of the project site, this analysis compares the existing visual setting with visual simulations of the post-project visual conditions. As described above, seven KOPs were selected for visual simulation. These KOPs are representative of views that would be experienced from numerous sensitive receptor locations in the project vicinity.

Visual simulations are provided in **Figures 4.1-2** through **4.1-8**. KOPs are described in **Table 4.1-1,** *Key Observation Points*. Potential visual impacts associated with the project, once operational, would vary by viewer location and are discussed below by KOP. The rating system and impact methodology are discussed in the "Rating Visual Quality" section above.

The project would introduce solar arrays covering most of the project site. Storage yards, dirt or gravel access roads, collector substations, a switchyard, battery energy storage systems and perimeter fencing would be visible to residents, workers at nearby facilities, and travelers on surrounding roadways for an estimated lifespan up to approximately 35 years. Roads, driveways, and site entrances would be constructed in accordance with Kern County improvement standards, would be consistent with existing roadways in the area, and would not greatly alter the visual landscape. Fences would be approximately 6 to 8 feet tall. In addition, generation-tie (gen-tie) lines are proposed to connect the project to the existing Windhub Substation. Project facilities would introduce elements into the project site that could be visible to sensitive viewers if viewers are in proximity to these features and if terrain, vegetation, or existing structures, do not obscure views of these features.

Solar modules for the proposed project would be provided on a fixed-mount array system and/or a single-axis tracker system. Depending on the type of technology (modules) used, the panels would measure approximately 4.5 feet wide and 8 feet long with the total height of the panel system, measured from the ground surface, approximately 9 to 12 feet. The degree of visual change and potential impact on scenic quality that would result from the project can be measured by subtracting the score for project conditions from the score for existing conditions. The difference in the scenic quality scores represents the degree of visual change to existing scenic quality. Higher differential values indicate greater impacts, while differential values near zero indicate little to no impact. A summary of scenic quality ratings at the KOPs for existing conditions and proposed project conditions based on the visual simulations, as well as the score differences, are provided in **Tables 4.1-4,** *Visual Quality Rating Analysis – KOP 1,* through **4.1-10,** *Visual Quality Rating Analysis – KOP 7,* which discuss the particular characteristics of each KOP and changes in the visual environment.

KOP 1. Figure 4.1-2, *KOP 1 - Existing and Simulated Views from Oak Creek Road Looking Southwest,* shows views from the southwest bound travel lanes of Oak Creek Road, west of SR-14, looking southwest. This KOP reflects views that would be experienced by area residents, southwest-bound motorists on Oak Creek Road, and southbound motorists on SR-14. At KOP 1, the project is located approximately 5.7 miles away. The pre-development views from KOP 1 show that the landscape is relatively flat in the foreground and middle ground and low mountains in the background (see **Figure 4.1-2a**). Visible development within this viewpoint includes residential development and roadways in the foreground and renewable wind energy facilities and transmission towers in the middle and background. The post-development views of the project from KOP 1 (see **Figure 4.1-2b** and **4.1-2c**) would be mostly obscured due to intervening structures and vegetation. As discussed in **Table 4.1-4**, *Visual Quality Rating Analysis – KOP 1,* the pre-development score is 11 (average visual quality class), and the post-development score is 11 (average visual quality

class); therefore, the view would remain in the same visual class. With no change in scores, potential visual impacts from KOP 1 would be less than significant.

Decommissioning

The project has an anticipated operational life of up to 35 years, after which the project proponent may choose to update site technology and recommission, or to decommission the site and remove the systems and their components. Decommissioning and reclamation activities would adhere to the requirements of the appropriate governing authorities as well as all applicable local, state, and federal requirements and BMPs. Decommissioning and reclamation activities would be similar in nature and duration as those associated with construction activities. It is anticipated that during project decommissioning, project components would be removed from the site. Temporary changes are associated with the removal of systems and components associated with the Project. These visual impacts would be short-term in nature and are not considered to be significant. Reclamation activities will be undertaken to bring the project site back to similar conditions as those that existed prior to construction of the project; the goal of reclamation activities is to return the land to a condition in which natural vegetation can successfully re-establish. Therefore, the project will have a less than significant impact associated with decommissioning.

TABLE 4.1-4: VISUAL QUALITY RATING ANALYSIS – KOP 1

Sensitive Receptors: Residents, southwest bound motorists on Oak Creek Road, southbound motorists on SR-14.

Pre-development and post-development conditions are depicted in **Figure 4.1-2**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Landform	3	3	0	Less than Significant
Explanation:	Relatively flat terrain in the foreground and middle ground with low, tan mountains in the distance.	Project development would result in slight modification of the area's topography but would not be noticeable from the KOP.		
Detail:	The pre- and post-development view is dominated by flat valley terrain in the foreground and middle ground with distant mountains in the background. Views of the project's slight modification of the area's topography would not be visible in the background. As the project will involve minimal overall grading, potential impacts to landforms would be less than significant.			
Vegetation	3	3	0	Less than Significant
Explanation:	Low, mounded desert shrub vegetation dotted with occasional ornamental trees; similar species present in the visible landscape.	Views of project development and changes to onsite vegetation would be obscured by distance and intervening structures and vegetation, would not attract attention or interrupt views of existing off-site desert shrub or ornamental vegetation.		
Detail:	The visual effects of vegetation removal onsite would generally be obscured by distance and intervening structures and vegetation. Therefore, potential aesthetic impacts associated with vegetation removal would be less than significant.			
Water	0	0	0	No Impact
Explanation:	No surface water features are visible on the project site or in the vicinity.	Project development would not introduce water to or remove water from the visible landscape.		
Detail:	Surface water features are not included in pre- or post-development views. No visual impacts associated with surface water features would occur.			

Sensitive Receptors: Residents, southwest bound motorists on Oak Creek Road, southbound motorists on SR-14.

Pre-development and post-development conditions are depicted in **Figure 4.1-2**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Color	2	2	0	Less than Significant
Explanation:	Shades of green, brown, and tan are displayed by soil and vegetation in the foreground and middle ground. Low tan mountains rise from the valley. Development colors are prominent in the foreground and middle ground: grey (roadway, buildings, light poles), white (wind turbines, buildings), tan (buildings) and brown (electrical transmission line poles).	Solar arrays would display low and dark horizontal bands in the background. These colors would contrast with the muted earth tones in the foreground and middle ground; however, due to distance and intervening vegetation and structures, this contrast would be barely visible.		
Detail:	Muted earth tones of green, brown, and tan dominate the foreground and middle ground. Visible solar arrays would introduce a low and dark horizontal band of color to the middle ground that would generally be obscured by distance and intervening vegetation and structures and easy to overlook. Background colors would not be altered or substantially obstructed from view. Potential impacts associated with color would be less than significant.			
Adjacent Scenery	3	3	0	No Impact
Explanation:	Background mountains to the west enhance the view.	Mountains would remain visible and would not be obstructed by project components.		
Detail:	The project would not modify, obstruct, or interrupt views of adjacent scenery. No impacts to views of adjacent scenery would occur.			
Scarcity	2	2	0	Less than Significant
Explanation:	Views of the mountains are distinctive though similar and fairly common within the region.	Mountains would remain visible. Solar arrays, fencing, gen-tie components, and other project components, would not block hills or mountains from view.		
Detail:	Existing views offered from Oak Creek Road and SR-14 are distinctive though typical of the area. Visible features are not unique or unusual. Project development would not block views of hills or mountains. Potential impacts associated with scarcity would be less than significant.			

Sensitive Receptors: Residents, southwest bound motorists on Oak Creek Road, southbound motorists on SR-14.

Pre-development and post-development conditions are depicted in **Figure 4.1-2**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Cultural Modifications	-2	-2	0	Less than Significant
Explanation:	Cultural modifications include paved roads, electrical transmission lines, light poles, wind energy and solar facilities, and buildings.	The project would introduce manufactured elements to the background; however, project components would be barely visible from this viewpoint and would not attract attention.		
Detail:	Existing cultural modifications are visible and prominent. The project would introduce solar development and ancillary components to the background; however, these project components would be barely visible from this viewpoint and would not attract attention. Potential visual impacts associated with cultural modifications would be less than significant.			
Totals:	11	11	0	Less than Significant

KEY OBSERVATION POINT 1

OAK CREEK ROAD LOOKING SOUTHWEST

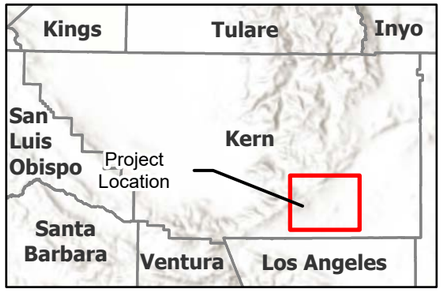
EXISTING VIEW



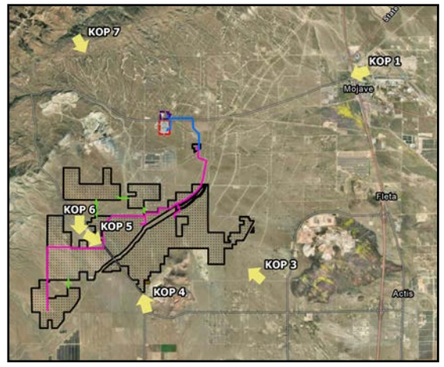
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-2a, KOP 1 - Existing View from Oak Creek Road Looking Southwest



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 1
Time of photograph: 10:08 AM
Date of photograph: 10/11/2024
Weather condition: Sunny
Viewing direction: Southwest
Latitude: 35.058287° N
Longitude: -118.178037° W

Distance to the Project:
5.9 miles

Camera Information:
Nikon Z7, Focal Length 50mm

Not for Construction

KEY OBSERVATION POINT 1

OAK CREEK ROAD LOOKING SOUTHWEST

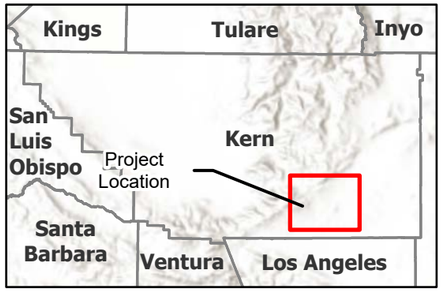
SIMULATED VIEW



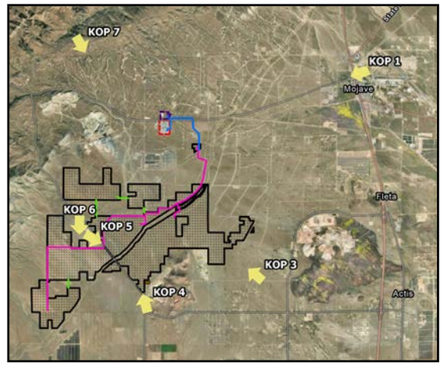
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-2b, KOP 1 - Simulated View from Oak Creek Road Looking Southwest



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 1
Time of photograph: 10:08 AM
Date of photograph: 10/11/2024
Weather condition: Sunny
Viewing direction: Southwest
Latitude: 35.058287° N
Longitude: -118.178037° W

Distance to the Project:
5.9 miles

Camera Information:
Nikon Z7, Focal Length 50mm

Not for Construction

KEY OBSERVATION POINT 1

OAK CREEK ROAD LOOKING SOUTHWEST

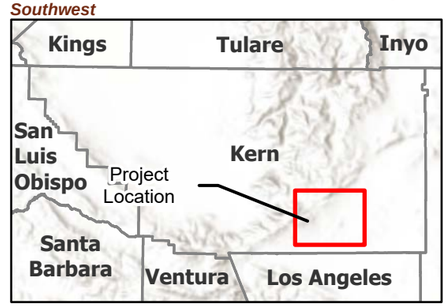
SIMULATED VIEW



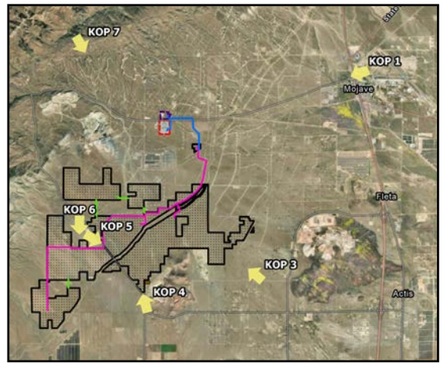
Discovery Solar PV and Storage Project

Kern County, CA

***Figure 4.1-2c, KOP 1** - Simulated View with Visible Project Indicators from Oak Creek Road Looking Southwest*



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 1
Time of photograph: 10:08 AM
Date of photograph: 10/11/2024
Weather condition: Sunny
Viewing direction: Southwest
Latitude: 35.058287° N
Longitude: -118.178037° W

Distance to the Project:
5.9 miles

Camera Information:
Nikon Z7, Focal Length 50mm

Not for Construction

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KOP 2. Figure 4.1-3, *KOP 2 - Existing and Simulated Views from Proteus Road Looking Southwest* shows views from Proteus Road and SR-58 looking southwest. This KOP reflects views that SR-58 motorists would experience looking southwest. The pre-development views from KOP 2 depict broad and flat terrain covered with mounded green and tan shrubs and low grasses in the foreground and middle ground (see **Figure 4.1-3b**). Buildings associated with the community of Mojave are visible in the middle ground of this viewpoint. Renewable wind energy facilities and low brown mountains are visible in the distance. The post-development view of the project from KOP 2 (see **Figure 4.1-3b** and **4.1-3c**) would be mostly obscured due to intervening structures and vegetation, this line is barely visible. In addition, where the contrast can be seen, it would not attract attention. As discussed in **Table 4.1-5**, *Visual Quality Rating Analysis – KOP 2*, the pre-development score is 11 (average visual quality class), and the post-development score is 11 (average visual quality class); therefore, the view would remain in the same visual class. With no change in scores, potential visual impacts from KOP 2 would be less than significant.

TABLE 4.1-5: VISUAL QUALITY RATING ANALYSIS – KOP 2

Sensitive Receptor: Motorists on Proteus Road and SR-58.

Pre-development and post-development conditions are depicted in **Figure 4.1-3**.

Rated Feature	Pre-Development Score	Post-Development Score	Difference in Scores	Impact Significance
Landform	3	3	0	Less than Significant
Explanation:	Broad and flat terrain in the foreground and middle ground with low, brown mountains in the distance.	Project development would result in slight modification of the area's topography but would not be noticeable from this KOP.		
Detail:	The pre- and post-development view is dominated by flat valley terrain in the foreground and middle ground with distant mountains in the background. Views of the project's slight modification of the area's topography would not be visible in the background. As the project will involve minimal overall grading, potential impacts to landforms would be less than significant.			
Vegetation	3	3	0	Less than Significant
Explanation:	Low and mounded desert shrub vegetation covers the foreground and middle ground terrain.	Views of project development and changes to onsite vegetation would be obscured by distance and intervening structures and vegetation, would not attract attention or interrupt views of existing off-site desert shrub vegetation.		
Detail:	The visual effects of vegetation removal would generally be obscured by distance and intervening structures and vegetation. Therefore, potential visual impacts associated with vegetation removal would be less than significant.			
Water	0	0	0	No Impact

Sensitive Receptor: Motorists on Proteus Road and SR-58.
Pre-development and post-development conditions are depicted in **Figure 4.1-3**.

Rated Feature	Pre-Development Score	Post-Development Score	Difference in Scores	Impact Significance
Explanation:	No surface water features are visible on the project site or in the vicinity.	Project development would not introduce water to or remove water from the visible landscape.		
Detail:	Surface water features are not included in pre- or post-development views. No visual impacts associated with surface water features would occur.			
Color	2	2	0	Less than Significant
Explanation:	Shades of green, brown, and tan are displayed by soil and vegetation, which dominate the foreground and middle ground. Low brown mountains rise from the valley. Development is grey (highway, buildings, solar arrays), white (wind turbines, buildings), and brown (electrical transmission line poles).	Solar arrays would display a low dark horizontal band in the background. These colors would contrast with the muted earth tones in the foreground and middle ground; however, due to distance would be barely visible.		
Detail:	Muted earth tones of green, brown, and tan dominate the foreground and middle ground. Solar arrays would introduce a low and dark horizontal band of color to the middle ground that would be easy to overlook. Background colors would not be altered or substantially obstructed from view. Potential impacts associated with color would be less than significant.			
Adjacent Scenery	2	2	0	No Impact
Explanation:	Views of the flat desert terrain are enhanced by mountains to the west.	Mountains would remain visible. Visible solar arrays and fencing would not block mountains from view.		
Detail:	The project would not modify, substantially obstruct, or interrupt views of adjacent scenery. No impacts to views of adjacent scenery would result.			
Scarcity	1	1	0	Less than Significant
Explanation:	Views of the mountains are distinctive though similar and fairly common within the region.	Mountains would remain visible. Solar arrays, fencing, gen-tie components, and other project components would not block hills or mountains from view.		
Detail:	The existing view of the mountain from SR-58 is distinctive to this viewpoint. Visible features are not unique or unusual. Project development would not block views of hills or mountains. Potential impacts associated with scarcity would be less than significant.			

Sensitive Receptor: Motorists on Proteus Road and SR-58.

Pre-development and post-development conditions are depicted in **Figure 4.1-3**.

Rated Feature	Pre-Development Score	Post-Development Score	Difference in Scores	Impact Significance
Cultural Modifications	0	0	0	Less than Significant
Explanation:	Cultural modifications include electrical transmission lines, wind energy and solar facilities, and buildings.	The project would introduce manufactured elements to the background; however, project components would be barely visible from this viewpoint and would not attract attention.		
Detail:	To the south of SR-58, the landscape has fewer existing cultural modifications. However, existing wind turbines to the west in the background are prominent. The desert vegetation and the flat to mountainous terrain are prominent, and the view is open and long. The project would introduce solar development and ancillary components to the background; however, these project components would be barely visible from this viewpoint and would not attract attention. Potential visual impacts associated with cultural modifications would be less than significant.			
Totals:	11	11	0	Less than Significant

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KEY OBSERVATION POINT 2

PROTEUS ROAD LOOKING SOUTHWEST

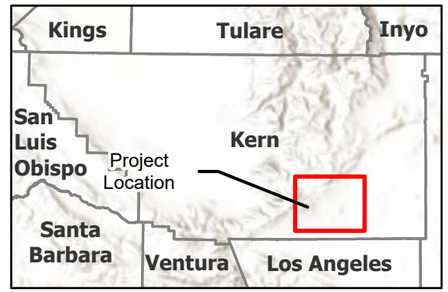
EXISTING VIEW



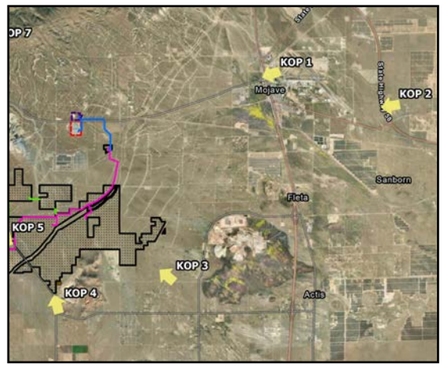
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-3a, KOP 2 - Existing View from Proteus Road Looking Southwest



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 2
Time of photograph: 10:44 AM
Date of photograph: 10/11/2024
Weather condition: Sunny
Viewing direction: Southwest
Latitude: 35.044926° N
Longitude: -118.112070° W

Distance to the Project:
7.6 miles

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

KEY OBSERVATION POINT 2

PROTEUS ROAD LOOKING SOUTHWEST

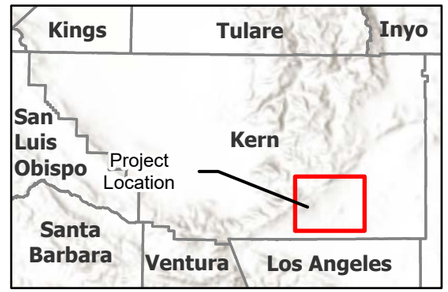
SIMULATED VIEW



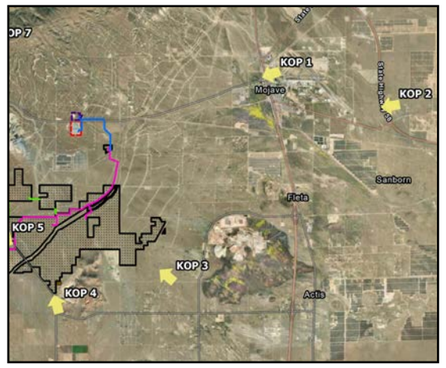
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-3b, KOP 2 - Simulated View from Proteus Road Looking Southwest



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 2
Time of photograph: 10:44 AM
Date of photograph: 10/11/2024
Weather condition: Sunny
Viewing direction: Southwest
Latitude: 35.044926° N
Longitude: -118.112070° W

Distance to the Project:
7.6 miles

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

KEY OBSERVATION POINT 2

PROTEUS ROAD LOOKING SOUTHWEST

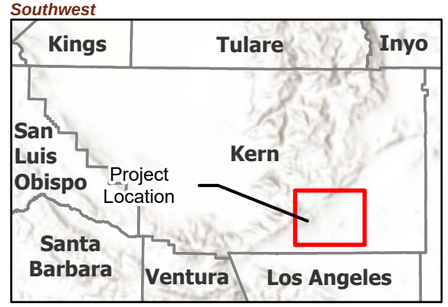
SIMULATED VIEW



Discovery Solar PV and Storage Project

Kern County, CA

***Figure 4.1-3c, KOP 2** - Simulated View with Visible Project Indicators from Proteus Road Looking Southwest*



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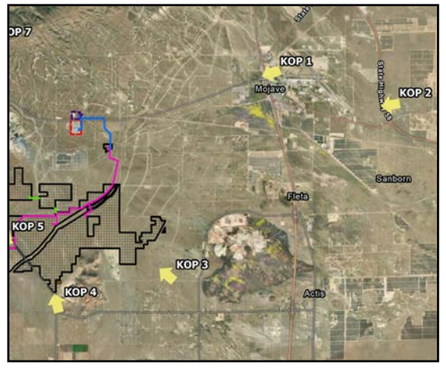

PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 2
Time of photograph: 10:44 AM
Date of photograph: 10/11/2024
Weather condition: Sunny
Viewing direction: Southwest
Latitude: 35.044926° N
Longitude: -118.112070° W

Distance to the Project:
7.6 miles

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

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KOP 3. Figure 4.1-4, *KOP 3 - Existing and Simulated Views from 57th Street W Looking Northwest*, shows views from the northbound travel lanes of 57th Street W looking northwest. This KOP reflects views that northbound motorists and residents located nearby would experience. The pre-development views from KOP 3 depict relatively flat terrain with mountains in the background (see **Figure 4.1-4a**). Dense shrubs are abundant in the foreground and middle ground terrain. Yucca and Joshua trees dot the foreground and middle ground. The post-development view from KOP 3 (see **Figure 4.1-4b** and **4.1-4c**) would include faint modifications low in the middle ground landscape. However, due to intervening vegetation, only a small portion of the solar arrays would be visible. In addition, where the contrast can be seen, it would not attract attention. As discussed in **Table 4.1-6**, *Visual Quality Rating Analysis – KOP 3*, the pre-development score is 10 (average visual quality class), and the post-development score is 10 (average visual quality class); therefore, the view would remain in the same visual class. With no change in scores, potential visual impacts from KOP 3 are less than significant.

TABLE 4.1-6: VISUAL QUALITY RATING ANALYSIS – KOP 3

Sensitive Receptor: Nearby Residents, Motorists traveling northbound on 57th Street W.
Pre-development and post-development conditions are depicted in **Figure 4.1-4**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Landform	2	2	0	Less than Significant
Explanation:	Flat terrain in the foreground and middle ground with mountains in the background.	Project development would result in slight modification of the area's topography but would not be noticeable from the KOP.		
Detail:	The pre- and post-development view is dominated by flat valley terrain in the foreground and middle ground with distant mountains in the background. Views of the project's slight modification of the area's topography would not be visible due to intervening vegetation. As the project will involve minimal overall grading, potential impacts to landforms would be less than significant.			
Vegetation	2	2	0	Less Than Significant
Explanation:	Low and mounded desert shrubs dotted with Yuka and Joshua trees.	Project development and changes to onsite vegetation would minimally be visible and where visible would not attract attention or interrupt views of low and mounded shrub vegetation covering the desert terrain.		
Detail:	The visual effects of vegetation removal would generally be obscured by intervening vegetation. Therefore, potential aesthetic impacts associated with vegetation would be less than significant.			

Sensitive Receptor: Nearby Residents, Motorists traveling northbound on 57th Street W.
Pre-development and post-development conditions are depicted in **Figure 4.1-4**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Water	0	0	0	No Impact
Explanation:	No surface water features are visible on the project site or in the vicinity.	Project development would not introduce water to or remove water from the visible landscape.		
Detail:	Surface water features are not included in pre- or post-development views. No visual impacts associated with surface water features would occur.			
Color	2	2	0	Less than Significant
Explanation:	Foreground and middle-ground terrain and vegetation display shades of tan, green, and brown. Mountains in the background includes shades of brown and tan. Development is grey (transmission towers) and white (wind turbines).	The grey color of solar arrays would contrast with the drab tones displayed by terrain and vegetation in the foreground However, this color would be consistent with the existing transmission towers and due to intervening vegetation, would be barely visible.		
Detail:	Transmission lines and wind turbines are visible throughout the middle ground. Shades of tan, green, and brown associated with vegetation are visible in the foreground and middle ground. Solar arrays would display a grey color that would contrast with the characteristic color of the vegetation; however, they would be consistent with the transmission towers and due to intervening vegetation, would barely be visible. Potential impacts would be less than significant.			
Adjacent Scenery	3	3	0	No Impact
Explanation:	Views are enhanced by mountains in the background.	Mountains would remain visible. Solar arrays, fencing, gen-tie components, and other project components, would not block hills or mountains from view.		
Detail:	Visibility of mountains in the background would not be altered by project development. No impacts to views of adjacent scenery would occur.			
Scarcity	2	2	0	No Impact
Explanation:	Mountains are visible from this viewpoint, though somewhat obscured by existing wind turbines and transmission towers.	As small portion of the solar arrays would barely be visible from KOP 3 and would not disrupt views of the mountains.		
Detail:	The project would not disrupt views of the mountains. Visible features are not unique or unusual. Project development would not block views of hills or			

Sensitive Receptor: Nearby Residents, Motorists traveling northbound on 57th Street W. Pre-development and post-development conditions are depicted in **Figure 4.1-4**.				
Rated Feature	**Pre-Development Condition**	**Post-Development Score**	**Difference in Scores**	**Impact Significance**
	mountains. Potential impacts associated with scarcity would be less than significant.			
Cultural Modifications	-1	-1	0	Less than Significant
Explanation:	Cultural modifications include transmission towers and wind turbines.	Solar arrays and associated structures would be introduced to the middle ground but would be faintly visible due to intervening vegetation.		
Detail:	Existing cultural modifications include transmission towers and wind turbines. The project would introduce solar development and ancillary components to the middle ground. Solar arrays, the gen-tie and structures and other project components would not attract attention, and where visible, these project components are faintly visible from this viewpoint. Potential visual impacts associated with cultural modifications would be less than significant.			
Totals:	10	10	0	Less Than Significant

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KEY OBSERVATION POINT 3

57TH STREET W LOOKING NORTHWEST

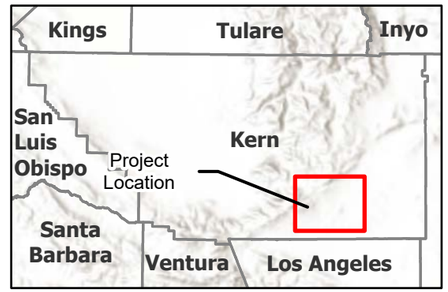
EXISTING VIEW



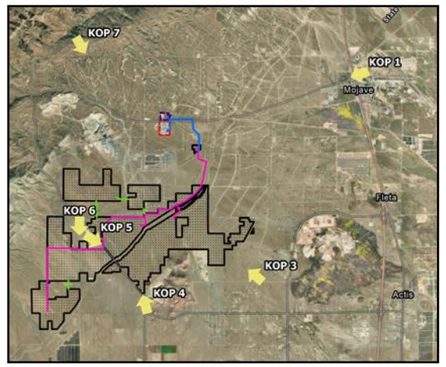
Discovery Solar PV and Storage Project

Kern County, CA

***Figure 4.1-4a, KOP 3 -** Existing View From Northbound Lanes of 57th Street W Looking Northwest*



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 3
Time of photograph: 11:24 AM
Date of photograph: 10/11/2024
Weather condition: Sunny
Viewing direction: Northwest
Latitude: 34.970941° N
Longitude: -118.234431° W

Distance to the Project:
0.8 miles

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

KEY OBSERVATION POINT 3

57TH STREET W LOOKING NORTHWEST

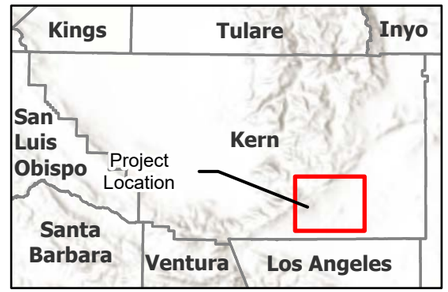
SIMULATED VIEW



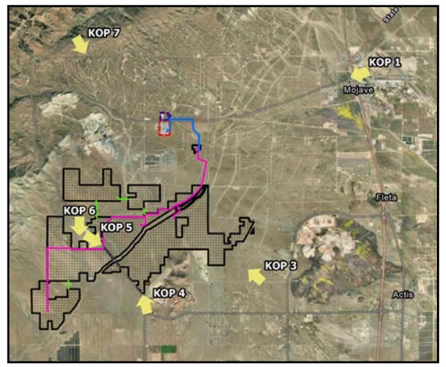
Discovery Solar PV and Storage Project

Kern County, CA

***Figure 4.1-4b, KOP 3** - Simulated View From Northbound Lanes of 57th Street W Looking Northwest*



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 3
Time of photograph: 11:24 AM
Date of photograph: 10/11/2024
Weather condition: Sunny
Viewing direction: Northwest
Latitude: 34.970941° N
Longitude: -118.234431° W

Distance to the Project:
0.8 miles

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

KEY OBSERVATION POINT 3

57TH STREET W LOOKING NORTHWEST

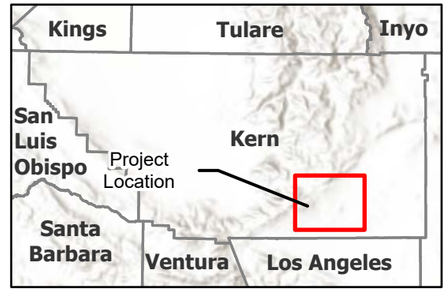
SIMULATED VIEW



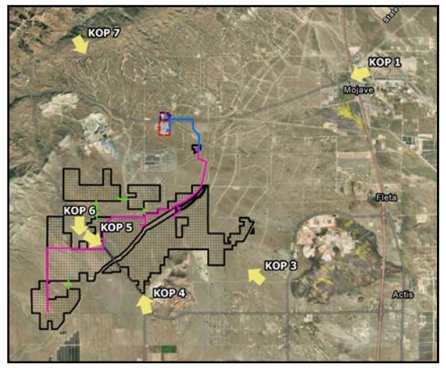
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-4c, KOP 3 - ***Simulated View with Visible Project Indicators From Northbound Lanes of 57th Street W Looking Northwest***



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 3
Time of photograph: 11:24 AM
Date of photograph: 10/11/2024
Weather condition: Sunny
Viewing direction: Northwest
Latitude: 34.970941° N
Longitude: -118.234431° W

Distance to the Project:
0.8 miles

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

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KOP 4. Figure 4.1-5, *KOP 4 - Existing and Simulated Views from Tehachapi Willow Springs Road Looking Northwest,* shows views from Tehachapi Willow Springs Road, south of Trotter Road, looking northwest. This KOP reflects views that motorists traveling north on Tehachapi Willow Springs Road would experience. The pre-development views from KOP 4 depict relatively flat terrain with dense shrubs in the foreground and middle ground terrain (see **Figure 4.1-5a**). Yucca and Joshua trees dot the foreground and middle ground. Background views include mountains. The post-development view from KOP 4 (see **Figure 4.1-5b**) would include the low and dark horizontal line displayed by rows of solar arrays. Solar arrays would not block the long view across the valley terrain to the north but would create noticeable vegetation and color contrast. The introduction of project gen-tie poles would increase the volume of straight, thin, vertical features present in the view. The contrast introduced by the project would attract attention and would not be overlooked. As discussed in **Table 4.1-7**, *Visual Quality Rating Analysis – KOP 4*, the pre-development score is 12 (above average visual quality class), and the post-development score is 7 (average visual quality class); therefore, visual class of the view would be reduced. Since the difference in scores would be 5 points, visual impacts from KOP 4 are potentially significant.

TABLE 4.1-7: VISUAL QUALITY RATING ANALYSIS – KOP 4

Sensitive Receptor: Motorists on Tehachapi Willow Springs Road, south of Trotter Road.
Pre-development and post-development conditions are depicted in **Figure 4.1-5**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Landform	3	3	0	Less Than Significant
Explanation:	Flat terrain in the foreground and middle ground and mountains in the background.	Project development would result in slight modification of the area's topography but would not draw attention.		
Detail:	The pre- and post-development view is dominated by flat valley terrain in the foreground and middle ground with mountains in the background. Views of the project would be visible in the foreground and middle ground. However, as the project will involve minimal overall grading, impacts to landforms would be less than significant.			
Vegetation	3	1	2	Less Than Significant with Mitigation

Sensitive Receptor: Motorists on Tehachapi Willow Springs Road, south of Trotter Road.
Pre-development and post-development conditions are depicted in **Figure 4.1-5**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Explanation:	Mounded desert shrubs cover the foreground and middle ground terrain. Yucca and Joshua trees dot the foreground and middle ground.	Project development would require removal of some vegetation at the project site; however, natural vegetation would be maintained where possible, such as immediately adjacent to Tehachapi Willow Springs Road, and temporarily impacts areas of the site would be revegetated in compliance with **Mitigation Measure MM 4.1-3**, Landscape Revegetation and Restoration Plan.		
Detail:	While project development would minimize vegetation removal to the extent feasible, permanent facilities would replace some vegetation at the project site. The visual effects of vegetation removal would be reduced by **Mitigation Measure MM 4.1-3**, Landscape Revegetation and Restoration Plan, which involves limiting vegetation removal and planting native vegetation. Therefore, with implementation of **Mitigation Measure MM 4.1-3**, aesthetic impacts associated with vegetation removal would be less than significant.			
Water	0	0	0	No Impact
Explanation:	No surface water features are visible on the project site or in the surrounding area.	Project development would not introduce water to or remove water from the visible landscape.		
Detail:	Surface water features are not included in pre- or post-development views. No visual impacts associated with water features would occur.			
Color	2	1	1	Less Than Significant with Mitigation

Sensitive Receptor: Motorists on Tehachapi Willow Springs Road, south of Trotter Road.
Pre-development and post-development conditions are depicted in **Figure 4.1-5**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Explanation:	Foreground and middle-ground vegetation and terrain display shades of tan, green, and brown. The mountains in the background are tan and brown. Grey roadway is prominent in the foreground and white wind turbines are visible throughout the middle ground and background.	Grey solar arrays would contrast with the drab tones displayed by terrain and vegetation in the foreground and middle ground. This color would be consistent with the grey of the roadway.		
Detail:	Shades of tan, green, and brown associated with terrain and vegetation are visible in the foreground and middle ground. Project solar arrays would display a grey color that would be consistent with the grey of the roadway but would contrast with the characteristic color of the terrain and vegetation. The contrast would be noticeable and attract attention, but the contrast would be reduced by **Mitigation Measures MM 4.1-2**, Proposed Color Scheme and Treatment Plan, and **MM 4.1-3**, Landscape Revegetation and Restoration Plan, which involves limiting vegetation removal and planting native vegetation. Therefore, with implementation of **Mitigation Measures MM 4.1-2** and **MM 4.1-3**, impacts to color would be less than significant.			
Adjacent Scenery	2	2	0	Less than Significant
Explanation:	Views are enhanced by the mountains in the background.	Mountains would remain visible. Project components would not block mountains from view.		
Detail:	Visibility of mountains would not be altered by project development. Potential impacts would be less than significant.			
Scarcity	2	2	0	Less than Significant
Explanation:	Mountains are visible from this viewpoint.	Solar arrays, the collector substations, energy storage facilities, and gen-tie would be visible from Tehachapi Willow Springs Road and would modify the existing, landscape view in this area, but would not disrupt views of the mountains.		
Detail:	The project would not disrupt views of mountains, and these views would continue to be available. Potential impacts would be less than significant.			
Cultural Modifications	0	-2	2	Potentially Significant

Sensitive Receptor: Motorists on Tehachapi Willow Springs Road, south of Trotter Road.
Pre-development and post-development conditions are depicted in **Figure 4.1-5**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Explanation:	Cultural modifications include paved roads and wind turbines.	Solar arrays and associated infrastructure would be introduced to the foreground and middle ground.		
Detail:	Existing cultural modifications include paved roads and wind turbines. The project would introduce solar development and ancillary components to the foreground and middle ground. Solar arrays, gen-tie poles and other project components would attract attention and create form, line, and color contrasts. The visual effects of the contrast would be reduced by **Mitigation Measure MM 4.1-3**, Landscape Revegetation and Restoration Plan, which involves limiting vegetation removal and planting native vegetation, especially near roadways. However, the visual contrasts would remain discordant and promote disharmony; therefore, potential visual impacts associated with cultural modifications would be significant.			
Totals:	12	7	5	Potentially Significant

KEY OBSERVATION POINT 4

TEHACHAPI WILLOW SPRINGS ROAD LOOKING NORTHWEST

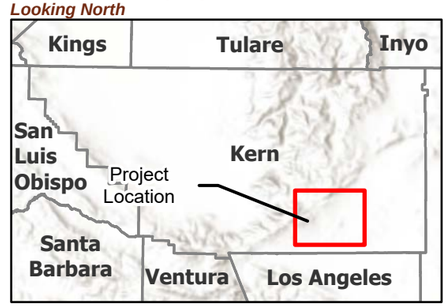
EXISTING VIEW



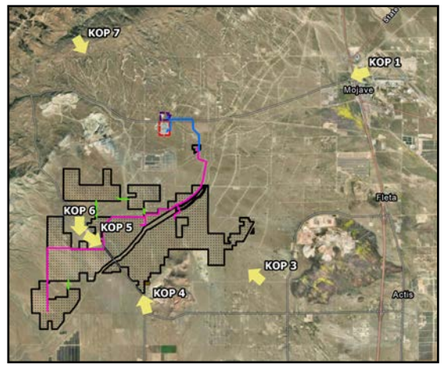
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-5a, KOP 4 - Existing View from Tehachapi Willow Springs Road, south of Trotter Road Looking North



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 4
Time of photograph: 11:55 AM
Date of photograph: 10/11/2024
Weather condition: Sunny
Viewing direction: Northwest
Latitude: 34.959210° N
Longitude: -118.292692° W

Distance to the Project Fence: 260 ft

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

KEY OBSERVATION POINT 4

TEHACHAPI WILLOW SPRINGS ROAD LOOKING NORTHWEST

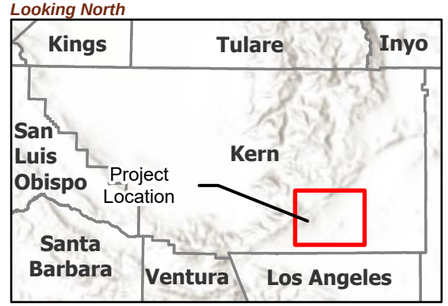
SIMULATED VIEW



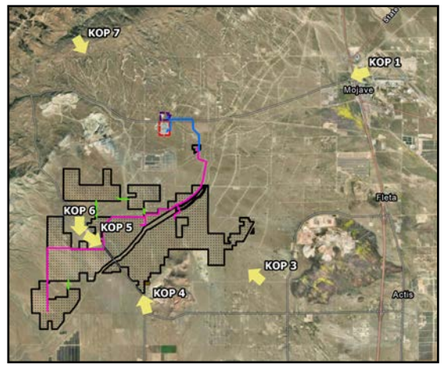
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-5b, KOP 4 - Simulated View from Tehachapi Willow Springs Road, south of Trotter Road Looking North



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 4
Time of photograph: 11:55 AM
Date of photograph: 10/11/2024
Weather condition: Sunny
Viewing direction: Northwest
Latitude: 34.959210° N
Longitude: -118.292692° W

Distance to the Project Fence: 260 ft

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

KOP 5. Figure 4.1-6, *KOP 5 - Existing and Simulated Views from Tehachapi Willow Springs Road Looking Southeast*, shows views from Tehachapi Willow Springs Road, north of Trotter Road, looking southeast. This KOP reflects views that motorists traveling south on Tehachapi Willow Springs Road would experience. The pre-development views from KOP 5 depict relatively flat terrain with dense shrubs in the foreground and middle ground terrain. Yucca and Joshua trees dot the foreground and middle ground (see **Figure 4.1-6a**). Middle ground views include Soledad Mountain with mountains in the background. The post-development view from KOP 5 (see **Figure 4.1-6b**) would include the low and dark horizontal line displayed by rows of solar arrays. Solar arrays would not block the long view across the valley terrain to the south but would create noticeable vegetation and color contrast. The introduction of project gen-tie poles would increase the volume of straight, thin, vertical features present in the view. The contrast introduced by the project would attract attention and would not be overlooked. As discussed in **Table 4.1-8**, *Visual Quality Rating Analysis – KOP 5*, the pre-development score is 12 (above average visual quality class), and the post-development score is 9 (average visual quality class); therefore, visual class of the view would be reduced. Since the difference in scores would be 3 points, visual impacts from KOP 5 are potentially significant.

TABLE 4.1-8: VISUAL QUALITY RATING ANALYSIS – KOP 5

Sensitive Receptor: Motorists on Tehachapi Willow Springs Road, north of Trotter Road.
Pre-development and post-development conditions are depicted in **Figure 4.1-6.**

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Landform	3	3	0	Less than Significant
Explanation:	Flat terrain in the foreground and middle ground with Soledad Mountain and mountains in the background.	Project development would result in slight modification of the area's topography but would not draw attention.		
Detail:	The pre- and post-development view is dominated by flat valley terrain in the foreground and middle ground with mountains in the background. Views of the project would be visible in the foreground and middle ground. However, as the project will involve minimal overall grading, impacts to landforms would be less than significant.			
Vegetation	3	2	1	Less than Significant with Mitigation

Sensitive Receptor: Motorists on Tehachapi Willow Springs Road, north of Trotter Road.
Pre-development and post-development conditions are depicted in **Figure 4.1-6.**

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Explanation:	Mounded desert shrubs cover the foreground and middle ground terrain. Yucca and Joshua trees dot the foreground and middle ground.	Project development would require removal of some vegetation at the project site; however, natural vegetation would be maintained where possible and temporarily impacts areas of the site would be revegetated in compliance with **Mitigation Measure MM 4.1-3**, Landscape Revegetation and Restoration Plan.		
Detail:	Visual effects of vegetation removal would be reduced by **Mitigation Measure MM 4.1-3**, Landscape Revegetation and Restoration Plan, which involves limiting vegetation removal and planting native vegetation. Therefore, with implementation of **Mitigation Measure MM 4.1-3**, impacts to vegetation would be less than significant.			
Water	0	0	0	No Impact
Explanation:	No surface water features are visible on the project site or in the vicinity.	Project development would not introduce water to or remove water from the visible landscape.		
Detail:	Surface water features are not included in pre- or post-development views. No visual impacts associated with surface water features would occur.			
Color	2	1	1	Less than Significant with Mitigation
Explanation:	Foreground and middle-ground vegetation and terrain display shades of tan, green, and brown. The mountains in the middle ground and background are tan and brown. Grey roadway and transmission tower and brown transmission poles are prominent in the foreground and are visible throughout the middle ground and background.	Grey solar arrays would contrast with the drab tones displayed by terrain and vegetation in the foreground and middle ground. This color would be consistent with the grey of the existing roadway and transmission tower.		

Sensitive Receptor: Motorists on Tehachapi Willow Springs Road, north of Trotter Road.
Pre-development and post-development conditions are depicted in **Figure 4.1-6.**

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Detail:	Shades of tan, green, and brown associated with terrain and vegetation are visible in the foreground and middle ground. Project solar arrays would display a grey color consistent with the grey of the roadway but would contrast with the characteristic color of the terrain and vegetation. The contrast would be noticeable and attract attention, but the contrast would be reduced by **Mitigation Measures MM 4.1-2**, Proposed Color Scheme and Treatment Plan, and **MM 4.1-3**, Landscape Revegetation and Restoration Plan, which involves limiting vegetation removal and planting native vegetation. Therefore, with implementation of **Mitigation Measures MM 4.1-2** and **MM 4.1-3**, impacts to color would be less than significant.			
Adjacent Scenery	2	2	0	Less than Significant
Explanation:	Views are enhanced by Soledad Mountain in the middle ground and mountains in the distance.	Soledad Mountain in the middle ground and mountains in the distance would remain visible. Project components would not block mountains from view.		
Detail:	Visibility of mountains would not be altered by project development. Potential impacts would be less than significant.			
Scarcity	2	2	0	Less than Significant
Explanation:	Soledad Mountain is visible from this viewpoint.	Solar arrays would be visible from Tehachapi Willow Springs Road and would modify the existing landscape view in this area but would not disrupt views of Soledad Mountain.		
Detail:	The existing view of Soledad Mountain is unique to this viewpoint. The project would not disrupt views of Soledad Mountain, which would continue to be available. Potential impacts would be less than significant.			
Cultural Modifications	0	-1	1	Less than Significant with Mitigation
Explanation:	Cultural modifications include paved roads and electrical transmission poles and towers.	Solar arrays and associated infrastructure would be introduced to the foreground and middle ground.		

Sensitive Receptor: Motorists on Tehachapi Willow Springs Road, north of Trotter Road.
Pre-development and post-development conditions are depicted in **Figure 4.1-6.**

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Detail:	Existing cultural modifications include paved roads and electrical transmission poles and towers. The project would introduce solar development and ancillary components to the foreground and middle ground. While partially obscured by existing vegetation, where visible, solar arrays, gen-tie poles, and other project components would attract attention and create form, line, and color contrast. The contrast of the project components would be reduced by **Mitigation Measure MM 4.1-3**, Landscape Revegetation and Restoration Plan, which involves limiting vegetation removal and planting native vegetation, especially along the roadway. Therefore, with implementation of **Mitigation Measure MM 4.1-3**, aesthetic impacts associated with cultural modification would be less than significant.			
Totals:	12	9	3	Potentially Significant

KEY OBSERVATION POINT 5

TEHACHAPI WILLOW SPRINGS ROAD LOOKING SOUTHEAST

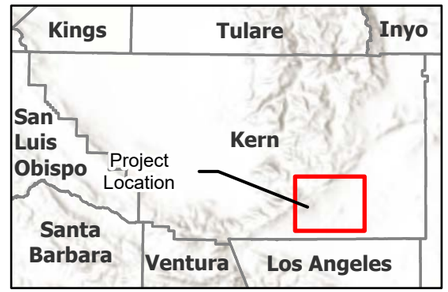
EXISTING VIEW



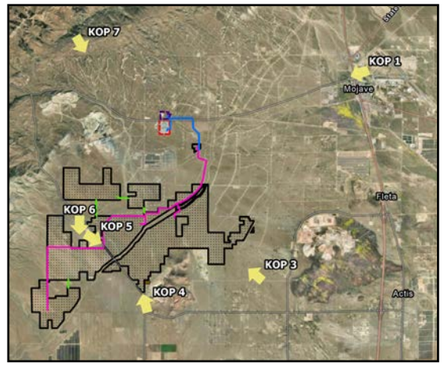
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-6a, KOP 5 - Existing View From the PCT Looking Southeast Towards the Project



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 5
Time of photograph: 1:59 PM
Date of photograph: 10/11/2024
Weather condition: Partly cloudy
Viewing direction: Southeast
Latitude: 34.982595° N
Longitude: -118.316083° W

Distance to the Project Fence: 670 feet

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

KEY OBSERVATION POINT 5

TEHACHAPI WILLOW SPRINGS ROAD LOOKING SOUTHEAST

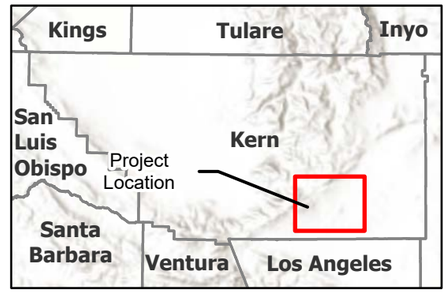
SIMULATED VIEW



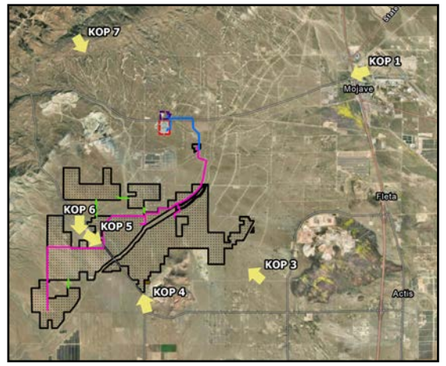
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-6b, KOP 5 - Simulated View From the PCT Looking Southeast Towards the Project



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 5
Time of photograph: 1:59 PM
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Weather condition: Partly cloudy
Viewing direction: Southeast
Latitude: 34.982595° N
Longitude: -118.316083° W

Distance to the Project Fence: 670 feet

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

KOP 6. Figure 4.1-7, *KOP 6 - Existing and Simulated Views From 110 Street W Looking Southwest*, shows views from the southbound travel lanes of 110th Street W looking southwest. This KOP reflects views that southbound motorists and residents located nearby would experience. The pre-development views from KOP 6 depict relatively flat terrain with mountains in the background. Dense shrubs are abundant in the foreground and middle ground terrain. Yucca and Joshua trees dot the foreground and middle ground (see **Figure 4.1-7a**). The post-development view from KOP 6 (see **Figure 4.1-7b** and **4.1-7c**) would include relatively faint modifications that would be located low in the foreground and middle ground landscape. However, due to intervening vegetation, project components are barely visible. In addition, where the contrast can be seen, it would not attract attention. As discussed in **Table 4.1-9**, *Visual Quality Rating Analysis – KOP 6*, the pre-development score is 10 (average visual quality class), and the post-development score is 10 (average visual quality class); therefore, the view would remain in the same visual class. With no change in scores, visual impacts from KOP 6 are less than significant.

TABLE 4.1-9: VISUAL QUALITY RATING ANALYSIS – KOP 6

Sensitive Receptor: Nearby Residents, Motorists traveling northbound on 110th Street W.
Pre-development and post-development conditions are depicted in **Figure 4.1-7**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Landform	2	2	0	No Impact
Explanation:	Flat terrain in the foreground and middle ground with mountains in the background.	The flat topography of the area would not be noticeably modified by project development.		
Detail:	Flat landforms dominate the foreground and middle ground of the visible landscape. However, mountains can be seen in the distance. Mountains add interest to the otherwise low and flat landscape. As the project will involve minimal overall grading, impacts to flat landforms would be less than significant.			
Vegetation	2	2	0	Less Than Significant
Explanation:	Low and mounded desert shrubs dotted with Yuka and Joshua trees.	Views of project development and changes to onsite vegetation would be mostly obscured and, where visible, would not attract attention or interrupt views of low and mounded shrub vegetation covering the desert terrain.		
Detail:	The visual effects of vegetation removal would generally be obscured by intervening vegetation. Therefore, impacts to vegetation would be less than significant.			
Water	0	0	0	No Impact
Explanation:	No surface water features are visible on the project site or in the vicinity.	Project development would not introduce water to or remove water from the		

Sensitive Receptor: Nearby Residents, Motorists traveling northbound on 110th Street W.
Pre-development and post-development conditions are depicted in **Figure 4.1-7**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
		visible landscape.		
Detail:	Surface water features are not included in pre- or post-development views. No visual impacts associated with surface water features would occur.			
Color	2	2	0	Less than Significant
Explanation:	Foreground and middle-ground terrain and vegetation display shades of tan, green, and brown. Mountains in the background includes shades of brown and tan. Development is grey (transmission towers) and brown (transmission poles).	The grey color of solar arrays would contrast with the drab tones displayed by terrain and vegetation in the foreground However, this color would be consistent with the existing transmission towers and views of the contrast would be obscured by intervening vegetation.		
Detail:	Shades of tan, green, and brown associated with terrain and vegetation are visible in the foreground and middle ground. Solar arrays would display a grey color that would contrast with the characteristic color of the vegetation; however, would be consistent with the existing transmission towers. Views of the contrast would be obscured by intervening vegetation. Potential impacts to color would be less than significant.			
Adjacent Scenery	3	3	0	No Impact
Explanation:	Views are enhanced by mountains in the background.	Mountains would remain visible. Solar arrays, fencing, gen-tie components, and other project components, would not block hills or mountains from view.		
Detail:	Visibility of the mountains would not be altered by project development. No visual impacts would occur.			
Scarcity	2	2	0	No Impact
Explanation:	Mountains are visible from this viewpoint.	Solar arrays would be minimally visible in this area and would not disrupt views of the mountains.		
Detail:	The project would not disrupt views of the mountains. No impacts to view scarcity would occur.			
Cultural Modifications	-1	-1	0	Less than Significant

Sensitive Receptor: Nearby Residents, Motorists traveling northbound on 110th Street W.
Pre-development and post-development conditions are depicted in **Figure 4.1-7**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Explanation:	Cultural modifications include transmission towers and poles.	Solar arrays and associated infrastructure would be introduced to the middle ground but would be faintly visible due to intervening vegetation.		
Detail:	Existing cultural modifications include an existing dirt road, transmission towers and poles. The project would introduce solar development and ancillary components to the middle ground. Solar arrays and other project components would not attract attention and where visible, these project components are faintly visible from this viewpoint. Potential visual impacts associated with cultural modifications would be less than significant.			
Totals:	10	10	0	Less Than Significant

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KEY OBSERVATION POINT 6

110 STREET W LOOKING SOUTHWEST

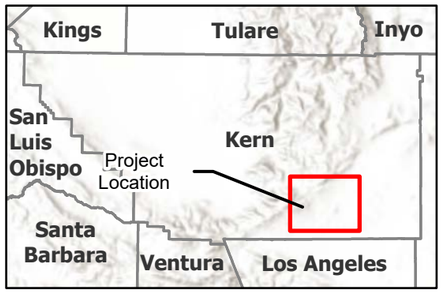
EXISTING VIEW



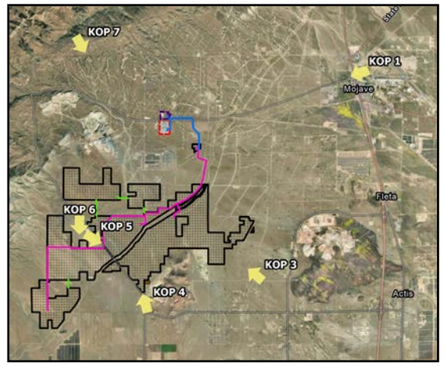
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-7a, KOP 6 - Existing View From 110 Street W Looking Southwest



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 6
Time of photograph: 12:13 PM
Date of photograph: 10/11/2024
Weather condition: Partly cloudy
Viewing direction: Southwest
Latitude: 34.986526° N
Longitude: -118.327827° W

Distance to the Project:
0.2 miles

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

KEY OBSERVATION POINT 6

110 STREET W LOOKING SOUTHWEST

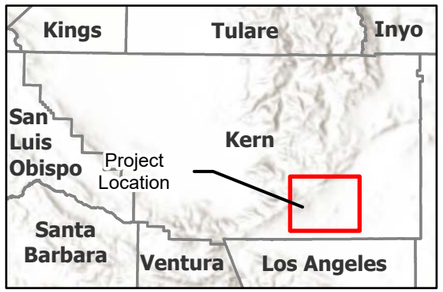
SIMULATED VIEW



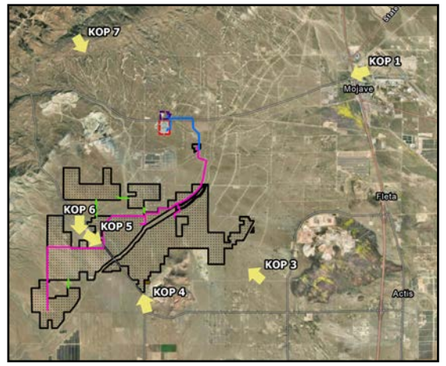
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-7b, KOP 6 - Simulated View From 110 Street W Looking Southwest



KEY MAP



PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 6
Time of photograph: 12:13 PM
Date of photograph: 10/11/2024
Weather condition: Partly cloudy
Viewing direction: Southwest
Latitude: 34.986526° N
Longitude: -118.327827° W

Distance to the Project:
0.2 miles

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

KEY OBSERVATION POINT 6

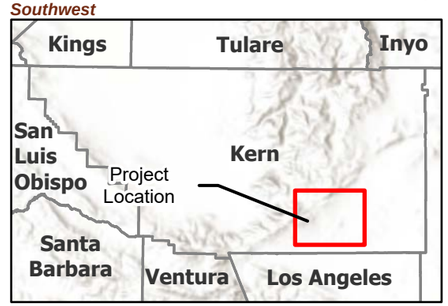
110 STREET W LOOKING SOUTHWEST



Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-7c, KOP 6 - Simulated View with Visible Project Indicators From 110 Street W Looking Southwest



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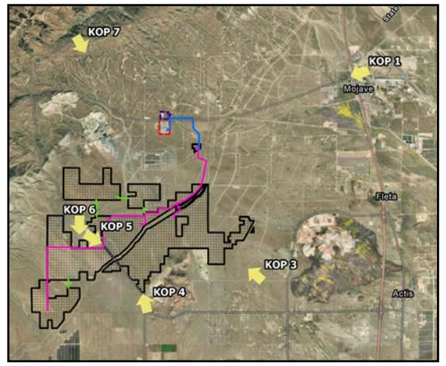

PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 6
Time of photograph: 12:13 PM
Date of photograph: 10/11/2024
Weather condition: Partly cloudy
Viewing direction: Southwest
Latitude: 34.986526° N
Longitude: -118.327827° W

Distance to the Project:
0.2 miles

Camera Information
Nikon Z7, Focal Length 50mm

Not for Construction

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KOP 7. Figure 4.1-8, *KOP 7 - Existing and Simulated Views from PCT Looking Southeast Towards the Project*, shows views from the PCT looking southeast toward the project. The nearest segment of the PCT is located 2.5 miles northwest of the project site. This KOP accurately reflects views experienced by hikers on the PCT. The pre-development views from KOP 7 depict hilly terrain in the foreground and middle ground, to flat terrain and Soledad Mountain in the background, to mountains in the distance (see **Figure 4.1-8a**). Low and mounded desert shrubs cover the foreground and middle ground, from greater distances they appear as patches of color. Existing cultural modifications in the view consist of paved roads in the foreground, wind turbines and transmission lines throughout the foreground and middle ground, and solar facilities in the background. The post-development view from KOP 7 (see **Figure 4.1-8b**) would include large areas of grey color in the middle ground. Where the project is visible from the PCT, grey solar modules as well as the gen-tie poles and other associated infrastructure would be located in the middle ground and background of this viewpoint. As discussed in **Table 4.1-10**, *Visual Quality Rating Analysis – KOP 7*, the pre-development score is 15 (high visual quality class), and the post-development score is 14 (high visual quality class); therefore, visual class of the view would not be reduced. Since the difference in scores would be 1 point, visual impacts from KOP 7 would be less than significant.

TABLE 4.1-10: VISUAL QUALITY RATING ANALYSIS – KOP 7

Sensitive Receptor: Hikers on PCT looking Southeast Towards Project.
Pre-development and post-development conditions are depicted in **Figure 4.1-8**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Landform	4	4	0	Less than Significant
Explanation:	Hilly terrain in the foreground and middle ground, to flat terrain and Soledad Mountain in the background, to mountains in the distance.	The flat topography of the project area would not be noticeably modified by project development as effects would be obscured by distance.		
Detail:	Hilly terrain in the foreground and middle-ground landscape and Soledad Mountain in the background adds interest to the low and flat landscape. There would be no impact to these landforms resulting from project operations.			
Vegetation	3	3	0	Less than Significant with Mitigation.
Explanation:	Low and mounded desert shrubs cover the foreground and middle ground.	Views of project development would be mostly obscured by distance and terrain and, where visible, would not attract attention.		

Sensitive Receptor: Hikers on PCT looking Southeast Towards Project.
Pre-development and post-development conditions are depicted in **Figure 4.1-8**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Detail:	The effects of vegetation removal would be obscured by distance. The visual effects of vegetation removal would be reduced by **Mitigation Measure MM 4.1-3**, Landscape Revegetation and Restoration Plan, which involves limiting vegetation removal and planting native vegetation. Therefore, with implementation of **Mitigation Measure MM 4.1-3**, impacts to vegetation would be less than significant.			
Water	0	0	0	No Impact
Explanation:	No surface water features are visible on the project site or in the vicinity.	Project development would not introduce water to or remove water from the visible landscape.		
Detail:	Surface water features are not included in pre- or post-development views. No visual impacts associated with surface water features would occur.			
Color	3	3	0	Less Than Significant with Mitigation
Explanation:	Foreground and middle-ground vegetation and terrain display shades of tan and green. Soledad Mountain and hills in the background are tan and brown with dark mountains with some snow caps detectable in the background. Development is grey (paved road, solar arrays, transmission lines), and white (wind turbines).	Solar arrays would display large areas of grey color in the middle ground. The lightly colored, vertical lines of gen-tie poles in the middle ground would blend in with the existing transmission lines. These colors would contrast with the muted earth tones in the foreground and middle ground but be consistent with other solar facilities.		
Detail:	Muted earth tones of tan and green co-dominate the foreground and middle ground with the white of the wind turbines. Solar arrays would display large areas of grey color in the middle ground that would be visible but not demand attention. The lightly colored, vertical lines of gen-tie poles in the middle ground would blend in with the existing transmission lines. Background colors would not be altered or substantially obstructed from view. Contrast would be reduced by **Mitigation Measures MM 4.1-2**, Proposed Color Scheme and Treatment Plan, and **MM 4.1-3**, Landscape Revegetation and Restoration Plan, which involves limiting vegetation removal and planting native vegetation. Therefore, with implementation of **Mitigation Measures MM 4.1-2** and **MM 4.1-3**, impacts to color would be less than significant.			
Adjacent Scenery	4	4	0	No Impact

Sensitive Receptor: Hikers on PCT looking Southeast Towards Project.
Pre-development and post-development conditions are depicted in **Figure 4.1-8**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Explanation:	Views are enhanced by the hilly terrain in the in the foreground and middle ground, to flat terrain and Soledad Mountain in the background, and mountains in the distance.	Hills and mountains would remain visible and would not be obstructed by project components.		
Detail:	The project would not modify, obstruct, or interrupt views of adjacent scenery. No impact to views of adjacent scenery would result.			
Scarcity	3	3	0	Less than Significant
Explanation:	The available view is broad and valued though similar views exist throughout the region.	Views would be modified by development in the middle ground; however, the effects would be somewhat obscured by distance and cultural modification in the foreground. Mountainous terrain in the foreground and mountains in the distance would remain visible. Project components would not block mountains from view.		
Detail:	The view from the PCT is valued though typical of views available throughout the area. Landscape modification resulting from project development would result in less-than-significant impacts to view scarcity.			
Cultural Modifications	-2	-3	1	Less than Significant
Explanation:	The landscape contains numerous cultural modifications, including prominent wind turbines.	The project would introduce grey solar modules and lightly colored, vertical lines of gen-tie poles; however, the effects would be somewhat obscured by distance and cultural modification in the foreground.		

Sensitive Receptor: Hikers on PCT looking Southeast Towards Project.

Pre-development and post-development conditions are depicted in **Figure 4.1-8**.

Rated Feature	Pre-Development Condition	Post-Development Score	Difference in Scores	Impact Significance
Detail:	Existing cultural modifications are visually prominent in the foreground and middle ground. The hilly to mountainous terrain and low and mounded desert vegetation are also prominent. The project would introduce grey solar modules to the background and lightly colored, vertical lines of gen-tie poles to the middle ground and background, but due to the low form and dark color of solar arrays and the faint lines associated with the gen-tie, the addition of cultural modifications to the middle ground and background would be subdominant to the existing cultural modifications in the foreground and would result in less-than-significant impacts.			
Totals:	15	14	1	Less than Significant

KEY OBSERVATION POINT 7

PACIFIC CREST TRAIL LOOKING SOUTHEAST

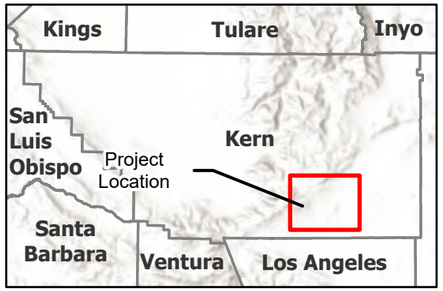
EXISTING VIEW



Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-8a, KOP 7 - Existing View from the PCT Looking Southeast Towards the Project



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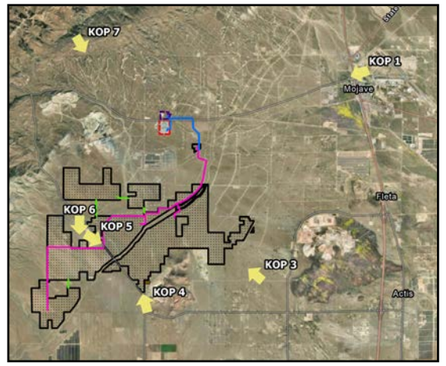


PHOTOGRAPH INFORMATION

Field Visit KOP ID number: 7
Time of photograph: 4:54 PM
Date of photograph: 4/26/2023
Weather condition: Sunny
Viewing direction: Southeast
Latitude: 35.069732° N
Longitude: -118.325759° W

Distance to the Project:
3.7 miles

Camera Information
Nikon Z6, Focal Length 50mm

Not for Construction

KEY OBSERVATION POINT 7

PACIFIC CREST TRAIL LOOKING SOUTHEAST

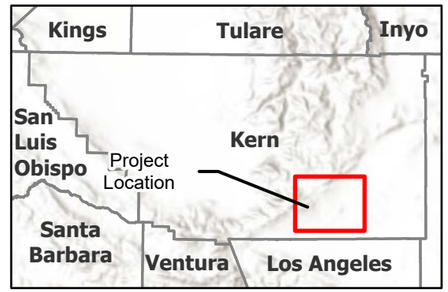
SIMULATED VIEW



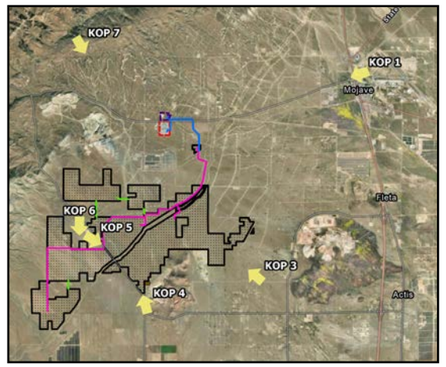
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.1-8b, KOP 7 - Existing View from the PCT Looking Southeast Towards the Project



KEY MAP



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3.7 miles

Camera Information
Nikon Z6, Focal Length 50mm

Not for Construction

Factors Reducing Visual Impacts

The following attributes of the project and elements of the existing conditions would reduce potential visual impacts of the project:

- The project site is generally flat and limits the need for grading and visible alteration of landforms.
- The lack of scenic designation of local roads in the immediate project vicinity indicates that viewer sensitivity and expectations for scenic landscapes is reduced compared to areas with higher visual quality.
- Solar arrays, the primary feature of the project, would cover most of the land on the site and would generally be 12 feet in height or less. The solar arrays would not block long-distance views of scenic hills and mountains.
- The project gen-tie line would appear as a similar element to existing distribution and transmission lines traversing the area and would not diminish overall visual quality. In addition, the project will use "weathering steel" for gen-tie poles, which would display rusty brown colors that would be consistent with the characteristic drab color of desert terrain and vegetation.
- Solar arrays do not create significant levels of glare, as explained in **Impact 4.1-4**, below.
- Minimal onsite lighting would be required during operations, as explained in **Impact 4.1-4**, below. The solar arrays would stow horizontally overnight and reset to the east in the evening or early morning to receive sunlight at sunrise.

Summary

As shown in **Tables 4.1-4,** *Visual Quality Rating Analysis – KOP 1,* through **4.1-10,** *Visual Quality Rating Analysis – KOP 7,* implementation of the project would result in potentially significant visual impacts to the existing visual quality or character of the site and surrounding area. The visual simulations demonstrate visual change associated with project development would be somewhat muted when viewed from greater distances. With distance, the effects associated with removal of vegetation from the project site would be masked by dense groupings of solar arrays. Similarly, solar arrays viewed from a distance would begin to appear similar to other dark tones associated with distant terrain in the landscape. However, visual change would be evident from Tehachapi Willow Springs Road and the PCT. Even with distance and diminished visibility, visual change associated with introduction of large areas of solar development and associated infrastructure on currently undeveloped desert terrain would likely attract attention. Further, introduction of large areas of solar arrays, collector substations, battery energy storage facilities, and the gen-tie supported by up to 250-foot-high poles would increase the footprint of solar and electrical transmission development in the Mojave area. More importantly, development of the project would expand existing renewable energy development (i.e., solar and wind developments) present south of SR-58 and east and west of SR-14.

Mitigation Measures MM 4.1-1 through **MM 4.1-5** would reduce visual impacts associated with the 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. However, because there are no feasible mitigation measures that can be implemented to maintain the existing, open and undeveloped desert landscape character of the project site until such time the project is decommissioned and the land restored, impacts to visual resources would remain significant and unavoidable.

Mitigation Measures

MM 4.1-1: Prior to issuance of a grading or building permit, a Maintenance, Trash Abatement, and Pest Management Program shall be submitted for review and approval to the Kern County Planning and Natural Resources Department. The program shall include, but not be limited to the following:

a. The project proponent/operator shall clear debris from the project area at least twice per year; this can be done in conjunction with regular array washing and site maintenance activities.

b. The project proponent/operator shall erect signs with contact information for the project proponent/operator's maintenance staff at regular intervals along the site boundary, as required by the Kern County Planning and Natural Resources Department. Maintenance staff shall respond within two (2) weeks to resident requests for additional cleanup of debris. Correspondence with such requests and responses shall be submitted to the Kern County Planning and Natural Resources Department.

c. The project proponent/operator shall implement a regular trash removal and recycling program on an ongoing basis during construction, operation, and decommissioning of the project. Barriers to prevent pest/rodent access to food waste receptacles shall be implemented. Locations of all trash receptacles during operation of the project shall be shown on final plans.

d. Trash and food items shall be contained in closed containers to be locked at the end of the day and removed at least once per week to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs.

MM 4.1-2: Prior to the issuance of building permits, the project proponent/operator shall submit a proposed color scheme and treatment plan, for review and approval by the Kern County Panning and Natural Resources Department, that will ensure project facilities including operations and maintenance buildings, gen-tie poles, array facilities, etc. blend in with the colors found in the natural landscape. Color treatments shall result in matte or nonglossy/non-reflective finishes.

MM 4.1-3: Wherever possible, within the proposed project boundary, native vegetation shall remain undisturbed unless mowing or grading is necessary for placement of project components. Native vegetation adjacent to the proposed project boundary shall remain in place as permitted by Fire Code. Prior to the commencement of project operations and decommissioning, the project proponent/operator shall submit a Landscape Revegetation and Restoration Plan for the project site to the Kern County Planning and Natural Resources Department for review and approval. The plan shall include the measures detailed below.

a. 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 (including Mohave creosote scrub habitat) and/or allowed to re-vegetate with the existing native seed bank in the topsoil where possible to establish revegetation. Areas

that contain permanent project features such as security fencing, substations, BESS facilities, stormwater basins, perimeter and maintenance roads or under solar arrays do not require revegetation.

b. The plan must include but is not limited to: (1) the approved California native seed mix that will be used onsite, (2) a timeline for seeding the site, (3) details of which areas are to be revegetated, (4) a list of the consultation efforts completed, and (5) the methods and schedule for installation of fencing that complies with wildlife agency regulations, and a clear prohibition of the use of toxic rodenticides.

c. Ground cover shall include native seed mix and shall be spread where earthmoving activities have taken place, as needed to establish re-vegetation. The seed mix or native plants shall be determined through consultation with professionals such as landscape architect(s), horticulturist(s), botanist(s), etc. with local knowledge as shown on submitted resume and shall be approved by the Kern County Planning and Natural Resources Department prior to planting. Phased seeding may be used if a phased construction approach is used (i.e. the entire site need not be seeded at the same time).

d. Vegetation/ground cover shall be continuously maintained on the site by the project operator.

e. Revegetation and restoration of the site shall be monitored annually for a three- (3-) year period following restoration activities that occur post-construction and post-decommissioning until vegetative cover is evenly established over 70 percent of disturbed and exposed areas of soil (non-paved or non-built). In areas that naturally have low vegetative coverage (e.g., deserts), 70 percent of natural conditions of local undisturbed areas is acceptable. Based on annual monitoring visits during these three-year periods, an annual evaluation report shall be submitted to the Kern County Planning and Natural Resources Department for the three- (3-) year period. Should efforts to reach 70 percent final cover prove in the second year to not be successful compared to existing conditions, re-evaluation of revegetation methods shall be made in consultation with the Kern County Planning and Natural Resources Department and an additional year shall be added to the monitoring program until the required minimum is achieved. The three- (3-) year monitoring program is intended to ensure the site naturally achieves native plant diversity, establishes perennials, and is consistent with conditions prior to implementation of the proposed project, where feasible.

MM 4.1-4: The project proponent shall install fence slats or similar view-screening materials, as approved by the Kern County Planning and Natural Resources Department, in on-site perimeter fencing for the portion of the solar site that abuts parcels zoned for residential use, including E (Estate Residential), R-1 (Low-Density Residential), R-2 (Medium-Density Residential), R-3 (High-Density Residential), or PL (Platted Lands) zoning unless the adjacent property is owned by the project proponent (to be verified by the Kern County Planning and Natural Resources Department) or a public or private agency that has submitted correspondence to

the Kern County Planning and Natural Resources Department requesting this requirement to be waived. Should the project proponent sell the adjacent property, slat fencing or similar view-screening materials shall be installed prior to the sale.

MM 4.1-5: For portions of the project that abut residentially zoned parcels not controlled by the project proponent, an aesthetics setback of 100 feet shall be required from the project property boundary line, which includes the centerline of any public roadway or easement. If a public roadway or easement does not exist between the project site and the residentially zoned property, the 100-foot setback shall be measured from the edge of the shared property line. The project proponent shall be responsible for continued dust control and weed maintenance within this additional setback area. No solar arrays, substations or operating equipment shall be located in or stored in the identified setback area.

Level of Significance after Mitigation

Despite implementation of **Mitigation Measures MM 4.1-1** through **MM 4.1-5**, impacts would be significant and unavoidable.

Impact 4.1-4: The project would create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.

Regarding night lighting and daytime glare conditions, "light" refers to artificial light emissions, or the degree of brightness, generated by a given source. Regarding glare conditions, the Illuminating Engineering Society of North America (IES 2000) defines "glare" as the sensation produced by luminance in the visual field that is sufficiently greater than the luminance to which the eye has adapted to cause annoyance, discomfort, or loss of visual performance and visibility.

Construction

Lighting

According to the County's Noise Ordinance, construction is allowed during the hours of 6:00 a.m. to 9:00 p.m. Monday through Friday and 8:00 a.m. to 9:00 p.m. on weekends. Construction of the project would generally occur during daytime hours; however, non-daylight hours may be necessary at times to make up for unanticipated schedule delays or to complete critical construction activities. In the event that work is performed during non-daylight hours, construction crews would use minimal illumination in order to perform the work safely. Lighting would be directed downward and shielded to focus illumination on the desired work areas only, and to prevent light spillage onto adjacent properties. During construction, dusk-to-dawn motion sensitive, directional security lights would be installed to provide adequate illumination around the temporary construction staging areas, parking area, construction office trailer entries/common areas, and points of ingress/egress. Lighting is not planned for typical construction activities because construction activities would occur primarily during daylight. 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. As a result, construction of the project would result in less-than-significant impacts to nighttime views.

Glare

Most of the proposed construction activities are planned to occur during daylight hours. Increased truck traffic and the transport of the solar arrays and construction materials to the project site and gen-tie would temporarily increase glare conditions during construction. However, this increase in glare would be minimal and temporary. Construction activity would occur on focused areas of the project site as construction progresses and any sources of glare would not be stationary for a prolonged period of time. Additionally, the surface area of construction equipment would be minimal compared to the scale of the site. Therefore, construction of the project would not create a new source of substantial glare that would affect daytime views in the area and potential impacts would be less than significant.

Operation

Lighting

As described in **Chapter 3**, *Project Description*, the project's lighting system would provide operation and maintenance personnel with illumination for both normal and emergency conditions. Lighting would be designed to provide the minimum illumination needed to achieve safety and security objectives. Additionally, lighting would be directed downward and shielded to focus illumination on the desired areas only and to minimize light trespass in accordance with Kern County Zoning Ordinance Chapter 19.81, *Outdoor Lighting – Dark Skies Requirements*, and as required with implementation of **Mitigation Measure MM 4.1-6**, which states that project facilities would be designed to provide the minimum illumination needed to achieve safety and security objectives. Therefore, implementation of **Mitigation Measure MM 4.1-6** and compliance with applicable local development standards and regulations pertinent to lighting would minimize the potential for light trespass onto adjacent properties and roads, and impacts would be less than significant.

Glare

Glare can result in visual hazards and temporary loss of vision. The hazard level of glare depends on the level of visual annoyance to the observer. Unlike solar thermal facilities, which rely on large fields of mirrors to reflect light, the potential reflection from solar PV modules is inherently low since they are designed to capture and not to reflect sunlight. PV arrays have a lower index of refraction/reflectivity than common sources of glare in residential environments. The glare and reflectance levels from a given PV system are lower than the glare and reflectance levels of steel, snow, standard glass, plexiglass, and smooth water (Shields, 2010). The glare and reflectance levels of modules are further reduced with the application of anti-reflective coatings. PV suppliers typically use stippled glass for arrays as the "texturing" of the glass to allow more light energy to be channeled/transmitted through the glass while weakening the reflected light. With the application of anti-reflective coatings and use of modern glass technology, project PV arrays would display overall low reflectivity. In addition, because tracker systems follow the sun, the underside of the PV arrays and most of the structure supporting them are shadowed throughout the day.

Moreover, light reflected from the PV arrays would travel above the line of sight of most, if not all, viewers. PV tracking systems position the array so that the sun's rays are always perpendicular to the face of the array. What light is reflected from the arrays is reflected back toward the sun. During midday conditions, when the sun is high in the sky, the rays of the sun are reflected directly upwards. For example, when the sun is low on the horizon (near dawn or dusk), the sun's angle in the sky is low; however, reflected rays would still be directed away from ground-level receptors because the maximum downward angle of the arrays would not be below 30 degrees.

As noted previously in the **Section 4.1.3**, *Regulatory Setting*, per FAA Policy 86 FR 25801–25803, the following criteria must be met for solar energy systems on airport property:

- No glare of any kind for air traffic control tower(s) at cab height

This policy only applies to proposed solar energy systems on federally obligated airport property and only those airports with control towers. Though the Mojave Air and Space Port is a federally obligated airport, the project does not fall on airport property. In addition, the project is not proximate (as defined in CFR Title 14 Part 77.9) to the airport or its air traffic control tower. Therefore, due to distance, no significant glare impacts to the Mojave Air and Space Port are expected.

The 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. Based on this analysis, operation of the project would result in less-than-significant impacts related to substantial adverse effects to daytime views due to new sources of glare.

The battery energy storage facilities and collector substations could also generate glare that could be received by motorists during project operations. As described in **Chapter 3**, *Project Description*, the battery energy storage facilities would incorporate non-reflective materials and would not generate glare during daytime hours. To further reduce glare potential, the project would be required to implement **Mitigation Measure MM 4.1-2,** which requires the use of non-reflective materials when feasible. The collector substations would include vertical steel components of low potential reflectivity.

Decommissioning

The project has an anticipated operational life of up to 35 years, after which the project proponent may choose to update site technology and recommission, or to decommission the site and remove the systems and their components. Decommissioning would adhere to the requirements of the appropriate governing authorities as well as all applicable local, state, and federal requirements and BMPs. Decommissioning activities would be similar in nature and duration as those associated with construction activities. Decommissioning activities would generally occur during daytime hours; however, non-daylight hours may be necessary at times to make up for unanticipated schedule delays or to complete critical decommissioning activities. In the event that work is performed between the hours of 9:00 p.m. to 6:00 a.m., construction crews would use minimal illumination in order to perform the work safely. Lighting would be directed downward and shielded to focus illumination on the desired work areas only, and to prevent light spillage onto adjacent properties. During decommissioning, dusk-to-dawn motion sensitive, directional security lights would be installed to provide adequate illumination around the temporary construction staging areas, parking area, construction office trailer entries/common areas, and points of ingress/egress. Lighting is not planned for typical decommissioning activities because these activities would occur primarily during daylight. Per Mitigation Measure MM 4.1-6, any nighttime decommissioning would use lighting designed to provide the minimum illumination needed, thereby minimizing adverse impacts on any nearby residents. As a result, construction of the project would result in less-than-significant impacts to nighttime views.

Therefore, based on the analysis presented above and with implementation of **Mitigation Measures MM 4.1-2, MM 4.1-6,** and **MM 4.1-7,** potential glare effects generated by the solar arrays, energy storage facilities, and collector substations would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measure MM 4.1-2**, and:

MM 4.1-6: Prior to the issuance of building permits, the project proponent shall demonstrate to the Kern County Planning and Natural Resources Department, through the submittal of a lighting plan, that the project site complies with the applicable provisions of the Dark Skies Ordinance (Chapter 19.81 of the Kern County Zoning Ordinance) and shall be designed to provide the minimum illumination needed to achieve safety and security objectives. Lighting shall be directed downward and shielded to focus illumination on the desired areas only and avoid light trespass into adjacent properties and roadways. Lenses and bulbs shall not be exposed or extend below the shields.

MM 4.1-7: Prior to the issuance of building permits, the project proponent shall demonstrate solar arrays and hardware are designed to minimize glare and spectral highlighting. Emerging technologies such as diffusion coatings and nanotechnological innovations shall be used to effectively reduce the refractive index of the solar cells and protective glass. These technological advancements are intended to make the solar arrays more efficient with respect to converting incident sunlight into electrical power while also reducing the amount of glare generated by the arrays. Specifications of such designs shall be submitted to the Kern County Planning and Natural Resources Department.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.1-2, MM 4.1-6,** and **MM 4.1-7**, impacts would be less than significant.

4.1.5 Cumulative Setting Impacts and Mitigation Measures

As presented in **Chapter 3**, *Project Description*, of this Draft EIR, there are 43 cumulative projects. These have the potential to result in cumulative impacts to aesthetics when considered together with the project. The "scarcity" rating criterion is likely to be impacted by widespread development in the area, as unobstructed views of regional topographical features and undeveloped lands would be less available as acreage is developed with PV arrays, wind energy projects, and new transmission lines.

As discussed above, the project would have less-than-significant impacts as it relates to scenic vistas as project distance, topography, and intervening existing development would reduce the visual prominence of the proposed project facilities. Due to the developed nature of the landscape visible from the PCT (i.e. existing the Mojave -Rosamond Landfill, SR-14, the Windhub Substation, rural residential developments, solar and wind energy facilities and transmission line infrastructure) in the viewshed between the PCT and the project, project development would not have a substantial adverse effect on existing views from the PCT. As such, cumulative impacts to views from the PCT would be less than significant and not cumulatively considerable

With regard to impacts related to damaging scenic resources (including trees, rock outcroppings, and historic buildings) within a scenic highway, the project would not be visible from any Officially Designated

State Scenic Highway as there are no Officially Designated State Scenic Highways in the vicinity of the project site. SR-58 and SR-14 are Eligible State Scenic Highways. The project site would not be clearly visible from the eligible scenic segment of SR-14 and would be barely visible from SR-58. Components of the project would not substantially alter existing long-distance views of the mountain and valley landscape or other natural features visible from the designated scenic segments of SR-58 or SR-14. In addition, significant trees, rock outcroppings, and historic buildings are not located within the project ite or within the proposed gen-tie line corridor. As such, cumulative impacts would be less than significant and not cumulatively considerable.

The project would result in potentially significant impacts related to visual character despite implementation of mitigation. Renewable energy developments within the vicinity include the Windhub Solar Project, the SEPV Mojave West Solar Project, the Big Beau Solar Project, the Catalina Solar Project, and numerous wind farms.

While other projects in the region would also be required to implement various mitigation measures to reduce impacts, the conversion of thousands of acres to a developed landscape cannot be mitigated to a degree in which impacts are no longer significant. Even with implementation of **Mitigation Measures MM 4.1-1** through **MM 4.1-5**, the project's contribution to significant cumulative impacts associated with visual character in the Mojave Desert and Antelope Valley areas would be significant and unavoidable.

The project would result in less-than-significant impacts related to light and glare with implementation of **Mitigation Measures MM 4.1-2, MM 4.1-6,** and **MM 4.1-7**. Cumulative projects in the region would also be required to implement similar mitigation measures to reduce lighting impacts, such that cumulative impacts related to light and glare would be less than significant with mitigation.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.1-1** through **MM 4.1-7**.

Level of Significance after Mitigation

Despite implementation of **Mitigation Measures MM 4.1-1** through **MM 4.1-7**, cumulative impacts related to visual character would be significant and unavoidable. However, cumulative impacts related to scenic vistas, scenic resources, and light and glare would be less than significant.

Section 4.2

Agriculture and Forestry Resources

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Section 4.2
Agriculture and Forestry Resources

4.2.1 Introduction

This section of the EIR describes the affected environment and regulatory settings for agriculture and forestry resources for the project. It also describes potential impacts on agricultural and forestry resources that may result from implementation of the project, and includes mitigation measures that would reduce these impacts, if applicable. This section is based, in part, on information provided in the 2023 Kern County Agricultural Crop Report prepared by the Kern County Department of Agriculture and Measurement Standards (County of Kern, 2024) and a *10-year Farming History Memorandum*, prepared by Tetra Tech, located in **Appendix B** of this EIR and incorporated by reference herein.

4.2.2 Environmental Setting

Regional Setting

Kern County (County) covers approximately 8,163 square miles (5,224,258 acres), including 1,339 square miles (857,233 acres) of harvested agricultural land and approximately 2,889 square miles (1,857,259 acres) of grazing land (County of Kern, 2024; DOC, 2024a). According to the 2023 Kern County Agricultural Crop Report, agriculture in Kern County was worth approximately $8.6 billion in 2023, which is an increase of 12 percent from the 2022 crop value of $7.7 billion. The top five commodities for 2023 were grapes, citrus, pistachios, almonds, and carrots, which made up more than $5 billion (approximately 66 percent) of the total value, with the top 20 commodities making up 96 percent of the total value (County of Kern, 2024).

Like many agricultural-based jurisdictions, Kern County has a growing population and must balance urbanization and the loss of farmland. As shown in **Table 4.2-1,** *2018–2020 Farmland Conversion in Kern County*, the California Department of Conservation (DOC) found that 2,620 acres of Important Farmland, including all of the categories of important farmland, were converted to grazing or non-agricultural uses between 2018 to 2020. Approximately 5,256 net acres were converted from agricultural and other uses to urban/built-up land from 2018 to 2020 (DOC, 2024a). Farmland designations are defined in **Section 4.2.3**, *Regulatory Setting*, below.

The population of Kern County is approximately 913,820 as of July 1, 2023, which is a 0.5 percent population increase compared to the estimate of 909,235 as of April 1, 2020 (U.S. Census Bureau, 2024). The anticipated growth will likely further decrease the amount of agricultural land in Kern County. However, it is important to note the conversion of agricultural land is affected by numerous factors other than population growth and urban development. Agricultural production is dependent on commodity prices, water prices and supply, labor, the proximity of processing and distribution facilities, and pest management. Factors such as weather, trade agreements, and labor disputes can also affect decisions regarding which crops are grown and which lands go in and out of production. Additionally, most conversion of Prime or Farmland of Statewide Importance agricultural lands to non-agricultural uses is occurring within the planned development footprint of Metropolitan Bakersfield. Very little conversion of the most productive agricultural lands has occurred in outlying areas of the County.

TABLE 4.2-1: 2018–2020 FARMLAND CONVERSION IN KERN COUNTY

Land Use Category	Total Acres 2018	Total Acres 2020	Net Acreage Changed
Prime Farmland	573,935	567,066	-6,868
Farmland of Statewide Importance	208,323	207,938	-385
Unique Farmland	91,768	93,710	1,940
Farmland of Local Importance	0	0	0
IMPORTANT FARMLAND SUBTOTAL	874,026	868,714	-5,313
Grazing Land	1,854,641	1,857,259	2,620
AGRICULTURAL LAND TOTAL	**2,728,667**	**2,725,973**	**-2,693**

SOURCE: DOC, 2024a.

Local Setting

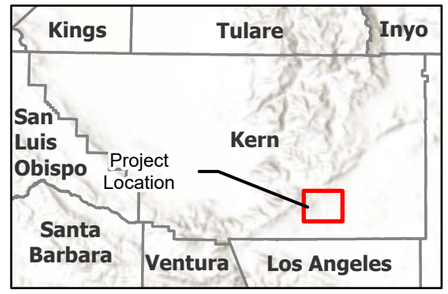
The project and project site are defined in **Chapter 3**, *Project Description*. The project site is located in the southeastern portion of Kern County within the administrative boundaries of the Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan. The project site is primarily designated for resources management under map code 8.5 and zoned predominantly A-1 (Limited Agricultural) as the base district with varying combining districts, as shown on **Figure 3-6**, *Existing General Plan Map*, **Figure 3-7**, *Existing Zone Classifications*, **Figure 3-8**, *Proposed Zone Classifications* and as listed in **Table 3-1**, *Project Assessor Parcel Numbers, Existing and Proposed Land Use Zonings, and Acreages.*

The project site is generally undeveloped. Nearby land uses include renewable energy development (wind and solar), rural residential development, livestock grazing, light and heavy industrial and mining uses, and undeveloped lands. As shown in **Figure 4.2-1** *Farmland Designation*, the project site is not designated by the DOC as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland; the DOC designates the project site as Grazing Land and Nonagricultural or Natural Vegetation. None of the proposed project's parcels are subjected to a Williamson Act Land Use contract; however, approximately 5,213 acres of Kern County Agricultural Preserve Number 24 are within the project site. A Petition of Exclusion to remove the project site from the Agricultural Preserve is not required as solar facilities are permitted on lands zoned A (Exclusive Agriculture), as further discussed in **Appendix B** of this EIR. Though no farming has occurred within the last 10 years on the project site, based on review of historic publicly available aerial imagery dating back to 2014 (**Appendix B** of this EIR), livestock grazing occurs on surrounding properties. Sheep grazing previously occurred on the project site. The Windswept Ranch Petting Zoo, located on the project site and proposed for demolition by the Applicant, is an exotic animal ranch that houses a variety of hooved animals. The available Kern County Department of Agricultural and Measurement Standards published permit and use data indicates that no agricultural-related permits have been issued for the project site since 2019 (**Appendix B** of this EIR).

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.2-1. Farmland Designation



Project Site

Important Farmland

Grazing Land

Non-Irrigated (Not Verified)

Data Sources: California Department of Conservation, ESRI

N

0 0.45 0.9 1.8 Miles

Scale is 1:40,000 when printed at 11"x17"

Not for Construction

Document Path: \\oes\Projects\OES\projects\194_PROJECTS\TERRA_GEN\194_1405_0001_Discovery\PRO\Discovery_Figures_2024_EIR.aprx

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4.2.3 Regulatory Setting

Federal

Farmland Protection Policy Act (7 United States Code Section 4201)

The purpose of the Farmland Protection Policy Act (FPPA) is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. It additionally directs federal programs to be compatible with State and local policies for the protection of farmland.

Under the FPPA, the term "farmland" includes Prime Farmland, Unique Farmland, and Farmland of Statewide or Local Importance. Farmland that is subject to FPPA requirements does not have to be currently used as cropland. It can be forestland, pastureland, or other land, but not urban and built-up land or water. The FPPA assures that, to the extent possible, federal programs are administered to be compatible with state and local units of government and private programs and policies to protect farmland.

In 1981, Congress passed the Agriculture and Food Act (Public Law 97-98), which contained the FPPA, Subtitle I of Title XV, Section 1539–1549. The final rules and regulations were published in the Federal Register on June 17, 1994. Federal agencies are required to develop and review their policies and procedures related to implementing the FPPA every 2 years.

The FPPA does not authorize the federal government to regulate the use of private or nonfederal land or, in any way, affect the property rights of owners. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or rely on assistance from a federal agency (NRCS, 2024).

State

California Department of Conservation, Division of Land Resource Protection

The DOC applies the Natural Resources Conservation Service (NRCS) soil classifications to identify agricultural lands. These agricultural designations are used in planning for the present and future of California's agricultural land resources. The DOC uses a minimum mapping unit of ten acres; parcels that are smaller than ten acres are absorbed into the surrounding classifications.

The list below describes the categories mapped by the DOC (DOC, 2024b) through the Farmland Mapping and Monitoring Program. Collectively, lands classified as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are referred to as "farmland."

- **Prime Farmland.** Farmland that has the ideal combination of physical and chemical features. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields and long-term agricultural production. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance.** Farmland that is similar to Prime Farmland, but with minor shortcomings, such as greater slopes or lower moisture content. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- **Unique Farmland.** Land with lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include land that supports non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been used for crops at some time during the four years prior to the mapping date.
- **Farmland of Local Importance.** Land that is important to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee.
- **Grazing Land.** Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups with an interest in grazing activities.
- **Urban and Built-up Land.** Land that is developed with structures that have been built to a density of at least one unit to 1.5 acres, or approximately six structures to a ten-acre parcel. This land supports residential, industrial, commercial, institutional, public administrative uses; railroad and other transportation yards; cemeteries; airports; golf courses; sanitary landfills; sewage treatment facilities; water control structures; and other developed uses.
- **Other Land.** Land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines and borrow pits; and waterbodies smaller than 40 acres. Undeveloped and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act (California Government Code Section 51200-51297.4), is applicable to specific parcels within the State of California.

The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural, open-space, or other compatible uses in return for reduced property tax assessments. Private land within locally designated agricultural preserve areas is eligible for enrollment under a Williamson Act contract. The Williamson Act program is administered by the DOC, in conjunction with local governments that administer the individual contract arrangements with landowners. Participation in the Williamson Act program is dependent on County adoption and implementation of the program and is voluntary for landowners (DOC, 2024c).

Under the Williamson Act, a landowner commits the parcel to a ten-year period, during which time no conversion out of agricultural use is permitted. In return, the land is taxed at a rate based on the actual use (i.e., agricultural production), as opposed to its unrestricted market value. Each year, the contract automatically renews unless a notice of nonrenewal or cancellation is filed. However, the application to cancel must be consistent with the criteria of the affected county or city. Nonrenewal or contract cancellation does not change a property's zoning. Participation in the Williamson Act program, which is voluntary for landowners, is dependent on a county's willingness to adopt and implement the program. The Williamson Act states that a board or council will, by resolution, adopt rules governing the administration of agricultural preserves. The rules of each agricultural preserve specify the allowed uses. Generally, any commercial agricultural use would be permitted within any agricultural preserve. In addition, local governments may identify compatible uses permitted under a permit (DOC, 2024c).

California Government Code Section 51238 states that, unless otherwise decided by a local board or council, the erection, construction, alteration, or maintenance of electric and communication facilities, as well as other facilities, are determined to be compatible uses within any agricultural preserve. Section 51238 also states that a board of supervisors may impose conditions on lands or land uses to be placed within preserves to permit and encourage compatible uses, in conformity with Section 51238.1. Furthermore, under California Government Code Section 51238.1, a board or council may allow any use that without conditions or mitigations would otherwise be considered incompatible. However, this may occur only if that use meets the following conditions:

- The use would not significantly compromise the long-term agricultural capability of the subject contracted parcel or parcels on other contracted lands in agricultural preserves;
- The use would not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping; and
- The use would not result in the significant removal of adjacent contracted land from agricultural or open-space use.

Farmland Security Zone Act

The Farmland Security Zone Act is similar to the Williamson Act. It was passed by the California State Legislature in 1999 to ensure that long-term farmland preservation is part of public policy in the state. Farmland Security Zone Act contracts are sometimes referred to as "Super Williamson Act Contracts." Under the provisions of this act, a landowner who is already under a Williamson Act contract can apply for Farmland Security Zone status by entering into a contract with the county. Farmland Security Zone classification automatically renews each year for an additional 20 years. In return for a further 35 percent reduction in the taxable value of land and improvements (in addition to Williamson Act tax benefits), the owner of the property promises not to develop the property into nonagricultural uses.

Public Resources Code Section 21060.1

Public Resources Code Section 21060.1 uses the FMMP to define agricultural land for the purposes of assessing environmental impacts. The FMMP was established in 1982 to assess the location, quality, and quantity of agricultural lands and analyze the conversion of such lands. The FMMP provides analysis pertaining to agricultural land use changes throughout California.

Local

Construction and operation of the project would be subject to policies and regulations contained within the County's general and specific plans, including the Kern County General Plan, the Soledad Mountain Elephant Butte Specific Plan, Kern County Zoning Ordinance, and the Kern County Code of Building Regulations, which include policies, goals, and implementation measures related to agricultural resources. The policies, goals, and implementation measures in the Kern County General Plan and the Soledad Mountain Elephant Butte Specific Plan related to agricultural resources that are applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the project. These

measures are not listed below, but as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Kern County General Plan

According to the Kern County General Plan, agriculture is vital to the future of Kern County and sets goals to protect important agricultural lands for future use and prevent the conversion of prime agricultural lands to other uses (e.g., industrial or residential). The Kern County General Plan includes four designations for agricultural land:

- **8.1 Intensive Agriculture (minimum parcel size 20 acres gross)** – Lands devoted to the production of irrigated crops or having potential for such use. Uses shall include, but are not limited to, the following: Irrigated cropland; orchards; vineyards; horse ranches; raising of nursery stock ornamental flowers and Christmas trees; fish farms; bee keeping; ranch and farm facilities and related uses; one single-family dwelling unit; cattle feed yards; dairies; dry land farming; livestock grazing; water storage; groundwater recharge acres; mineral, aggregate; and petroleum exploration and extraction; hunting clubs; wildlife preserves; farm labor housing; public utility uses; and agricultural industries pursuant to provisions of the Kern County Zoning Ordinance, and land within development areas subject to significant physical constraints.
- **8.2 Resource Reserve (minimum parcel size is 20 acres gross, except to a Williamson Act Contract/Farmland Security Zone Contract, in which case the minimum parcel size shall be 80 acres gross)** – Lands devoted to areas of mixed natural resource characteristics, including rangeland, woodland, and wildlife habitat which occur in an established County water district.

  Uses shall include, but are not limited to, the following: Livestock grazing; dry land farming; ranching facilities; wildlife and botanical 54 preserves; and timber harvesting; one single-family dwelling unit; irrigated croplands; water storage or groundwater recharge areas; mineral; aggregate; and petroleum exploration and extraction; recreational activities, such as gun clubs and guest ranches; and land within development areas subject to significant physical constraints.
- **8.3 Extensive Agriculture (minimum parcel size 20 acres gross, except lands subject to a Williamson Act contract/Farmland Security Zone contract, in which case the minimum parcel size shall be 80 acres gross)** – Lands devoted to uses involving large amounts of land with relatively low value-per-acre yields, such as livestock grazing, dry land farming, and woodlands.

  Uses shall include, but are not limited to, the following: Livestock grazing; dry land farming; ranching facilities; wildlife and botanical preserves; and timber harvesting; one single-family dwelling unit; irrigated croplands; water storage or groundwater recharge areas; mineral; aggregate; and petroleum exploration and extraction; and recreational activities, such as gun clubs and guest ranches; and land within development areas subject to significant physical constraints.
- **8.5 Resource Management (minimum parcel size 20 acres gross, except lands subject to a Williamson Act contract/Farmland Security Zone contract, in which case the minimum parcel size shall be 80 acres gross)** – Lands consisting primarily of open space containing important resource values, such as wildlife habitat, scenic values, or watershed recharge areas. These areas may be characterized by physical constraints, may constitute an important watershed recharge area or wildlife habitat, or may have value as a buffer between resource areas and urban areas. Other lands with this resource attribute are undeveloped, non-urban areas that do not warrant additional planning within the foreseeable future because of current population (or anticipated increase), marginal physical development, or no subdivision activity. Additionally, the designation

of 8.5 (Resource Management) can be used for agricultural uses, such as dry-land farming and ranch facilities.

Additionally, the designation of 8.5 (Resource Management) can be used for agricultural uses such as dry-land farming, ranch facilities, irrigated croplands, and livestock grazing.

The policies, goals, and implementation measures in the Kern County General Plan for agricultural and forestry resources applicable to the project are provided below (County of Kern, 2009). The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development such as the proposed project. Therefore, they are not listed below, but as stated in **Chapter 2**, *Introduction*, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference (Kern County, 2009).

Chapter 1. Land Use, Open Space, and Conservation Element

1.9 Resource

Goals

Goal 1: To contain new development within an area large enough to meet generous projections of foreseeable need, but in locations which will not impair the economic strength derived from the petroleum, agriculture, rangeland, or mineral resources, or diminish the other amenities which exist in the County.

Goal 2: Protect areas of important mineral, petroleum, and agricultural resource potential for future use.

Goal 3: Ensure the development of resource areas minimize effects on neighboring resource lands.

Goal 5: Conserve prime agriculture lands from premature conversion.

Goal 6: Encourage alternative sources of energy, such as solar and wind energy, while protecting the environment.

Policies

Policy 1: Appropriate resource uses of all types will be encouraged as desirable and consistent interim uses in undeveloped portions of the County regardless of general plan designation.

Policy 7: Areas designated for agricultural use, which include Class I and II and other enhanced agricultural soils with surface delivery water systems, should be protected from incompatible residential, commercial, and industrial subdivision and development activities.

Policy 12: Areas identified by the NRCS (formerly Soil Conservation Service) as having high range-site value should be conserved for Extensive Agriculture uses or as Resource Reserve, if located within a County water district.

Implementation Measure

Measure F: Prime agricultural lands, according to the Kern County Interim-Important Farmland map produced by the Department of Conservation, which have Class I or II soils and a surface delivery water system shall be conserved through the use of agricultural zoning with minimum parcel size provisions.

Soledad Mountain Elephant Butte Specific Plan

A portion on the eastern side of the project site is within the boundaries of the Soledad Mountain Elephant Butte Specific Plan. The Soledad Mountain Elephant Butte Specific Plan was adopted in 1973 and addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. The recommendations, analysis, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan for agricultural resources applicable to the project are provided below. The Soledad Mountain Elephant Butte Specific Plan does not contain any recommendations, analysis, and implementation measures for forestry resources (County of Kern, 1973). The Soledad Mountain Elephant Butte Specific Plan contains additional recommendations, analysis, and implementation measures that are more general in nature and are not specific to development such as the project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan are incorporated by reference.

Item 5. Agriculture

Recommendation:	Grazing shall be allowed only in accordance with the Zoning Ordinance and where permitted by right.
Analysis:	Two-thirds of the land within the Plan area is zoned either A-1 or A-2, which allows grazing. Approximately one half of this would have grazing capabilities. Grazing should be kept to a minimum to protect the desert ecosystem.
Implementation:	Compliance with the existing Zoning Ordinance.

Kern County Zoning Ordinance

The Kern County Zoning Ordinance establishes basic regulations under which land is developed. This includes allowable uses, building setback requirements, and development standards. Pursuant to state law, the zoning ordinance must be consistent with the Kern County General Plan. The basic intent of the Kern County Zoning Ordinance is to promote and protect the public health, safety, and welfare via the orderly regulation of the land uses throughout the unincorporated area of the county. The zoning ordinance applies to all property in unincorporated Kern County, except land owned by the United States or any of its agencies.

The Kern County Zoning Ordinance designates the project site as zoned A (Exclusive Agriculture), A-1 (Limited Agriculture), E (Estate), and PL (Platted Lands). Many project parcels also contain one or multiple of the following combining districts: Floodplain (FPPF), Floodplain Secondary (FPS), Wind Energy (WE), and Residential Suburban (RS).

Additionally, per County policy to allow for zoning consistency with the existing General Plan designations for each parcel, the Project includes a request for a zone classification change to change the existing base zoning (preserving the existing combining district classification) to A (Exclusive Agriculture). Accordingly, the project site would be rezoned to A, with the exception of those parcels that are already in the A Zone District. No zone changes are proposed for the combining district zone classifications (FP, FPS, WE, and RS). 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.

Williamson Act Standard Uniform Rules

The County has adopted a set of rules that identify compatible land uses within agricultural preserves established under the Williamson Act. The rules restrict uses on such land to agricultural or other compatible uses. Agricultural uses include crop cultivation, grazing commercial wind farms, livestock breeding, dairies, and uses that are incidental to these uses. Other compatible agricultural uses include those associated with public utilities (e.g., gas, electric, communications, water, and other similar public utilities). For purposes of this analysis, the conversion of agricultural land to a solar facility itself would be incompatible with the farming provisions necessary for projects under Williamson Act contracts. Therefore, a proposed solar project on contracted land would be required by the County to petition for an early cancellation of the contract. However, the project site does not contain lands under an active Williamson Act contract and, therefore, is not subject to these rules.

4.2.4 Impacts and Mitigation Measures

Methodology

The project's potential impacts on agriculture and forestry resources have been evaluated on a qualitative basis through review of **Appendix B** of this EIR, the DOC Farmland Mapping and Monitoring Program, the Kern County General Plan, the Soledad Mountain Elephant Butte Specific Plan, and the Kern County Zoning Ordinance. A change in land use would normally be determined to be significant if the effects described in the thresholds of significance were to occur (see California Code of Regulations Title 14, Section 15064.7(a)). The evaluation of project impacts is based on a thorough analysis of the Kern County General Plan's and the Soledad Mountain Elephant Butte Specific Plan's applicable goals and policies related to agricultural resources, professional judgment, and the significance criteria established by the California Environmental Quality Act (CEQA).

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify, per Appendix G of the CEQA *Guidelines*, that a project would have a significant impact on agriculture and forestry resources if it would:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use;

b. Conflict with existing zoning for agricultural use or Williamson Act Contract;

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)) or timberland (as defined in Public Resources Code Section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104 (g).

d. Result in the loss of forestland or conversion of forest land to non-forest use.

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use; or

f. Result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15206(b)(3) Public Resources Code).

Project Impacts

Impact 4.2-1: The project would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use.

The project would not directly or indirectly impact farmland. As stated previously, the project site is generally undeveloped, with the exception of dirt roads and a few scattered structures present. The project site is not being used for agricultural purposes. There has been no farming on any of the parcels within the project site over the last 10 years. The project site is not under a Williamson Act Land Use contract. The project site is not designated by the DOC as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. The DOC designates the project site as Grazing Land or Nonagricultural or Natural Vegetation (Appendix B of this EIR). Surrounding properties are also designated as Grazing Land or Nonagricultural or Natural Vegetation, with small areas of Semi-Agricultural and Rural Commercial Land and Vacant or Disturbed Land scattered throughout the vicinity. Construction and operation of the project would not convert prime, unique, or important farmland to nonagricultural uses and, therefore, no impact would occur.

Mitigation Measures

No mitigation would be required.

Level of Significance

No impact.

Impact 4.2-2: The project would conflict with existing zoning for agricultural use or Williamson Act Contract.

No parcels within the project site are under Williamson Act contract or are currently used for agriculture (**Appendix B** of this EIR). There has been no farming on any of the parcels within the project site over the last 10 years, and the parcels are unlikely to be farmed in the future. Accordingly, the project would not conflict with an existing Williamson Act contract.

The Kern County Zoning Ordinance designates the project site as zoned A (Exclusive Agriculture), A-1 (Limited Agriculture), Estate (E), and Platted Lands (PL). Many parcels also have a Floodplain (FP), Floodplain Secondary (FPS), Wind Energy (WE), and Residential Suburban (RS) overlay.

The Project includes a request for a zone change to A (Exclusive Agriculture) for all parcels which are not already in the A (Exclusive Agriculture) District. According to the Kern County Zoning Ordinance Section 19.12.030 G, a commercial solar facility is a compatible use in the A district subject to the approval of a CUP. The Kern County General Plan encourages the development of alternative sources of energy, such as solar energy, while protecting the environment (see **Section 4.11** *Land Use and Planning*, of this EIR for additional goals and policies that promote solar energy development). As such, solar facilities are considered a compatible use.

Upon approval of the listed CUPs, the proposed project would not conflict with agricultural zoning of the project site. Therefore, development of the project site for use as a solar energy facility is expected to result in a less than significant impact related to conflicts with existing zoning. The project would not conflict

with any Williamson Act contracts as there are no parcels within the project site that are under Williamson Act contracts. .

Mitigation Measures

No mitigation would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.2-3: The project would conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)) or timberland (as defined in Public Resources Code Section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104 (g).

The project is not located on land zoned as forest land, timberland, or timberland production. It is located on private land zoned A (Exclusive Agriculture), A-1 (Limited Agriculture), Estate (E), and Platted Lands (PL) with some parcels also having a Floodplain (FP), Floodplain Secondary (FPS), Wind Energy (WE), and Residential Suburban (RS) overlays. Given that the project site is not zoned for forest land, timberland, or timberland production, the project would not conflict with existing zoning for forest land, timberland, or timberland production and no impact would occur.

Mitigation Measures

No mitigation would be required.

Level of Significance

No impact.

Impact 4.2-4: The project would result in the loss of forestland or conversion of forest land to non-forest use.

The project is not located within any forest lands and would not convert forest land to non-forest uses. There is no land in the vicinity of the project that is zoned as forest land. Therefore, the project would not result in the loss of forestland or the conversion of forest land to non-forest uses. No impact would occur.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

No impact.

Impact 4.2-5: The project would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use.

There are no existing agricultural or forest lands on the project site or within the vicinity. The project site consists of largely undeveloped land and is primarily zoned for agriculture. No farming on any of the parcels within the project site has occurred over the last 10 years. Therefore, the conversion of the project site to a solar facility would not result in the conversion of farmland to a nonagricultural use nor the conversion of forest land to non-forest use. Operation of the solar facility on the project site would not preclude the surrounding areas from being improved with agricultural uses. Further, the project site could be used for agricultural uses following project decommissioning. Therefore, potential impacts would be less than significant.

Mitigation Measures

No mitigation would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.2-6: The project would result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15206(b)(3) Public Resources Code.

The project site is not subject to an open space contract made pursuant to the California Land Conservation Act of 1965 or the Farmland Security Zone Contract. As stated previously, the project site is not under a Williamson Act contract. No impact would occur.

Mitigation Measures

No mitigation would be required.

Level of Significance

No impact.

4.2.5 Cumulative Setting, Impacts, and Mitigation Measures

The geographic scope for cumulative agricultural and forestry impacts is Kern County. As shown in **Table 3-5**, *Cumulative Projects List*, of **Chapter 3**, *Project Description*, there are 43 cumulative projects proposed or approved in Kern County.

Although the project would develop a solar facility on land zoned for agricultural uses, the proposed project would not result in the loss of farmland. With the exception of past sheep grazing and the Windswept Ranch Petting Zoo, an exotic animal ranch, the project site has not been used for agricultural purposes in the last 10 years. Further, the project site could be used for agricultural uses following project decommissioning,

and the development of solar power generating facilities on the project site would not preclude agricultural production to occur in adjacent or distant areas within Kern County. Therefore, the proposed project's contribution to cumulative impacts related to agriculture would be less than cumulatively considerable.

Mitigation Measures

No mitigation would be required.

Level of Significance

Cumulative impacts would be less than significant.

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Section 4.3
Air Quality

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4.3.1 Introduction

This section of the EIR describes the affected environment and regulatory setting of air quality for the project. This section also evaluates the short- and long-term air quality impacts associated with development of the project and, where necessary, mitigation measures are provided to avoid or lessen potential impacts of the project.

Information in this section is based primarily on the *Air Quality and Greenhouse Gas Technical Report* (Tetra Tech, 2025), located in **Appendix C1** of this EIR and incorporated by reference herein. The report was prepared in accordance with the Eastern Kern Air Pollution Control District's (EKAPCD) *Guidelines for Implementation of the California Environmental Quality Act* (CEQA) (EKAPCD, 1999) and Kern County Planning and Natural Resources Department's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (Kern County Planning and Natural Resources Department, 2006). Other supporting documents are included in **Appendix C2**.

4.3.2 Environmental Setting

The California Air Resources Board (CARB) has divided California into regional air basins according to topographic drainage features. The project site is located in the northwestern portion of the Mojave Desert Air Basin (MDAB) and is under the jurisdiction of the EKAPCD. The MDAB includes the eastern half of Kern County, the northern part of Los Angeles County, most of San Bernardino County (except for the southwest corner), and the eastern edge of Riverside County. It is separated from the South Coast Air Basin to the south by the San Gabriel and San Bernardino Mountains. It is separated from the San Joaquin Valley to the northwest by the Tehachapi Mountains and the south end of the Sierra Nevada.

Topography and Meteorology

Air pollution, especially the dispersion of air pollutants, is directly related to a region's topographic features. Air quality is a function of both the rate and location of pollutant emissions and the meteorological conditions and topographic features that influence pollutant movement and dispersal. Atmospheric conditions, such as wind speed, wind direction, atmospheric stability, and air temperature gradients, interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, which affect ambient air quality.

The project is located in an unincorporated area in southeastern Kern County, California, at the western edge of the Antelope Valley and southwest of the community of Mojave. The project site is located approximately 6 miles southwest of the unincorporated community of Mojave, approximately 9 miles southeast of the City of Tehachapi, and approximately 8 miles northwest of the unincorporated community of Rosamond. State Route (SR)-58 is north of the project site, SR-14 is east of the project site, and Tehachapi Willow-Springs Road runs between the project site's boundaries. A network of existing named and unnamed dirt roads traverses the project site.

Regional access to the project would be provided by SR-14 to/from the south and northeast and SR-58 to/from the northwest. Locally, the project site can be accessed via Tehachapi Willow Springs Road, Backus

Road, and 90th Street West. New unpaved roads would be constructed to serve as project access roads from the existing road network to project facilities.

Elevations across the project site are relatively flat, ranging from approximately 2,970 feet above mean sea level (amsl) in the southeast corner to approximately 3,760 feet amsl in the northwest portion of the site.

The weather in the MDAB is characterized by hot summers, cold winters, large diurnal ranges in temperature, low relative humidity, and irregular rainfall. The topography in the MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest, due to the proximity of the MDAB to the Pacific Ocean and the blocking nature of the Sierra Nevada Mountains to the north. Air masses, pushed onshore in southern California by differential heating, are channeled through the MDAB. The MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet amsl), the passes of which form the main channels for these air masses.

During the summer, the MDAB is generally influenced by a Pacific subtropical high-pressure cell that sits off the coast to the west, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south. Average temperatures recently recorded in the nearby City of Lancaster in eastern Los Angeles County range from a low of 29 degrees Fahrenheit (°F) in December to highs of 95 °F in July. Annual rainfall averages approximately 5.1 inches per year. The MDAB averages between 3 and 7 inches of precipitation per year (from 16 to 30 days with at least 0.01 inch of precipitation). The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, which indicates at least 3 months have maximum average temperatures over 100.4 °F.

Sensitive Receptors

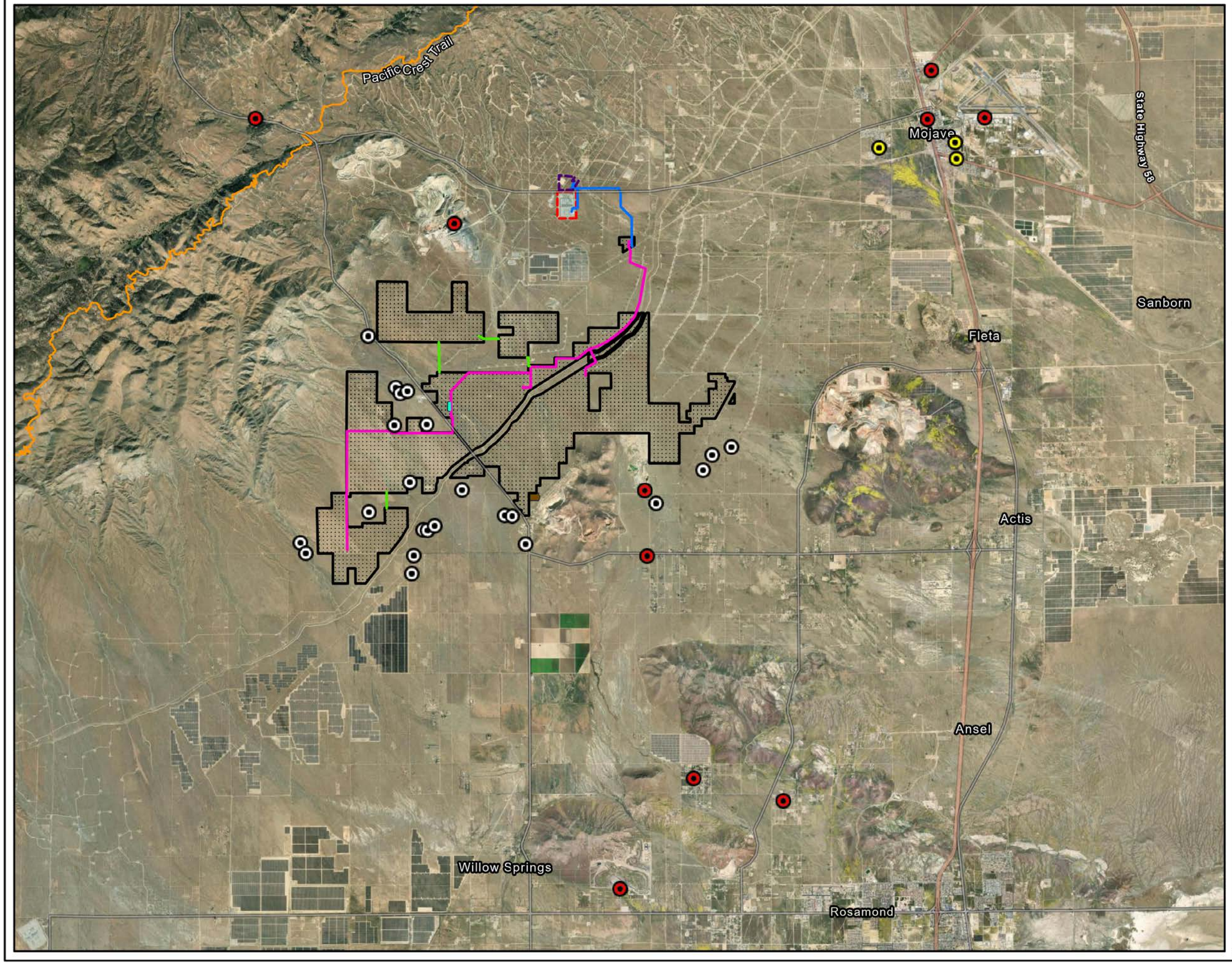
Sensitive receptors are land uses or people considered to be more sensitive than others to air pollutants. The reasons for higher-than-average sensitivity include preexisting health problems, genetic predilection, age, and prolonged exposure to air pollutants. Residences, schools, hospitals, convalescent homes, and parks are considered to be relatively sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality related health problems than the general public. Residential areas are considered sensitive to poor air quality because people usually stay home for extended periods of time, with associated greater exposure to ambient air quality. Recreational uses are also considered sensitive due to greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system.

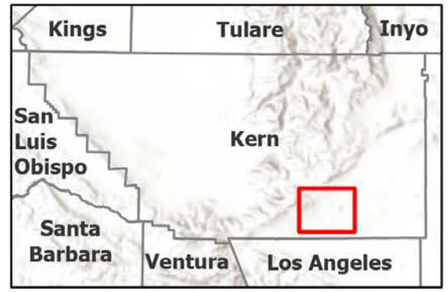
The project site is located in the vicinity of existing renewable energy development, rural residential development, livestock grazing, light and heavy industrial and mining uses, and undeveloped lands. The nearest residence is located approximately 303 feet east of the project site, on Assessor Parcel Number 474-082-09. The community of Mojave is located approximately 6 miles northeast of the project site. The closest school is the Joshua Middle School, located approximately 4.4 miles northeast of the project site. Other sensitive receptors in the vicinity of the project include Mojave High School, and Mojave East Park, located approximately 5.5 miles, and 5.4 miles north of the project boundary, respectively. Additionally, for the purpose of conducting the Health Risk Assessment (HRA), offsite worker receptors were identified for the project. Receptors used in the analysis are shown in **Figure 4.3-1**, *Sensitive Receptors*.

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.3-1. Sensitive Receptors





- Residential Receptors
- Worker Receptors
- Sensitive Receptors
- Windhub High-voltage Substation (Existing)
- SCE Property (500kv)

Proposed Project Features

- Project Site
- Temporary Offsite Laydown Area
- Gen-tie Line (New)
- Medium-voltage/Transmission/ Access Easements

Other Applicant and/or Affiliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

*Already approved under separate projects.

N

0 0.5 1 2 Miles

Scale is 1:150,000 when printed at 11"x17"

Not for Construction

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Ambient Air Quality Standards

National and State Standards

Regulation of air pollution is achieved through both federal and state ambient air quality standards and permitted emission limits for individual sources of air pollutants. As required by the federal Clean Air Act (CAA), the U.S. Environmental Protection Agency (USEPA) has identified criteria pollutants and has established National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM) (specifically PM_{10} and $PM_{2.5}$), and lead (Pb). These pollutants are called "criteria" air pollutants because standards have been established for each of them to meet specific public health and welfare criteria.

To protect human health and the environment, the USEPA has set "primary" and "secondary" ambient standards for each of the criteria pollutants. Primary thresholds were set to protect human health, particularly sensitive receptors, such as children, the elderly, and individuals suffering from chronic lung conditions, such as asthma and emphysema. Secondary standards were set to protect the natural environment and prevent further deterioration of animals, crops, vegetation, and buildings.

Regional and Local Standards

NAAQS establish the level for an air pollutant above which detrimental effects to public health or welfare may result. NAAQS are defined as the maximum acceptable concentrations that, depending on the pollutant, may not be equaled or exceeded more than once per year or, in some cases, as a percentile of observations. California has generally adopted more stringent ambient air quality standards for the criteria air pollutants (i.e., California Ambient Air Quality Standards [CAAQS]). California has also established CAAQS for sulfates, hydrogen sulfide, and vinyl chloride; however, air emissions of these pollutants are not expected to occur under the project and, thus, these pollutants are not addressed further in this EIR.

Table 4.3-1, *National and State Criteria Pollutant Standards and EKAPCD Attainment Status*, presents both sets of ambient air quality standards (i.e., national and state) as well as attainment status for each of these standards within the EKAPCD jurisdiction. If a pollutant concentration in an area is lower than the established standard, the area is classified as being in "attainment" for that pollutant. If the pollutant concentration meets or exceeds the standard (depending on the specific standard for the individual pollutants), the area is classified as a "nonattainment" area. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated "unclassified."

As shown in **Table 4.3-1**, *National and State Criteria Pollutant Standards and EKAPCD Attainment Status*, the southern portion of the EKAPCD, where the project is located, is currently classified as nonattainment for the California 1-hour and 8-hour O_3 standards and PM_{10} standards, severe nonattainment for the national 8-hour O_3 standard, and attainment and/or unclassified for the California and national standards of all of the other criteria pollutants (EKAPCD, 2025).

TABLE 4.3-1: NATIONAL AND STATE CRITERIA POLLUTANT STANDARDS AND EKAPCD ATTAINMENT STATUS

		California Standards		National Standards	
Pollutant	**Averaging Time**	**Concentration**	**Attainment Status**	**Primary**	**Attainment Status**
Ozone (O_3)	1-hour	0.09 ppm	Non-Attainment	–	Attainment
	8-hour	0.070 ppm		0.070 ppm	Severe Nonattainment
Particulate Matter (PM_{10})	AAM	20 µg/m^3	Non-Attainment	–	Unclassifiable/ Attainment
	24-hour	50 µg/m^3		150 µg/m^3	
Fine Particulate Matter ($PM_{2.5}$)	AAM	12 µg/m^3	Unclassified	9.0 µg/m^3	Unclassified/ Attainment
	24-hour	No Standard		35 µg/m^3	
Carbon Monoxide (CO)	1-hour	20 ppm	Unclassified	35 ppm	Unclassified/ Attainment
	8-hour	9.0 ppm		9 ppm	
Nitrogen Dioxide (NO_2)	AAM	0.030 ppm	Attainment	0.053 ppm	Unclassified
	1-hour	0.18 ppm		0.100 ppm	
Sulfur Dioxide (SO_2)	AAM	–	Attainment	—	Unclassified
	24-hour	0.04 ppm		—	
	3-hour	–		–	
	1-hour	0.25 ppm		0.075 ppm	
Lead (Pb)	30-day Average	1.5 µg/m^3	Attainment	–	Unclassified/ Attainment
	Calendar Quarter	–		—	
	Rolling 3-month Average	–		0.15 µg/m^3	
Sulfates	24-hour	25 µg/m^3	Attainment	No Federal Standards	
Hydrogen Sulfide	1-hour	0.03 ppm (42 µg/m^3)	Unclassified		
Vinyl Chloride	24-hour	0.01 ppm (42 µg/m^3)	Unclassified		
Visibility Reducing Particle Matter	8-hour	Extinction coefficient: 0.23/km-visibility of 10 miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70%.	Unclassified		

Notes:
AAM = annual arithmetic mean; km = kilometer; ppm = parts per million; µg/m^3 = micrograms per cubic meter
Sources: CARB, 2023; CARB, 2025a; CARB, 2025b; EKAPCD, 2025.

Local Air Quality

To assess local air quality impacts, the significance thresholds are based on the State CO standards, shown previously in **Table 4.3-1**, *National and State Criteria Pollutant Standards and EKAPCD*

Attainment Status, which are 20 parts per million (ppm) for 1-hour CO concentration levels and 9 ppm for 8-hour CO concentration levels. If CO concentration levels with the project would be less than the standards, then there would be no significant impact on local air quality. If future CO concentrations with the project would be above the standards, then the increase due to the project would contribute to the determination if the impact would be significant or less than significant. A project would have a significant impact on local air quality if the project would result in an increase of 1 ppm or more for the 1-hour averaging time or 0.45 ppm or more for the 8-hour averaging time.

Ambient Air Monitoring

CARB has established and maintains a network of sampling stations (called the State and Local Air Monitoring Stations [SLAMS] network) that work in conjunction with local air pollution control districts and air quality management districts to monitor ambient pollutant levels. The SLAMS network in Kern County consists of seven stations that monitor various pollutant concentrations. The locations of these stations were chosen to meet monitoring objectives, which, for the SLAMS network, call for stations that monitor the highest pollutant concentrations, representative concentrations in areas of high population density, the impact of major pollution emissions sources, and general background concentration levels.

EKAPCD is responsible for monitoring air quality in the Kern County portion of the MDAB to determine whether pollutant concentrations meet state and national air quality standards. Air quality data statistics from various monitors were obtained based on the proximity of the monitoring station to the project. However, they do not necessarily reflect the exact project site conditions (i.e., generally undeveloped land). Most of the monitors are in nearby towns where monitoring data recorded are expected to show higher concentrations of criteria pollutants. Therefore, these monitoring locations are conservatively representative of the air quality in the immediate vicinity of the project.

The closest monitor measuring ozone concentrations is the Arvin-Di Giorgio monitoring station, located approximately 32 miles northwest of the project site. For $PM_{2.5}$, the closest monitor is the Bakersfield-Airport monitoring station located approximately 45 miles northwest of the project site. For NO_2, the closest monitor is the Edison monitoring station located approximately 40 miles northwest of the project site. For PM_{10}, the closest monitor is the Bakersfield-Golden State Highway monitoring station located approximately 50 miles northwest of the project site. Finally, for CO, the Bakersfield-Muni monitoring station is the closest, located approximately 44 miles northwest of the project site. Although there are no monitoring stations within the project vicinity that have available measurements for SO_2, data from the Los Angeles-North Main Street monitoring station (located approximately 70 miles south of the Project site) was used. Ambient monitoring data obtained for the most recent and available 3-year period (2021 through 2023) are summarized below in **Table 4.3-2**, *Air Quality Data Summary (2021–2023)*.

TABLE 4.3-2: AIR QUALITY DATA SUMMARY (2021-2023)

Averaging Time	2021	2022	2023	Days Exceeding Standard During 2021-2023 Period (days/year) State	Federal
Ozone (O_3) – Arvin-Di Giorgio Monitoring Station (AQS Site ID: 06-019-5002)					
1-hour (ppm)	0.106	0.110	0.109	7 to 16	--
8-hour (ppm)	0.095	0.091	0.095	45 to 66	45-66
Inhalable Particulate Matter (PM_{10}) – Bakersfield-Golden State Highway Monitoring Station (AQS Site ID: 06-029-0010)					
24-hour (µg/m^3)	175.0	64.7	236.3	25 to 178	0 to 1
Annual Arithmetic Mean (µg/m^3)	*	*	*	--	--
Fine Particulate Matter ($PM_{2.5}$) – Bakersfield-Airport (Planz) Monitoring Station (AQS Site ID: 06-029-0016)					
24-hour (µg/m^3)	70.5	55.6	58.8	--	3 to 17
Annual Arithmetic Mean (µg/m^3)	20	16.1	12.4	--	--
Carbon Monoxide (CO) – Bakersfield-Muni Monitoring Station (AQS Site ID: 06-029-2012)					
1-hour	2.8	1.5	1.6	--	--
8-hour	1.3	0.9	0.9	--	--
Nitrogen Dioxide (NO_2) – Edison Monitoring Station (AQS Site ID: 06-029-0007)					
1-hour (ppm)	0.041	0.033	0.042	--	--
Annual Arithmetic Mean (ppm)	0.005	0.005	0.004	--	--
Sulfur Dioxide (SO_2) – Los Angeles-North Main Street, California Monitoring Station (AQS Site ID: 06-037-1103)					
1-hour (ppb)	2.2	6.5	7.7	--	0
24-hour (ppb)	1.2	1.2	2.3	--	0
Annual (ppb)	0.39	0.26	0.17	--	0

Notes:
ppm = parts per million by volume; ppb = parts per billion by volume; µg/m^3 = micrograms per cubic meter
* Insufficient data available to determine the value.
Source: Tetra Tech, 2025

Criteria Air Pollutants

The following is a general description of the physical and health effects from the governmentally regulated air pollutants shown in **Table 4.3-1**, *National and State Criteria Pollutant Standards and EKAPCD Attainment Status*.

Ozone

O_3 occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. At ground level, tropospheric, or "bad," ozone is an air pollutant that damages human health, vegetation, and many common materials. Ozone is a key ingredient of urban smog. The troposphere extends to a level approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric, or "good," ozone layer extends upward from approximately 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays (UV-B).

"Bad" ozone is what is known as a photochemical pollutant, which needs the combination of reactive organic gas (ROG) and oxides of nitrogen (NO_X) in the presence of sunlight to form. ROG and NO_X are emitted from various sources throughout Kern County. Significant ozone formation generally requires an adequate amount of precursors in the atmosphere and several hours in a stable atmosphere with strong sunlight. To reduce ozone concentrations, it is necessary to control the emissions of these ozone precursors.

Ozone is a regional air pollutant, which is generated over a large area and transported and spread by the wind. As the primary constituent of smog, ozone is the most complex, difficult to control, and pervasive of the criteria pollutants. Unlike other pollutants, it is not emitted directly into the air by specific sources but is created by sunlight acting on other air pollutants (the precursors), specifically NO_X and ROG. Sources of precursor gases number in the thousands and include common sources, such as consumer products, gasoline vapors, chemical solvents, and combustion byproducts of various fuels. Originating from gas stations, motor vehicles, large industrial facilities, and small businesses, such as bakeries and dry cleaners, the ozone-forming chemical reactions often take place in another location, catalyzed by sunlight and heat. Thus, high ozone concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

Health Effects

While ozone in the upper atmosphere protects the earth from UV-B, high concentrations of ground-level ozone can adversely affect the human respiratory system. Many respiratory ailments, as well as cardiovascular diseases, are aggravated by exposure to high ozone levels.

Ozone is a powerful oxidant—it can be compared to household bleach, which can kill living cells (such as germs or human skin cells) upon contact. Ozone can damage the respiratory tract, causing inflammation and irritation, and it can induce symptoms, such as coughing, chest tightness, shortness of breath, and worsening of asthmatic symptoms. Ozone in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. High concentrations of ozone (above the current ambient air quality standard) lead to lung inflammation, lung tissue damage, and a reduction in the amount of air inhaled into the lungs. Health effects include potential increased susceptibility to respiratory infections and reduced ability to exercise. Health effects are more severe in people with asthma and other respiratory ailments. People who work or play outdoors are at a greater risk for harmful health effects from ozone. Children and adolescents are also at greater risk because they are more likely than adults to spend time engaged in vigorous activities. Research indicates that children under 12 years of age spend nearly twice as much time outdoors daily than adults. Teenagers spend at least twice as much time as adults in active sports and outdoor activities. Also, children inhale more air per pound of body weight than adults, and they breathe more rapidly than adults. Children are less likely than adults to notice their own symptoms and avoid harmful exposures. Elevated ozone concentrations also reduce crop and timber yields, damage native plants, and damage materials, such as rubber, paints, fabric, and plastics (CARB, 2025c).

Reactive Organic Gases and Volatile Organic Compounds

Hydrocarbons are organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases, including ROGs and VOCs, which include all hydrocarbons, except those exempted by CARB. Therefore, ROGs are a set of organic gases based on state rules and regulations. VOCs are similar to ROGs in that they include all organic gases, except those exempted by federal law. Both VOCs and ROGs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the primary sources of hydrocarbons. Another source of hydrocarbons is evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

Health Effects

The primary health effects of hydrocarbons result from the formation of ozone and its related health effects (see the ozone health effects discussion above). High levels of hydrocarbons in the atmosphere can interfere

with oxygen intake by reducing the amount of available oxygen through displacement. There are no separate federal or California ambient air quality standards for ROG. Carcinogenic forms of ROG are considered toxic air contaminants (TAC). The health effects of individual ROGs are described under the *Toxic Air Contaminants* heading below.

Carbon Monoxide

CO is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. CO is an odorless, colorless, poisonous gas that is highly reactive. CO is a byproduct of gasoline-powered motor vehicle exhaust, which contributes more than 66 percent of all CO emissions nationwide. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. These emissions can result in high concentrations of CO, particularly in local areas with heavy traffic congestion. Other sources of CO emissions include industrial processes and fuel combustion in sources, such as boilers and incinerators. Despite an overall downward trend in concentrations and emissions of CO, some metropolitan areas still experience high levels of CO. High CO concentrations develop primarily during winter when periods of light winds combine with the formation of ground-level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures.

Health Effects

When inhaled, CO enters the bloodstream and binds more readily to hemoglobin, the oxygen-carrying protein in blood, than oxygen, thereby reducing the oxygen-carrying capacity of blood and reducing oxygen delivery to organs and tissues. The health threat from CO is most serious for those who suffer from cardiovascular disease. Healthy individuals are also affected, but only at higher levels of exposure. Exposure to CO can cause chest pain in heart patients, headaches, and reduced mental alertness. At high concentrations, CO can cause heart difficulties in people with chronic diseases and can impair mental abilities. Exposure to elevated CO levels is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, difficulty performing complex tasks, and, with prolonged enclosed exposure, death.

The adverse health effects associated with exposure to ambient and indoor concentrations of CO are related to the concentration of carboxyhemoglobin in the blood. Exposure to elevated concentrations of CO weaken the heart's contractions and lower the amount of oxygen carried by the blood. Health effects observed may include an early onset of cardiovascular disease; behavioral impairment; decreased exercise performance in young healthy men; reduced birth weight; sudden infant death syndrome; and increased daily mortality rate (Fierro et al., 2001).

Oxides of Nitrogen

NO_X are a family of highly reactive gases that are a primary precursor to the formation of ground-level ozone and react in the atmosphere to form acid rain. NO_X is emitted from combustion processes in which fuel is burned at high temperatures, principally motor vehicle exhaust and stationary sources, such as electric utilities and industrial boilers. In terms of NO_X emissions, the two principal species of NO_X are nitric oxide (NO) and NO_2, with the majority (95 percent) of the NO_X emissions being comprised of NO. NO is converted to NO_2 by several processes, the two most important of which are: (1) the reaction of NO with ozone; and (2) the photochemical reaction of NO with hydrocarbons. A brownish gas, NO_X is a strong oxidizing agent that reacts in the air to form corrosive nitric acid as well as toxic organic nitrates.

Health Effects

NO_X is an ozone precursor that combines with ROG to form ozone. See the ozone section above for a discussion of the health effects of ozone. Direct inhalation of NO_X can cause a wide range of health effects, including irritation of the lungs, lung damage, and lowered resistance to respiratory infections, such as influenza. Short-term exposures (e.g., less than 3 hours) to low levels of NO_2 may lead to changes in airway responsiveness and lung function in individuals with preexisting respiratory illnesses. These exposures may also increase respiratory illnesses in children. Long-term exposures to NO_2 may lead to increased susceptibility to respiratory infection and may cause irreversible lung damage. Other health effects associated with NO_2 include an increase in the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO_2 may lead to eye and mucus membrane aggravation, along with pulmonary dysfunction. Clinical studies of human subjects suggest that NO_2 exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children. Epidemiological studies have also shown associations between NO_2 concentrations and daily mortality from respiratory and cardiovascular causes as well as hospital admissions for respiratory conditions.

NO_X contributes to a wide range of environmental effects both directly and indirectly when combined with other precursors in acid rain and ozone. NO_X can cause fading of textile dyes and additives, deterioration of cotton and nylon, and corrosion of metals due to the production of particulate nitrates. Airborne NO_X can also impair visibility. Increased nitrogen inputs to terrestrial and wetland systems can lead to changes in plant species composition and diversity. Similarly, direct nitrogen inputs to aquatic ecosystems, such as those found in estuarine and coastal waters, can lead to eutrophication (a condition that promotes excessive algae growth, which can lead to a severe depletion of dissolved oxygen and increased levels of toxins harmful to aquatic life). Nitrogen, alone or in acid rain, can also acidify soils and surface waters. Acidification of soils causes the loss of essential plant nutrients and increased levels of soluble aluminum, which is toxic to plants. Acidification of surface waters creates conditions of low pH and levels of aluminum that are toxic to fish and other aquatic organisms.

Sulfur Dioxide

Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California because of regional meteorological features.

SO_2 is a colorless irritating gas with a “rotten egg” smell that is formed primarily by the combustion of sulfur-containing fossil fuels. Historically, SO_2 was a pollutant of concern in Kern County, but with the successful implementation of regulations, levels have been reduced significantly and the area is in attainment, as shown in **Table 4.3-1,** *National and State Criteria Pollutant Standards and EKAPCD Attainment Status*.

Health Effects

High concentrations of SO_2 can result in temporary breathing impairment for asthmatic children and adults who are active outdoors. Health effects from exposure to emissions of SO_2 include aggravation of lung diseases, especially bronchitis, and constricting of breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. Short-term exposures of individuals to elevated SO_2 levels during

moderate activity may result in health effects, including breathing difficulties that can be accompanied by symptoms, such as wheezing, chest tightness, or shortness of breath. Other health effects that have been associated with longer-term exposures to high concentrations of SO_2, in conjunction with high levels of particulate matter, include aggravation of existing cardiovascular disease, respiratory illness, and alterations in the lungs' defenses. SO_2 also is a major precursor to $PM_{2.5}$, which is a significant health concern and a main contributor to poor visibility (see also the discussion of health effects of PM).

SO_2 not only has a bad odor but can irritate the respiratory system. Exposure to high concentrations for short periods of time can constrict the bronchi and increase mucous flow, making breathing difficult. SO_2 can also irritate the lung and throat at concentrations greater than 6 ppm in many people; impair the respiratory system's defenses against foreign particles and bacteria when exposed to concentrations less than 6 ppm for longer time periods; and enhance the harmful effects of ozone (combinations of the two gases at concentrations occasionally found in the ambient air appear to increase airway resistance to breathing).

SO_2 tends to have more toxic effects when acidic pollutants, liquid or solid aerosols, and particulates are also present. Effects are more pronounced among "mouth breathers," e.g., people who are exercising or who have head colds. These effects include:

- Health problems, such as episodes of bronchitis requiring hospitalization associated with lower-level acid concentrations;
- Self-reported respiratory conditions, such as chronic cough and difficult breathing, associated with acid aerosol concentrations (individuals with asthma are especially susceptible to these effects. The elderly and those with chronic respiratory conditions may also be affected at lower concentrations than the general population);
- Increased respiratory tract infections associated with longer term, lower-level exposures to SO_2 and acid aerosols; and
- Subjective symptoms, such as headaches and nausea, in the absence of pathological abnormalities due to long-term exposure.

SO_2 easily injures many plant species and varieties, both native and cultivated. Some of the most sensitive plants include various commercially valuable pines, legumes, red and black oaks, white ash, alfalfa, and blackberry. The effects include:

- Visible injury to the most sensitive plants at exposures as low as 0.12 ppm for 8 hours;
- Visible injury to many other plant types of intermediate sensitivity at exposures of 0.30 ppm for 8 hours; and
- Positive benefits from low levels in a very few species growing in sulfur-deficient soils.

Increases in SO_2 concentrations accelerate the corrosion of metals, probably through the formation of acids. SO_2 is a major precursor to acidic deposition. Sulfur oxides may also damage stone and masonry, paint, various fibers, paper, leather, and electrical components.

Increased SO_2 also contributes to impaired visibility. Particulate sulfate, much of which is derived from SO_2 emissions, is a major component of the complex total suspended particulate mixture.

Particulate Matter (PM_{10} and $PM_{2.5}$)

PM pollution consists of very small liquid and solid particles floating in the air. Some particles are large and dark enough to be seen as soot or smoke. Others are so small they can be detected only with an electron microscope. PM is a mixture of materials that can include smoke, soot, dust, salt, acids, and metals. PM also forms when gases emitted from motor vehicles and industrial sources undergo chemical reactions in the atmosphere. PM or airborne dusts are the small particles that remain suspended in the air for long periods of time. Particulates of concern are those that are 10 microns or less in diameter (PM_{10}) and 2.5 microns or less in diameter ($PM_{2.5}$). Thus, $PM_{2.5}$ is a subset of PM_{10}. PM_{10} and $PM_{2.5}$ are small enough to be inhaled, pass through the respiratory system, and lodge in the lungs, possibly leading to adverse health effects.

The composition of PM_{10} and $PM_{2.5}$ can vary greatly with time, location, the sources of the material and meteorological conditions. Dust, sand, salt spray, metallic and mineral particles, pollen, smoke, mist, and acid fumes are the main components of PM_{10} and $PM_{2.5}$. In addition to those listed previously, secondary particles can also be formed as precipitates from photochemical reactions of gaseous SO_2 and NO_X in the atmosphere to create sulfates (SO_4) and nitrates (NO_3), respectively. Secondary particles are of greatest concern during the winter months when low inversion layers tend to trap the precursors of secondary particulates.

In the western United States, there are sources of PM_{10} and $PM_{2.5}$ in both urban and rural areas. PM_{10} and $PM_{2.5}$ are emitted from stationary and mobile sources, including diesel trucks and other motor vehicles; power plants; industrial processes; wood-burning stoves and fireplaces; wildfires; dust from roads, construction, landfills, and agriculture; and fugitive windblown dust. Because particles originate from a variety of sources, their chemical and physical compositions vary widely.

Health Effects

PM_{10} and $PM_{2.5}$ particles are small enough—about one-seventh the thickness of a human hair or smaller—to be inhaled and lodged in the deepest parts of the lung, where they evade the respiratory system's natural defenses and can be trapped in the nose, throat, and upper respiratory tract. Health effects from exposure to PM_{10} and $PM_{2.5}$ occur when the body reacts to these foreign particles. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases; heart and lung disease; and coughing, bronchitis, and respiratory illnesses in children. Recent mortality studies have shown a statistically significant direct association between mortality and daily concentrations of PM in the air. PM_{10} and $PM_{2.5}$ can aggravate respiratory disease and cause lung damage, cancer, and premature death. Sensitive populations, including children, the elderly, exercising adults, and those suffering from chronic lung disease, such as asthma or bronchitis, are especially vulnerable to the effects of PM. Of greatest concern are recent studies that link PM exposure to the premature death of people who already have heart and lung disease, especially the elderly. Acidic PM can also damage humanmade materials and is a major cause of reduced visibility in many parts of the United States. Non-health-related effects include reduced visibility and soiling of buildings.

Premature deaths linked to PM are now at levels comparable to deaths from traffic accidents and secondhand smoke. One of the most dangerous pollutants, fine PM (e.g., from diesel exhaust) not only bypasses the body's defense mechanisms and becomes embedded in the deepest recesses of the lungs, but also can disrupt cellular processes. Population-based studies in hundreds of cities in the United States and around the world have demonstrated a strong link between elevated particulate levels and premature deaths, hospital admissions, emergency room visits, and asthma attacks. Long-term studies of children's health

conducted in California have demonstrated that particulate pollution may significantly reduce lung function growth in children (CARB and American Lung Association of California, 2007).

A 2006 study provides evidence that exposure to particulate air pollution is associated with lung cancer. This study found that residents who live in an area that is severely affected by particulate air pollution are at risk of developing lung cancer at a rate comparable to nonsmokers exposed to secondhand smoke. This study also found approximately 16 percent excess risk of dying from lung cancer due to fine particulate air pollution (Dockery and Pope, 2006).

Another study shows that individuals with existing cardiac disease can be in a potentially life-threatening situation when exposed to high levels of fine air pollution. Fine particles can penetrate the lungs and cause the heart to beat irregularly or can cause inflammation, which could lead to a heart attack (Peters et al., 2001).

Attaining the California particulate matter standards would annually prevent about 6,500 premature deaths, or 3 percent of all deaths. These premature deaths shorten lives by an average of 14 years. This is roughly equivalent to the same number of deaths (4,200 to 7,400) linked to secondhand smoke in 2000. In comparison, motor vehicle crashes caused 3,200 deaths, and 2,000 deaths resulted from homicide. Attaining the California particulate matter and ozone standards would annually prevent 4,000 hospital admissions for respiratory disease, 3,000 hospital admissions for cardiovascular disease, and 2,000 asthma-related emergency room visits. Exposure to diesel particulate matter (DPM) causes about 250 excess cancer cases per year in California (Kern County, 2006).

Sulfates

Sulfates (SO_4^{2-}) are a particulate product that comes from the combustion of sulfur-containing fossil fuels. When sulfur monoxide or SO_2 is exposed to oxygen, it precipitates out into sulfates (SO_3 or SO_4).

Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California because of regional meteorological features.

Health Effects

CARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in oxygen intake, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. When acidic pollutants and particulates are also present, SO_2 tends to have an even more toxic effect. In addition to particulates, SO_3 and SO_4 are also precursors to acid rain. SO_X and NO_X are the leading precursors to acid rain. Acid rain can lead to corrosion of manufactured structures and cause acidification of water bodies. Sulfates are particularly effective in degrading visibility and, because they are usually acidic, can harm ecosystems and damage materials and property (CAPCOA, 2023).

Lead

Lead is a metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. Historically, lead was used to increase the

octane rating in automobile fuel. However, because gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels and that use has been mostly phased out, the ambient concentrations of lead have dropped dramatically. The EKAPCD no longer monitors ambient levels of atmospheric lead in the MDAB.

Health Effects

Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments, such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ. Recent studies also show that lead may be a factor in high blood pressure and subsequent heart disease. Lead can also be deposited on the leaves of plants, presenting a hazard to grazing animals and humans through ingestion (USEPA, 2022).

This highly toxic metal has been used for many years in everyday products and has been found to cause a range of health effects, from behavioral problems and learning disabilities to seizures and death. Effects on the nervous systems of children are one of the primary health risk concerns from lead. In high concentrations, children can even suffer irreversible brain damage and death. Children 6 years old and under are most at risk because their bodies are growing quickly.

If not detected early, children with high levels of lead in their bodies can suffer from:

- Damage to the brain and nervous system;
- Behavior and learning problems (such as hyperactivity);
- Slowed growth;
- Hearing problems; and
- Headaches.

Lead is also harmful to adults, and adults with high levels of lead in their bodies can suffer from:

- Difficulties during pregnancy;
- Other reproductive problems (in both men and women);
- High blood pressure;
- Digestive problems;
- Nerve disorders;
- Memory and concentration problems; and
- Muscle and joint pain.

Since the 1980s, lead has been phased out in gasoline, reduced in drinking water, reduced in industrial air pollution, and banned or limited in consumer products.

Other Pollutants

Hydrogen Sulfide

Hydrogen sulfide (H_2S) is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. H_2S in the atmosphere would likely oxidize into SO_2 that can cause acid rain. At low concentrations, H_2S, which has a characteristic "rotten egg" smell, may cause irritation to the eyes, mucous membranes and respiratory system, dizziness, and headaches. In high concentrations (800 ppm can cause death), hydrogen sulfide is extremely hazardous, especially in enclosed spaces. The Occupational Safety and Health Administration (OSHA) has the primary responsibility for regulating workplace exposure to H_2S.

Health Effects

Exposure to low concentrations of H_2S may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Exposure to higher concentrations (above 100 ppm) can cause olfactory fatigue, respiratory paralysis, and death. Brief exposures to high concentrations of H_2S (greater than 500 ppm) can cause a loss of consciousness. In most cases, the person appears to regain consciousness without any other effects. However, in many individuals, there may be permanent or long-term effects, such as headaches, poor attention span, poor memory, and poor motor function. No health effects have been found in humans exposed to typical environmental concentrations of H_2S (0.00011 to 0.00033 ppm). Deaths due to breathing in large amounts of H_2S have been reported in a variety of different work settings, including sewers, animal processing plants, waste dumps, sludge plants, oil and gas well drilling sites, and tanks and cesspools.

Vinyl Chloride

Vinyl chloride monomer is a sweet-smelling colorless gas at ambient temperature. Landfills, publicly owned treatment works, and polyvinyl chloride (PVC) production are the major identified sources of vinyl chloride emissions in California. PVC can be fabricated into several products, such as PVC pipes, pipe fittings, and plastics.

Health Effects

In humans, epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of liver angiosarcoma, which is a rare cancer, and have suggested a relationship between exposure cancers of the lung and brain. There are currently no adopted ambient air standards for vinyl chloride.

Short-term exposure to vinyl chloride has been linked with the following acute health effects (USEPA, 2020):

- Acute exposure of humans to high levels of vinyl chloride via inhalation in humans has resulted in effects on the central nervous system, such as dizziness, drowsiness, headaches, and giddiness.
- Vinyl chloride is reported to be slightly irritating to the eyes and respiratory tract in humans. Acute exposure to extremely high levels of vinyl chloride has caused loss of consciousness; irritation to the lungs and kidneys; inhibition of blood clotting in humans; and cardiac arrhythmias in animals.

- Tests involving acute exposure of mice to vinyl chloride have shown high acute toxicity from inhalation exposure to the substance.

Long-term exposure to vinyl chloride concentrations has been linked with the following chronic health effects (USEPA, 2020):

- Liver damage may result in humans from chronic exposure to vinyl chloride through both inhalation and oral exposure.
- A small percentage of individuals occupationally exposed to high levels of vinyl chloride in air have developed a set of symptoms termed "vinyl chloride disease," which is characterized by Raynaud's phenomenon (fingers blanch and numbness and discomfort are experienced upon exposure to the cold), changes in the bones at the end of the fingers, joint and muscle pain, and scleroderma-like skin changes (thickening of the skin, decreased elasticity, and slight edema).
- Central nervous system effects (including dizziness, drowsiness, fatigue, headache, visual and/or hearing disturbances, memory loss, and sleep disturbances) as well as peripheral nervous system symptoms (peripheral neuropathy, tingling, numbness, weakness, and pain in fingers) have also been reported in workers exposed to vinyl chloride.

Several reproductive/developmental health effects from vinyl chloride exposure have been identified (USEPA, 2020):

- Several case reports suggest that male sexual performance may be affected by vinyl chloride. However, these studies are limited by lack of quantitative exposure information and possible co-occurring exposure to other chemicals.
- Several epidemiological studies have reported an association between vinyl chloride exposure in pregnant women and an increased incidence of birth defects, while other studies have not reported similar findings.
- Epidemiological studies have suggested an association between men occupationally exposed to vinyl chloride and miscarriages during their spouses' pregnancies, although other studies have not supported these findings.
- Long-term exposure to vinyl chloride has also been identified as a cancer risk. Inhaled vinyl chloride has been shown to increase the risk of a rare form of liver cancer (angiosarcoma of the liver) in humans. Animal studies have shown that vinyl chloride, via inhalation, increases the incidence of angiosarcoma of the liver and cancer of the liver.

Visibility-reducing Particles

Visibility-reducing particles is a measure of visibility. CARB does not yet have a measurement method that is accurate or precise enough to designate areas in the state as being in attainment or nonattainment. Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. Except for Lake County, which is designated to be in attainment, California's attainment status with respect to visibility-reducing particles is currently designated as unclassified.

Toxic Air Contaminants

TACs, as known under the California Clean Air Act of 1988 (CCAA), are 10 pollutants that have been identified through ambient air quality data as posing the most substantial health risk in California. Direct exposure to these pollutants has been shown to cause cancer, birth defects, damage to brain and nervous system, and respiratory disorders. CARB provides TAC emission inventories for only the larger air basins.

Sources include industrial processes, such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. TACs do not have ambient air quality standards. Since no safe levels of TACs can be determined, there are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic "Hot Spots" Information and Assessment Act apply to facilities that use, produce, or emit toxic chemicals. Facilities that are subject to the toxic emission inventory requirements of the Act must prepare and submit toxic emission inventory plans and reports to CARB and periodically update those reports. While TACs do result in potential health risks for those exposed, the project would not emit TACs with the exception of diesel particulate matter, which, therefore, is the only TAC described further in this analysis.

Diesel Particulate Matter

Diesel particulate matter (DPM) is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the statewide total, with an additional 71 percent attributed to other mobile sources, such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute about 5 percent of total DPM.

Health Effects

Diesel exhaust and many individual substances contained in it (including arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by the California Office of Environmental Health Hazard Assessment (OEHHA).

In its comprehensive assessment of diesel exhaust, the OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term occupational exposure to diesel exhaust increases the risk of lung cancer. Using information from the OEHHA's assessment, CARB estimates that diesel-particle levels measured in California's air in 2000 could cause 540 "excess" cancers (beyond what would occur if there were no diesel particles in the air) in a population of 1 million people over a 70-year lifetime. Other researchers and scientific organizations, including the National Institute for Occupational Safety and Health, have calculated similar cancer risks from diesel exhaust as those calculated by the OEHHA and CARB.

Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks (OEHHA and American Lung Association, 2001).

Airborne Fungus (Valley Fever)

Coccidioidomycosis, commonly referred to as San Joaquin Valley Fever or Valley Fever, is one of the most studied and oldest known fungal infections. Valley Fever most commonly affects people who live in hot dry areas with alkaline soil and varies with the season. This disease, which affects both humans and animals, is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). CI spores are found in the top few inches of soil and the existence of the fungus in most soil areas is temporary. The cocci fungus lives as a saprophyte in dry alkaline soil. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lay dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-moving activities and become airborne. Agricultural workers, construction workers, and other people who work outdoors and who are exposed to wind and dust are more likely to contract Valley Fever. Children and adults whose hobbies or sports activities expose them to wind and dust are also more likely to contract Valley Fever. After the fungal spores have settled in the lungs, they change into a multicellular structure called a spherule. Fungal growth in the lungs occurs as the spherule grows and bursts, releasing endospores, which then develop into more spherules.

Mild symptoms of Valley Fever can include a slight cold, which quickly goes away. The most common symptoms are described as flu-like and include a cough, fever, headache, chills, sweats, chest pain, and fatigue. Other symptoms that could occur with Valley Fever include rashes on lower legs and joint pain similar to arthritis. Chest X-rays of persons with Valley Fever typically show fluid in one or both lungs, enlarged glands behind the lungs, or fluid buildup around the lungs.

It should be noted that the incident rate for Valley Fever in Kern County within the MDAB is less than the incident rate in Kern County within the San Joaquin Valley Air Basin, where the highest incidence rate within California occurs.

Valley Fever is not contagious and, therefore, cannot be passed from person to person. Most of those who are infected recover without treatment within 6 months and have a lifelong immunity to the fungal spores. In severe cases, especially in those patients with rapid and extensive primary illness, those who are at risk for dissemination of disease, and those who have disseminated disease, antifungal drug therapy is used. The type of medication used and the duration of drug therapy are determined by the severity of disease and response to the therapy. The medications used include ketoconazole, itraconazole, and fluconazole in chronic mild to moderate disease, and amphotericin B, given intravenously or inserted into the spinal fluid, for rapidly progressive disease. Although these treatments are often helpful, evidence of disease may persist and years of treatment may be required (Valley Fever Center for Excellence, 2018).

Table 4.3-3, *Range of Valley Fever Cases*, presents the range of Valley Fever cases based on research conducted by the Valley Fever Center for Excellence (2018).

TABLE 4.3-3: RANGE OF VALLEY FEVER CASES

Infection Classification	Percentage of Total Diagnosed Cases
Unapparent infections	60 percent
Mild to moderate infections	30 percent
Infections resulting in complications	5–10 percent
Fatal infections	<1 percent

Source: Valley Fever Center for Excellence, 2018.

Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals found in many parts of California. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. In addition, naturally occurring asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. Serpentinite and/or ultramafic rock are known to be present in 44 of California's 58 counties. These rocks are particularly abundant in the counties associated with the Sierra Nevada foothills, the Klamath Mountains, and Coast Ranges. According to information provided by the California Department of Conservation, Division of Mines and Geology, the project is not located in an area where naturally occurring asbestos is likely to be present (DOC, 2011).

Coronavirus Disease (COVID-19)

There are many types of human coronaviruses, including some that commonly cause mild upper-respiratory tract illnesses. COVID-19 is a respiratory illness that can spread from person to person. According to the Centers for Disease Control and Prevention (CDC), older adults and people who have severe underlying medical conditions like heart or lung disease or diabetes seem to be at higher risk for developing more serious complications from COVID-19 illness. Symptoms may appear 2 to 14 days after the exposure to the virus and can include fever or chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, and diarrhea (CDC, 2025). According to the CDC, COVID-19 is believed to spread between people who are in close contact with one another (within about 6 feet) through respiratory droplets produced when an infected person coughs, sneezes, or talks (CDC, 2024). A nationwide study by Harvard University found a linkage between long-term exposure to $PM_{2.5}$ as air pollution (averaged from 2000 to 2016) and statistically significant increased risk of COVID-19 death in the United States (Xiao et al., 2020).

4.3.3 Regulatory Setting

In California, air quality is regulated by several agencies, including USEPA, CARB, and local air districts, such as the EKAPCD. Each of these agencies develops rules and/or regulations to attain the goals or directives imposed upon them through legislation. Although USEPA regulations may not be superseded, some state and local regulations may be more stringent than federal regulations. The project site is located within the MDAB, which is under the jurisdiction of the EKAPCD.

Federal

U.S. Environmental Protection Agency

The principal air quality regulatory mechanism on the federal level is the CAA and, in particular, the 1990 amendments to the CAA and the NAAQS that it establishes. These standards identify levels of air quality for "criteria" pollutants that are considered the maximum levels of ambient (background) air pollutants

considered safe, with an adequate margin of safety, to protect the public health and welfare. The criteria pollutants include O_3, CO, NO_2 (which is a form of NO_X), SO_2 (which is a form of SO_X), PM_{10}, $PM_{2.5}$, and lead. The USEPA also has regulatory and enforcement jurisdiction over emission sources beyond state waters (outer continental shelf), and those that are under the exclusive authority of the federal government, such as aircrafts, locomotives, and interstate trucking. The USEPA's primary role at the state level is to oversee the state air quality programs. The USEPA sets federal vehicle and stationary source emission standards and oversees approval of all State Implementation Plans (SIP), as well as provides research and guidance for air pollution programs. The SIP is a state level document that identifies all air pollution control programs within California that are designed to meet NAAQS.

USEPA has also adopted technology-based standards that limit the emissions of criteria pollutants from new or modified facilities in specific source categories. These standards are referred to as New Source Performance Standards and are found in 40 Code of Federal Regulations (CFR) Part 60. The applicability of these standards depends on the equipment size or rating; material or fuel process rate; and/or the date of construction, modification, or reconstruction. In the event that emergency backup generators are required for project facilities by the Authority Having Jurisdiction (AHJ), the project's diesel-powered emergency generators would be subject to Subpart IIII, which establishes emission and operational limits of criteria pollutants for new stationary compression ignition engines. The project's natural gas-fired emergency generators would be subject to Subpart JJJJ, which establishes emission and operational limits of criteria pollutants for new stationary spark ignition engines. To comply with the requirements of Subpart IIII, the project's diesel-fired emergency generators would be operated and maintained as per the manufacturer specifications and would be certified to comply with Tier 4 emission rates. The project's natural gas-fired generators would be confirmed by the manufacturer to meet the respective Subpart JJJJ emission requirements and would be operated and maintained as required by the Subpart.

In addition to criteria pollutants, the USEPA also regulates emissions of hazardous air pollutants (HAP). HAPs, or air toxics, are pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects or adverse environmental effects. Controlling air toxic emissions became a national priority with the passage of the CAA amendments in 1990, when the U.S. Congress mandated that the USEPA regulate 188 air toxics. National Emission Standards for Hazardous Air Pollutants (NESHAP) regulate HAPs at major emission sources, aiming to protect public health with an ample margin of safety and to prevent any significant and adverse environmental effects. As stated previously, the project does not include large stationary sources; therefore, it is not considered a "major" source of emissions and NESHAP requirements would generally not apply.

Corporate Average Fuel Economy Standards

Established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and USEPA jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the "maximum feasible level" with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy (NHTSA, 2020). Fuel efficiency standards for medium- and heavy-duty trucks have been jointly developed by USEPA and NHTSA. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018, and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type. USEPA and NHTSA have also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25

percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type (USEPA and NHTSA, 2016). On April 1, 2022, the NHTSA announced new fuel economy standards that require an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026. The new standards will increase fuel efficiency 8 percent annually for model years 2024-2025 and 10 percent annually for model year 2026. They will also increase the estimated fleetwide average by nearly 10 miles per gallon for model year 2026, relative to model year 2021 (NHTSA, 2022). Pursuant to the National Environmental Policy Act, NHTSA is currently analyzing the potential environmental impacts of new fuel efficiency standards for model years 2030 and beyond medium- and heavy-duty on-highway vehicles and some work trucks, new CAFE standards for model years 2027 and beyond passenger cars and light trucks, and new fuel efficiency standards for model years 2029 and beyond heavy-duty pickup trucks and vans.

State

California Air Resources Board

CARB, a department of the California Environmental Protection Agency (CalEPA), oversees air quality planning and control throughout California by administering the SIP. Its primary responsibility lies in ensuring implementation of the 1989 amendments to the CCAA, responding to the federal CAA requirements, and regulating emissions from motor vehicles sold in California. CARB also sets fuel specifications to further reduce vehicular emissions.

The amendments to the CCAA establish the CAAQS and a legal mandate to achieve these standards by the earliest practical date. These standards apply to the same criteria pollutants as the federal CAA and also include sulfates, visibility-reducing particulates, hydrogen sulfide, and vinyl chloride (there are currently no NAAQS for these latter pollutants). They are also generally more stringent than the national standards in most cases, although recently promulgated NAAQS for annual $PM_{2.5}$, 1-hour NO_2 and SO_2 can be more stringent than the respective CAAQS.

CARB is also responsible for regulations pertaining to TACs. The Air Toxics “Hot Spots” Information and Assessment Act (Assembly Bill 2588) was enacted in 1987 as a means to establish a formal air toxics emission inventory risk quantification program. Assembly Bill 2588, as amended, establishes a process that requires stationary sources to report the type and quantities of certain substances their facilities routinely release into their local air basin. Each APCD and air quality management districts (AQMD) in the state rank the data into high, intermediate, and low priority categories. When considering the ranking, the potency, toxicity, quantity, volume, and proximity of the facility to receptors are given consideration by an air district. DPM is considered a TAC under AB 2588; therefore, the project may be subject to Assembly Bill 2588 due to its DPM-emitting emergency backup generators (natural gas generators are expected to have minimal TAC emissions). However, DPM emissions from the emergency backup generators will be intermittent and minimal, with operations estimated at approximately 100 hours per year for maintenance and testing purposes. Emissions will be further controlled based on the engines being Tier 4. Any reporting required by Assembly Bill 2588, if applicable, will be completed through annual reporting to the EKAPCD.

In an effort to reduce DPM emissions throughout the state, CARB has established the Airborne Toxic Control Measures (ATCM) for DPM from Portable Engines Rated at 50 Horsepower and Greater (13 California Code of Regulations [CCR] Section 93116). This ATCM requires portable diesel-fueled engines having a maximum rating of 50 horsepower and greater to meet fleet-average DPM emissions standards. Additionally, CARB has a Portable Equipment Registration Program that allows owners or operators of

portable engines and associated equipment to register their units under a statewide program to operate their equipment, which must meet specified program emission requirements, throughout California without having to obtain individual permits from local air districts.

CARB has also established the ATCM for Stationary Compression Ignition Engines (17 CCR Section 93115) to reduce DPM and criteria pollutant emissions from stationary diesel-fueled compression ignition engines through fuel requirements, operational restrictions, and emission limits. The ATCM applies to points of sale of stationary compression ignition engines for use in California except portable engines, engines for motive power, auxiliary engines on marine vessels, and agricultural wind machines.

CARB also has on- and off-road engine emission-reduction programs that would indirectly affect the project's emissions through the phasing in of cleaner on- and off-road engines. In 2007, CARB enacted a regulation for the reduction of DPM and criteria pollutant emissions from in-use, off-road diesel-fueled vehicles (13 CCR Article 4.8, Chapter 9, Section 2449). This regulation provides target emission rates for PM and NO_X emissions for owners of fleets of diesel-fueled off-road vehicles. It applies to equipment fleets of three specific sizes, and the target emission rates are reduced over time with full implementation by 2023 for large and medium fleets and 2028 for small fleets.

Title V and Extreme Designation

Title V of the CAA, as amended in 1990, creates an operating permit program for certain defined sources. In general, owner/operators of defined industrial or commercial sources that emit more than 25 tons per year (tpy) of NO_x and ROG must possess a Title V permit. In "Extreme Designation" areas, the definition of a major source which requires Title V permitting, changes from 25 tpy to 10 tpy. This change results in more businesses having to comply with Title V permitting requirements under the "Extreme" nonattainment designation.

Title V does not impose any new air pollution standards, require installation of any new controls on the affected facilities, or require reductions in emissions. Title V does enhance public and USEPA participation in the permitting process and requires additional recordkeeping and reporting by businesses, which results in significant administrative requirements.

California Renewables Portfolio Standard Program

California's Renewables Portfolio Standard Program was enacted in 2002 with Senate Bill 1078 with the requirement that investor-owned utilities to obtain 20 percent of their electric supply from renewable energy sources, such as solar, by 2017. On April 12, 2011, Governor Brown signed Senate Bill 2X, requiring California retail electric providers to procure 33 percent of their retail energy sales from eligible renewable sources by 2020. In October 2015, Governor Brown signed into legislation Senate Bill 350, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030 (CPUC, 2025a and 2025b).

On September 10, 2018, Governor Brown signed Senate Bill 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. Senate Bill 100 also created new standards for the Renewable Portfolio Standard (RPS) goals that were established by Senate Bill 350 in 2015. Specifically, the bill increases required energy from renewable sources for both investor-owned and publicly owned utilities from 50 percent to 60 percent by 2030. Incrementally, these energy providers also are required to have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. The updated RPS goals are considered achievable, since

many California energy providers are already meeting or exceeding the RPS goals established by Senate Bill 350. Governor Brown signed Executive Order B-55-18 with a new statewide goal to achieve carbon neutrality (zero-net GHG emissions) by 2045 and to maintain net negative emissions thereafter.

On September 16, 2022, Governor Newsom signed Senate Bill 1020, the Clean Energy, Jobs, and Affordability Act, which adds interim targets to the policy framework originally established in Senate Bill 100. The interim targets require renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent of all retail electricity sales by 2040. The bill also requires all state agencies to rely on 100 percent renewable energy and zero-carbon resources to power their own facilities by 2035 and encourages better information sharing and coordination between agencies for transmission planning.

California State Implementation Plan

The CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA. State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register.

Regional

Eastern Kern Air Pollution Control District

The EKAPCD has primary responsibility for regulating stationary sources of air pollution situated within its jurisdictional boundaries. To this end, the EKAPCD implements air quality programs required by state and federal mandates, enforces rules and regulations based on air pollution laws, and educates businesses and residents about their role in protecting air quality. The EKAPCD also identifies thresholds of significance against which project impacts are analyzed to determine whether a project will have a significant impact on air quality. The EKAPCD is responsible for managing and permitting existing, new, and modified sources of air emissions within the Mojave Desert portion of Kern County and has established the following rules and regulations to ensure compliance with local, state, and federal air quality regulations:

Rule 106 – Land Use

As part of their responsibility to protect the public health and property from the damaging effects of air pollution, it shall be the duty of the Air Pollution Control Officer to review and advise the appropriate planning authorities within the EKAPCD on all new construction or changes in land use which the Air Pollution Control Officer believes could become a source of air pollution problems.

Rule 201 (Permits Required)

Rule 201 establishes permitting requirements for stationary sources, including the project's backup generators. The EKAPCD also adopted rules requiring commercial solar facilities to obtain Authority to Construct and Permit to Operate approval under Rule 201 to address fugitive dust emissions. Under Rule 201, these projects would be required to submit a Fugitive Dust Emissions Control Plan in accordance with Rule 402. In addition, the EKAPCD is requiring a Fugitive Dust Emissions Monitoring Plan through which each facility install upwind and downwind particulate matter air monitoring. The monitoring will be used to demonstrate compliance with the District Rules and Regulations.

Rule 208.2 – Criteria for Finding of No Significant Environmental Impact (CEQA)

This Rule establishes criteria by which a project under review by EKAPCD be found to have no potential for causing a significant environmental impact, and, thus, be granted a general rule exemption pursuant to Section 15061(b)(3) of the State CEQA Guidelines.

Rule 210.1 – New and Modified Stationary Source Review [NSR]

Rule 210.1 establishes stationary source offset levels for new and modified stationary sources of air pollutants. Under this rule, the EKAPCD has established required offsets for when the emissions from a source exceed the following trigger levels:

- PM_{10}: 15 tons per year;
- SO_X (as SO_2): 27 tons per year;
- VOCs: 25 tons per year; and
- NO_X (as NO_2): 25 tons per year.

Rule 401 – Visible Emissions

Rule 401 states that a person shall not discharge into the atmosphere, from any single source of emissions whatsoever, any air contaminant from any single emissions source for a period or periods aggregating more than 3 minutes in any 1 hour which is:

- As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines; or
- Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Subsection A [of the Rules].

Rule 402 – Fugitive Dust

Rule 402 of the EKAPCD's rules and regulations addresses significant human-made dust sources from active operations. An active operation is defined as "activity capable of generating fugitive dust, including any open storage pile, earth-moving activity, construction/demolition activity, disturbed surface area, and non-emergency movement of motor vehicles on unpaved roadways and any parking lot served by an unpaved road subject to this Rule." Rule 402 applies to specified bulk storage, earth-moving, construction and demolition, and human-made conditions resulting in wind erosion, and includes the following requirements:

- A person shall not cause or allow emissions of fugitive dust from any active operation to remain visible in the atmosphere beyond the property line of the emission source.
- A person shall utilize one or more Reasonably Available Control Measures (RACM) or Bulk Material Control Measures (BMCM) to minimize fugitive dust emissions from each source type that is part of any active operation, including unpaved roadways.
- No person shall conduct a large operation without filing for and obtaining an approved fugitive dust emission control plan. Large operation is defined as "any construction activity on any site involving 10 or more contiguous acres of disturbed surface area, or any earth-moving activity exceeding a daily volume of 10,000 cubic yards, or relocating more than 2,500 cubic yards per day of bulk materials at least three days per year."
- The EKAPCD may require onsite PM_{10} monitoring for any large operation that causes downwind PM_{10} ambient concentrations to increase more than 50 micrograms per cubic meter above upwind concentrations as determined by utilizing high-volume particulate matter samplers or other USEPA-approved equivalent method(s).

Rule 404.1 – Particulate Matter Concentrations – Desert Basin

Rule 404.1 pertains to Particulate Matter Concentrations – Desert Basin and states:

- Particulate matter emissions shall not exceed 0.1-grains per standard cubic foot of gas at standard conditions (gr/scf).

Rule 412 – Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants

Rule 412 applies to the transfer of gasoline into stationary storage tanks, gasoline delivery vessels and gasoline bulk plants. The rule requires CARB Phase I Vapor Recovery systems among other provisions.

Rule 412.1 – Gasoline Transfer into Vehicle Fuel Tanks

Rule 412.1 applies to the transfer of gasoline into vehicle fuel tanks from stationary storage containers subject to the requirements of Rule 412 (Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants). The rule requires CARB Certified Phase II Vapor Recovery Systems.

Rule 419 – Nuisance

Rule 419 states that a person shall not discharge from any source whatsoever such quantities of contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or that endanger the comfort, repose, health, or safety of such persons or the public or that cause or have a natural tendency to cause injury or damage to business or property.

Rule 422 – New Source Performance Standards

Rule 422 incorporates performance standard provisions of 40 CFR Part 60 for implementation delegation by EKCAPCD. The standards include provisions for storage of petroleum liquids, among others.

Rule 423- National Emission Standards for Hazardous Air Pollutants and Source Categories (NESHAPs).

Rule 423 adopts the USEPA's NESHAPS by reference, which grants the EKAPCD the ability to ensure that all sources of hazardous air pollution would comply with applicable standards, criteria, and requirements set forth in Title 40, Chapter 1, parts 61 and 63, of the CFR that are in effect as of October 10, 2017.

Ozone Attainment Plans

In 2008, USEPA adopted a more stringent 8-hour ozone NAAQS of 0.075 ppm. Although EKAPCD attained the 1997 8-hour ozone NAAQS, and the Indian Wells Valley planning area met the new (2008) ozone NAAQS, the EKAPCD's Design Value was higher than 0.075 ppm. In 2012, a portion of the EKAPCD was classified "marginal" nonattainment pursuant to the 2008, 8-hour Ozone NAAQS Air Quality Designations. However, EKAPCD failed to meet the 0.075 ppm standard by the applicable attainment date and was reclassified as "moderate" nonattainment, effective June 3, 2016. As a result, EKAPCD was required to submit a SIP revision for the nonattainment area by January 1, 2017, which showed compliance with statutory and regulatory conditions applicable to the "moderate" designation (EKAPCD, 2017).

EKAPCD, in partnership with CARB, conducted photochemical modeling along with supplemental analyses to determine whether the EKAPCD could attain the 2008 ozone NAAQS by the "moderate" nonattainment deadline. Modeling indicated EKAPCD would not meet the 0.075 ppm standard by the moderate deadline but could attain it by 2020, which is the attainment date for "serious" nonattainment areas. Pursuant to Section 181(b)(3) of the CAA "Voluntary Reclassification," EKAPCD requested CARB formally submit a request to USEPA asking for voluntary reclassification of EKAPCD from "moderate" to "serious" nonattainment for the 2008, 8-hour ozone NAAQS, and revise the attainment date to December 31, 2020 (EKAPCD, 2017). USEPA reclassified EKAPCD (except for the Indian Wells Valley planning area) as "serious" nonattainment on August 6, 2018 (USEPA, 2018).

The 2017 Ozone Attainment Plan was adopted by EKAPCD on July 27, 2017, which addresses all required elements, emissions reductions, and control measures necessary to demonstrate attainment with the 2008 8-hour ozone NAAQS by 2020. CARB approved the 2017 Ozone Attainment Plan as a revision to the SIP and submitted it to USEPA on October 25, 2017 (CARB, 2017). In response to court decisions, some elements included in the 2017 Plan required updates. CARB staff prepared the 2018 Updates to the California State Implementation Plan (2018 SIP Update) to update SIP elements for nonattainment areas throughout the State as needed. CARB adopted the 2018 SIP Update on October 25, 2018 (CARB, 2018). CARB adopted another update to the SIP (2022 SIP Update) on September 22, 2022. The 2022 SIP Update includes measures and commitments to reduce emissions from State-regulated sources to support attainment of the 70 parts per billion (ppb) 8-hour ozone standard in all nonattainment areas across California (CARB, 2022). In 2023, EKAPCD adopted the 2023 Ozone Attainment Plan to satisfy both the 2008, 8-hour O_3 NAAQS of 75 ppb and 2015, 8-hour O_3 NAAQS (70 ppb) (EKAPCD, 2023).

Air Quality Conformity Determination for Transportation Plans and Programs

The CAA amendments of 1990 require a finding to be made stating that any project, program, or plan subject to approval by a metropolitan planning organization conforms to air plans for attainment of air quality standards. Kern Council of Governments (KCOG) is designated the Regional Transportation

Planning Agency and Metropolitan Planning Organization for Kern County. In that capacity, KCOG models air quality projections on population projections in conjunction with current general plan designations and estimated vehicle miles as well as the current Regional Transportation Plan (RTP) and the federal transportation plan for Kern County. These results are compared to pollutant budgets for each basin approved by the USEPA in the 1999 base year. Kern County is contained within two air basins: San Joaquin Valley Air Basin and the MDAB. Each air basin has its own plans and pollutant budgets. KCOG makes conformity findings for each air basin. KCOG adopted the 2022 RTP/Sustainable Communities Strategy (SCS), which serves as a 24-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County (KCOG, 2022).

The Federal Transportation Improvement Program (FTIP) for the Kern County region is a 6-year schedule of multimodal transportation improvements, and the RTP is a long-range, 26-year transportation plan. The conformity findings conclude that the FTIP and RTP result in emissions that are less than the emission budgets of baseline emissions for CO, VOC, NO_X, and PM_{10} (KCOG, 2024).

Local

Construction and operation of the project would be subject to policies and regulations contained within the Kern County General Plan, Kern County Zoning Ordinance, and the Kern County Code of Building Regulations, which include policies, goals, and implementation measures related to air quality. The policies and implementation measures in the Kern County General Plan related to air quality that are applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the project. These measures are not listed below, but as stated in **Chapter 2**, *Introduction*, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

The Soledad Mountain-Elephant Butte Specific Plan is also applicable to the project. However, this plan does not include any applicable goals, policies, or implementation measures.

Kern County General Plan

Chapter 1. Land Use, Conservation, and Open Space Element

Air Quality

Policies

Policy 18: The air quality implications of new discretionary land use proposals shall be considered in approval of major developments. Special emphasis will be placed on minimizing air quality degradation in the desert to enable effective military operations and in the valley region to meet attainment goals.

Policy 19: In considering discretionary projects for which an Environmental Impact Report must be prepared pursuant to the California Environmental Quality Act, the appropriate decision-making body, as part of its deliberations, will ensure that:

(1) All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and

(2) The benefits of the proposed project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to the extent that such a statement is required pursuant to the California Environmental Quality Act.

Policy 20: The County shall include fugitive dust control measures as a requirement for discretionary projects and as required by the adopted rules and regulations of the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District on ministerial permits.

Policy 21: The County shall support air districts efforts to reduce PM_{10} and $PM_{2.5}$ emissions.

Policy 22: Kern County shall continue to work with the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District toward air quality attainment with federal, State, and local standards.

Implementation Measures

Measure F: All discretionary permits shall be referred to the appropriate air district for review and comment.

Measure G: Discretionary development projects involving the use of tractor-trailer rigs shall incorporate diesel exhaust reduction strategies including, but not limited to:

1. Minimizing idling time.
2. Electrical overnight plug-ins.

Measure H: Discretionary projects may use one or more of the following to reduce air quality effects:

1. Pave dirt roads within the development.
2. Pave outside storage areas.
3. Provide additional low Volatile Organic Compounds (VOC) producing trees on landscape plans.
4. Use of alternative fuel fleet vehicles or hybrid vehicles.
5. Use of emission control devices on diesel equipment.
6. Develop residential neighborhoods without fireplaces or with the use of Environmental Protection Agency certified, low emission natural gas fireplaces.
7. Provide bicycle lockers and shower facilities on site
8. Increasing the amount of landscaping beyond what is required in the Zoning Ordinance (Chapter 19.86).
9. The use and development of park and ride facilities in outlying areas.
10. Other strategies that may be recommended by the local Air Pollution Control Districts.

Measure J: The County should include PM_{10} control measures as conditions of approval for subdivision maps, site plans, and grading permits.

Chapter 5. Energy Element

Solar Energy Development

Policies

Policy 1: The County shall encourage domestic and commercial solar energy uses to conserve fossil fuels and improve air quality.

Policy 3: The County should permit solar energy development in the desert and valley planning regions that does not pose significant environmental or public health and safety hazards.

Soledad Mountain Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. There are no recommendations, analysis, or implementation measures in the Soledad Mountain Elephant Butte Specific Plan that are applicable to air quality. In Kern County, specific plans are used to implement goals, objectives, and policies of the Kern County General Plan in a more detailed and refined manner unique to a smaller area of the County. Since there are no applicable goals, policies, or implementation measures within the Soledad Mountain Elephant Butte Specific Plan, refer to the applicable policies, goals, and implementation measures of the Kern County General Plan above.

Kern County Best Management Practices for Dust Management

In 2013, solar developers and planners from Los Angeles and Kern Counties began a series of meetings to discuss the best management practices (BMP) for protecting air quality and minimizing construction impacts from solar projects. The process incorporated feedback from the Mojave Air and Space Port, members of the Mojave Chamber of Commerce, Rosamond Municipal Advisory Council, and numerous other community leaders. Subsequent to these meetings, Kern County developed a new approach to best control fugitive dust emissions and improve air quality in the high desert. The County's approach recognizes that effective dust control management must be site specific and cannot be "one size fits all" because standard methods do not adequately meet the challenges of such a unique environment as the Mojave Desert region. An effective strategy has to be based on soil conditions, topography, adjacent land uses, and wind direction.

Conditions imposed on the new solar projects in Kern County are more extensive and rigorous than ever before. These include:

- Development of a Site-specific Dust Control Plan that considers ongoing community stakeholder input, to the extent feasible and practicable.
- Use of Global Positioning System (GPS) or lasers to level posts, generally avoiding grading except when elevation changes exceed design requirements.
- When grading is unavoidable, it is to be phased and done with the application of approved chemical dust palliatives that stabilize the earth.
- Use of dust suppression measures during road surface preparation activities, including grading and compaction.

- Final road surfaces must be stabilized to achieve a measurable threshold friction velocity (the wind speed at which erosion starts) equal to or greater than 100 centimeters per second.
- If ground is cleared, plant roots must be left in place where possible.
- Expanded onsite watering processes.
- Installation of wind barrier fencing or screening.
- Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved (i.e., without asphalt) surface at the construction site.
- All trucks hauling dirt, sand, soil, or other loose materials shall be covered or shall maintain at least 2 feet of freeboard.
- Sending mailings to residents within 1,000 feet of a project site.

Kern County is also carefully monitoring all solar construction activities to ensure that all mitigation measures are followed and are adequate to minimize dust-related health concerns.

4.3.4 Impacts and Mitigation Measures

This section describes the impact analysis relating to air quality for the project. It describes the methods used to determine the impacts of the project and lists the thresholds used to conclude whether an impact would be significant. Where warranted, measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Methodology

The analysis presented within this section is based on both qualitative and quantitative approaches for determining air quality impacts associated with construction, operation, and maintenance of the project. The findings in the *Air Quality and Greenhouse Gas Technical Report* prepared for the project (located in **Appendix C1** of this EIR), which was prepared in accordance with the EKAPCD's *Guidelines for Implementation of the California Environmental Quality Act* (EKAPCD, 1999) and Kern County Planning and Natural Resources Department's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (Kern County Planning and Natural Resources Department, 2006) [County Air Quality Assessment guidance] documents (**Appendix C2**), were used to assess the project's impacts related to air quality.

Pollutant Emissions

Project construction and operational emissions were estimated primarily using the California Emissions Estimator Model (CalEEMod; Version 2022.1.1.21). Short-term and annual emissions were estimated using project-specific data and schedules within the model. Emissions from emergency generators used during operation of the project were estimated by using spreadsheet calculations. Refer to **Appendix C1** of this EIR for details on equipment fleet, hours of operation, vehicle miles traveled, and other assumptions used.

Construction

Construction of the project would generate emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ that could result in short-term air quality effects during the construction period. Emissions would originate from offroad equipment exhaust, employee and haul truck vehicle exhaust (on-road vehicles), and fugitive dust from site grading and earth movement.

Kern County guidance states that an air quality assessment should include estimates of short-term construction emissions in tons per year (Kern County, 2006). The estimates must include site grading and building construction emissions with comparison to the adopted Kern County CEQA thresholds and the applicable air district (EKAPCD) thresholds. Per the County's guidance, all assumptions should be clearly presented, including length of each construction phase, equipment that would be used during each phase, and the amount of soil disturbance, including any import or export of soil. The emission factors used to estimate emissions should be clearly documented, and the model output should be included in the report.

CalEEMod Version 2022.1.1.21 was used to estimate emissions from construction of the project. CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with construction activities from a variety of land use projects, such as residential, commercial, and industrial facilities. CalEEMod input parameters, including the land use type used to represent the project and size, construction schedule, and anticipated construction equipment utilization, were based on information provided by project applicant, or default model assumptions if project specifics were unavailable and default assumptions reasonable for the project, as described in **Appendix C1** of this EIR.

Construction scenario assumptions including schedule, equipment mix, and vehicle trips, were based on information provided by the project applicant (See **Appendix C1** of this EIR for a complete list of construction assumptions, including equipment, and vehicles). For purposes of this analysis, it was assumed that construction of the project would commence in the fourth quarter of 2025, and would last approximately 34 months. Details regarding the methods and activity assumptions by source type are provided below.

- **Off-road Equipment**: Off-road equipment would be required for several construction activities, including grading and structure construction. Based on assumptions provided in **Appendix C1** of this EIR, several construction phases will run concurrently. For this analysis, it was assumed that all construction equipment would be operating at the site for 5 days per week and 8 hours per day during project construction. Default values for equipment horsepower and load factor contained in CalEEMod were used for estimating project emissions.
- **On-road Vehicles:** On-road vehicles (e.g., pickup trucks, flatbed trucks, and passenger vehicles) would be required for material deliveries to the project site, material and equipment hauling within the project site, onsite crew and material movement, and employee commuting. As provided in **Appendix C1** of this EIR, the analysis assumes a construction peak workforce of approximately 660 workers per day. Most of the truck deliveries would be for the photovoltaic (PV) system installation, as well as any aggregate material that may be required for road base. For calculation of emissions from on-road mobile sources, CalEEMod uses the EMFAC 2021 emissions model.
- **Water Trucks:** During construction of the Project, water would be required for common construction-related purposes, including but not limited to dust suppression, soil compaction, and

grading, with as many as thirty (30) water trucks onsite expected on a given day. Water trucks were modeled as onsite trucks in the analysis.

- **Fugitive Dust**: Fugitive dust (PM_{10} and $PM_{2.5}$) emissions would result from wind erosion of exposed soil and soil storage piles, and vehicles traveling on paved and unpaved roads and surfaces. These emissions were calculated based on USEPA (2006a, 2006b, 2011) emissions factors contained in CalEEMod.
- **Site Grading and Earth Movement**: Fugitive dust emissions from earth movement (e.g., site grading, and bulldozing) were also quantified using emission factors contained in CalEEMod. Data on the total graded acreage were provided by the project applicant and the graded acreage was assumed to be 500 total acres. Per the applicant, it was assumed that all material would be balanced onsite and therefore no material import or export is expected.

Operation

Operation of the project would generate emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ that could result in long-term impacts on ambient air quality. During operation of the project, there would be daily operational and site maintenance activities, and periodic water hauling for panel cleaning. Panel cleaning is expected to be conducted one to two times annually as performance testing and weather and site conditions dictate. The annual water usage is expected to be up to approximately 20 acre-feet of water. This amount includes the water necessary for project operations, fire suppression, and site maintenance.

Emissions would result from off-road equipment exhaust and on-road vehicle trip generation for employee trips. Long-term operational emissions associated with the project were calculated using CalEEMod (please see **Appendix C1** of this EIR for a complete list of operational assumptions).

- **Energy Source:** Energy sources include emissions associated with project electricity usage and onsite power generation. Electricity use would contribute indirectly to criteria air pollutant emissions. It is assumed that power for operations and maintenance activities would be provided by the project's electrical generation, supplied by the local power provider or via diesel generators. It is likely groundwater well pumps would utilize electricity generated onsite or from the local electrical grid; however, for a worst-case emissions generation perspective, a diesel generator has been assumed to power the water well pumps. The emissions are accounted for in the stationary source emission estimates. The generator emits pollutants from the combustion of diesel fuel. The generator will be regulated by an operating permit under the EKAPCD's Rule 1160 for Internal Combustion Engines.
- **Mobile Source:** Mobile sources for the project would primarily be motor vehicles (automobiles and light-duty trucks) traveling to and from the project site. Motor vehicles are assumed to use gasoline. Based on conservative estimates for vehicular travel, the project is anticipated to have up to 3,129 trips per year during operation, accounting for the commutes by six full-time equivalent staff, plus up to 10 additional workers for periodic panel washing activities, and onsite and offsite material delivery trucks.
- **Off Road:** The project will require periodic panel washing up to twice a year based on site conditions. Each wash cycle would take place for approximately 15 to 30 days and would require 10 additional workers. Emissions from panel washing are calculated by conservatively assuming that each worker would require an off-highway truck for panel washing.

- **Stationary Source:** Emissions from backup generators that may be required for the project were quantified using spreadsheet calculations that are provided in **Appendix C1**. The generators will be regulated by an operating permit under the EKAPCD's Rule 201 for Internal Combustion Engines. Appropriate air permits will be obtained from EKAPCD. Emergency backup generators would meet applicable best available control technology and be operated in accordance with applicable CARB and EKAPCD rules and regulations. The generators would need to be intermittently run for maintenance and testing purposes and in a manner consistent with CARB's ATCM for Stationary Compression Ignition Engines (17 CCR Section 93115). For air emissions quantification purposes, it is assumed the backup generators would be diesel powered.

Decommissioning

The project anticipates an estimated lifetime of 35 years. At such time the project is decommissioned, equipment operation and site restoration activities could result in temporary impacts to air quality. Given the assumption that much of the construction equipment necessary to construct the project would also be required to decommission the site, it is reasonable to assume that decommissioning activities would be similar in nature to activities associated with construction of the project. It should be noted that this does not take into account any future improvement in technology or subsequent reductions in air emissions. Project decommissioning is conservatively projected to be approximately the same time in duration as construction. Therefore, decommissioning emissions are assumed to be the same as predicted construction emissions.

Ambient Air Quality Analysis

Kern County Planning and Natural Resources Department's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (Kern County Planning and Natural Resources Department, 2006) requires a dispersion modeling analysis of the maximum 24-hour average concentrations of PM_{10} and $PM_{2.5}$ resulting from construction in comparison to applicable ambient air quality standards and thresholds; therefore, an ambient air quality analysis (AAQA) was performed for the project during construction. Air dispersion modeling was not performed for the operational emissions as they are below the EKAPCD thresholds of significance and would be intermittent sources estimated at approximately 100 hours per year, likely to have negligible impacts. The purpose of the AAQA is to determine whether the project's construction emissions would cause or contribute to exceedances of any CAAQS or NAAQS during construction. The AAQA was performed using AERMOD v23132. Dispersion modeling assumptions and results for project construction are provided in **Appendix C1** of this EIR.

Health Risk Assessment

A Health Risk Assessment (HRA) associated with construction emissions was prepared and follows the methodologies prescribed in the OEHHA's *Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments* (OEHHA, 2015), which was adopted in 2015 replacing the previous 2003 guidance manual. **Appendix C1**, *Air Quality and Greenhouse Gas Technical Report*, of this EIR details the methodology and results of the HRA estimating the potential risk attributed from mitigated DPM emissions from project construction. A HRA was not performed for the operational emissions since operational sources are likely to have negligible impacts.

For risk assessment purposes, PM_{10} in diesel exhaust is considered DPM, originating mainly from offroad equipment and onsite trucks operating at a defined location for a given length of time at a given distance

from sensitive receptors. Less-intensive, more-dispersed emissions result from on-road vehicle exhaust (e.g., heavy-duty diesel trucks). These emissions could result in elevated concentrations of DPM at nearby receptors, which could lead to an increase in the risk of cancer or other health impacts. Consequently, an HRA was performed to determine the extent of increased cancer risks and chronic health indices at the maximally exposed receptors from project construction. HRA assumptions and results are provided in **Appendix C1** of this EIR.

CO Hotspots

Heavy traffic congestion can contribute to high levels of CO. Individuals exposed to these CO "hot spots" may have a greater likelihood of developing adverse health effects. Kern County's suggested criteria recommends performing a localized CO impact analysis for the following project conditions: a) Level of Service (LOS) of an intersection or roadway identified LOS E or worse; b) signalization and/or channelization is added to an intersection; and c) sensitive receptors such as residences, schools, hospitals, etc. are located in the vicinity of the affected intersection or signalization. The project would not cause the LOS of any studied intersection or roadway to operate at LOS E or worse during construction or operation or require adding signalization or channelization to an intersection. Further, as project construction is only expected to last 34 months, it would be considered temporary and would not result in a long-term source of CO emissions. Also, the project would create minimal emission sources during operation. As such, a CO hotspot analysis is not required.

Valley Fever Exposure

While there are no specific thresholds for the evaluation of potential Valley Fever exposure, the potential for Valley Fever exposure as a result of the project is evaluated based on the anticipated earth-moving activities and considers applicant-proposed measures and compliance with Rule 8021, Section 6.3, which requires development and implementation of a Site-Specific Fugitive Dust Control Plan to help control the release of the *Coccidioides immitis* fungus during construction activities.

Visibility Impacts

Kern County guidance states that potential impacts to visibility should be evaluated for all industrial projects and any other projects, such as mining projects, that have components that could generate dust or emissions related to visibility.

Based on the Kern County guidelines, a visibility analysis is not required since the project is not a large industrial stationary source or mining project, and it would not have long-term operational components that could generate substantial dust or emissions related to visibility.

Asbestos

There are no quantitative thresholds related to receptor exposure to asbestos. However, EKAPCD Rule 423 (National Emission Standards for Hazardous Air Pollutants and Source Categories) requires all projects to comply with the provisions of Title 40, Chapter I, Parts 61 and 63 of the CFR. Among other requirements, NESHAP specifies work practices to ensure safe handling of asbestos during demolitions and renovations of all facilities, including, but not limited to, structures, installations, and buildings (excluding residential buildings that have four or fewer dwelling units).

Thresholds of Significance

The air quality significance criteria were developed considering the CEQA significance criteria developed by the local air quality district in the project area, approved CEQA air quality checklists, and other federal criteria.

Kern County Environmental Checklist Thresholds

The Kern County CEQA Implementation Document and Kern County Environmental Checklist (updated in May 2019) identify the following criteria, as established in Appendix G of the State CEQA Guidelines, to determine if a project could potentially have a significant adverse effect related to air quality. The Kern County Environmental Checklist states that a project would normally be considered to have a significant impact related to air quality if it would:

a. Conflict with or obstruct implementation of the applicable air quality plan;

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. Specifically, would implementation of the project (in a specific location) exceed any of the following adopted thresholds:

i. Eastern Kern Air Pollution Control District:

Operational and Area Sources

- *25 tons per year for ROG*
- *25 tons per year for NO_X*
- *15 tons per year for PM_{10}.*

c. Expose sensitive receptors to substantial pollutant concentrations; or

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Air Quality Plan Consistency

As a component of the cumulative impact analysis, the Kern County Planning and Natural Resources Department's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* states that the following should be included in the consistency determination for existing air quality plans:

- Discuss project in relation to KCOG conformity and traffic analysis zones (TAZ); and
- Quantify the emissions from similar projects in the Ozone Attainment Plan for the applicable basin. Discuss the Ozone Attainment Plan for the applicable air district, development, and relation to regional basin, Triennial Plan, and SIP.

Eastern Kern Air Pollution Control District

As discussed in the EKAPCD's *Guidelines for Implementation of the CEQA*, a project is determined to not have significant (as defined by CEQA, Section 21068) air quality impact on the environment, if operation of the project would (EKAPCD, 1999):

1. *Emit (from all project sources subject to KCAPCD Rule 201) less than offsets trigger levels set forth in Subsection III.B.3. of KCAPCD's Rule 210.1 (New and Modified Source Review Rule);*
2. *Emit less than 137 pounds per day of NOx or Reactive Organic Compounds (ROG) from motor vehicle trips (indirect sources only);*
3. *Not cause or contribute to an exceedance of any California or National Ambient Air Quality Standard;*
4. *Not exceed the District health risk public notification thresholds adopted by the EKAPCD Board;*
5. *Be consistent with adopted federal and state Air Quality Attainment Plans.*

The guidelines reference EKAPCD Rule 208.2 (Criteria for Finding of No Significant Environmental Impact [California Environmental Quality Act], which contains the following thresholds for sensitive receptors:

- *Cancer risk impacts – Maximum Exposed Individual (MEI) exceeds 1 in one million*
- *Chronic non-cancer risk impacts – Chronic Hazard Index (HIC) exceeds 0.2;*

Health-Based Thresholds for Project-Generated Pollutants of Human Health Concern

The California Supreme Court's decision in *Sierra Club v. County of Fresno* (6 Cal. 5th 502) (hereafter referred to as the Friant Ranch Decision) reviewed the long-term, regional air quality analysis contained in the environmental impact report for the proposed Community Plan Update and *Friant Ranch Specific Plan*. The *Friant Ranch Specific Plan* project is a 942-acre master-plan development in unincorporated Fresno County within the San Joaquin Valley Air Basin, an air basin currently in nonattainment under NAAQS and CAAQS for O_3 and $PM_{2.5}$. The Court found that the environmental impact report's air quality analysis was inadequate because it failed to provide enough detail "for the public to translate the bare [criteria pollutant emissions] numbers provided into adverse health impacts or to understand why such a translation is not possible at this time." The Court's decision clarifies that environmental documents must attempt to connect a project's air quality impacts to specific health effects or explain why it is not technically feasible to perform such an analysis.

All criteria pollutants that would be generated by the proposed project are associated with some form of health risk (e.g., asthma, lower respiratory problems). Criteria pollutants can be classified as either regional or localized pollutants. *Regional pollutants* can be transported over long distances and affect ambient air quality far from the emissions source. *Localized pollutants* affect ambient air quality near the emissions source. O_3 is considered a regional criteria pollutant, whereas CO, NO_2, SO_2, and Pb are localized pollutants. PM can be both a local and a regional pollutant, depending on its composition. The primary criteria pollutants of concern generated by the proposed project are O_3 precursors (ROG and NO_X), CO, SO_X, and PM (including DPM), because EKAPCD and Kern County Planning Department have developed numerical thresholds for these pollutants.

Ozone Precursors and Regional PM

Adverse health effects induced by regional criteria pollutant emissions generated by the proposed project (O_3 precursors and PM) are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, the number and character of exposed individuals [e.g., age, gender]). For these reasons, O_3 precursors (ROG and NO_X) contribute to the formation of groundborne O_3 on a regional scale. Emissions of ROG and NO_X generated in one area may not equate to a specific O_3 concentration in that same area. Similarly, some types of particulate pollutant

may be transported over long-distances or formed through atmospheric reactions. As such, the magnitude and locations of specific health effects from exposure to increased O_3 or regional PM concentrations are the product of emissions generated by numerous sources throughout a region, as opposed to a single individual project.

Models and tools have been developed to correlate regional criteria pollutant emissions to potential community health impacts. Although there are models capable of quantifying O_3 and secondary PM formation and associated health effects, these tools were developed to support regional planning and policy analysis and have limited sensitivity to small changes in criteria pollutant concentrations that individual projects induce. Therefore, translating project-generated criteria pollutants to the locations where specific health effects could occur or the resultant number of additional days of nonattainment is not possible with any degree of accuracy.

Technical limitations of existing models to correlate project-level regional emissions to specific health consequences are recognized by air quality management districts throughout the state, including the San Joaquin Valley Air Pollution Control District (SJVAPCD) and South Coast Air Quality Management District (SCAQMD), who provided amici curiae briefs for *the Friant Ranch Decision* legal proceedings. Although the project is not within the SJVAPCD or SCAQMD, the discussion regarding the approach to assessing health risk within the published case and amici curiae briefs are appropriate for reference in all air districts across the state. In its brief, SJVAPCD acknowledged that although health risk assessments for localized air toxics, such as DPM, are commonly prepared, "it is not feasible to conduct a similar analysis for criteria air pollutants because currently available computer modeling tools are not equipped for this task." SJVAPCD further notes that emissions solely from the *Friant Ranch Specific Plan* project (which equate to less than one-tenth of one percent of the total NO_X and VOC in the Valley) are not likely to yield valid information and that any such information should not be "accurate when applied at the local level." SCAQMD presents similar information in their brief, stating that "it takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels."

As discussed above, air districts develop region-specific CEQA thresholds of significance in consideration of existing air quality concentrations and attainment designations under NAAQS and CAAQS, which are informed by a wide range of scientific evidence that demonstrates there are known safe concentrations of criteria pollutants. While recognizing that air quality is cumulative problem, air districts typically consider projects that generate criteria pollutant and O_3 precursor emissions below these thresholds to be minor in nature and thus would not adversely affect air quality such that NAAQS or CAAQS would be exceeded. Emissions generated by the proposed project could increase photochemical reactions and the formation of tropospheric O_3 and secondary PM, which, at certain concentrations, could lead to increased incidence of specific health consequences. Although these health effects are associated with O_3 and particulate pollution, the effects are a result of cumulative and regional emissions. Thus, the proposed project's incremental contribution cannot be traced to specific health outcomes on a regional scale, and a quantitative correlation of project-generated regional criteria pollutant emissions to specific human health impacts is not included in this analysis. All feasible mitigation is being applied to reduce construction- and operations-generated emissions of O_3 precursors and PM to the extent possible.

Local Air Quality

To assess localized CO impacts, the significance thresholds are based on the state CO standards, shown previously in **Table 4.3-1**, *National and State Ambient Air Quality Standards* and *Eastern Kern Air Pollution Control District Attainment Status*, which are 20 ppm for 1-hour CO concentration levels and

9 ppm for 8-hour CO concentration levels. If CO concentration levels with the proposed project would be less than the standards, then there would be no significant impact on local air quality. If future CO concentrations with the proposed project would be above the standards, then the increase due to the project would determine if the impact would be significant or less than significant. A project would have a significant impact on local air quality if the project would result in an increase of 1 ppm or more for the 1-hour averaging time or 0.45 ppm or more for the 8-hour averaging time.

Localized Project-Generated Criteria Pollutants (PM and CO) and Air Toxics (DPM)

Localized pollutants generated by a project are deposited and potentially affect populations near the emissions source. Because these pollutants dissipate with distance, emissions from individual projects can result in direct and material health impacts on adjacent sensitive receptors. Models and thresholds are readily available to quantify these potential health effects and evaluate their significance. Locally adopted thresholds and analysis procedures for the localized pollutants of concern associated with the proposed project (PM_{10}/$PM_{2.5}$, DPM, CO, and naturally occurring asbestos) are identified below.

Localized PM_{10} and $PM_{2.5}$

The Kern County Planning Department requires projects to estimate the maximum 24-hour average concentration of PM_{10} and $PM_{2.5}$ at the project boundary and compare concentrations to the appropriate NAAQS, CAAQS, Kern County CEQA thresholds, and the applicable threshold from EKAPCD or SJVAPCD. The proposed project area is considered a nonattainment area for PM_{10} and $PM_{2.5}$ CAAQS, which are more restrictive than the NAAQS. The Kern County Planning Department has not adopted a threshold for areas that exceed CAAQS or NAAQS. The SJVAPCD recommends USEPA Significant Impact Level (SIL) values for areas that exceed NAAQS or CAAQS. EPA SIL values are amounts EPA considers to be a significant contribution in an area that exceeds air quality standards without the proposed project. USEPA SIL values used in the analysis are as follows:

- An incremental increase in 24-hour PM_{10} of 5 micrograms per cubic meter (micrograms per cubic meter [$\mu g/m^3$]), or
- An incremental increase in 24-hour $PM_{2.5}$ of 1.2 $\mu g/m^3$.

Diesel Particulate Matter

EKAPCD requires that projects do not exceed the District health risk public notification thresholds adopted by the Kern County Air Pollution Control District Board. Based on EKAPCD reporting per Assembly Bill 2588, EKAPCD's public notification thresholds are as follows:

- A cancer risk exceeding 10 in 1 million, or
- A ratio of the chronic or acute exposure to the reference exposure level ("hazard index") exceeding 1.0.

CO Hotspots

Heavy traffic congestion can contribute to high levels of CO. Individuals exposed to these CO "hot spots" may have a greater likelihood of developing adverse health effects. The potential for the proposed project to result in localized CO impacts at intersections resulting from addition of its traffic volumes is assessed based on Kern County's suggested criteria, which recommends performing a localized CO impact analysis for intersections operating at or below LOS E. Projects that do not generate CO concentrations in excess of

the health-based CAAQS or NAAQS would not contribute a significant level of CO such that localized air quality and human health would be substantially degraded.

Naturally Occurring Asbestos

There are no quantitative thresholds related to receptor exposure to asbestos. However, EKAPCD Rule 423 (National Emission Standards for Hazardous Air Pollutants and Source Categories) requires all projects to comply with the provisions of CFR Title 40, Chapter I, Parts 61 and 63.

Project Impacts

Impact 4.3-1: The project would conflict with or obstruct implementation of the applicable air quality plan.

In general, a project would not interfere with the applicable air quality plan if it is consistent with growth assumptions used to form the applicable air quality plan and if the project implements all reasonably available and feasible air quality control measures. The consistency with the Air Quality Management Plan (AQMP) is discussed below for construction and operation. Air quality impacts are controlled through policies and provisions of the EKAPCD, the Kern County General Plan, and the Kern County Code of Building Regulations. The CCAA requires air pollution control districts with severe or extreme air quality problems to provide for a 5 percent reduction in nonattainment emissions per year. The Attainment Plans prepared for the EKAPCD comply with this requirement. CARB reviewers approve or amend the document and forward the plan to the USEPA for final review and approval within the SIP.

Required Evaluation Guidelines

CEQA Guidelines and the CAA (Section 176) contain specific references regarding the need to evaluate consistencies between the project and the applicable AQMP for the projects. To accomplish this, CARB has developed a three-step approach to determine project conformity with the applicable AQMP:

1. *Determination that an AQMP is being implemented in the area where the project is being proposed.* EKAPCD's most recently adopted air quality management plan is its 2023 Ozone Attainment Plan (OAP).
2. *The project must be consistent with the growth assumptions of the applicable AQMP*. The project, as a solar facility, is consistent with Kern County's General Plan. Additionally, the project would not introduce land uses that would generate vehicle trips or promote growth in the project area beyond what is projected in the KCOG 2022 RTP. Both the RTP and general plan are incorporated into the AQAP. Therefore, the project is consistent with the applicable AQMP.
3. *The project must contain in its design all reasonably available and feasible air quality control measures.* The project incorporates various policy and rule-required implementation measures that would reduce related emissions, as described in **Section 4.3.3** above.

Because implementation of the project would not result in additional growth beyond what was anticipated by the Kern County General Plan and incorporated into the AQAP, conclusions may be drawn from the following criteria:

- The findings of the analysis conducted using TAZ show that sufficient employment increase is planned for the project area such that new employment opportunities afforded by the project were included in the growth assumptions used to develop the AQAP.
- The primary source of emissions from the project would be from construction and operation vehicles that are licensed through the State and whose emissions are already incorporated into CARB's emissions inventory

Consistency with the Kern Council of Government's Regional Conformity Analysis

The KCOG Regional Conformity Analysis Determination for the 2025 FTIP and 2022 RTP demonstrates that the regional transportation expenditure plans in the Kern County portion of the Mojave Desert air quality attainment areas would not hinder the efforts set out in the CARB's SIP for each area's non-attainment pollutants (CO, O_3, and PM_{10}) (KCOG, 2024). The analysis uses an adopted regional growth forecast, governed by both the adopted KCOG Policy and Procedure Manual and a Memorandum of Understanding between the County of Kern and KCOG (representing itself and outlying municipal member agencies).

The KCOG Regional Conformity Analysis considers General Plan Amendments (GPA) and zone changes that were enacted at the time of the analysis as projected growth within the area based on land use designations incorporated within the Kern County General Plan. Land use designations that are altered based on subsequent GPAs that were not included in the Regional Conformity Analysis were not incorporated into the KCOG analysis. Consequently, if a proposed project is not included in the regional growth forecast using the latest planning assumptions, it may not be said to conform to the regional growth forecast.

Item 2 under Section 3 – Model Maintenance Procedure, of the KCOG Regional Transportation Modeling Policy and Procedure Manual states "Land Use Data – General Plan land capacity data or "Build-out capacity" is used to distribute the forecasted County totals, and may be updated as new information becomes available, and is revised in regular consultation with local planning departments" (KCOG, 2023).

Under the current Kern County Zoning, the project site is designated as various agricultural, estate, platted land, floodplain, wind energy, and residential suburban districts. In addition, a review of KCOG regional forecast was prepared to evaluate if the proposed project area growth forecast would be sufficient to account for the project's projected employment increase. The adopted growth forecasts are assigned to TAZs; a review of the growth forecast one mile from a project presents a conservative assessment of the project area. Given that the project would only require six full-time employees, the current growth forecast accounts for the proposed employment increase, therefore, the proposed project is consistent with the regional growth forecast. Additionally, although traffic associated with the project site may increase during construction, those increases would be temporary. There are no intersections or roadways identified as LOS E or worse associated with the project. Additionally, there would be no signalization or channelization added to an intersection as part of this project. Therefore, project construction would be consistent with the TAZs.

Construction

As noted previously, the project's short-term construction emissions are a result of construction equipment and vehicle exhaust, water usage, and fugitive dust associated with vehicle travel on paved and unpaved roads and earth-moving activities.

Unmitigated construction emissions are provided in **Table 4.3-4**, *Estimated Construction Criteria Pollutant Emissions Without Mitigation*. As shown in **Table 4.3-4**, annual unmitigated PM_{10} emissions and unmitigated maximum daily NOx emissions would exceed their respective EKAPCD threshold. Mitigated construction emissions are shown in **Table 4.3-5**, *Estimated Construction Criteria Pollutant Emissions With Mitigation*, and include implementation of BMPs and **Mitigation Measure MM 4.3-1** for controlling NO_X, PM_{10}, and $PM_{2.5}$ exhaust emissions from construction equipment and **Mitigation Measure MM 4.3-2** for dust control. Detailed emissions calculations are provided in **Appendix C1** of this EIR. As shown in **Table 4.3-5**, *Estimated Construction Criteria Pollutant Emissions With Mitigation*, the Project's construction emissions would not exceed the EKAPCD's annual and daily significance thresholds.

TABLE 4.3-4: ESTIMATED CONSTRUCTION CRITERIA POLLUTANT EMISSIONS WITHOUT MITIGATION

Construction Period	ROG	CO	NOx	SO_2	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions (lb/day) [a]	21	2,377	195	0.52	518	85
EKAPCD Daily Thresholds (lb/day)[b]	137	--	137	--	--	--
Exceeds Daily Thresholds (Y/N)?	N	NA	Y	NA	NA	NA
Annual Emissions (tpy)[c]	2.02	302	18.3	0.050	48.7	8.1
EKAPCD Annual Thresholds (tpy)[d]	25	--	25	--	15	--
Exceeds Annual Thresholds (Y/N)?	N	NA	N	NA	**Y**	NA

NOTES:

"--" indicates that no significance threshold exists for this pollutant; NA = Not applicable (i.e., no significance threshold exists for this pollutant); tpy = ton per year

[a] Maximum daily emissions reflect the maximum emissions possible on any given day during the 34-month construction duration, based on the schedule of expected overlapping activities, and assuming all construction equipment and vehicles within a phase could operate simultaneously on any given day during the project.

[b] The EKAPCD Daily Thresholds were taken from the *Guidelines for Implementation of the California Environmental Quality Act (CEQA) of 1970, as Amended* (EKAPCD, 1999). Although these thresholds are intended for project operations only, they were applied to construction emissions for comparison purposes.

[c] Represents highest annual emissions generated during construction, which occurs in 2026.

[d] The EKAPCD Annual Thresholds were taken from Attachment A of the *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (Kern County Planning and Natural Resources Department, 2006). Although EKAPCD Rule 210.1 does provide offset thresholds for CO and SO, those thresholds only apply to new stationary sources or modifications to existing stationary sources. As a result, they are not appropriate for comparison to the mobile-oriented construction emission sources.

TABLE 4.3-5: ESTIMATED CONSTRUCTION CRITERIA POLLUTANT EMISSIONS WITH MITIGATION[a]

Construction Period	ROG	CO	NOx	SO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions (lb/day) [b]	12	2,377	111	0.52	170	41
EKAPCD Daily Thresholds (lb/day) [c]	137	--	137	--	--	--
Exceeds Daily Thresholds (Y/N)?	N	NA	N	NA	NA	NA
Annual Average Emissions (tpy) [d]	1.32	302	11.3	0.050	13.5	2.0
EKAPCD Annual Thresholds (tpy) [e]	25	--	25	--	15	--
Exceeds Annual Thresholds (Y/N)?	N	NA	N	NA	**N**	NA

NOTES:

"--" indicates that no significance threshold exists for this pollutant; NA = Not applicable (i.e., no significance threshold exists for this pollutant); tpy = ton per year

[a] The mitigated emissions scenario accounts for emission reductions achieved through implementation of best management practices and **Mitigation Measure MM 4.3-2** for dust control and **MM 4.3-3** for controlling construction equipment exhaust.

Construction Period	ROG	CO	NOx	SO	PM_{10}	$PM_{2.5}$

[b] Maximum daily emissions reflect the maximum emissions possible on any given day during the 34-month construction duration, based on the schedule of expected overlapping activities, and assuming all construction equipment and vehicles within a phase could operate simultaneously on any given day during the project.

[c] The EKAPCD Daily Thresholds were taken from the *Guidelines for Implementation of the California Environmental Quality Act (CEQA) of 1970, as Amended* (EKAPCD, 1999). Although these thresholds are intended for project operations only, they were applied to construction emissions for comparison purposes.

[d] Represents highest annual emissions generated during construction, which occurs in 2026

[e] The EKAPCD Annual Thresholds were taken from Attachment A of the *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (Kern County Planning and Natural Resources Department, 2006). Although EKAPCD Rule 210.1 does provide offset thresholds for CO and SO, those thresholds only apply to new stationary sources or modifications to existing stationary sources. As a result, they are not appropriate for comparison to the mobile-oriented construction emission sources.

The project would implement all applicable BMPs outlined in EKAPCD Rule 402 to minimize potential ambient air quality impacts during construction. Implementation of these BMPs, along with **Mitigation Measure MM 4.3-2**, would minimize potential visibility impacts from dust and emissions at the project site's perimeter during construction. The project must comply with CARB's ATCMs for emergency standby diesel-fueled compression ignition engines, which are identified as key stationary control measures identified in the EKAPCD's 2017 Ozone Attainment Plan for 2008 Federal 75 ppb 8-Hour Ozone Standard (EKAPCD, 2017). Through implementation of the construction BMPs and **Mitigation Measures MM 4.3-1** through **MM 4.3-5,** the project is expected to comply with CARB's ATCMs for diesel-fueled, heavy-duty, off-road equipment. Therefore, construction of the project would be consistent with this plan. Project construction workforce would be temporary, requiring approximately 34 months of employment. Temporary construction jobs required for the project would be well within the annual growth projection presented in Section 3 of KCOG's 2022 Regional Transportation Plan and Sustainable Communities Strategy in. Therefore, project construction would be consistent with this plan and would result in a less than significant impact.

Operation

Long-term air emission impacts are associated with any change in permanent use of a project site by onsite stationary and onsite or offsite mobile sources. As stated previously, the project includes mobile source emissions resulting from vehicle trips associated with the project operations and maintenance. In addition, emergency backup generators for the project's substations or battery energy storage systems may be required. If required, there would be up to six 500-kilowatt diesel-fired generators, each needing to be intermittently run for maintenance and testing purposes. Stationary emissions from portable/backup generators are expected to meet the emission standards for CARB certified Tier 4 engines. Emission factors used to quantify emissions from the emergency backup generators are provided in **Appendix C1**. Operational assumptions were based on information provided by the project proponent.

Appropriate air permits would be obtained from EKAPCD for the emergency backup generators. It is also expected that these emergency backup generators, if required, would be CARB-certified Tier 4 engines, as dictated by EKAPCD requirements at the time of permitting, and operated in accordance with applicable federal, state, regional, and local ordinances and regulations. If required, the generators would be powered by diesel fuel but would only need to be intermittently run for maintenance and testing purposes and in a manner consistent with CARB's ATCM for Stationary Compression Ignition Engines (17 CCR Section 93115). Accordingly, the amount of operational emissions released by the emergency backup generators would be minimal. The project does not include large stationary sources; therefore, it is not considered a major source of emissions. Even with this conservative assumption, the project's operational emissions would be well below EKAPCD's significance thresholds.

Unmitigated operational emissions are shown in **Table 4.3-6**, *Estimated Operation Criteria Pollutant Emissions.* Detailed emissions calculations are provided in **Appendix C1** of this EIR. While the model of emergency backup generators has not been selected at this time, **Appendix C**1 includes conservative emissions estimates using typical generators on the market today. As shown, the project's operational emissions would not exceed the EKAPCD's significance thresholds even without mitigation.

TABLE 4.3-6: ESTIMATED OPERATION CRITERIA POLLUTANT EMISSIONS [a]

Operations	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$
Operations Maximum Daily Emissions (lb/day)	4.75	30.60	24.40	0.124	0.97	0.82
Emergency Generator Maximum Daily Emissions (lb/day)	1.26	23.15	2.65	0.043	0.13	--
Total Operational Maximum Daily Emissions (lb/day)[b]	6.00	53.75	27.05	0.17	1.10	0.82
EKAPCD Daily Thresholds (lb/day)[c]	137	--	137	--	--	--
Exceeds Daily Thresholds (Y/N)?	N	NA	N	NA	NA	NA
Operations Annual Emissions (tpy)	0.11	0.54	0.38	0.002	0.03	0.02
Emergency Backup Generator Annual Emissions (tpy)	0.06	1.16	0.13	0.002	0.01	--
Total Operational Annual Emissions (tpy)	0.17	1.70	0.51	0.004	0.03	0.02
EKAPCD Annual Thresholds (tpy)[d]	25	--	25	--	15	--
Exceeds Annual Thresholds (Y/N)?	N	NA	N	NA	N	NA

NOTES:

"--" indicates that no significance threshold exists for this pollutant; NA = Not applicable (i.e., no significance threshold exists for this pollutant); tpy = ton per year

[a] The unmitigated emissions scenario accounts for emission reductions achieved through implementation of best management practices for dust control, because these are required by existing regulations.

[b] Maximum daily generator emissions assume each generator operates one hour within a single day.

[c] The EKAPCD Daily Thresholds were taken from the *Guidelines for Implementation of the California Environmental Quality Act (CEQA) of 1970, as Amended* (EKAPCD, 1999).

[d]The EKAPCD Annual Thresholds were taken from Attachment A of the *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (Kern County Planning and Natural Resources Department, 2006). Although EKAPCD Rule 210.1 does provide an offset threshold for SO_2, this threshold only applies to new stationary sources or modifications to existing stationary sources and emergency equipment operating less than 200 hours per year are exempt. As a result, it is not appropriate for comparison to the project's mobile-oriented operation emission sources or the emergency backup generators.

Table 4.3-7, *Ozone Precursors Emissions Comparison*, includes a comparison of the 2032 ozone precursor emissions projections for the EKAPCD's jurisdiction and the project's unmitigated operation emissions. The project is expected to be fully operational by 2028. This comparison shows that project operations would emit less than 0.06 percent of the total ozone precursor emissions in the EKAPCD's jurisdiction without mitigation.

TABLE 4.3-7: OZONE PRECURSORS EMISSIONS COMPARISON

Source	ROG Emissions (tpd)	NO_x Emissions (tpd)
2032 EKAPCD District-wide On-road Sources[a]	0.556	1.014
2032 EKAPCD District-wide Off-road Sources[a]	3.386	3.941
2032 EKAPCD District-Wide Total Stationary Sources[a]	1.550	12.399
2032 EKAPCD District-Wide Total Mobile and Stationary Sources[a]	5.492	17.354
Discovery Solar PV and Storage Project Operation (Unmitigated)	0.003	0.014
Discovery Solar PV and Storage Project % of EKAPCD District-wide Mobile and Stationary Source Emissions	0.055%	0.078%

NOTES:
tpd = tons per day
[a] Source: EKAPCD, 2023

Additionally, the project's unmitigated operation emissions would represent a small portion of the transportation conformity budget, as shown in **Table 4.3-8**, *Transportation Conformity Emissions Comparison*.

TABLE 4.3-8: TRANSPORTATION CONFORMITY EMISSIONS COMPARISON

Source	ROG Emissions (tpd)	NOx Emissions (summer tpd)
2029 Kern (MDAB) Conformity Budget[a]	0.6	1.7
Discovery Solar PV and Storage Project Operation (Unmitigated)	0.003	0.014
Discovery Solar PV and Storage Project % of EKAPCD Conformity Budget	0.50%	0.80%

NOTES:
tpd = tons per day
[a] Source: KCOG, 2024

Project operations are not expected to generate significant dust or particulate emissions, and as described above, would result in emissions less than the operational significance criteria. Therefore, potential impacts from project operational emissions would be less than significant.

Furthermore, solar power generated from the project would also function to reduce air pollutant emissions within the MDAB to the extent that the power generated is used to offset power production from fossil-fueled power plants within (or contributory to) the MDAB. This power production is not projected within the existing air quality plans, and so the project would further aid in reducing air pollutant emissions and increase the potential for attainment of the Ozone Attainment Plan. Therefore, the project would not conflict with the EKAPCD's Ozone Attainment Plan. As project operational emissions would also not exceed the EKAPCD's significance thresholds, implementation of the project would not obstruct implementation of an air quality plan during operation. Therefore, potential operational impacts would be less than significant.

Decommissioning

The project has an anticipated operational life of up to 35 years, after which the project proponent may choose to update site technology and recommission or to decommission the site and remove the systems and their components. The project would be required to develop a decommissioning plan and financial assurances for review and approval by the Kern County Planning and Natural Resources Department.

Decommissioning and reclamation activities would adhere to the requirements of the appropriate governing authorities as well as all applicable local, state, and federal requirements and BMPs.

At such time as the facility is decommissioned, equipment operation and site reclamation activities could result in impacts to air quality. Given that much of the construction equipment necessary to construct the project would also be required to decommission the site, it is reasonable to assume that decommissioning activities would be similar in nature to activities associated with construction of the project. However, impacts would be less than those of construction, as no grading would occur. As with construction of the project, emissions from decommissioning would be reduced with implementation of Mitigation Measures **MM 4.3-1** through **MM 4.3-5**. Therefore, decommissioning emissions are not projected to exceed the EKAPCD's annual and daily significance thresholds as shown in **Table 4.3-9**, *Projected Decommissioning Criteria Emissions*, even with mitigation incorporated (**Table 4.3-10**,*Projected Decommissioning Criteria Emissions with Mitigation)*.

TABLE 4.3-9: PROJECTED DECOMMISSIONING CRITERIA POLLUTANT EMISSIONS[A]

Decommissioning Period	ROG	CO	NO_x	SO_x	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions (lb/day) [b]	21	2,377	195	0.52	518	85
EKAPCD Daily Thresholds (lb/day) [c]	137	--	137	--	--	--
Exceeds Daily Thresholds (Y/N)?	N	NA	N	NA	Y	NA
Annual Emissions (tpy) [d]	1.44	222	13.1	0.04	38.3	6.2
EKAPCD Annual Thresholds (tpy) [e]	25	--	25	--	15	--
Exceeds Annual Thresholds (Y/N)?	N	NA	N	NA	Y	NA

NOTES:

"--" indicates that no significance threshold exists for this pollutant; NA = Not applicable (i.e., no significance threshold exists for this pollutant); tpy = ton per year

[a] Decommissioning emissions are based on the emission values that were estimated for construction. The emissions presented here are conservative since they do not take into account any future improvement in technology, which would likely result in reduced emissions.

[b] Maximum daily emissions reflect the maximum emissions possible on any given day during the 34-month construction duration, based on the schedule of expected overlapping activities, and assuming all construction equipment and vehicles within a phase could operate simultaneously on any given day during the project.

[c] The EKAPCD Daily Thresholds were taken from the *Guidelines for Implementation of the California Environmental Quality Act (CEQA) of 1970, as Amended* (EKAPCD, 1999). Although these thresholds are intended for project operations only, they were applied to construction emissions for comparison purposes.

[d] Project decommissioning is projected to be approximately the same time in duration as construction. To facilitate comparison to the EKAPCD Annual Thresholds, total construction emissions were scaled by a factor of 12/34, to represent the emissions that could occur in a single 12-month period (out of the total 34-month construction period).

[e] The EKAPCD Annual Thresholds were taken from Attachment A of the *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (Kern County Planning and Natural Resources Department, 2006). Although EKAPCD Rule 210.1 does provide offset thresholds for CO and SO, those thresholds only apply to new stationary sources or modifications to existing stationary sources. As a result, they are not appropriate for comparison to the mobile-oriented construction emission sources.

TABLE 4.3-10: PROJECTED DECOMMISSIONING CRITERIA POLLUTANT EMISSIONS WITH MITIGATION[a]

Decommissioning Period	ROG	CO	NOx	SO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions (lb/day) [b]	12	2,377	111	0.52	170	41
EKAPCD Daily Thresholds (lb/day) [c]	137	--	137	--	--	--
Exceeds Daily Thresholds (Y/N)?	N	NA	N	NA	NA	NA

Decommissioning Period	ROG	CO	NOx	SO	PM_{10}	$PM_{2.5}$
Annual Average Emissions (tpy) [d]	0.96	222	8.2	0.04	10.6	1.5
EKAPCD Annual Thresholds (tpy) [e]	25	--	25	--	15	--
Exceeds Annual Thresholds (Y/N)?	N	NA	N	NA	**N**	NA

NOTES:

"--" indicates that no significance threshold exists for this pollutant; NA = Not applicable (i.e., no significance threshold exists for this pollutant); tpy = ton per year

[a] The mitigated emissions scenario accounts for emission reductions achieved through implementation of best management practices and **Mitigation Measures MM 4.3-2** for dust control and **MM 4.3-3** for controlling decommissioning equipment exhaust. Mitigated decommissioning emissions are based on the mitigated emission values that were estimated for construction. The emissions presented here are conservative since they do not take into account any future improvement in technology, which would likely result in reduced emissions.

[b] Maximum daily emissions reflect the maximum emissions possible on any given day during the 34-month construction duration, based on the schedule of expected overlapping activities, and assuming all construction equipment and vehicles within a phase could operate simultaneously on any given day during the project.

[c] The EKAPCD Daily Thresholds were taken from the *Guidelines for Implementation of the California Environmental Quality Act (CEQA) of 1970, as Amended* (EKAPCD, 1999). Although these thresholds are intended for project operations only, they were applied to decommissioning emissions for comparison purposes.

[d] Represents highest annual emissions generated during construction, which occurs in 2026.

[e] The EKAPCD Annual Thresholds were taken from Attachment A of the *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (Kern County Planning and Natural Resources Department, 2006). Although EKAPCD Rule 210.1 does provide offset thresholds for CO and SO, those thresholds only apply to new stationary sources or modifications to existing stationary sources. As a result, they are not appropriate for comparison to the mobile-oriented decommissioning emission sources.

Mitigation Measures

MM 4.3-1: The project shall continuously comply with applicable rules and regulations set forth by the East Kern Air Pollution Control District.

MM 4.3-2: To control fugitive PM emissions during implementation of the project, prior to the issuance of grading or building permits, the project proponent shall prepare a comprehensive Site-Specific Fugitive Dust Control Plan in coordination with the Eastern Kern Air Pollution Control District. A copy of the final plan shall be submitted to the Kern County Planning and Natural Resources Department to be kept on file. The plan shall include Eastern Kern Air Pollution Control District-recommended measures, including but not limited to, the following:

a. Identify a comprehensive grading schedule for the entire project site. When feasible, grading activities shall be phased and minimized to those areas necessary for project access and installation of solar panels and other areas of infrastructure associated with the solar facility.

b. The Site-Specific Fugitive Dust Control Plan shall identify, in addition to those measures required by the air district, measures being undertaken during construction activities, operational activities and decommissioning activities to ensure fugitive dust being blown off site is minimized. Measures may include, but are not limited to:

   1. Use of water trucks as required for the expected level of winds in the area.

   2. Use of dust suppressant (i.e., soil binders or mulch).

3. Pre-seeding and irrigating prior to construction to create vegetation with useful root structures.

4. Construction of dust screening in appropriate locations around the project site (i.e., fence slats or mesh screening).

5. A copy of the final Site-Specific Fugitive Dust Control Plan shall be kept at the site construction office and measures included in the Site-Specific Fugitive Dust Control Plan shall be included on Grading Plans issued for the project by the Kern County Public Works Department.

MM 4.3-3: The project proponent and/or its contractors shall continuously implement the following measures during implementation of the project to control emissions from the on-site equipment:

a. All equipment shall be maintained in accordance with the manufacture's specifications.

b. All equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for extended periods of time. Engine idling of all equipment shall be minimized.

c. Construction equipment shall not operate longer than eight cumulative hours per day.

d. All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NO_X emissions.

e. On-road and off-road diesel equipment shall use diesel particulate filters (or the equivalent) if permitted under manufacturer's guidelines.

f. All on-site off-road equipment and on-road vehicles shall meet the recent California Air Resources Board engine emission standards or alternatively fueled equipment, such as compressed natural gas, liquefied natural gas, or electric, as appropriate.

MM 4.3-4: Prior to commencement of any onsite construction activities (i.e., fence construction, mobilization of construction equipment, initial grading), including decommissioning, the project proponent shall provide written notice to the public through mailing a notice to property owners of all parcels within 1,000 feet of the project site, no sooner than 15 days prior to construction activities. The notices shall include the construction schedule, a telephone number and email address where complaints and questions can be registered. Additionally, a minimum of one sign, legible at a distance of 50 feet, shall also be posted at the construction sites or adjacent to the nearest public access to the main construction entrances throughout construction activities which include the construction schedule (updated as needed) and a telephone number where complaints can be registered. Documentation that the public notice has been sent and the sign has been posted shall be provided to the Kern County Planning and Natural Resources Department.

MM 4.3-5: Prior to the issuance of any grading or building permit, the project proponent shall establish a "construction coordinator" and submit written documentation which includes their phone number, email address and mailing address. The construction coordinator shall be responsible for the following:

a. Responding to any local complaints about construction activities. The construction coordinator shall determine the cause of the construction complaint and shall be required to implement reasonable measures such that the complaint is resolved.

b. Ensuring all appropriate construction notices have been made available to the public and that all appropriate construction signs have been installed.

c. Maintaining an ongoing up-to-date log of all construction related complaints (i.e., blowing dust, inability to access parcels, etc.) during project construction activities. The log shall include the nature of the complaint and the measures that were undertaken to address the concerns. Upon request, the construction coordinator shall provide the log to the Planning and Natural Resources Department no later than three business days from request.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.3-1** through **MM 4.3-5**, impacts would be less than significant.

Impact 4.3-2: The project would expose sensitive receptors to substantial pollutant concentrations.

Sensitive receptors are particularly sensitive to air pollution because they are persons who are ill, elderly, or have lungs that are not fully developed. Locations where such persons reside, spend considerable amount of time, or engage in strenuous activities are also referred to as sensitive receptors. Typical sensitive receptors include inhabitants of long-term healthcare facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, childcare centers, and athletic facilities. As discussed previously, the closest sensitive receptor to the project site, on land not owned by the project proponent, is a residential land use located approximately 303 feet east of the project site. Other sensitive receptors in the vicinity of the project include Joshua Middle School, Mojave High School, and Mojave East Park, located 4.4 miles, 5.5 miles, and 5.4 miles from the project site, respectively. These sensitive receptors located within the project vicinity could be exposed to criteria air pollutants and TACs emitted during project construction and operation. Of note is the possibility for localized CO hotspots, reduced visibility, and increased health risks in the project vicinity, including exposure to Valley Fever. For the purpose of conducting the HRA in accordance with OEHHA guidelines, worker receptors were identified for the project. A complete list of receptors used in the analysis is provided in **Appendix C1**.

Table 4.3-11, *Screening HRA for Mitigated Construction Emissions*, summarizes the mitigated construction emissions screening HRA results at the point of maximum impact (PMI), maximally exposed individual resident (MEIR), maximally exposed individual worker (MEIW), and maximally exposed individual sensitive receptor. As shown in **Table 4.3-11,** *Screening HRA for Mitigated Construction Emissions*, cancer risks for all MEIRs, MEIWs, and sensitive receptors are below the EKAPCD's significance threshold of one in 1 million and all non-cancer chronic hazard indexes are below the EKAPCD's significance threshold of 0.2. Although the cancer risk at the PMI exceeds the EKAPCD's significance threshold of one in 1 million, this PMI occurs at or within the project boundary where there would be no permanent sensitive receptors in this area. While workers may travel through this area, no long-term exposure would occur during the project's operational life. Additionally, the cancer risk presented in the analysis is based on worst-case construction conditions, which assume that all construction

activities would occur simultaneously and for the entire duration of the 34-month construction phase. In reality, exposure to emissions would vary substantially throughout construction, and would depend on the staging of the work being conducted over time, location of work relative to receptors, and weather conditions. An HRA was not performed for the operational emissions since operational sources are likely to have negligible impacts.

Details of the screening HRA for construction DPM are included in **Appendix C1** of this EIR.

TABLE 4.3-11: SCREENING HRA FOR MITIGATED CONSTRUCTION EMISSIONS

Maximum Impact Receptor	Cancer Risk (Persons per million)	Chronic Hazard Index	Exceeds EKAPCD Thresholds (Y/N)?	Receptor Coordinates (UTM NAD 83 Zone 10)	
				Easting (meters)	Northing (meters)
PMI	1.04	0.0007	Y	383649.41	3873133.75
MEIR-5	0.44	0.0003	N	378486	3871853
MEIR-6	0.52	0.0004	N	379354	3871868
MEIR-7	0.51	0.0004	N	378889	3870319
MEIW-2	0.002	<0.0001	N	385248	3868276
MEIW-4	0.002	<0.0001	N	392883	3879921
MEIW-7	0.004	0.0001	N	385203	3870036
Sensitive Receptor-1	0.05	<0.0001	N	391577	3879168
Sensitive Receptor-2	0.03	<0.0001	N	393648	3878855
Sensitive Receptor-3	0.03	<0.0001	N	393618	3879292

NOTES:
NAD = North American Datum; UTM = Universal Transverse Mercator; PMI – point of maximum impact; MEIR –Maximally Exposed Individual Resident; MEIW – Maximally Exposed Individual Worker

The project's operation as a solar facility is not expected to generate dust or emissions related to visibility, such that a visibility assessment is not warranted. Additionally, compliance with the EKAPCD's Rule 402, including implementation of a Site-Specific Fugitive Dust Control Plan consistent with **Mitigation Measure MM 4.3-2**, would sufficiently reduce PM emissions to ensure a less than significant visibility impact from dust and emissions during construction. This dust control plan would have the added benefit of controlling the release of *Coccidioides* spores, thus limiting exposure to Valley Fever during construction activities. These less than significant impacts would be further reduced through implementation of **Mitigation Measures MM 4.3-1**, and **MM 4.3-3** through **MM 4.3-5**.

Toxic Air Contaminants

Projects are considered for potential health risks wherein a new or modified source of TACs is proposed for a location near an existing residential area or other sensitive receptor when evaluating potential impacts related to TACs. The primary TAC of concern for this project would be DPM emitted within the project site from the construction and operation phases of the project.

DPM would be emitted during construction activities as a result of construction equipment and heavy-duty diesel vehicles traveling to/from and around the project site and diesel-fired emergency backup generators, respectively. TACs emitted from vehicles during project operation would not be noticeably distinguishable from those emitted from existing regional activities. **Table 4.3-11,** *Screening HRA for Mitigated Construction Emissions,* shows that DPM emitted during mitigated construction of the project would not

result in cancer risk or a chronic health index above the EKAPCD's significance thresholds of one in 1 million and 0.2, respectively, after removal of receptors that would not constitute a point of chronic exposure as discussed. Decommissioning activities are anticipated to occur approximately 35 years after the initial start-up of the facilities and therefore diesel vehicles would be subject to greater restrictions and newer technologies that would reduce future diesel emissions. However, it is conservatively assumed in this analysis that the decommissioning health risk will be equivalent to that of the construction health risk. As a result, the project's health risk impacts would be less than significant with mitigation.

The project's operation emissions do not exceed EKAPCD's significance thresholds for any criteria pollutant and are not expected to be a source of any TACs except for DPM from diesel-fueled trucks and diesel-powered emergency backup generators for project facilities such as project substations and battery energy storage systems. The generators would be the project's only expected stationary source of TAC emissions. The emergency backup generators would need to be intermittently run for maintenance and testing purposes. As stated above, appropriate air permits would be obtained from EKAPCD. It is also expected that these emergency backup generators would be CARB-certified Tier 4 engines, as dictated by EKAPCD requirements at the time of permitting, and operated in accordance with applicable federal, state, regional, and local ordinances and regulations. The project does not include large stationary sources; therefore, it is not considered a major source of emissions. Even with this conservative assumption, the project's operational emissions would be well below EKAPCD's significance thresholds. Therefore, potential associated health risk impacts would be considered less than significant during operation of the project.

Ambient Air Quality Analysis and Criteria Air Pollutants

An AAQA, as provided in **Appendix C1** of this EIR, was performed to determine whether the project's construction emissions would cause or contribute to exceedances of any CAAQS or NAAQS during construction. As provided in **Table 4.3-12**, *24-Hour PM_{10} and PM2.5 Construction Impacts*, construction of the project would not result in construction activities that could generate ambient constructions of PM_{10} and $PM_{2.5}$ above the applicable thresholds.

TABLE 4.3-12: 24-HOUR PM_{10} AND $PM_{2.5}$ CONSTRUCTION IMPACTS

Pollutant	Modeled Impact ($\mu g/m^3$)	Significant Impact Level ($\mu g/m^3$)	Above the Significant Impact Level (Y/N)
24-hour PM_{10}[a]	1.3	5	N
24-hour $PM_{2.5}$[b]	0.12	1.2	N

NOTES:
$\mu g/m^3$ = microgram per cubic meter
[a] Modeled result represents the high-first-high 24-hour modeled concentration
[b] Modeled result represents the high-first-high five-year average 24-hour modeled concentration

Although construction activities would not generate ambient concentrations of of PM_{10} and $PM_{2.5}$ above the applicable thresholds, the project would implement **Mitigation Measures MM 4.3-1** and **MM 4.3-2**, which would serve to reduce emissions of PM_{10} and $PM_{2.5}$ during construction of the project through diesel emission reduction measures and compliance with EKAPCD Rules and Regulations for dust control measures. Therefore, potential impacts would be less than significant.

Operational activities emitting PM would include onsite work trucks and diesel-fueled trucks making infrequent material deliveries to the project site during operation and maintenance and potential use of

emergency backup generators at project substations or the battery energy storage systems which would need to be intermittently run for maintenance and testing purposes. These emissions are assumed to be negligible and less impactful than the construction-related emissions, as illustrated in **Table 4.3-6,** *Operation Criteria Pollutant Emissions Without Mitigation*. The project is considered less than significant for potential impacts to ambient air quality standards during operation.

CO Hotspots

A CO "hotspot" can occur when vehicles are idling at highly congested intersections. CO hotspots can adversely affect nearby sensitive receptors. The Kern County Planning and Natural Resources Department's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (Kern County Planning and Natural Resources Department, 2006) states that CO hotspots must be analyzed when one of the following conditions occur: (1) a project increases traffic at an intersection or roadway that operates at an LOS E or worse; (2) a project involves adding signalization and/or channelization to an intersection; or (3) sensitive receptors, such as residences, schools, hospitals, etc., are located in the vicinity of the affected intersection or signalization.

The project would have trip generation associated with construction worker vehicles and vendor trucks, which would be temporary, such that construction would not result in a long-term source of CO emissions. Also, the project would create minimal emission sources during operation. As identified in Section 4.15, *Transportation*, project construction and operation would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including the KCOG Congestion Management Program. As such, a CO hotspot analysis is not required and the potential project-generated impacts associated with CO hotspots would be less than significant.

Valley Fever

The project has the potential to generate fugitive dust and suspend Valley Fever spores with the dust that could then reach nearby sensitive receptors. It is possible that onsite workers could be exposed to Valley Fever as fugitive dust is generated during construction. CEQA does not require the analysis of project impacts on project workers; however, project workers are considered in this section for informational purposes. Because dust can be an indicator that increased efforts are needed to control other airborne particulates (including CI spores, if any), the project is required to control dust and the potential for exposure to any CI spores as well as provide training and awareness of Valley Fever via **Mitigation Measures MM 4.3-6** and **MM 4.3-7**.

As stated previously, **Mitigation Measure MM 4.3-2** requires the project to have comprehensive site construction controls in place to proactively control the generation of fugitive dust as required and regulated by the EKAPCD Rule 402. This rule also requires the site to have a designated dust monitor, as well as visible signage for nearby residents with the phone number for the site construction management and the EKAPKD for nearby residents use if they see blowing dust.

Mitigation Measure MM 4.3-6 requires that training be provided to construction workers on measures they must take to proactively control and reduce fugitive dust and the potential for the release of CI spores during their ground disturbing activities, training on specific worker/task safety procedures, and general information regarding symptoms testing and treatment options for Valley Fever. All workers would be trained in and are expected to use their "stop work" authority if their activities are deemed to be causing the release of fugitive dust. This mitigation measure also requires that an educational Valley Fever Training Handout be developed for distribution to onsite workers and nearby residents. This handout contains general

information about the causes, symptoms, and treatment instructions regarding Valley Fever, including contact information of local health departments and clinics knowledgeable about Valley Fever. **Mitigation Measure MM 4.3-7** would require a one-time fee of $3,200 to be paid to the Kern County Public Health Services Department Valley Fever public awareness programs. With implementation of the mitigation measures, dust from the construction of the proposed project would not add significantly to the existing exposure level of people to this fungus, including construction workers.

With implementation of **Mitigation Measures MM 4.3-2, MM 4.3-6**, and **MM 4.3-7**, the potential for the release of CI spores, if present, and the associated potential for workers or nearby residents to contract Valley Fever would be minimized; accordingly, the project would not add significantly to the existing exposure level of construction workers or nearby residences to the CI fungus.

Visibility Impacts

As discussed above under *Methodology,* Kern County has established criteria to determine if a project would potentially result in a visibility impact due to dust or emissions; however, the EKAPCD has not established guidance to address visibility in CEQA documents. Per Kern County guidelines, a visibility analysis is not required since the project is not a large, industrial stationary source project or a mining project and it would not have long-term operational components that could generate dust or emissions related to visibility. Compliance with EKAPCD Rule 402, including implementation of a Site-Specific Fugitive Dust Control Plan, is sufficient mitigation to reduce visibility effects from construction to a less than significant level. Although the Site-Specific Fugitive Dust Control Plan does not apply to tailpipe emissions from construction equipment or vehicles, the combustion equipment emissions associated with the project are not expected to have a significant impact on visibility. Therefore, the project's potential to expose sensitive receptors to substantial pollutant concentrations associated with potential visibility impacts would be less than significant.

Asbestos

Naturally occurring asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading of development projects, and at mining operations.

Serpentine and/or ultramafic rock are known to be present in 44 of California's 58 counties. These rocks are particularly abundant in the counties associated with the Sierra Nevada foothills, the Klamath Mountains, and Coast Ranges. However, according to information provided by the Department of Conservation Division of Mines and Geology, the project site is not in an area likely to contain ultramafic rock or naturally occurring asbestos (DOC, 2011). Therefore, impacts associated with exposure of construction workers and nearby sensitive receptors to asbestos would be less than significant.

Health Effects of Criteria Pollutants

The USEPA and CARB have established AAQS at levels above which concentrations could be harmful to human health and welfare, with an adequate margin of safety. Further, California air districts, like the EKAPCD, have established emission-based thresholds that provide project-level estimates of criteria air pollutant quantities that air basins can accommodate without affecting the attainment dates for AAQS. Accordingly, elevated levels of criteria air pollutants as a result of a project's emissions could cause adverse

health effects associated with these pollutants. The EKAPCD is designated as an attainment area for O_3 (1-hour), PM_{10} and $PM_{2.5}$ and nonattainment for O_3 (8-hour) under NAAQS, and nonattainment for O_3, PM_{10}, and $PM_{2.5}$ under CAAQS.

Regarding health effects of criteria air pollutants, implementation of **Mitigation Measure MM 4.3-3** would reduce the project's potential to result in regional health effects associated with ROG, NOX, PM_{10}, and $PM_{2.5}$; however, localized health effects associated with NO_X, PM_{10}, and $PM_{2.5}$ could occur. However, implementation of the mitigation measures described in **Impacts 4.3-1** and **Impact 4.3-2** above, would reduce both localized and regional project-generated construction and operational emissions.

The accumulation and dispersion of air pollutant emissions within an air basin is dependent upon the size and distribution of emission sources in the region and meteorological factors such as wind, sunlight, temperature, humidity, rainfall, atmospheric pressure, and topography. The air districts, including EKAPCD, establish and recommend that the analyses of criteria air pollutants use CEQA significance thresholds that are set at emission levels tied to the region's attainment status and are based on emission levels at which stationary pollution sources permitted by the air district must offset their emissions. Such offset levels allow for growth while keeping the cumulative effects of new sources at a level that will not impede attainment of the NAAQS. The health risks associated with exposure to criteria pollutants are evaluated on a regional level, based on the region's attainment of the NAAQS. The mass emissions significance thresholds used in CEQA air quality analysis are set such that if a project's contribution is less than the threshold then the project would not make a cumulatively considerable contribution to regional emissions in a manner that would cause the region to exceed its NAAQS or CAAQS. The NAAQS and CAAQS thresholds are set at conservative levels to protect human health.

As shown in **Table 4.3-2,** *Air Quality Data Summary (2021-2023)*, above, the MDAB is currently in state and federal nonattainment status for ozone and PM_{10}. Although ozone would not be directly emitted by construction equipment for the proposed project, the ozone precursors ROG and NO_X would be emitted, as well as the other criteria pollutants of CO, SO_X, PM_{10}, and $PM_{2.5}$. Given that ozone formation occurs through a complex photo-chemical reaction between NO_X and ROG in the atmosphere with the presence of sunlight, the impacts of ozone are typically considered on a basin-wide or regional basis and not on a localized basis. The health-based ambient air quality standards for ozone are established as concentrations of ozone and not as tonnages of their precursor pollutants (i.e., NO_X and ROG). It is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting ozone or particulate matter. Because of the complexity of ozone formation and the non-linear relationship of ozone concentration with its precursor gases, and given the state of environmental science modeling in use at this time, it is not practical to determine whether, or the extent to which, a single project's precursor (i.e., NO_X and ROG) emissions would potentially result in the formation of secondary ground-level ozone and the geographic and temporal distribution of such secondary formed emissions. Meteorology, the presence of sunlight, seasonal impacts, and other complex photochemical factors all combine to determine the ultimate concentration and location of ozone.

In *Sierra Club v. County of Fresno* (S219783) (*Sierra Club*), the Supreme Court held that CEQA requires environmental impact reports to either (i) make a "reasonable effort" to substantively connect the estimated amount of a given air pollutant a project will produce and the health effects associated with that pollutant, or (ii) explain why such an analysis is infeasible (6 Cal.5th at 1165-66). However, the Court also clarified that CEQA "does not mandate" that EIRs include "an in-depth risk assessment" that provides "a detailed comprehensive analysis … to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the

individual and population wide health risks associated with those levels of exposure." *Id.* at 1665. However, correlating the project's criteria air pollutant to specific health impacts, particularly with respect to O_3, is extremely difficult because there is no established scientific method to perform such analysis. This conclusion is supported by both the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the South Coast Air Quality Management District (SCAQMD), who have determined that this type of analysis does not yield informative results for short-term construction related exceedances of air district thresholds. There are no unique issues for the EKAPCD that would make this analysis invalid.

The SJVAPCD explained that it assesses a project's potential to exceed AAQS by evaluating the project's compliance with district thresholds of significance, which are measured in mass emissions (SJVAPCD, 2015). As explained by the SJVAPCD, its thresholds are based on factual scientific data and have been set at a level that ensures AAQS will not be exceeded, taking into consideration all cumulative emission sources (SJVAPCD, 2015). The SJVAPCD explained that attempting to connect criteria pollutant emissions to localized health impacts will "not yield reliable information because currently available modeling tools are not well suited for this task" (SJVAPCD, 2015). Available models are only equipped to model the impact of all emissions sources on an air basin-wide or regional basis, not on a project-level basis, and "[r]unning the photochemical grid model used for predicting ozone attainment with emissions solely from one project would thus not be likely to yield valid information given the relative scale involved" (SJVAPCD, 2015).

This inability to "accurately ascertain local increases in concentration" of mass emissions and then to further link emissions with health effects is particularly true for O_3 and its precursors NO_X, ROG, and VOC; O_3 is not directly emitted into the air, but is instead formed as ozone precursors undergo complex chemical reactions through sunlight exposure (SJVAPCD, 2015). Given the complex nature of this process and the fact that O_3 can be transported by wind over long distances, "a specific tonnage amount of NO_X or VOCs emitted in a particular area does not equate to a particular concentration of ozone in that area" (SJVAPCD, 2015). For this reason, the photochemical analysis for O_3 is done on a regional scale and it is inappropriate to analyze O_3 impacts at a local or project-level basis because a localized analysis would at most be speculative and at worst be misleading. Speculative analysis is not required by CEQA (*CEQA Guidelines* Section 15145; *Laurel Heights Improvement Association v. Regents of the University of California 1988*).

The SCAQMD agrees that it is very difficult to quantify health impacts with regard to O_3, opining that the only possible means of successfully doing so is for a project so large that emissions would essentially amount to all regional increases (SCAQMD, 2015). The amicus briefs filed by SJVAPCD and SCAQMD in *Sierra Club* are attached as part of **Appendix C2**.

The project's operational emissions are less than EKAPCD's thresholds and thus would not contribute to an exceedance of the NAAQS or the CAAQS in the vicinity, which, as discussed above, are set at levels that protect human health. As such, it can be reasonably inferred that the project's operational emissions would not result in significant health impacts.

The project's construction emissions would not exceed the EKAPCD's thresholds and is unlikely to result in chronic adverse health impacts. Further, models designed to determine health impacts from air pollution generally look at long-term exposures, making them not particularly informative of health impacts from short-term exposures such as would be experienced by people residing in the vicinity of a construction site. The project proposes the construction and operation of a large-scale utility solar project that would require dust-generating construction activities such as pile-driving, mowing, and grading, over a large area. During construction, the project would implement **Mitigation Measures MM 4.3-1** through **MM 4.3-5** to reduce the project's regional and localized health effects associated with criteria air pollutants, particularly particulate matter.

Due to the open nature of the project site, blowing dust could occur and result in the dispersal of criteria air pollutants such as $PM_{2.5}$ and potentially contribute to the transmission of respiratory diseases like COVID-19. Since COVID-19 is understood to spread as result of close, person-to-person contact, especially within poorly ventilated indoor spaces, the likelihood of emissions from the proposed project directly increasing the spread of COVID-19 is remote. However, a nationwide study by Harvard University found a linkage between long-term exposure to $PM_{2.5}$ as air pollution and statistically significant increased risk of COVID-19 death in the United States (Xiao et al., 2020). As noted previously, construction dust suppression measures would be implemented as part of **Mitigation Measure MM 4.3-2**. With implementation of **Mitigation Measure MM 4.3-2**, impacts would be less than significant.

Since COVID-19 is understood to spread as result of close, person-to-person contact, especially within poorly ventilated indoor spaces, the likelihood of emissions from the proposed project directly increasing the spread of COVID-19 is remote. However, a nationwide study by Harvard University found a linkage between long term exposure to $PM_{2.5}$ as air pollution and statistically significant increased risk of COVID-19 death in the United States (Xiao et al., 2020). Though construction dust suppression measures would be implemented as a requirement of **Mitigation Measure MM 4.3-2**, exposure to dust during construction could still occur which could increase the severity of the disease project employees and nearby residents to COVID-19 should they contract it. However, the vaccines for COVID-19 drastically reduce the likelihood of hospitalization, much less death, as a result of contracting COVID-19. In spite of a readily available COVID-19 vaccine supply in the United States, the COVID-19 pandemic is ongoing as a result of low vaccination rates and mask compliance by unvaccinated individuals. People of color may also have a higher risk of getting sick or dying from COVID-19 (Graham, 2021) and may live in areas already burdened by air pollution (NRDC, 2020). Onsite workers and residents near project activities potentially could be exposed to increased levels of $PM_{2.5}$ from project activities due to the emissions of $PM_{2.5}$ from the project.

Therefore, in addition to implementation of **Mitigation Measures MM 4.3-1** thorough **MM 4.3-7**, the project would implement **Mitigation Measure MM 4.3-8**, which requires implementation of a COVID-19 Health and Safety Plan in accordance with the Kern County Public Health Services Department and Kern County Health Officer mandates.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.3-1** through **MM 4.3-5**, and:

MM 4.3-6: To minimize personnel and public exposure to potential Valley Fever-containing dust on and offsite, the following control measures shall be implemented during project construction:

a. Equipment, vehicles, and other items shall be thoroughly cleaned of dust before they are moved offsite to other work locations.

b. Wherever possible, grading and trenching work shall be phased so that earth-moving equipment is working well ahead or downwind of workers on the ground.

c. The area immediately behind grading or trenching equipment shall be sprayed with water before ground workers move into the area.

d. In the event that a water truck runs out of water before dust is sufficiently dampened, ground workers being exposed to dust shall leave the area until a truck can resume water spraying.

e. To the greatest extent feasible, heavy-duty earth-moving vehicles shall be closed-cab and equipped with HEP-filtered air system.

f. Workers shall receive training in procedures to minimize activities that may result in the release of airborne *Coccidioides immitis* (CI) spores, to recognize the symptoms of Valley Fever, and shall be instructed to promptly report suspected symptoms of work-related Valley Fever to a supervisor. Evidence of training shall be provided to the Kern County Planning and Natural Resources Department.

g. A Valley Fever informational handout shall be provided to all onsite construction personnel. The handout shall, at a minimum, provide information regarding the symptoms, health effects, preventative measures, and treatment. Additional information and handouts can be obtained by contacting the Kern County Public Health Services Department.

h. Onsite personnel shall be trained on the proper use of personal protective equipment, including respiratory equipment. National Institute for Occupational Safety and Health–approved respirators shall be provided to onsite personal upon request. When exposure to dust is unavoidable, provide appropriate National Institute for Occupational Safety & Health-approved respiratory protection to affected workers, if necessary. If respiratory protection is deemed necessary, employers must develop and implement a respiratory protection program in accordance with California Division of Occupational Safety and Health's Respiratory Protection standard (8 CCR 5144).

MM 4.3-7: Prior to the issuance of grading permits, a one-time fee shall be paid to the Kern County Public Health Services Department in the amount of $3,200 for Valley Fever public awareness programs.

MM 4.3-8: At the time of project implementation, a COVID-19 Health and Safety Plan should be prepared in accordance with the Kern County Public Health Services Department and Kern County Health Officer mandates. A copy of the COVID-19 Health and Safety Plan shall be submitted to the Kern County Planning and Natural Resources Department for review and approval.

Level of Significance after Mitigation

With implementation of Mitigation Measures **MM 4.3-1** through **MM 4.3-8**, potential impacts would be less than significant. Potential operational impacts would be less than significant.

Impact 4.3-3: The project would result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Although emissions from project construction may result in temporary odors, they would be short term and have the potential to affect few people due to the distance between the project and any occupied areas, including schools and other sensitive receptors. Potential odor sources during construction activities may include diesel exhaust from heavy-duty equipment. These odors are typical of most construction sites. Such odors may be a temporary source of nuisance to the nearest sensitive receptor but would not affect a substantial number of people. Furthermore, CCR Title 13, Section 2485 limits the idling of a vehicle's primary diesel engine to 5 minutes at any location. Compliance with this regulation through the

implementation of **Mitigation Measure MM 4.3-3** would help further reduce detectable exhaust odors. Potential odor sources from project operations may include diesel exhaust from infrequent material delivery truck trips. Therefore, given the project's relatively remote location and minimal emissions generated during facility operations, the project would not result in other emissions, such as those leading to odor, that would adversely affect a substantial number of people.

With implementation of **Mitigation Measure MM 4.3-3**, and given the minimal activities required for project operations, temporary duration of construction and decommissioning, and spatially varying nature of construction emissions, potential impacts would be less than significant for construction, operation, and decommissioning.

Mitigation Measures

Implementation of **Mitigation Measure MM 4.3-3** would be required.

Level of Significance

With implementation of **Mitigation Measure MM 4.3-3**, impacts would be less than significant.

4.3.5 Cumulative Setting, Impacts, and Mitigation Measures

Kern County Planning and Natural Resources Department's (2006) *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* requires three steps for estimating the potential significance of cumulative impacts: (1) evaluate localized impacts (Guideline Instruction 16a); (2) evaluate consistency with existing air quality plans (Guideline Instruction 16b); and (3) summarize CARB air basin emissions (Guideline Instruction 16c).

The geographic scope for cumulative air quality impacts is a 6-mile radius for regional impacts and a 1-mile radius for impacts on sensitive receptors. These geographic scopes of analysis are appropriate for determining air quality impacts because of the statewide, regional, and localized nature of air quality impacts, which could occur cumulatively with the project. **Appendix C1** lists all of the currently approved and proposed renewable development projects within Kern County, which may have concurrent construction activities with the project.

Impact 4.3-4: The project would result in a cumulatively considerable net increase of criteria pollutant for which the projects' region is nonattainment under applicable federal or State ambient air quality standards.

Construction and Decommissioning

Construction and decommissioning of the project would result in the temporary addition of pollutants to the local airshed caused by onsite sources (i.e., off-road construction equipment, soil disturbance) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

Construction schedule assumptions, including phase type, duration, and sequencing, were based on information provided by the project applicant and is intended to represent a reasonable scenario based on the best information available. As shown in **Table 4.3-4,** *Construction Criteria Pollutant Emissions Without Mitigation*, and **Table 4.3-5,** *Construction Criteria Pollutant Emissions With Mitigation*, construction of the project would result in emissions of the following nonattainment pollutants: ozone precursors (NO_X and VOC) and PM_{10}. These emissions would be temporary (occurring over an approximately 34-month period), and would be below EKAPCD's annual significance threshold with mitigation. Therefore, during construction, the project would not result in a cumulatively considerable contribution to significant cumulative impacts. Details of the construction emission estimates are provided in **Appendix C1** of this EIR (as discussed below, the analysis of criteria air pollutants is inherently cumulative because the thresholds are set to account for existing significant cumulative impacts in the air basin). As shown in **Table 4.3-9,** *Estimated Decommissioning Criteria Pollutant Emissions,* Decommissioning impacts would be similar to construction and would not result in a cumulatively considerable contribution to significant cumulative impacts.

Operations

Operation of the project would result in minimal emissions of criteria air pollutants. As shown in **Table 4.3-6**, *Operation Criteria Pollutant Emissions,* emissions associated with project operations would not exceed applicable EKAPCD significance thresholds. Therefore, potential operational emissions would be less than significant, and no mitigation measures are required. Details of the operational emission estimates are provided in **Appendix C1** of this EIR.

Localized Impacts

As previously discussed, there are several active developments within 6 miles of the project boundary. Significant cumulative impacts from the project, when considered with nearby, reasonably foreseeable planned projects, would potentially occur during project construction. Most project emissions would occur temporarily during the construction phase. Subsequent to construction activities, there would be minimal emissions and insignificant cumulative impacts during operation of the project.

The Kern County Planning and Natural Resources Department has determined that the previously listed project-level thresholds for criteria air pollutants are defined, for purposes of determining cumulative effects, as the baseline for "considerable." In other words, the thresholds are set at a level that accounts for existing and planned future air basin conditions. Thus, if a project's emissions do not exceed the project-level thresholds, the project would not make a cumulatively considerable contribution to significant cumulative impacts in the air basin. As noted above, project construction activities would not generate emissions and modeled ambient impacts that exceed the EKAPCD's annual significance threshold for PM_{10} and the USEPA's Significant Impact Levels for PM_{10} and $PM_{2.5}$, respectively. Therefore, the project would not make a cumulatively considerable contribution to a significant cumulative air quality impact with respect to PM from construction emissions. Potential cumulative impacts during construction would be temporary, and less than significant. Potential cumulative impacts during operation would be less than significant.

Consistency with Existing Air Quality Plans

Consistency with the air quality plan, even at the cumulative level, is based on a comparison of project-generated growth in employment, population, and vehicle miles traveled within the region. As stated under

Impact 4.3-1 above, since the MDAB is in nonattainment for PM_{10} and the project would result in less than significant temporary levels of PM_{10} emissions during construction, the project would not obstruct the EKAPCD's ability to achieve further progress toward attainment of the state PM_{10} standards. Cumulative construction and decommissioning impacts would be less than significant.

With regard to operation, the project is not expected to induce growth or result in trips or criteria pollutant emissions during operation that would conflict with the EKAPCD's Ozone Air Quality Management Plan, nor is the project expected to exceed thresholds for any nonattainment pollutant. Therefore, the project's incremental contribution to cumulative air quality impacts related to operation would not be cumulatively considerable and would not compromise existing air quality plans. Potential cumulative operational impacts would be less than significant.

Further, the power produced by the project would serve to reduce air pollutant emissions within the MDAB, to the extent that the power is used to offset power production from fossil-fueled power plants within (or contributory to) the MDAB, and also by providing power to allow the displacement of fossil-fueled engines (such as agricultural pumps) with electrical power units. This power production is not projected within the existing air quality plans; thus, the project and other related solar facilities would further aid in reducing air pollutant emissions and increase the potential for attainment of the 2023 Ozone Attainment Plan.

California Air Resources Board Air Basin Emissions

The following tables (**Tables 4.3-12**, *Emissions Inventory for the MDAB, 2025 Projection – Tons per Day*; **4.3-13**, *Emissions Inventory for the Kern County Portion of the MDAB, 2025 Projection – Tons per Day;* and **4.3-14,** *2025 Emissions Projections for Enterprise Solar Storage Project, Kern County, and the MDAB – Tons Per Day*) show the MDAB emissions of nonattainment pollutants and their precursors, along with a composite showing the contribution from the project's unmitigated operation emissions. The Kern County and MDAB emissions were downloaded from the CARB website (CARB, 2025d) and are based on 2025 projections. The most recent year of actual data published by CARB is for 2017, with all later years projected from the 2017 results. Given this, projected annual emissions for the year 2025 were used for comparison to the project's unmitigated emissions as they are the closest future year projections for the construction period.

TABLE 4.3-12: EMISSIONS INVENTORY FOR THE MDAB, 2025 PROJECTION – TONS PER DAY

Source	ROG	NO_X	PM_{10}
Total Emissions	209.4	95.5	135.5
Percent Stationary Sources	8%	40%	22%
Percent Area-wide Sources	7%	2%	54%
Percent Mobile Sources	9%	56%	5%
Percent Natural Sources	77%	2%	19%
Total Stationary Source Emissions	16.4	37.9	30.1
Total Area-Wide Source Emissions	14.1	1.8	73.4
Total Mobile Source Emissions	18.2	53.5	6.8
Total Natural Source Emissions	160.7	2.4	25.2

Source: CARB, 2025d

TABLE 4.3-13: EMISSIONS INVENTORY FOR THE KERN COUNTY PORTION OF THE MDAB, 2025 PROJECTION – TONS PER DAY

Source	ROG	NO_X	PM_{10}
Total Emissions	116.6	20.42	33.6
Percent Stationary Sources	2%	60%	8%
Percent Area-wide Sources	1%	1%	22%
Percent Mobile Sources	5%	34%	9%
Percent Natural Sources	92%	5%	61%
Total Stationary Source Emissions	1.8	12.3	2.6
Total Area-wide Source Emissions	1.7	0.2	7.4
Total Mobile Source Emissions	6.0	6.9	3.2
Total Natural Source Emissions	107.2	1.0	20.4

Source: CARB, 2023

TABLE 4.3-14: 2025 EMISSIONS PROJECTIONS FOR THE DISCOVERY SOLAR PV AND STORAGE PROJECT, KERN COUNTY, AND THE MDAB – TONS PER DAY

Source	ROG	NO_X	PM_{10}
Discovery Solar PV and Storage Project (Unmitigated)	0.003	0.014	0.00055
Kern County	116.6	20.42	33.6
MDAB	209.37	95.5	135.49
Discovery Solar PV and Storage Project % of Kern County	<0.1%	<0.1%	<0.1%
Discovery Solar PV and Storage Project % of MDAB	<0.1%	<0.1%	<0.1%
Kern County % of MDAB	56%	21%	25%

Compared to Kern County and MDAB emissions in 2025, operational emissions associated with the project would be negligible. In addition, as described above, the power produced by the project could serve to reduce air pollutant emissions within the MDAB to the extent that the power is used to offset power production from fossil fueled power plants within (or contributory to) the MDAB. Thus, the project's incremental contribution from project operations to the MDAB Emissions Inventory would not be cumulatively considerable.

Cumulative Hazardous Air Pollutants

Combined HAPs emission impacts from the project and other existing and planned projects are considered cumulatively significant when air quality standards are exceeded. Because the project would not be a significant source of HAPs, it also would not make a cumulatively considerable contribution to significant HAPs impact.

Cumulative Carbon Monoxide – Mobile Sources

The project would result in negligible traffic increases and congestion and would not substantially contribute or combine with existing conditions to cause a CO "hot spot." Additionally, as the majority of the other projects and land uses in the vicinity consist of renewable energy development, generally undeveloped land, and rural residential uses, existing traffic is minimal. Accordingly, "hot spot" modeling was not conducted for the proposed project and there would be no significant cumulative CO impacts. Potential impacts would be less than significant.

Cumulative Impacts Summary

The discussion provided evaluates localized impacts, including projects located within a 1- and 6-mile radius; evaluates consistency with existing air quality plans; and compares project emissions to CARB emission projections for the region, consistent with the criterion provided in Kern County Planning and Natural Resources Department's (2006) *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports.*

Mitigated emissions for construction-related ambient air quality impacts are summarized in **Table 4.3-5,** *Construction Criteria Pollutant Emissions With Mitigation*. With implementation of **Mitigation Measures MM 4.3-1** and **MM 4.3-2**, NOx, PM_{10}, and $PM_{2.5}$ emissions during project construction would be below the EKAPCD 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 project.

Although the project's emissions would be negligible in comparison to the air basin's total emissions, assuming on a worst-case basis that the construction schedules for all cumulative projects would overlap with each other and with the proposed project, cumulative impacts during construction and decommissioning are conservatively considered significant and unavoidable. However, the project's mitigated emissions during construction and operation would be less than the EKAPCD daily and annual significance thresholds for all pollutants. Therefore, the project's individual contribution to such cumulative impacts would be less than significant, and additional mitigation measures beyond those already implemented would not have an appreciable effect on cumulative impacts.

Mitigation Measures

Implementation of Mitigation Measures **MM 4.3-1** through **MM 4.3-8** would be required.

Level of Significance after Mitigation

Despite implementation of **Mitigation Measures MM 4.3-1** through **MM 4.3-8**, construction emissions generated by the proposed project and related projects could cumulatively combine and result in a temporary significant and unavoidable cumulative impact, but the project's individual contribution to such cumulative impacts would be less than significant. Cumulative operational impacts would be less than significant.

Section 4.4
Biological Resources

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Section 4.4
Biological Resources

4.4.1 Introduction

This section of the EIR describes the affected environment and regulatory setting for biological resources either present, or with the potential to be present, within the Study Area. Although the project site is 7,700 acres, a larger Study Area of 8,606 acres that encompasses the project site, generation tie (gen-tie) line corridor, and temporary offsite construction laydown yard was surveyed. Unless otherwise stated, the Study Area refers to these 8,606 acres. The section includes the physical and regulatory setting for the project; an evaluation of the existing biological conditions within the Study Area and its vicinity; the criteria used to evaluate the significance of potential impacts on biological resources; the methods used in evaluating these potential impacts; an analysis of potential impacts; and project-specific mitigation.

The analysis presented in this section of the EIR is based on a multi-year effort to document existing biological resources within the Study Area and vicinity conducted by Tetra Tech, Inc. (Tetra Tech), Heritage Environmental Consultants, LLC (Heritage), and Bloom Biological, Inc. (BBI) in 2022, 2023, 2024, and 2025. Biologists conducted the following types of biological surveys for the project: vegetation mapping; botanical surveys; general and focused wildlife surveys including protocol-level Mojave desert tortoise (*Gopherus agassizii*) surveys and habitat suitability assessment, burrowing owl (*Athene cunicularia*) burrow surveys, desert kit fox (*Vulpes macrotis arsipus*) burrow surveys, protocol-level Swainson's hawk (*Buteo swainsoni*) surveys, protocol-level golden eagle (*Aquila chrysaetoas*) surveys, and protocol-level California condor (*Gymnogyps californianus*) surveys; and jurisdictional delineation surveys. In addition, a Mohave ground squirrel (*Xerospermophilus mohavensis*) desktop assessment was prepared for the project. The analysis is supported by the following reports included in the Appendices of this EIR:

- *Biological Resources Summary Technical Report, Discovery Solar PV and Storage Project, Kern County, California* (Tetra Tech, 2025a) included as **Appendix D1** of this EIR.
- *Botanical Inventory Report, Discovery Solar PV and Storage Project, Kern County, California* (Tetra Tech, 2025b) included as **Appendix D2** of this EIR.
- *Mojave Desert Tortoise Survey Report, Discovery Solar PV and Storage Project, Kern County, California* (Tetra Tech, 2025c) included as **Appendix D3** of this EIR.
- *Burrowing Owl Survey Report, Discovery Solar PV and Storage Project, Kern County, California* (Tetra Tech, 2025d) included as **Appendix D4** of this EIR.
- *Desert Kit Fox Survey Report, Discovery Solar PV and Storage Project, Kern County, California* (Tetra Tech, 2025e) included as **Appendix D5** of this EIR.
- *Swainson's Hawk (Buteo swainsoni) and Nesting Raptor Survey Report, Discovery Solar PV and Storage Project* (BBI, 2025a) included as **Appendix D6** of this EIR.

- *Golden Eagle (Aquila chrysaetos) and California Condor (Gymnogyps californianus) Analysis of Use, Discovery Solar PV and Storage Project* (BBI, 2025b) included as **Appendix D7** of this EIR.
- *Discovery Solar PV and Storage Project Aquatic Resources Delineation Report* (Heritage, 2025) included as **Appendix D8** of this EIR. As noted later in this section, the Study Area is larger at approximately 8,660 acres.
- *Memorandum on Potential for Mohave Ground Squirrel Occurrence in the Discovery Solar PV and Storage Project* (Tetra Tech, 2025f) included as **Appendix D9** of this EIR.
- *Western Joshua Tree Population Characterization and Woodland Mapping – Discovery Solar PV and Storage Project* (WEST, 2025) included as **Appendix D10** of this EIR

Multiple surveys were required to capture all areas to be used for the project. Therefore, while surveys covered the entire project site, proposed gen-tie corridor, and temporary offsite construction laydown yard, individual field efforts and survey reports may reflect slightly different survey areas depending on the survey date and type. Each survey area is described in detail within each respective survey report prepared for this project.

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 California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) (CDFW, 2025a); the United States Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) system (USFWS, 2025a); the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Plants of California (CNPS, 2025); Kern County's General Plan, ordinances, and municipal codes; CDFW's Biogeographic and Information Observation System (BIOS) (CDFW, 2025b); USFWS' Critical Habitat online mapper (USFWS, 2025b); USFWS' National Wetlands Inventory (NWI) database and Wetlands Mapper (USFWS, 2025c); USGS National Hydrographic Dataset (NHD) maps (USGS, 2025); CDFW's BIOS Habitat Connectivity Viewer (CDFW, 2025c); and finally Audubon California's Important Bird Areas interactive site map (Audubon, 2025a).

The purpose of the literature reviews was to provide information on the Study Area's location; land cover and land use; topography; soils; plant communities and plant cover; rare plant and wildlife species; hydrology, aquatic features, and jurisdictional areas; critical habitats; wildlife movement corridors; and other important biological resources and issues. The literature reviews were updated, as appropriate, throughout 2022, 2023, 2024, and 2025, and during preparation of this EIR.

4.4.2 Environmental Setting

Regional Setting

The proposed project is situated in the southeastern corner of the desert region in unincorporated Kern County. The project is located at the western edge of the Antelope Valley, approximately 6 miles southwest of the community of Mojave, approximately 9 miles southeast of the City of Tehachapi, approximately 8

miles northwest of the unincorporated community of Rosamond, and approximately 20 miles west of Edwards Air Force Base on generally undeveloped lands in the Mojave Desert.

The project is in an area of low population density southeast of the Tehachapi Mountains and is traversed by a network of existing 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 is located in the vicinity of renewable energy development, rural residential development, livestock grazing, light and heavy industrial and mining uses, and undeveloped lands. Specific developments within the region include the Windhub Solar Project, the SEPV Mojave West Solar Project, the Big Beau Solar Project, the Catalina Solar Project, numerous wind farms (including the Alta Wind II Project), a small number of single-family residences, the Windswept Ranch Petting Zoo, numerous electrical substations (including the Windhub Substation), the CalPortland Mojave Plant (a cement manufacturing facility), and the Holiday Rock Quarry (a rock aggregate and cement mining facility). Land owned by the Bureau of Land Management (BLM) is located immediately to the west but is located outside of the project site.

Climate

The climate within the Mojave Desert region is characterized by hot summers and cool winters with low year-round rainfall. According to U.S. Climate Data (USCD, 2025), July and August are the hottest months with an average high temperature of 96 degrees Fahrenheit (°F) and December and January are the coldest months with an average low temperature of 33 °F. The average annual precipitation for Mojave, California is 6.67 inches, with most of the precipitation occurring between November and April, originating from large-scale Pacific storm systems, while the remainder is generated primarily by high-intensity monsoonal thunderstorms during the summer months.

Vegetation

The vegetation in the Mojave Desert region where the project is located is shaped by arid climate conditions, topography, desert soils, and historical land uses. Vegetation in the region predominantly exhibits morphological adaptations to extreme dryness, such as waxy or resinous leaf surfaces, drought-deciduous or succulent forms, woolly leaf hairs, and deep taproot systems. The vegetation structure typically features short, widely spaced shrubs and tree-like shrubs, resulting from a competition for soil water resources. Portions of the Mojave Desert and Antelope Valley that were at one time cleared for agricultural or other development currently consist of moderate to highly degraded conditions, and often contain a high proportion of associated invasive and nonnative species (Thomas et al., 2004).

The predominant natural plant community within the project vicinity is creosote bush series on hills, pediments, and fans. Joshua tree series is common on pediments and fans, while California juniper series predominates above about 3,000 feet above mean sea level (amsl) near the San Andreas Fault. Mixed saltbush species are prevalent on basin floors; iodine bush and saltgrass series occur on wet basin-fill and lacustrine deposits; and greasewood series is found in riparian zones and around saltmarshes (Miles and Goudey, 1997).

Several vegetation types, including Mojavean desert scrub, chenopod scrub, grassland, and woodland, were observed within the Study Area. Mojavean desert scrub is comprised of vegetation communities that commonly occur within the Mojave Desert and are dominated by low shrubs (usually below 5 meters in height) that are adapted to low rainfall and high summer temperatures (**Appendix D1**).

Wildlife

The Mojave Desert supports a variety of reptile, bird, and mammal species. Reptile species commonly occurring in the desert portion of Kern County include the common side-blotched lizard (*Uta stansburiana*), western whiptail (*Aspidoscelis tigris*), desert spiny lizard (*Sceloporus magister*), gophersnake (*Pituophis catenifer*), and Mojave rattlesnake (*Crotalus scutulatus*). Bird species common to the region include common raven (*Corvus corax*), horned lark (*Eremophila alpestris*), western meadowlark (*Sturnella neglecta*), house finch (*Haemorhous mexicanus*), loggerhead shrike (*Lanius ludovicianus*), and red-tailed hawk (*Buteo jamaicensis*). Mammal species typical of the area include white-tailed antelope ground squirrel (*Ammospermophilus leucurus*), coyote (*Canis latrans*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), and bat species including California myotis (*Myotis californicus*), western small-footed myotis (*Myotis ciliolabrum*), and western pipistrelle (*Pipistrellus hesperus*).

Sensitive Natural Communities

Sensitive natural communities are designated by CDFW, or occasionally in local policies and regulations, and these communities are generally considered to have important functions or values for wildlife and/or are recognized as declining in extent and/or distribution. These communities are considered threatened enough to warrant some level of protection. For example, federal, State, and most local agencies consider wetlands and riparian habitat as sensitive communities. Natural plant communities considered sensitive are identified by the CDFW. Plant communities considered sensitive are ranked statewide S1, S2, and S3 (**Appendix D1**).

Surface Hydrology and Jurisdictional Waters

Within the arid and semi-arid western United States, limited precipitation restricts wetland and riparian resources to 1-5 percent of the land surface, a relatively low proportion compared to other systems globally. The proportion of wetland resources is even lower (less than 1 percent) in extremely arid areas such as the Mojave Desert and the Great Basin (USACE, 2008).

The project is in the South Lahontan Hydrologic Region, which represents about 17 percent of the land (26,732 square miles) area in California (Heritage, 2025). The region includes Inyo County and portions of Mono, San Bernardino, Kern, and Los Angeles Counties. The South Lahontan Hydrologic Region is bound to the north by the drainage divide between Mono Lake and East Walker River, to the west and south by the Sierra Nevada, San Gabriel, San Bernardino and Tehachapi Mountains, and to the east by the State of Nevada. Drainage for most of the watershed in the region is underground. Along with the arid climate, this accounts for the presence of many dry lakebeds or playas in the region (Heritage, 2025).

Wildlife Movement Corridors

Wildlife can move freely through open landscapes with minimal impediments such as paved roads and development. In denser landscapes where cover is harder for larger animals to penetrate, wildlife will often utilize human-made movement corridors such as scarcely travelled dirt roads and trails, as well as natural paths such as washes and small drainages. Topography across the Study Area is relatively flat as the site is located on the bajada of the Tehachapi Mountains. The Study Area is generally undeveloped with an open landscape, and thus wildlife can move relatively freely through the area. Existing constraints on the

landscape in the region that may influence wildlife movement include State Route (SR)-14, SR-58, other paved roads such as Tehachapi Willow Springs Road, industrial mining operations, existing utility infrastructure, and scattered rural residential areas. Existing solar fields occur adjacent to the project site, including areas to the north and south. The overall minimal development in this region of the Mojave Desert allows opportunities for wildlife movement between the desert areas and the Tehachapi Mountains to the northwest.

Local Setting

The project site and surrounding land are relatively flat and exhibit little topographic relief. Elevations within the Study Area range between approximately 2,970 feet amsl in the southeast corner to approximately 3,760 feet amsl in the northwest portion. Vegetation within the Study Area is characteristic of the Mojave Desert and is predominantly composed of Mojavean desert scrub, with creosote scrub as the dominant vegetation community. The native desert within the Study Area has experienced varying degrees of anthropogenic disturbance such as off-highway vehicle use, fencing, paved and unpaved roads, livestock grazing, residential structures, utility structures such as transmission lines and wind turbines, encampments, and refuse dumping. As a result of all these disturbances, non-native and invasive plant species are widespread.

Vegetation Communities

During botanical field surveys conducted for the project, Tetra Tech identified a total of 179 plant species within survey areas. Five separate field mobilizations were conducted to survey and map vegetation communities/habitats within an approximately 8,606-acre Study Area that encompassed the project site, the generation tie (gen-tie) line corridor, and temporary offsite construction laydown yard. These surveys were conducted between April 3 to May 16, 2023, June 6 to 21, 2023, April 8 to 12, 2024, June 3 to 5, 2024, and September 3 to 4, 2025. Detailed findings are documented in the *Botanical Inventory Report for the Discovery Solar PV & Storage Project, Kern County, California* (Tetra Tech, 2025b) included as **Appendix D2** of this EIR.

Nine natural vegetation communities and three other communities were identified within the 8,606-acre Study Area. The natural vegetation communities include allscale scrub (*Atriplex polycarpa* Shrubland Alliance), brittle bush scrub (*Encelia farinosa* Shrubland Alliance), California buckwheat scrub (*Eriogonum fasciculatum – Viguiera parishii* Shrubland Alliance), California juniper woodland (*Juniperus californica* Woodland Alliance), cheesebush scrub (*Ambrosia salsola – Bebbia juncea* Shrubland Alliance), creosote bush scrub (*Larrea tridentata* Shrubland Alliance), desert needlegrass grassland (*Stipa speciosa* Herbaceous Alliance), rubber rabbitbrush scrub (*Ericameria nauseosa* Shrubland Alliance), and scalebroom scrub (*Lepidospartum squamatum* Shrubland Alliance). Desert needlegrass grassland is a sensitive natural community with a rarity ranking in California of S2 (imperiled), and scalebroom scrub is a sensitive natural community with a rarity ranking in California of S3 (vulnerable). The three other communities within the Study Area contained developed and disturbed areas and disturbed creosote bush scrub.

Table 4.4-1, *Mapped Vegetation Communities and Land Cover Types Within the Study Area*, lists vegetation and land cover categories with approximate acreages that were mapped, describes the corresponding alliance name according to *A Manual of California Vegetation, Second Edition* (Sawyer et al., 2009) and CDFW's California Natural Community List (CDFW, 2025a), and states whether each

community is considered sensitive or not by CDFW. Characteristics of each vegetation community and land cover as well as plant species associated with the communities are described after the table. **Figures 4.4-1a** and **4.4-1b** depict the vegetation communities and other land covers.

TABLE 4.4-1: MAPPED VEGETATION COMMUNITIES AND LAND COVER TYPES WITHIN THE STUDY AREA

Vegetation Community or Other Land Cover Type	Alliance	Sensitive Community	Approximate Acreage[a]
Plant Community			
Allscale scrub	*Atriplex polycarpa* shrubland alliance	no	**20**
Brittle bush scrub	*Encelia farinosa* shrubland alliance	no	**206**
California buckwheat scrub	*Eriogonum fasciculatum – Viguiera parishii* shrubland alliance	no	**465**
California juniper woodland	*Juniperus californica* shrubland alliance	no	**354**
Cheesebush scrub	*Ambrosia salsola – Bebbia juncea* woodland alliance	no	**773**
Creosote bush scrub[b]	*Larrea tridentata* shrubland alliance	no	**5,737**
Desert needlegrass grassland	*Stipa speciosa* shrubland alliance	yes	**246**
Disturbed creosote bush scrub	N/A	no	**340**
Rubber rabbitbrush scrub	*Ericameria nauseosa* shrubland alliance	no	**344**
Scalebroom scrub	*Lepidospartum squamatum* shrubland alliance	yes	**29**
Other Land Cover Type			
Developed	N/A	no	**57**
Disturbed	N/A	no	**35**

Notes:

[a] Acreages are rounded to the nearest whole number. The 8,606-acre Study Area encompasses the 7,700-acre project site, the proposed generation tie line corridor, and temporary offsite construction laydown yard.

[b] Joshua tree woodlands were mapped within the creosote bush scrub community in locations where Western Joshua trees were present at 1 percent or greater cover. Approximately 5% (approximately 325 acres) of the creosote bush scrub constitutes Joshua tree woodland. Joshua tree woodland is a sensitive natural community with a rarity ranking in California of S3 (vulnerable).

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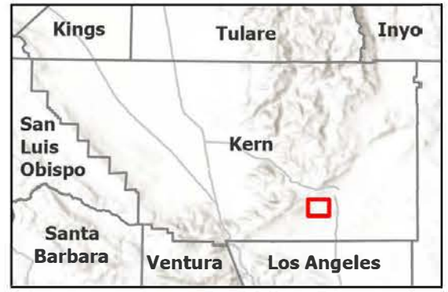
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.4-1a. Vegetation Communities



Oak Creek Rd
90th Street W
UPRR
Tehachapi Willow Springs Rd
Oak Creek
Los Angeles Aqueduct
Balboa Ave

- Windhub High-voltage Substation (Existing)
- Roads
- Watercourse

Proposed Project Features

- Project Site
- Study Area
- Gen-tie Line (New)
- Medium-voltage/Transmission/Access Easements

Other Applicant and/or Affiliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

Vegetation Communities

- Allscale Scrub
- Brittle Bush Scrub
- California buckwheat scrub
- California juniper woodland
- Cheesebush scrub
- Creosote bush scrub
- Desert needlegrass grassland
- Developed
- Disturbed
- Disturbed - Creosote bush scrub
- Rubber rabbitbrush scrub
- Scalebroom scrub

*Already approved under separate projects.

N

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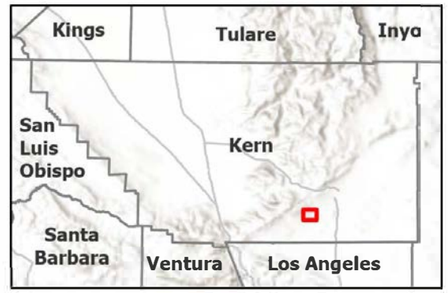
Not for Construction

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.4-1b. Vegetation Communities



Roads

Watercourse

Proposed Project Features

Project Site

Study Area

Gen-tie Line (New)

Medium-voltage/Transmission/Access Easements

Vegetation Communities

California buckwheat scrub

California juniper woodland

Cheesebush scrub

Creosote bush scrub

Desert needlegrass grassland

Developed

Disturbed

Disturbed - Creosote bush scrub

Rubber rabbitbrush scrub

Scalebroom scrub

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Not for Construction

Los Angeles Aqueduct

Oak Creek

Allscale Scrub

The allscale scrub plant community present in the Study Area is dominated by allscale (*Atriplex polycarpa*), which comprises more than 2 percent absolute cover in the shrub canopy and more than 50 percent relative cover in the shrub cover. Other shrubs present include creosote bush and winterfat (*Krascheninnikovia lanata*). Some scattered western Joshua trees (WJT; *Yucca brevifolia*) are present. Shrubs are generally less than 3 meters in height, and the canopy is open with patches of continuous cover. The onsite allscale scrub plant community meets the membership rules for the *Atriplex polycarpa* shrubland alliance. This community is not considered sensitive by CDFW.

Brittle Bush Scrub

The brittle bush scrub plant community present in the Study Area is dominated by brittle bush (*Encelia farinosa*), which comprises more than 1 percent absolute cover in the shrub canopy and more than 50 percent relative cover. Other plant species present in this community include white bursage (*Ambrosia dumosa*), creosote bush, desert needlegrass (*Stipa speciosa*), and cheesebush (*Ambrosia salsola*). Shrubs are generally less than 2 meters in height, and the canopy is open to intermittent. The onsite brittle bush scrub plant community meets the membership rules for *Atriplex polycarpa* shrubland alliance. This community is not considered sensitive by CDFW.

California Buckwheat Scrub

The California buckwheat scrub plant community present in the Study Area is dominated by Mojave desert California buckwheat (*Eriogonum fasciculatum* var. *polifolium*). California buckwheat is present at more than 5 percent absolute cover in the shrub canopy and Parish's goldeneye (*Viguiera parishii*) was not observed. In some areas, California buckwheat is codominant with Cooper's goldenbush (*Ericameria cooperi* var. *cooperi*). White bursage, desert needlegrass, creosote bush, cheesebush, Nevada ephedra (*Ephedra nevadensis*), devil's lettuce (*Amsinckia tessellata* var. *tessellata*), and rayless goldenhead (*Acamptopappus sphaerocephalus*) are also present in this community. Shrubs are generally less than 2 meters in height, and the canopy is open to intermittent open. The onsite California buckwheat scrub plant community meets the membership rules for *Eriogonum fasciculatum – Viguiera parishii* shrubland alliance. This community is not considered sensitive by CDFW.

California Juniper Woodland

The California juniper woodland plant community present in the Study Area is dominated by California juniper (*Juniperus californica*), which is present at more than 3 percent absolute cover over lower shrubs. No other tree species are present. Other plant species present in this community include creosote bush, Nevada ephedra, and desert needlegrass. Trees are generally less than 5 meters in height, and the canopy is open to intermittent. The onsite California juniper woodland plant community meets the membership rules for *Juniperus californica* woodland alliance. This community is not considered sensitive by CDFW.

Cheesebush Scrub

The cheesebush scrub plant community present in the Study Area is dominated by cheesebush, which is present at more than 2 percent cover in the shrub canopy with other shrubs comprising less cover in the shrub canopy. Sweetbush (*Bebbia juncea*) is not present in this community. Other plant species observed include creosote bush, white bursage, desert needlegrass, desert fiddleneck, Nevada ephedra, Acton Encelia

(*Encelia actoni*), rubber rabbitbrush (*Ericameria nauseosa*), cheatgrass (*Bromus tectorum*), and rayless goldenhead. Shrubs are less than 2 meters in height, and canopy is open to intermittent. The onsite cheesebush scrub plant community meets the membership rules for *Ambrosia salsola – Bebbia juncea* shrubland alliance. This community is not considered sensitive by CDFW.

Creosote Bush Scrub

The creosote bush scrub plant community is the most encountered vegetation community in the Study Area. This alliance is dominated by creosote bush, which exceeds other shrubs in cover. In some areas, emergent WJTs are present. Other small shrubs such as white bursage, winterfat, Nevada ephedra, cheesebush, rayless goldenhead, and peach thorn (*Lycium cooperi*) were observed alongside creosote in some areas, but in this alliance, their cover is less than three times the cover of creosote bush. The onsite creosote bush scrub plant community meets the membership rules for *Larrea tridentata* shrubland alliance. This community is not considered sensitive by CDFW.

Approximately 325 acres of both contiguous and isolated Joshua tree woodland were mapped at the project (approximately 5 percent of the creosote bush scrub plant community). Joshua tree woodland was generally mapped within the northern portion of the Study Area (see **Figure 4.4-2**, *Western Joshua Tree Impact, Woodland Habitat Preservation, and Woodland Areas within the Discovery Solar PV and Storage Project*). The mapped Joshua tree woodland meets the membership rules for *Yucca brevifolia* Woodland Alliance, which requires WJTs to be present at 1 percent or greater cover. Although individual WJTs were also observed throughout the Study Area, their density did not meet the 1 percent cover threshold and were therefore not mapped as Joshua tree woodland. This alliance is considered sensitive by CDFW. See **Appendix D10**.

Desert Needlegrass Grassland

The desert needlegrass grassland plant community present in the Study Area is dominated by desert needlegrass, which is present at more than 50 percent relative cover in the herbaceous layer. Emergent WJTs and shrubs, including cheesebush, rubber rabbitbrush, creosote bush, desert wishbone bush (*Mirabilis laevis*), and devil's lettuce are present at low percent cover. Herbs are generally less than 1 meter in height, and the canopy is open to intermittent. The onsite desert needle grassland plant community meets the membership rules for *Stipa speciosa* herbaceous alliance. This community is considered sensitive by CDFW.

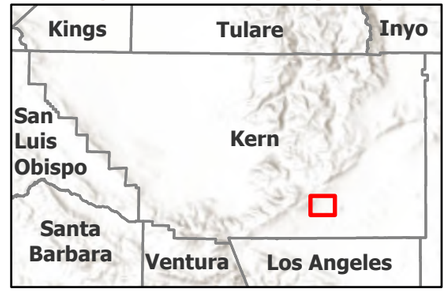
Disturbed Creosote Bush Scrub

The disturbed creosote bush scrub plant community present on the northernmost section of the Study Area. is disturbed due to historical ground and vegetation disturbance, road construction, and/or has been burned in wildfire. The section south of the Los Angeles Department of Water and Power (LADWP) aqueduct is disturbed due to a large burn scar, because of which it exhibits characteristics different than creosote bush scrub in other areas of the Study Area. In the area north of the LADWP aqueduct and south of Tehachapi Willow Springs Road, anthropogenic disturbances and historical grading were observed. This community is not considered sensitive by CDFW.

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.4-2. Western Joshua Tree Impact, Woodland Habitat Preservation, and Woodland Areas within the Discovery Solar PV and Storage Project



Oak Creek Rd

Tehachapi Willow Springs Rd

Backus Rd

- Western Joshua Tree Impact Areas
- Woodland Habitat Preservation Areas
- Survey/Assessment Area

Woodland Cells

- Non-Woodland
- Woodland

*Already approved under separate projects.

N

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Not for Construction

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Rubber Rabbitbrush Scrub

The rubber rabbitbrush scrub plant community present in the Study Area is dominated by rubber rabbitbrush, which is present at more than 50 percent relative cover in the shrub canopy. Shrubs are generally less than 3 meters in height, and the canopy is open to continuous. The rubber rabbitbrush scrub plant community meets the membership rules for *Ericameria nauseosa* shrubland alliance. This community is not considered sensitive by CDFW.

Scalebroom Scrub

The scalebroom scrub plant community present in the Study Area is dominated by scalebroom, which is present at more than one percent cover in alluvial environments. This alliance was observed along a dry streambed that runs across the Study Area. Rubber rabbitbrush and desert needlegrass were also present in this community. Shrubs are less than 2 meters in height, and the canopy is open to continuous and two-tiered. The scalebroom scrub plant community meets the membership rules for the *Lepidospartum squamatum* shrubland alliance. This community is considered sensitive by CDFW.

Developed

The developed areas in the Study Area include existing wind energy generating infrastructure, existing buildings, structures, hard paved roads, and railroads. The existing Windhub Substation is located off Oak Creek Road. Other areas mapped as developed include buildings on the Windswept Ranch Petting Zoo property as well as a graded gravel lot with trailers and fenced yard on Tehachapi Willow Springs Road. Active homesteads within the western half of the Study Area and roads including Oak Creek Road, Santa Fe Railroad, and Tehachapi Willow Springs Road were also considered to be developed.

Disturbed

The disturbed areas in the Study Area are characterized by the presence of anthropogenic disturbances such as trash, off-road vehicle tracks, and non-native species. Areas mapped as disturbed include areas along Oak Creek Road with existing infrastructure associated with the Windhub Substation, part of the southeastern section of the Study Area adjacent to the Holliday Rock Mine, an abandoned illegal grow operation in the middle of the Study Area north of the LADWP aqueduct, and abandoned encampments with no structures in the middle of the Study Area north of the LADWP aqueduct and in the southwestern section of the Study Area south of the LADWP aqueduct.

Wildlife Species

Wildlife species observed or detected in the Study Area are consistent with the common species known to occur in the Antelope Valley and Mojave Desert. Multiple field surveys were conducted for the project between 2022 and 2025. The surveys and associated technical reports are included below:

- A *Biological Resources Summary Technical Report, Discovery Solar PV and Storage Project, Kern County, California* (Tetra Tech, 2025a) included as **Appendix D1** of this EIR. This report discusses methods and high-level results for surveys conducted for the project.
- Between November 2022 and September 2025, a Mojave desert tortoise habitat suitability assessment and protocol presence/absence survey was conducted within the 8,606-acre Study Area.

The methods and results of the survey are included in the *Mojave Desert Tortoise Survey Report, Discovery Solar PV and Storage Project, Kern County, California* (Tetra Tech, 2025c) included as **Appendix D3** of this EIR.

- Between November 2022 and September 2025, a burrowing owl habitat assessment and burrow survey was conducted within the 8,606-acre Study Area. The methods and results of the survey are included the *Burrowing Owl Survey Report, Discovery Solar PV and Storage Project, Kern County, California* (Tetra Tech, 2025d) included as **Appendix D4** of this EIR.

- Between November 2022 and September 2025, a habitat assessment and burrow survey was conducted for desert kit fox within the 8,606-acre Study Area. The methods and results of the survey are included in the *Desert Kit Fox Survey Report, Discovery Solar PV and Storage Project, Kern County, California* (Tetra Tech, 2025e) included as **Appendix D5** of this EIR.

- Between April and July of 2023, 2024, and 2025, protocol-level Swainson's hawk surveys were conducted within the project site and a 5-mile radius of the project site. The methods and results of the survey are included in the *Swainson's Hawk (Buteo swainsoni) and Nesting Raptor Survey Report* (BBI, 2025a) included as **Appendix D6** of this EIR.

- In April and May 2023, BBI biologists conducted golden eagle protocol surveys within the project site and a 2-mile radius of the project site. 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* (BBI, 2025b) included as **Appendix D7** of this EIR.

A total of 110 wildlife species were observed or otherwise detected in the Study Area during the field surveys, including 14 invertebrate species, 10 reptile species, 72 bird species, and 14 mammal species. The Study Area does not support fish, and amphibians were not observed or detected during the surveys. A full list of wildlife species observed is included in **Appendix D3** of this EIR.

Common reptile species observed in the Study Area include great basin whiptail (*Aspidoscelis tigris tigris*), Mojave green rattlesnake (*Crotalus scutulatus*), long-nosed leopard lizard (*Gambelia wislizenii*), coachwhip (*Masticophis flagellum testaceus*), side blotch lizard (*Uta stansburiana*), and night lizard (*Xantusia vigilis*). Bird species that were observed included red-winged blackbird (*Agelaius phoeniceus*), black-throated sparrow (*Amphispiza bilineata*), great horned owl (*Bubo virginianus*), red-tailed hawk (*Buteo jamaicensis*), California quail (*Callipepla californica*), cactus wren (*Campylorhynchus brunneicapillus*), lark sparrow (*Chondestes grammacus*), rock pigeon (*Columba livia*), common raven (*Corvus corax*), horned lark (*Eremophila alpestris*), American kestrel (*Falco sparverius*), house finch (*Haemorhous mexicanus*), northern mockingbird (*Mimus polyglottos*), ash-throated fly catcher (*Myiarchus cinerascens*), savannah sparrow (*Passerculus sandwichensis*), mountain chickadee (*Poecile gambeli*), ruby-crowned kinglet (*Regulus calendula*), Say's phoebe (*Sayornis saya*), yellow-rumped warbler (*Setophaga coronata*), lesser goldfinch (*Spinus psaltria*), western meadowlark (*Sturnella neglecta*), American robin (*Turdus migratorius*), and white-crowned sparrow (*Zonotrichia leucophrys*). Mammal species that were identified on the site included white-tailed antelope squirrel (*Ammospermophilus leucurus*), coyote (*Canis latrans*), desert kangaroo rat (*Dipodomys deserti*), black tailed jackrabbit (*Lepus californicus*), bobcat (*Lynx rufus*), California ground squirrel, and desert cottontail (*Sylvilagus audubonii*). The wildlife observed during the field surveys are representative of the fauna in the surrounding area.

Special-Status Species

Special-status species are defined as those plants and wildlife that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, State, or local agencies as being under threat from development pressures as well as natural causes. Some of these species receive specific protection that is defined by the federal or state endangered species acts. Other species have been designated as special status on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities and/or special districts to meet local conservation objectives. Special-status species include the following:

- Species listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA);
- Species that meet the definitions of rare or endangered under the California Environmental Quality Act (CEQA) Guidelines Section 15380;
- All of the plants constituting California Rare Plant Rank (CRPR) 1B and Rank 2B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (CESA) of the California Fish and Game Code (CFGC), and are eligible for State listing;
- Species covered under an adopted National Community Conservation Planning Act/Habitat Conservation Plan (HCP);
- Species addressed by the Desert Renewable Energy Conservation Plan;
- Wildlife designated by CDFW as "Species of Special Concern" or "Watch List";
- Wildlife "fully protected" in California (CFGC Sections 3511, 4700, and 5050);
- Wildlife species protected as "fur-bearing mammals" (CFGC Section 4000 et seq.);
- Any local, State, or federal protected plant and wildlife species that are protected in the Kern County General Plan (County of Kern, 2009); and
- Avian species protected by the Migratory Bird Treaty Act (MBTA) and CFGC (Sections 3500–3516).

It should be noted that most avian species are afforded certain protections by the MBTA and CFGC (Sections 3500 – 3516); however, a majority of these, including some raptors, are common species and are not considered special status on that basis alone.

A complete list of rare plant and special-status wildlife species that have the potential to occur on the Study Area is provided in **Table 4.4-2**, *Rare Plants with the Potential to Occur Within the Study Area,* and **Table 4.4-3**, *Special-Status Wildlife with the Potential to Occur Within the Study Area*. Each species is discussed in the subsections below. The "Potential to Occur" categories are defined as follows:

- **Low:** The Study Area or immediate region does not support suitable habitat, and the known range of the species is outside of the Study Area or immediate region, or the Study Area and immediate region support suitable habitat for the species and are located within the species'

known distribution and elevational range, but protocol-level surveys were completed and the species was not observed.

- **Moderate:** The Study Area and immediate region support suitable habitat for the species and are located within this species' known distribution and elevational range.
- **High:** The Study Area and immediate region contain habitat for the species, and it is known to occur in the area.
- **Present:** Species observed on or near the Study Area during surveys or known to occur based on other site visits for the project.

Rare Plant Species

The CDFW CNDDB, USFWS IPaC system, and the CNPS Electronic Inventory of Rare and Endangered Plants of California databases were queried in May 2025 to compile a list of potential rare plant species that may occur in the project region (CNPS, 2025; CDFW, 2025a; USFWS, 2025a). Species identified in the database review were then assessed for their potential to occur within the Study Area by comparing their general range (if known), and their elevational range where the plant is known to occur and comparing those with the Study Area's location and elevational range. Biologists then evaluated whether the Study Area contains suitable habitats to support each species. For those species that have a potential to occur, biologists determined whether there is a high, moderate, or low potential for those species to occur within the Study Area. A total of 29 rare plant species identified in the database reviews have the potential to occur in the Study Area and are discussed below. The remaining species identified in the database review have little to no potential to occur within the Study Area because the site is located outside the species' known distribution, elevational range, and/or because the Study Area lacks suitable habitats to support these plants.

WJTs, few-flowered woolly star (*Eriastrum sparsiflorum*), and adobe yampah (*Perideridia pringlei*) were observed within the Study Area during field surveys. WJT is a state candidate species under CESA, and is protected under the California Desert Native Plant Act. Few-flowered woolly-star and adobe yampah are not federally listed but have a CRPR of 4.2 and 4.3, respectively. In addition to these three plant species observed onsite, habitat conditions and geographic location create a potential for 26 additional rare plant species to occur within the Study Area, though none of these species were observed during protocol-level surveys. **Table 4.4-2,** *Rare Plants with the Potential to Occur Within the Study Area,* includes the rare plants observed and those species that have potential to occur within the Study Area. The table also includes their status within California. Descriptions of each plant follow the table.

TABLE 4.4-2: RARE PLANTS WITH THE POTENTIAL TO OCCUR WITHIN THE STUDY AREA

Scientific Name	Common Name	Status in California[a]	Observed during Surveys	Potential to Occur within the Study Area
Allium howellii var. *howellii*	Howell's onion	CRPR: 4.3	-	low
Astragalus hornii var. *hornii*	horn's milkvetch	CRPR: 1B.1	-	low
Calochortus striatus	alkali mariposa lily	CRPR: 1B.2	-	moderate
Camissonia kernensis ssp. *kernensis*	Kern County evening-primrose	CRPR: 4.3	-	moderate

Scientific Name	Common Name	Status in California[a]	Observed during Surveys	Potential to Occur within the Study Area
Canbya candida	white pygmy-poppy	CRPR: 4.2	-	moderate
Castilleja plagiotoma	Mojave paintbrush	CRPR: 4.3	-	moderate
Chorizanthe spinosa	Mojave spineflower	CRPR: 4.2	-	moderate
Cymopterus deserticola	Desert cymopterus	CRPR: 1B.2	-	low
Delphinium recurvatum	recurved larkspur	CRPR: 1B.2	-	low
Dudleya abramsii ssp. *calcicola*	limestone dudleya	CRPR: 4.3	-	moderate
Eriastrum rosamondense	Rosamond eriastrum	CRPR: 1B.1	-	moderate
Eriastrum sparsiflorum	few-flowered woolly-star	CRPR: 4.3	observed	present
Eriastrum tracyi	Tracy's eriastrum	CRPR: 3.2	-	moderate
Eriophyllum mohavense	Barstow woolly sunflower	CRPR: 1B.2	-	moderate
Fritillaria pinetorum	pine fritillary	CRPR 4.3	-	moderate
Gilia interior	inland gilia	CRPR: 4.3	-	moderate
Goodmania luteola	golden goodmania	CRPR: 4.2	-	moderate
Layia heterotricha	pale-yellow layia	CRPR: 1B.1	-	moderate
Loeflingia squarrosa var. *artemisiarum*	sagebrush loeflingia	CRPR: 2B.2	-	moderate
Monardella exilis	Mojave monardella	CRPR: 4.2	-	moderate
Monardella linoides ssp. *anemonoides*	southern Sierra monardella	CRPR: 1B.3	-	low
Monardella linoides ssp. *oblonga*	Tehachapi monardella	CRPR: 1B.3	-	moderate
Nemacladus secundiflorus var. *robbinsii*	Robbins' nemacladus	CRPR: 1B.2	-	low
Opuntia basilarius var. *treleasei*	Bakersfield cactus	FE, SE, CRPR: 1B.1	-	low
Perideridia pringlei	Adobe yampah	CRPR: 4.3	observed	present
Puccinellia simplex	California alkali grass	CRPR 1B.2	-	low
Saltugilia latimeri	Latimer's woodland-gilia	CRPR 1B.2	-	high
Syntrichopappus lemmonii	Lemmon's syntrichopappus	CRPR 4.3	-	moderate
Yucca brevifolia	Western Joshua tree	SC	observed	present

Notes:

[a] ***Federal Status and/or Protection***

Scientific Name	Common Name	Status in California[a]	Observed during Surveys	Potential to Occur within the Study Area

- **FE = federally listed as endangered:** any species which is in danger of extinction throughout all or a significant portion of its range.

State Status and/or Protection

- **SE = state-**listed as endangered: "endangered species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease (California Fish and Game Code § 2062).
- **SC = state candidate for listing:** a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by the California Department of Fish and Wildlife (CDFW) for addition to the list of endangered species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (CFGC § 2068).

California Rare Plant Ranks (CRPR) Designations

- **CBR = Considered but Rejected**
- **CRPR: 1B = California Rare Plant Rank 1B - plants rare, threatened, or endangered in California and elsewhere:** plants with a CRPR of 1B are rare throughout their range with most of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. All the plants constituting CRPR 1B meet the definitions of § 2062 and § 2067 (California Endangered Species Act [CESA]) of the California Fish and Game Code (CFGC) and are eligible for state listing.
- **CRPR: 2B = California Rare Plant Rank 2B - plants rare, threatened, or endangered in California, but more common elsewhere:** except for being common beyond the boundaries of California, plants with a CRPR of 2B would have been ranked 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the federal Endangered Species Act. All the plants constituting CRPR 2B meet the definitions of § 2062 and § 2067 (CESA) of the CFGC and are eligible for state listing.
- **CRPR: 3 = California Rare Plant Rank 3 – Plants about which more information is needed (Review List)** Plants for which there is insufficient information to assign them to 1B, 2B, or 4. They may be rare or threatened, but data gaps prevent accurate ranking. The California Native Plant Society (CNPS) maintains CRPR 3 as a "review list" to encourage further study. As knowledge improves, these plants may be reassigned to a more definitive rank. Some CRPR 3 plants may meet the definitions of § 2062 and § 2067 (CESA) of the CFGC, but eligibility for state listing depends on future data.
- **CRPR: 4 = California Rare Plant Rank 4 - plants of limited distribution - a watch list**: the plants in this category are of limited distribution or infrequent throughout a broader area in California. While the CNPS and California Department of Fish and Wildlife (CDFW) cannot call these plants "rare" from a statewide perspective, they are uncommon enough that their status should be monitored regularly. Should the degree of endangerment or rarity of a CRPR 4 plant change, CNPS and CDFW will transfer it to a more appropriate rank. Some of the plants constituting CRPR 4 meet the definitions of § 2062 and § 2067 (CESA) of the CFGC, and few, if any, are eligible for state listing.

CRPR Threat Rank Designations

- **x.1** = seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat).
- **x.2** = moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat).
- **x.3** = not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

While the Study Area supports desert habitats and soils that could potentially support rare plants, only 3 of the 29 rare plant species listed in **Table 4.4-2**, *Rare Plants with the Potential to Occur Within the Study Area*, were observed during the focused botanical field surveys conducted in 2023 and 2024.

Rare Plant Species Observed During Surveys

Few-flowered woolly-star (*Eriastrum sparsiflorum*): Few-flowered woolly-star is a CRPR 4.3 plant. This plant is an annual herb that prefers open sunny areas on flats, hillsides, small washes, floodplains, and disturbed areas. This species prefers chaparral, cismontane woodland, Great Basin scrub, Joshua tree woodland, Mojavean desert scrub, pinyon, and juniper woodland. This species is typically observed growing at an elevation of 3,525 to 5,610 feet. Blooming period: May to September. A total of 579 few-flowered woolly-star individuals were observed in the Study Area within creosote bush scrub and Joshua tree woodland plant communities (**Figure 4.4-3**, *Rare Plants*).

Adobe yampah (*Perideridia pringlei*): Adobe yampah is CRPR 4.3 plant. It occurs in chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland habitats. Adobe yampah typically grows along grassy slopes and in serpentine outcrops. This species is typically observed growing at an elevation of 985 to 5,905 feet. Blooming period: April to June. Approximately 110 adobe yampah individuals were identified growing on a slope along a dry streambed within California juniper woodland and rubber rabbitbrush scrub communities (**Figure 4.4-3**, *Rare Plants*).

Western Joshua Tree (WJT; *Yucca brevifolia*): WJT is a state candidate for listing under CESA and is a species that is protected by the California Desert Native Plants Act (CDNPA). This plant is a perennial tree-like succulent that grows on desert flats, gentle slopes, mesas, and bajadas on a variety of substrates, but typically igneous, that are silty, loamy, or sandy, within many different plant communities. This species is typically observed growing at an elevation of 1,310 to 7,545 feet.

A combination of extensive field surveys for WJT in compliance with CDFW protocol and desktop analyses were conducted for the project site, gen-tie line corridor, temporary offsite construction laydown yard, as well as some additional proponent-owned parcels adjacent to the project (an approximately 9,046-acre survey area). The WJT population at the project exhibits signs of active, recent reproduction through a combination of seed germination and clonal growth: 75 percent of live stems are classified as immature (i.e., young, juvenile individuals), with the remaining 25 percent classified as mature and reproductive (i.e., branching or evidence of previous flowering events). Overall, size Class A (<1 meter tall) comprised 52 percent of live stems, while Size Class B (1-5 meters tall) and Size Class C (>5 meters tall) made up 46 percent and 2 percent of live stems, respectively. The overall density of live WJT stems is approximately 17 trees per acre (this density is primarily driven by juvenile trees and clonal sprouts); however, the density of mature reproductive stems is approximately six trees per acre. Density of WJT within Joshua tree woodland areas is approximately 64 trees per acre; as stated above, the mapped Joshua tree woodland meets the membership rules for *Yucca brevifolia* Woodland Alliance, which requires WJTs to be present at 1 percent or greater cover.

The project contains areas where impacts to WJTs may occur (WJT Impact Area) and areas where WJT and Joshua tree woodlands will be preserved (Woodland Habitat Preservation Areas). Within the WJT Impact Area (i.e., project development footprint), there are approximately 106,100 live WJT stems and approximately 69,600 dead WJT stems. Within the 420 acres of Woodland Habitat Preservation Areas, there are approximately 26,650 live WJT stems and approximately 7,550 dead WJT stems. Per the Western Joshua Tree Conservation Act (WJTCA), each stem is considered an individual WJT.

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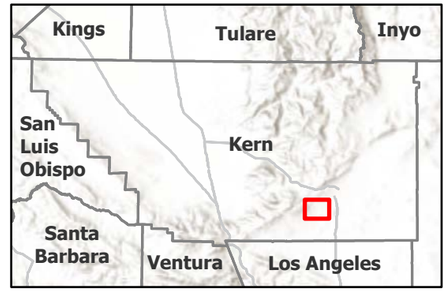
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.4-3. Rare Plants



Windhub High-voltage Substation (Existing)

Roads

Watercourse

Proposed Project Features

Project Site

Study Area

Gen-tie Line (New)

Medium-voltage/Transmission/Access Easements

Other Applicant and/or Affiliate Controlled*

Step-up HV substation

Gen-tie Corridor

Rare Plant Species

Few-flowered woolly-star (*Eriastrum sparsiflorum*)

Point

Polygon

Adobe yampah (*Peridendia pringlei*)

Point

Polygon

*Already approved under separate projects.

N

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Scale is 1:45,000 when printed at 11"x17"

Not for Construction

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Rare Plant Species Not Observed During Surveys

Howell's onion (*Allium howellii* var. *howellii*): Howell's onion has been designated by CNPS and CDFW as a CRPR 4.3 plant. This plant is a perennial herb (bulb) that is known to occur in serpentine soil on grassy slopes. It occurs in valley and foothill grassland. Preferred soil types for this species are serpentine soils on grassy slopes. This species is typically observed growing at an elevation of 165 to 7,220 feet. Blooming period: March to April. Although some grasslands occur in the Study Area, the Study Area lacks the preferred habitat of this species.

Horn's milkvetch (*Astragalus hornii* var. *hornii*): Horn's milkvetch is a CRPR 1B.1 plant. This species is an annual herb that occurs in meadows, seeps, and playas. It is typically observed growing on salty flats and lake shores at an elevation of 195 to 2,790 feet, which is lower than the Study Area elevation. Blooming period: May to October. Although some meadow habitat in the form of grasslands occurs in the Study Area, the Study Area lacks the preferred habitat of this species.

Alkali mariposa lily (*Calochortus striatus*): Alkali mariposa lily is a CRPR 1B.2 plant. This perennial herb (bulb) species prefers alkaline meadows and moist creosote-bush scrub. Blooming period: April to June. The Study Area falls within the alkali mariposa lily species distribution model map (Tetra Tech, 2025b). The Study Area meets the habitat and elevation requirements of this species.

Kern County evening-primrose (*Camissonia kernensis* ssp. *kernensis*): Kern County evening-primrose is a CRPR 4.3 plant. This plant is an annual herb species that prefers sandy slopes and flats, which were found in the Study Area in Joshua tree woodland and California juniper woodland vegetation communities. This species is typically observed growing at an elevation of 2,590 to 6,990 feet. Blooming period: March to May. The Study Area meets the habitat and elevation requirements of this species.

White pygmy-poppy (*Canbya candida*): White pygmy-poppy is a CRPR 4.2 plant. This plant is an annual herb that is typically observed growing in sandy places. It occurs in Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland habitats. This species is typically observed growing at an elevation of 1,970 to 4,790 feet. Blooming period: March to May. The Study Area meets the habitat and elevation requirements of this species.

Mojave paintbrush (*Castilleja plagiotoma*): Mojave paintbrush is a CRPR 4.3 plant. This plant is a perennial herb (hemiparasitic) that prefers dry sagebrush scrub and pinyon woodland. It occurs in Great Basin scrub, Joshua tree woodland, lower montane coniferous forest, pinyon and juniper woodland. This species is typically observed growing at an elevation of 985 to 8,205 feet. Blooming period: April to June. The Study Area meets the habitat and elevation requirements of this species.

Mojave spineflower (*Chorizanthe spinosa*): Mojave spineflower is a CRPR 4.2 plant. This plant is an annual herb that prefers sandy or gravelly soil types, which were found on the Study Area in allscale, brittle bush, California buckwheat, cheesebush, creosote bush, rubber rabbitbrush, and scalebroom scrub, as well as Joshua tree woodland. It occurs in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and playas. This species is typically observed growing at an elevation of 20 to 4,265 feet. Blooming period: March to July. The Study Area meets the habitat and elevation requirements of this species.

Desert cymopterus (*Cymopterus deserticola*): Desert cymopterus is a CRPR 1B.2 plant. This plant is a perennial herb that prefers sandy soils in Joshua tree woodland and Mojavean desert scrub. It occurs at 2,065 to 4,920 feet. Blooming period: March to May. The Study Area meets the habitat and elevation requirements of this species.

Recurved larkspur (*Delphinium recurvatum*): Recurved larkspur is a CRPR 1B.2 plant. This plant is a perennial herb that prefers poorly drained, fine, alkaline soils in grassland and saltbush scrub habitat, which is a type of Mojavean desert scrub. It occurs in chenopod scrub, cismontane woodland, and valley and foothill grassland. This species is typically observed growing at an elevation of 10 to 2,590 feet. Blooming period: March to June. The preferred elevation of this species is lower than the elevation of the Study Area.

Limestone dudleya (*Dudleya abramsii* ssp. *calcicole*): Limestone dudleya is a CRPR 4.3 plant. This plant is a perennial herb that prefers open, rocky, granite or limestone outcrops. It occurs in chaparral, pinyon and juniper woodland. This species prefers flat alkali plains, hard-packed sandy soil among low hummocks, and alkaline scrub. This species is typically observed growing at an elevation of 1,640 to 8,530 feet. Blooming period: April to August. The Study Area meets the habitat and elevation requirements of this species.

Rosamond eriastrum (*Eriastrum rosamondens*): Rosamond eriastrum is a CRPR 1B.1 plant. This plant is an annual herb that prefers flat alkali plains, hard-packed sandy soil among low hummocks, and alkaline scrub. This species prefers chenopod scrub and vernal pools. This species is typically observed growing at an elevation of 2,295 to 3,855 feet. Blooming period: April to May. The Study Area meets the habitat and elevation requirements of this species.

Tracy's eriastrum (*Eriastrum tracyi*): Tracy's eriastrum is a CRPR 3.2 plant. This plant is an annual herb that is typically observed in shale barrens, open hillsides, ridge tops, flats, floodplains, dry washes, and disturbed areas. This species prefers chaparral, cismontane woodland, valley, and foothill grassland habitats. This species is typically observed growing at an elevation of 1,035 to 5,840 feet. Blooming period: May to July. The Study Area meets the habitat and elevation requirements of this species.

Barstow woolly sunflower (*Eriophyllum mohavense*): Barstow woolly sunflower is a CRPR 1B.2 plant. This annual herb prefers creosote bush-scrub habitat, which is a type of Mojavean desert scrub. This species is typically observed growing at an elevation of 1,640 to 3,150 feet. Blooming period: March to May. The Study Area meets the habitat and elevation requirements of this species.

Pine fritillary (*Fritillaria pinetorum*): Pine fritillary is a CRPR 4.3 plant. This plant is a perennial herb that prefers chaparral, lower montane coniferous forest, pinyon and juniper woodland, subalpine coniferous forest, and upper montane coniferous forest habitats. This species is typically observed growing at an elevation of 5,695 to 10,825 feet. Blooming period: May to July. The Study Area meets the habitat requirements of this species.

Inland gilia (*Gilia interior*): Inland gilia is a CRPR 4.3 plant. This annual herb species prefers rocky slopes, open woodland, and scrub habitats. It occurs in cismontane woodland, Joshua tree woodland, and lower montane coniferous forest habitats. This species is typically observed growing at an elevation of 2,295 to 5,580 feet. Blooming period: March to May. The Study Area meets the habitat and elevation requirements of this species.

Golden goodmania (*Goodmania luteola*): Golden goodmania is a CRPR 4.2 plant. This annual herb species prefers clay soils. One small area of the Study Area may contain clay soils. It occurs in Mojavean desert scrub, meadows and seeps, playas, valley and foothill grassland habitats. This species is typically observed growing at an elevation of 65 to 7,220 feet. Blooming period: April to August. A small area within the Study Area meets the habitat and elevation requirements of this species.

Pale-yellow layia (*Layia heterotricha):* Pale-yellow layia is a CRPR 1B.1 plant. This annual herb occurs in cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland habitats. This species prefers clay and sandy soils that may or may not be alkaline in open areas. This species is typically observed growing at an elevation of 985 to 5,595 feet. Blooming period: March to June. The Study Area meets the habitat and elevation requirements of this species.

Sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*): Sagebrush loeflingia is a CRPR 2B.2 plant. This annual herb occurs in desert dunes, Great Basin scrub, and Sonoran desert scrub habitats. This species is typically observed growing in sand, gravelly hills, mesas, dunes, and disturbed areas. This species is typically observed growing at an elevation of 2,295 to 5,300 feet. Blooming period: April to May. The Study Area meets the habitat and elevation requirements of this species.

Mojave monardella (*Monardella exilis*): Mojave monardella is a CRPR 4.2 plant. This annual herb occurs in chenopod scrub, desert dunes, Great Basin scrub, Joshua tree woodland, lower montane coniferous forest, Mojavean desert scrub, pinyon and juniper woodland. This species is typically observed growing at an elevation of 1,970 to 6,725 feet. Blooming period: April to September. The Study Area meets the habitat and elevation requirements of this species.

Southern Sierra monardella (*Monardella linoides* ssp. *anemonoides*): Southern Sierra monardella is a 1B.3 plant. This perennial herb occurs in chaparral, cismontane woodland, and lower montane coniferous forest habitats. This species is typically observed growing at an elevation of 2,200 to 8,040 feet. Blooming period: June to August. The Study Area lacks the preferred habitat of this species.

Tehachapi monardella (*Monardella linoides* ssp. *oblonga*): Tehachapi monardella is a CRPR 1B.3 plant. This perennial herb occurs in lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest. This species is typically observed growing at an elevation of 2,955 to 8,105 feet. Blooming period: June to August. The Study Area meets the habitat requirements of this species.

Robbins' nemacladus (*Nemacladus secundiflorus* var. *robbinsii*): Robbins' nemacladus is a CRPR 1B.2 plant. This annual herb occurs in chaparral, valley and foothill grassland habitat. This species is typically observed growing on dry, gravelly slopes. This species is typically observed growing at an elevation of 1,150 to 5,580 feet. Blooming period: April to June. The Study Area meets the habitat requirements of this species.

Bakersfield cactus (*Opuntia basilaris* var. *treleasei*): The Bakersfield cactus is a federally endangered, state endangered, and CRPR 1B.1 species. This species is a perennial stem cacti that is endemic to the southwestern corner of the San Joaquin Valley, which occurs from just north of Bakersfield south to Wheeler Ridge and into the western foothills of the Sierra Nevada (Cypher et al., 2014a; Cypher et al., 2014b; USFWS, 2025d). It occurs within chenopod scrub, cismontane woodland, and valley and foothill grasslands. This species typically occurs at elevations of 330 to 4,755 feet. Blooming period: April to May. Based on the known range and genetic studies conducted for this species, Bakersfield cacti occur in the San Joaquin Valley and do not occur in the project Study Area.

California alkali grass (*Puccinellia simplex*): California alkali grass is a CRPR 1B.2 plant. This perennial herb occurs in chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pool habitats. This species prefers saline flats and mineral springs. This species is typically observed growing at an elevation of 5 to 3,050 feet. Blooming period: March to May. The Study Area meets the elevation requirement of this species. However, the Study Area lacks its preferred habitat.

Latimer's woodland-gilia (*Saltugilia latimeri*): Latimer's woodland-gilia is a CRPR 1B.2 plant. This annual herb occurs in chaparral, Mojavean desert scrub, pinyon and juniper woodland habitats. This species prefers rocky or sandy substrate in washes. This species is typically observed growing at an elevation of 1,310 to 6,235 feet. Blooming period: March to June. The Study Area meets the habitat and elevation requirements of this species.

Lemmon's syntrichopappus (*Syntrichopappus lemmonii*): Lemmon's syntrichopappus is a CRPR 4.3 plant. This annual herb occurs in chaparral, Joshua tree woodland, pinyon and juniper woodland habitats. This species prefers open, sandy or gravelly areas. This species is typically observed growing at an elevation of 1,640 to 6,005 feet. Blooming period: April to May. The Study Area meets the habitat and elevation requirements of this species.

Special-Status Wildlife

The CDFW CNDDB and USFWS IPaC databases were queried in May 2025 to compile a list of potential special-status wildlife species that may occur in the project region (CDFW, 2025a; USFWS, 2025a). Species identified in the database reviews were then assessed for their potential to occur within the Study Area by comparing their general distribution (if known) with the project's location. Biologists then evaluated whether the Study Area contains suitable habitats to support each species. For those species that have a potential to occur, biologists determined whether there is a high, moderate, or low potential for those species to occur within Study Area. A total of 30 special-status wildlife species were identified in the database review and were determined to have the potential to occur on site.

Of the 30 species in the database reviews, 12 sensitive wildlife species were observed and/or detected during field surveys conducted for the project. The remaining 18 special-status species in the database searches were not identified in the Study Area, but have the potential to occur and are listed in **Table 4.4-3,** *Special-status Wildlife with the Potential to Occur Within the Study Area*. The definitions of potential are the same as those provided prior to the rare plant discussion, earlier in this section. The table also includes their statuses within California. General habitat descriptions for each species follow the table.

TABLE 4.4-3: SPECIAL-STATUS WILDLIFE WITH THE POTENTIAL TO OCCUR WITHIN THE STUDY AREA

Scientific Name	Common Name	Status in California[a,b]	Observed/Detected during Surveys	Potential to Occur within the Study Area
Bombus crotchii	Crotch's bumble bee	SC	-	high (foraging); moderate (nesting)
Anniella pulchra	Northern California legless lizard	SSC	-	moderate
Phrynosoma blainvillii	Coast horned lizard	SSC	-	moderate
Gopherus agassizii	desert tortoise	FT and SE	carcass observed	low
Batrachoseps stebbinsi	Tehachapi slender salamander	SE	-	low

Scientific Name	Common Name	Status in California[a,b]	Observed/Detected during Surveys	Potential to Occur within the Study Area
Astur cooperii	Cooper's hawk	WL	observed	present (foraging)
Agelaius tricolor	tricolored blackbird	ST and SSC	-	moderate (foraging); no nesting habitat
Aquila chrysaetos	golden eagle	FP, BGEPA, and WL	-	moderate (foraging); no nesting habitat on-site
Artemisiospiza belli belli	Bell's sparrow	WL	observed	present
Asio flammeus	short-eared owl	SSC	-	low (foraging); no nesting habitat
Asio otus	long-eared owl	SSC	-	moderate (foraging and nesting)
Athene cunicularia	western burrowing owl	SC and SCC	observed	present
Buteo regalis	ferruginous hawk	WL	-	moderate (foraging); no nesting habitat
Buteo swainsoni	Swainson's hawk	ST	observed	present (active nest in Study Area outside of the project site)
Charadrius montanus	mountain plover	SSC	-	low (foraging); no nesting habitat
Circus hudsonius	northern harrier	SSC	observed	present (foraging); no nesting habitat
Contopus cooperi	olive-sided flycatcher	SSC	observed	low (foraging and nesting)
Falco columbarius	merlin	WL	-	moderate (foraging); no nesting habitat
Falco mexicanus	prairie falcon	WL	-	high (foraging); low (nesting)
Gymnogyps californianus	California condor	FE and SE	-	moderate (foraging); no nesting habitat
Lanius ludovicianus	loggerhead shrike	SSC	observed	present
Setophaga petechia	yellow warbler	SSC	observed	present
Toxostoma leconti	Le Conte's thrasher	SSC	observed	present
Xanthocephalus xanthocephalus	yellow-headed blackbird	SSC	observed	present
Corynorhinus townsendii	Townsend's big-eared bat	SSC	-	moderate (foraging); low (roosting)
Onychomys torridus tularensis	Tulare grasshopper mouse	SSC	-	moderate
Perognathus alticola inexpectatus	Tehachapi pocket mouse	SSC	-	low
Taxidea taxus	American badger	SSC	sign observed	high (foraging and denning)
Vulpes macrotis arsipus	Desert kit fox	14 CCR 460	sign observed	high (foraging and denning)

Scientific Name	Common Name	Status in California[a,b]	Observed/Detected during Surveys	Potential to Occur within the Study Area
Xerospermophilus mohavensis	Mohave ground squirrel	ST	-	low

Notes:

[a] Status as of the date this EIR was prepared.

[b] ***Federal Status and/or Protection***

- **FT = federally listed as threatened:** any species of plant or animal that is considered likely to become endangered throughout all or a significant portion of its range within the foreseeable future.
- **FE = federally listed as endangered:** any species which is in danger of extinction throughout all or a significant portion of its range.
- **BGEPA = Bald and Golden Eagle Protection Act:** this law protects bald eagles and golden eagles from take.

State Status and/or Protection

- **ST = state-listed as threatened:** "threatened species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts (California Fish and Game Code [CFGC] § 2067).
- **SE = state-**listed as endangered: "endangered species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease (California Fish and Game Code § 2062).
- **SC = state candidate for listing:** a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by the California Department of Fish and Wildlife (CDFW) for addition to the list of endangered species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (CFGC § 2068).
- **SSC = species of special concern:** a species of special concern is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird and mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role; is listed as federally-, but not state-, threatened or endangered; meets the state definition of threatened or endangered, but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.
- **Fully protected:** fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Lists were created for fish (CFGC § 5515), amphibians and reptiles (CFGC § 5050), birds (CFGC § 3511) and mammals (CFGC § 4700).
- **WL = watch list:** watch list status is given to wildlife that are designated as "taxa to watch."
- **14 CCR 460:** section 460 of the California Code of Regulations, Title 14, states fisher, marten, river otter, desert kit fox, and red fox may not be taken at any time.

Of the 30 special-status wildlife species identified in **Table 4.4-3** above as having the potential to occur, only 12 species were observed or detected in the Study Area: Cooper's hawk (*Astur cooperii*), Bell's sparrow (*Artemisiospiza belli belli*), western burrowing owl, mountain plover (*Charadrius montanus*), olive-sided flycatcher (*Contopus cooperi*), Swainson's hawk, northern harrier (*Circus hudsonius*), loggerhead shrike, yellow warbler (*Setophaga petechia*), Le Conte's thrasher (*Toxostoma leconti*), yellow-headed blackbird (*Xanthocephalus xanthocephalus*), American badger (*Taxidea taxus*; sign only) and desert kit fox (sign only). A Mojave desert tortoise carcass was observed; however, it was determined this was a carcass from a previously released captive individual (Tetra Tech, 2025c; **Appendix D3**). Species that were observed or detected, or have the potential to occur onsite are discussed further below.

Invertebrates

Crotch's Bumble Bee (*Bombus crotchii*): Crotch's bumble bee is a State candidate for listing under the CESA. In California, Crotch's bumble bee inhabits open grassland and scrub habitats and requires a hotter and drier environment than other bumblebee species (Xerces, 2018). The Crotch's bumble bee is generally found in multiple habitats including flowering vegetation, potential preferred nectar plants, small mammal burrows, bunch grasses, thatch, brush piles, old bird nests, or dead trees. Crotch's bumble bee, like most other species of bumble bees, primarily nest underground (Xerces, 2018). Very little is known about the hibernacula, or overwintering sites, utilized by Crotch's bumble bee; however, generally, bumble bees overwinter in soft, disturbed soil, or under leaf litter or other debris (Xerces, 2018). Overwintering sites may include soft soil, leaf litter, or other debris. Crotch's bumble bee uses a variety of suitable floral resources including, but not limited to, flowering plants in the *Asteraceae, Boraginaceae, Fabaceae,* and *Hydrophyllaceae* families (Xerces, 2018). These flowering plants occur in the Study Area.

Crotch's bumble bee was previously documented once in the Mojave quad in the CNDDB, about 7 miles northeast of the Study Area in 1936, and the Study Area is within its current range (Tetra Tech, 2025a; **Appendix D1**). During 2024 Crotch's bumble bee surveys conducted for another project in the region, one Crotch's bumble bee individual was found approximately 1.2 miles northwest of the Study Area (Tetra Tech, 2025a; **Appendix D1**). No nests were observed during surveys for other projects and no nests have been documented near the Study Area. This species primarily nests in late February to late October in thatched grasses, abandoned rodent burrows or bird nests, brush piles, rock piles, and fallen logs. This species may occur onsite due to the presence of floral resources (potential foraging habitat), burrows and crevices (potential nesting habitat), and overwintering habitat. No confirmed Crotch's bumble bees were observed and no Crotch's bumble bee nests were incidentally observed within the Study Area during surveys conducted for the project.

Reptiles

Northern California Legless Lizard (*Anniella pulchra*): The northern California legless lizard is a species of special concern. This species occurs in moist warm loose soil with plant cover. It occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. The nearest recorded observation of northern California legless lizard in the CNDDB is approximately 3 miles north of the Study Area in 2013 (Tetra Tech, 2025a; **Appendix D1**). There are seven occurrences documented between 1952 and 2017 in the *Monolith, Little Buttes,* and *Rosamond* quads. This species has a moderate potential to occur onsite due to the presence of sandy washes and desert scrub habitat, but was not observed during field surveys conducted for this project.

Coast Horned Lizard (*Phrynosoma blainvillii*): The coast horned lizard is a species of special concern. Coast horned lizard can be found in arid and semi-arid climate conditions in chaparral and coastal sage scrub habitats, primarily below 2,000 feet amsl in elevation. Critical factors are the presence of loose soils with a high sand fraction; an abundance of native ants or other insects, especially harvester ants (*Pogonomyrmex* spp.); and the availability of both sunny basking spots and dense cover for refuge.

The nearest recorded observation of coast horned lizard in the CNDDB is approximately 5 miles northwest of the Study Area in 2016 (Tetra Tech, 2025a; **Appendix D1**). There are three occurrences documented between 2013 and 2016 in the *Monolith* quad in the Tehachapi Mountains. Coast horned lizard is known to occur in open areas with sandy soil and low vegetation. This species has a moderate potential to occur

onsite due to the presence of alkali desert scrub habitat, which occurs in the Study Area in all observed natural scrub habitats. This species was not observed during the project's field surveys.

Desert Tortoise (***Gopherus agassizii***)**:** The desert tortoise is a federally threatened species. As of June 12, 2025, the desert tortoise, which was previously listed as threatened in California since 1989, has been uplisted to endangered under CESA. The desert tortoise is found in the Mojave Desert in California, extreme southern Nevada, extreme southwest Utah, and extreme northwest Arizona. Desert tortoises inhabit a range of habitats including creosote bush scrub, blackbrush scrub, alluvial fans, and juniper woodlands. They are most often found on gentle slopes with sandy-gravel soils and sparse covering of shrubs that contains herbaceous plants that the tortoise feed upon. Soils must be friable enough for tortoises to dig burrows, and yet firm enough that burrows do not collapse. Tortoises remain in their burrows throughout the winter months, emerging in spring and remaining active through the fall, although activity decreases dramatically during the summer and is mainly restricted to cooler rainy periods. Tortoises feed on herbaceous vegetation, preferring grasses and flowers, and water is taken in opportunistically. The Study Area is located at the western edge of desert tortoise range.

Between November 2022 and September 2025, biologists conducted a habitat suitability assessment and protocol-level presence absence surveys for desert tortoise. The results of the habitat assessment and protocol-level presence absence surveys are documented in Tetra Tech (2025c) included as **Appendix D3** of this EIR. During the habitat assessment, areas of the Study Area were characterized as high suitability, moderate suitability, low suitability, and unsuitable based on specific features such as topography, substrate texture, plant species diversity, vegetation composition and cover, presence of washes, presence of potential forage plants, and cover sites (e.g., soil burrows, caliche caves, rock shelters, large shrubs). None of the Study Area was determined to have high suitability. Approximately 78 percent of the Study Area was determined to have moderate suitability, approximately 21 percent of the Study Area was determined to have low suitability, and less than 1 percent was determined to be unsuitable.

Following the habitat assessment, protocol-level presence absence surveys were conducted. No live individuals were observed, but one desert tortoise carcass was observed. This carcass was first observed in 2022 and again in 2023 in the same location. Based on the characteristics of the carcass, this individual is assumed to be a previously captive individual released from captivity that died once in the wild. The characteristics include: (1) a smooth and clean circular hole was observed in the right marginal scute of the carapace, similar to a drilled hole used for tethering pet tortoises; and (2) the femoral and abdominal scutes were observed to be smooth and flat, consistent with captive desert tortoise that have lived on a hard surface (e.g., concrete) (Tetra Tech, 2025c; **Appendix D3**). Other than this one individual, no other live individuals, or sign or other individuals were observed on the Study Area.

Amphibians

Tehachapi Slender Salamander (*Batrachoseps stebbinsi*): The Tehachapi slender salamander is a State threatened species. This species is uncommon and occurs in a small number of isolated localities in the Piute and Tehachapi Mountains at elevations ranging from approximately 2,500 to 5,000 feet. This species occurs in valley foothill hardwood conifer forests and valley foothill riparian habitats. Little is known about this species specific habitat requirements but it's above ground activity is strongly correlated with periods of rainfall when it may be found under surface objects such as bark, talus rocks, and leaf litter, and retreats to subterranea refugia during dry periods (Ziener at al., 1988). The nearest CNDDB occurrence is approximately 12 miles west in the Tehachapi Mountains.

Birds

Cooper's Hawk (***Astur cooperii*****):** In California, the Cooper's hawk is a watch list species. Cooper's hawks breed in dense coniferous, deciduous, and mixed woods, typically those with tall trees and with openings or edge habitat nearby, usually in trees 25 to 50 feet above ground (Audubon, 2025b). In the winter, they are known to forage in open areas including shrublands and grasslands and may periodically foraging in the vicinity of the Study Area (Tetra Tech, 2025a; **Appendix D1**). The Study Area provides foraging habitat but not nesting habitat for Cooper's hawk. There are no CNDDB occurrences of this species in the project vicinity, but one individual was observed as a transient visitor to the Study Area on November 10, 2022.

Tricolored Blackbird (*Agelaius tricolor*): The tricolored blackbird is a State threatened species. This is a highly social bird that nests in colonies in large freshwater marshes with dense cattail or bulrush stands. Foraging occurs in open habitats such as grasslands, fields, and pastures. Tricolored blackbirds are known to forage over a wide area, with reports of foraging up to 9 kilometers from the nesting colony (UC Davis, 2025). The nearest CNDDB recorded observation of tricolored blackbird is approximately 11 miles south of the Study Area in 1995 (Tetra Tech, 2025a; **Appendix D1**). The Study Area may provide foraging habitat but not nesting habitat for tricolored blackbird.

Golden Eagle (*Aquila chrysaetos*): In California, the golden eagle is a fully protected and watch list species and is also protected under the Bald and Golden Eagle Protection Act. Golden eagles occur primarily in mountainous canyon land, rimrock terrain of open desert and grassland areas (Kochert et al., 2002). Habitat typically includes open rolling foothills of grasslands, oak savannas, oak and juniper woodlands, chaparral, mountain areas, and desert (CDFW, 2025d). Golden eagles require a large territory to forage for prey and they typically forage in open habitats including grasslands, deserts, savannahs, and shrublands (CDFW, 2025d).

In spring and summer of 2023, BBI conducted ground surveys were conducted to search for nests in suitable eagle nesting habitat (BBI, 2025b). Protocol surveys were designed to occur in accordance with the USFWS's *Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations* ("Service Protocol"; Pagel et al., 2010). As there is currently no guidance provided for survey distance surrounding proposed solar energy development, the 2-mile survey radius provided in the Service's *Eagle Conservation Plan Guidance: Module 1 – Land-based Wind Energy* and subsequent memorandum updates (BBI, 2025b) was utilized. The methods and results of the surveys are documented in BBI (2025b) included as **Appendix D7** of this EIR.

No golden eagles or their nests were observed by BBI within the 2-mile survey radius of the project site. Similarly, no golden eagles were observed during other biological surveys conducted for the project (Tetra Tech, 2025a). There is minimal suitable nesting habitat present within 2 miles of the project site in the form of rocky outcrops; however, the degree of anthropogenic disturbances in these areas is largely intolerable to nesting golden eagle (BBI, 2025b). While nesting habitat is largely limited, the project site and vicinity contain suitable habitats to potentially support foraging eagles.

Bell's Sparrow (***Artemisiospiza belli belli)*****:** Bell's sparrow is a watch list species that typically occurs in California's coastal sage and chapparal but is also known to occur in Baja California, the Mojave Desert, and on San Clement Island. It inhabits coastal sagebrush, chaparral, and other open shrubby habitats. In the Mojave, Bell's sparrow uses low scrub including big sagebrush, saltbush, bitterbrush, shadscale, and creosote bush. Bell's sparrow mainly nests within shrubs, but also in bunchgrasses and occasionally on the ground under shrubs. One Bell's sparrow nest was observed during surveys in 2023, but this species has not been previously documented within 10 miles of the Study Area (Tetra Tech, 2025a**; Appendix D1**).

Short-Eared Owl (*Asio flammeus*): The short-eared owl is a State species of special concern. This species primarily inhabits open terrain with low growing vegetation such as prairies, grasslands, marshes, dunes, agricultural areas and tundra. This species does not breed in California but may be found in shrubby areas while overwintering. The nearest documented occurrence of this species is approximately 18 miles southeast of the Study Area (Tetra Tech, 2025a; **Appendix D1**). This species has a low potential to forage within the Study Area.

Long-Eared Owl (*Asio otus*): The long-eared owl is a State species of special concern. Long-eared owls roost in dense vegetation and forage in open grasslands and shrublands. Nesting commonly occurs in stick nests constructed by ravens and hawks, and will occasionally nest in tree cavities (BBI, 2025a). Long-eared owls have not been observed in the Study Area, but three active nests were observed during the 2024 raptor survey over 2 miles from the project site (BBI, 2025a). The nearest previously recorded occurrence is approximately 4 miles south of the Study Area in 2011 (Tetra Tech, 2025a; **Appendix D1**). This species has the potential to nest and forage within the Study Area.

Western Burrowing Owl (***Athene cunicularia*):** In California, the western burrowing owl is a State candidate species and State species of special concern. The burrowing owl is broadly distributed and can be found throughout western North America and Mexico. This species can be found in a variety of low vegetation habitat types including grasslands, deserts, or other open habitats where food resources are available. Western burrowing owls utilize earthen burrows, typically relying on other fossorial mammals to construct their burrows such as California ground squirrel or American badger. While burrows are most often earthen, owls have been documented using atypical burrows such as pipes, culverts, and other man-made structures as shelter or artificial nest sites.

Between November 2022 and April 2024, biologist conducted a habitat assessment and burrow survey for western burrowing owl in accordance with the guidelines in the Burrowing Owl Survey Protocol and Mitigation Guidelines (The California Burrowing Owl Consortium, 1993) and the Staff Report on Burrowing Owl Mitigation (CDFG, 2012). The surveys included the 8,606-acre Study Area that encompasses the 7,700-acre project site and the proposed gen-tie line corridor. The methods and results surveys are documented in the *Burrowing Owl Survey Report for the Discovery Solar PV and Storage Project, Kern County, California* (Tetra Tech, 2025d) included as **Appendix D4** of this EIR.

During the surveys, biologists mapped potentially suitable burrows (greater than 4 inches in diameter) for burrowing owl and recorded any observations of burrowing owl sign or individuals. Burrows and observations were categorized as potential burrows, occupied known burrows, occupied nesting burrows, and live owls (Tetra Tech, 2025d) defined as follows:

- **Potential Burrow:** Any subterranean hole 4 inches or larger for which no current evidence is present to conclude that the burrow is being used or any past use by a burrowing owl.
- **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.
- **Occupied Nesting Burrow:** A burrow where monitoring overseen by a designated biologist demonstrated the presence of burrowing owl eggs, chicks, dependent young, and/or brooding or egg incubation (via inter-burrow scope).
- **Live owl:** Locations where a live burrowing owl individual was observed foraging or perched, but no burrow was located within the vicinity of the observation.

During western burrowing owl surveys, 397 potential burrows were within the mapped within the Study Area, of which 348 were located within the project site. Two occupied known burrows with live individuals were observed 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, including the project site, provides suitable foraging habitat for western burrowing owls (Tetra Tech, 2025d; **Appendix D4**).

Ferruginous Hawk (*Buteo regalis*): In California, the ferruginous hawk is a watch list species and are found in large, open dry country such as grasslands, shrub-steppes, sagebrush flats, desert scrub, saltbush-greasewood shrublands, and outer edges of pinyon-pine/juniper and other forests (CDFW, 2025d). The Study Area is outside of the breeding range of this species and the species is not expected to nest within the Study Area however, this species is known to occur within the Mojave Desert region during the winter months and may forage on the Study Area. No ferruginous hawk individuals were observed during the biological field surveys. The nearest CNDDB recorded occurrence is approximately 4 miles south of the Study Area.

Swainson's Hawk (***Buteo swainsoni*):** In California, the Swainson's hawk is currently a State threatened species. They prefer larger isolated trees or small woodlots for nesting, usually with grassland or dry-land grain fields nearby for foraging. Swainson's hawks forage in grassland, open scrub, pasture, and dryland grain agricultural habitats, primarily for rodents. Swainson's hawks exhibit a moderate to high nest site fidelity at successful nest sites. Swainson's hawks are known to nest in Joshua tree woodland habitat and forage in grasslands and native desert scrub habitats.

From April to July of 2023,2024, and 2025, BBI conducted protocol level Swainson's hawk surveys within the project site and a surrounding 5-mile radius survey buffer, in accordance with 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* (CEC and CDFG, 2010). The methods and results are documented in the *Swainson's Hawk (Buteo swainsoni) & Nesting Raptor Survey Report* (BBI, 2025a) included as **Appendix D6** of this EIR. During the raptor nesting survey, three active Swainson's hawk nests were located within 5 miles of the project site in 2023, only two of these three were active during 2024, and only one of these was active during 2025. However, CDFW considered a nest active if it was used one or more times in the last 5 years (CEC and CDFG, 2010). These nests were located approximately 2.8 miles south, 3.7 miles south, and 3.3 miles southeast of the project site (BBI, 2025a). Suitable nesting habitat is also present within the project site, particularly within stands of WJTs and California juniper; however, no nesting territories have been observed within the project site. Similarly, suitable foraging habitat occurs throughout the Study Area with the exception of the developed areas.

Mountain Plover (***Charadrius montanus*):** The mountain plover has no state or federal listing, but is a state species of special concern. Mountain plovers are primarily associated with open grasslands, agricultural areas, and desert areas with scattered saltbush. Mountain plovers often utilize recently plowed or grazed fields to forage for small insects and seeds. This species nests in the western United States but outside of California. Mountain plovers overwinter in California from approximately September to mid-March before returning to their breeding grounds. The nearest CNDDB occurrence of this species is approximately 11 miles south of the Study Area (Tetra Tech, 2025a; **Appendix D1**). This species may periodically occur to forage on or near the Study Area during winter or migration, but is not expected to occur during the nesting bird season.

Northern Harrier (***Circus hudsonius*****):** In California, the northern harrier is a species of special concern. It ranges widely from northern Alaska to Baja California (Shuford and Gardali, 2008). In California, the harrier's range extends from the Modoc Plateau to San Diego, primarily found along the humid coast in the northwest and in the arid southeastern deserts. The harrier most often nests on the ground within dense, tall vegetation in undisturbed areas. Foraging occurs in a wide range of habitat ranging from marshes to ungrazed or lightly grazed pastures, sagebrush flats, and desert sinks (Shuford and Gardali, 2008). The nearest CNDDB occurrence is approximately 13 miles south of the Study Area, and one individual was observed foraging during surveys in 2023 (Tetra Tech, 2025a; **Appendix D1**). The Study Area provides foraging but not nesting habitat for northern harrier.

Merlin (*Falco columbarius*): In California, the merlin is a watch list species, but is not state or federally listed. This species primarily hunts in open habitat such as grasslands, agricultural fields, coastal areas, deserts, shrublands, open forests and woodlands, and wetlands where it can easily observe prey such as small birds or large insects. Merlins breed in the northern United States and Canada and may periodically migrate or overwinter in California and the southern United States. There are two recorded CNDDB occurrences in the Study Area, but no individuals were observed during field surveys (Tetra Tech, 2025a; **Appendix D1**). Merlins may use the Study Area for foraging, but nesting is not expected.

Olive-sided Flycatcher (*Contopus cooperi*): In California, the olive-sided flycatcher is a species of special concern. This species primarily occurs in mountain habitats in open or edges of mixed coniferous and boreal forests. This species breeds in the Sierra Nevada mountains and occasionally in coastal California north through Canada and Alaska at mid to high elevations and winters in Central and Southern America. During migration, this species mainly uses mountain habitats, but may also be found in migrating through lowlands and coasts. This species was potentially observed in the Study Area in May 2023 while migrating north to its breeding grounds (Tetra Tech, 2025a; **Appendix D1**).

Prairie Falcon (*Falco mexicanus*): In California, the prairie falcon is a watch list species. This species nests on cliffs in Great Basin grassland and scrub, Mojavean desert scrub, Sonoran desert scrub, and valley and foothill grassland habitats. This species occurs in various habitats ranging from annual grasslands to alpine meadows, but is primarily associated with perennial grasslands, savannahs, rangelands, some agricultural fields, and desert scrub areas. This species nests in cliffs, canyons, escarpments, and rocky outcrops and forages in open habitats. The nearest CNDDB occurrence of this species is approximately 4 miles east of the Study Area (Tetra Tech, 2025a; **Appendix D1**). Suitable nesting habitat is not located within the Study Area, but is located in the project vicinity. This species may forage in the Study Area.

California Condor (***Gymnogyps californianus*****):** The California condor is the largest North American vulture and is listed as a federally and state endangered species. This species covers great distances daily and occupies very large home ranges consistent with being obligatory scavengers whose food supply is unpredictable and patchily distributed (BBI, 2025b). Foraging often occurs in open areas with sparse vegetation such as grasslands or rangelands. Condors nest mainly in natural cavities or caves in cliffs, though they sometimes also use trees,

In spring and summer of 2023, BBI conducted surveys for California condors simultaneously with golden eagle nest surveys within a 2-mile radius of the project site (BBI, 2025b). The methods and results of the surveys are documented in the *Golden Eagle (Aquila chrysaetos) and California Condor (Gymnogyps californianus) Analysis of Use* (BBI, 2025b) included as **Appendix D7** of this EIR.

No California condors or their nests were observed by BBI during surveys conducted for the project. The nearest suitable nesting habitat is within the Tehachapi Mountains, over 9 miles west of the project site

(BBI, 2025b). While nesting habitat is limited in the project vicinity, condors have a large foraging range and may forage within the Study Area.

Loggerhead Shrike (*Lanius ludovicianus*): In California, the loggerhead shrike is a species of special concern. This species is a yearlong resident in lower elevations throughout most of the United States, except for portions of the northwest and northeast, and also occurs in Mexico and Canada. In California, loggerhead shrikes are widespread in lower elevations, with the largest breeding populations located in portions of the Central Valley, the Coast Ranges, and the southeastern deserts (CDFW, 2025d). This species nests within trees and shrubs and uses broadleaved upland forest, desert wash, Joshua tree woodland, Mojavean Desert scrub, piñon and juniper woodlands, riparian woodland, and Sonoran Desert scrub habitats. Loggerhead shrikes forage in open areas with low-growing vegetation that include shrubs, trees, posts, fences, utility lines, or other structures that provide hunting perches with views of open ground. Loggerhead shrike was observed during the 2023 and 2024 field surveys. There is one previous occurrence of loggerhead shrike within the southern portion of the Study Area in 2009 (Tetra Tech, 2025a; **Appendix D1**). This species may forage and nest within the Study Area.

Yellow Warbler (*Setophaga petechia*): The yellow warbler is a State species of special concern. Yellow warbler was observed during field surveys in 2023. There are no previous CNDDB occurrences of yellow warbler within the nine USGS 7.5-minute quadrangles surrounding the project site (Tetra Tech, 2025a). Yellow warbler breeds along streamsides and forages in shrubland and woodland habitats. The Study Area provides foraging habitat for yellow warbler but does not provide breeding habitat.

Le Conte's Thrasher (*Toxostoma leconti*): The Le Conte's thrasher is a State species of special concern. Two active nests were observed during field surveys in 2023. This species is an uncommon-to-rare local resident in southern California deserts from southern Mono County south to the Mexican border, as well as in western and southern San Joaquin Valley. They occur primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats; they also occur in Joshua tree habitat with scattered shrubs of the western San Joaquin Valley and the Mojave Desert. There are two CNDDB occurrences within the Study Area. This species may forage and nest within the Study Area.

Yellow-Headed Blackbird (*Xanthocephalus xanthocephalus)*: The yellow headed blackbird is a state species of special concern. Yellow-headed blackbird was observed during 2023 surveys conducted by Tetra Tech. There are no previous CNDDB occurrences of yellow-headed blackbird in the within the nine USGS 7.5-minute quadrangles surrounding the project site (Tetra Tech, 2025a; **Appendix D1**). Yellow-headed blackbird breeds in freshwater sloughs, marshy lakes, and tall cattails, which are not present within the vicinity of the Study Area. Yellow-headed blackbirds are known to inhabit desert grassland and shrubland habitat during their migration period. This species may periodically forage within the Study Area.

Mammals

Townsend's Big-Eared Bat (*Corynorhinus townsendii*): Townsend's big-eared bat is a species of special concern. This species occurs in wide variety of mesic habitats excluding alpine and sub-alpine habitats. This species roosts in caves, mines, tunnels, buildings, and other human-made structures. In southern California, Townsend's big-eared bats are commonly found in abandoned mines. Townsend's big-eared bat was not observed during surveys conducted for the project. The nearest recorded observation of Townsend's big-eared bat in the CNDDB is approximately 3.8 miles east of the Study Area in 1997 in an abandoned mine in Soledad Mountain (Tetra Tech, 2025a; **Appendix D1**). This species is not likely to roost in the Study Area because there are no caves or mines within the Study Area. However, three abandoned mines

are found on the side of Middle Butte Mountain that borders the southern boundary of the Study Area, approximately 0.1 mile from the Study Area (Hudson Institute of Mineralogy, 2025). There are an additional 11 mines on the opposite end of the mountain, about 0.25 to 2 miles from the Study Area. Townsend's big-eared bat may forage up to 6.5 miles from their roost site, but the average distance traveled while foraging is 2 miles. Therefore, Townsend's big-eared bat has the potential to forage within the Study Area.

Tulare Grasshopper Mouse (*Onychomys torridus tularensis*): The Tulare grasshopper mouse is a species of special concern that occurs in arid shrubland communities in hot, arid grassland and shrubland, which occur within the Study Area. Tulare grasshopper mouse has only been observed once within the Tehachapi Mountains in 1973 (Tetra Tech, 2025a; **Appendix D1**). Due to the presence of shrubland habitat within the Study Area, the Tulare grasshopper mouse has a moderate potential to occur.

Tehachapi Pocket Mouse (***Perognathus alticola inexpectatus*):** The Tehachapi pocket mouse is a species of special concern. Little is known about this species and its life history, but they are known to mainly inhabit the Tehachapi Mountains in chaparral, sagebrush scrub, and pinyon juniper woodland habitat (Tetra Tech, 2025a). The nearest recorded occurrence is approximately 1 mile north of the proposed gen-tie line, at the base of the Tehachapi Mountains. Due to potential range limitation to the Tehachapi Mountains, the potential for the Tehachapi pocket mouse to inhabit the Study Area is low.

American Badger (***Taxidea taxus*):** In California, the American badger is a state species of special concern. The American badger is an uncommon permanent resident throughout California except in alpine habitats and in the northern North Coast. They can be found in grasslands, deserts, and drier habitats. Badgers are generally nocturnal and hunt or forage at night while spending daylight hours below ground. Dens are usually found in friable soils, which are easier to dig in. American badgers spend most of their time near a den, and they may have multiple dens in an area that can be used interchangeably. American badgers primarily feed on small mammals that they capture from digging out the prey's burrows. Prey may include pocket gophers, mice, chipmunks, and ground squirrels. Other prey may include birds, bird eggs, reptiles, invertebrates, and carrion.

American badgers are known to inhabit desert scrub habitat, and their sign, which consisted of predatory excavations of rodent burrows with claw marks, was observed during the field surveys. This species has been previously documented twice approximately 6 miles south of the Study Area and 7 miles north of the Study Area (Tetra Tech, 2025a; **Appendix D1**). American badgers can have expansive home ranges to meet foraging and shelter requirements. The Study Area provides both foraging and denning habitat for American badger.

Desert Kit Fox (***Vulpes macrotis arsipus*):** In California, desert kit fox has no sensitive status; however, it is a protected species under Section 460 of the California Code of Regulations (CCR), Title 14. Desert kit foxes are found in the southeastern deserts of California and occur most often in open desert, creosote bush flats, and sand dunes. Desert kit foxes use subterranean dens year-round for shelter, pup-rearing, and protection from predators. They are nocturnal but may be visible above ground near their dens during the day. They feed primarily on Merriam's kangaroo rat (*Dipodomys merriami*), but also feed on black-tailed jackrabbits, desert cottontails (*Sylvilagus audubonii*), birds, lizards, and insects.

Between November 2022 and September 2025, biologists conducted a habitat assessment and burrow survey for desert kit fox. The surveys included the 8,606-acre Study Area that encompasses the 7,700-acre project site and the proposed gen-tie line corridor. The methods and results surveys are documented in the *Desert Kit Fox Survey Report for the Discovery Solar PV and Storage Project, Kern County, California*

(Tetra Tech, 2025e) included as **Appendix D5** of this EIR. During surveys, a total of 293 dens were located within the Study Area, of which 263 were located in the project site. Of these 263 located in the project site, 241 were potential dens (approximately 5- to 8-inch entrance with no evidence to conclude it has been used by desert kit fox), 21 were known dens (approximately 5- to 8-inch entrance with sign of desert kit fox use in the form of scat or tracks), and 1 was a natal/pupping den (larger den complex with sign of desert kit fox use and prey remains) (Tetra Tech, 2025e; **Appendix D5**). Potential dens are subterranean holes within the desert kit fox species range that have entrances with appropriate dimensions but also have insufficient evidence to conclude that these holes are being used or have been used by a desert kit fox (USFWS, 1999). Dens 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.

The Study Area is located within this species' known distribution. No live desert kit foxes were observed, but positive desert kit fox signs (scat and tracks) were observed within the Study Area during the field surveys, and this species is presumed present. The Study Area contains suitable sparsely vegetated desert habitats with friable soils for dens and abundant rodent populations to support this species.

Mohave ground squirrel (***Xerospermophilus mohavensis*****):** The Mohave ground squirrel is a State threatened species. Mohave ground squirrels are found over much of the western Mojave Desert to the east of the Tehachapi Wind Resource Area. Suitable Mohave ground squirrel habitat contains friable soils for burrow construction, good shrub density and diversity, and relatively abundant shrub and herbaceous species important in the Mohave ground squirrel diet (Tetra Tech, 2025f). They inhabit Mojave creosote scrub, desert saltbush scrub, desert sink scrub, desert greasewood scrub, shadscale scrub, and Joshua tree woodland. The species has been found most frequently in sandy, alluvial soils, but is also found in gravelly, and occasionally rocky soils (BLM, 2005).

The project is located outside of and to the west of the accepted historical range of Mohave ground squirrel and it is currently assumed that Mohave ground squirrels only occur in approximately 65 percent of its historic range and may be extirpated from the southern portion of its historic range (Tetra Tech, 2025f). No individual Mohave ground squirrels were observed during surveys conducted in 2023 and 2024 for the project. Despite extensive protocol trapping efforts conducted in the Tehachapi Wind Resource Area between 2006 and present, including 13 trapping sites within the project site during the period 2008-2018 (conducted for other projects), no Mohave ground squirrels have been detected in the Study Area. Additionally, since 1988 there have only been 8 detections of Mohave ground squirrels in the project vicinity, all located approximately 8 to 12 miles east of the project, on the eastern side of SR-14. Only one of these detections has resulted in a positive identification of a reproductive population, which is located 9.2 miles northeast of the project. As confirmed by extensive live-trapping and camera-trapping efforts in the region to the north and east of the Tehachapi Wind Resource Area, there are no records of Mohave ground squirrels occurrence closer than approximately 7 miles from the project. Additionally, the project is separated from any documented occurrence by a number of barriers (urban development, highways, and other existing infrastructure), which would further restrict movement of Mohave ground squirrels westward toward the project site. Based on this evidence, Mohave ground squirrels are not expected to occur within the boundaries of the project (Tetra Tech, 2025f).

Sensitive Natural Communities

Three sensitive natural communities were mapped during the field surveys: desert needlegrass grassland, scalebroom scrub, and Joshua tree woodland. Desert needlegrass grassland is a sensitive natural community

with a rarity ranking in California of S2 (imperiled). Scalebroom scrub and Joshua tree woodland are a sensitive natural community with a rarity ranking in California of S3 (vulnerable).

Critical Habitat

The Study Area is not located within designated final or proposed critical habitats for federally listed plant or wildlife species. The nearest critical habitat is located 13 miles west of the Study Area (USFWS, 2025b; Tetra Tech, 2025a).

Wildlife Movement Corridors

Wildlife movement corridors, also referred to as dispersal corridors or landscape linkages, are generally defined as linear features along which animals can travel from one habitat or resource area to another. The Essential Connectivity Map on the CDFW BIOS Habitat Connectivity Viewer was reviewed to determine whether the Study Area is located within or near a CDFW designated Natural Landscape Block or Essential Connectivity Area (CDFW, 2025c). Natural Landscape Blocks are blocks of contiguous natural habitat connectivity in California. Essential Connectivity Areas are large areas important to maintaining ecological integrity that connect multiple Natural Landscape Blocks. Additional resources reviewed include aerial imagery and Audubon data (Audubon, 2025a).

Per the BIOS Habitat Connectivity Viewer, the Study Area is not located within a Natural Landscape Block or Essential Connectivity Area. The closest Essential Connectivity Area is located approximately 4 miles northwest of the Study Area and the closest Natural Landscape Block (ID#49) occurs approximately 9 miles north of the Study Area.

The Study Area is located within the Pacific Flyway, which is a significant north-south flight route that stretches 4,000 miles from the Arctic to South America. Millions of birds annually migrate along the Pacific Flyway and stop along the way at sites for nesting, wintering, resting, and foraging, which are known as Important Bird Areas (IBA). The Antelope Valley–Edwards Air Force Base IBA occurs within the Study Area, the Tehachapi Mountains IBA occurs approximately 10 miles west of the Study Area, and the Kelso Creek–Southern Sierra Desert Canyons IBA occurs approximately 12 miles north of the Study Area (Audubon, 2025a).

A Linkage Network for the California Deserts (Penrod et al., 2012) is a report used in Desert Renewable Energy Conservation Plan (DRECP) analysis that mapped habitat linkages and wildlife movement corridors. According to that report, the Study Area is not within South Coast Missing Linkages Wildlife Corridors or Desert Linkage Networks. The closest linkage network is the Tehachapi Connection located approximately 3 miles west/northwest of the Study Area.

The Study Area is located at the edge of a vast area of generally undeveloped open space that facilitates unimpeded wildlife movement and provides “live-in habitat” for a variety of species. The open space present within and adjacent to the Study Area is expected to be used by a variety of wildlife species for local wildlife movement. Although the Study Area and vicinity are mostly undeveloped and contain areas of open space where wildlife movement could occur unimpeded, Study Area does not contain or function as a wildlife movement corridor. The Study Area does not appear to constitute a concentrated wildlife movement corridor and does not connect larger core habitat areas that would otherwise be fragmented or isolated from one another.

Jurisdictional Waters

Jurisdictional waters include aquatic resources such as streams, creeks, lakes, riparian areas, wetlands, and certain aquatic vegetation communities, which are considered sensitive biological resources and can fall under the jurisdiction of federal and/or State regulatory agencies including the U.S. Army Corps of Engineers (USACE), CDFW, and/or Lahontan Regional Water Quality Control Board (RWQCB). The definitions of the extent of regulatory agency jurisdictions are described in **Subsection 4.4.3**, *Regulatory Setting*.

The Study Area is within the South Lahontan Hydrologic Region in the Antelope-Fremont Valley watershed, which straddles Kern and Los Angeles Counties (**Figure 4.4-4**, *Hydrology*). This watershed is not tributary to any ocean or other water body. The floor of the Antelope Valley where the project is located generally lacks defined natural channels outside of the foothills and is subsequently subject to water traveling in unpredictable sheet flow patterns rather than within confined channels. Numerous streams originate in the mountains and foothills surrounding the valley and flow across the valley floor before eventually draining to the dry lakes to the southeast. The closest playa to the Study Area is Rosamond Lake, approximately 11 miles southeast of the project. The topography is such that runoff will not be directed toward Rosamond Lake because most rainfall infiltrates into the immediate surrounding soils quickly.

In October and November 2023, January and March 2024, and June 2025, Heritage conducted jurisdictional delineation surveys within the project site and results are documented in the *Discovery Solar PV and Storage Project Aquatic Resources Delineation Report* (Heritage, 2025) included as **Appendix D8** of this EIR. For the purposes of the jurisdictional delineation, the "study area" encompasses the 7,700-acre project site and the proposed gen-tie line corridor and consists of approximately 8,660 acres as noted previously. Based on results of the jurisdictional delineation, there are 68 features that total approximately 143.33 acres and approximately 172,928 linear feet of potentially jurisdictional waters subject to CDFW jurisdiction within the study area and 66 features that total approximately 37.00 acres and approximately 160,656 linear feet of potentially jurisdictional waters subject to RWQCB jurisdiction within the study area. Additional information on the methodology and results is included in the *Discovery Solar PV and Storage Project Aquatic Resources Delineation Report* (Heritage, 2025) included as **Appendix D8** of this EIR.

Potential USACE Jurisdiction

Figure 4.4-5, *NWI Wetlands and NHD Flowlines,* shows USFWS NWI wetlands and USGS NHD flowlines data in the project vicinity. The study area does not contain any wetlands or non-wetland waters that are subject to federal jurisdiction under Section 404 of the Clean Water Act (CWA). All drainages within the study area are ephemeral, non-navigable features that convey hydrologic flows only during, and for short durations, after high precipitation events. The drainages do not support interstate or foreign commerce or cross state lines. This determination was made based on the fact that features within the study area are isolated as they have no downstream connectivity to a traditionally navigable waterway (e.g., the Mojave River), and there is no recreation or interstate commerce related to fisheries or industry. The USACE is not expected to assert jurisdiction over the delineated ephemeral drainages. It should be noted that the USACE has ultimate discretion in the determination of their jurisdiction.

Potential RWQCB Jurisdiction

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) defines waters of the State broadly to include "any surface water or groundwater, including saline waters, within the boundaries of the state." The

project site does not contain wetland waters of the State subject to the jurisdiction of the RWQCB pursuant to the Porter-Cologne Act. There are 66 features that total approximately 37.00 acres and approximately 160,656 linear feet of potentially jurisdictional non-wetland waters subject to RWQCB jurisdiction within the study area (**Figure 4.4-6**, *RWQCB Potentially Jurisdictional Waters*). The boundaries for waters of the state potentially subject to regulation by the RWQCB were delineated as the ordinary high water mark. It should be noted that the RWQCB has ultimate discretion in the determination of their jurisdiction.

Potential CDFW Jurisdiction

CFGC section 1600 et seq. establishes CDFW's jurisdiction over streams and lakes. Delineated drainages that contain evidence of a defined bed and bank or other ordinary high water mark indicators are likely subject to CDFW jurisdiction. There are 68 features that total approximately 143.33 acres and approximately 172,928 linear feet of potentially jurisdictional waters subject to CDFW jurisdiction within the study area (**Figure 4.4-7**, *CDFW Potentially Jurisdictional Waters*). The larger extents of potentially jurisdictional CDFW waters as compared to the smaller extents of potentially jurisdictional RWQCB waters are the result of including the area between the ordinary high water mark and top-of-bank, under CDFW jurisdiction. Riparian habitats are absent from the study area. It should be noted that CDFW has ultimate discretion in the determination of their jurisdiction.

DISCOVERY SOLAR PV and STORAGE PROJECT

Figure 4.4-4 Hydrology

Kern County, CA

OAK CREEK RD
TEHACHAPI WILLOW SPRINGS RD
90TH ST W
Windhub Substation
Joshua Middle School 180902062001
Town of Mojave 180902062004
Oak Creek 180902061701
Soledad Mountain 180902062002
Tropico Hill 180902061705
Town of Rosamond 180902062404
Bean Canyon 180902061703
180902061702
BACKUS RD



LEGEND

- Existing Windhub High-Voltage Substation
- Major Road
- Railroad

Project Components

- Proposed Gen-Tie Corridor
- Proposed Medium-Voltage/Transmission /Access Easements
- Project Site
- Study Area

Other Applicant and/or Affiliitate Controlled*

- Gen-Tie Corridor
- Step-up HV Substation

Hydrologic Units (HUC 12)

- Desert Butte-Cache Creek
- Bean Canyon
- Joshua Middle School
- Oak Creek
- Soledad Mountain
- Town of Mojave
- Town of Rosamond
- Tropico Hill

* Already approved under separate projects.

0 0.25 0.5 0.75 1
Miles

HERITAGE ENVIRONMENTAL CONSULTANTS, LLC

NAD 83, State Plane, California Zone V, Feet
Data Sources: BLM, ESRI, Kern Co., NRCS, USDA.
F:...\Discovery\Figure 3 Hydrology 071225.mxd
7-16-25 sjw

DISCOVERY SOLAR PV and STORAGE PROJECT

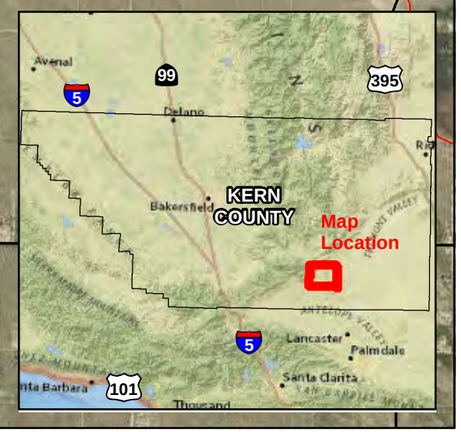
Figure 4.4-5
NWI Wetlands and NHD Flowlines

Kern County, CA

OAK CREEK RD
TEHACHAPI WILLOW SPRINGS RD
90TH ST W
Windhub Substation
BACKUS RD

DS-67 DS-66 DS-68 DS-69 DS-70 DS-50 DS-71 DS-72
DS-35 DS-36 DS-34 DS-40 DS-64 DS-61 DS-60 DS-62 DS-63 DS-38 DS-41 DS-39 DS-33 DS-32 DS-37 DS-44 DS-45 DS-43 DS-42 DS-46 DS-48 DS-49 DS-24 DS-25 DS-29 DS-23 DS-57 DS-27 DS-26 DS-65 DS-58 DS-59
DS-17 DS-16 DS-19 DS-18 DS-20 DS-21 DS-22 DS-14 DS-15 DS-13 DS-12 DS-11 DS-10 DS-08 DS-51 DS-07 DS-09 DS-53 DS-54 DS-55 DS-56 DS-05 DS-06 DS-04 DS-02 DS-01 DS-52

PP-74 PP-31 PP-75 PP-73 PP-72 PP-51 PP-45 PP-79 PP-46 PP-50 PP-47 PP-52 PP-48 PP-49 PP-86 PP-85 PP-64 PP-83 PP-84 PP-61 PP-59 PP-60 PP-53 PP-62 PP-65 PP-68 PP-67 PP-57 PP-66 PP-69 PP-70 PP-71 PP-54 PP-55 PP-77 PP-39 PP-40 PP-38 PP-78 PP-58 PP-43 PP-56 PP-41 PP-42 PP-44
PP-33 PP-82 PP-29 PP-30 PP-31 PP-32 PP-34 PP-35 PP-76 PP-36 PP-37 PP-25 PP-28 PP-27 PP-26 PP-81 PP-80 PP-24 PP-21 PP-19 PP-18 PP-11 PP-22 PP-23 PP-01 PP-02 PP-17 PP-13 PP-16 PP-15 PP-09 PP-12 PP-10 PP-14 PP-07 PP-03 PP-04 PP-05 PP-08 PP-06



LEGEND

- Existing Windhub High-Voltage Substation
- Major Road
- Railroad

Project Components

- Proposed Gen-Tie Corridor
- Proposed Medium-Voltage/Transmission /Access Easements
- Project Site
- Study Area

Other Applicant and/or Affilitate Controlled*

- Gen-Tie Corridor
- Step-up HV Substation

Potentially Jurisdictional Waters

- Photo Point
- CDFW

USFWS NWI Wetlands

- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

* Already approved under separate projects.

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Miles

HERITAGE ENVIRONMENTAL CONSULTANTS, LLC

NAD 83, State Plane, California Zone V, Feet
Data Sources: BLM, ESRI, Kern Co., USDA.
F:...\Discovery\Figure 6 CDFW NWI 071225.mxd
7-16-25 sjw

DISCOVERY SOLAR PV and STORAGE PROJECT

Figure 4.4-6
RWQCB Potentially Jurisdictional Waters

Kern County, CA

OAK CREEK RD
TEHACHAPI WILLOW SPRINGS RD
90TH ST W
MOJAVE TROPICO RD
BACKUS RD
Windhub Substation

LEGEND

- Existing Windhub High-Voltage Substation
- Major Road
- Railroad

Project Components

- Proposed Gen-Tie Corridor
- Proposed Medium-Voltage/Transmission /Access Easements
- Project Site
- Study Area

Other Applicant and/or Affilitate Controlled*

- Gen-Tie Corridor
- Step-up HV Substation

Potentially Jurisdictional Waters

- Photo Point
- Flow Direction
- No OHWM
- RWQCB

* Already approved under separate projects.

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Miles

HERITAGE ENVIRONMENTAL CONSULTANTS, LLC

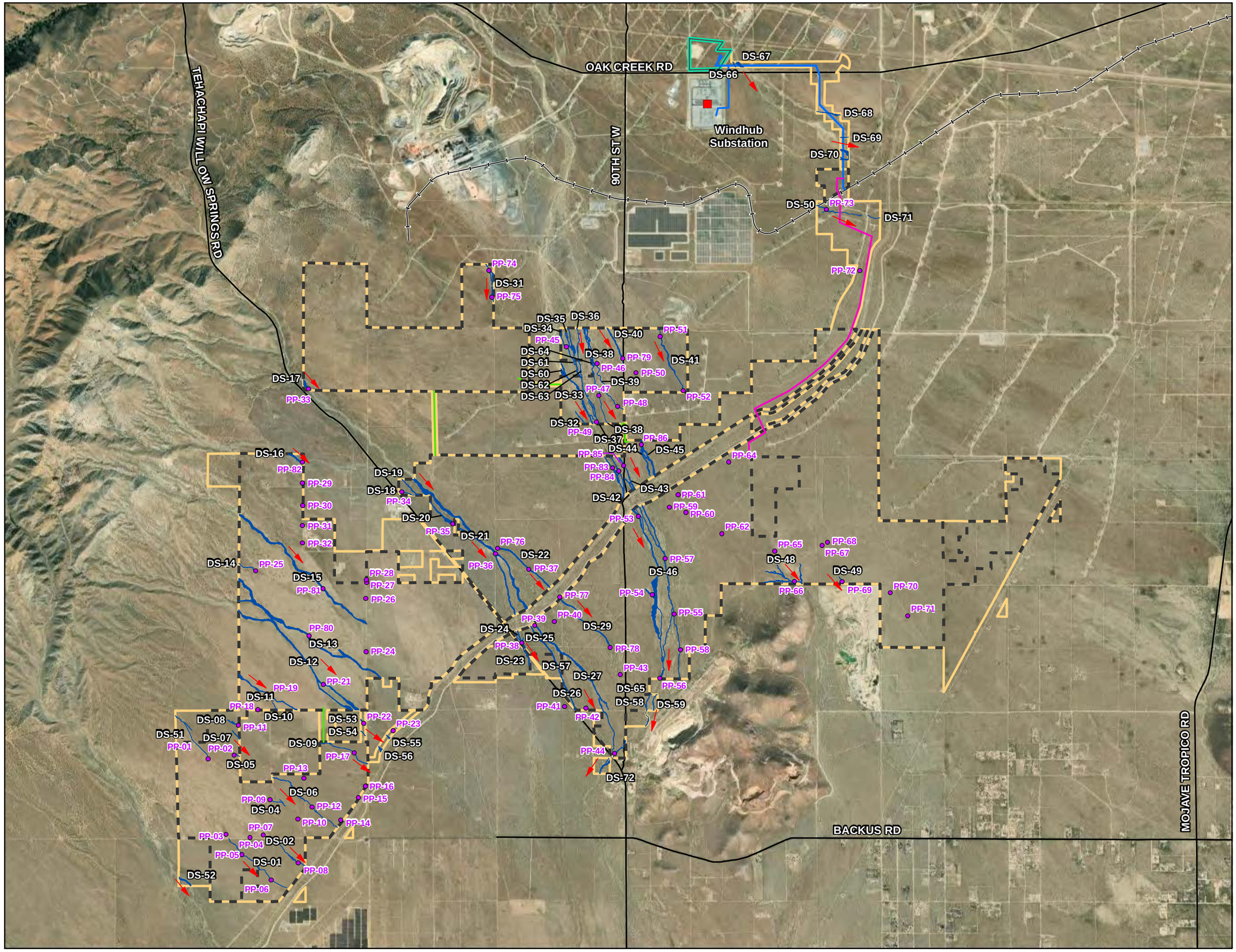
NAD 83, State Plane, California Zone V, Feet
Data Sources: BLM, ESRI, Kern Co., USDA.
F:...\Discovery\Figure 5 RWQCB 071225.mxd
7-16-25 sjw



DISCOVERY SOLAR PV and STORAGE PROJECT

Figure 4.4-7
CDFW Potentially Jurisdictional Waters

Kern County, CA



LEGEND

- Existing Windhub High-Voltage Substation
- Major Road
- Railroad

Project Components

- Proposed Gen-Tie Corridor
- Proposed Medium-Voltage/Transmission /Access Easements
- Project Site
- Study Area

Other Applicant and/or Affiliitate Controlled*

- Gen-Tie Corridor
- Step-up HV Substation

Potentially Jurisdictional Waters

- Photo Point
- Flow Direction
- CDFW

* Already approved under separate projects.

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Miles

HERITAGE ENVIRONMENTAL CONSULTANTS, LLC

NAD 83, State Plane, California Zone V, Feet
Data Sources: BLM, ESRI, Kern Co., USDA.
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4.4.3 Regulatory Setting

Federal

Endangered Species Act of 1973 (Title 16 U.S.C. Sections 1531 through 1543)

The FESA and subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. In addition, the FESA defines species as threatened or endangered and provides regulatory protection for listed species. The FESA also provides a program for the conservation and recovery of threatened and endangered species as well as the conservation of designated critical habitat that USFWS determines is required for the survival and recovery of these listed species.

Section 7 of the FESA requires federal agencies, in consultation with and assistance from the Secretary of the Interior or the Secretary of Commerce, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. The USFWS and National Marine Fisheries Service share responsibilities for administering the FESA. Regulations governing interagency cooperation under Section 7 are found in CCR Title 50, Part 402. The opinion issued at the conclusion of consultation will include a statement authorizing "take" (i.e., to harass, harm, pursue, hunt, wound, kill, etc.) that may occur incidental to an otherwise legal activity.

Section 9 lists those actions that are prohibited under the FESA. Although take of a listed species is prohibited, it is allowed when it is incidental to an otherwise legal activity. Section 9 prohibits take of listed species of fish, wildlife, and plants without special exemption. The definition of "harm" includes significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns related to breeding, feeding, or shelter. "Harass" is defined as actions that create the likelihood of injury to listed species by disrupting normal behavioral patterns related to breeding, feeding, and shelter significantly.

Section 10 provides a means whereby a nonfederal action with the potential to result in take of a listed species can be allowed under an incidental take permit. Application procedures are found at Code of Federal Regulations (CFR), Title 50, Sections 13 and 17 for species under the jurisdiction of USFWS, and CFR, Title 50, Sections 217, 220, and 222 for species under the jurisdiction of the National Marine Fisheries Service.

Section 4(a)(3) and (b)(2) of the FESA require the designation of critical habitat to the maximum extent possible and prudent based on the best available scientific data and after considering the economic impacts of any designations. Critical habitat is defined in Section 3(5)(A) of the FESA: (1) areas within the geographic range of a species that are occupied by individuals of that species and contain the primary constituent elements (physical and biological features) essential to the conservation of the species, thus warranting special management consideration or protection; and (2) areas outside of the geographic range of a species at the time of listing but that are considered essential to the conservation of the species.

Migratory Bird Treaty Act (Title 16 U.S.C. Sections 703 through 711)

The MBTA, first enacted in 1918, domestically implements a series of treaties between the United States and Great Britain (on behalf of Canada), Mexico, Japan, and the former Soviet Union that provide for international migratory bird protection. The MBTA authorizes the Secretary of the Interior to regulate the taking of migratory birds; the act provides that it shall be unlawful, except as permitted by regulations, "to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird" (United States Code [U.S.C.] Title 16, Section 703). The current list of species protected by the MBTA includes several hundred species and essentially includes all native birds. Permits for take of nongame migratory birds can be issued only for specific activities, such as scientific collecting, rehabilitation, propagation, education, taxidermy, and protection of human health and safety and personal property.

Bald and Golden Eagle Protection Act of 1940 (Title 16 U.S.C. Section 668, enacted by 54 State. 250)

The Bald and Golden Eagle Protection Act of 1940 protects bald eagles (*Haliaeetus leucocephalus*) and golden eagles by prohibiting the taking, possession, and commerce of these species and establishes civil penalties for violation of this act. Take of bald and golden eagles includes to "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." To disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior (72 *Federal Register* [FR] 31132; 50 CFR 22.3).

Federal Clean Water Act (Title 33 U.S.C. Sections 1251 through 1376)

The federal CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Under section 404 of the CWA, the USACE, under the authority of the U.S. Environmental Protection Agency (USEPA), regulates the discharge of dredged and fill material into "Waters of the U.S., including wetlands." USACE implementation regulations are found at CFR Title 33, Sections 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the USEPA in conjunction with the USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into waters of the U.S. only if there is no practicable alternative that would have less adverse impacts. Section 401 requires a project proponent for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. to obtain State certification, thereby ensuring that the discharge will comply with provisions of the CWA. In California, the State Water Resource Control Board and each of its nine RWQCBs administer the Section 401 water quality certification program. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

State

California Endangered Species Act (CFGC Section 2050 et seq.)

The CESA establishes the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that State agencies should not approve projects

that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no State agency consultation procedures under the CESA. For projects that would affect a listed species under both the CESA and the FESA, compliance with the FESA would satisfy the CESA if CDFW determines that the federal incidental take authorization is "consistent" with the CESA under CFGC Section 2080.1. For projects that would result in take of a species listed under the CESA only, the project proponent would have to apply for an Incidental Take Permit (ITP)under Section 2081(b) to remain in compliance with the CESA.

Regional Water Quality Control Board

Under Section 401 of the CWA, the RWQCB must certify that actions receiving authorization under Section 404 of the CWA also meet State water quality standards. The RWQCB also regulates waters of the State under the Porter-Cologne Act. The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. The RWQCB typically requires compensatory mitigation for impacts to wetlands and/or waters of the State. The RWQCB also has jurisdiction over certain waters deemed "isolated" or not subject to Section 404 jurisdiction. Dredging, filling, or excavation of isolated waters constitutes a discharge of waste to waters of the State and prospective dischargers are required obtain authorization through an Order of Waste Discharge or waiver thereof from the applicable RWQCB and comply with other requirements of Porter-Cologne Act. The Study Area is located within the jurisdiction of the Lahontan RWQCB.

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Act, waters of the State fall under the jurisdiction of the appropriate RWQCB. Waters of the State are broadly defined by the Porter-Cologne Act (§ 1305(e)) as "any surface water or groundwater, including saline waters, within the boundaries of the state." Under the Act, the RWQCB must prepare and periodically update water quality control basin plans. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Projects that affect wetlands or waters must meet waste discharge requirements of the RWQCB, which may be issued in addition to a water quality certification or waiver under Section 401 of the CWA. The Study Area is under the jurisdiction of the Lahontan RWQCB and its associated basin plan.

California Fish and Game Code

Section 460. Under this section of the CFGC, desert kit fox may not be taken at any time.

Sections 1600 through 1616. Under these sections of the CFGC, the project operator is required to notify CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the code, a "stream" is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that supports or has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial watercourses valuable to fish and wildlife are subject to CDFW jurisdiction. CDFW also has jurisdiction over dry washes that carry water during storm events. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are

formalized in a Streambed Alteration Agreement, which becomes part of the plans, specifications, and bid documents for the project.

Sections 2080 and 2081. Section 2080 of the CFGC states that "No person shall import into this State [California], export out of this State, or take, possess, purchase, or sell within this State, any species, or any part or product thereof, that the Commission [State Fish and Game Commission] determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, or the Native Plant Protection Act, or the California Desert Native Plants Act." Pursuant to Section 2080.1 or 2081 of the code, CDFW may authorize individuals or public agencies to import, export, take, or possess State-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through permits or memoranda of understanding if the take is incidental to an otherwise lawful activity, impacts of the authorized take are minimized and fully mitigated, the permit is consistent with any regulations adopted pursuant to any recovery plan for the species, and the project proponent ensures adequate funding to implement the measures required by CDFW, which makes this determination based on available scientific information and considers the ability of the species to survive and reproduce.

Sections 3503 3503.5, 3513, and 3800. Under these sections of the CFGC, the project proponent is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey or their nests or eggs; the taking or possessing of any migratory nongame bird as designated in the MBTA unless authorized by rules or regulations approved by the Secretary of the Interior; the taking, possessing, or needlessly destroying of the nest or eggs of any bird; or the taking of any nongame bird pursuant to CFGC Section 3800.

Sections 3511, 4700, 5050, and 5515. Protection of fully protected species is described in Sections 3511, 4700, 5050, and 5515 of the CFGC. These statutes prohibit take or possession of fully protected species. CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species.

Sections 4000 through 4003. Under Section 4000 of the CFGC, it is unlawful to conduct activities that would result in the taking, possessing, or destroying of any fur-bearing mammals, including desert kit foxes, without prior authorization from CDFW.

CEQA Guidelines, Section 15380

In addition to the protections provided by specific federal and state statutes, CEQA *Guidelines* Section 15380(b) provides that a species not listed on the federal or state list of protected species nonetheless may be considered rare or endangered for purposes of CEQA if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the FESA and the section of the CFGC dealing with rare or endangered plants or animals. This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not at present have legal protection of any kind, CEQA calls for an assessment of whether any such resources would be affected and requires findings of significance if there would be substantial losses. Natural communities listed by CNDDB as sensitive are considered by CDFW

to be significant resources and fall under the CEQA *Guidelines* for addressing impacts. Local planning documents such as general plans often identify these resources as well.

CDFW generally regards as rare many plant species included on CRPR 1A, 1B, 2A, and 2B of the CNPS Inventory of Rare and Endangered Vascular Plants of California. In addition, sometimes CRPR 3 and 4 plants are considered if the population has local significance in the area and is impacted by the project based on CNPS guidance (CNPS, 2020).

Native Plant Protection Act (CFGC Sections 1900 through 1913)

California's Native Plant Protection Act (NPPA) requires all State agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the NPPA prohibit the taking of listed plants from the wild and require notification of CDFW at least 10 days in advance of any change in land use. This allows CDFW to salvage listed plant species that otherwise would be destroyed. The project proponent is required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and Sections of CEQA that apply to rare or endangered plants. The project proponent is currently in ongoing consultation with CDFW.

California Desert Native Plants Act (California Food and Agricultural Code Sections 800071 through 80075)

The California Desert Native Plant Protection Act affords protection to certain native desert plant species to make the harvest, transport, sale, or possession of these species unlawful unless a permit is first obtained. It restricts harvesting of the following plants, except for educational or scientific purposes under a permit issued by the commissioner of the county in which the native plants are growing:

- All species of the genus Burseraceae family (such as elephant tree [*Bursera microphylla*], saguaro cactus [*Carnegiea gigantean*], barrel cactus [*Ferocactus acanthodes*], and panamint dudleya [*Dudleya saxosa*]).

The California Desert Native Plant Protection Act also restricts harvesting of the following species, except under a permit issued by the commissioner of the sheriff of the county in which the native plants are growing:

- All species of the agave family (Agavaceae);
- All species of the genus *Prosopis*;
- All species of the genus *Cercidium*;
- All species of the cacti family Cactaceae, besides saguaro and barrel cactus which are protected as described above;
- All species of the ocotillo and candlewood family Fouquieriaceae; and
- Catclaw (*Acacia greggii*), desert-holly (*Atriplex hymenelytra*), smoke tree (*Dalea spinose*), and desert ironwood (*Olneya tesota*).

Western Joshua Tree Conservation Act

The WJTCA is a California law enacted in July 2023. Under this law, the taking, possession, purchase, sale, import, and export of WJT are prohibited except as allowed by the WJTCA (CFGC Section 1927.2), the CESA (CFGC Section 2050 et seq.), or the Natural Community Conservation Planning Act (CFGC Section 2800 et seq.). The WJTCA requires the California Fish and Game Commission to reconsider the listing of the WJT under CESA. Currently, the CDFW classifies the WJT as a candidate for listing. Authorization under CESA is required for take of candidate species as well as those listed as threatened or endangered (CFGC Section 2081).

Under the WJTCA, individuals and entities can obtain take authorization by avoiding and minimizing take to the maximum extent practicable and paying a fee established by the WJTCA. The fee is paid on a per-tree basis and varies based on tree height and project location. Fees under the WJTCA vary between $150 and $2,550 per trunk or stem emerging from the ground, depending on tree height and project location. If the California Fish and Game Commission ultimately lists the species as threatened or endangered under CESA, the WJTCA would become inoperative and take authorization would only be available under CESA.

Local

Kern County General Plan

The Kern County General Plan identifies the federal, State, and local statutes, ordinances, and policies that govern the conservation of biological resources that must be considered by Kern County during the decision-making process for any project that could affect biological resources.

The Land Use, Open Space, and Conservation Element of the Kern County General Plan states that the element provides for a variety of land uses for future economic growth while also ensuring the conservation of the County's agricultural, natural, and resources attributes. Section 1.10, General Provisions, provides goals, policies, and implementation measures that apply to all types of discretionary projects.

Chapter 1. Land Use, Open Space, and Conservation Element

1.10 General Provisions

1.10.5 Threatened and Endangered Species

Goal

Goal 1: Ensure that the County can accommodate anticipated future growth and development while a safe and healthful environment and a prosperous economy by preserving valuable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

Policies

Policy 27: Threatened or endangered plant and wildlife species should be protected in accordance with State and Federal laws.

Policy 28: The County should work closely with State and Federal agencies to assure that discretionary projects avoid or minimize impacts on fish, wildlife, and botanical resources.

Policy 29: The County will seek cooperative efforts with local, State, and Federal agencies to protect listed threatened and endangered plant and wildlife species through the use of conservation plans and other methods promoting management and conservation of habitat lands. Policy 30. The County will promote public awareness of endangered species laws to help educate property owners and the development community of local, State, and Federal programs concerning endangered species conservation issues.

Policy 31: Under the provisions of CEQA, the County, as lead agency, will solicit comments from the CDFW and the USFWS when an environmental document (Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report) is prepared.

Policy 32: Riparian areas will be managed in accordance with the USACE and the CDFW rules and regulations to enhance the drainage, flood control, biological, recreational, and other beneficial uses while acknowledging existing land use patterns.

Implementation Measures

Measure Q: Discretionary projects shall consider effects to biological resources as required by CEQA.

Measure R: Consult and consider the comments from responsible and trustee wildlife agencies when reviewing a discretionary project subject to CEQA.

Measure S: Pursue the development and implementation of conservation programs with State and federal wildlife agencies for property owners desiring streamlined endangered species mitigation programs.

Chapter 5. Energy Element

5.2 Importance of Energy to Kern County

Policy

Policy 8: The County should work closely with local, State, and federal agencies to assure that energy projects (both discretionary and ministerial) avoid or minimize direct impacts to fish, wildlife, and botanical resources, wherever practical.

5.4.5 Solar Energy Development

Policy

Policy 1: The County shall encourage domestic and commercial solar energy used to conserve fossil fuel and improve air quality.

Policy 2: The County should attempt to identify and remove disincentives to domestic and commercial solar energy development.

Policy 3: The County should permit solar energy development in the desert and valley planning regions that does not pose significant environmental or public health and safety hazards.

Policy 4: The County should encourage solar development in the desert and valley regions previously disturbed, and discourage development of energy projects in undisturbed land supporting State or federally protected plant and wildlife species.

Soledad Mountain-Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. The recommendations, analysis, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan for biological resources applicable to the project are provided below. The Soledad Mountain Elephant Butte Specific Plan contains additional recommendations, analysis, and implementation measures that are more general in nature and are not specific to developments such as this project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan are incorporated by reference.

D. Conservation

Item 1 - Conservation, Development, and Utilization of Natural Resources

Recommendations:

a) Underground waters – The quality and quantity of underground waters shall not be degraded.

b) Surface waters – None in the area.

c) Forests – None in the area.

d) Vegetation and soils - All existing vegetation that must be cleared for building sites shall be removed from the site prior to completion of construction. Preservation of native plant life pursuant to Item C-2 herein.

e) Rivers, creeks, and streams – None in the area.

f) Fish and wildlife - Adherence to the guidelines recommended herein will produce the least negative effect on wildlife, other than no development at all.

E. Open Space

Item 1 - Natural Resource Land

a) Botanic Communities: All possible safeguards shall be initiated to prevent destruction of Joshua Trees.

Analysis: There are no botanic communities designated within the Plan area; however, there are scattered stands of WJTs which should be protected.

Kern County Zoning Ordinance

Chapter 19.81, Dark Skies Ordinance (Outdoor Lighting)

In November 2011, Kern County approved a Dark Skies Ordinance. The purpose of this ordinance is to maintain the existing character of Kern County by requiring a minimal approach to outdoor lighting, recognizing that excessive illumination can create a glow that may obscure the night sky, and that excessive illumination or glare may constitute a nuisance. The ordinance provides requirements for outdoor lighting within specified unincorporated areas of Kern County in order to accomplish the following objectives:

Objective 1: Encourage a safe, secure, and less light-oriented night-time environment for residents, businesses and visitors.

Objective 2: Promote a reduction in unnecessary light intensity and glare, and to reduce light spillover onto adjacent properties.

Objective 3: Protect the ability to view the night sky by restricting unnecessary upward projections of light.

Objective 4: Promote a reduction in the generation of greenhouse gases by reducing wasted electricity that can result from excessive or unwanted outdoor lighting.

Kern County Development Standards

The Kern County Development Standards have specific regulations pertaining to lighting standards including the requirement that lighting must be designed so that light is reflected away from surrounding land uses so as not to affect or interfere with vehicular traffic, pedestrians, or adjacent properties.

4.4.4 Impacts and Mitigation Measures

This section evaluates the impacts to biological resources that may occur during construction, operation and maintenance, and decommissioning of the project. It describes the sensitive biological resources located on and adjacent to the project site that may be affected and identifies the thresholds used to determine whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, where applicable.

Methodology

The following impact analysis is based on existing and potential biological resources occurring within the Study Area and vicinity of the project identified through a review of relevant literature and field surveys. Biological resources evaluated include sensitive habitats, rare plant and special-status wildlife species, and potential for wildlife movement corridors, and jurisdictional areas. The potential for special-status species to occur in the Study Area is based on the results of database research, biological assessments, surveys conducted in the Study Area, presence of suitable habitat, and the proximity of the Study Area to previously recorded occurrences in the CNDDB, CDFW, and USFWS data. Other sources of information used include aerial photographs, topographic maps, soil survey maps, geological maps, climatic data, previous biological studies, and project plans.

Field Surveys

A multi-year effort to document existing biological resources within the project site and vicinity was conducted by Tetra Tech, Heritage, and BBI biologists in 2022, 2023, 2024, and 2025. Biologists visited the project site and areas around the project site numerous times during this timeframe to conduct the following types of surveys: plant community and land cover mapping; botanical surveys; general and focused wildlife surveys including desert tortoise, western burrowing owl, desert kit fox, Swainson's hawk, golden eagle, and California condor; and jurisdictional delineation surveys. In addition, a Mohave ground squirrel desktop assessment was prepared for the project. The impact analyses presented here address potential biological resources located in the Study Area based on results of field surveys detailed in the biological survey reports and memos (provided in **Appendices D1** through **D10** of this EIR).

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project could potentially have a significant adverse effect on biological resources.

A project would have a significant adverse effect on biological resources if it:

a. Has 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 CDFW or the USFWS;

b. Has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or the USFWS;

c. Has a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Project Impacts

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.

Overview

The project has the potential to impact special-status plants and wildlife through the loss of habitat as well as from direct and indirect impacts on species, such as mortality of individuals or interference with reproductive success. Potential impacts to special-status plants and wildlife from construction, operation and maintenance, and decommissioning are discussed below.

Construction

Construction of the proposed project involves ground disturbance and other activities involved with ground clearing (grubbing, clearing, and grading), installation of solar panels, and construction of access roadways and other needed infrastructure and improvements that could result in impacts to special-status plant and wildlife species. During construction, the project site may be temporarily fenced to keep terrestrial wildlife species from entering the project site.

Special-Status Plants

CRPR 1B and 2B Plants – Horn's milk-vetch, alkali mariposa lily, desert cymopterus, recurved larkspur, Rosamond eriastrum, Barstow woolly sunflower, pale-yellow layia, southern Sierra monardella, Tehachapi monardella, Robbins' nemacladus, California alkali grass, Latimer's woodland-gilia, and sagebrush loeflingia: The Study Area contains suitable desert habitats to potentially support Horn's milk-vetch, alkali mariposa lily, desert cymopterus, recurved larkspur, Rosamond eriastrum, Barstow woolly sunflower, pale-yellow layia, southern Sierra monardella, Tehachapi monardella, Robbins' nemacladus, California alkali grass, Latimer's woodland-gilia, and sagebrush loeflingia. The project has the potential to result in direct and/or indirect impacts on these plants should they exist within the project development footprint. However, it should be noted that none of these CRPR 1B or 2B plants were observed during the numerous field surveys conducted for the project. If these species were to occur onsite, potentially significant impacts would occur if the project resulted in the removal of a significant number of individuals of any of these species such that it substantially reduced or threatened the regional or local populations. To minimize potential impacts to these species, the project proponent/operator would be required to implement **Mitigation Measure MM 4.4-5**, which requires a Lead Biologist or their designee perform a pre-construction visual survey of the area within 14 days prior to conducting vegetation clearing, or similar activities, to ensure that no rare plants are present. If rare plant species are observed, they shall be delineated with stakes and/or flagged for avoidance to the extent feasible. For CRPR 1B plants that cannot feasibly be avoided, the project proponent/operator will also implement the following measures to avoid, minimize, reduce, and/or mitigate potential impacts: **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, operation and maintenance, and decommissioning activities. With these measures, the project is not expected to result in the removal of a significant number of individuals of any of these species, and potential impacts would be less than significant.

The project proponent/operator also would prepare and implement a Landscape Revegetation and Restoration Plan (**Mitigation Measure MM 4.1-3**; see **Section 4.1**, *Aesthetics*, for full mitigation measure text); and a Fugitive Dust Control Plan (**Mitigation Measure MM 4.3-3**). The project proponent/operator would follow standard herbicide safety measures (**Mitigation Measure MM 4.9-2**; see **Section 4.9**, *Hazards and Hazardous Materials*, for full mitigation measure text) and implement emissions control measures (**Mitigation Measure MM 4.3-3**; see **Section 4.3**, *Air Quality*, for full mitigation measure text). These measures would further reduce potential impacts to CRPR 1B and 2B plants.

CRPR 3 and 4 Plants – Tracy's eriastrum, Howell's onion, Kern County evening primrose, white pygmy-poppy, Mojave paintbrush, Mojave spineflower, limestone dudleya, few-flowered woolly-star, pine fritillary, inland gilia, golden goodmania, Mojave monardella, Adobe yampah, and Lemmon's syntrichopappus: The Study Area contains suitable desert habitats to potentially support Tracy's eriastrum, Howell's onion, Kern County evening primrose, white pygmy-poppy, Mojave paintbrush, Mojave spineflower, limestone dudleya, few-flowered woolly-star, pine fritillary, inland gilia, golden goodmania, Mojave monardella, Adobe yampah, and Lemmon's syntrichopappus. Desert habitats would be impacted by the project; therefore, the project has the potential to result in direct and/or indirect impacts on these plants should they exist within and/or adjacent to the project footprint. These impacts would be considered less than significant for the following reasons: 1) impacts on CRPR 4 plants are generally not considered significant (CNPS, 2020); 2) these species have low sensitivity statuses and some are widespread in California; 3) if these species were to occur onsite at all, they would most likely occur in low numbers because, with the exception of Adobe yampah and few-flowered woolly star, none of these plants were observed during the numerous field surveys conducted for the project; and 4) the loss of one or a few individuals would not substantially reduce or threaten the regional or local populations of these species below self-sustaining levels. Furthermore, based on CNPS guidance (CNPS, 2020), Adobe yampah and few-flowered woolly star do not meet the requirements for CEQA standards and thresholds for impact considerations. This is because these plant species and their occurrences are not type localities for the taxon, are not at the periphery of the species range, are not in an area where they are uncommon or an area where they are sustaining heavy losses, do not exhibit unusual morphology or occur on unusual substrates, and are not part of a taxa that are declining in California at a significant rate. Therefore, the minor impacts to individuals of this species would not be considered a potentially significant impact, and no mitigation would be required. Potential impacts to the identified CRPR 3 and 4 plant species would be less than significant.

Western Joshua Tree (WJT): As mentioned above, detailed WJT surveys were conducted for the project (**Appendix D10)**. For the purposes of this analysis, the project contains areas where impacts to WJT may occur (i.e., the project development footprint; WJT Impact Areas) and areas where WJT and Joshua tree woodlands will be preserved (Woodland Habitat Preservation Areas). Generally, contiguous stands of Joshua tree woodland have been set aside as Woodland Habitat Preservation Areas, while isolated areas that meet the 1 percent cover threshold but lack connectivity to the Woodland Habitat Preservation Areas remain within the WJT Impact Areas.

Within the WJT Impact Areas there are approximately 106,100 live WJT stems and approximately 69,600 dead WJT stems. Within the Woodland Habitat Preservation Areas there are approximately 26,650 live WJT stems and approximately 7,550 dead WJT stems. Overall, size Class A (<1 meter tall) comprised 52 percent of live stems, while Size Class B (1-5 meters tall) and Size Class C (>5 meters tall) made up 46 percent and 2 percent, respectively (**Appendix D10**). The overall density of live WJT stems is approximately 17 trees per acre (this density is primarily driven by juvenile trees and clonal sprouts); however, the density of mature reproductive stems is approximately six trees per acre. Density of WJT

within Joshua tree woodland areas is approximately 64 trees per acre. Approximately 80 percent of WJT stems at the project are within the WJT Impact Area and subject to potential direct impacts. The remainder of WJT stems (20 percent) at the project would be preserved onsite within Woodland Habitat Preservation Areas (see discussion under **Impact 4.4-2** below for analysis regarding Joshua tree woodland and Woodland Habitat Preservation Areas).

WJTs are protected by the CDNPA and are a candidate species under CESA. Given that WJT individuals would be impacted by the project, impacts on WJT would be considered significant without mitigation. The project includes a number of design features to avoid, preserve, and minimize impacts to WJT and Joshua tree woodland at the project:

- An onsite 50-foot vegetated strip between the project site and Tehachapi Willow Springs Road will remain undeveloped as shown on **Figure 3-3**, *Proposed Site Plan*.
- The project includes restoration and enhancements of WJT habitats through relocation of a minimum of 10,000 onsite WJT stems to the onsite Woodland Habitat Preservation Areas, to the 50-foot vegetated strip along Tehachapi Willow Springs Road, and to other onsite or offsite conserved lands.
- Creation of 420 acres of Woodland Habitat Preservation Areas on the project site would avoid impacts to contiguous blocks of Joshua tree woodlands (preserving approximately 34,200 living and dead WJT stems).
- The 420 acres of Woodland Habitat Preservation Areas exceed the approximately 325 acres of mapped Joshua tree woodland at the project to allow space for relocation of WJT into less dense portions of these areas, and for the potential organic expansion of existing Joshua tree woodland into these areas.
- The Woodland Habitat Preservation Areas would be protected for the life of the project and are shown on **Figure 3-3**, *Proposed Site Plan*.
- The project proponent also 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 4.4-7**). Mitigation for impacts to WJTs would be coordinated with CDFW through take coverage permitting and is expected to include measures such as seed collection, WJT relocation requirements, and the acquisition of offsite compensatory mitigation lands with a focus on WJT refugia habitat.

In addition, the project proponent/operator would also 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, operation and maintenance, and decommissioning activities. However, while implementation of the project design features listed above and **Mitigation Measures MM 4.4-7** and **MM 4.4-1** through **MM 4.4-3** would reduce impacts to WJT, the County considers impacts to WJT to be significant and unavoidable due to the number of WJT that would be impacted to implement the project.

CDNPA Protected Plants – silver cholla (*Cylindropuntia echinocarpa*), beavertail cactus (*Opuntia basilaris* var. *basilaris*), and beavertail prickly pear (*Opuntia basilaris*): While not special-status plant species under CESA or FESA, silver cholla, beavertail cactus, and beavertail pricklypear are protected

under the CDNPA and have been observed in the Study Area. These plants are protected by the CDNPA, which prohibits harvesting these native desert plants, or any parts thereof, except when a permit from the County Department of Agriculture and Measurement Standards is obtained or a fee for removal is paid.

During surveys connected at the project, there was a single cactus plant that was initially viewed to exhibited characteristics of the federally and State listed endangered Bakersfield cactus on the project site. Coordination with an expert botanist who specializes in this listed species was performed to ensure accurate species identification. Based on personal communication with Michelle Cloud-Hughes (M. Cloud-Hughes, personal communication, 2024), who coordinated with Mark Porter (a professor at Claremont Graduate University and research scientist at California Botanic Garden), it was determined that the single cactus observed in the Study Area is genetically different from the listed species because studies show that only the populations in the San Joaquin Valley are true Bakersfield cactus (var. *treleasei*). Although historically the Bakersfield cactus populations on the east and west of the Tehachapi Mountains have been classified as Bakersfield cactus (var. *treleasei*), Mark Porter indicated that genetics studies show that only the populations in the San Joaquin Valley are the *treleasei* variety. Including the populations west and east of the Tehachapi Mountains as the Bakersfield cactus would mean that the populations in the southern and eastern Sierra Nevada should also be the Bakersfield cactus, because they are all genetically close enough to be grouped. In addition, the distinct morphology of the San Joaquin Valley true Bakersfield cactus (var. *treleasei*) separates them from the more southern beavertail pricklypear (*Opuntia basilaris*) in the Antelope Valley. Therefore, genetic studies indicate that the individual specimen observed at the project site is beavertail pricklypear (*Opuntia basilaris*) and not the listed Bakersfield cactus species (*Opuntia basilaris* var. *treleasei*).

Prior to vegetation clearing or similar activities, a Lead Biologist or their designee will conduct pre-construction surveys for CDNPA species in compliance with **Mitigation Measure MM 4.4-5**. If the project is anticipated to remove CDNPA species, the project proponent would obtain the appropriate permits and pay the applicable fee to Kern County (**Mitigation Measure MM 4.4-6**). With implementation of **Mitigation Measures MM 4.4-5** and **MM 4.4-6**, impacts to CDNPA protected plant species would be less than significant. Because WJT are a state candidate species, they are exempt from the CDNPA permit requirement. However, as discussed above, the project proponent/operator plans to obtain take authorization and would be required to comply with all avoidance, minimization and compensatory mitigation requirements included with such authorization. Nonetheless, even with implementation of the listed project design features to avoid, preserve, and minimize impacts to WJT and **Mitigation Measure MM 4.4-7**, impacts to WJT would remain significant and unavoidable.

Special-Status Wildlife

Special-status wildlife species that were observed within the Study Area during the field surveys include the Bell's sparrow, western burrowing owl, northern harrier, yellow warbler, loggerhead shrike, and yellow-headed blackbird. In addition, American badger and desert kit fox sign was observed within the Study Area and long-eared owl and Swainson's hawk were observed nesting within 5 miles of the project site. The Study Area supports habitats and features that could potentially support an additional 18 species including the Crotch's bumble bee, Norther California legless lizard, coast horned lizard, desert tortoise, Cooper's hawk, tricolored blackbird, golden eagle, short-eared owl, ferruginous hawk, mountain plover, olive-sided flycatcher, merlin, prairie falcon, California condor, Townsend's big-eared bat, Tulare grasshopper mouse, Tehachapi pocket mouse, and Mohave ground squirrel. Construction of the project could result in direct impacts to these special-status species if present during ground disturbance and construction. During construction, the project site may be temporarily fenced to keep terrestrial wildlife species from entering

the project site. Discussions for each species observed onsite or have the potential to occur onsite are provided below.

Crotch's Bumble Bee: The Crotch's bumble bee has a statewide distribution in a variety of habitats and agricultural fields including but not limited to grasslands and chaparral shrublands, small mammal burrows, bunch grasses, thatch, brush piles, old bird nests, or dead trees. 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 have 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 Crotch's bumble bee is present, impacts on the species would be considered potentially significant. Pursuant to **Mitigation Measure MM 4.4-17**, prior to initial ground-disturbing activities, a Lead Biologist or their designee will conduct Crotch's bumble bee nesting surveys within suitable habitat on the project site. Surveys 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 CDFW. If a Crotch's bumble bee nest is observed onsite, a minimum 50-foot disturbance buffer shall be established around the nest. If avoidance of Crotch's bumble bee nests is not feasible, construction activities in the immediate area will be halted until the nest has been determined inactive, or the project proponent/operator will consult with the CDFW regarding potential for project activities to result in take 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. As such, even if the species is determined to be nesting onsite, impacts will be less than significant following implementation of **Mitigation Measure MM 4.4-17**.

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 4.4-14,** 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, operation and maintenance, and decommissioning activities. Lastly, the project proponent/operator will implement **Mitigation Measures MM 4.1-3** (see **Section 4.1**, *Aesthetics*, for full mitigation measure text)**, MM 4.3-3** (see **Section 4.3**, *Air Quality*, for full mitigation measure text)**,** 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 4.4-17, MM 4.4-14, 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.

Desert Tortoise: The Study Area is located at the western edge of desert tortoise range and suitable desert tortoise habitat is present in the Study Area. The Study Area does not contain high-quality habitat; however,

the majority of the Study Area consists of moderately suitable desert tortoise habitat, with some areas of low or unsuitable habitat (Tetra Tech, 2025c; **Appendix D3**). No live desert tortoises were observed in the Study Area during the protocol desert tortoise surveys or during other biological surveys conducted for the project. One carcass was observed in 2022 and again in 2023 in the same location; however, based on the characteristics of the carcass, this individual is assumed to be a previously captive individual released from captivity that died once in the wild.

If present, direct impacts to the species could include death or injury to individuals, displacement of tortoises and loss of territory, disruption of breeding activities, crushing of burrows and viable eggs, and loss of suitable habitat. Common ravens, a notable predator of juvenile desert tortoises, are present within the Study Area and could injure or kill juvenile desert tortoises should they be present. Indirect impacts could also occur during construction if desert tortoises are present within 500 feet of the project site. These indirect impacts include construction-related noise and ground vibration deterring individuals from inhabiting or foraging in areas near the project site. Additional indirect impacts could occur from construction-related dust, sedimentation, and erosion along the site edges, which have the potential to alter offsite conditions. Noxious weed seeds could be spread during construction activities to offsite habitats that are occupied by tortoise during travel to and from the site or by wind. Non-native vegetation often offers little to no nutritional value to desert tortoises and could reduce their ability to find sufficient amounts of food and increase risk of fires in the area. These potential direct and indirect impacts to desert tortoise would be considered significant without mitigation.

Potential impacts to desert tortoise would be reduced through implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-3, MM 4.4-8, MM 4.4-13,** and **MM 4.4-14**. These measures include requiring 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, operation and maintenance, and decommissioning activities; pre-construction surveys for special status wildlife, including desert tortoise; a Raven Management Plan; and revegetating disturbed areas of the project site where feasible. Additionally, the project proponent/operator would implement **Mitigation Measures MM 4.1-3 (**see **Section 4.1**, *Aesthetics*, for full mitigation measure text)**, MM 4.3-3** (see **Section 4.3**, *Air Quality*, for full mitigation measure text)**,** and **MM 4.9-2** (see **Section 4.9**, *Hazards and Hazardous Materials*, for full mitigation measure text)**,** which require a Landscape Revegetation and Restoration Plan, Fugitive Dust Control Plan, and use of approved herbicides, which will further reduce potential impacts to desert tortoise. With implementation of the aforementioned mitigation measures, impacts to desert tortoise would be less than significant.

Due to absence of live tortoise occurrence in the Study Area and its position at the periphery of the species' current range, as well as the abundance of suitable habitat to the east of the Study Area where the largest primary population in the Mojave Desert is located, loss of moderate to low quality habitat is considered less than significant and mitigation is not required.

Northern California legless lizard, coast horned lizard, and Tehachapi slender salamander: The northern California legless lizard, coast horned lizard, and Tehachapi slender salamander were not observed during field surveys conducted for the project. Potentially suitable desert scrub habitat occurs onsite that may be used by the Northern California legless lizard and coast horned lizard. There is no suitable riparian or hardwood coniferous forests to support Tehachapi slender salamander in the Study Area. Construction of the proposed project, including vegetation clearing and grubbing, ground disturbance, vehicle traffic, and onsite personnel, has the potential to affect these species if present in or near active construction areas. These impacts may result in direct mortality or injury, behavior disturbances, and loss or alteration of

suitable habitat that may be potentially significant. With implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-3** and **MM 4.4-8**, which include requiring 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, operation and maintenance, and decommissioning activities; and pre-construction surveys for special status wildlife, impacts to the these species would be less than significant.

Golden Eagle and California Condor. Golden eagles and California condors were not observed during the project field surveys or during protocol-level nest surveys conducted during spring and summer of 2023. The nearest recorded observation of golden eagle in the CNDDB is approximately 6 miles east of the Study Area in 1969, and the nearest existing golden eagle nest is approximately 7 miles to the north of the Study Area and contained signs of nesting activity as recently as 2019. California condor was documented approximately 15 to 20 miles west of the project in 1976 and 2013 (Tetra Tech, 2025a). There is no suitable nesting habitat for either species within the Study Area; however, potentially suitable foraging habitat for golden eagles and California condors occurs onsite (BBI, 2025b).

Golden eagles and California condors typically fly at altitudes much higher than project infrastructure while searching for food or traveling, and collision with the project is considered extremely unlikely. Development of the project would result in loss of foraging habitat for both species; however, while potential foraging habitat would be reduced or lost during construction, this reduction would not be considered a significant impact because there is an abundance of foraging habitat surrounding the project site. If present during construction activities, the project would have a low potential to directly impact these species through mortality or injury because the species is highly mobile and could easily avoid construction. Hence, direct impacts such as vehicular collisions would be considered less than significant. Indirect impacts may include collisions and/or electrocution from power lines. These indirect impacts are a substantial source of mortality and would be considered significant without mitigation. However, potentially significant impacts from power lines would be reduced through implementation of **Mitigation Measure MM 4.4-15**, which requires power lines to be installed per Avian Power Line Interaction Committee (APLIC) standards, reducing the likelihood of collision and/or electrocution from power lines.

In addition, the project proponent/operator would implement the following measures to help avoid, minimize, and/or reduce impacts: **Mitigation Measures MM 4.1-1, MM 4.1-3 (**see **Section 4.1**, *Aesthetics*, for full mitigation measure text)**, MM 4.4-1** through **MM 4.4-3**, **MM 4.4-8**, **MM 4.4-9**, **MM 4.4-14**, **MM 4.4-16**, **MM 4.9-2** (see **Section 4.9**, *Hazards and Hazardous Materials*, for full mitigation measure text), and **MM 4.13-1** (see **Section 4.13**, *Noise*, for full mitigation measure text). With implementation of these mitigation measures, impacts to golden eagle and California condor would be less than significant.

Northern Harrier, Cooper's Hawk, Ferruginous Hawk, Merlin, Short-Eared Owl, Long-Eared Owl, and Prairie Falcon: The Study Area does not contain suitable habitats, features, and/or conditions to support northern harrier, Cooper's hawks, or prairie falcons for nesting, and is outside of the breeding range for short-eared owl, ferruginous hawk, and merlin. Therefore, potential impacts to breeding for these raptor species are not anticipated. The long-eared owl commonly nests in stick nests created by ravens and hawks and may nest within the Study Area, if suitable nests exist. While nesting habitat is only limited to long-eared owls, the Study Area contain suitable desert habitats, prey items, and perch sites to potentially support foraging for these raptors. Of these species, only the Cooper's hawk and northern harrier have been observed in the Study Area. Suitable foraging habitat in the Study Area for these species would be reduced or lost as a result of vegetation and habitat removal from grading and constructing the proposed project. However, while availability of potential foraging habitat would be reduced or lost during construction, this

reduction would not be a significant impact because there is an abundance of suitable foraging habitat surrounding the project site. If present during construction activities, the project would have a low potential to directly impact these raptor species through mortality or injury because the species is highly mobile and could easily avoid construction, hence, direct impacts such as vehicular collisions would be considered less than significant. Indirect impacts include collisions and/or electrocution from power lines. This indirect impact is a substantial source of mortality for this species and would be considered significant without mitigation.

Potential impacts to raptor species would be reduced through implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-3**, **MM 4.4-8**, **MM 4.4-9**, **MM 4.4-15**, and **MM 4.4-16**. These measures include requiring 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, operation and maintenance, and decommissioning activities; pre-construction surveys for special-status wildlife, including bird species; conducting preconstruction nesting bird surveys; installing power lines per APLIC standards; and implementing an Avian Mortality Monitoring Program. Additionally, the project proponent/operator would implement **Mitigation Measures MM 4.1-3** (see **Section 4.1**, *Aesthetics*, for full mitigation measure text), **MM 4.3-3** (see **Section 4.3**, *Air Quality*, for full mitigation measure text), **MM 4.9-2** (see **Section 4.9**, *Hazards and Hazardous Materials*, for full mitigation measure text), and **MM 4.13-1** (see **Section 4.13**, *Noise*, for full mitigation measure text), which require a Landscape Revegetation and Restoration Plan, Fugitive Dust Control Plan, use of approved herbicides, and reducing noise levels associated with construction that would further reduce potential impacts to raptor species. With implementation of these mitigation measures, impacts to the northern harrier, Cooper's hawk, ferruginous hawk, merlin, short-eared owl, long-eared owl, and prairie falcon would be less than significant.

Swainson's Hawk: 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 from 2022 through 2024. While this species was not observed on the project site, three active Swainson's hawk nests were observed within 5 miles of the project site in 2023, two of these were observed again in 2024, and one was observed again in 2025 (BBI, 2025a). 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. If present during construction activities, the project would have a low potential to directly impact this listed raptor species through mortality or injury because the species is highly mobile and could easily avoid construction, hence, direct impacts such as vehicular collisions would be considered less than significant. Indirect impacts would include collisions and/or electrocution from power lines. This indirect impact is a substantial source of mortality for this species and would be considered significant without mitigation.

While no Swainson's hawk nests were observed within the project site, large WJTs and California junipers that could potentially provide nesting habitats for Swainson's hawk are located within and adjacent to the project site. A portion of these trees are located within the project footprint and would be directly impacted by the project; therefore, the project has the potential to result in direct and indirect impacts on breeding Swainson's hawk, their nests, young, or eggs, if project construction activities occur during their nesting season and this species is nesting within and/or adjacent to the project footprint at that time. Swainson's hawk is protected by the MBTA and the CFGC, which render it unlawful to take native breeding birds, and

their nests, eggs, and young. Loss of active Swainson's hawk nests as a result of construction or other site preparation activities would be a significant impact.

Impacts on nesting and breeding Swainson's hawks can be avoided and/or minimized by conducting ground/vegetation-disturbing activities outside the peak breeding bird season, which generally runs from March 1 to September 15. If construction activities are scheduled to be initiated during the nesting season, the project proponent shall conduct pre-construction Swainson's hawk surveys of all accessible areas within 0.5 miles of the construction site to determine the presence and activity of known or new Swainson's hawk nests and to avoid, minimize, and/or reduce impacts on these breeding raptors and their offspring (**Mitigation Measure MM 4.4-12**). If preconstruction surveys detect a nesting Swainson's hawk within 0.5 mile of the project site, a 0.5-mile avoidance buffer will be established around the nest by a Lead Biologist or approved Biological Monitor and no construction within the buffer shall be allowed until the Lead Biologist or approved Biological Monitor has determined the nest is no longer active.

Although there is an abundance of suitable foraging habitat in the area surrounding the project site, 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, which would be considered a significant impact. 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 4.4-12**, which would reduce impacts on foraging habitat to less than significant.

Swainson's hawks may use the utility structures surrounding the facilities as perch sites for hunting increasing the likelihood of collisions and/or electrocution. These impacts would be considered significant; therefore, the project proponent/operator will implement **Mitigation Measure MM 4.4-15**, which requires power lines to be installed per APLIC standards, reducing the likelihood of collision and/or electrocution from power lines. The project proponent/operator also would implement the following measures to avoid, minimize, and/or reduce impacts: **Mitigation Measures MM 4.4-1** through **MM 4.4-3**, **MM 4.4-15**, **MM 4.4-16** and **MM 4.1-3** (see **Section 4.1**, *Aesthetics*, for full mitigation measure text), **MM 4.3-3** (see **Section 4.3**, *Air Quality*, for full mitigation measure text), **MM 4.9-2** (see **Section 4.9**, *Hazards and Hazardous Materials*, for full mitigation measure text), and **MM 4.13-1** (see **Section 4.13**, *Noise*, for full mitigation measure text). These measures require 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, operation 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 Swainson's hawk. With implementation of these measures, impacts would be reduced to less than significant.

Western Burrowing Owl: Western burrowing owls were observed in the Study Area during project surveys. 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 (Tetra Tech, 2025d). 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.

Direct impacts to western burrowing owl and its habitat could occur as a result of project construction through the loss of available foraging habitat and potential nesting burrows due to construction activities and increased human presence. Indirect impacts could also occur during construction if burrowing owls are nesting in adjacent offsite areas, and noise from construction activities harasses an owl to the point of abandoning an active nest site. According to 2012 Staff Report (CDFG 2012) the use of buffer zones, visual screens or other measures while project activities are occurring can minimize disturbance impacts. Any adverse direct or indirect impacts to western burrowing owls as a result of construction would be considered significant under CEQA without mitigation.

While impacts to western burrowing owls are potentially significant, impacts would be reduced through implementation of **Mitigation Measure MM 4.4-10,** which requires pre-construction surveys to locate occupied known and/or occupied nesting burrowing owl burrows within the project site and 500-foot buffer (where legally accessible). Pre-construction surveys shall be consistent with the methods outlined in the 2012 CDFG Staff Report. If occupied known and/or occupied nesting burrowing owl burrows are detected, a no-disturbance avoidance buffer would be implemented for the duration the burrow remains occupied. If avoidance is not feasible, the project proponent will 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 (**Mitigation Measure MM 4.4-10**).

In addition, the project proponent/operator would implement **Mitigation Measures MM 4.4-1** through **MM 4.4-3**, **MM 4.4-15**, **MM 4.4-16** and **MM 4.1-3 (**see **Section 4.1**, *Aesthetics*, for full mitigation measure text), **MM 4.3-3** (see **Section 4.3**, *Air Quality*, for full mitigation measure text), **MM 4.9-2** (see **Section 4.9**, *Hazards and Hazardous Materials*, for full mitigation measure text), and **MM 4.13-1** (see **Section 4.13**, *Noise*, for full mitigation measure text). These measures require 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, operation 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.

Loggerhead Shrike, Mountain Plover, Tricolored Blackbird, Bell's Sparrow, Yellow Warbler, Le Conte's thrasher, and Yellow-Headed Blackbird: During field surveys conducted for the project, loggerhead shrike, yellow-headed blackbird, and yellow warbler were observed onsite. In addition, Bell's sparrow and Le Conte's thrasher were observed nesting in the Study Area in 2023. Mountain plovers and tricolored blackbirds were not observed onsite, but have the potential to occur (Tetra Tech, 2025a). Trees, shrubs, and open ground on the Study Area provide suitable habitat for loggerhead shrike, Le Conte's thrasher, and Bell's sparrows nesting habitat. The Study Area does not contain suitable nesting habitat, or is outside of the breeding range, for the mountain plover, tricolored blackbird, yellow warbler, and yellow-headed blackbird.

The Study Area contains suitable desert habitats to potentially support these birds for foraging. Loss of habitat is not expected to be significant because of the abundance of suitable habitat surrounding the project site. Direct impacts could include death or injury to chicks or nest destruction, displacement of birds and loss of territory, and disruption of breeding activities. Adults of these species are mobile and not susceptible

to direct impacts from construction activities. Indirect impacts from construction and decommissioning activities include disturbance to nesting individuals related to increased dust, noise, vibrations, and increase human presence. These direct and indirect impacts to these species would be considered significant without mitigation.

Trees, shrubs, open ground, and other physical features that could potentially provide nesting habitats for loggerhead shrike, Le Conte's thrasher, and Bell's sparrows are located within and adjacent to the project site and would be directly impacted by the project; therefore, the project has the potential to result in direct and indirect impacts on these breeding birds, their nests, young, or eggs, if project construction activities occur during the breeding bird season and birds are nesting within and/or adjacent to the project footprint at that time. Project activities could adversely affect the breeding behavior of some birds, and lead to the loss of eggs and chicks, or nest abandonment. These species are protected by the MBTA and the CFGC, which render it unlawful to take native breeding birds, and their nests, eggs, and young. Loss of active bird nests as a result of construction or other site preparation activities would be a potentially significant impact.

Impacts on breeding loggerhead shrike, Le Conte's thrasher, and Bell's sparrow, can be avoided and/or minimized by conducting ground/vegetation disturbing activities outside the peak breeding bird season which generally runs from February 1 through August 31. If construction activities are scheduled to be initiated during the nesting season, the project proponent/operator will conduct pre-construction breeding bird surveys (**Mitigation Measure MM 4.4-9**) to avoid, minimize, and/or reduce impacts on these breeding birds and their offspring. Avoidance and minimization measures will be implemented if nests are observed during the pre-construction surveys.

The project proponent/operator also would implement the following measures to avoid, minimize, and/or reduce impacts: **Mitigation Measures MM 4.4-1** through **MM 4.4-3**, **MM 4.4-14**, **MM 4.4-15**, **MM 4.4-16** and **MM 4.1-3 (**see **Section 4.1**, *Aesthetics*, for full mitigation measure text), **MM 4.3-3** (see **Section 4.3**, *Air Quality*, for full mitigation measure text), **MM 4.9-2** (see **Section 4.9**, *Hazards and Hazardous Materials*, for full mitigation measure text), and **MM 4.13-1** (see **Section 4.13**, *Noise*, for full mitigation measure text). These measures require 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, operation and maintenance, and decommissioning activities; minimizing vegetation removal; 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. With implementation of these mitigation measures, potential impacts to loggerhead shrike, mountain plover, tricolored blackbird, Bell's sparrow, yellow warbler, Le Conte's thrasher, and yellow-headed blackbird would be less than significant.

Townsend's Big-Eared Bat: The Study Area does not contain suitable habitats, features, and/or conditions to support Townsend's big-eared bats for breeding or roosting; therefore, impacts on breeding/roosting bats are not anticipated. The Study Area contains suitable desert habitats to potentially support this species for foraging, but it is likely that they forage in the area at low levels because of the low insect production in desert communities at most times of the year. Bat foraging habitats will be impacted by the project; therefore, the project has the potential to result in direct and indirect impacts on foraging bats should they use the project site and/or surrounding lands for foraging. Direct and indirect impacts on foraging bats would be considered less than significant for the following reasons: 1) impacts on these bats may be elevated during construction, but most bats are highly mobile and would be expected to move to adjacent areas of similar habitat at the onset of project activities, thereby avoiding direct contact with construction

vehicles, equipment, and personnel; 2) nocturnal foraging activities near the project site will not be disturbed by daytime project construction; 3) the loss of foraging habitat is unlikely to create a significant, permanent impact because there are ample, suitable foraging habitats of similar quality immediately outside of the project site that these bats could access; and 4) the loss of foraging habitats would not substantially reduce or threaten the regional or local population of these species below self-sustaining levels. Therefore, impacts to Townsend's big-eared bat would be less than significant.

Mohave Ground Squirrel, Tulare Grasshopper Mouse, and Tehachapi Pocket Mouse: The Mohave ground squirrel, Tulare grasshopper mouse, and Tehachapi pocket mouse were not observed in the Study Area during field surveys. The project is located outside of and to the west of the accepted historical range of Mohave ground squirrel and extensive trapping and protocol surveys for Mohave ground squirrel on and in the immediate vicinity of the Study Area have resulted in no detections of Mohave ground squirrels (Tetra Tech, 2025f). The Tulare grasshopper mouse and Tehachapi pocket mouse occur in arid scrubland habitats and have a low potential to occur onsite. Construction of the project, including clearing and grubbing vegetation, ground disturbance, noise, vehicle traffic, and onsite personnel, has the potential to affect these species if present in or near the construction area. These impacts may result in direct mortality or behavioral disturbance; therefore, the impact is potentially significant.

With implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-3** and **MM 4.4-8**, which include requiring 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, operation and maintenance, and decommissioning activities; and pre-construction surveys for special status wildlife, impacts to the Mohave ground squirrel, Tulare grasshopper mouse, and Tehachapi pocket mouse would be less than significant.

Desert Kit Fox and American Badger: The Study Area contains suitable desert habitats, friable soils for dens, and abundant rodent populations to support desert kit foxes and American badgers. No individual desert kit fox or American badgers were observed during field surveys, but sign of these mammals were observed during field surveys conducted for the project. Although this species is protected under Title 14 CCR Section 460, it does not constitute as a special-status species; therefore, loss of suitable habitat for desert kit fox are not considered significant. If desert kit foxes and American badgers were to occur onsite, they would most likely occur in low numbers.

Direct impacts to these species could include being hit by vehicles on access roads or the loss of available habitat and potential burrows due to construction activities and increased human presence. Indirect impacts include noise, vibrations, increased human presence, and night-time lighting. These types of potential impacts to this species would be considered significant without mitigation.

Project impacts to these species' habitat would be considered less than significant for the following reasons: 1) the loss of foraging habitat is unlikely to create a significant, permanent impact because there are ample, foraging habitats of similar quality immediately outside of the project site that these mammals could access; 2) following construction, the project site would be available for these species to traverse, forage, or den; and 3) the loss of foraging habitats would not substantially reduce or threaten the regional or local population of these species below self-sustaining levels.

Further, the project proponent/operator will conduct pre-construction American badger and desert kit fox surveys to help avoid, minimize, and/or reduce impacts on these species and avoidance, minimization, and/or mitigation measures will be implemented if American badger are observed or detected during the pre-construction surveys (**Mitigation Measure MM 4.4-11**). In addition, the project will implement

Mitigation Measures MM 4.4-1 through **MM 4.4-3**, **MM 4.4-8**, **MM 4.1-1**, **MM 4.1-3 (**see **Section 4.1**, *Aesthetics*, for full mitigation measure text), **MM 4.3-3** (see **Section 4.3**, *Air Quality*, for full mitigation measure text), and **MM 4.13-1** (see **Section 4.13**, *Noise*, for full mitigation measure text). These measures require 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, operation and maintenance, and decommissioning activities; pre-construction surveys for special-status species, implementing a Trash Abatement Program; implementing a Landscape Revegetation and Restoration Plan; Fugitive Dust Control Plan; use of approved herbicides; and reducing noise levels associated with construction. With implementation of these mitigation measures, impacts to desert kit fox and American badger would be less than significant.

Operations and Maintenance

Direct impacts to special-status species are unlikely to result from project operation and maintenance activities because, due to project construction techniques that allow for retention and reestablishment of vegetation, vegetation supporting special-status species would continue to be available on the site during project operations. This already less-than-significant impact would be further minimized through implementation of **Mitigation Measure MM 4.4-14,** which requires vegetation/ground cover to be continuously maintained on the site by the project proponent/operator.

Perimeter fencing would be designed with a gap at the bottom of the fence to allow permeability for wildlife and wildlife movement through and around the project site, while permanent exclusion fencing around collector substations and the switchyard may be required. Final perimeter fencing design would be evaluated and developed in consultation with appropriate agencies, and the best-fit scenario would be incorporated at the project site. Additionally, vehicle traffic and onsite personnel would be minimal and heavy equipment would be infrequently used.

A study conducted in 2019 found that midday temperatures measured at 1.5 meters above solar PV panels were regularly 1.3 degrees Celsius warmer than an adjacent desert reference site. Afternoon measurements also showed that heating was confined to the air immediately adjacent to the solar PV panels, with temperature differences diminishing with height. At night, air just beneath the solar PV panels (0.4 meters) remained approximately 0.58 degrees Celsius warmer than the reference site, while no significant warming persisted above the panels at 1.5 meters (Broadbent et al., 2019). Although daytime warming data closely resembles the earlier work by Barron-Gafford et al. (2016), the reported nocturnal warming of 3-4 degrees Celsius greatly exceeds the approximately 0.58 degrees Celsius observed during the study. This difference in nightly temperature is likely due to differences in measurement height of air temperature and advection from being closer to urban areas during the Barron-Gafford et al. (2016) study. Although the Broadbent et al. (2019) study demonstrated that the areas around solar PV panels tended to be warmer than the nearby desert reference site, it concluded that the heat dissipates quickly and cannot be measured beyond 100 feet away from the solar PV systems. Therefore, any increases in ambient temperature would be localized and therefore, impacts to special-status species resulting from increases in ambient temperature would be less than significant.

Mitigation Measures MM 4.4-1 through **MM 4.4-3** require methods designed to reduce wildlife mortality and impacts, promote long-term project site suitability, and educate onsite personnel. Project operation could result in indirect impacts to wildlife in proximity of the project if nighttime lighting is used. However, the potential indirect impact from nighttime lighting during operation and maintenance would be minimized through compliance with all development standards, the Kern County Zoning Ordinance, and the goals,

policies, and implementation measures of the Kern County General Plan. The proposed project would be required to implement **Mitigation Measure MM 4.1-6**, which requires compliance with the Kern County's Dark Skies Ordinance to minimize nighttime lighting in unincorporated areas of Kern County. Impacts to special-status species as a result of operations and maintenance would be less than significant with implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-3**, and **MM 4.1-6**.

Battery Energy Storage System. An energy storage system is proposed as part of the project. As discussed in **Subsection 3.7.2**, *Battery Energy Storage Systems*, the project would utilize outdoor cabinet-type battery energy storage system (BESS) enclosures that have undergone large-scale fire testing to ensure that any battery failures are contained to a single enclosure. While batteries generally burn with difficulty, they can potentially catch fire. A battery fire does not produce embers like a typical structure or wildland fire, thus minimizing the spread of a battery fire to adjacent vegetation. Instead, fire spread risk for a battery is typically through thermal energy transfer to nearby adjacent exposures. This is mitigated through spacing, barriers, and/or cooling.

Project design includes a conservative 100-foot setback from onsite vegetation to battery cabinets, which is well beyond the 10-foot CFC Section 1207.8.3 requirement. The 10-foot CFC-required setback was originally established by the NFPA 855 Committee, which was later reflected in the International Fire Code and then California Fire Code, as an acceptable distance between a battery fire and another combustible exposure (i.e. buildings, combustible materials like vegetation, etc.) based on the Committee's experts understanding of fire dynamics plus the protection requirements of the fire code. In addition, the project includes a minimum 300-foot setback of the energy storage system to adjacent property lines and will implement strict vegetation management protocols for the life of the facility. Therefore, sufficient distance between battery storage containers and onsite or offsite vegetation will be established and continuously maintained to eliminate risk of fire spread to adjacent vegetation. Additional information on the risk of wildfires, setback requirements, and further analysis on potential battery failures is included in **Sections 4.9**, *Hazards and Hazardous Materials*, and **4.18**, *Wildfire*, of this EIR.

While fires at battery energy storage systems are rare, environmental monitoring that has occurred during and after outdoor cabinet-type battery energy storage system fires has shown no impact to the surrounding environment. For example, following an outdoor cabinet-type BESS fire at a San Diego Gas & Electric facility in Escondido, San Diego on September 5, 2024, County Hazmat conducted air monitoring over a four-hour period during the incident at eleven different locations. The monitoring found only normal products combustion of a structure fire were detected and at levels well below exposure thresholds set by the National Institute for Occupational Safety and Health and Occupational Safety and Health Administration. A third-party contractor conducted additional air quality monitoring at eighteen different locations during the incident and for an additional 12 hours after the fire was extinguished and concluded that at no time during the incident did the levels of oxygen deviate from 20.9 percent, which is considered normal atmospheric level. Any decrease in the percentage of oxygen would indicate that there was some unknown gas in the atmosphere that was not able to be detected by monitoring equipment. No such deviation was detected (SDG&E, 2024a).

The project includes firewater tanks, consistent with KCFD requirements for other similar projects. The final amount of firewater storage is not expected to exceed 30,000 gallons of usable water. Due to the project electing to only use cabinet-type battery enclosures, the use of the fire water tank is only intended to cool adjacent uninvolved enclosures if needed during a fire and not directly used on a battery fire, thus eliminating any water runoff concerns both due to the limited water quantity and indirect application. By way of the same incident example, the fire water runoff used during the San Diego Gas & Electric fire in

Escondido was sampled and found to have no levels of contamination above safe drinking water levels. Eurofins Calscience, an accredited environmental testing lab, in collaboration with San Diego County Wastewater Division, sampled for 17 different containments. Six samples had detectable concentrations, but all were below safe drinking water levels. The remaining 11 samples did not detect any levels of the sampled for contaminants. The San Diego County Wastewater Division at Hale Avenue Resource Recovery Facility confirmed that there were no concerns with this water entering the environment (SDG&E, 2024b).

Additionally, the project would comply with California Public Utilities Code Section 761.3, requiring an emergency response and action plan developed in coordination with local emergency management agencies, unified program agencies, and local first responders. The project would also implement **Mitigation Measure MM 4.14-1** (see **Section 4.14,** *Public Services* for full mitigation measure text), which requires the project proponent/operator 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 during construction, operation and decommissioning. Under the Fire Safety Plan, construction and maintenance personnel would also be trained and equipped to extinguish small fires, thus reducing the risk of fire onsite, and information would be provided to first responders about the type of battery energy storage technology onsite, potential hazards and mitigations, and recommended firefighting tactical procedures in case of a fire incident. With implementation of **Mitigation Measure MM 4.14-1**, in addition to complying with applicable design requirements and following industry best practices, potential impacts on biological resources as a result from the proposed energy storage system at the project would be less than significant.

Swainson's Hawk, Golden Eagles, California Condor, and Other Raptors. Potential direct impacts to raptor species from the operations and maintenance phase of the project may occur through the collisions into and/or electrocution from power lines anticipated to be installed within the project site but particularly along the proposed gen-tie interconnection routes. Raptor prey sources such as rodents and small birds are still likely to inhabit the area around solar panels on the project site. Raptors may be able to use the solar panels, perimeter fencing, and utility structures surrounding the facilities as perch sites for hunting. While collision/electrocution impacts to the aforementioned raptors are potentially significant, impacts would be reduced through implementation of **Mitigation Measures MM 4.4-15** and **MM 4.4-16**. Mitigation Measure **MM 4.4-15** requires power lines to be installed per APLIC standards, reducing the likelihood of collision and/or electrocution from power lines. **Mitigation Measure MM 4.4-16** requires the project proponent/operator to prepare and implement an Avian Mortality Monitoring Program to collect data on avian mortality at the facility and implement adaptive management where necessary to reduce impacts on avian species. Direct and indirect impacts to raptors would be less than significant with implementation of the above mitigation measures.

Migratory Birds. Direct and indirect impacts to avian species may occur during project operation and maintenance through individual collisions with project facilities and equipment including transmission wires, fencing, array structures, and heavy equipment. Such risks are commonplace with most human development activities. Factors that may determine the risk of avian collisions with man-made structures include the size, height, and specific attributes of the structures (wind turbines, guy wires, and lighting/light attraction). Other factors include the siting in high-risk areas, frequency of inclement weather, type of development, and the species at potential risk. Such collisions can result in injury or mortality of avian species from electrocution, including in the case of power lines. Collisions with project facilities and equipment would be considered a potentially significant impact under CEQA.

Factors that have been empirically demonstrated to result in elevated collision risk at various types of facilities and structures are not present at the project site, which consists of low-height photovoltaic (PV) arrays and a few structures (i.e., battery enclosures and an O&M facility). The project would incorporate only minimal lighting required for security and would adhere to best management practices in an effort to avoid attracting avian species. Thus, while individual impacts may occur due to collisions with project facilities and equipment, the risk of significant impacts to avian populations is minimal.

To reduce potentially significant direct and indirect impacts to migratory birds, **Mitigation Measures MM 4.1-6** (Kern County Dark Skies Ordinance), **MM 4.1-7** (minimize glare and spectral highlighting) (see **Section 4.1**, *Aesthetics*, for full mitigation measure text), and **MM 4.4-15** (APLIC guidelines) would be implemented. With implementation of these mitigation measures, impacts to migratory birds would be less than significant during operation and maintenance with implementation of these mitigation measures.

Decommissioning

The post-project condition of the project site as a result of project construction and operation would be different than pre-project conditions. Decommissioning would only directly impact areas that were previously disturbed during project construction; therefore, direct impacts to native habitats and rare plants are expected to be less than significant. If special-status species have recolonized the project site during the operation and maintenance phase, decommissioning activities could impact these species, similar to the direct impacts described for construction. Wildlife with the potential to utilize partially developed habitats and man-made structures include western burrowing owl, desert kit fox, badger, bats, and nesting birds. Indirect impacts to biological resources would be similar to those that would occur during construction but would depend on the resources present adjacent to the project site at the time of decommissioning. Additional indirect impacts could include degradation of adjacent habitat if the site is colonized by invasive species or generates excessive runoff or dust due to a lack of vegetation. Impacts to these species would be considered significant without mitigation. While impacts during decommissioning are potentially significant, impacts would be reduced through implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-4**, **MM 4.4-8**, **MM 4.4-9**, and **MM 4.4-14**. Implementation of these mitigation measures during the decommissioning period would reduce potentially significant impacts to special-status wildlife and plant species to less than significant.

Project Design Features to Avoid, Preserve and Minimize Impacts to Western Joshua Tree and Joshua Tree Woodland at the Project:

Per **Chapter 3**, *Project Description*, the project includes the following avoidance and minimization measures which have been incorporated into **Mitigation Measure MM 4.4-7**:

- An onsite 50-foot vegetated strip between the project site and Tehachapi Willow Springs Road will remain undeveloped as shown on **Figure 3-3**, *Proposed Site Plan*.
- The project includes restoration and enhancements of WJT habitats through relocation of a minimum of 10,000 onsite WJT stems to the onsite Woodland Habitat Preservation Areas, to the 50-foot vegetated strip along Tehachapi Willow Springs Road, and to other onsite or offsite conserved lands.

- Creation of 420 acres of Woodland Habitat Preservation Areas on the project site would avoid impacts to contiguous blocks of Joshua tree woodlands (preserving approximately 34,200 living and dead WJT stems).
- The 420 acres of Woodland Habitat Preservation Areas exceed the approximately 325 acres of mapped Joshua tree woodland at the project to allow space for relocation of WJT into less dense portions of these areas, and for the potential organic expansion of existing Joshua tree woodland into these areas.
- The Woodland Habitat Preservation Areas would be protected for the life of the project and are shown on **Figure 3-3**, *Proposed Site Plan*.
- The project proponent intends to obtain take coverage from CDFW for impacts to WJT and, prior to the issuance of grading or building permits, documentation of take authorizations will be provided to Kern County. Mitigation for impacts to WJT would be coordinated with CDFW through take coverage permitting and is expected to include measures such as seed collection, WJT relocation requirements, and the acquisition of offsite compensatory mitigation lands with a focus on WJT refugia habitat.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.1-1, MM 4.1-3, MM 4.1-6, MM 4.1-7 (**see **Section 4.1**, *Aesthetics*, for full mitigation measure text), **MM 4.3-3** (see **Section 4.3**, *Air Quality*, for full mitigation measure text), **MM 4.9-2** (see **Section 4.9**, *Hazards and Hazardous Materials*, for full mitigation measure text), and **MM 4.13-1** (see **Section 4.13**, *Noise*, for full mitigation measure text), **MM 4.14-1** (see **Section 4.14,** *Public Services*, for full mitigation measure text), and:

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 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 shall be provided in writing to the Planning and Natural Resources Department.

The following measures pertain to the Lead Biologist:

a. The Lead Biologist 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 to oversee compliance with protection measures during operations.

c. The Lead Biologist or approved Biological Monitor 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 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 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 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 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 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 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 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 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 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 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 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 or approved Biological Monitor 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 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 or approved Biological Monitor. 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 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 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 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.

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.

MM 4.4-5: Within 14 days prior to the commencement of ground-disturbing activities, the Lead Biologist 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 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, 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 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 shall be avoided by a buffer of 25 feet. Sturdy, highly visible, orange plastic construction fencing (or equivalent material verified by the Lead Biologist) 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. Fencing will also be installed in such a way as to avoid wildlife entanglement (i.e., installed with a gap between the bottom of the fence and ground level) and promote wildlife permeability. 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 present on the site that have not otherwise been accounted for in an approved removal 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 impacted 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 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: Prior to the issuance of grading permits, the project applicant shall provide proof of fee payment for the removal of silver cholla and beavertail pricklypear in accordance with the California Desert Native Plant Act to the Kern County Planning and Natural Resources Department.

MM 4.4-7: The project shall avoid western Joshua tree (WJT) individuals, except to the extent take is permitted by CDFW. Prior to the issuance of grading permits, the project applicant shall consult with CDFW regarding 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 issuance of grading permits, site plans shall clearly identify and label an onsite 50-foot vegetated strip as a receiver site for WJT impacted by the project,

located between the project site and Tehachapi Willow Springs Road, and will remain undeveloped for the life of the project.

b. 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 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 CESA or CDFW take requirements and compensatory mitigation related to the protection or mitigation of impacted Joshua trees.

c. 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 10,000 onsite WJT stems to the onsite Woodland Habitat Preservation Areas, to the 50-foot vegetated strip along Tehachapi Willow Springs Road, and to other onsite or offsite conserved lands.

d. Prior to issuance of grading permits, the project proponent shall identify within site plans the creation of 420 acres of Woodland Habitat Preservation Areas on the project site that avoid impacts to contiguous blocks of Joshua tree woodlands, thereby preserving approximately 34,200 living and dead WJT stems. The Woodland Habitat Preservation Areas shall:

    1. be labeled and identified on all plans, with boundaries clearly illustrated and included on plan legends. Woodland Habitat Preservation areas shall be consistent with areas shown on **Figure 3-3**, *Proposed Site Plan,* of the Final EIR.

    2. exceed the total 325 acres of mapped Joshua tree woodland at the project to allow space for relocation of WJT into less dense portions of these areas, and for the potential organic expansion of existing Joshua tree woodland into these areas.

    3. be protected for the life of the project.

e. 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 4.4-8: Within a maximum of 30 days of the start of ground disturbance for construction or decommissioning activities, a Lead Biologist 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 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 4.4-9: If construction and decommissioning activities are conducted during the typical nesting bird season (February 1 through August 31), a Lead Biologist or their designee shall conduct a pre-construction or pre-decommissioning nesting survey within 14 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 14 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, a Lead Biologist or approved Biological Monitor shall establish an appropriate buffer distance around the nest site (typically 100 feet for passerines and up to 500 feet for raptors). The buffer shall remain in place until the Lead Biologist or approved Biological Monitor has determined that the nest is no longer active. Encroachment into the buffer may occur at the discretion of the Lead Biologist in consultation with the Kern County Planning and Natural Resources Department.

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 4.4-10: No more than 14 days prior to commencement of ground-disturbing activities, a Lead Biologist 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 radius (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 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. 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, 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 Incidental Take Permit (ITP) issued for the project by CDFW authorizing take of the species.

MM 4.4-11: 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 or their designee no more than 30 days prior to project ground disturbance.

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

b. If the Lead Biologist 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.

c. If the Lead Biologist 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.

MM 4.4-12: If construction activities are scheduled to be initiated during the Swainson's hawk nesting season (March 1 through September 15), a Lead Biologist 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 & CDFW Guidance (2010).

To the extent feasible, the project applicant 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 a Lead Biologist or approved Biological Monitor and no construction within the buffer shall be allowed until the Lead Biologist has determined the nest is no longer active. Encroachment into the buffer may occur at the discretion of a Lead Biologist in consultation with 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.

MM 4.4-13: Within 14 days prior to the commencement of any ground-disturbing activities a Lead Biologist 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, including desert tortoise, within the project site, as well 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 14 days prior to ground disturbance in specific areas of the site.

a. If no Class 1 desert tortoise burrows or tortoises are discovered during preconstruction surveys, no further mitigation for desert tortoise is necessary. If Class 1 burrows or tortoises are identified on the project site during preconstruction surveys, the project proponent shall be required to consult with the USFWS and CDFW regarding take coverage, and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any issued permit for the project authorizing take of the species. Documentation of any such take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department.

b. A Raven Management Plan shall be developed for the project site in accordance with USFWS guidelines and shall implement management measures for ravens in the project area. This plan shall include at a minimum:

    1. 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.

    2. Identification of all common raven nests within the project area during construction.

    3. 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 USFWS, CDFW, and the Kern County Planning and Natural Resources Department within five calendar days; and

    4. 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 4.4-14: 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 4.4-15: The project proponent/operator shall install power lines in conformance with Avian Power Line Interaction Committee (APLIC) standards for electrocution-reducing techniques as 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 4.4-16: 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 4.4-17: 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 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 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 a Lead Biologist 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. If avoidance of an active nest is not feasible, the project proponent/operator shall consult with CDFW regarding potential for project activities to result in take 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 4.4-18 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 County Planning 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. 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.

Level of Significance after Mitigation

Even with implementation of the project design features and **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 4.4-18**, , **MM 4.9-2**, **MM 4.13-1** and **MM 4.14-1**, impacts would be significant and unavoidable for WJT; however, impacts would be less than significant for all other affected species.

Impact 4.4-2: The project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

The project site does not support any riparian habitat. The project site is not located within designated final or proposed critical habitats for federally listed plant or wildlife species, nor is it located within or adjacent to critical habitats. The project would have no impacts to these resources and no measures are warranted.

The Study Area contains three sensitive natural communities: desert needlegrass grassland (*Stipa speciosa* Herbaceous Alliance), scalebroom scrub (*Lepidospartum squamatum* Shrubland Alliance), and Joshua tree woodland (*Yucca brevifolia* Woodland Alliance).

Desert needlegrass grassland: Desert needlegrass grassland is a sensitive natural community with a rarity ranking in California of S2 (imperiled). Approximately 246 acres of desert needlegrass grassland were

mapped within the 8,606-acre Study Area. Desert needlegrass grassland occur in the southwestern portion of the Study Area, and a portion of the 246 acres is anticipated to be impacted by the project.

Scalebroom scrub: Scalebroom scrub is a sensitive natural community with a rarity ranking in California of S3 (vulnerable). Approximately 29 acres of desert needlegrass grassland were mapped within the 8,606-acre Study Area. This community was observed along a dry streambed that runs across the Study Area. A portion of this may be impacted by project activities.

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 to desert needle grassland and scalebroom scrub would be less than significant because, following construction activities, these sensitive natural communities are expected to continue germinating throughout project operations, ensuring the communities' persistence on and around the project site. Given the relatively low level of impact and the small size of the project footprint within the desert needlegrass grassland and scalebroom scrub, impacts would be less significant.

Joshua tree woodland: Joshua tree woodland is a sensitive natural community with a rarity ranking in California of S3 (vulnerable). Joshua tree woodlands were mapped where the density of WJTs were 1 percent or greater in cover; approximately 325 acres of Joshua tree woodland were mapped at the project. Joshua tree woodland was generally mapped within the northeastern portion of the project (see **Appendix D10** of this EIR).

Potential impacts to Joshua tree woodland would primarily result from construction of the project and associated infrastructure within the project development footprint. The project has been designed to avoid the majority of Joshua tree woodland on the project site in coordination with Kern County and as depicted in **Figure 3-3,** *Proposed Site Plan*. Approximately 420 acres of Woodland Habitat Preservation Areas have been delineated wherein large contiguous blocks of Joshua tree woodland within the project site will be preserved. These Woodland Habitat Preservation Areas include 195 acres of contiguous Joshua tree woodland (60 percent of all mapped Joshua tree woodland at the project) as well as interspersed non-woodland areas. The less dense portions of the Woodland Habitat Preservation Areas are intended to allow space for natural dispersal, organic expansion of woodland habitat and/or relocation of WJTs from other areas of the project, and are anticipated to facilitate the creation of additional Johsua tree woodland within the Woodland Habitat Preservation Areas. Additionally, the non-woodland portions of the Woodland Habitat Preservation Areas facilitate connectivity between smaller woodland blocks, creating habitat continuity for not only WJTs, but the species that cohabitate with them. The Woodland Habitat Preservation Areas would be protected for the life of the project and are shown on **Figure 3-3,** *Proposed Site Plan*, which will be approved and enforced by the County pursuant to an enforceable condition of approval.

In addition, the project would obtain take coverage from CDFW prior to the removal of any WJTs and mitigation for WJT impacts would be coordinated with CDFW through take coverage permitting (**Mitigation Measure MM 4.4-7**). Although implementation of the proposed project would result in a significant and unavoidable impact to WJT outside of the identified Joshua tree woodland areas (see **Impact 4.1-1** above), with the establishment Woodland Habitat Preservation Areas, which would protect the majority of existing Joshua tree woodland on the project site and facilitate the creation of additional woodland, and implementation of **Mitigation Measure MM 4.4-7**, potential impacts specifically to Joshua tree woodland would be reduced to less than significant.

Jurisdictional Features: Sixty-eight potentially jurisdictional features were observed within the 8,660-acre jurisdictional delineation study area. The features generally flow from the northwest to the southeast in the majority of the study area. All of the features in the study area are generally characterized as ephemeral, single-thread, low-gradient and low-sinuosity channels lacking riparian or desert wash species. The project may have direct impacts on jurisdictional features during project construction or due to placement of project facilities. Implementation of the project could result in indirect impacts on adjacent jurisdictional features that are not directly impacted by project construction or infrastructure. Alteration of drainage patterns on the project site could affect downstream areas by redirecting flow and runoff. Construction-related pollution, airborne fugitive dust, erosion, runoff, siltation, sedimentation, and soil compaction could adversely affect jurisdictional features. Potential indirect impacts also include the introduction and spread of invasive, exotic plants that could result in permanent indirect impacts to jurisdictional features. These impacts are considered potentially significant. Potential impacts would be reduced through implementation of the project's Stormwater Pollution Prevention Plan per **Mitigation Measure MM 4.10-1** (see **Section 4.10,** *Hydrology and Water Quality,* for full mitigation measure text), which would require preservation of existing vegetation and topography to the maximum extent feasible, as well as include erosion and sediment control BMPs designed to prevent erosion and sedimentation from occurring during project construction. Compliance with the Kern County Grading Code also requires erosion prevention measures be implemented.

With regard to erosion and sedimentation during project operation caused by increased runoff from impervious surfaces, large amounts of pervious ground surface would remain during project operation that would continue to absorb the majority of surface flows. Further, **Mitigation Measure MM 4.10-2** (see **Section 4.10,** *Hydrology and Water Quality,* for full mitigation measure text) would require the submittal of a Final Drainage Plan for the project that would evaluate and minimize potential increases in runoff and ensure that the retention basins and other stormwater management features are implemented consistent with existing regulatory requirements. With these mitigation measures, impacts would be reduced to less than significant.

Impacts would be further reduced through implementation of **Mitigation Measures MM 4.10-1, MM 4.10-2, MM 4.4-19,** and **MM 4.4-20**. If jurisdictional features are to be impacted, the project proponent/operator would implement **Mitigation Measure MM 4.4-20** to avoid, minimize, reduce, and/or mitigate impacts on potential jurisdictional features. Prior to any impacts to RWQCB or CDFW jurisdictional features, the project proponent/operator shall prepare and submit an application permit package to the RWQCB and obtain Waste Discharge Requirements (WDRs) from the RWQCB pursuant to the Porter-Cologne Act and shall consult with the CDFW on the need for a streambed alteration agreement pursuant to sections 1600-1616 of the CFGC, respectively. Compensatory mitigation for permanent impacts on jurisdictional features shall be identified prior to disturbance of jurisdictional features. The permits (WDRs and Streambed Alteration Agreements) will mandate BMPs, avoidance and protection measures, and/or compensatory mitigation ratios and other measures for impacts on jurisdictional features. Compliance with permits issued for the project by the RWQCB and CDFW, and implementation of the measures required by the permits would offset the loss of jurisdictional features and mitigate the project's impacts. The project proponent/operator would implement **Mitigation Measures MM 4.4-7, MM 4.10-1, MM 4.10-2, MM 4.4-19,** and **MM 4.4-20**. With implementation of the mitigation measures described above, impacts would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.4-7, MM 4.10-1, MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*, for full mitigation measure text)**,** and:

MM 4.4-19: Prior to issuance of any grading or building permit, the project proponent/operator shall submit to Kern County a jurisdictional delineation report detailing identified ephemeral drainages within the project boundary. The report shall include information as shown below as a plan if necessary and shall outline compliance with the following:

a. Clearly identify jurisdictional features identified in the jurisdictional delineation that cannot feasibly be avoided. This may be shown in plan form.

b. Any material/spoils generated from project activities shall be located away from jurisdictional areas or special-status habitat and 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.

c. 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.

d. 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. For all spills, the project foreman or designated environmental representative shall be notified.

MM 4.4-20: If Regional Water Quality Control Board (RWQCB) and/or 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 shall be provided to the Kern County Planning and Natural Resources Department.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.4-7, MM 4.10-1, MM 4.10-2, MM 4.4-19,** and **MM 4.4-20**, impacts would be less than significant.

Impact 4.4-3: The project would have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Wetlands, marshes, and vernal pools as defined by USACE are absent from the Study Area; therefore, no impacts to federally protected wetlands would occur. Impacts to state jurisdictional waters are discussed under **Impact 4.4-2**.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

No impact.

Impact 4.4-4: The project would interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Aquatic features that support fish are absent from the Study Area; therefore, impacts on fish and fish spawning habitats would not occur. In addition, native wildlife nursery sites are absent from the Study Area; therefore, impacts to wildlife nursery sites would not occur.

The Study Area is not located within or adjacent to a CDFW designated Essential Connectivity Area (ECA) or Natural Landscape Block (NLB). The nearest NLB is an unnamed NLB (ID# 177) located approximately located 4 miles northwest of the Study Area. One NLB (ID# 49) occurs 9 miles north of the Study Area. Therefore, the Study Area is located outside of an identified essential regional wildlife linkage. Further, the Study Area is not located within or adjacent to a South Coast Missing Linkages Wildlife Corridors or a Desert Linkage Network. Impacts on designated wildlife corridors or on identified essential regional wildlife linkages will not occur.

Connections of habitat (wildlife corridor) that joins two or more larger areas of similar habitat that would otherwise be fragmented or separated from each other are absent from the project site. In addition, wildlife crossings are also absent from the project site; therefore, impacts would not occur on wildlife corridors or wildlife crossings. Impacts on wildlife and their movement within or adjacent to project work areas may be elevated during construction, but these impacts would be temporary. Species would be expected to re-occupy adjacent habitats following completion of construction. While the project would introduce structures and features to the project site that could physically impede wildlife movement in certain areas and directions, potential long-term direct and indirect impacts on wildlife movement are not likely to be significant because abundant adjacent lands would remain available for wildlife movement after project development. While access roads associated with the proposed gen-tie line would result in vehicle use, wildlife would be able to pass across these dirt roads freely, since traffic would still be sparse.

Perimeter fencing would be designed with a gap at the bottom of the fence to allow permeability for wildlife and wildlife movement through and around the project site. Final perimeter fencing design would be

evaluated and developed in consultation with appropriate agencies, and the best-fit scenario would be incorporated at the project site. Additionally, project lighting would comply with all development standards, the Kern County Zoning Ordinance, and the goals, policies, and implementation measures of the Kern County General Plan. The proposed project would be required to implement **Mitigation Measure MM 4.1-6** (see **Section 4.1,** *Aesthetics*, for full mitigation measure text), which requires compliance with Kern County's Dark Skies Ordinance to minimize nighttime lighting in unincorporated areas of Kern County. As a result, development of the project would not restrict local or regional wildlife movement. Therefore, the project is not expected to adversely impact wildlife movement and potential impacts would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measure MM 4.1-6 (**see **Section 4.1**, *Aesthetics*, for full mitigation measure text) would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.4-5: The proposed project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Studies of the biological resources associated with the project site were conducted and reports were prepared to comply with the policies and programs described within Kern County General Plan. As currently designed, the proposed project is considered consistent with the Kern County General Plan. The project would implement mitigation measures to reduce potential project-related impacts to sensitive biological resources including special-status species, sensitive natural communities, and jurisdictional features. Impacts of these resources are discussed above.

Kern County does not have a tree protection ordinance and therefore, impacts would not occur. The County promotes the preservation and management of oak woodlands and individual oaks in its General Plan. The project site does not support oak woodlands or individual oak trees; therefore, there would be no impact.

The Soledad Mountain Elephant Butte Specific Plan encourages the preservation of WJT and Joshua tree woodlands. Approximately 130 acres of the project site and Western Joshua Tree Impact Area (see **Figure 4.4-2**) are within the administrative boundaries of this Specific Plan. As discussed above, the project has been designed to avoid the majority of Joshua tree woodland on site in coordination with Kern County and as depicted in **Figure 3-3**, *Proposed Site Plan*. Approximately 420 acres within the project site would be preserved as Joshua tree Woodland Habitat Preservation Areas. These Woodland Habitat Preservation Areas include 195 acres of contiguous Joshua tree woodland (60 percent of all mapped Joshua tree woodland at the project) as well as interspersed non-woodland areas. The less dense portions of the Woodland Habitat Preservation Areas are intended to allow space for natural dispersal, new growth, and/or relocation of WJTs from other areas of the project, and are anticipated to facilitate the creation of additional Johsua tree woodland within the Woodland Habitat Preservation Areas.

Although the project would result in impacts to WJTs as described above, the project includes implementation of a number of avoidance and minimization measures to preserve WJT and Joshua tree

woodland at the project site and would comply with **Mitigation Measure MM 4.4-7**. The project would obtain take coverage from CDFW and comply with all avoidance, minimization, and compensatory mitigation measures, as set forth in any incidental take permit issued to the project by CDFW. Thus, the project would be consistent with the Soledad Mountain Elephant Butte Specific Plan for those portions of the project site within the specific plan boundaries. See also discussions under **Impacts 4.4-1** and **4.4-2 above** for analysis regarding WJT and Joshua tree woodland impacts. With implementation of **Mitigation Measures MM 4.4.1** through **MM 4.4-20** described previously, impacts related to local policies or ordinances protecting biological resources would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-20** would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-20**, impacts would be less than significant.

Impact 4.4-6: The project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The project site is located within the boundaries of two conservation plan areas: the West Mojave Plan (WEMO Plan) and the DRECP. At this time, the WEMO Plan and DRECP are applicable only to BLM-administered public lands within their boundaries. Although the project site is within the WEMO Plan and DRECP areas, it is not encompassed within BLM-administered lands; therefore, there would be no impact.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

No impact.

4.4.5 Cumulative Setting, Impacts, and Mitigation Measures

Cumulative impacts for a project would be significant if the incremental effects of the individual project are considerable when combined with the effects of past projects, other current projects, and probable future projects. As described above, the project-specific impacts would be less than significant with implementation of **Mitigation Measures MM 4.1-1, MM 4.1-3, MM 4.1-6, MM 4.1-7 (**see **Section 4.1**, *Aesthetics*, for full mitigation measure text), **MM 4.3-3** (see **Section 4.3**, *Air Quality*, for full mitigation measure text), **MM 4.4-1** through **MM 4.4-20, MM 4.9-2** (see **Section 4.9**, *Hazards and Hazardous Materials*, for full mitigation measure text), **MM 4.10-1, MM 4.10-2** (see **Section 4.10**, *Hydrology and*

Water Quality, for full mitigation measure text)**, MM 4.13-1** (see **Section 4.13**, *Noise,* for full mitigation measure text), and **MM 4.14-1** (see **Section 4.14,** *Public Services*, for full mitigation measure text).

There are several proposed, existing, and permitted solar energy and transmission projects in the region where the project site is located, as shown in **Figure 3-18**, *Cumulative Projects*, in **Chapter 3** of this EIR. As large-scale energy projects and urbanization pressures increase within Kern County, impacts to biological resources within the region are expanding on a cumulative level. As described in **Table 3-5,** *Cumulative Projects List*, several projects, including other utility-scale energy production facilities, are presently underway or proposed within the Antelope Valley. In general, bioregions are defined through physical and environmental features, including watershed boundaries and soil and terrain characteristics. Areas to the north and west of the Tehachapi Mountains, and to the south of the San Gabriel Mountains, are within a different bioregion and are separated from the project site by the natural geography that these ranges present. SR-14, at the eastern end of the Western Antelope Valley, also acts as a barrier to wildlife movement.

Several special-status species, both plants and wildlife, currently utilize the project site and surrounding vicinity. Implementation of the project in addition to the other projects underway or proposed within Kern County would impact transient wildlife species, including western burrowing owl, Swainson's hawk, other raptors including golden eagle, American badger, and desert kit fox. The project site contains habitat that support insects, rodents, and small birds that provide a prey base for raptors and terrestrial wildlife. In addition, based on the literature review and database search completed for the project, the region is known to support a diversity of special-status species, most of which are expected to utilize the project site on a transient basis, if at all.

Given the number of present and reasonably foreseeable future development projects in the Antelope Valley, the project, when combined with other projects, would have an incremental contribution to cumulative loss of foraging and nesting habitat for special-status species. Implementation of mitigation measures would reduce impacts to biological resources to less-than-significant levels on the project-level scale, with the exception of WJT (see **Impact 4.1-1**). However, the project, when combined with other related development projects proposed throughout the County, the cumulative impact would be significant and unavoidable.

The project would contribute to cumulative impacts to rare plant species, including WJT; however, after implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-7** and **MM 4.4-14**, which includes pre-construction surveys, avoidance, revegetation, and other compensation via the CFGC, the project's contribution of impacts to rare plant species would be less than significant.

In addition, common raven numbers have grown substantially in the past few decades in the western Mojave Desert. Ravens are predators of the desert tortoise and burrowing owl, and compete with, as well as prey on, many special-status raptors and birds. Raven numbers are such that they pose a serious threat to many desert species. Additionally, the common raven population growth is directly attributed to human development and the subsidies it creates that support this adaptable species. When considered within the cumulative context of related projects as described above, the project's contribution to maintaining artificially high common raven populations when combined with other related projects, is potentially significant. However, the contribution of the project with mitigation incorporated would not be cumulatively considerable because project impacts to special-status wildlife would be reduced.

When considered in combination with other existing and reasonably foreseeable projects in the surrounding flat, open portions of Antelope Valley from SR-14 to the Tehachapi foothills, the proposed project has the potential to further reduce local wildlife movement. However, wildlife movement within the project site

and area is likely diffuse, and flat, undeveloped lands would remain available to facilitate wildlife movement within the valley. Therefore, impacts concerning wildlife movement would be less than significant.

Project impacts to nesting migratory birds would be considered less than significant with implementation of **Mitigation Measure MM 4.4-9** by protecting nesting birds from disturbances during construction or operations and maintenance activities. Secondly, the loss of foraging habitat would be less than significant as the project will result in a small portion of the total available foraging habitat in the Antelope Valley. Available data suggest that injury to and mortality of birds may occur from collision with PV panels at solar facilities. However, the solar panels for the project would be designed to be anti-reflective to minimize glare (**Mitigation Measure MM 4.1-7**; see **Section 4.1**, *Aesthetics*, for full mitigation measure text) and reduce potential collision impacts to migratory birds. The Project would include construction of new power lines that have potential to cause injury or mortality from collisions or electrocution, and these effects are likely cumulative with other projects in the County that will be constructing power lines. However, this proposed project includes the commitment to adhere to current APLIC design standards, as described in **Mitigation Measure MM 4.4-15**, which would reduce the potential for bird injury and mortality from collisions and electrocution. Furthermore, it is assumed that other cumulative projects in the region also have similar measures (nesting bird surveys, anti-reflective solar panels, and APLIC design standards) to reduce potential impacts to migratory birds. Therefore, the incremental effects of the project on overall bird fatality from collision or electrocution risk in the Antelope Valley would not be cumulatively considerable, and impacts would be considered less than significant.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.1-1, MM 4.1-3, MM 4.1-6, MM 4.1-7 (**see **Section 4.1**, *Aesthetics*, for full mitigation measure text), **MM 4.3-3** (see **Section 4.3**, *Air Quality*, for full mitigation measure text), **MM 4.4-1** through **MM 4.4-20, MM 4.9-2** (see **Section 4.9**, *Hazards and Hazardous Materials*, for full mitigation measure text), **MM 4.10-1, MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*, for full mitigation measure text)**, MM 4.13-1** (see **Section 4.13**, *Noise*, for full mitigation measure text), and **MM 4.14-1** (see **Section 4.14,** *Public Services*, for full mitigation measure text) would be required.

Level of Significance after Mitigation

Despite implementation of the above mitigation, cumulative impacts would be significant and unavoidable to rare plant and special-status wildlife species known to occur or with potential to occur in the region.

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Section 4.5
Cultural Resources

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Section 4.5
Cultural Resources

4.5.1 Introduction

This section of the EIR describes the affected environment and regulatory setting of the project for impacts that may affect cultural resources. It provides contextual background information on cultural resources in the Study Area, summarizes the results of cultural resources investigations conducted for the project, describes the regulatory setting, and discusses the need for mitigation measures, where applicable. Native American consultation conducted by the County for purposes of compliance with California Environmental Quality Act (CEQA) requirements prompted by Assembly Bill 52 and Senate Bill 18, as well the project's potential impacts on tribal cultural resources, are addressed in **Section 4.16**, *Tribal Cultural Resources*, of this EIR.

The information in this section is based on the cultural resources technical report prepared by Tetra Tech, *Cultural Resource Phase I Investigation Report, Discovery Solar PV and Storage Project, Kern County, California* (**Appendix E1**) and the Tetra Tech cultural resources memo *Addendum Infill Survey of the Phase I Cultural Resource Inventory for the Discovery Solar PV and Storage Project* (**Appendix E2**).

Cultural investigations were conducted to comply with the California Public Resources Code (PRC) Chapter 2.6, Sections 21083.2 to 21084.1, and the CEQA *Guidelines*, California Code of Regulations (CCR) Title 14, Chapter 3, Sections 15000 to 15387. Due to the culturally sensitive nature of the information in the report, a non-confidential version of the technical report is included as Appendix E to this EIR (pursuant to CCR § 15120(d)).

Cultural Resource Terminology

For the purposes of CEQA, "cultural resources" generally refer to prehistoric and historical archaeological sites, isolates, and the built environment. Cultural resources can also include areas determined to be important to Native Americans. Below are definitions of key cultural resources terms used in this section:

- **Alluvium**: a fine-grained fertile soil consisting of mud, silt, and sand deposited by flowing water on flood plains, in riverbeds, and in estuaries.
- **Archaeological site**: A site is defined as the place or places that are at least 50 years old where the remnants of a past culture survive in a physical context that allows for the interpretation of these remains. Archaeological remains usually take the form of artifacts (e.g., fragments of tools, vestiges of utilitarian, or nonutilitarian objects), features (e.g., remnants of walls, cooking hearths, or midden deposits), and ecological evidence (e.g., pollen remaining from plants that were in the area when the activities occurred). Prehistoric archaeological sites generally represent the material remains of Native American groups and their activities dating to the period before European contact. In some cases, prehistoric sites may contain evidence of trade contact with Europeans. Ethnohistoric archaeological sites are defined as Native American settlements occupied after the arrival of European settlers in California. Historic archaeological sites reflect activities during the Historic period.

- **Artifact**: An object that has been made, modified, or used by a human being.
- **Cultural Resource**: Cultural resources are expressions of human culture and history in the physical environment that are generally at least 50 years old, and may include archaeological sites, buildings, structures, objects, districts, works of art, architecture, and natural features that were important in past human events. They may consist of physical remains, but also may include areas where significant human events occurred, even though evidence of the events no longer remains. Cultural resources also include places that are of traditional cultural or religious importance to social or cultural groups.
- **Ethnographic**: Relating to the study of human cultures. "Ethnographic resources" represent the heritage resources of a particular ethnic or cultural group, such as Native Americans or African, European, Latino, or Asian immigrants. They may include traditional resource-collecting areas, ceremonial sites, value-imbued landscape features, cemeteries, shrines, or ethnic neighborhoods and structures.
- **Historic period**: The period that begins with the arrival of the first nonnative population and thus varies by area. In 1772, Commander Don Pedro Fages was the first European to enter Kern County, initiating the historic period in the area.
- **Historical Resource**: This term is used for the purposes of CEQA and is defined in the CEQA Guidelines (Section 15064.5) as: (1) a resource listed in, or determined to be eligible for listing in the California Register of Historical Resources (CRHR); (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.
- **Holocene**: Of, denoting, or formed in the second and most recent epoch of the Quaternary period, which began 11,700 years ago at the end of the Pleistocene.
- **Isolate**: An isolated artifact or small group of artifacts that appear to reflect a single event or activity. Because isolates may lack identifiable context and may not have the potential to add important information about a region, culture, or person, they are generally not considered under CEQA to be historical or unique archaeological resources (PRC Section 21083.2 and CEQA Guidelines Section 15064.5).
- **Lithic**: Of or pertaining to stone. Specifically, in archaeology lithic artifacts are chipped or flaked stone tools, and the stone debris resulting from their manufacture.
- **Pleistocene (Ice Age)**: An epoch in the Quaternary period of geologic history lasting from 1.8 million to 10,000 years ago. The Pleistocene was an epoch of multiple glaciations, during which continental glaciers covered nearly one-fifth of the earth's land.
- **Prehistoric period**: The era prior to European presence and written records; before the late 1700s in the Project Area. The later part of the prehistoric period is also referred to as the protohistoric

period in some areas, which marks a transitional period during which native populations began to be influenced by European presence resulting in gradual changes to their lifeways.

- **Quaternary Age**: The most recent of the three periods of the Cenozoic Era in the geologic time scale of the International Commission on Stratigraphy. It follows the Tertiary Period, spanning 2.588 ± 0.005 million years ago to the present. The Quaternary includes two geologic epochs: the Pleistocene and the Holocene Epochs.
- **Study Area:** Includes the area in which the cultural resources assessment was conducted for the project and encompasses the 7,700-acre project site and generation tie line, as depicted in **Appendix E1**. Areas designated for zone changes only were not included in the Study Area, as they will not be part of the development footprint. Areas within the addendum Infill Survey area include 41.3 acres, which are depicted in **Appendix E2**.
- **Stratigraphy**: The natural and cultural layers of soil that make up an archaeological deposit, and the order in which they were deposited relative to other layers.
- **Tertiary Period**: The geologic period prior to the Quaternary Age. It spans from about 66 million years ago to 2.588 ± 0.005 million years ago.
- **Tribal Cultural Resource**: These are defined in Assembly Bill 52 as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the CRHR or included in a local register of historical resources or determined by the lead agency, based on substantial evidence, to be significant based on the criteria in PRC Section 5024.1, subdivision (c). (PRC Section 21074 (a)(1)).
- **Unique Archaeological Resource**: This term is used for the purposes of CEQA and is defined in PRC Section 21083.2(g) as an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it either contains information needed to answer important scientific research questions and that there is demonstrable public interest in that information; has a special and particular quality such as being the oldest of its type or the best available example of its type; or, is directly associated with a scientifically recognized important prehistoric or historic event or person.

4.5.2 Environmental Setting

General Setting

The Study Area is situated in the western Antelope Valley, within the southwestern Mojave Desert. The Antelope Valley is a large, triangularly shaped closed basin formed between the Tehachapi Mountains (north) and San Gabriel Mountains (south). The Antelope Valley is defined in the north by the northeast-trending Garlock Fault zone of the Tehachapi Mountains, and the southwestern portion is defined by the southeast-trending San Andreas Fault zone. The valley floor is mantled in thick deposits of Quaternary alluvial and lacustral (lakebed) sediments derived from nearby granitic mountains that have been deposited over the course of thousands of years.

Specifically, the Study Area is situated on a gently sloping alluvial plain of the Tehachapi Mountains that trends southeastward and is characterized by numerous unnamed northwest- to southeast-trending braided ephemeral dry channels. Oak Creek, a seasonal or periodic drainage, traverses the central portion of the Study Area. A small section of the westernmost part of the project site lies on the upland terraces and alluvial fans of the Tehachapi Mountains, composed of older Quaternary alluvial sediments containing boulders, cobbles, gravel, and sand. The northern and eastern portions of the Study Area lie within the alluvial plain that consists of younger (Holocene) alluvium composed of boulders, cobbles, gravels, sand, and silts (**Appendix E1** and **Appendix E2**). Areas designated for zone changes only were not included in the Study Area, as they will not be part of the development footprint.

Paleoenvironment

During the Late Pleistocene/Early Holocene (18,000 to 8,000 years before present [BP]), the Mojave Desert experienced cool and wet conditions. The Middle Holocene (8,000 to 5,000 BP) was a period of relatively warmer and drier climate than today. The Late Holocene (5,000 BP to AD 1850s) is characterized by alternating periods of cooler and wetter conditions, and warmer and drier conditions.

During the Late Pleistocene, fossil evidence suggests that the Antelope Valley was inhabited by numerous large mammalian species including sloths, horses, bears, mammoth, bison, camels, as well as prong-horned antelope. The now-dry playas of the Mojave Desert were once part of a pluvial lake system that was hydraulically connected. In the Antelope Valley, Lake Thompson spanned over 950 square kilometers (366 square miles). As temperatures warmed, lake levels began to decrease and fluctuate at the end of this era.

During the Middle Holocene, the Mojave Desert slowly transitioned to the flora and fauna that are characteristic of the contemporary desert ecosystems. Packrat midden studies suggest creosote bush did not arrive in the Mojave Desert until around the Middle Holocene, approximately 6,900 to 6,000 years ago.

During the Late Holocene, the Mojave Desert exhibited climate variability marked by fluctuations in temperatures and precipitation. Much of the current vegetation arrived during the Late Holocene. Climatic variation includes two significant episodes of prolonged drought and warmer conditions between 800 and 1350 AD, referred to as the Medieval Climatic Anomaly (MCA), followed by a period of cooler and wetter conditions known as the Little Ice Age from 1400 to 1700 AD (**Appendix E1**).

Prehistoric Setting

The cultural context for the precontact period is defined by different temporal periods and cultural complexes based on cross-dating of distinct artifact types, cultural patterns and adaptions, climate change, and radiocarbon dates, as available. Archaeologist Mark Sutton recently refined the chronology for the Mojave Desert and suggests that chronological frameworks should be defined by cultural systems with a focus on traditions, patterns, and phases (Sutton, 2023). The generalized cultural sequence proposed by Sutton (2023) for the Mojave Desert includes the potential pre-Clovis occupation of the region, the Mojavean tradition, the Encinitas tradition, the Northern Mojave pattern of the Montane tradition, and the Palomar tradition. This chronology is summarized and presented here in the sections below and in **Table 4.5-1,** *Precontact Chronology for the Mojave Desert as Proposed by Sutton (2023)*. Additional references for this section are provided in **Appendix E1**.

TABLE 4.5-1. PRECONTACT CHRONOLOGY FOR THE MOJAVE DESERT AS PROPOSED BY SUTTON (2023)

Tradition	Pattern	Phase	General Date (BP)	Primary Marker Traits	Settlement System	Subsistence System
Palomar	Southern Mojave	Mojave River	1000-200	Desert series points, ground stone, villages	Initial permanent occupation of the Mojave River Valley	Acorns and pinyon nuts, mesquite, seeds, large and small game
		Traverse	1000-200	Desert series points, ground stone, villages	Diffusion of California traits east across the eastern Transverse Ranges	Acorns and pinyon nuts, small seeds, large and small game
Montane	Northern – Western Mojave	Montane II	600–200	Desert series points, abundant ground stone, brown pottery, inhumation	Relocation of settlements to montane settings, large villages	Acorns and pinyon nuts, seeds, large and small game
		Koehn Lake	1300–600	Rose Spring points, ground stone and obsidian, brown pottery, dark middens, inhumation	Large settlements at springs and a few long-term lakes in lower settings along the northern portion of the Mojave Desert	Mesquite, seeds, large and small game, emphasis on leporids
		Montane I	5000–1300	Elko and Gypsum points, ground stone, inhumation	Small settlements in montane settings of the southern Sierra Nevada, Tehachapi Mountains, Sierra Pelona, and Coso Range, and western Mojave Desert	Acorns and pinyon nuts, seeds, large and small game
Encinitas	Greven Knoll	Greven Knoll III	3000–1000	Elko points, abundant ground stone, cairn inhumations	Settlements along the northern fringes of the San Gabriel and San Bernardino Mountains	Yucca, seeds, large and small game, bones processed
		Greven Knoll I	4000–3000	Elko points, abundant ground stone, late discoidals, cairn inhumations	Settlements along the northern fringes of the San Gabriel and San Bernardino Mountains	Seeds, large and small game, bones processed

Tradition	Pattern	Phase	General Date (BP)	Primary Marker Traits	Settlement System	Subsistence System
		Greven Knoll I	9400–4000	Pinto points, abundant ground stone, cairn inhumations	Settlement on streams, springs, lakes, valley floors, and montane settings	Seeds, large and small game, bones processed
Mojavean	Pinto	Pinto III	5000–4000	Pinto points	Settlements moved to edges of the Mojave Desert, abandonment of the desert proper	Seeds, small game
		Pinto II	7500–5000	Pinto points, loss of GBS points, cremation	Occupation of springs with reliable water, large central camps	Seeds, small game, fewer artiodactyls
		Pinto I	8500–7500	Pinto points with GBS points, increase in ground stone, loss of crescents	Abandonment of lakeshores, settlements moved to streams and springs	Seeds, small game, artiodactyls
	Lake Mojave	Lake Mojave II	9300–8500	GBS points, ground stone, and crescents, loss of GBCB points	Continued occupation of lakeshores, streams, and springs	Lacustrine resources; focus on seeds, small game, and artiodactyls
		Lake Mojave I	12,000-9,300	GBS points, crescents, and ground stone, GBCB points, lack of Fluted Points	Occupation of lakeshores, streams, and springs, expansion in the Mojave Desert	Lacustrine resources; focus on seeds, small game, and artiodactyls
	Lakebed	Lakebed II	12,900–12,000	Appearance of GBCB fluted points, joint presence with Western Fluted points	Primary occupation of lakeshores in the western Mojave Desert, continued visitation of other areas of the desert	Lacustrine resources, loss of megafauna, greater emphasis on artiodactyls
		Lakebed I	13,200–12,900	Appearance of Western Fluted points	Occupation of lakeshores in the western Mojave Desert, visitation of other areas of the desert	Lacustrine resources, megafauna
Pre-Clovis	--	--	>13,200	Unknown	Unknown	Unknown

Notes:
GBS = Great Basin Stemmed; GBCB = Great Basin Concave Base
SOURCE: Sutton (2023): Table 2 and 3

Pre-Clovis Tradition (>13,200 BP)

Pre-Clovis presence in the Mojave Desert is the subject of debate among the archaeological community. One of the most controversial archaeological sites to claim a pre-Clovis occupation in the central Mojave Desert is the Calico Early Man site (>60,000 BP), recorded as a lithic quarry and workshop. Archaeologists debate the authenticity of the artifacts and age of the geological deposits at the Calico site. Other debated pre-Clovis sites are reported near high lakes stands at Lake China in western Mojave and Lake Manix, the Lake Manix Lithic Industry, in central Mojave Desert (Sutton, 2023). Currently, no compelling archaeological evidence has secured a positive pre-Clovis site in the Mojave Desert.

Mojavean Tradition (ca. 13,200 to 4000 BP)

The Mojavean Tradition proposed by Sutton (2023) is described as a single cultural entity consisting of the following patterns.

The Lakebed Pattern (ca. 13,200-12,000 BP)

The Lakebed Pattern delineates two district phases, the Lakebed 1 (ca. 13,200 to 12,900) and II (ca. 12,900–12,000), each characterized by unique fluted project point technologies and potentially different types of subsistence systems (Sutton, 2023). The groups associated with this pattern appear to have only occupied the western Mojave Desert. The Lakebed 1 Phase represents the potential peopling of the Mojave Desert from the southern San Joaquin Valley region or from the north (i.e., Owens Valley) bringing a Clovis-based technology (Sutton, 2023). The phase is characterized by an emphasis on the use of Western fluted points and some smaller stone tools and an absence of stone milling tools. The Lakebed II Phase is characterized by the continued use of Clovis technology and the appearance of the Great Basin Concave Base (GBCB) points, with the potentially to be bit younger (Sutton, 2023). It remains uncertain whether the point morphologies relate to a single or two separate technological traditions. Lakebed archaeological components are uncommon in the Mojave Desert and have only been identified primarily as isolates in the Mojave Desert and few habitation sites, one with the general association of Pleistocene megafauna (e.g., mammoth), located within the pluvial Lake China basin (north of the Antelope Valley) (Sutton, 2023). Fluted points have also been identified at Edwards Air Force Base in northwestern Antelope Valley (Caltrans, 2019). The Lakebed I Phase subsistence strategy remains unclear as there is no direct archaeological evidence linking flora and fauna exploitation. Based on the locality of the discovered artifacts, Lakebed I subsistence efforts may have been focused on migratory megafauna and lacustrine resources. This is not to say that they did not exploit a variety of small game and plant resources, especially with the extinction of megafauna. Hence, by the Lakebed II Phase, subsistence may have shifted toward small mammals. Lakebed groups possibly entered the Mojave Desert as the climate was becoming warmer and dry and the lakes in the region were starting to recede. Currently, data suggest these groups were hunters and collector-gatherers centered in the Lake China basin, with visits to the western Mojave Desert and southern Sierra Nevada to further exploit resources (Sutton, 2023).

The Lake Mojave Pattern (ca. 12,000-8800 BP)

The Lake Mojave Pattern is characterized by the Great Basin Stemmed (GBS) projectile points and the Lake Mojave and Silver Lake point types, and an absence of the Western fluted points (Sutton, 2023). During this pattern, the Mojave Desert continued to become warmer and drier, resulting in the continued recession of the pluvial lakes. Sutton (2023) proposes that the Lakebed and Lake Mojave groups were a

single population continuum (shared origin) adapting to variable environmental conditions through technological improvements in tools and subsistence acquisition. The Lake Mojave Pattern contains two district phases, Lake Mojave I (ca. 12,000 to 9,300 BP) and Lake Mojave II (ca. 9,300 to 8,500 years BP), which are primarily differentiated by tool technology.

The Lake Mojave I Phase groups migrated to the south and east across the Mojave Desert to inhabit areas such as the lake basins of the Mojave River system and other localities in the desert at lakes, streams, and springs (Sutton, 2023). The Lake Mojave I assemblage consists of GBCB and GBS points, crescents, and a relatively low frequency of stone milling equipment. As the megafauna became extinct across the desert, artiodactyl hunting became more specialized and supplemented with smaller mammals and reptiles. The precise utilization of crescents is currently uncertain, they may have served a function for hunting and processing resources (e.g., waterfowl) in aquatic environments since they are typically identified along Late Pleistocene or Early Holocene Lake shorelines, marshes, and estuaries. The presence of milling equipment suggests the processing of plant resources such as seeds (Sutton, 2023). Settlements continued around lacustrine resources of lake shorelines and expanded to other freshwater locations (i.e., streams, springs) with a subsistence system focus on seeds, small game, and artiodactyls (Sutton, 2023).

During the Lake Mojave II Phase, the tool assemblage is like the Lake Mojave I Phase, except only the Lake Mojave and Silver Lake point types were in use and the use of GBCB points were abandoned (ca. 9500 BP). Sutton (2023) suggests groups may have dropped the use of GBCB point forms due to the success rate of GBS points for hunting artiodactyls. As the desiccation of pluvial lakes continued in the persistent warm and dry climate, lake levels became shallower and more intermittent. As lakes became a less reliable ecozone for resources, groups focused on other areas with more consistent water availability (i.e., streams, springs). As the focus shifted from lacustrine resources, groups expanded to other patches in the desert to hunt small mammals and collect seeds such as mesquite, which was present by 9000 BP (Koehler et al., 2004). Groups during this phase may reflect a settlement pattern of a more generalized hunting and collecting adaptation utilizing desert scrub resource communities rather than lacustrine.

The Pinto Pattern (ca. 8500 to 4000 BP)

Succeeding Lake Mohave I and II Phases in the regional sequence is the Pinto Pattern consisting of three phases: Pinto I (8500 to 7500 BP), Pinto II (7500 to 5000 BP), and Pinto III (5000 to 4000 BP). This pattern is marked by the introduction of Pinto projectile points, eventually rendering the GBS obsolete during the Pinto II Phase. The Pinto Pattern subsistence system is portrayed as having a greater diet breadth than during the Lake Mohave Pattern. Large game hunting continued as the subsistence focus, but vegetal use and small animal (e.g., rabbits, hares, rodents, and reptiles) exploitation increased as environmental conditions deteriorated (i.e., Altithermal) and artiodactyl productivity decreased. In the Antelope Valley, Pinto type sites tend to occur in open settings near extinct streams and springs (Caltrans, 2019).

During the Pinto I Phase (ca. 8500 to 7500 BP), the environmental conditions continued to follow a warm and dry trend and most, if not all, of the pluvial lakes had become dry. The lakes may have experienced occasional, albeit temporary, infilling during wetter seasons and major storm events. This phase is marked by the introduction of Pinto projectile points and an increase in the use of stone milling equipment (Sutton, 2023). GBS points continued to be utilized but crescents become obsolete. Similar to the Lake Mojave Pattern, flaked stone, lithic bifaces, retouched flakes, and debitage of rhyolite, basalt, and quartzite materials were also part of the Pinto assemblage. In the western Mojave Desert, rhyolite is readily available and there was an emphasis of use by the Pinto phase groups. As the lakes became arid playas, groups were drawn to

streams and springs and subsistence shifted from lacustrine ecozones to a more focused collector-like system (Sutton, 2023).

The Pinto II Phase (ca. 7500 to 5000 BP) is marked by the abandonment of GBS points and the preferred use of the Pinto projectile point series. The warming trend of the Mojave Desert continued during this time and settlements continued to shift to more reliable, albeit few, fresh water sources such as Salt Springs in the central Mojave Desert. Sutton (2023) suggests populations may have decreased due to declines in available water sources and preferred subsistence resources such as artiodactyls.

The Pinto III Phase (ca. 5000–4000 BP) is characterized by the abandonment of the Mojave Desert by Pinot groups due to the unfavorable arid conditions of the Mojave Desert as streams and springs continued to desiccate (Sutton, 2023; Sutton, 1996:231). Settlements groups declined in size and moved to higher elevation areas with more reliable resources along the outskirts of the Mojave Desert. Collector-like subsistence practices persisted as some groups conducted logistical expeditions into the upland and desert ecozones, acquiring resources such as pinyon in the uplands and mesquite, along with other small plants and animals, at lower elevations.

The Bean Spring Site (CA-KER-2821/H) situated northwest of Willow Springs in the Antelope Valley represents a large prehistoric (and historic era ranch) site with a recovered assemblage that represents projectile point types that span the Mojavean Pinto Phase and Montane I and II Phases with recovered artifacts such as GBS, Pinto, Elko, and Cottonwood type projectile points (Caltrans, 2019).

The Encinitas Tradition (ca. 9,400 to 1,000 BP)

Along the southwestern Mojave Desert, the San Gabriel and San Bernardino Mountains were occupied by the Encinitas Tradition (often imprecisely called the Millingstone Horizon). The tradition is characterized by a transition from large projectile point tool use to a period of extensive millingstone and core tool use (Sutton, 2023: 22). The artifact assemblage typically consists of millingstones (manos or handstones, and metates), hammerstones, crude scrapers, cores, and other flaked-based stone tools. Manos and metates are thought to have been used to process small, hard seeds (and possibly nut) associated with the local vegetation communities (Glassow et al., 2007). Faunal assemblages from sites occupied along or near the southern California coast (bays, lagoons, and estuaries) suggest subsistence consisted primarily of shellfish and plant resources, with hunting and fishing secondary. Interior sites also illustrate an emphasis on processing floral (e.g., nuts and seeds) resources and hunting of a variety of faunal resources (e.g., deer). Populations were semisedentary.

The Greven Knoll Pattern (ca. 9400 to 1000 BP)

Sutton (2023:22) suggests the Greven Knoll Pattern was partly a response to arid conditions during the Altithermal and represents the movement of groups from the northern interior of southern California to the Transverse Ranges within the southwestern fringes of the Mojave Desert (i.e., the San Gabriel and San Bernardino Mountains). The Greven Knoll artifact assemblage is characterized by the rarity of projectile points, cogstones, and discoidals, and the plentitude of ground stone milling equipment such as manos and metates and the general lack of mortars and pestles, suggesting acorns were not processed in the interior until much later. Subsistence appears to be focused primarily on plant resources and small game. The Mojave Desert cultural influence occurs at sites with the presence of Pinto or Elko series projectile points, albeit rare. Greven Knoll Pattern groups had a flexible and long-lasting adaption and settled along lakes, streams, springs, the valley floor, and some mountainous areas.

The most notable characteristic of the Greven Knoll I Phase (ca. 9400 to 4000) is the increase and abundance of manos and metates and the rate occurrence of Pinto projectile points (Sutton, 2023:22). During this phase, the Pinto pattern technology may have spread southward from the Mojave Desert, or it may have been introduced by migrating Pinto Pattern groups moving south from the Transverse Ranges (Sutton, 2023:22). Taylor (1961, as cited in Sutton 2023; also see Moratto, 1984:546–547) suggests that Hokan (Yuman) communities migrated from the desert to the coast around the onset of the Altithermal or slightly before, bringing with them milling stone technology.

The Greven Knoll II Phase (ca. 4000 to 3000 BP) retains the characteristic of Greven Knoll I, except for the transition from Pinto Points to Elko points (although projectile point occurrence is rare) and the lack of "scraper planes," a unifacial lithic tool with steep edges, potentially utilized for scraping hides or processing vegetal materials like yucca (Wilmsen 1968, cited in Sutton, 2023). During the Greven Knoll III Phase (ca. 3000 to 1000 BP), the "scraper planes" begin to occur and become the marker of this phase, along with Elko points (still rate) and roasting pits that potentially were used for preparing yucca. The Lovejoy Spring site located north of the San Gabreil Mountains and situated on the Mojave Desert floor, along a series of small buttes, yielded material attributed to the Greven Knoll II or III Phase (Sutton, 2023).

The Montane Tradition (ca. 5000 to 200 BP)

The Montane Tradition (ca. 5000 to 200 BP), as suggested by Sutton (2023:31), demonstrates the evolution of societies speaking Northern Uto Aztecan (NUA) languages in the northwestern Mojave Desert (potentially the origination of NUA) and the southern Sierra Nevada into the ethnographically known Takic (Kitanemuk, and possibly Tübatulabal) and Numic groups (Kawaiisu, Koso Shoshone, and Southern Paiute) of the region. There are two distinct patterns of the Montane Tradition proposed by Sutton (2023): the Northern Mojave Pattern, comprising four phases and the Eastern Mojave pattern consisting of two phases. The Northern Mojave Pattern is presented here (as proposed by Sutton, 2023) because it is thought to have been present in the Antelope Valley.

The Northern Mojave Pattern

The Northern Mojave Pattern represents the cultural groups inhabiting the northern and western edges of the Mojave Desert. It is commonly accepted that the NUA languages potentially had its origins in the western Mojave Desert and southern Sierra Nevada, where it is believed groups spoke proto-NUA languages (Sutton, 2023; Moratto, 1986). During this pattern, people diversified their subsistence-settlement strategies with the appearance of the mortar and pestle, and introduction of the bow and arrow with the appearance of Rose Springs projectile points near the later part of the pattern. Increased trade also played a role in this desert adaptation. The Northern Mojave Pattern is delineated in four phases: Montane Phase I, Koehn Lake, Coso, and Montane II. Each phase is characterized by shifts in settlement patterns, subsistence strategies, and the seasonal cooperative utilization of the Mojave Desert lowlands for resource procurement. The Coso Phase groups inhabited the montane ecozones of the southern Sierra Nevada, the Argus Range, and the southern Panamint Mountains. The Montane I, Koehn Lake, and Montane II Phase groups lived in or near the Antelope Valley and are discussed below.

Montane I Phase (ca. 5000 to 1300 BP) groups occupied the mountain and foothill regions of the Sierra Nevada, Tehachapi Mountains, Sierra Pelona, and Coso Range. The western Mojave Desert was visited by these groups as a shared territory to utilize resources, as needed. The Montane I assemblage is characterized by the presence of ground stone, shell beads, and Elko and Gypsum projectile points. A shift in new technology occurs around ca. 1800 BP with the introduction of the bow and arrow as indicated by the use

of smaller, triangular, Rose Spring projectile point types. The adoption of this new technology may have increased hunting efficiency, potentially resulting in resource depression. The use of atlatl spears with the larger Elko and Gypsum type projectile points continued to about ca. 1300 BP, after which they are no longer represented in assemblages. Subsistence was focused on resources such as pinyon nuts, acorns, various other flora, and larger and small mammal resources such as lagomorphs and rodents.

The Koehn Lake Phase (ca. 1300 to 600 BP) is differentiated from the Montane I Phase as a time when groups shifted settlement and subsistence patterns. During this phase, groups transitioned from the highland regions to locations with favorable resources (i.e., fresh water, flora, and fauna) within the core Mojave Desert. Technology also shifted with the loss of the Elko and Gypsum type projectile points, the continued use of the Rose Spring types during the early portion of the phase, and the later adoption of the Cottonwood triangular projectile point type. An increase in obsidian from the Coso Volcanic Field in the Coso Range also marks this phase. Brownware pottery and incised slate ornaments and shell beads are also present (Sutton, 2023). Subsistence included mesquite, acorns, other various plants, and large and small game with an emphasis on lagomorphs. Commodities such as obsidian and marine shell were acquired through trade. Sutton (2023) suggests the site type for the Koehn Lake Phase is the village at the Koehn Lake site (CA-KER-875) located in mesquite dunes along the southwestern shoreline of Koehn Lake in the Fremont Valley (over 20 miles northeast of the Study Area). The site contained dark middens, projectile points, an abundance of ground stone, faunal material (i.e., lagomorphs), and sub-terranean structural post of mesquite (Sutton, 2023: 35). Environmental conditions were most likely more mesic during the occupation of the site. Evidenced of burned juniper berries recovered from the site suggest a juniper woodland was nearby. Former, small, Montane I Phase habitation sites within the foothill areas evolved into larger villages containing dark middens, a significant quantity of cultural material, and inhumation cemeteries. Examples of sites attributed to the Montane I Phase in the western Mojave include CA-KER-303 (Cottonwood Creek) in the foothills of the Tehachapi Mountains and CA-LAN-488 located in the foothills of the Sierra Pelona along the southwest margin of the Mojave Desert. Other habitation areas were established near water sources such as springs and creeks.

Sutton (2023) attributes the Montane II Phase (ca. 600 to 200 BP) with the ancestors of the Numic Kawaiisu along the northern edge of the Mojave Desert (e.g., foothill and montane areas), with the Takic Ktianeumuk of the western Mojave Desert exhibiting a similar archaeological pattern. This phase is marked by a shift in settlement as groups returned to the upland areas, like the Montane I Phase. Montane II coincides with the MCA and the environmental conditions of the Mojave Desert became more arid and drier, resulting in water sources such as Koehn Lake, or streams and springs receded or completely dried up. As available water and resources declined in the desert, groups relocated to more favorable upland areas. The assemblage is characterized by locally made brownware pottery, trade items, beads, bedrock mortars, and the continued use of Cottonwood projectile points and the introduction of Desert Side-notched forms (Sutton, 2023: 37).

An example of sites near and within the western Antelope Valley attributed to the Montane I and Koehn Lake phases include CA-KER-303, the Montane II phase includes the ethnographic Sand Canyon Kawaiisu village complex on the boarder of the southern Sierra Nevada and Mojave Desert and the Bean Spring site northwestern Mojave Desert (noted above) and Koehn Lake phase sites include Willow Springs (CA-KER-129), Buckhorn Springs (CA-LAN-1992), and Cantil (CA-KER-2211) (Sutton, 2023).

The Palomar Tradition (ca. 1000 to 200 BP)

The Palomar Tradition generally encompasses the southern Mojave Desert along the northern flank of the eastern Transverse Ranges (San Gabriel and San Bernardino Mountains) and northward along either side

of the Mojave River (Sutton, 2023:41-42). Prior to 1000 BP, this area was occupied by the Encinitas groups with the latest occupation attributed to the Greven Knoll III Phase. The Palomar Tradition includes the Southern Mojave Pattern, which is divided in two phases, the Mojave River and Traverse. By ca. 1000 BP, prehistoric aspects of the Takic Serrano became combined in the Mojave Pattern phases. Sutton (2023:41) suggests the cultural characteristics of the Mojave River Phase reflects Desert Serrano groups, and the Transverse Phase reflects the ancestors of the Mountain Serrano (Sutton 2023; Sutton and Earle, 2017).

The Mojave River Phase (ca. 1000 to 200 BP) is characterized by the emergence of the Desert Serrano after ca. 1000 BP that settled along the Mojave River and adjacent areas through ethnographic times. This phase includes the diffusion of Palomar traits eastward from Sierra Pelona along the northern margin of the San Gabriel Mountains. The archaeological assemblage markers include Desert series points, ground stone milling tools including mortar and pestles, shell beads, some local brownware pottery, and traded pottery (Sutton, 2023: 43). Settlement occurred as village sites along the Mojave River and margin of the San Gaberiel Mountains, and potentially other satellite sites in areas beyond the river. Subsistence was based on a wide variety of flora and fauna resources available along the riparian zone of the Mojave River and adjacent areas. Plant resources such as mesquite, juniper, yucca, cacti, and tule, and large and small game such as pronghorn, desert bighorn, deer, and small game such as lagomorphs, rodents, reptiles, and insects. The Mojave River phase groups did practice agriculture. The Mojave River served as a trade route among various groups exchanging commodities between the southern California Coast and the southern San Joaquin Valley with the Colorado River and the Southwest.

Transverse Phase (ca. 1000 to 200 BP) groups (Mountain Serrano) occupied the foothill and mountain settings of the San Bernadino Mountains. The assemblage is characterized by large, deep, dark middens; shell and steatite artifacts; obsidian; bedrock mortars; and pictographs. Subsistence included acorns and pinyon nuts, small seeds, and large and small game.

Ethnographic Setting

The project is in the territory associated with the Kitanemuk, who spoke a Serran language of the Takic family Serrano. There is very little ethnographic information regarding the Kitanemuk lifeways and the summary below is drawn from studies conducted by 20th century Euro-American researchers and does not necessarily include a Tribe's (descendants) perspective of their people and culture. Sources of ethnographic information are available in Tetra Tech (2025) included as Appendix E to this EIR.

The Kitanemuk occupied areas along fresh water sources in the Tehachapi Mountain foothills, areas along the northern slopes of the Liebre and Sawmill Range, and portions of the western Antelope Valley of the Mojave Desert. Their territory was bounded by the Kawaaiisu to the north, the Southern Valley Yokuts to the northwest, the Chumash to the southwest, the Tataviam to the south, and the Serrano to the south and southeast. The Kitanemuk engaged in various types of interactions and trade relations with various coastal and inland valley and desert neighboring Tribes.

Available ethnographic data suggest the Kitanemuk practiced customs similar to the Yokuts and the inland Chumash. Their territory included a vast area with a wide range of ecosystems from montane to high desert with a broad range of fauna and seasonal flora resources. The Kitanemuk economic subsistence was most likely based on available resources in their territory, such as pine nuts and acorns, mesquite, various roots and seeds, and small game. The Kitanemuk settlement pattern consisted of semi-permanent village sites within the Tehachapi Mountains and smaller special use/temporary sites focused on natural resource availability in the foothills and desert valley. A settlement in the western Antelope Valley at Willow Springs

was identified as the village of Panukavea or Sesevjek, and it is unclear whether this site was affiliated with the Desert Serrano or the Kitanemuk or both. Each village had a well-developed social and political structure that included a chief, a ceremonial manager, messengers, shamans, and diviners.

At the time of European contact, the Kitanemuk population was estimated at 500 to 1,000 individuals. Mission records suggest that many Serrano (or Kitanemuk) from the Willow Spring Village were removed from their lands to the Spanish Mission system at Mission San Fernando in early 1800s. By the 1850s, the U.S. Department of Indian Affairs records indicate that some Kitanemuk were present at the Rancho Tejon Indian Reservation in southeastern San Joaquin Valley.

Historic Context

The historic context provides a brief history of Kern County and the northern portion of the Antelope Valley and focuses on the built environment features found in the Study Area. Sources of historical information can be found in Tetra Tech (2025) included as **Appendix E1** to this EIR.

Early Euro-American Exploration

During the period of early Euro-American settlement, the Antelope Valley was the location of several trails, roads, and eventually rail lines that crossed the desert providing a means of travel for a variety of peoples. The Spanish arrived in the late 1700s and began establishing missions throughout California until the late 1800s, often engaging in conflicts with the aboriginal population that led to warfare. Fur trappers and Euro-Americans began to cross the desert in the early to mid-1800s. The Gold Rush era instigated the railroad, and surveyors began plotting a route for a transcontinental railroad. By the 1860s, livestock was driven to the Mojave Desert in the spring to feed in desert pastures and flocks of sheep were herded from the San Joaquin Valley along with cattle from the Kern River to the east. During this period, the Antelope Valley's main economic mainstays were ranching and mining.

Kern County was established in 1866. The first non-native exploration of the northern Antelope Valley began in the 1700s and later in the 1840s; permanent settlement occurred during the 1850s due to an influx of people headed to the new territory of California for gold. In 1854, Fort Tejon, a military post, was established near Castaic Lake and Grapevine Canyon, approximately 32 miles southwest of the Study Area.

The increase in development of the Antelope Valley peaked in the mid-1800s and can be attributed to several factors including the appeal of gold mining near the Owens and Kern Rivers, increased stagecoach and wagon travel to the area, and construction of the Southern Pacific Railroad line in 1876. Homesteaders grew alfalfa, barley, wheat, and fruits and nuts from the 1810s into the 1890s, but between 1894 and 1904 a decade-long drought occurred, ending the agricultural boom and forcing many settlers to flee. With the end of the drought, farmers returned and used technologically advanced irrigation methods, including electricity, which resulted in more reliable irrigation. From 1904 through 1913, the Owens River Aqueduct was built, spanning 233 miles between the Owens Valley, bringing water to Los Angeles, which also contributed to the success of the Antelope Valley economy. Agriculture continues to be an economic driver for Antelope Valley, along with mining of antimony, borax, calcium, chloride, feldspar, granite, gypsum, iron, lead, lime, limestone, Marold, potash, rotary mud, salt silica, tungsten, uranium, volcanic rock, and zinc. All of these mines are outside the Study Area. By the 1950s, some mines in Kern County contained the largest boron deposits in the world. Renewable energy projects (wind and solar) are current economic contributors to the region.

Mining

In the Antelope Valley, mining played a significant role in the development of the area. Kern County was known for its gold production, primarily from its two most prominent mines: the Yellow Aster in Randsburg, and the Golden Queen near Mojave. In addition to gold, early mining also concentrated on borax and later potash. In 1866, the Mining Act declared all mineral lands of public domain free and open to exploration and occupancy. Mining began in the El Paso Mountains during the 1860s and, by the middle of the 1890s, miners were moving into the region south of Mojave, digging for gold, silver, tungsten, salt, and pumice.

Mining in the Antelope Valley began in the mid-1890s at mines on Middle Butte, Soledad Mountain, and Standard Hill, producing both gold and silver. While there were no mines within the Study Area, there are mines adjacent and within a few miles. Middle Butte and its 19 mines are directly adjacent (but outside of) the Study Area to the southeast. Middle Butte Mine has undergone several periods of operation, the first of which began in 1894 into the early 1900s. The Great Depression instigated a second phase of operation in 1932. Gold was discovered at Cactus Queen Mine in 1934 and continued production until 1942 wherein the district experienced its most productive era. From 1942 to 1945, the mines were idle due to a halt in operations as a result of the Limitation Order L-208 issued by the United States which deemed gold mining as non-essential toward the World War II effort. In 1945, minimal operations resumed until another cessation in 1956. The Cactus Queen Mine was acquired in 1979 by CoCa Mines, Inc. and commercial operations resumed from 1986 to 1992. The Cactus Queen mine has been intermittently in operation throughout the following decades into 2024. Soledad Mountain, located outside of the Study Area and approximately 2 miles east, was mined in 1897. Soledad Mine produced large amounts of silver and gold extracted from three mines on Soledad Mountain. Standard Hill, also outside of the Study Area and more than 3 miles northeast, was in production from 1928 until 1942.

Residential settlement within the Study Area is sparse compared to surrounding cities like Sanborn, Mojave, and Rosamond. There are some residences within the Study Area that were constructed as recently as 2009, as well as remnants of former ranches constructed during the 1920s, 1930s, and 1950s. These are located outside the Study Area and are therefore not detailed in this report; however, their presence near the mines indicates these structures may have been associated with mining activities in the area as workers' residences or otherwise associated buildings.

Transportation

Two types of transportation have historically crossed through the project vicinity: railroads and roads.

The Southern Pacific Railroad came to Mojave in the 1870s, followed by the Atchison, Topeka, and Santa Fe Railroads later in the 1880s. This opened areas previously unsettled by homesteaders in search of cheap land, turning the historically isolated desert area of Kern County and the Antelope Valley into a region that attracted many new settlers. There were several factors for the increase in settlement of the area, including the passage of federal acts. One was passage of the Homestead Act of 1862, which granted adult heads of families 160 acres of public land with the possibility of ownership if they lived on the land for 5 years. Another was the Pacific Railway Act of 1862, which provided federal subsidies and loans and land for the construction of a transcontinental railroad and resulted in further encouraging people to settle along the rail lines and routes and create family farms. Communities were established along railroad stops, and Rosamond, Boron, and Inyokern became towns in this manner. Eventually, residential development

occurred outside the rail centers, settling in what became Palmdale, Lancaster, and Rosemond. There are no historic built environmental features associated with the railroad within the Study Area.

There are numerous existing unpaved and paved roads and segments of roads within the Study Area. While some have been previously recorded as historical architectural features, others are minor, unnamed roads that have not been officially recorded. A review of historic maps depicts these roads in their former and current alignments varying in length from less than 0.5 mile to over 5 miles, with travel in various directions and routes. Most of the roads are minor and first appear on historic maps from the 1920s through the 1960s. One of the oldest roads through the area is Oak Road (outside of the Study Area), depicted on historic maps as early as 1876 as a dirt road that ran from Mojave west to Oak Creek Pass, the only route through the Tehachapi Mountains until the construction of the railroad through this area in 1876. The Los Angeles and Tehachapi Road (P-15-016251) is another early road, first shown on General Land Office (GLO) maps in 1856, adjacent to a segment similar in length, crossing west moving toward southerly direction. It is adjacent to the current Tehachapi Willow Springs Road to the south.

Other roads in the Study Area are associated with mining operations and were constructed in later periods, first appearing on historic maps dating from 1935, crossing directly adjacent (or leading to) the mines. Roads shorter in length that are connected to longer roads lead to remnants of structures, indicating they were constructed specifically by the owners of those ranches or residences. There are also roads that appear to be associated with the construction and access to the Los Angeles Aqueduct, which are mostly short segments that first appear on historic maps in 1935. Other roads were potentially constructed to build and then maintain transmission lines and their associated substations in the region, given their proximity to transmission lines.

The alignments of many of these minor unpaved and unnamed roads within the Study Area have been altered, with some segments interrupted or no longer extant due to the placement of wind turbines or roads constructed to access wind farms that now intersect the historic route of a road. Some historic-era roads are currently inactive and are overgrown with vegetation from lack of use. The Tehachapi/Willow Springs Road was updated during Tetra Tech's 2025 survey.

Conveyance Systems: Water and Electricity

The Los Angeles Aqueduct runs through the Study Area in a northeast to southwest direction. Construction of the Los Angeles Aqueduct began in 1908, which resulted in an engineering feat—construction of a water conveyance system 230 miles long, delivering water from northern California to Los Angeles. Developed by William Mulholland, Engineer for the Los Angeles Department of Water and Power (LADWP), the aqueduct's construction answered the need for additional water supply to the growing population of Los Angeles. Constructed in two phases, the first Los Angeles Aqueduct (a second was constructed in 1970) extends from the Owens River in the Owens Valley to the San Fernando Valley. Mojave (outside of the Study Area) and Owenyo became important shipping stops for construction materials carried by rail via Southern Pacific Railroad. Construction of the first aqueduct was completed in 1913; the system was reinforced in places in the 1960s.

Workers hired by the Bureau of the Los Angeles Aqueduct were immigrants originally from Greece, Bulgaria, Serbia, Switzerland, Montenegro, and Mexico. The work was difficult and labor intensive, but the workers received daily pay and medical care, many living in worker camps set up adjacent to the construction areas. There are no extant built environment resources associated with the workers' camps in the Study Area.

Built environment features related to electrical transmission, such as transmission lines and affiliated substations, are located throughout the region. While not within the Study Area, the LADWP's Owens Gorge 230-kilovolt (kV) transmission line is directly adjacent to the Study Area boundaries at the northeast. The line begins at the Upper Gorge Powerhouse and runs through Mojave, crossing the Silver Queen Mine through former alfalfa and hay fields in the western Antelope Valley, where it crosses the Los Angeles Aqueduct at 130th Street and continues for several miles until it reaches Sylmar, where it terminates.

During the 1880s through 1910, there was competition to create hydroelectric and electrical power sources by large corporations such as Pacific Gas & Electric Company and Edison to provide electricity to growing cities in northern and southern California. Several small power companies and power lines were purchased and consolidated during this period. By the 1950s, LADWP had acquired land and rights-of-way to construct three 37,500-kilowatt power plants in the Gorge and the city also developed plans for work on a new 230-kV transmission line from the Angeles National Forest, following an existing right-of-way associated with a former line built from 1917 through 1925. This 230-kV line, called the Owens Gorge Transmission line, constructed ca. 1950 through 1952, originally linked three LADWP powerplants in the Owens River Gorge near Bishop, California, to Receiving Station E, in Toluca Lake. The line has been modified several times over the years, although the existing alignment between the Owens Gorge and Sylmar was noted as intact at the last recordation in 2014.

4.5.3 Existing Cultural Resources

Methods Used to Identify Known Cultural Resources

To evaluate the project's potential effects on significant cultural resources, Tetra Tech conducted cultural resources assessments for the project, which included records searches, historic research, and pedestrian surveys (**Appendix E1** and **Appendix E2**). The methodology and results of these assessments are summarized below.

In accordance with the CEQA, cultural (historical and unique archeological resources) and tribal cultural resources were identified using the following methods:

- A California Historical Resources Information System (CHRIS) records search via the Southern San Joaquin Valley Information Center (SSJVIC) housed at the California State University, Bakersfield;
- A review of properties listed in the National Register of Historic Places (NRHP) and CRHR, or listed as California Historical Landmarks, California Points of Historical Interest, or listed in local registers of significant resources;
- A literature review including the following publications and lists: Built Environment Resources Directory, Listed California Historical Resources, and California Historical Landmarks; and a review of available literature (e.g., ethnographies, scholarly articles, data reports, etc.), historic maps (e.g., topographic, GLO plats), historic aerial imagery, and local resource inventories;
- A Native American Heritage Commission (NAHC) Sacred Land File search;
- Cultural resource pedestrian field surveys; and

- Tribal consultation per Assembly Bill 52 and Senate Bill 18, as discussed in **Section 4.5.4**, *Regulatory Setting*, and detailed in **Section 4.16**, *Tribal Cultural Resources*, of this EIR.

Southern San Joaquin Valley Information Center Records Search

Cultural resource records for the Study Area plus the 0.5-mile buffer from the boundary of the Study Area were requested from the SSJVIC housed at California State University, Bakersfield. Records search results were received on September 26, 2022 (**Appendix E1** and **Appendix E2**). The record searches included a review of all previous cultural resource studies, recorded archaeological resources, and built-environment resources within the Study Area and 0.5-mile buffer.

The SSJVIC records search indicated that 33 previous cultural investigations have been conducted within the Study Area (**Appendix E1**) and 11 previously conducted cultural investigations within the Infill Survey Area (**Appendix E2**). Studies included archaeological/historical field surveys, monitoring, and evaluation/excavation studies. All but one of the studies were completed more than 10 years ago; thus, the majority of the Study Area required a new pedestrian cultural resources survey.

The SSJVIC records search identified 23 historic resources, 5 prehistoric resources, and 1 multi-component (prehistoric and historic) resource within the Study Area (**Appendix E1** and **Appendix E2**). In addition, 29 isolates were previously recorded, including 13 prehistoric isolates, 15 historic isolates, and 1 dual component isolate.

Historical Review

Tetra Tech (2025) reviewed historic aerial imagery, U.S. Geological Survey topographical maps, GLO maps, and patents for the Study Area. Historic aerials and available historic topographical and plat maps illustrate the Study Area as rural and primarily undeveloped desert land with some surrounding infrastructure. The surrounding infrastructure consists of major and minor roads and utility corridors such as transmission lines, the Southern Pacific Railroad (later part of the Burlington Northern and Sante Fe Railroad), various mines at the Buttes, and the Los Angeles Aqueduct. The Study Area was primarily undeveloped land except for a few roads up until the mid-1960s. By 1965, various minor roads and very few structures are present. The structures, as with many of the minor roads, are no longer extent by the 1980s to current times.

Available Bureau of Land Management online general office records indicate there were at least 12 patent holders in the Study Area. These included mainly private individuals and also the Southern Pacific Railroad Company and the California Portland Cement Company. Federal land patents provide information on the initial transfer of land titles from the federal government to private individuals or companies or local governments by the title transfer authority.

Native American Heritage Commission Sacred Land File Search

The California NAHC responded to a Sacred Lands File search request on November 9, 2022, that there are no known Native American resources listed in the Sacred Lands File within or near the Study Area (**Appendix E1** and **Appendix E2**). See **Section 4.16**, *Tribal Cultural Resources,* for Kern County consultation results under Assembly Bill 52 and Senate Bill 18.

Cultural Resources Survey Results

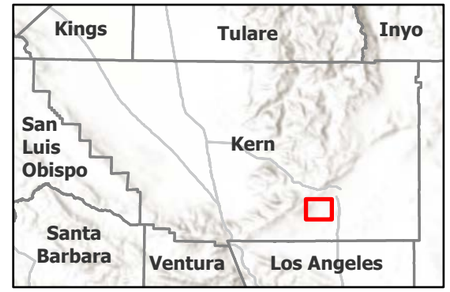
Tetra Tech conducted a Phase I cultural resource investigation for the proposed project in 2022, 2023, 2024, and 2025 (**Appendix E1** and **Appendix E2**). A Study Area of 8,540 acres was defined as the survey area. This larger Study Area captured the 7,700-acre project site and the proposed generation tie line corridor. The Infill Survey Area consisted of 41.3 acres. Areas designated for zone changes only were not included in the Study Area, as they will not be part of the development footprint. See **Figure 4.5-1**, *Phase I Cultural Resource Surveyed Area,* for the Phase I cultural resource surveyed area.

The results presented here include cultural resources located within the Study Area as defined above.

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.5-1
Phase I Cultural Resource Surveyed Area



Surveyed Area

Windhub High-voltage Substation (Existing)

Proposed Project Features

Project Site

Study Area

Other Applicant and/or Affiliate Controlled*

Step-up HV substation

Gen-tie Corridor

*Already approved under separate projects.

N

0 0.25 0.5 1 Miles

Scale is 1:48,000 when printed at 11"x17"

Not for Construction

\\tt.local\GIS\US\CES\Projects\BOT\GIS\PROJECTS\EDSAN_3_SOLAR_1403-0001\CULTURAL\MAPS\Discovery_Cultural_Report_Figures.aprx

Cultural Resources Recorded within the Study Area and Infill Survey Area

The Phase I pedestrian field survey resulted in the field check and update to previously recorded resources that included 22 archaeological sites, 5 built environment resources, and 34 isolates. These resources included 4 prehistoric sites, 21 historic sites, and 2 multicomponent sites; and isolates included 15 prehistoric, 18 historic, and 1 multicomponent. The survey resulted in the identification and recordation of newly recorded resources that are composed of 85 sites and 101 isolates. The sites include 11 prehistoric, 67 historic, and 7 multicomponent and the isolates include 40 prehistoric, 55 historic, and 6 multicomponent.

Tetra Tech was unable to locate four previously recorded archaeological sites, most likely due to resource disturbance from modern development, erosional processes, incorrect previously recorded boundary coordinates, and/or the paucity of cultural material of isolates.

Table 4.5-2, *Cultural Resources Documented in Study Area (Excluding Isolates)*, provides a summary of the archaeological sites and built environment resources documented in the Study Area and Infill Survey Area by Tetra Tech and their CRHR evaluation status. Isolates (predominantly comprising single historical-period cans and glass fragments as well as single, prehistoric lithic artifacts) are not included in **Table 4.5-2**, *Cultural Resources Documented in the Study Area (Excluding Isolates)*, as they are categorically not eligible for listing in the CRHR or considered historical resources for purposes of CEQA. Detailed resource descriptions and evaluations are included in the technical report and addendum memo (**Appendix E1** and **Appendix E2**).

TABLE 4.5-2: CULTURAL RESOURCES DOCUMENTED IN STUDY AREA (EXCLUDING ISOLATES)

Trinomial/Temp ID	Time Period	Description	Recommended CRHR Eligibility	Management Recommendations
Historic Built Environment				
P-15-003537 (CA-KER-3537)	Historic	Oak Creek Road (paved)	Not Eligible	No further management.
P-15-003549 (CA-KER-3549)	Historic	The Los Angeles Aqueduct	Eligible, NRHP and CRHR	Avoidance. Implement 50-foot buffer from resource boundary.
P-15-013928	Historic	Unnamed dirt road	Not Eligible	No further management.
P-15-013929	Historic	Unnamed dirt road	Not Eligible	No further management.
P-15-016251 (CA-KER-8984)	Historic	Unnamed dirt road	Not Eligible	No further management.
Previously Recorded Archaeological Sites				
P-15-010952 (CA-KER-6341)	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-012677 (CA-KER-7135)	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-012678 (CA-KER-7136)	Multi-component	Isolated prehistoric biface, historic era refuse scatter.	Not Eligible	No further management

Trinomial/Temp ID	Time Period	Description	Recommended CRHR Eligibility	Management Recommendations
P-15-012688	Historic	Site: Refuse Scatter	Not Eligible	No further management.
P-15-012714 (CA-KER-7172)	Historic	Foundations, refuse scatter.	Not Eligible	No further management.
P-15-013838	Prehistoric	Lithic scatter.	Not Eligible	Avoidance pending Tribal consultation.
P-15-013839	Multi-component	Isolated prehistoric flake, Historic era refuse scatter.	Not Eligible	No further management.
P-15-013917 (CA-KER-7801)	Historic	Refuse scatter.	Not Eligible (no longer extant)	No further management.
P-15-013918 (CA-KER-7802)	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-013919 (CA-KER-7803)	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-013920 (CA-KER-7804)	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-013921 (CA-KER-7805)	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-014703 (CA-KER-8269)	Historic	Historic era campsite.	Not Eligible	No further management.
P-15-016244 (CA-KER-8979)	Prehistoric	Lithic scatter.	Not Eligible	Avoidance pending Tribal consultation.
P-15-016252	Historic	Foundation, refuse scatter.	Not Eligible	No further management.
P-15-016508 (CA-KER-9088)	Historic	Homestead, refuse scatter.	Not Eligible	No further management.
P-15-016511	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-016514 (CA-KER-9094)	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-016518 (CA-KER-9098)	Prehistoric	Lithic scatter.	Not Eligible	Avoidance pending Tribal consultation
P-15-016519 (CA-KER-9099)	Historic	Homestead, refuse scatter.	Unevaluated	No further management.
P-15-016528 (CA-KER-9108)	Prehistoric	Lithic scatter.	Unevaluated	Avoidance pending Tribal consultation
P-15-016875 (CA-KER-9264)	Historic	Refuse scatter, fire affected rocks.	Not Eligible	No further management.
Newly Recorded Archaeological Sites				
GAL-SK-01	Historic	Site: Refuse Scatter	Not Eligible	No further management.
DIS-AM-02	Historic	Refuse Scatter	Not Eligible	No further management.

Trinomial/Temp ID	Time Period	Description	Recommended CRHR Eligibility	Management Recommendations
P-15-022325, CA-KER-11763/H	Multi-component	Prehistoric isolate: rhyolite flake; historic refuse scatter.	Not Eligible	No further management.
P-15-022326, CA-KER-11764H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022327, CA-KER-11765H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022329, CA-KER-11767H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022330, CA-KER-11768H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022331, CA-KER-11769H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022332, CA-KER-11770H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022333, CA-KER-11771H	Historic	Refuse scatter, and potential mine claim.	Not Eligible	No further management.
P-15-022334, CA-KER-11772H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022335, CA-KER-11773H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022337, CA-KER-11775H	Historic	Refuse scatter, and a rock cairn mining claim.	Not Eligible	No further management.
P-15-022338, CA-KER-11776H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022339, CA-KER-11777H	Historic	Refuse scatter and a rock cairn mine claim.	Not Eligible	No further management.
P-15-022340, CA-KER-11778H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022341, CA-KER-11779H	Historic	Refuse scatter, GLO marker, and circle of rhyolite rocks.	Not Eligible	No further management. Note: for GLO survey marker, follow State of California Business and Professional Code Section 8726 (see Chapter 7)
P-15-022342, CA-KER-11780H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022343, CA-KER-11781H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022344, CA-KER-11782H	Historic	Refuse scatter.	Not Eligible	No further management.

Trinomial/Temp ID	Time Period	Description	Recommended CRHR Eligibility	Management Recommendations
P-15-022345, CA-KER-11783H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022346, CA-KER-11784H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022347, CA-KER-11785H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022348, CA-KER-11786H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022349, CA-KER-11787H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022350, CA-KER-11788H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022351, CA-KER-11789H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022352, CA-KER-11790H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022353, CA-KER-11791H	Historic	Refuse scatter, rock rings (possible cairn).	Not Eligible	No further management.
P-15-022354, CA-KER-11792H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022356, CA-KER-11794H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022357, CA-KER-11795H	Historic	Refuse scatter, homestead.	Not Eligible	No further management.
P-15-022358, CA-KER-11796H	Prehistoric	Bedrock milling slick.	Unevaluated	Avoidance pending Tribal consultation
P-15-022359, CA-KER-11797/H	Multi-component	Prehistoric lithic scatter; historic refuse scatter.	Historic: Not Eligible Prehistoric: Unevaluated	Historic: No further management. Prehistoric: Avoidance pending Tribal consultation
P-15-022360, CA-KER-11798	Prehistoric	Lithic scatter.	Unevaluated	Avoidance pending Tribal consultation
P-15-022361, CA-KER-11799H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022362, CA-KER-11800H	Historic	Mining cairn, test pits, and refuse.	Not Eligible	No further management.
P-15-022363, CA-KER-11801/H	Multi-component	Prehistoric lithic scatter; historic mining refuse.	Historic: Not Eligible Prehistoric: Unevaluated	Historic: No further management. Prehistoric: Avoidance pending tribal consultation
P-15-022364, CA-KER-11802/H	Multi-component	Prehistoric lithic scatter; historic refuse scatter.	Historic: Not Eligible	Historic: No further management. Prehistoric:

Trinomial/Temp ID	Time Period	Description	Recommended CRHR Eligibility	Management Recommendations
			Prehistoric: Unevaluated	Avoidance pending Tribal consultation
P-15-022365, CA-KER-11803H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022366, CA-KER-11804	Prehistoric	Lithic scatter.	Unevaluated	Avoidance pending tribal consultation
P-15-022367, CA-KER-11805/H	Multi-component	Prehistoric isolate: flake; historic vast refuse scatter.	Not Eligible	No further management.
P-15-022368, CA-KER-11806H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022369, CA-KER-11807H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022370, CA-KER-11808H	Historic	Placer pit, piles, tobacco tins.	Not Eligible	No further management.
P-15-022371, CA-KER-11809H	Historic	Tailings pile and possible pit, ceramics, solarized amethyst glass, metal.	Not Eligible	No further management.
P-15-022372, CA-KER-11810H	Historic	Large, excavated pit, small pits, cans.	Not Eligible	No further management.
P-15-022373, CA-KER-11811H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022374, CA-KER-11812H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022375, CA-KER-11813H	Historic	Excavated pit, milled lumber.	Not Eligible	No further management.
P-15-022376, CA-KER-11814H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022377, CA-KER-11815H	Historic	Structure remnants, concrete footers, refuse scatter.	Not Eligible	No further management.
P-15-022378, CA-KER-11816	Prehistoric	Lithic scatter.	Unevaluated	Avoidance pending tribal consultation
P-15-022379, CA-KER-11817	Prehistoric	Lithic scatter.	Unevaluated	Avoidance pending Tribal consultation
P-15-022380, CA-KER-11818H	Historic	Refuse scatters.	Not Eligible	No further management.
P-15-022381, CA-KER-11819H	Historic	Machine excavated pit, spoils piles, refuse scatter	Not Eligible	No further management.
P-15-022382, CA-KER-11820H	Historic	Dilapidated fence/corral remnants.	Not Eligible	No further management.
P-15-022384, CA-KER-11822H	Historic	Refuse scatter.	Not Eligible	No further management.

Trinomial/Temp ID	Time Period	Description	Recommended CRHR Eligibility	Management Recommendations
P-15-022385, CA-KER-11823H	Historic	Refuse scatter	Not Eligible	No further management.
P-15-022386, CA-KER-11824H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022387, CA-KER-11825H	Historic	Dilapidated fend/corral remnants.	Not Eligible	No further management.
P-15-022388, CA-KER-11826H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022389, CA-KER-11827H	Historic	Excavated pit and tailings pile.	Not Eligible	No further management.
P-15-022390, CA-KER-11828	Prehistoric	Lithic and tool scatter.	Unevaluated	Avoidance pending Tribal consultation
P-15-022391, CA-KER-11829H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022392, CA-KER-11830H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022393, CA-KER-11831H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022394, CA-KER-11832H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022395, CA-KER-11833H	Historic	Refuse scatter; previously recorded isolate P-15-016844 is combined with this site.	Not Eligible	No further management.
P-15-022396, CA-KER-11834H	Historic	Refuse scatter and dug out pits.	Not Eligible	No further management.
P-15-022398, CA-KER-11836	Prehistoric	Lithic scatter.	Unevaluated	Avoidance pending Tribal consultation
P-15-022399, CA-KER-11837H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022400, CA-KER-11838H	Historic	Foundations, refuse scatter, former housing type community.	Not Eligible	No further management.
P-15-022401, CA-KER-11839	Prehistoric	Lithic scatter.	Unevaluated	Avoidance pending Tribal consultation
P-15-022402, CA-KER-11840/H	Multi-component	Prehistoric Isolate: rhyolite flake; historic refuse Scatter.	Not Eligible	No further management.
P-15-022403, CA-KER-11841/H	Multi-component	Prehistoric rhyolite lithic scatter; historic refuse scatter.	Historic: Not Eligible Prehistoric: Unevaluated	Historic: No further management. Prehistoric: Avoidance pending Tribal consultation

Trinomial/Temp ID	Time Period	Description	Recommended CRHR Eligibility	Management Recommendations
P-15-022404, CA-KER-11842H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022405, CA-KER-11843H	Historic	Refuse scatter.	Not Eligible	No further management.
P-15-022407, CA-KER-11845H	Historic	Refuse scatter in drainage.	Not Eligible	No further management.
P-15-022408, CA-KER-11846	Prehistoric	Lithic scatter.	Unevaluated	Avoidance pending Tribal consultation
P-15-022409, CA-KER-11847	Prehistoric	Lithic scatter.	Unevaluated	Avoidance pending Tribal consultation
P-15-022410, CA-KER-11848	Prehistoric	Lithic scatter.	Unevaluated	Avoidance pending Tribal consultation
P-15-022411, CA-KER-11849H	Historic	Wooden corral debris.	Not Eligible	No further management.
P-15-022412, CA-KER-11850H	Historic	Glass scatter.	Not Eligible	No further management.

CRHR Eligibility Recommendations

The Tetra Tech survey evaluated extant cultural resources identified within the Study Area for eligibility to the CRHR. Isolate finds are typically considered not eligible for listing in the CRHR due to the limited amount of information they can provide and lack of associated context. All the isolates were identified with good ground surface visibility, and no other cultural material or features were observed. The documentation of these resources provides sufficient data, and their research potential has been fulfilled through their documentation. The isolates possess little probability for new information that would contribute substantially to the local history (CRHR Criterion 4). As a result, the isolates are recommended not eligible for listing on the CRHR and no further management is necessary for these resources.

Ninety-one archaeological sites and built environment resources are recommended not eligible for the CRHR under any criteria (see **Table 4.5-2**, *Cultural Resources Documented in the Study Area (Excluding Isolates)*). These sites were evaluated as having no significant associations with events or people important to the history of the local area, California, or the nation (CRHR Criteria 1 and 2), they do not represent the work of a master (CRHR Criterion 3) and they have little to no potential to yield information important to the prehistory or history of the local area, California, or the nation beyond what has already been recorded (CRHR Criterion 4) (**Appendix E1**). The majority of the ineligible sites documented in the Study Area are historic refuse scatters interpreted as single surficial refuse disposal episodes with no information potential beyond what has been recorded. Four are historic-era roads, and the rest are remnants of agricultural and mining activities that lack significance and historic integrity.

The 91 sites recommended as ineligible from an archaeological perspective include 3 sites with prehistoric components that require tribal consultation to determine eligibility. An additional 16 prehistoric sites were recommended as unevaluated pending tribal consultation. These 19 archaeological sites with prehistoric components, are comprised mainly of lithic scatters with no features. Tetra Tech (2025) did not provide final CRHR evaluations for prehistoric sites that may be considered significant and important to a Tribe, as

tribal cultural knowledge and tribal consultation is necessary for such determinations. Because the unevaluated sites are potentially eligible for the CRHR, they are managed as if they are eligible resources.

One previously documented built environment resource, the Los Angeles Aqueduct (P-15-003549), is recommended as eligible for the CRHR. The Los Angeles Aqueduct is a 215-mile-long water conveyance system with associated reservoirs, dams, channels, siphons, spillways, tunnels, and roads. It was first constructed ca. 1907 to 1913; a second and parallel Los Angeles Aqueduct and road was added in ca. 1965 to 1970. The aqueduct spans Inyo, Kern, and Los Angeles Counties. P-15-003549 has been previously recommended as eligible for listing as part a larger Los Angeles Aqueduct NRHP district. Tetra Tech visited P-15-003549 and the site appears as previously recorded. Tetra Tech agrees with this recommendation that the segment retains integrity and appears to be a contributing element to the overall eligibility of the Aqueduct to the CRHR. The Los Angeles Aqueduct is related to the development of the City of Los Angeles and Southern California (CRHR Criterion 1) and was developed by William Mullholland, who was responsible for many large-scale engineering projects that shaped the development of the City of Los Angeles (CRHR Criterion 2). The Aqueduct system as a whole may also qualify under Criterion 3 for its materials, design, and method of construction, and under Criterion 4, for associated historic artifacts and features related to its construction and use.

Potential for Unknown Buried Cultural Resources

The Antelope Valley floor is covered in thick deposits of Quaternary alluvial sediments. Dibblee (1963) subdivides the alluvium into two units: the older (Pleistocene) Quaternary sediments, and younger (Holocene) alluvial surface deposits. These alluvial sediments are derived from nearby granitic mountains and have been deposited on the valley floor over the course of thousands of years. The younger Quaternary valley alluvial deposits, composed of weathered soil material and poorly sorted clay, silt, and sand, may be up to several hundred feet thick in valley areas, and thinner on slopes at the valley margins.

In many places, the interface between older land surfaces and newer alluvial depositions is marked by a well-developed buried soil profile, or a paleosol. Paleosols preserve the composition and character of the earth's surface prior to subsequent sediment deposition; thus, paleosols have the potential to preserve archaeological resources if the area had been occupied or settled by humans. Holocene alluvium and Pleistocene-age surfaces buried by Holocene alluvium are the most likely landforms to contain paleosols. However, because human populations have grown since the arrival of the area's first inhabitants, younger paleosols (late Holocene) are more likely to yield archaeological resources than older paleosols (early Holocene or Pleistocene).

Given that these portions of the Antelope Valley within the Study Area have been covered with Holocene alluvial deposits, which have been deposited over the course of known human occupation in the region, there is a possibility that alluvium has buried prehistoric archaeological sites that once existed on the surface. As such, there is a possibility that buried archaeological deposits may be encountered during project-related excavations.

4.5.4 Regulatory Setting

Federal

There are no applicable federal regulations for this issue area.

State

California Register of Historical Resources

Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." Certain properties, including those listed in, or formally determined eligible for listing in, the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historic resources surveys or designated by local landmarks programs, may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. It is associated with the lives of persons important to local, California or national history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.
4. It has yielded, or may be likely to yield, information important to the history or prehistory of the local area, California, or the nation.

Furthermore, under PRC 5024.1 and Title 14 CCR, Section 4852(c), a cultural resource must retain integrity to be considered eligible for the CRHR. Specifically, it must retain sufficient character or appearance that existed during the resources time of significance, to be recognizable as a historical resource and convey reasons of significance. Integrity is evaluated with regard to retention of such factors as location, design, setting, materials, workmanship, feeling, and association. Cultural sites that have been affected by ground-disturbing activities, such as farming, often lack integrity because they have been directly damaged or moved from their original location, among other changes.

Typically, an archaeological site in California is recommended eligible for listing in the CRHR based on its potential to yield information important in prehistory or history (Criterion 4). Important information includes chronological markers such as projectile point styles or obsidian artifacts that can be subjected to dating methods or undisturbed deposits that retain their stratigraphic integrity. Sites such as these have the ability to address research questions. Prehistoric sites may be considered significant and important to a Tribe and require tribal consultation and tribal cultural knowledge to determine eligibility.

If an archaeological resource is found eligible for listing in the CRHR, then it is considered under CEQA an historical resource. Unevaluated sites are potentially eligible and therefore treated the same as eligible properties.

California Historical Landmarks

California Historical Landmarks (CHLs) are buildings, structures, sites, or places that have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other

value and that have been determined to have Statewide historical significance by meeting at least one of the criteria listed below. The resource also must be approved for designation by the County Board of Supervisors (or the city or town council in whose jurisdiction it is located); be recommended by the State Historical Resources Commission; and be officially designated by the Director of California State Parks. The specific standards now in use were first applied in the designation of CHL #770. CHLs #770 and above are automatically listed in the CRHR.

To be eligible for designation as a landmark, a resource must meet at least one of the following criteria:

1. It is the first, last, only, or most significant of its type in the State or within a large geographic region (Northern, Central, or southern California);
2. It is associated with an individual or group having a profound influence on the history of California; or
3. It is a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer, or master builder.

California Points of Historical Interest

California points of historical interest (PHI) are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. PHI designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the CRHR. No historic resource may be designated as both a landmark and a point. If a point is later granted status as a landmark, the point designation will be retired. In practice, the point designation program is most often used in localities that do not have a locally enacted cultural heritage or preservation ordinance.

To be eligible for designation as a PHI, a resource must meet at least one of the following criteria:

1. It is the first, last, only, or most significant of its type within the local geographic region (city or county);
2. It is associated with an individual or group having a profound influence on the history of the local area; or
3. It is a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in the local region of a pioneer architect, designer, or master builder.

California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects occurring in the State and is codified at PRC Section 21000 et seq. CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or unique archaeological resources.

Under CEQA (Section 21084.1), a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. The CEQA *Guidelines* (Title 14 CCR Section 15064.5) recognize that an historical resource includes: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the

CRHR; (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g) unless the preponderance of evidence demonstrates that it is not historically or culturally significant; and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record. The fact that a resource is not listed in, or determined to be eligible for listing in, the CRHR, not included in a local register of historical resources (pursuant to section 5020.1(k) of the PRC), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the PRC) does not preclude the lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

If a lead agency determines that an archaeological site is a historical resource, the provisions of Section 21084.1 of CEQA and Section 15064.5 of the CEQA *Guidelines* apply. If a project may cause a substantial adverse change (defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired) in the significance of an historical resource, the lead agency must identify potentially feasible measures to mitigate these effects (CEQA *Guidelines* Sections 15064.5(b)(1), 15064.5(b)(4)).

If an archaeological site does not meet the historical resource criteria contained in the CEQA *Guidelines*, then the site may be treated in accordance with the provisions of Section 21083, which addresses unique archaeological resources. As defined in Section 21083.2 of CEQA a "unique" archaeological resource is an archaeological artifact, object, or site, for which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site is to be treated in accordance with the provisions of Section 21083.2, which state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state (Section 21083.2(b)). If preservation in place is not feasible, mitigation measures shall be required.

The CEQA *Guidelines* note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (CEQA *Guidelines* Section 15064.5(c)(4)).

Native American Heritage Commission

PRC Section 5097.91 established the NAHC, the duties of which include inventorying places of religious or social significance to Native Americans and identifying known graves and cemeteries of Native Americans on private lands. PRC Section 5097.98 specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act (the Act) applies to both state and private lands. The Act requires that, upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified. If the remains are Native American, the coroner must notify the NAHC. The NAHC will then identify and notify a most likely descendant. The Act stipulates the procedures that the most likely descendant may follow for treating or disposing of the remains and associated grave goods.

California Public Records Act

Sections 6254(r) and 6254.10 of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public related to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports maintained by, or in the possession of, the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the NAHC, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a state or local agency."

California Health and Safety Code, Sections 7050 and 7052

The California Health and Safety Code, Section 7050.5, declares that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground disturbance must cease and the county coroner must be notified. Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

California Penal Code, Section 622.5

California Penal Code, Section 622.5, provides misdemeanor penalties for injuring or destroying objects of historic or archaeological interest located on public or private lands but specifically excludes the landowner.

California Public Resources Code, Section 5097.5

California PRC Section 5097 specifies the procedures to be followed in the event of an unexpected discovery of human remains on non-federal land. The disposition of Native American remains falls within the jurisdiction of the NAHC. Section 5097.5 of the Code states:

> *No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate*

> *paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.*

As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state or any city, county, district, authority, public corporation, or any agency thereof.

Assembly Bill 52

Under the CEQA, Assembly Bill 52 requires a lead agency to consult with any California Native American Tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. Consultations must include discussing the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the Tribe. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or EIR is required for a project. **Section 4.16**, *Tribal Cultural Resources*, of this EIR discusses the effort made to contact the Tribes that may have an interest in the project, in compliance with Assembly Bill 52.

California Senate Bill 18

Senate Bill 18 requires cities and counties to conduct consultations with California Native American Tribes before the local officials adopt or amend their general plans. These consultations are for preserving or mitigating impacts to Native American historic, cultural, sacred sites, features, and objects located within the city or county. The city or county must protect the confidentiality of information about the specific identity, location, character, and use of those places, features, and objects, consistent with the General Plan Guidelines issued by the Governor's Office of Planning and Research.

Local

The following local plans applicable to the Study Area include stipulations for cultural and/or tribal resources: the Kern County General Plan and the Soledad Mountain Elephant Butte Specific Plan. The components of these plans related to cultural and/or tribal resources are described below.

Kern County General Plan

The Kern County General Plan is a policy document designed to provide long-range guidance for planning decisions that affect the growth and resources of unincorporated Kern County. Included in the Kern County General Plan is the Land Use, Open Space, and Conservation Element (Chapter 1), which provides for a variety of land uses for future economic growth while also assuring the conservation of Kern County's agricultural, natural, and resource attributes. The policies and implementation measures in the Kern County General Plan for cultural resources applicable to the project are provided below.

Chapter 1.10.3. Archaeological, Paleontological, Cultural, and Historical Preservation.

Policy

Policy 25: The County will promote the preservation of cultural and historic resources which provide ties with the past and constitute a heritage value to residents and visitors.

Implementation Measures

Measure K: Coordinate with the California State University, Bakersfield's Archaeology Inventory Center.

Measure L: The County shall address archaeological and historical resources for discretionary projects in accordance with CEQA.

Measure M: In areas of known paleontological resources, the County should address the preservation of these resources where feasible.

Measure N: The County shall develop a list of Native American organizations and individuals who desire to be notified of proposed discretionary projects. This notification will be accomplished through the established procedures for discretionary projects and CEQA documents.

Measure O: On a project-specific basis, the County Planning Department shall evaluate the necessity for the involvement of a qualified Native American monitor for grading or other construction activities on discretionary projects that are subject to a CEQA document.

Soledad Mountain Elephant Butte Specific Plan

There are no recommendations, analysis, or implementation measures in the Soledad Mountain Elephant Butte Specific Plan that address cultural resources. In Kern County, specific plans are used to implement goals, objectives, and policies of the Kern County General Plan in a more detailed and refined manner unique to a smaller area of the County. Since there are no applicable recommendations, analysis, or implementation measures within the Soledad Mountain Elephant Butte Specific Plan, refer to the applicable policies, goals, and implementation measures of the Kern County General Plan above.

4.5.5 Impacts and Mitigation Measures

Methodology

The project will aim to avoid all known historical resources, as defined by CEQA. Potential impacts to unknown cultural resources could result from ground-disturbing activities associated with the project. These impacts include damage, destruction, or alteration of archaeological sites and historical-period structures. Ground-disturbing activities include project-related excavation, grading, trenching, vegetation clearance, the operation of heavy equipment, or other surface and subsurface disturbance that could damage or destroy unknown surficial or buried cultural resources including prehistoric or historical-period archaeological resources, historical-period structures, or human remains.

To evaluate the potential for the project to result in a significant impact to one or more historical resources as defined by CEQA, Tetra Tech conducted cultural resources assessments of the Study Area, which included literature reviews, a Sacred Lands File search, cultural resources surveys, and evaluation of resources for inclusion in the CRHR (**Appendix E1** and **Appendix E2**).

Under Assembly Bill 52 and Senate Bill 18, Kern County is responsible for government-to-government consultation with applicable Native American Tribes to identify potential tribal resources in the Study Area and evaluate potential project effects on said properties.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project could potentially have a significant adverse effect on cultural resources. A project would have a significant adverse effect on cultural resources if it would:

a. Cause a substantial adverse change in the significance of a historical resource, as defined in CEQA *Guidelines* Section 15064.4;

b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA *Guidelines* Section 15064.4; or

c. Disturb any human remains, including those interred outside of dedicated cemeteries.

All of the above impact thresholds are addressed in the "Project Impacts" section below. Impacts to tribal cultural resources are addressed in **Section 4.16**, *Tribal Cultural Resources*, of this EIR.

Project Impacts

Impact 4.5-1: The project would cause a substantial adverse change in the significance of a historical resource, as defined in CEQA Guidelines Section 15064.5.

As a result of the cultural resources studies conducted for the project, 143 archaeological resources and historical-period linear resources were documented or updated, and 93 isolated finds were recorded within the Study Area. As discussed above, the isolates (predominantly comprising single historical-period cans and glass fragments as well as single, prehistoric lithic artifacts) lack archaeological context and do not provide sufficient information to be considered significant resources. As such, the isolates documented as part of the survey are recommended not eligible for listing in the CRHR, and do not qualify as historical resources pursuant to CEQA. Of the 143 archaeological resources and historical-period linear resources documented or updated within the Study Area, 91 historic-era cultural resources are recommended as not eligible for the CRHR and are not considered historical resources under CEQA.

One historic linear site, the Los Angeles Aqueduct (P-15-003549) is recommended eligible for the CRHR and is therefore a historical resource under CEQA. Sixteen prehistoric sites are unevaluated (pending tribal consultation) and are assumed to be potentially eligible for the CRHR and qualify as historical resources under CEQA. These include the following: P-15-016528, P-15-022358, P-15-022359 (prehistoric

component), P-15-022360, P-15-022363 (prehistoric component), P-15-022364 (prehistoric component), P-15-022366, P-15-022378, P-15-022379, P-15-022390, P-15-022398, P-15-022401, P-15-022403 (prehistoric component), P-15-022408, P-15-022409, and P-15-022410. Unevaluated prehistoric sites are potentially eligible for the CRHR; therefore, they are managed as if they are eligible resources.

To the extent feasible, the project will be designed to avoid all 20 potentially eligible historic-era cultural resources. Implementation of **Mitigation Measure MM 4.5-2** ensures that the project will avoid the potentially eligible resources or, if required, develop and implement a Testing and Data Recovery Plan in consultation with the Native American Monitor(s) for the recovery of any known and unanticipated cultural discoveries that cannot be avoided or preserved in place. Therefore, the project will not result in a substantial adverse change in the significance of any known historical resources and will not result in a significant impact to known historical resources.

The Study Area is covered by Holocene alluvium, which has been deposited over the course of known human occupation in the region, possibly burying prehistoric archaeological sites that once existed on the surface. Therefore, the Study Area has the potential to contain previously unknown archaeological deposits that may underlie the ground surface and, as discussed in **Section 4.16**, *Tribal Cultural Resources*, tribal cultural resources. Should buried archaeological deposits be uncovered during project construction, and should such resources qualify as historical resources under CEQA, they could be subject to significant impacts. To reduce potential impacts to less than significant, **Mitigation Measures MM 4.5-1, MM 4.5-2, MM 4.5-3**, and **MM 4.5-4** require cultural resources sensitivity training for construction workers; development of a cultural resources plan; archaeological and Native American monitoring during construction; and appropriate treatment of unearthed archaeological resources during construction.

Mitigation Measures

MM 4.5-1: The project proponent/operator shall retain a Lead Archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior, 2011), to carry out all mitigation measures related to archaeological and unique historical resources. The contact information for this Lead Archaeologist shall be provided to the Kern County Planning and Natural Resources Department prior to the commencement of any construction activities onsite. Further, the Lead Archaeologist shall be responsible for ensuring the following employee training provisions are implemented during implementation of the project:

a. Prior to commencement of any ground disturbing activities, the Lead Archaeologist, in consultation with Native American monitor(s), shall prepare Cultural Resources Sensitivity Training materials, including a Cultural Resources Sensitivity Training Guide, to be used in an orientation program given to all personnel working on the project. The training guide may be presented in video form. A copy of the proposed training materials shall be provided to the Planning and Natural Resources Department prior to the issuance of grading or building permits.

b. The project proponent/operator shall ensure all new employees or onsite workers who have not participated in earlier Cultural Resources Sensitivity Trainings shall meet provisions specified above.

c. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition,

avoidance, and subsequent immediate notification to the Lead Archaeologist and/or Native American monitor(s) for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of archaeological resources.

d. A copy of the Cultural Resources Sensitivity Training Guide/Materials shall be kept onsite and available for all personnel to review and be familiar with as necessary. It is the responsibility of the Lead Archaeologist to ensure all employees receive appropriate training before they work onsite.

e. The services of Native American Monitors, as identified through consultation with appropriate Native American tribes, working under the supervision of the Lead Archaeologist, shall be retained to monitor initial excavation or ground-disturbing activities as identified in **Mitigation Measure MM 4.5-2** below.

MM 4.5-2: Prior to the issuance of grading or building permits, the project proponent shall submit to the Kern County Planning and Natural Resources Department a Cultural Resources Treatment Plan. The plan shall:

a. Require that prior to conducting initial ground disturbance in the vicinity of a prehistoric archaeological site that requires avoidance, an "exclusion area" (i.e., the recorded boundary of the archaeological site that require avoidance and the area within 50 feet thereof) shall be temporarily marked with exclusion markers or protective fencing as determined by the Lead Archaeologist in consultation with the Native American Monitor.

b. Require that the construction zone shall be narrowed or otherwise altered to avoid any exclusion areas.

c. Provide an overview of best management practices to be utilized during ground-disturbing construction activities to ensure protection of cultural resources.

d. Outline the process for evaluation of any unanticipated cultural discoveries during project construction activities.

e. Provide a Data Recovery Plan, if required, prepared by the Lead Archeologist in consultation with the Native American Monitor(s), for the recovery of known and unanticipated cultural discoveries that cannot be avoided or preserved in place.

MM 4.5-3: In the event that previously unknown archaeological materials are encountered during the course of grading or construction, the project contractor shall cease ground-disturbing activities within 50 feet of the find. The area of the discovery shall be marked off by temporary fencing that encloses a 50-foot radius from the location of the discovery. Signs shall be posted that establish it as an "Exclusion Area," and all entrance into the area shall be avoided until the discovery is assessed by the Lead Archaeologist and Native American Monitor. The Lead Archaeologist, in consultation with the Native American Monitor, shall evaluate the significance of the resources and recommend appropriate treatment measures. If further treatment of the discovery is necessary, the Exclusion Area shall remain in place until the treatment is completed. Per CEQA Guidelines Section 15126.4(b)(3), project

redesign and preservation in place shall be the preferred means to avoid impacts to significant historical resources.

Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the Lead Archaeologist, in consultation with Native American Monitor, shall develop additional treatment measures in consultation with Kern County, which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature. Diagnostic archaeological materials with research potential recovered during an investigation shall be curated at an accredited curation facility. The Lead Archaeologist, in consultation with a designated Native American Monitor, shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the Kern County Planning and Natural Resources Department and to the San Joaquin Valley Information Center (SSJVIC) at California State University, Bakersfield.

MM 4.5-4: The services of both an Archaeological and Native American Monitor, working under the supervision of the Lead Archaeologist as identified through consultation with appropriate Native American tribes, shall be retained by the project proponent to monitor ground-disturbing activities associated with project construction, as follows:

a. During project construction, Archaeological and Native American monitoring shall be conducted for all initial excavation or ground-disturbing activities. If no archaeological discoveries are made during the course of this monitoring, no additional monitoring will be required. If the Lead Archaeologist can demonstrate that the level of monitoring should be reduced or discontinued, or a need for continuing monitoring, the Lead Archaeologist, in consultation with the Kern County Planning and Natural Resources Department, may adjust the level of monitoring to circumstances as warranted.

b. All ground disturbing activities within 100 feet of a grave site shall be monitored by Archaeological and Native American Monitor(s).

c. The Lead Archaeologist and Native American Monitor(s) shall be provided all project documentation related to cultural resources within the project site prior to commencement of ground disturbance activities. Should the services of any additional individuals be retained (as the Lead Archaeologist, Archaeological Monitor, or Native American Monitor) subsequent to commencement of ground disturbing activities, such individuals shall be provided all proposed project documentation related to cultural resources within the project site, prior to beginning work. Documentation shall include but not be limited to previous cultural studies, surveys, maps, drawings, etc. Any modifications or updates to project documentation, including construction plans and schedules, shall immediately be provided to the Lead Archaeologist, Archaeological Monitor, and Native American Monitor.

d. The Archaeological Monitor(s) shall keep daily logs and the Lead Archaeologist shall submit monthly written updates to the Kern County Planning and Natural Resources Department and Native American Monitor. After monitoring has been completed, the Lead Archaeologist shall prepare a monitoring report that details monitoring results; assessment of inadvertent discoveries; communication with Tribal representatives;

installation of, maintenance of, and guidance for environmentally sensitive areas; and general implementation of the required mitigation. The final monitoring report shall act as a record of compliance with guiding documents and mitigation, and shall be submitted to the Kern County Planning and Natural Resources Department and the SSJVIC at California State University, Bakersfield.

Level of Significance

With implementation of the **Mitigation Measures MM 4.5-1** through **MM 4.5-4**, impacts would be less than significant.

Impact 4.5-2: The project would cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

As discussed above under **Impact 4.5-1**, of the 143 sites and historical-period linear resources documented within the Study Area, 91 cultural resources are recommended not eligible for the CRHR and are not considered historical resources under CEQA. The other 20 resources—recommended eligible—would be avoided by Project construction or subject to an approved Testing and Data Recovery Plan developed in consultation with interested Tribes, per **Mitigation Measure MM 4.5-2**. These include 3 "not eligible" prehistoric sites and 16 "unevaluated" prehistoric sites that require tribal consultation and are considered potentially eligible to the CRHR, an unevaluated historic homestead site, and an eligible historic linear resource. In addition, there is potential that previously unknown archaeological deposits may underlie the ground surface. Should buried historical resources or cultural resources be uncovered during project construction, they could be subject to significant impacts. To reduce potential impacts to less than significant, **Mitigation Measures MM 4.5-1** through **MM 4.5-4** require cultural resources sensitivity training for construction workers; the development of a treatment plan, a procedure for unanticipated discoveries, and archaeological and Native American monitoring during construction.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-4** would be required.

Level of Significance

With implementation of the **Mitigation Measures MM 4.5-1** through **MM 4.5-4**, impacts would be less than significant.

Impact 4.5-3: The project would disturb any human remains, including those interred outside of formal cemeteries.

There is no indication, either from research results or the archaeological survey, that any particular location within the Study Area has been used for human burial purposes in the recent or distant past. However, in the event that human remains are inadvertently discovered during project construction activities, the human remains could be damaged or disturbed, which would be a significant impact. Existing regulations identified

as **Mitigation Measure MM 4.5-5** would ensure that any human remains encountered during project implementation are properly treated, thus reducing potential impacts to a less-than-significant level.

Mitigation Measures

MM 4.5-5: If human remains are uncovered during project construction, the project contractor shall immediately halt work within 100 feet of the find, contact the Kern County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 of the California Environmental Quality Act Guidelines.

If the County Coroner determines that the remains are Native American, the coroner shall contact the Native American Heritage Commission, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by Assembly Bill 2641). The Native American Heritage Commission shall designate a Most Likely Descendent for the remains per Public Resources Code 5097.98. Per Public Resources Code 5097.98, and in accordance with generally accepted cultural or archeological standards or practices, the project proponent shall ensure that the immediate vicinity of the Native American human remains is not damaged or disturbed by further development activity until the project proponent has discussed and conferred with the most likely descendent regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. If the remains are determined to be neither of forensic value to the Coroner, nor of Native American origin, provisions of the California Health and Safety Code (7100 et. seq.) directing identification of the next-of-kin will apply.

Level of Significance

With implementation of **Mitigation Measure MM 4.5-5**, impacts would be less than significant.

4.5.6 Cumulative Setting, Impacts, and Mitigation Measures

An analysis of cumulative impacts takes into consideration the entirety of impacts that the projects discussed in **Chapter 3**, *Project Description*, of this EIR, would have on cultural resources. The geographic area of analysis of cumulative impacts for cultural resources includes the western portion of the Antelope Valley. This geographic scope of analysis is appropriate because the archaeological and historical resources within this area are expected to be similar to those that occur within the Study Area because of their proximity, and because the similar environments, landforms, and hydrology would result in similar land use—and thus, site types. Further, this is a large enough area to encompass any effects of the project on cultural resources that may combine with similar effects caused by other past, current, and reasonably foreseeable future projects, and provides a reasonable context wherein cumulative actions could affect cultural resources. Multiple projects, including solar energy production facilities, are proposed throughout the western Antelope Valley. Cumulative impacts to cultural resources in the western Antelope Valley could occur if other projects, in conjunction with the proposed project, had or would have impacts on cultural resources that, when considered together, would be significant.

Development of the proposed project, in combination with other projects in the area, has the potential to contribute to a cumulatively significant cultural resources impact due to the potential loss of historic and archaeological resources unique to the region. However, no known historical resources will be subject to impacts from the project, and mitigation measures are included in this EIR to reduce potentially significant impacts to unknown archaeological resources that could be encountered during construction of the proposed project. 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 a less-than-significant level and ensure that project-level impacts to cultural resources are not cumulatively considerable. Although project construction has the potential to disturb human remains, as do other projects in the cumulative study area, implementation of Mitigation Measure **MM 4.5-5** would ensure that appropriate laws and protocols are followed if human remains are uncovered and ensure that cumulative impacts are not significant.

With implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5**, as described above, the project would not result in significant impacts to cultural resources. Given this minimal impact, as well as similar mitigation requirements for other projects in the western Antelope Valley, the project would not make a cumulatively considerable contribution to a significant cumulative impact to cultural resources.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5** would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5,** cumulative impacts would be less than significant.

Section 4.6
Energy

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Section 4.6
Energy

4.6.1 Introduction

This energy section of the EIR analyzes the energy implications of the project, focusing on the following three energy resources: electricity, natural gas, and transportation-related energy (petroleum-based fuels). This section includes a summary of the project's anticipated energy needs (detailed energy calculations are contained in **Appendix F** of this EIR) and conservation measures. Information in this section is primarily based on the *Discovery Solar PV and Storage Project Energy Impact Analysis* (Tetra Tech, 2025), located in Appendix F of this EIR and incorporated by reference herein. In addition, the information found herein, as well as other aspects of the project's environmental-related energy impacts, are discussed in greater detail elsewhere in this EIR, including in **Chapter 3**, *Project Description*, **Section 4.3**, *Air Quality*, and **Section 4.8**, *Greenhouse Gas Emissions*.

This section provides the content and analysis required by Public Resources Code, Section 21100(b)(3), and described in Appendix F to the California Environmental Quality Act (CEQA) *Guidelines* (AEP, 2018). Public Resources Code Section 21100(b) and Section 15126.4 of the CEQA *Guidelines* require that an EIR identify mitigation measures to minimize a project's significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy. Appendix F to the CEQA *Guidelines* states that the potential energy implications of a project shall be considered in an EIR to the extent relevant and applicable to the project. Appendix F further states that a project's energy consumption and proposed conservation measures may be addressed as relevant and applicable in the Project Description, Environmental Setting, and Impact Analysis portions of technical sections, as well as through mitigation measures and alternatives.

In late 2018, the California Natural Resources Agency finalized updates to the 2018 CEQA *Guidelines* (California Natural Resources Agency, 2018). Appendix G was amended to now include the analysis of energy. Previously included in Appendix F, the Appendix G Checklist now provides energy criteria for the analysis of wasteful energy consumption and conflicts with state or local energy efficiency plans (California Natural Resources Agency, 2018).

4.6.2 Environmental Setting

Electricity

Electricity, a consumptive utility, is a manufactured resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components for distribution and use. The electricity generated is distributed through a network of transmission and distribution lines, commonly called a power grid.

Energy capacity, or electrical power, is generally measured in watts (W), while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 Wh. If ten 100-W bulbs were on for 1 hour, the energy required would

be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts (MW), which is 1 million watts, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is 1 billion watt-hours.

According to the U.S. Energy Information Administration (EIA), California used approximately 239,480 GWh of electricity in 2023 (EIA, 2025a). The sector-specific breakdown for energy consumption in 2023 indicates that commercial uses utilized 47 percent of the state's total energy consumption, followed by 35 percent for residential uses, 18 percent for industrial uses, and 0.3 percent for transportation uses (EIA, 2024). Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity consuming devices within a building. Due to the state's energy efficiency building standards and efficiency and conservation programs, California's energy use per capita in the residential sector is lower than any other state except Hawaii (EIA, 2025b).

Southern California Edison (SCE) provides electricity to the project site. SCE, a subsidiary of Edison International, serves approximately 180 cities in 11 counties across central and southern California. SCE receives electric power from a variety of sources.

SCE updates all load forecasts for gas and electricity services every year. Load growth forecasts for the project area are currently determined using load growth projection tools that use a number of sources of data, including past peak loading, population, development characteristics, and temperature history information. **Table 4.6-1,** *Electric Power Mix Delivered to Retail Customers in 2023*, shows the electric power mix that was delivered to retail customers for SCE compared to the statewide power mix for 2023, the most recent year for which data are available.

TABLE 4.6-1: ELECTRIC POWER MIX DELIVERED TO RETAIL CUSTOMERS IN 2023

Energy Resource	SCE	CA Power Mix (for comparison)
Eligible Renewable	**37.6%**	**36.9%**
Biomass & bio-waste[a]	0.1%	2.1%
Geothermal	5.2%	4.8%
Small hydroelectric	0.7%	1.8%
Solar	19.8%	17.0%
Wind	11.7%	11.2%
Coal	**0%**	**1.8%**
Large Hydroelectric	**4.5%**	**11.7%**
Natural Gas	**20.0%**	**36.6%**
Nuclear	**9.1%**	**9.3%**
Other	**0.1%**	**0.1%**
Unspecified sources of power[b]	**28.8%**	**3.7%**
Total	**100%**	**100%**

Notes:
[a] The Eligible Renewables category is further delineated into the specific sources: biomass & waste, geothermal, small hydroelectric, solar, and wind
[b] "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.
Source: SCE, 2025.

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs and delivered through high-pressure transmission pipelines.

According to the EIA, California used approximately 2,087,461 million cubic feet of natural gas in 2023 (EIA, 2025c). Most of California's natural gas customers are residential and small commercial customers (core customers). These customers accounted for approximately 35 percent of the natural gas delivered by California utilities in 2023. Large consumers, such as electric generators and industrial customers (noncore customers), accounted for approximately 58 percent and vehicle fuel accounted for approximately 1.5 percent of the natural gas delivered by California utilities in 2023 (EIA, 2025c). While the supply of natural gas in the United States and production in the lower 49 states has increased greatly since 2008, California produces little and imports 95 percent of its supply of natural gas (EIA, 2025c).

Natural gas is measured in terms of cubic feet (cf). Southern California Gas Company (SoCalGas) is the natural gas provider in Kern County; however, there is not a known natural gas service for the project site. SoCalGas' service territory encompasses approximately 20,000 square miles and more than 500 communities. In the California Energy Demand mid-energy demand scenario, natural gas demand in SoCalGas' service territory is projected to remain flat and increase by only 0.01 percent in 2030 above the last recorded demand in 2018 (CEC, 2020). In 2024, approximately 2,269 million cubic feet per day (MMcfd) were used in SoCalGas' service area. For the winter of 2023 to 2024, the highest daily SoCalGas pipeline capacity was estimated to be 3,851 MMcfd (California Gas and Electric Utilities, 2025). With the current natural gas assets and withdrawal protocols in place and sufficient interstate gas supplies, the California Public Utilities Commission (CPUC) predicted no curtailments or emergency flow orders in the winter of 2023 to 2024 (CPUC, 2023a).

Transportation

California used approximately 27.2 billion gallons of petroleum in 2023 (EIA, 2025d). Most of California's petroleum customers are residential and small commercial customers (core customers). This equates to a daily use of approximately 74.5 million gallons of petroleum. By sector, transportation uses utilize approximately 86 percent of the state's petroleum, followed by 10 percent from industrial, 3 percent from commercial, 1 percent from residential, and less than 1 percent from electric power uses (EIA, 2025d). In California, petroleum fuels refined from crude oil are the dominant source of energy for transportation sources. Petroleum usage in California includes petroleum products, such as motor gasoline, diesel fuel, liquefied petroleum gases, and jet fuel. California has implemented policies to improve vehicle efficiency and to support use of alternative transportation. Over the last decade, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and greenhouse gas (GHG) from the transportation sector, and reduce vehicle miles traveled (CEC, 2020). The California Energy Commission (CEC) predicts that the demand for gasoline will continue to decline over the next 10 years and that there will be an increase in the use of alternative fuels (CEC, 2020).

4.6.3 Regulatory Setting

Federal

Corporate Average Fuel Standards

Established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA) jointly administer the CAFE standards (NHTSA, 2023). The U.S. Congress has specified that CAFE standards must be set at the "maximum feasible level" with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.

Fuel efficiency standards for medium- and heavy-duty trucks have been jointly developed by the USEPA and NHTSA. The Phase 1 heavy duty truck standards apply to combination tractors, heavy duty pickup trucks and vans, and vocational vehicles, and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type. The USEPA and NHTSA have also adopted the Phase 2 heavy duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline, depending on the compliance year and vehicle type (USEPA and NHTSA, 2016). In 2022, a final rule established standards for passenger cars and light trucks, requiring an industry wide fleet average of 49 miles per gallon in 2026 (NHTSA, 2023).

Energy Independence and Security Act of 2007

Signed into law in December 2007, the Energy Independence and Security Act was passed to increase the production of clean renewable fuels; increase the efficiency of products, buildings, and vehicles; improve the energy performance of the federal government; increase U.S. energy security; develop renewable fuel production; and improve vehicle fuel economy. The act included the first increase in fuel economy standards for passenger cars since 1975, and also included a new energy grant program for use by local governments in implemented energy efficiency initiatives, as well as a variety of green building incentives and programs.

State

Senate Bill 1389

Senate Bill 1389 (Public Resources Code Sections 25300–25323) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code Section 25301[a]). The 2019 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California, including energy efficiency, strategies related to data for improved decisions in the Existing Buildings Energy Efficiency Action Plan, building energy efficiency standards, the impact of drought on California's energy system, achieving 50 percent renewables by 2030, the California Energy Demand Forecast, the Natural Gas Outlook, the Transportation Energy Demand Forecast, Alternative and Renewable Fuel and

Vehicle Technology Program benefits updates, update on electricity infrastructure in Southern California, an update on trends in California's sources of crude oil, an update on California's nuclear plants, and other energy issues (CEC, 2020).

California's Renewables Portfolio Standard

California's Renewables Portfolio Standard Program was enacted in 2002 with Senate Bill 1078 and accelerated in 2006, requiring investor-owned utilities to obtain 20 percent of their electric supply from renewable energy sources, such as solar, by 2010. On April 12, 2011, Governor Brown signed Senate Bill 2X, requiring California retail electric providers to procure 33 percent of their retail energy sales from eligible renewable sources by 2020. In October 2015, Governor Brown signed into legislation Senate Bill 350, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030 (CPUC, 2023b).

On September 10, 2018, Governor Brown signed SB 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also created new standards for the Renewable Portfolio Standard (RPS) goals that were established by Senate Bill 350 in 2015. Specifically, the bill increases required energy from renewable sources for both investor-owned and publicly owned utilities from 50 percent to 60 percent by 2030. Incrementally, these energy providers also are required to have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. The updated RPS goals are considered achievable, since many California energy providers are already meeting or exceeding the RPS goals established by SB 350. Governor Brown signed Executive Order B-55-18 with a new statewide goal to achieve carbon neutrality (zero-net GHG emissions) by 2045 and to maintain net negative emissions thereafter.

On September 16, 2022, Governor Newsom signed Senate Bill 1020, the Clean Energy, Jobs, and Affordability Act, which adds interim targets to the policy framework originally established in Senate Bill 100. The interim targets require renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent of all retail electricity sales by 2040. The bill also requires all state agencies to rely on 100 percent renewable energy and zero-carbon resources to power their own facilities by 2035 and encourages better information sharing and coordination between agencies for transmission planning.

California Assembly Bill 1493 (AB 1493, Pavley)

In response to the transportation sector accounting for more than half of California's carbon dioxide (CO_2) emissions, Assembly Bill 1493 (commonly referred to as the California Air Resources Board's [CARB] Pavley regulations), enacted in 2002, requires CARB to set GHG emission standards for new passenger vehicles, light-duty trucks, and other vehicles manufactured in and after 2009 whose primary use is non-commercial personal transportation. Phase I of the legislation established standards for model years 2009–2016 and Phase II established standards for model years 2017–2025 (CARB, 2017).

California Health and Safety Code, Division 25.5/California Global Warming Solutions Act of 2006

In 2006, the California State Legislature adopted Assembly Bill 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. Under HSC Division 25.5, CARB has the

primary responsibility for reducing the State's GHG emissions; however, Assembly Bill 32 also tasked the CEC and the CPUC with providing information, analysis, and recommendations to CARB regarding strategies to reduce GHG emissions in the energy sector.

In 2016, Senate Bill 32 and its companion bill Assembly Bill 197 amended HSC Division 25.5, established a new climate pollution reduction target of 40 percent below 1990 levels by 2030, and included provisions to ensure that the benefits of state climate policies reach into disadvantaged communities.

Low Carbon Fuel Standard

The Low Carbon Fuel Standard (LCFS), established in 2007 through Executive Order S-1-07 and administered by CARB, requires producers of petroleum-based fuels to reduce the carbon intensity of their products, starting with 0.25 percent in 2011 and culminating in a 10 percent total reduction in 2020. Petroleum importers, refiners and wholesalers can either develop their own low carbon fuel products, or buy LCFS credits from other companies that develop and sell low carbon alternative fuels, such as biofuels, electricity, natural gas and hydrogen.

California Air Resources Board

CARB's Advanced Clean Car Program

The Advanced Clean Cars emissions-control program was approved by CARB in 2012 and is closely associated with the Pavley regulations. The program requires a greater number of zero-emission vehicle models for years 2015 through 2025 to control smog, soot, and GHG emissions. This program includes the Low-Emissions Vehicle (LEV) regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles; and the Zero-Emissions Vehicle regulations (ZEV) to require manufactures to produce an increasing number of pure ZEVs (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025.

In 2022, CARB adopted the Advanced Clean Cars II regulations to establish the next phase of regulations beginning with the 2026 model year. Advanced Clean Cars II, among other things, increased the stringency of the smog-causing criteria pollutant standards, updated the zero-emission vehicle regulation to require that 100% of new passenger vehicles meet zero-emission standards (including plug-in hybrids) by the 2035 model year, and established a suite of assurance measures to ensure zero-emission vehicles can provide enduring emission reductions. On June 12, 2025, President Trump signed resolutions that nullified the U.S. Environmental Protection Agency's waivers for three of California transportation-related regulations, including the Advanced Clean Cars II regulations. In response, Governor Gavin Newsome and Attorney General Rob Bonta filed a lawsuit over resolutions. Additionally, Governor Gavin Newsom signed Executive Order N-27-25 on June 12, 2025. This order directs state agencies to assess additional actions to spur light-, medium-, and heavy-duty zero emission vehicle adoption in California, and to deliver formal recommendations for additional actions. CARB has begun a new phase of work that includes light-duty vehicle emissions standards to reduce criteria air pollutant, greenhouse gas, and toxic emissions consistent with state and federal law.

CARB also adopted the Advanced Clean Truck Regulation to accelerate a large-scale transition of zero emission medium- and heavy-duty vehicles. The regulation requires the sale of zero-emission medium- and heavy-duty vehicles as an increasing percentage of total annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b to 3 truck sales, 75 percent of Class 4 to 8 straight truck sales, and 40 percent of truck tractor sales. By 2045, every new medium- and

heavy-duty truck sold in California will be zero emission. Large employers, including retailers, manufacturers, brokers, and others, are required to report information about shipments and shuttle services to better ensure that fleets purchase available zero-emission trucks.

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

In 2004, CARB adopted an Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling in order to reduce public exposure to diesel particulate matter emissions (Title 13 California Code of Regulations [CCR] Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen, and other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles

In addition to limiting exhaust from idling trucks, in 2008, CARB approved the Truck and Bus regulation to reduce nitrogen oxide, particulate matter less than 10 microns in diameter, and particulate matter less than 2.5 microns in diameter emissions from existing diesel vehicles operating in California (13 CCR, Section 2025). The phased regulation aims to reduce emissions by requiring installation of diesel soot filters and encouraging the retirement, replacement, or retrofit of older engines with newer emission-controlled models. The phasing of this regulation has full implementation by 2023.

CARB also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The In-Use Off-Road Diesel-Fueled Fleets regulation adopted by CARB on July 26, 2007, aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models (13 CCR Section 2449). The compliance schedule requires full implementation by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

While the goals of these measures are primarily to reduce public health impacts from diesel emissions, compliance with the regulation has shown an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines.

California Environmental Quality Act

In accordance with CEQA and Appendix F, Energy Conservation, of the 2018 CEQA *Guidelines*, and to assure that energy implications are considered in project decisions, EIRs are required to include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the CEQA *Guidelines* provides a list of energy-related topics to be analyzed in the EIR. In addition, while not described or required as significance thresholds for determining the significance of impacts related to energy, Appendix F provides the following topics for consideration in the discussion of energy use in an EIR, to the extent the topics are applicable or relevant to the project:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;
- The effects of the project on local and regional energy supplies and on requirements for additional capacity;
- The effects of the project on peak and base period demands for electricity and other forms of energy;
- The degree to which the project complies with existing energy standards;
- The effects of the project on energy resources; and
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

In late 2018, the California Natural Resources Agency finalized updates to the 2018 CEQA *Guidelines* (California Natural Resources Agency, 2018). Appendix G was amended to now include the analysis of energy. Previously included in Appendix F, the Appendix G Checklist now provides energy criteria for the analysis of wasteful energy consumption and conflicts with state or local energy efficiency plans (California Natural Resources Agency, 2018). Appendix F did not describe or require significance thresholds for determining the significance of impacts related to energy. According to the updated Appendix G Checklist, Issue VI. Energy, a project would have a significant impact on energy and energy resources if it would:

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Local

Construction and operation of the project would be subject to policies and regulations contained within the County's general and specific plans, including the Kern County General Plan, Kern County Zoning Ordinance, and the Kern County Code of Building Regulations, which include policies, goals, and implementation measures related to energy. The policies and goals in the Kern County General Plan related to energy that are applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the project. These measures are not listed below, but as stated in **Chapter 2**, *Introduction*, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Kern County General Plan

Chapter 1. Land Use, Open Space, and Conservation Element

1.9 Resources

Goal 4: Encourage safe and orderly energy development within the County, including research and demonstration projects, and to become actively involved in the decision and actions of other agencies as they affect energy development in Kern County.

Chapter 5. Energy Element

5.4.5 Solar Energy Development

Goal

Goal 1: Encourage safe and orderly commercial solar development.

Policies

Policy 1: The County shall encourage domestic and commercial solar energy uses to conserve fossil fuels and improve air quality.

Policy 3: The County should permit solar energy development in the desert and valley planning regions that does not pose significant environmental or public health and safety hazards.

Soledad Mountain Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan addresses issues of importance in the area by stating goals, policies, implementation measures, and general provisions specific to the area. There are no goals, policies, or implementation measures in the Soledad Mountain Elephant Butte Specific Plan that are applicable to energy. In Kern County, specific plans are used to implement goals, objectives, and policies of the General Plan in a more detailed and refined manner unique to a smaller area of the County. Since there are no applicable goals, policies, or implementation measures within the Soledad Mountain Elephant Butte Specific Plan, refer to the applicable policies, goals, and implementation measures of the Kern County General Plan above.

4.6.4 Impacts and Mitigation Measures

Methodology

This analysis addresses the project's potential energy usage, including electricity, natural gas, and transportation fuel. Energy consumption during both construction and operation is assessed. Specific analysis methodologies are discussed below. The assessment presented herein is based in part on the Energy Impact Analysis prepared for the project (Tetra Tech, 2025), provided in **Appendix F** of this EIR.

Construction

Fuel consumption for off-road equipment was calculated from the OFFROAD2021 model output for the Eastern Kern Air Pollution Control District (EKAPCD) for the years 2025, 2026, and 2027, based on the

equipment's horsepower rating. Fuel efficiency for on-road worker commutes, vendor deliveries, and material transport trips was calculated from EMFAC2017 model output for the EKAPCD in the year 2021, based on the presumed vehicle mix.

California Emissions Estimator Model (CalEEMod) input parameters, including the land use type used to represent the project and size, construction schedule, and anticipated construction equipment utilization, were used to generate the OFFROAD and EMFAC model outputs.

Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the project applicant. For purposes of estimating project energy consumption, and based on information provided by the project applicant, it is assumed that construction of the project would last approximately 34 months. The analysis contained herein is based on project assumptions listed in **Table 3-4**, *Solar PV Construction Activity, Duration, and Equipment*, in Chapter 3, *Project Description*.

For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, during project construction. Construction would primarily occur during daylight hours, Monday through Friday, between 6:00 a.m. and 6:00 p.m.; however, some work may occur on Saturday and Sunday, as required, to meet the construction schedule and/or to promote the health and safety of workers.

Construction peak workforce is conservatively estimated to be approximately 660 workers. In addition to the 660 maximum daily workers traveling to the project site, it is assumed that there would be a combination of delivery and onsite trucks, which would be traveling to and from the project site daily. Delivery of material and supplies would reach the project site via on-road truck delivery via State Route (SR)-14 or SR-58. Most truck deliveries would be for the photovoltaic (PV) system installation, as well as any aggregate material that may be required for road base. Detailed construction equipment mix and vehicle trips are found in the *Energy Impact Analysis* provided as **Appendix F** of this EIR.

Power required for construction activities, such as for the temporary construction trailers, would be provided via portable generators or temporary local distribution. Generators used onsite would abide by CARB and EKAPCD regulations.

Operation

Energy consumption from the operational phase of the project was also estimated using the OFFROAD2021 and Emissions Factor 2017 (EMFAC2017) web database.

Electricity and diesel fuel would be required for various project components, including but not limited to operation of heating, ventilation, and air conditioning (HVAC) equipment, inverters, and battery storage equipment. The groundwater well pumps would likely be operated by electricity; however, from an energy demand perspective a worst-case assumption has been used consisting of a diesel generator. Emergency backup generators for project substations or battery energy storage system, if required, would use diesel fuel and would operate in accordance with applicable EKAPCD regulations. Additional fuel consumption during the operational phase would result from employee vehicle trips, vendor deliveries, and additional employee vehicle trips for panel washing.

Annual miles traveled is estimated to be 37,621 miles per year, accounting for the commutes and performance of regular inspection and maintenance activities by six full-time-equivalent staff. Employee vehicle trips during project operations is estimated to require approximately 1,436 gallons of gasoline fuel per year. The estimated diesel fuel use for off-highway trucks and emergency backup generators during

project operations is approximately 55,050 gallons per year. Although the project would require gasoline and diesel fuel usage, worker vehicles would likely consume less energy as fuel efficiency standards are increased and vehicles are replaced over the project's anticipated 35-year operational lifespan.

Decommissioning

Based on the expectation that equipment and vehicles used for decommissioning would be similar to those used for construction of the project, decommissioning fuel consumption is conservatively assumed to be the same as construction fuel consumption.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify, per Appendix G of the CEQA *Guidelines*, a project would have a significant impact on energy and energy resources if it would:

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Project Impacts

Impact 4.6-1: The project would result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Construction and Decommissioning

Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers, and HVAC) would be provided by portable generators or temporary local distribution. The amount of electricity used during construction would be minimal; typical demand would stem from the use of electrically powered hand tools and several construction trailers by managerial staff during the hours of construction activities. The electricity used for construction activities would be temporary and minimal; therefore, potential impacts would be less than significant.

Natural gas is not anticipated to be required during construction of the project. Any minor amounts of natural gas that may be consumed as a result of project construction would be temporary and negligible, and would not have an adverse effect; therefore, potential impacts would be less than significant.

Construction and decommissioning of the project is expected to require the use of non-renewable resources in the form of gasoline and diesel to power off-road construction equipment and on-road vehicles. Fuel consumption associated with the transportation of construction materials and construction worker commutes would be the primary energy resource expended over the course of construction. It is assumed that construction workers would travel to and from the project site in gasoline-powered vehicles. Heavy duty construction equipment associated with construction activities and onsite trucks such as water trucks and trucks involved in relocating dirt around the project site would rely on diesel fuel.

As stated previously, fuel consumption from construction equipment was estimated using the fuel consumption rates for each equipment obtained from OFFROAD2021 and construction information provided by the applicant (phase duration, number of equipment, and fuel type). Fuel consumption from worker and vendor trips was estimated using fuel efficiency values obtained using EMFAC2017. Worker vehicles are assumed to be gasoline fueled, and vendor vehicles are assumed to be diesel fueled.

Table 4.6-2, *Estimated Project Construction and Decommissioning Fuel Usage*, provides the estimated gasoline and diesel fuel use from construction equipment during project construction and decommissioning. It is estimated that approximately 960,228 gallons of diesel fuel would be consumed during project construction, based on construction equipment type, vendor deliveries, and material transport.

An estimated approximately 562,169 gallons of gasoline fuel would be consumed by on-road vehicles during project construction, based on employee vehicle trips (as provided in **Appendix F** of this EIR). Energy consumption associated with future decommissioning activities for the project is anticipated to be similar to construction activities. Therefore, the total diesel and gasoline consumption for decommissioning is projected to be 960,228 gallons and 562,169 gallons, respectively. The *Energy Impact Assessment* estimated that the total diesel and gasoline consumption by project construction represents approximately 0.08 percent and 0.008 percent of statewide fuel resources, respectively (Tetra Tech, 2025).

TABLE 4.6-2: ESTIMATED PROJECT CONSTRUCTION AND DECOMMISSIONING FUEL USAGE

Source	Total Gallons of Gasoline Fuel	Total Gallons of Diesel Fuel
Construction:		
Workers	453,657	--
Onsite Pickup Trucks	--	22,967
Diesel Vendor and Haul Trucks	--	466,926
Offroad Equipment	108,513	470,335
Construction Total	**562,169**	**960,228**
Decommissioning Total	**562,169**	**960,228**
Statewide Fuel Resources	13,576,000,000	2,316,000,000
Percentage of Statewide Fuel Resources	**0.008%**	**0.08%**

SOURCE: Tetra Tech, 2025

There are no unusual project characteristics that would cause or require the use of construction equipment that would be less energy efficient compared with other similar projects. It is not anticipated that construction-related fuel consumption as a result of implementation of the proposed project would result in inefficient, wasteful, or unnecessary energy use compared with other similar projects. Although the consumption of fuels during construction and decommissioning would be irreversible, the project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy duty diesel vehicle idling time to 5 minutes, and would implement **Mitigation Measure MM 4.3-3**, as provided in **Section 4.3**, *Air Quality*, of this EIR, which would impose idling restrictions. Additionally, the project soil use is anticipated to be balanced onsite and would not require intensive use of haul trucks for the import or export of earthwork material. Therefore, because petroleum use during construction would be temporary and relatively minimal, and with implementation of **Mitigation Measure MM 4.3-3**, the project would not result in the wasteful, inefficient, or unnecessary consumption of transportation fuels, and potential impacts would be less than significant.

Operation

Fuel during the operational phase would be required for use of emergency backup generators, employee vehicle trips, vendor deliveries, and additional employee vehicle trips for panel washing. Annual miles traveled are estimated to be 37,621 miles per year. Employee vehicle trips during operation and maintenance would require approximately 1,436 gallons of gasoline fuel per year. The estimated diesel fuel use for emergency backup generators and off-highway trucks during operation and maintenance is approximately 55,050 gallons per year. Although the project would increase gasoline and diesel fuel usage, worker vehicles would likely consume less energy as fuel efficiency standards are increased and vehicles are replaced over the project's anticipated 35-year operational lifespan.

Energy use associated with long-term operational activities is summarized in **Table 4.6-3**, *Project Operational Fuel Usage Per Year*. As shown, operation of the project would annually consume approximately 0.00001 percent and 0.00236 percent of the state's annual gasoline and diesel resources, respectively.

TABLE 4.6-3: PROJECT OPERATIONAL FUEL USAGE PER YEAR

Source	Total Gallons of Gasoline Fuel	Total Gallons of Diesel Fuel
Operations and Maintenance:		
Workers	1,436	--
Maintenance Trucks	--	34,659
Emergency Backup Generators	--	20,391
Total	**1,436**	**55,050**
Statewide Fuel Resources	13,576,000,000	2,316,000,000
Percentage of Statewide Fuel Resources	**0.00001%**	**0.00238%**

SOURCE: Tetra Tech, 2025.

The project would generate approximately 4,292,400 MWh of carbon-free electricity annually over a 35-year lifespan. This production would more than offset the minimal amount of energy consumed annually to operate the project. This electricity generation also would assist State investor-owned utilities in meeting their obligations under State RPS guidelines by providing a renewable energy alternative to the utilities' existing power mix.

As shown in **Table 4.6-3**, *Project Operational Fuel Usage Per Year,* the project would result in 1,436 gallons of gasoline and 55,050 gallons of diesel per year, representing a small fraction of a percent of the state's fuel resources, respectively. Over the lifetime of the project, the fuel efficiency of the vehicles being used by the employees and visitors is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation would decrease over time.

Given these considerations, the project's fuel and energy consumption during construction and operations would comprise a small percentage of the available resources within the state. Fuel and energy consumption for the project would not result in inefficient, wasteful, or unnecessary energy use.

Mitigation Measures

Implement **Mitigation Measure MM 4.3-3** would be required (see **Section 4.3**, *Air Quality*, for text of **Mitigation Measure MM 4.3-3**).

Level of Significance

With implementation of **Mitigation Measure MM 4.3-3**, impacts would be less than significant.

Impact 4.6-2: The project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Construction and Decommissioning

Construction and decommissioning equipment would comply with federal, State, and regional requirements where applicable. With respect to truck fleet operators, the USEPA and NHSTA have adopted fuel efficiency standards for medium- and heavy-duty trucks. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018 and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type. The USEPA and NHTSA also adopted the Phase 2 heavy duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline, depending on the compliance year and vehicle type. The energy modeling for trucks does not take into account specific fuel reductions from these regulations, since they would apply to fleets as they incorporate newer trucks meeting the regulatory standards; however, these regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards.

In addition, construction and decommissioning equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of 5 minutes at a location and the phase-in of off-road emission standards that result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy. Energy consumption associated with future decommissioning activities for the project is anticipated to be similar to construction activities.

Operation

In order to meet the Assembly Bill 32 GHG emissions reduction mandate, the Climate Change Scoping Plan relies on achievement of the 33 percent RPS by 2020 and 50 percent by 2030. The 2017 Scoping Plan relies on achievement of the RPS target of 50 percent of California's energy coming from renewable sources by 2030. Senate Bill 100 further increased California's RPS and required retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by the end of 2024, 52 percent by the end of 2027, and 60 percent by the end of 2030; and that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045.

The project would include the development of a solar facility and associated infrastructure with the capacity to generate up to 1,400 MW of renewable electric energy and the installation of an energy storage facility and accessories that would provide energy storage capacity of up to 8 GWh for the electrical grid. The project and other similar projects are essential to achieving the RPS. As discussed in Section 4.8, *Greenhouse Gases*, the project is reasonably expected to displace region-wide and statewide emissions of GHGs over the expected life of the project. The reduction in GHG emissions is a direct result of increasing the share of renewable energy available to investor-owned utilities required to meet the RPS. The project directly aligns with the goals of the RPS by generating 4,292,400 MWh of renewable electricity annually.

Any onsite building would be subject to Building Energy Efficiency Standards as required by the CCR. The Building Energy Efficiency Standards are intended to save energy, increase electricity supply reliability, and avoid the need to construct new power plants. Pursuant to the California Green Building Standards Code (CALGreen) and the Energy Efficiency Standards, the County would review the design components of the project's energy conservation measures when the project's building plans are submitted. These measures could include insulation; use of energy efficient HVAC; solar-reflective roofing materials; energy efficient indoor and outdoor lighting systems; reclamation of heat rejection from refrigeration equipment to generate hot water; incorporation of skylights; and other measures. The project would also be subject to CALGreen, which requires 65 percent construction solid waste diversion.

Overall, because one of the objectives of the project is to assist California in meeting its GHG emissions reduction goals by 2030 and 2045, as required by the California Global Warming Solutions Act (Assembly Bill 32) and as amended by Senate Bill 32 in 2016, the project would be compliant with the applicable recommended actions of the CARB Climate Change Scoping Plan, as well as applicable federal, state, and local policies. Specifically, the project would assist the State and regulated utility providers to generate a greater portion of energy from renewable sources consistent with the 2030 and 2045 RPS. Therefore, potential impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

Impacts would be less than significant.

4.6.5 Cumulative Setting, Impacts, and Mitigation Measures

Cumulative impacts occur when the incremental effects of a project are significant when combined with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. The geographic context for the analysis of cumulative impacts on electricity is SCE's service area because the project and related projects are located within the service boundaries of SCE.

The main contribution of energy consumption from the project would be from construction equipment usage, haul truck trips, and employee trips during the construction phase and panel washing activities, maintenance trips, and employee trips during project operation of the project. The project's emissions would, therefore, contribute to the increase in emissions in the transportation sector as well as the electricity generation sector. Construction emissions, however, would be finite and temporary and would cease at the end of construction activities.

Although the project would result in a contribution to cumulative energy consumption in California, construction of the project would implement **Mitigation Measure MM 4.3-3**, as provided in **Section 4.3**, *Air Quality*, of this EIR, would require the use of energy-efficient equipment during project construction. Additionally, operation of the project could offset emissions from the electricity generation sector estimated at 4,292,400 MWh of renewable electricity annually.

Cumulative projects in the project area listed in **Table 3-5**, *Cumulative Projects List*, largely consist of utility-scale solar power generation facilities. The nature of these projects is such that, like the project, they would be consistent with the strategies of the Climate Change Scoping Plan. In order to meet the Senate Bill 32 GHG emissions reduction mandate, the Scoping Plan relies on achievement of the RPS target of 60 percent of California's energy coming from renewable sources by 2030 and 100 percent renewable sources by 2045. The project and other similar projects are essential to achieving the RPS. Also like the project, the related solar and wind projects would have similar energy use that would be offset by renewable energy generation and would have minimal operational trips to and from the sites. Overall, the project would not contribute to cumulative energy consumption in California because operation of the project would provide electric power with negligible operational energy consumption over the long term when compared to traditional fossil-fueled generation technologies. Thus, the project would not have a cumulatively considerable impact on energy consumption, would not conflict with any renewable energy plans, and cumulative impacts would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measure MM 4.3-3** would be required (see **Section 4.3**, *Air Quality*, for text of this measure).

Level of Significance

With implementation of **Mitigation Measure MM 4.3-3**, cumulative impacts would be less than significant.

Section 4.7

Geology and Soils

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Section 4.7
Geology and Soils

4.7.1 Introduction

This section of the EIR describes the geologic and soil characteristics of the project site and potential geology and soils impacts associated with construction and operation of the project and mitigation measures that would reduce these impacts, if applicable. The analysis in this section is largely based on the *Preliminary Geologic California Environmental Quality Act Report* (Terracon, 2025) and the *Paleontological Resources Assessment Report* (ECORP, 2025) prepared for the project. These reports are included in **Appendix G1** and **G2** of this EIR and are incorporated by reference herein.

4.7.2 Environmental Setting

Regional Geologic Setting

The project is situated in the western portion of the Mojave Desert Geomorphic Province. This geomorphic province encompasses an area that extends approximately 250 miles from the intersection of the San Andreas and Garlock Faults on the west to the Nevada and Arizona borders on the east. The western end of the province is bounded by the San Andreas and Garlock Faults. The province is up to 100 miles wide and is generally bounded by the Garlock Fault, the Tehachapi Mountains, and the Basin and Range to the north and to the south by the Transverse Ranges (Norris and Webb, 1990). In general, the province consists of broad alluvial valleys underlain by sedimentary, metamorphic, and igneous rocks. The Mojave Desert Province within the region generally consists of Tertiary, Quaternary, and Mesozoic-age granitic rock, sedimentary rock, and alluvium. The Garlock Fault is a major strike-slip fault in southern California that clearly marks the northern boundary of the Mojave province and the southern ends of the Sierra Nevada (Terracon, 2025). The San Andreas Fault is the master fault of an intricate fault network cutting through the California coastal region; the fault extends from northern California to the San Bernardino area of southern California (Terracon, 2025). The project site is not intersected by any known faults, but, like most of Southern California, is located in a region considered seismically active (Terracon, 2025).

Local Geologic Setting

Fault Rupture

Ground surface rupture along an earthquake fault may cause damage to aboveground infrastructure and other features and occurs when movement on a fault deep within the earth breaks through to the surface. Fault rupture is considered to be most likely to occur along the identified traces of active faults (Bryant and Hart, 2007). Active faults are defined as faults with evidence of displacement in the last 11,000 years. As described above, there are no active faults that intersect the project site nor are any located within the immediate vicinity. The nearest Earthquake Fault Zone, as delineated by the Alquist-Priolo Earthquake Fault Zoning Act, is the western Garlock segment of the Garlock fault, which is located approximately 3.2 miles northwest of the project site (Terracon, 2025).

Ground Shaking

Faults located within the vicinity of the project have the potential to cause ground shaking at the project site; the magnitude of ground shaking experienced onsite is dependent on the distance to causative faults and the earthquake magnitude (or measure of the amount of energy released during an earthquake event). **Table 4.7-1**, *Historic Earthquakes in Project Vicinity*, shows some of the significant historical earthquakes that have occurred in the region and their Richter scale magnitude.

TABLE 4.7-1: HISTORIC EARTHQUAKES IN PROJECT VICINITY

Earthquake (Year)	Approximate Distance to Project Site (miles)	Earthquake Magnitude (Richter Scale)
Kern County (1952)	35	7.5
Tejon Ranch (1988)	32	5.4
Mojave (1992)	18	5.7
Ridgecrest (2019)	64	7.1, 6.4, and 5.4

SOURCE: USGS, 2025.

The fault with likely the most potential to affect the project site from a design standpoint is the Garlock Fault, due to its location and earthquake magnitude potential. The Garlock Fault has a maximum moment magnitude earthquake potential of 7.73 (Terracon, 2025), which is enough to cause substantive ground shaking at the project site. However, seismic events on other active faults of the region would also have the potential to cause ground shaking at the project site.

Landslides

No landslides or related features are known to underlie or be adjacent to the project site. Therefore, the potential for landslides at the project is considered low (Terracon, 2025).

Liquefaction and Lateral Spreading

Liquefaction is a type of ground failure resulting from the generation of high porewater pressures during earthquake ground shaking, causing loss of shear strength. Liquefaction is typically a hazard where loose sandy soils exist below groundwater. Liquefaction potential is considered highest when saturated loose soils are found within 50 feet of ground surface. Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Research and historical data indicate that loose granular soils and non-plastic silts that are saturated by relatively a shallow groundwater table are susceptible to liquefaction. Based on data obtained from existing wells located 0.5 mile and 1.5 mile from the project site, historical groundwater depth at the site is anticipated to be deeper than 50 feet below ground surface (bgs). Groundwater was not observed in the borings and test pits conducted by Terracon at the project site. As such, groundwater is not anticipated to occur within the depth of excavations or foundation installations at the project site. Therefore, the potential for liquefaction at the project site is considered low and other geologic hazards related to liquefaction, such as lateral spreading, are therefore also considered low (Terracon, 2025).

Soil Erosion

Soil erosion is the wearing away of soil and rock by processes such as mechanical or chemical weathering, mass wasting, and the action of waves, wind, and subsurface water flow. Excessive soil erosion can

eventually lead to damage of building foundations and roadways. In general, areas that are most susceptible to erosion are those that would be exposed during the construction phase when earthwork activities disturb soils and require stockpiling. Typically, the soil erosion potential is reduced once the soil is graded and covered with concrete, structures, asphalt, or slope protection; however, changes in drainage patterns can also cause areas to be susceptible to the effects of erosion. There are many factors contributing to soil erosion. High soil erodibility contributes to high erosion rates. Soils containing high silt content have the highest soil erodibility since they are easily detached, tend to crust, and produce high rates of runoff. Coarse textured soils, or sandy soils, are easily detached, but typically do not produce a lot of runoff, so they have low soil erodibility. Slope stability is not anticipated to be a design consideration for the project due to the relatively flat topography of the project site. (Terracon, 2025).

Subsidence

Subsidence is characterized as a sinking of the ground surface relative to surrounding areas. There are four types of subsidence that are currently occurring within Kern County. Tectonic subsidence refers to the long-term slow sinking of the land surface. Subsidence can also occur naturally when moisture-deficient soils are exposed to water, which causes collapse. Subsidence has also been caused by human activities, including the extraction of oil and gas and the withdrawal of groundwater. Specific areas identified as experiencing subsidence within the County primarily occurred to the southeast of the project site near the cities of Rosamond and Lancaster (Terracon, 2025). There is no known evidence of subsidence at the project site nor was there any evidence of associated fissures or cracking during Terracon's site exploration. The project site is noted, however, as generally consisting of loose surficial soils that may conceal underlying cracks and fissures. (Terracon, 2025).

Soil Collapse

Collapsible soils consist of loose, dry, low-density materials that collapse, compact, and change in settlement under the addition of water or excessive loading, often resulting in severe damage to structures. These soils are distributed throughout the southwestern United States, specifically in areas of young alluvial fans, debris flow sediments, and loess (wind-blown sediment) deposits. The soils in portions of the project site may have low to moderate collapse potential in the upper 5 feet. These conditions have minor impact on the design and are typically mitigated with remedial grading to remove and replace potentially collapsible soils beneath shallow concrete foundations (Terracon, 2025).

Expansive Soils

Expansive soils contain clay types capable of absorbing water in a manner that results in volumetric changes. Over long-term periods of cyclical changes in water content, these volumetric changes can cause damage to foundations, retaining walls, sidewalks, and roadways. The soils at the project site are expected to have a low potential for expansion (Terracon, 2025).

Paleontological Setting

Paleontological resources are the mineralized (fossilized) remains of prehistoric plants and animals and the mineralized impressions (trace fossils) left as indirect evidence of the forma and activity of such organisms. These resources are located within sedimentary rocks or alluvium and are considered to be nonrenewable.

Formations that contain vertebrate fossils are considered more sensitive because vertebrate fossils tend to be rare and fragmentary. Formations containing microfossils, plant casts, and invertebrate fossils are more common. A significant fossil deposit is a rock unit or formation that contains significant nonrenewable

paleontological resources. This is defined as comprising one or more identifiable vertebrate fossils, large or small, and any associated invertebrate and plant fossils, traces, and other data that provide taphonomic, taxonomic, phylogenetic, ecologic, and stratigraphic information (e.g., ichnites and trace fossils generated by vertebrate animals, such as trackways or nests and middens), which provide datable material and climatic information. This definition excludes invertebrate or botanical fossils except when present within a given vertebrate assemblage. However, invertebrate and botanical fossils may be significant as environmental indicators associated with vertebrate fossils.

According to published maps, the project site is predominantly underlain by Quaternary alluvium (Qa, and Qoa). Alluviam (Qa and Qoa) of two relative ages forms the majority of the surficial materials across the project site. Eolian sands (Qs) occur in a small area along the southeastern margin of the project site and are described as windblown sand, groundcover, and dunes. Quartz Monzonite bedrock is mapped as outcrops in very limited areas in the northwest and southeast portions of the project site. In a majority of the project site, during exploratory borings and test pits, bedrock was not encountered. The majority of the project site is instead expected to be underlain by alluvial sediments of varying density. Due to the young age (i.e., Holocene), deposits mapped as Quaternary alluvium (Qa) have low paleontological potential on the surface that increases to high with depth where Quaternary older alluvium (Qoa) can be encountered. These older alluvial deposits often lie just below a thin layer of younger alluvial or aeolian sediments and are known to produce significant fossil vertebrates in the Mojave and Colorado Deserts (ECORP, 2025). Quaternary older alluvium are assigned a high paleontological potential as a result (ECORP, 2025).

Existing Paleontological Resources

A paleontological resource assessment was conducted to assess the potential for paleontological resources to be uncovered during ground-disturbing activities associated with the proposed project. This assessment was prepared in accordance with Society of Vertebrate Paleontology established guidelines and standard procedures (ECORP, 2025) and included an examination of published geological maps of the project site, paleontological locality search using the Natural History Museum of Los Angeles County (NHMLAC), and a review of published paleontological reports to determine if the geologic units present within the project site typically yield paleontological resources. Intensive pedestrian surveys were conducted over a 8,540-acre Study Area (which encompasses the 7,700-acre project site and the proposed generation tie line corridor) from November 7 through 16, 2022; on July 1 and 2, 2023; from November 11 through 17, 2023; and on April 20 and 21, 2024. A survey crew examined the ground surface for fossils as well as any exposed geology that may indicate the potential for fossils. Whenever possible, the locations of subsurface exposures caused by factors such as water or soil erosion were examined. There were no subsurface investigations conducted nor were any resources collected during the pedestrian survey.

The fossil record from the NHMLAC online database (2020) is provided as part of **Appendix G2**, *Paleontological Resources Assessment Report*. The record search results provided by the NHMLAC determined that 20 previously recorded paleontological resources are located outside the Study Area; none are located within the Study Area. Because many of these findings are from vertebrates that date to the Pleistocene, a literature review was conducted to obtain a better understanding of the general geology, stratigraphy, and paleontological potential of the Study Area, as well as to identify any previously recorded fossil localities. Geologic maps were also reviewed to determine the presence and distribution of geologic units within the Study Area. There were no fossil localities that were found within the Study Area during the records search, literature review, or pedestrian surveys. However, the NHMLAC identified 20 fossil localities outside of the Study Area that came from the same sedimentary units found within the Study Area. Holocene alluvium (not highly sensitive) was observed in the Study Area, but no highly sensitive

Quaternary older alluvium or Horned Toad Formation were observed during surveys; however, the latter two may be encountered with depth during Project excavations (ECORP, 2025).

While the NHMLAC reported no paleontological localities within the Study Area, which encompasses portions of the Monolith, Mojave, Sanborn, and Bissell U.S. Geological Survey topographic quadrangle maps, the LACNHM reported several fossil localities from the same or similar deposits that are mapped within the project site (i.e., sediments mapped as Quaternary alluvium [Qa]). The closest NHMLAC fossil locality is NHMLAC 7891, which consists of a fossil camel *Hemiauchenia*), recovered to the south-southwest of the Study Area near the California Aqueduct west and southwest of Soledad Mountain. In addition, the Rising Tree Wind Energy Project, which is near the Study Area (approximately 2 miles north of Oak Creek Road), exposed numerous fossils in exposures of the Horned Toad Formation (ECORP, 2025). This fauna, referred to as the Warren Local Fauna, includes a diverse assemblage of large herbivores (many now extinct in Noth America), including antilocaprids, camelids, rhinoceros, horse, and llama. Carnivores include the extinct bone-eating canid *Osteoborus* and the extinct large cat *Machairodus*. Smaller mammals recorded include the primitive hare *Hypolagus* and the packrat-like rodent *Repomys*. This faunal assemblage is significant in the fossil record because it represents a timeframe from 5.2 to 5.9 million years ago known as the Hemphillian Land Mammal Age in western North America (ECORP, 2025).

4.7.3 Regulatory Setting

Geologic resources and geotechnical hazards are governed primarily by local jurisdictions. The conservation elements and seismic safety elements of city and county general plans contain policies for the protection of geologic features and avoidance of hazards.

The California Environmental Quality Act (CEQA) is the major environmental statute that guides the design and construction of projects on nonfederal lands in California. This statute establishes a specific process for environmental impact analysis and public review. In addition, the project proponent must comply with other applicable federal, state, and local statutes, regulations, and policies. Relevant and potentially relevant statutes, regulations, and policies are discussed below.

Federal

Clean Water Act (Erosion Control)

The federal Clean Water Act (CWA; 33 United States Code [U.S.C.] 1251 *et seq.*), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point-source and certain nonpoint-source discharges to surface water. Such discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). Projects that disturb one acre or more are required to obtain NPDES coverage under the NPDES General Permit for Stormwater Discharges Associated with Construction Activity (Construction General Permit), Order No. 2009-0009-DWQ. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which includes best management practices (BMPs) to regulate stormwater runoff, including measures to prevent soil erosion. Requirements of the CWA and associated SWPPP are described in further detail in **Section 4.9**, *Hydrology and Water Quality*.

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act was enacted in 1997 to "reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program." To accomplish this, the Act established the National Earthquake Hazards Reduction Program (NEHRP). This program was significantly amended in November 1990 by NEHRP, which refined the description of agency responsibilities, program goals, and objectives.

NEHRP's mission includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improvement of building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results. NEHRP designates the Federal Emergency Management Agency as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Programs under NEHRP help inform and guide planning and building code requirements, such as emergency evacuation responsibilities and seismic code standards, such as those to which the project would be required to adhere.

Paleontological Resources

A variety of federal statutes specifically address paleontological resources. They are generally applicable to a project if that project includes federally owned or federally managed lands or involves a federal agency license, permit, approval, or funding. The first of these is the Antiquities Act of 1906 (54 U.S.C. 320301-320303 and 18 U.S.C. 1866(b)), which calls for protection of historic landmarks, historic and prehistoric structures, as well as other objects of historic or scientific interest on federally administered lands, the latter of which would include fossils. The Antiquities Act both establishes a permit system for the disturbance of any object of antiquity on federal land and also sets criminal sanctions for violation of these requirements. The Antiquities Act was extended to specifically apply to paleontological resources by the Federal-Aid Highways Act of 1958. More recent federal statutes that address the preservation of paleontological resources include the National Environmental Policy Act, which requires the consideration of important natural aspects of national heritage when assessing the environmental impacts of a project (P.L. 91-190, 31 Stat. 852, 42 U.S.C. 4321–4327). The Federal Land Policy Management Act of 1976 (P.L. 94-579; 90 Stat. 2743, U.S.C. 1701–1782) requires that public lands be managed in a manner that will protect the quality of their scientific values, while Title 40 Code of Federal Regulations Section 1508.2 identifies paleontological resources as a subset of scientific resources. The Paleontological Resources Preservation Act (Title VI, Subtitle D of the Omnibus Land Management Act of 2009) is the primary piece of federal legislation.

Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act offers provisions of paleontological resources identified on federal, Native American, or State lands and guidance for their management and protection and promotes public awareness and scientific education regarding vertebrate fossils. The law also requires federal agencies to develop plans for inventory, collection, and monitoring of paleontological resources and establishes stronger criminal and civil penalties for the removal of scientifically significant fossils on federal lands.

State

The Alquist-Priolo Earthquake Fault Zoning Act of 1972

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (formerly the Special Studies Zoning Act) regulates the development and construction of buildings intended for human occupancy to avoid hazards associated with surface fault rupture. In accordance with this law, the California Geological Survey (CGS) maps active faults and designates Earthquake Fault Zones along mapped faults. This act groups faults into categories (i.e., active, potentially active, or inactive). Historic and Holocene faults are considered active, Late Quaternary and Quaternary faults are considered potentially active, and pre-Quaternary faults are considered inactive. These classifications are qualified by conditions. For example, a fault must be shown to be "sufficiently active" and "well defined" through detailed, site-specific, geologic explorations to determine whether building setbacks should be established. Any project that involves the construction of buildings or structures for human occupancy is subject to review under the Alquist-Priolo Earthquake Fault Zoning Act, and any structures for human occupancy must be located at least 50 feet from any active fault.

The Seismic Hazards Mapping Act of 1990

In accordance with Public Resources Code (PRC) Chapter 7.8, Division 2, the CGS is directed to delineate seismic hazard zones. The purpose of the act is to reduce the threat to public health and safety and minimize the loss of life and property by identifying and mitigating seismic hazards, such as those associated with strong ground shaking, liquefaction, landslides, other ground failures, or other hazards caused by earthquakes. Cities, counties, and state agencies are directed to use seismic hazard zone maps developed by the CGS in their land use planning and permitting processes. In accordance with the Seismic Hazards Mapping Act, site-specific geotechnical investigations must be performed prior to permitting most urban development projects within seismic hazard zones.

California Building Code

The California Building Code (CBC), which is codified in Title 24 of the California Code of Regulations, Part 2, was promulgated to safeguard public health, safety, and general welfare by establishing minimum standards related to structural strength, means of egress facilities, and general stability of buildings. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all buildings and structures within its jurisdiction. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under State law, all building standards must be centralized in Title 24 or they are not enforceable. The provisions of the CBC apply to the construction, alteration, movement, replacement, location, and demolition of every building or structure, or any appurtenances connected or attached to such buildings or structures throughout California.

The 2022 edition of the CBC is based on the 2021 International Building Code published by the International Code Council. The code is updated triennially, and the 2022 edition of the CBC was published by the California Building Standards Commission in July 2022 and took effect January 1, 2023.

The 2022 CBC provides requirements for general structural design and includes means for determining earthquake loads as well as other loads (such as wind loads) for inclusion into building codes. A load is the overall force to which a structure is subjected in supporting a weight or mass, or in resisting externally applied forces. Excess load or overloading may cause structural failure. Seismic design provisions of the building code generally prescribe minimum lateral forces applied statically to the structure, combined with

the gravity forces of the dead and live loads of the structure, which the structure then must be designed to withstand. The prescribed lateral forces are generally smaller than the actual peak forces that would be associated with a major earthquake. Consequently, structures should be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage, but with some nonstructural damage, and (3) resist major earthquakes without collapse, but with some structural as well as nonstructural damage. Conformance to the current building code recommendations does not constitute any kind of guarantee that significant structural damage would not occur in the event of a maximum magnitude earthquake. However, it is reasonable to expect that a structure designed in accordance with the seismic requirements of the CBC should not collapse in a major earthquake.

The earthquake design requirements consider the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, all of which are used to determine a seismic design category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site; SDC ranges from A (very small seismic vulnerability) to E/F (very high seismic vulnerability and near a major fault). Seismic design specifications are determined according to the SDC in accordance with Chapter 16 of the CBC. Chapter 18 of the CBC covers the requirements of geotechnical investigations (Section 1803), excavation, grading, and fills (Section 1804), load-bearing of soils (Section 1806), as well as foundations (Section 1808), shallow foundations (Section 1809), and deep foundations (Section 1810). For Seismic Design Categories D, E, and F, Chapter 18 requires analysis of slope instability, liquefaction, and surface rupture attributable to faulting or lateral spreading, plus an evaluation of lateral pressures on basement and retaining walls, liquefaction and soil strength loss, and lateral movement or reduction in foundation soil-bearing capacity. It also addresses measures to be considered in structural design, which may include ground stabilization, selecting appropriate foundation type and depths, selecting appropriate structural systems to accommodate anticipated displacements, or any combination of these measures. The potential for liquefaction and soil strength loss must be evaluated for site-specific, peak ground acceleration magnitudes and source characteristics consistent with the design earthquake ground motions.

Chapter 18 also describes analysis of expansive soils and the determination of the depth to groundwater table. Expansive soils are defined in the CBC as follows:

1803.5.3 Expansive Soil. In areas likely to have expansive soil, the building official shall require soil tests to determine where such soils do exist. Soils meeting all four of the following provisions shall be considered expansive, except that tests to show compliance with Items 1, 2 and 3 shall not be required if the test prescribed in Item 4 is conducted:

1. Plasticity index (PI) of 15 or greater, determined in accordance with ASTM D 4318.
2. More than 10 percent of the soil particles pass a No. 200 sieve (75 micrometers), determined in accordance with ASTM D 422.
3. More than 10 percent of the soil particles are less than 5 micrometers in size, determined in accordance with ASTM D 422.
4. Expansion index greater than 20, determined in accordance with ASTM D 4829.

Public Resources Code Section 5097.5 and Section 30244

Other state requirements for paleontological resource management are included in PRC Sections 5097.5 and 30244. These statutes prohibit the removal of any paleontological site or feature from public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a

misdemeanor, and require reasonable mitigation of adverse impacts to paleontological resources from developments on public (e.g., state, county, city, district) lands.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act, in cooperation with the CWA, established the State Water Resources Control Board (SWRCB). The SWRCB and the nine Regional Water Quality Control Boards (RWQCB) are responsible for protecting California's surface water and groundwater supplies. Section 13000 of the Act directs each RWQCB to develop Water Quality Control Plans for all areas in its region, to designate the beneficial uses of California's rivers and groundwater basins; these plans are the basis for each board's regulatory program.

The Basin Plan gives direction on the beneficial uses of state waters in Region 7, describes the water quality that must be maintained to support such uses, and includes programs, projects, and other actions necessary to achieve the standards established in the Basin Plan. The Colorado River RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements to individuals, communities, or businesses whose waste discharges may affect water quality. These requirements are state Waste Discharge Requirements for discharge to land or federally delegated NPDES permits for discharges to surface water. Responsibility for implementing CWA Sections 401, 402, and 303(d) is also outlined in the Porter-Cologne Water Quality Control Act.

State Regional Water Quality Control Board, Stormwater General Construction Permit

The five-member SWRCB allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine RWQCBs in the major watersheds of the state. The joint authority of water allocation and water quality protection enables the SWRCB to provide comprehensive protection for California's waters.

In 1999, the state adopted the Construction General Permit (SWRCB Order No. 2012-0006-DWQ, NPDES No. CAS000002). The Construction General Permit requires that construction sites with one acre or greater of soil disturbance, or less than one acre but part of a greater common plan of development, apply for coverage for discharges under the Construction General Permit by submitting a Notice of Intent for coverage, developing a SWPPP, and implementing BMPs to address construction site pollutants.

The SWPPP should contain a site map(s) that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list the BMPs the discharger will use to protect stormwater runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs, and a sediment monitoring plan if the site discharges directly to a waterbody listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. Enrollment under the Construction General Permit is through the Stormwater Multiple Application and Report Tracking System. Additionally, the SWRCB is responsible for implementing the CWA and issues NPDES permits to cities and counties through the individual regional boards.

California Environmental Quality Act

Appendix G of the State CEQA *Guidelines* (California Code of Regulations Title 14, Chapter 3) provides an Environmental Checklist of questions intended to guide analysis pertaining to project-level impacts to geology and soils and paleontological resources. For purposes of the Environmental Checklist, CEQA does not define "a unique paleontological resource or site." However, the Society of Vertebrate Paleontology (SVP) has defined a "significant paleontological resource" in the context of environmental review. The SVP defines a Significant Paleontological Resource as: Fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years) [p. 11] (SVP, 2010).

Local

Construction, operation, and decommissioning of the project would be subject to policies and regulations contained within the County's general and specific plans, including the Kern County General Plan, Soledad Mountain Elephant Butte Specific Plan, Kern County Zoning Ordinance, and the Kern County Code of Building Regulations, which include policies, goals, and implementation measures related to hydrology and water quality name. The policies and implementation measures in the Kern County General Plan related to geology and soils that are applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the project. These measures are not listed below, but as stated in **Chapter 2**, *Introduction*, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Kern County General Plan

The policies, goals, and implementation measures in the Kern County General Plan for geology and soils that are applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the project. These measures are not listed below, but as stated in **Chapter 2**, *Introduction*, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Chapter 1. Land Use, Conservation, and Open Space Element

1.3 Physical and Environmental Constraints

Goal

Goal 1: To strive to prevent loss of life, reduce personal injuries, and property damage, minimize economic and social diseconomies resulting from natural disaster by directing development to areas which are not hazardous.

Policy

Policy 1: Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained (Map Code 2.1 [Seismic Hazard], Map Code 2.2 [Landslide], Map Code 2.3 [Shallow Groundwater], Map Code 2.5 [Flood Hazard], Map

Codes from 2.6 – 2.9, Map Code 2.10 [Nearby Waste Facility], and Map Code 2.11 [Burn Dump Hazard]) to support such development unless appropriate studies establish that such development will not result in unmitigated significant impact.

Implementation Measures

Measure D: Review and revise the County's current Grading Ordinance as needed to ensure that its standards minimize permitted topographic alteration and soil erosion while maintaining soil stability.

Measure N: Applicants for new discretionary development should consult with the appropriate Resource Conservation District and the California Regional Water Quality Control Board regarding soil disturbances issues.

1.10.3 Archaeological, Paleontological, Cultural, and Historical Preservation

Policy

Policy 25: The County will promote the preservation of cultural and historic resources that provide ties with the past and constitute a heritage value to residents and visitors.

Implementation Measures

Measure M: In areas of known paleontological resources, the County should address the preservation of these resources where feasible.

Chapter 4: Safety Element

Goal

Goal 1: Minimize injuries and loss of life and reduce property damage.

4.3 Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure

Policy

Policy 1: The County shall require development for human occupancy to be placed in a location away from an active earthquake fault in order to minimize safety concerns.

Implementation Measure

Measure B: Require geological and soils engineering investigations in identifying significant geologic hazard areas in accordance with the Kern County Code of Building Regulations.

Measure C: The fault zones designated in the Kern County Seismic Hazard Atlas should be considered significant geologic hazard areas. Proper precautions should be instituted to reduce seismic hazard, whenever possible in accordance with State and County regulations.

4.5 Landslides, Subsidence, Seiche, and Liquefaction

Policies

Policy 1: Determine the liquefaction potential at sites in areas of shallow groundwater (Map Code 2.3) prior to discretionary development and determine specific mitigation to be incorporated into the foundation design, as necessary, to prevent or reduce damage from liquefaction in an earthquake.

Policy 3: Reduce potential for exposure of residential, commercial, and industrial development to hazards of landslide, land subsidence, liquefaction, and erosion.

Soledad Mountain Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. The recommendations, analysis, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan for geology and soils applicable to the project are provided below. The Soledad Mountain Elephant Butte Specific Plan contains additional recommendations, analysis, and implementation measures that are more general in nature and are not specific to developments such as this project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan are incorporated by reference.

Conservation

Item 5. Standards for Prevention, Control, and Correction of Soil Erosion Caused by Subdivision Roads and Other Sources

Recommendation: No construction shall be allowed unless mitigating measures are implemented to prevent erosion.

Analysis: In an area naturally scenic landscape, all measures should be taken to prevent unsightly scarring of the land. Cuts, fills, and "padding" of lots should be minimized.

Implementation: Initially, compliance with the Building Code and reseeding of any fill or cut with native seed mix and 40 pounds per acre properly fertilized; development and adoption of grading and erosion control ordinance for lot grading and road construction.

Kern County Code of Building Regulations (Title 17 of the Ordinance Code of Kern County)

All construction in Kern County is required to conform to the Kern County Building Code (Chapter 17.08, *Building Code*, of the Kern County Code of Regulations). Kern County has adopted the CBC 2022 Edition, with some modifications and amendments. The entire County is in Seismic Zone 4, a designation previously used in the Uniform Building Code to denote the areas of highest risk for earthquake ground motion. California has an unreinforced masonry program that details seismic safety requirements for Zone 4. Seismic provisions associated with Seismic Zone 4 have been adopted (Kern County 2023).

Chapter 17.28. Kern County Grading Code

The purpose of the Kern County Grading Code (Chapter 17.28, *Building Code*, of the Kern County Code of Regulations) sets forth rules and regulations to control excavation, grading and earthwork construction, including fills and embankments; establishes the administrative procedure for issuance of permits; and provides for approval of plans and inspection of grading construction (Kern County 2023). Sections of the Grading Code that are particularly relevant to geology and soils are provided below.

Section 17.28.140. Erosion Control

A. Slopes. The faces of cut-and-fill slopes shall be prepared and maintained to control erosion. This control may consist of effective planting. Protection for the slopes shall be installed as soon as

practicable and prior to calling for final approval. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted.

B. Other Devices. Where necessary, check dams, cribbing, riprap, or other devices or methods shall be employed to control erosion and provide safety.

C. Temporary Devices. Temporary drainage and erosion control shall be provided as needed at the end of each workday during grading operations, such that existing drainage channels would not be blocked. Dust control shall be applied to all graded areas and materials and shall consist of applying water or another approved dust palliative for the alleviation or prevention of dust nuisance. Deposition of rocks, earth materials or debris onto adjacent property, public roads or drainage channels shall not be allowed.

Section 17.28.170. Grading Inspection

A. General. All grading operations for which a permit is required shall be subject to inspection by the building official. Professional inspection of grading operations and testing shall be provided by the civil engineer, soils engineer, and the engineering geologist retained to provide such services in accordance with Subsection 17.28.170(E) for engineered grading and as required by the building official for regular grading.

B. Civil Engineer. The civil engineer shall provide professional inspection within such engineer's area of technical specialty, which shall consist of observation and review as to the establishment of line, grade, and surface drainage of the development area. If revised plans are required during the course of the work they shall be prepared by the civil engineer.

C. Soils Engineer. The soils engineer shall provide professional inspection within such engineer's area of technical specialty, which shall include observation during grading and testing for required compaction. The soils engineer shall provide sufficient observation during the preparation of the natural ground and placement and compaction of the fill to verify that such work is being performed in accordance with the conditions of the approved plan and the appropriate requirements of this chapter. Revised recommendations relating to conditions differing from the approved soils engineering and engineering geology reports shall be submitted to the permittee, the building official and the civil engineer.

D. California Geotechnical Engineer. The California geotechnical engineer shall provide professional inspection within such engineer's area of technical specialty, which shall include professional inspection of the bedrock excavation to determine if conditions encountered are in conformance with the approved report. Revised recommendations relating to conditions differing from the approved geotechnical report shall be submitted to the soils engineer.

E. Permittee. The permittee shall be responsible for the work to be performed in accordance with the approved plans and specifications and in conformance with the provisions of this Code, and the permittee shall engage consultants, if required, to provide professional inspections on a timely basis. The permittee shall act as a coordinator between the consultants, the contractor and the building official. In the event of changed conditions, the permittee shall be responsible for informing the building official of such change and shall provide revised plans for approval.

F. Building Official. The building official may inspect the project at the various stages of the work requiring approval to determine that adequate control is being exercised by the professional consultants.

G. Notification of Noncompliance. If, in the course of fulfilling their responsibility under this chapter, the civil engineer, the soils engineer, or the engineering geologist finds that the work is not being done in conformance with this chapter or the approved grading plans, the discrepancies shall be reported immediately in writing to the permittee and to the building official. Recommendations for corrective measures, if necessary, shall also be submitted.

H. Transfer of Responsibility. If the civil engineer, the soils engineer, or the engineering geologist of record is changed during the course of the work, the work shall be stopped until:

1. The civil engineer, soils engineer, or engineering geologist has notified the building official in writing that they will no longer be responsible for the work and that a qualified replacement has been found who will assume responsibility.
2. The replacement civil engineer, soils engineer, or engineering geologist notifies the building official in writing that they have agreed to accept responsibility for the work.

Kern County Water Quality Control Plan

Each of the nine RWQCBs adopts a Water Quality Control Plan which recognizes and reflects regional differences in existing water quality, the beneficial uses of the region's groundwater and surface waters, and local water quality conditions and problems. Water quality problems in the regions are listed in these plans, along with the causes, if they are known. Each RWQCB is to set water quality objectives that will ensure the reasonable protection of beneficial uses and the prevention of nuisance, with the understanding that water quality can be changed somewhat without unreasonably affecting beneficial uses.

The Kern County Engineering and Survey Services Department requires the completion of an NPDES applicability form for all construction projects disturbing one or more acres within Kern County. This form requires the applicant to provide background information on construction activities. Applicants must apply for the permit under one of the following four conditions:

1. *All storm water is retained onsite and no storm water runoff, sediment, or pollutants from onsite construction activity can discharge directly or indirectly offsite or to a river, lake, stream, municipal storm drain, or offsite drainage facilities.*
2. *All storm water runoff is not retained on site but does not discharge to a Water of the United States (i.e. drains to a terminal drainage facility). Therefore, a SWPPP has been developed and BMPs must be implemented.*
3. *All storm water runoff is not retained on site, and the discharge is to a Water of the United States. Therefore, a Notice of Intent (NOI) must be filed with the State Regional Water Resources Control Board prior to issuance of the building permit. Also, a SWPPP has been developed and BMPs must be implemented.*
4. *Construction activity is between one to five acres and an Erosivity Waiver was granted by the SWRCB. BMPs must be implemented.*

Kern County Public Health Services Onsite Wastewater Treatment System Permitting

The Kern County Public Health Services Department is responsible for permitting, inspecting, and approving onsite wastewater treatment systems, including septic tank wastewater disposal systems. The

agency provides leach line requirements, seepage pit requirements, percolation testing standards, and other regulations for land development related to wastewater treatment systems.

Society for Vertebrate Paleontology Professional Standards

The SVP has established standard guidelines for acceptable professional practices in the conduct of paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation. Most practicing professional paleontologists in the nation adhere closely to the SVP's assessment, mitigation, and monitoring requirements as specifically provided in its standard guidelines. Most California State regulatory agencies accept the SVP standard guidelines as a measure of professional practice.

As defined by the SVP (2010: 11), significant nonrenewable paleontological resources are:

> *fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).*

Numerous paleontological studies have developed criteria for the assessment of significance for fossil discoveries. In general, these studies assess fossils as significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
4. The fossils demonstrate unusual or spectacular circumstances in the history of life; or
5. The fossils are in short supply and/or are in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

A geologic unit known to contain significant fossils is considered "sensitive" to adverse impacts if there is a high probability that earth-moving or ground-disturbing activities in that rock unit will either directly or indirectly disturb, or destroy, fossil remains. The limits of the entire rock formation, both areal and stratigraphic, therefore define the scope of the paleontological potential in each case (SVP, 1995:23).

Fossils are contained within surficial sediments, or bedrock, and are, therefore, not observable, or detectable, unless exposed by erosion or human activity. In summary, paleontologists cannot know either the quality or quantity of fossils prior to natural erosion, or human-caused exposure. As a result, even in the absence of surface fossils, it is necessary to assess the sensitivity of rock units based on their known potential to produce significant fossils elsewhere within the same geologic unit (both within and outside of the study area), a similar geologic unit, or based on whether the unit in question was deposited in a type of

environment that is known to be favorable for fossil preservation. Monitoring by experienced paleontologists greatly increases the probability that fossils will be discovered during ground-disturbing activities and that, if these remains are significant, successful mitigation and salvage efforts may be undertaken in order to prevent adverse impacts to these resources.

Paleontological Sensitivity

Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. In its "Standard Guidelines for the Assessment and Mitigation of Adverse Impacts to Paleontologic Resources," the SVP (2010: 1-2) defines four categories of paleontological sensitivity (potential) for rock units: high, low, undetermined, and no potential:

- **High Potential.** Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources. Rocks units classified as having high potential for producing paleontological resources include, but are not limited to, sedimentary formations and some volcaniclastic formations (e.g., ashes or tephras), and some low-grade metamorphic rocks which contain significant paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils (e.g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous and carbonate-rich paleosols, cross-bedded point bar sandstones, fine-grained marine sandstones, etc.). Rock units that contain potentially datable organic remains older than late Holocene, including deposits associated with animal nests or middens, and rock units which may contain new vertebrate deposits, traces, or trackways, are also classified as having high potential.
- **Low Potential.** Reports in the paleontological literature or field surveys by a qualified professional paleontologist may allow determination that some rock units have low potential for yielding significant fossils. Such rock units will be poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule, e.g., basalt flows or recent colluvium. Rock units with low potential typically will not require impact mitigation measures to protect fossils.
- **Undetermined Potential.** Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study is necessary to determine if these rock units have high or low potential to contain significant paleontological resources. A field survey by a qualified professional paleontologist to specifically determine the paleontological resource potential of these rock units is required before a paleontological resource impact mitigation program can be developed. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically located excavations into subsurface stratigraphy.
- **No Potential.** Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Rock units with no potential require no protection nor impact mitigation measures relative to paleontological resources.

For geologic units with high potential, full-time monitoring is generally recommended during any project-related ground disturbance (SVP, 2010). For geologic units with low potential, full-time monitoring will not generally be required. For geologic units with undetermined potential, field surveys by a qualified vertebrate paleontologist should be conducted to specifically determine the paleontologic potential of the rock units present within the project area.

4.7.4 Impacts and Mitigation Measures

Methodology

Potential impacts have been evaluated through review of **Appendix G1** and **G2** of this EIR and available online resources. These resources present findings, conclusions, and recommendations concerning development of the project based on an engineering analysis of geotechnical properties of the subsurface conditions and evaluation of the underlying soils.

The loss of any identifiable fossil that could yield information important to prehistory, or that embodies the distinctive characteristics of a type of organism, environment, period of time, or geographic region, would be a significant environmental impact. Direct impacts to paleontological resources primarily concern the potential destruction of nonrenewable paleontological resources and the loss of information associated with these resources. This includes the unauthorized collection of fossil remains. If potentially fossiliferous bedrock or surficial sediments are disturbed, the disturbance could result in the destruction of paleontological resources and subsequent loss of information (significant impact). At the project-specific level, direct impacts can be mitigated to a less than significant level through implementation of paleontological mitigation.

The CEQA threshold of significance for a significant impact to paleontological resources is reached when a project is determined to "directly or indirectly destroy a significant paleontological resource or unique geologic feature." In general, for projects that are underlain by paleontologically sensitive geologic units, the greater the amount of ground disturbance, the higher the potential for significant impacts to paleontological resources. For projects that are directly underlain by geologic units with no paleontological sensitivity, there is no potential for impacts on paleontological resources unless sensitive geologic units which underlie the non-sensitive unit are also affected.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project could potentially have a significant adverse effect on geology and soils.

A project would have a significant adverse effect on geology and soils if it would:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

   i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;

   ii. Strong seismic ground shaking;

iii. Seismic-related ground failure, including liquefaction; or

iv. Landslides.

b. Result in substantial soil erosion or the loss of topsoil;

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property;

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater; or

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Project Impacts

Impact 4.7-1: The project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo earthquake fault zoning map issued by the state geologist for the area or based on other substantial evidence of a known fault.

Primary ground rupture is ground deformation that occurs along the surface trace of the causative fault during an earthquake. The proposed project would introduce structures and people to the project site (e.g., construction workers and periodic maintenance workers) and could thus expose people and structures to seismic risks. While the project is located in the seismically active southern California region, the project site is not intersected by any known faults and is not located within or near a State of California Alquist-Priolo Earthquake Fault Zone. The nearest Earthquake Fault Zone, as delineated by the Alquist-Priolo Earthquake Fault Zoning Act, is associated with the Garlock fault and is approximately 3.2 miles from the project site (Terracon, 2025). Due to distance from the nearest active fault to the project site, the potential for surface fault rupture at the project site is considered low.

In addition, prior to the issuance of grading permits, the project proponent would be required to design project infrastructure to withstand probable seismically induced ground shaking in accordance with all applicable ordinances of the Kern County Building Code (Chapter 17.08) and the current CBC. In addition, as described below, **Mitigation Measure MM 4.7-1** requires 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. These requirements would ensure that project structures comply with minimum standards related to structural strength and general stability. Adherence to all applicable regulations would mitigate any potential fault rupture-related impacts associated with the project. Based on

the absence of any known active faults that cross or come near the project site, and with implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2** that would ensure seismic hazards would be minimized, potential impacts related to fault rupture would be less than significant.

Mitigation Measures

Implementation of Mitigation Measures **MM 4.7-1** and **MM 4.7-2** would be required.

MM 4.7.1: Prior to the issuance of grading or building permits, the project proponent shall conduct a site-specific final geotechnical study in accordance with applicable ordinances of the Kern County Building Code (Chapter 17.08) and the CBC to evaluate soil conditions and geologic hazards on the project site and submit it to the Kern County Public Works Department for review and approval.

The project proponent shall determine the final siting of project facilities based on the results of the site-specific final geotechnical study and implement recommended measures to minimize geologic hazards. The project proponent shall not locate project facilities on or immediately adjacent to an active fault trace.

MM 4.7-2: Prior to the issuance of grading permits, the project proponent shall retain a California registered and licensed geotechnical engineer to design project facilities to withstand probable seismically induced ground shaking at the site. All grading and construction onsite shall adhere to the specifications, procedures, and site conditions contained in the final design plans, which shall be fully compliant with the seismic recommendations of the California-registered professional engineer. The Kern County Public Works Department shall evaluate any final facility siting design developed prior to the issuance of any grading or building permits to verify that geological constraints have been avoided. Additionally, **s**tructures supported on a shallow foundation system should bear on engineered fill extending to a depth determined by a California registered and licensed geotechnical engineer, based on site-specific conditions.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2**, impacts would be less than significant.

Impact 4.7-2: The project would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking, seismic-related ground failure, including liquefaction; or landslides.

As stated previously, the project is located in a seismically active region that could experience one or more substantive seismic events in the future. Depending on the magnitude, distance to the source, and duration of shaking, damage to the photovoltaic modules or other ancillary facilities and injury to workers or visitors could result. However, because the proposed project would not establish a permanent onsite population beyond the approximate six employees during operations and maintenance (O&M), damage to these onsite facilities would not expose a substantial number of people to potential adverse effects due to strong seismic ground shaking.

In addition, prior to the issuance of grading permits, the project proponent would be required to design project infrastructure to withstand substantial ground shaking in accordance with all applicable ordinances of the Kern County Building Code (Chapter 17.08) and the current CBC. In addition, as described below, **Mitigation Measure MM 4.7-1** requires that a final geotechnical study to evaluate soil conditions and geologic hazards be conducted 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 professional engineer in accordance with California and Kern County Building Code requirements. The required measures would encompass site preparation, foundation specifications, and protection measures for buried metal. The final structural designs would be subject to approval and follow-up inspection by the Kern County Building Inspection Department. Final design requirements would be provided to the onsite construction supervisor and the Kern County Building Inspector to ensure compliance. A copy of the approved design would be submitted to the Kern County Planning and Natural Resources Department. Further, project facilities would be constructed in accordance with all applicable codes, which require property line and public roadway setbacks that would protect the general public and onsite staff from potential hazards associated with facilities that could result from an earthquake. Adherence to the requirements of the Kern County Building Code, the CBC, and **Mitigation Measures MM 4.7-1** and **MM 4.7-2** would ensure that seismic hazards would be minimized; potential impacts related to ground shaking would be less than significant.

Seismically induced ground failure and liquefaction occurs when loose, water-saturated sediments of relatively low density are subjected to cyclic shaking that causes soils to lose strength or stiffness because of increased pore water pressure. Liquefaction generally occurs when the depth to groundwater is less than 50 feet. Groundwater is not anticipated within the upper 50 feet at the project site (Terracon 2025). Furthermore, the project is not located within a current, mapped California Liquefaction Hazard Zone. Structures constructed as part of the project would be required by state law to be constructed in accordance with all applicable International Building Code and CBC earthquake construction standards, including those relating to soil characteristics.

Due to the existing geotechnical conditions and the historical depth to groundwater, the liquefaction hazard potential is considered to be low. However, if liquefaction does occur it could result in loss of bearing capacity of the foundation elements and liquefaction induced settlement. This potential could be ameliorated by ground improvements that would reconfigure or avoid liquefiable areas and use mat foundations for building(s). In addition, seismic ties for the foundations for buildings and/or the addition of a geogrid to reinforce the underlying ground could be used to reduce the potential effects. Project conformance with building code requirements and geotechnical engineer recommendations also would serve to reduce the potential for liquefaction to affect the proposed project.

In addition, compliance with **Mitigation Measures MM 4.7-1** and **MM 4.7-2** would require an evaluation of liquefaction potential and design recommendation as part of the final geotechnical study to ameliorate any potential issues. The study would be prepared by a California registered and licensed geotechnical engineer and would ensure potential impacts remain less than significant. Recommendations, if needed, would include design measures but not be limited to, ground stabilization, selection of appropriate foundation type and depths, selection of appropriate structural systems to accommodate anticipated displacements, or any combination of these measures. Adherence to all applicable regulations would avoid

any potential impacts to structures resulting from liquefaction at the project. Therefore, potential impacts would be less than significant.

The project site has a relatively flat terrain with site elevations ranging between 2,970 and 3,760 feet above mean sea level due to being south of the Tehachapi Mountains where lands gradually slope downward from the northwest towards the southeast. The northwesternmost portion of the project site is located approximately two miles southeast of the Tehachapi Mountains, which extend to approximately 4,000 feet above the valley floor. The southeastern portion of the project site is even more distant from the mountains. Thus, given relatively flat terrain and distance to the surrounding mountain ranges, the potential for landslides on the project site is considered low. In addition, compliance with **Mitigation Measure MM 4.7-1** would require an evaluation of landslide potential and design recommendation as part of a final geotechnical study to ameliorate any potential issues. The final geotechnical study would be prepared by a California registered and licensed geotechnical engineer and would ensure potential impacts remain less than significant.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2** would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2**, impacts would be less than significant.

Impact 4.7-3: The project would result in substantial soil erosion or the loss of topsoil.

Construction of the project and associated improvements would involve earth-disturbing activities that could expose soils to the effects of wind or water erosion. Although the project site consists of relatively flat topography and would not involve substantive cut and fill operations, earthmoving and construction activities could loosen soil, and the removal of existing minimal vegetation could contribute to soil loss and erosion. **Mitigation Measure MM 4.7-1** requires that a final 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. Furthermore, a SWPPP will be prepared and implemented per the requirements of the 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 BMPs, 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** in **Section 4.10**, *Hydrology and Water Quality*). As a result, project construction would have less than significant impacts related to erosion with implementation of **Mitigation Measures MM 4.7-1, MM 4.7-2**, and **MM 4.10-1**.

Potential impacts during project decommissioning would be similar to those during construction and would be subject to similar requirements, including the preparation of a SWPPP (**Mitigation Measure MM 4.10-1**). Thus, any potential decommissioning impacts would be less than significant.

Project operations would include the periodic cleaning of the panels with water; however, this is not expected to result in soil erosion due to the infrequency of these activities and limited volumes of water involved. Water is expected to infiltrate into the ground and not generate substantial erosion or soil loss.

Project operations would not require ground disturbance. As a result, project operation would have a less than significant impact with relation to soil erosion.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.7-1, MM 4.7-2**, and **MM 4.10-1** would be required (see **Section 4.10**, *Hydrology and Water Quality*, for full text of Mitigation Measure **MM 4.10-1**).

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.7-1, MM 4.7-2**, and **MM 4.10-1**, impacts would be less than significant.

Impact 4.7-4: The project would be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

As stated above, the proposed project would result in no impact related to landslides. The preliminary geologic report prepared for the project concluded that the liquefaction potential on the project site is low based on the groundwater depth in the area which is reportedly greater than approximately 50 feet bgs and subsurface conditions encountered during the field investigation (Terracon, 2025). As a result, combined with the relatively flat topography, the low liquefaction potential indicates a low potential for lateral spreading. There is no known evidence of subsidence at the project site; however, loose surficial soils (alluvial deposits) onsite may may be subject to seismic settlement during a nearby seismic event. Soils in portions of the project site may have low to moderate collapse potential in the upper 5 feet; however, these conditions have minor impact on design and are typically mitigated with remedial grading to remove and replace potentially collapsible soils beneath shallow concrete foundations.

Further preconstruction subsurface exploration to confirm the subsurface conditions was recommended in the preliminary geologic report. This site-specific exploration would be included as part of the design level geotechnical study required by **Mitigation Measure MM 4.7-1**. The subsurface data would be used to complete the final design of the Project and associated structures in consultation with the County in a manner that meets applicable State and County building, grading, and construction codes, ordinances, and standards, as required by **Mitigation Measure MM 4.7-2**. The project site itself has not been identified by the County as being prone to subsidence and the final geotechnical study required by **Mitigation Measure MM 4.7-1** would be prepared for the proposed project to identify and remedy any soil conditions considered to be geologic hazards, including liquefaction, collapse, and subsidence. With implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2**, potential impacts would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2** would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2**, impacts would be less than significant.

Impact 4.7-5: The project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

The preliminary geologic report for the project site concluded that the underlying soils have a low potential for expansion (Terracon, 2025). Shrinking or swelling of foundation soils can lead to damage to slabs, foundations, and other engineered structures, including tilting and cracking. While the onsite soils have a low potential for expansion, **Mitigation Measure MM 4.7-1** requires that a site-specific final geotechnical study to evaluate soil conditions and geologic hazards be conducted for the project site. The final geotechnical study will include an evaluation for expansive soils and provide recommendations consistent with CBC requirements to reduce potential adverse effects from expansive soils. 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 recommendations provided by the California registered and licensed geotechnical engineer in accordance with California and Kern County Building Code requirements as required by **Mitigation Measure MM 4.7-2**. The required measures would encompass site preparation, such as treatment of expansive soils or replacement with engineered fill. The final designs would be subject to approval and follow-up inspection by the Kern County Building Inspection Department. Final design requirements would be provided to the onsite construction supervisor and the Kern County Building Inspector to ensure compliance. Therefore, with implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2**, potential impacts would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.7-1** and **MM 4.7-2** would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measure MM 4.7-1** and **MM 4.7-2**, impacts would be less than significant.

Impact 4.7-6: The project would have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater.

A permanent, onsite O&M facility and/or small satellite offices may be built onsite. If such an onsite O&M facility is constructed, permanent restroom facilities with septic system/tanks and/or portable toilets would be used for sanitary purposes. During O&M, small satellite portable office trailers may alternatively be placed on the project site to help facilitate rapid repair of equipment. Portable bathroom facilities to accommodate the six onsite employees would be used and wastewater would be disposed offsite at a permitted facility, such that a septic system at the project site would not be required. f required, the project's septic system would be constructed to comply with applicable requirements of the Kern County Environmental Health Services Division. The proposed septic system is anticipated to be located away from surface drainages and protected from potential surface runoff. Proper siting and design would minimize the potential for a health or environmental impact from flooding. **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. Implementation of **Mitigation Measure MM 4.7-3** would reduce potential impacts to a less than significant level.

Mitigation Measures

MM 4.7-3 Prior to the issuance of grading or building permits for the operation and maintenance facility, the project operator shall obtain all required permits and approvals from Kern County Environmental Health Services Division and shall implement all required conditions regarding the design and siting of the septic system.

Level of Significance

With implementation of **Mitigation Measure MM 4.7-3**, impacts would be less than significant.

Impact 4.7-7: The project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, as defined in CEQA Guidelines Section 15064.

Most of the surficial deposits within the project site consist of Holocene-age Quaternary alluvium (Qa), which is typically not paleontologically sensitive, but may be likely underlain by older Quaternary alluvium (Qoa), which has a higher potential to contain paleontological resources (Terracon 2025). Based on the paleontological records search, geological map and paleontological literature review performed for the project, and intensive pedestrian surveys conducted at the project site, the records search results indicated that no fossil localities have been recorded within the Study Area; however, 20 fossil localities have been recorded outside the Study Area. Therefore, the project site is considered to have low paleontological sensitivity on the surface in areas mapped as Quaternary alluvium (Qa) or sand deposits. However, that increases to high sensitivity with depth in areas underlain by Quaternary older alluvium (Qoa).

The potential to disturb paleontological resources would occur during earthmoving activities, such as grading, using an auger, trenching, excavating, etc., at depths of one foot and greater bgs in sediments mapped as Quaternary alluvium (Qa). There is no potential to disturb paleontological resources during activities that do not involve ground disturbance.

If significant vertebrate fossils are encountered during project implementation, disturbance of such resources would result in a potentially significant impact to paleontological resources. Therefore, excavations within older Quaternary alluvium (Qoa; whether on the surface or encountered underlying younger Quaternary alluvium [Qa]) could impact significant vertebrate fossil resources and would be considered a potentially significant impact to paleontological resources. However, with implementation of **Mitigation Measures MM 4.7-4, MM 4.7-5, MM 4.7-6**, and **MM 4.7-7**, which 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, potential impacts to paleontological resources would be reduced to less than significant. Decommissioning activities would occur within areas previously disturbed during construction, consequently associated mitigation measures will have been applied, thus, potential impacts to paleontological resources are not expected.

Mitigation Measures

MM 4.7-4: The project proponent shall retain a qualified paleontologist, defined as a paleontologist meeting the Society for Vertebrate Paleontology's Professional Standards (SVP 2010), to carry out all mitigation measures related to paleontological resources.

a. Prior to the start of any ground disturbing activities, the qualified paleontologist shall prepare a Paleontological Resources Awareness Training program for all construction personnel working on the project. A Paleontological Resources Awareness Training Guide approved by the qualified paleontologist shall be provided to all personnel. A copy of the Paleontological Resources Awareness Training Guide shall be submitted to the Kern County Planning and Natural Resources Department. The training guide may be presented in video form.

b. Paleontological Resources Awareness Training may be conducted in conjunction with other awareness training requirements.

c. The training shall include an overview of potential paleontological resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of paleontological resources.

d. The project operator shall ensure all new employees who have not participated in earlier Paleontological Resources Sensitivity Trainings shall meet the provisions specified above.

e. The Paleontological Resources Awareness Training Guides shall be kept onsite and available for all personnel to review and be familiar with as necessary.

MM 4.7-5: Prior to construction, the qualified paleontologist shall review excavation plans to determine where paleontologically sensitive stratigraphic units will potentially be disturbed by ground-disturbing activities.

MM 4.7-6: During construction, the qualified paleontologist or designated monitor shall monitor all ground-disturbing activities (with the exception of vibratory or hydraulic installation of tracking or mounting structures and foundations or supports) that occurs at a depth of 15 feet or deeper below ground surface.

Following completion of monitoring, the paleontologist shall prepare a report documenting the absence or discovery of fossil resources on site. A copy of the report shall be submitted to the Kern County Planning and Natural Resources Department to be kept on file.

MM 4.7-7: If a paleontological resource is found, the project contractor shall cease ground-disturbing activities within 50 feet of the find. The qualified paleontologist shall evaluate the significance of the resources and recommend appropriate treatment measures. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Any fossils encountered and recovered shall be catalogued and donated to a public, non-profit institution with a research interest in the materials. Accompanying notes, maps, and photographs shall also be filed at the repository.

Level of Significance

With implementation of Mitigation Measures **MM 4.7-4, MM 4.7-5, MM 4.7-6**, and **MM 4.7-7,** impacts would be less than significant.

4.7.5 Cumulative Setting, Impacts, and Mitigation Measures

Impacts of a project would be considered cumulatively considerable if they would have the potential to combine with other past, present, or reasonably foreseeable projects to become significant. Cumulative projects listed in **Table 3-5**, *Cumulative Projects List*, in **Chapter 3**, *Project Description*, would be subject to relatively similar seismic hazards as that of the proposed project. However, the effects of these projects are not of a nature to cause cumulatively significant effects from geologic impacts or on soils because such impacts are site specific and would only have the potential to combine with impacts of the project if they occurred in the same location as the project.

Development of the project, with implementation of the regulatory requirements discussed above, would result in less than significant impacts related to exposing persons or structures to geology, soils, or seismic hazards. Although the entire region is a seismically active area, geologic and soil conditions vary widely within a short distance, making the cumulative context for potential impacts resulting from exposing people and structures to related risks one that is more localized or even site specific. Similar to the project, other projects in the area would be required to adhere to the same California and Kern County Building Codes, which would reduce the risk to people and property to less than significant levels. While future seismic events cannot be predicted, adherence to all federal, state, and local programs, requirements, and policies pertaining to building safety and construction would limit the potential for injury or damage to a less than significant level. Therefore, the project, combined with past, present, and other foreseeable development in the area, would not result in a cumulatively significant impact by exposing people or structures to risk related to geologic hazards, soils, and/or seismic conditions. Therefore, the project would result in less than significant cumulative impacts related to geology and soils.

Surficial deposits, namely erosion and sediment deposition, can be cumulative in nature, depending on the type and amount of development proposed in a given geographical area. The cumulative setting for soil erosion consists of existing, planned, proposed, and reasonably foreseeable land use conditions in the region. However, construction constraints are primarily based on specific sites within a proposed development and on the soil characteristics and topography of each site. Individual projects are required to comply with applicable codes, standards, and permitting requirements (e.g., preparation of a SWPPP) to mitigate potential erosion impacts. The proposed project's compliance with these codes, standards, and permitting requirements are required by **Mitigation Measures MM 4.7-1**, **MM 4.7-2**, and **MM 4.10-1** (see **Section 4.10,** *Hydrology and Water Quality*, for full mitigation measure text). Other cumulative scenario projects would be required to adhere to similar requirements, thereby minimizing potential cumulative scenario erosion impacts. Specifically, all planned projects in the vicinity of the project are subject to environmental review, would be required to conform to the Kern County General Plan and Building Code, and would implement additional mitigation of seismic hazards to ensure soil stability, especially related to seismically induced erosion. With implementation of **Mitigation Measures MM 4.7-1, MM 4.7-2**, and **MM 4.10-1**, the project would not contribute to any cumulative impacts for geologic seismic hazards or related events. Cumulative impacts related to geology and soils are less than significant.

The geographic scope for cumulative effects to paleontological resources includes the north-central portion of the Antelope Valley that surrounds the area of the proposed project. Given similarities in geologic formations, this area is expected to contain similar types of paleontological resources. There is no temporal scope because direct impacts to paleontological resources are permanent. Cumulative impacts to paleontological resources could occur if other related projects, in conjunction with the proposed project,

had or would have impacts on paleontological resources that, when considered together, would be significant. Development of the proposed project, in combination with other projects in the area, has the potential to contribute to a cumulatively significant paleontological resources impact due to the potential loss of paleontological resources unique to the region. However, mitigation measures are included in this EIR to reduce potentially significant project impacts to paleontological resources during construction of the proposed project. Implementation of **Mitigation Measure MM 4.7-4** requires paleontology sensitivity training for construction workers, **Mitigation Measure MM 4.7-5** requires review of excavation plans to determine where paleontologically sensitive stratigraphic units would be potentially disturbed by ground-disturbing activities, and **Mitigation Measure MM 4.7-6** requires appropriate monitoring of construction activities for potential paleontological resources that may be encountered. Although project construction has the potential to disturb paleontological resources, implementation of **Mitigation Measure MM 4.7-**7 would ensure the appropriate protocol is followed with regard to identifying and handling paleontological resources. Implementation of these mitigation measures would reduce potential impacts to paleontological resources to a less-than-significant level.

With implementation of **Mitigation Measures MM 4.7-4** through **MM 4.7-7**, the project would not result in significant impacts to paleontological resources. Given this minimal impact and the requirement for similar mitigation for other projects in the Antelope Valley, cumulative impacts to paleontological resources would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.7-1** through **MM 4.7-7** and **MM 4.10-1** would be required (see **Section 4.10**, *Hydrology and Water Quality*, for full text of Mitigation Measure **MM 4.10-1**).

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.7-1** through **MM 4.7-7** and **MM 4.10-1**, cumulative impacts would be less than significant.

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Section 4.8

Greenhouse Gas Emissions

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Section 4.8
Greenhouse Gas Emissions

4.8.1 Introduction

This section of the EIR describes the affected environment and regulatory setting relating to greenhouse gases (GHGs) for the project. This section also describes potential impacts associated with GHGs that would result from implementation of the project, and, as necessary, mitigation measures that would reduce these potential impacts. Information in this section is based primarily on the GHG section of the project's air quality technical report, *Discovery Solar PV & Storage Project Air Quality and Greenhouse Gas Technical Report* (Air Quality and GHG Technical Report; Tetra Tech, 2025), located in **Appendix C1** of this EIR and incorporated by reference herein. The impact assessment for the project is also based upon a review of relevant literature and technical reports that include, but are not limited to, information and guidelines by the California Air Resources Board (CARB), U.S. Environmental Protection Agency (USEPA), and the applicable provisions of the California Environmental Quality Act (CEQA).

4.8.2 Environmental Setting

GHGs and climate change are a cumulative global issue. CARB and USEPA regulate GHG emissions within the state of California and the United States, respectively. While CARB has the primary regulatory responsibility within California for GHG emissions, local agencies can also adopt policies for GHG emissions reduction. CARB has divided California into regional air basins. The project site is located in the southeastern portion of the Mojave Desert Air Basin and is under the jurisdiction of the Eastern Kern Air Pollution Control District (EKAPCD).

Greenhouse Gases

GHGs refer to gases that absorb and re-emit infrared radiation in the atmosphere. Many chemical compounds found in Earth's atmosphere act as GHGs, which allow sunlight to enter the atmosphere freely. When sunlight strikes Earth's surface, some of it is reflected back toward space as infrared radiation (heat). GHGs, however, absorb some of this infrared radiation and trap the heat in the atmosphere. Over time, the amount of energy sent from the sun to Earth's surface should be about the same as the amount of energy radiated back into space, leaving the temperature of Earth's surface roughly consistent. However, many gases exhibit the "greenhouse" properties. Some of them occur in nature (water vapor, carbon dioxide, methane, and nitrous oxide) while others are exclusively human-made (e.g., gases used for aerosols). The principal GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs) and are described below (Tetra Tech, 2025).

- **Carbon dioxide:** CO_2 enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and chemical reactions (e.g., the manufacture of cement). CO_2 is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.

- **Methane:** CH_4 is emitted during the production and transport of coal, natural gas, and oil. CH_4 emissions also result from livestock and agricultural practices and the decay of organic waste in municipal solid waste landfills.
- **Nitrous oxide:** N_2O is emitted during agricultural and industrial activities and during combustion of fossil fuels and solid waste.
- **Fluorinated gases:** HFCs, PFCs, and SF_6 are synthetic, powerful climate-change gases emitted from a variety of industrial processes. Fluorinated gases are often used as substitutes for ozone-depleting substances (i.e., chlorofluorocarbons, hydrochlorofluorocarbons, and halons). These gases are typically emitted in minute quantities, but because they are potent climate-change gases, they are sometimes referred to as high Global Warming Potential (GWP) gases.
- **Sulfur hexafluoride:** SF_6 is a colorless, odorless, nontoxic, nonflammable gas. SF_6 is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity, including equipment such as electrical circuit breakers, which may be used for the project. The California Climate Action Registry (Registry) lists SF_6 as a potential source of fugitive emissions from electrical transmission and distribution equipment. Fugitive emissions are unintentional leaks of GHGs from equipment such as joints, seals, and gaskets.

Because different GHGs have different GWPs and CO_2 is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO_2 equivalents (CO_2e). For example, SF_6 is a GHG commonly used in the electrical utility industry as an insulating gas in circuit breakers and other electronic equipment. SF_6, while comprising a small fraction of the total GHGs emitted annually worldwide, is a much more potent GHG with 22,800 times the GWP as CO_2. Therefore, an emission of 1 metric ton (MT) of SF_6 could be reported as an emission of 22,800 $MTCO_2e$ (CARB, 2014a). Large emissions sources are reported in million MT (MMT) of CO_2e ($MMTCO_2e$).

GWPs are periodically updated by the Intergovernmental Panel for Climate Change (IPCC) in their Assessment Reports (AR). Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report (SAR). In 2007, the IPCC updated the GWP values based on the latest science at the time in its Fourth Assessment Report (AR4; IPCC, 2007). The updated GWPs in the IPCC AR4 are used in recent GHG emissions inventories. In 2013, the IPCC again updated the GWP values based on the latest science in its Fifth Assessment Report (AR5) (IPCC, 2013). This was followed by the Sixth Assessment Report (AR6), which was finalized in March 2023.

Greenhouse Gas Emissions Inventories

History

The following discussion is reproduced from Malone (2013):

> *In the first part of the 20th century, it was suspected that the concentration of atmospheric CO_2 might be increasing in the atmosphere due to fossil fuel combustion. However, there were relatively few measurements of this gas and the measurements varied widely.*
>
> *In 1953, Charles (Dave) David Keeling began a postdoctoral position at Caltech, Pasadena, California under Professor Harrison Brown. His initial project was aimed at extracting uranium from granite rock with applications in the nuclear power industry. He*

never really started this project but with encouragement from Professor Brown became involved in another project investigating the equilibria between carbonate in surface waters, limestone, and atmospheric CO_2. This involved the construction of a precision gas manometer to measure CO_2 extracted from the air as well as acidified samples of water.

Dave Keeling found significant variations in CO_2 concentration in Pasadena, probably due to industry, and later took his sampling equipment to Big Sur near Monterey. There he began to take air samples throughout the day and night and soon detected an intriguing diurnal pattern. The air contained more CO_2 at night than during the day and, after correcting for the effects of water vapor, had about the same amount of CO_2 every afternoon, 310 parts per million (ppm). He used stable isotope ratio mass spectrometry measurements of the CO_2 he extracted to show that the 13C/12C ratio in CO_2 at night was smaller than during the day and a function of plant respiration.

He repeated these measurements in the rainforests of the Olympic peninsula and high mountain forests in Arizona. Everywhere the data were the same: strong diurnal behavior with steady values of about 310 ppm in the afternoon. The explanation for the results came from a book on meteorology describing diurnal patterns in turbulence in the atmosphere. In the afternoon, Dave Keeling was measuring CO_2 concentrations representative of the "free atmosphere," concentrations that prevailed over a large part of the Northern Hemisphere. At nighttime with a lower boundary layer, the CO_2 concentration was heavily influenced by respiration from local plants and soils.

Little did Dave Keeling know then that he had laid the basis for his notable career investigating the global behavior of atmospheric CO_2.

In 1956, Dave Keeling's measurements came to the attention of Harry Wexler at the U.S. Weather Bureau and Roger Revelle at Scripps Institution of Oceanography. To both these organizations, he proposed a global program based on infrared gas analyzers to measure the atmospheric CO_2 concentration at several remote locations around the world including the South Pole station and at Mauna Loa in Hawaii. The proposal was supported by and became one of the features of the International Geophysical Year (IGY) beginning in July 1957 and ending in December 1958.

Using IGY funds from the Weather Bureau, Dave Keeling bought four infrared gas analyzers from the Applied Physics Corporation. One of these was installed at Mauna Loa in March 1958 and, on the first day of operation, recorded an atmospheric CO_2 concentration of 313 ppm.

To Dave Keeling's surprise, however, the CO_2 concentration at Mauna Loa had risen by 1 ppm in April 1958 to a maximum in May when it began to decline reaching a minimum in October. After this, the concentration increased again and repeated the same seasonal pattern in 1959. In Dave Keeling's words, "We were witnessing for the first time nature's withdrawing CO_2 from the air for plant growth during summer and returning it each succeeding winter." In 1959, the average concentration had increased and increased still further in 1960 as shown in the graph.

Dave Keeling's analytical skills and dedication had paid off with two dramatic discoveries: First, the natural seasonal "breathing" of the planet, and second, the rise in atmospheric

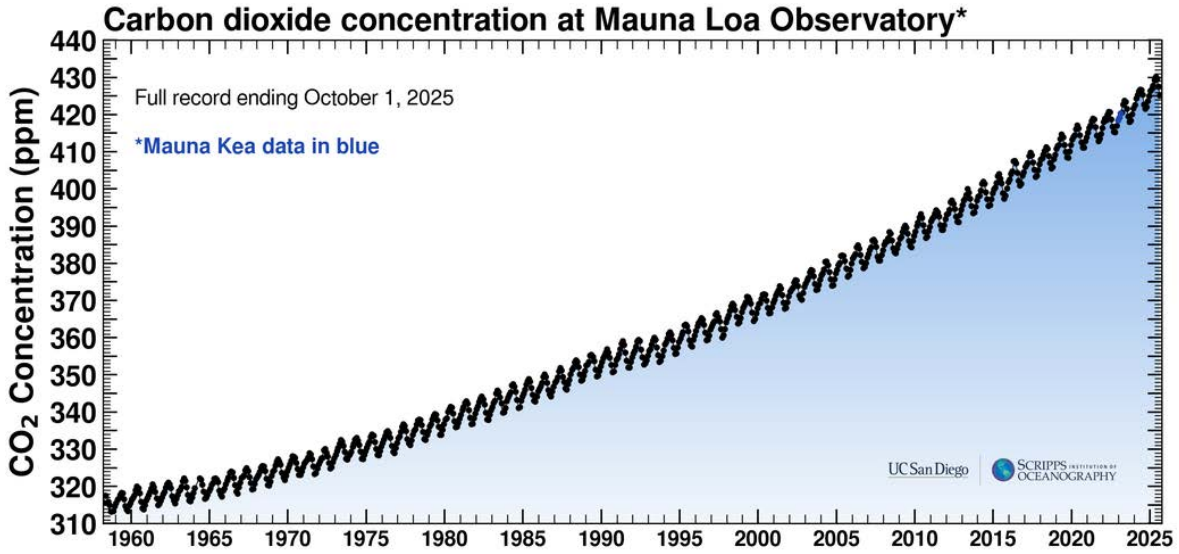
CO_2 due to the combustion of fossil fuels by industry and land use changes. Published in the 1960 Tellus Article, "The concentration and isotopic abundances of carbon dioxide in the atmosphere" (Keeling 1960), these significant findings marked the beginning of the now world-famous "Keeling Curve" which extends for 55 years and represents one of the most important geophysical records ever made.

By the early 1970s, this curve was getting serious attention and played a key role in launching a research program into the effect of rising CO_2 on climate. Since then, the rise has been relentless and shows a remarkably constant relationship with fossil fuel burning and can be well accounted for based on the simple premise that 57 percent of fossil fuel emissions remain airborne.

The Mauna Loa record can now be placed in the context of the variations in CO_2 over the past 400,000 years, based on reconstructions from polar ice cores. During ice ages, the CO_2 levels were around 200 ppm, and during the warmer interglacial periods, the levels were around 280 ppm.

Looking ahead, if the rate of fossil fuel burning continues to rise on a business-as-usual trajectory, such that humanity exhausts the reserves over the next few centuries, CO_2 will continue to rise to levels on the order of 1,500 ppm. The atmosphere will not return to preindustrial levels even tens of thousands of years into the future. Based on this trend, it is clear that humanity is on the threshold of a new era of geologic history, one with a climate very different from that of humanity's ancestors. These curves not only demonstrate the implications of rising CO_2 levels but also illustrate the power of continuous time series to communicate and clarify the essential science.

This is illustrated on **Figure 4.8-1,** *Keeling Curve Diagram*.



SOURCE: UCSD, 2025

Figure 4.8-1 Keeling Curve Diagram

Sources and Emissions

On a global scale, GHG emissions are predominantly associated with activities related to energy production; changes in land use, such as deforestation and land clearing; industrial sources; agricultural activities; transportation; waste and wastewater generation; and commercial and residential land uses. Worldwide, energy production including the burning of coal, natural gas, and oil for electricity and heat is the largest single source of global GHG emissions.

The USEPA releases an annual GHG inventory that tracks U.S. GHG emissions and sinks by source, economic sector, and GHG going back to 1990. In 2022, U.S. GHG emissions totaled 6,343.2 million metric tons (MMT) of CO_2e, or 5,489.0 MMT CO_2e after accounting for sequestration (also referred to as "storage"; these terms are used synonymously throughout the regulatory landscape) from the land sector. Overall, net emissions increased by 1.3 percent from 2021 to 2022 and decreased by 16.7 percent from 2005 levels. In 2022, CO_2 emissions from fossil fuel combustion were 4,699.4 MMT CO_2e, or 1.1 percent below emissions in 1990. The transportation sector accounted for 28.4 percent of 2022 GHG emissions, the electric power industry accounted for 24.9 percent, the industrial sector accounted for 22.9 percent, commercial and residential accounted for 13.5 percent, and agriculture accounted for 10 percent (USEPA 2024).

California

California produced approximately 371.1 gross $MMTCO_2e$ in 2022, which is 9.3 MMTCO2e (2.4%) lower than 2021 levels. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2022, accounting for approximately 38 percent of total GHG emissions in the state. This sector was followed by the industrial sector at approximately 19.6 percent and the electric power sector (including both in-state and out-of-state sources) at approximately 16 percent (CARB, 2024). California GHG emissions by economic sector from 2013 to 2022 are summarized in **Table 4.8-1**, *California Greenhouse Gas Emissions ($MMTCO_2e$)*.

TABLE 4.8-1: CALIFORNIA GREENHOUSE GAS EMISSIONS ($MMTCO_2E$)

Emission Inventory Category	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Transportation	156.8	157.5	161.1	164.8	166.0	164.8	161.7	135.2	145.1	139.9
Electric Power	94.0	90.3	86.3	70.8	64.4	65.0	60.2	59.5	62.3	59.8
Industrial	82.6	85.0	82.7	81.3	81.7	82.3	80.9	73.6	74.2	72.7
Commercial & Residential	39.0	35.5	37.2	37.7	38.3	37.5	40.6	39.0	38.8	39.5
Agriculture	33.7	33.7	32.5	32.1	31.6	32.0	31.2	31.4	30.4	29.8
High GWP	16.8	17.9	18.8	19.5	20.1	20.6	20.8	21.3	21.3	21.3
Recycling & Waste	8.3	8.2	8.1	7.9	8.2	8.2	8.3	8.5	8.3	8.2
Total Gross Emissions	431.4	428.1	426.8	414.1	410.3	410.5	403.7	368.5	380.4	371.1

Source: CARB, 2024

Climate Change

GHGs are gases in the atmosphere that trap heat. The major concern with GHGs is that increases in GHG concentrations in the atmosphere are causing global climate change, which is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to GHGs from human activities, most in the world-wide scientific community agree that there is a direct link between increased emissions of GHGs and long-term global temperature increases (i.e., global warming).

According to CARB, the potential impacts in California due to global climate change may include loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; larger forest fires; more drought years; increased erosion of California's coastlines and seawater intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation (CalEPA, 2006). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, ocean acidification (including coral bleaching), impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood, the potential for substantial environmental, social, and economic consequences over the long term may be great.

Additional warming will increase the magnitude of these changes. IPCC near-term projections predict that every region in the world will face further increases in climate hazards, increasing multiple risks to ecosystems and humans. Hazards and associated risks expected in the near term include an increase in heat-related human mortality and morbidity; food-borne, waterborne, and vector-borne diseases; mental health challenges; flooding in coastal and other low-lying cities and regions; biodiversity loss in land, freshwater, and ocean ecosystems; and a decrease in food production in some regions (IPCC, 2023).

According to CARB, potential impacts specific to California due to global climate change may include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems (CARB, 2018a).

4.8.3 Regulatory Setting

Federal

U.S. Environmental Protection Agency

The principal air quality regulatory mechanism at the federal level is the federal Clean Air Act (CAA) and, in particular, the 1990 amendments to the CAA and the National Ambient Air Quality Standards (NAAQS) that it establishes. The USEPA is responsible for implementing federal policy to address GHGs. The federal CAA does not specifically regulate GHG emissions; however, the U.S. Supreme Court has determined that GHGs are pollutants that can be regulated under the CAA. There are currently no federal regulations that set ambient air quality standards for GHGs.

USEPA regulations applicable to the project include the following:

Federal Clean Air Act

USEPA is responsible for implementing federal policy to address GHGs. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO_2 gases, agricultural practices, and implementation of technologies to achieve GHG reductions. USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the ENERGY STAR® labeling system for energy-efficient products) play a significant role in encouraging voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

In 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the federal CAA. USEPA adopted a Final Endangerment Finding for the six defined GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6). The Endangerment Finding was required before USEPA could regulate GHG emissions under Section 202(a)(1) of the CAA. USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not themselves impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

On July 29, 2025, USEPA proposed to rescind the 2009 Greenhouse Gas Endangerment Finding and all resulting GHG emission standards for new motor vehicles and engines, including the light-duty, medium-duty, and heavy-duty vehicle and engine standards for model years (MY) 2012 to 2027 and beyond. The comment period for the proposed rule concluded on September 22, 2025.

Regulations for Greenhouse Gas Emissions from Vehicles

Regulations for Greenhouse Gas Emissions from Passenger Cars and Trucks

In April 2010, the USEPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) established a national program consisting of new standards for MY 2012 through 2016 light-duty vehicles that will reduce GHG emissions and improve fuel economy. The USEPA finalized

the first-ever national GHG emissions standards under the CAA, and NHTSA finalized the Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. The new standards were applicable to new passenger cars, light-duty trucks, and medium duty passenger vehicles, covering MY 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile in MY 2016 under USEPA's GHG program, and 34.1 miles per gallon in MY 2016 under NHTSA's CAFE program and represent a harmonized and consistent national program (Tetra Tech, 2025).

In August 2012, the USEPA and NHTSA issued final rules extending the national program to improve fuel economy for MY 2017 through 2025. These standards require vehicles to meet an estimated combined average emissions level of 163 grams of CO_2 per mile in MY 2025 under USEPA's GHG program, and 49.6 miles per gallon in MY 2025 under NHTSA's CAFE program (USEPA and NHTSA, 2012). In August 2018, the ''Safer Affordable Fuel-Efficient" (SAFE) Vehicles Rule was proposed for MY 2021–2026 Passenger Cars and Light Trucks. This rule went into effect on June 29, 2020, thereby setting new CO_2 standards for MY 2021 and later, and fuel economy standards for MY 2021 and setting new fuel economy standards for MY 2022–2026 [NHTSA–2018–0067; EPA–HQ–OAR–2018–0283; FRL 10000–45–OAR].

In December 2021, following Executive Order 13990 (Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis), the USEPA further revised the GHG emissions standards under the CAA section 202(a) for light-duty vehicles for 2023 and later MY to make the standards more stringent than SAFE rule standards in each MY from 2023 through 2026 [EPA–HQ–OAR–2021–0208; FRL 8469–01–OAR].

On April 18, 2024, the USEPA published a final rule, Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles, that sets new, more protective standards to further reduce harmful air pollutant emissions from light-duty and medium-duty vehicles starting with MY 2027 [EPA–HQ–OAR–2022–0829; FRL–8953–04–OAR].

Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles

In 2011, the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for MY 2014–2018 (76 *Federal Register* 57106–57513). The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the USEPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 percent to 23 percent over the 2010 baselines. In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with MY 2018 through 2027 for certain trailers, and MY 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types of sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program [EPA–HQ–OAR–2014–0827; NHTSA–2014–0132; FRL–9950–25–OAR].

40 CFR Part 98. Mandatory Reporting of Greenhouse Gases Rule

This rule requires mandatory reporting of GHG emissions for facilities that emit more than 25,000 $MTCO_2e$ emissions per year (USEPA, 2011). Additionally, reporting of emissions is required for owners of SF_6- and

PFC-insulated equipment, when the total nameplate capacity of these insulating gases is above 17,280 pounds. The project would not be expected to trigger GHG reporting according to the rule; however, GHG emissions of the project are quantified in this EIR.

40 CFR Part 52. Proposed Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule

USEPA mandated to apply Prevention of Significant Deterioration (PSD) requirements to facilities whose stationary source CO_2e emissions exceed 75,000 tons per year (USEPA, 2010). The project would not be expected to trigger PSD permitting as required by this regulation; however, GHG emissions of the project are quantified in this EIR.

Fuel Efficiency Standards for Construction Equipment

The federal government sets fuel efficiency standards for non-road diesel engines that are used in construction equipment. The regulations, contained in 40 Code of Federal Regulations (CFR) Parts 1039, 1065, and 1068, include multiple tiers of emission standards. Most recently, the USEPA adopted a comprehensive national program to reduce emissions from non-road diesel engines by integrating engine and fuel controls as a system to gain the greatest reductions. To meet these Tier 4 emission standards, engine manufacturers will produce new engines with advanced control technologies (69 *Federal Register* 38958).

State

Executive Order S-1-07

Executive Order S-1-07 recognizes that the main source of GHG emissions in California is from the transportation sector, and establishes a goal to reduce the carbon intensity of transportation fuels sold in California by at least 10 percent by 2020. As a result of Executive Order S-1-07, CARB approved a proposed regulation to implement the Low Carbon Fuel Standard (LCFS) to reduce GHG emissions from the transportation sector in California by approximately 16 MMT by 2020. The LCFS is designed to reduce California's dependence on petroleum, create a lasting market for clean transportation technology, and stimulate the production and use of alternative, low-carbon fuels in California. The LCFS is designed to provide a durable framework that establishes performance standards that fuel producers and importers must meet each year beginning in 2011.

Executive Orders S-3-05 and B-30-15

Executive Order S-3-05 sets target dates to reduce statewide GHG emissions to historical levels, as follows:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Executive Order B-30-15 sets a target date of 2030 to reduce GHG emissions to 40 percent below 1990 levels. Executive Orders S-3-05 and B-30-15 are only applicable to "State agencies with jurisdiction over sources of greenhouse gas emissions" (Order 4-29-2015 Section 2), and Kern County is not a State agency. Furthermore, there is currently no implementation strategy for these Executive Orders (i.e., a plan, which

apportions GHG reductions by economic sector/activity/region, similar to the Assembly Bill 32 Scoping Plan).

Assembly Bill 32 and Senate Bill 32

In 2006, Assembly Bill 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006) focuses on reducing GHG emissions in California to 1990 levels by 2020. HSC Division 25.5 defines GHGs as CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6 and represents the first enforceable statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under HSC Division 25.5, CARB has the primary responsibility for reducing GHG emissions and is required to adopt rules and regulations directing State actions that would reduce GHG emissions to 1990 levels by 2020.

In 2016, Senate Bill 32 and its companion bill, Assembly Bill 197, amended HSC Division 25.5 and established a GHG reduction target of 40 percent below 1990 levels by 2030, and included provisions to ensure the benefits of State climate policies reach into disadvantaged communities.

Climate Change Scoping Plan

Assembly Bill 32 required preparing a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020 (HSC Section 38561 (h)). In 2008, the initial Climate Change Scoping Plan contained a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives (CARB, 2008). In 2014, the First Update to the Scoping Plan upon the initial Climate Change Scoping Plan with new strategies and recommendations (CARB, 2014b). CARB revised the projected statewide 2020 emissions estimate of 509.4 $MMTCO_2e$ using the GWP values from the IPCC AR4 509.4 $MMTCO_2e$ (CARB, 2014b). Therefore, the emission reductions necessary to achieve the 2020 emissions target of 431 $MMTCO_2e$ would be 78.4 $MMTCO_2e$, or a reduction of GHG emissions by approximately 15.4 percent. In 2017, the 2017 Scoping Plan established a 2030 GHG reduction target of 40 percent emissions reductions below 1990 levels (CARB, 2017). On November 16, 2022, CARB released the 2022 Updated Scoping Plan laying out the policies and actions California proposes to take to drastically reduce its dependence on fossil fuels and get to carbon neutrality by 2045 or earlier (CARB, 2022).

Senate Bill 97

Senate Bill 97 was enacted requiring the Office of Planning and Research (OPR) to develop guidelines for the mitigation of GHG emissions, or the effects related to releases of GHG emissions. OPR submitted proposed amendments to the Natural Resources Agency in accordance with Senate Bill 97 regarding analysis and mitigation of GHG emissions. As directed by Senate Bill 97, the Natural Resources Agency adopted Amendments to the *CEQA Guidelines* for GHG emissions, which became effective in 2010.

Senate Bill 375

Senate Bill 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. CARB adopted the vehicular GHG emissions reduction targets, in consultation with the metropolitan planning organizations (MPOs), which require a 7 to 8 percent reduction by 2020 and a 13 to 16 percent reduction by 2035, for each MPO. Senate Bill 375 recognizes the importance of achieving significant GHG reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the Senate Bill 375 process, MPOs, such as the Kern Council of Governments (COG), will work with local jurisdictions in the development of sustainable community strategies (SCS) designed to integrate development patterns and the transportation network in a way that reduces GHG emissions while meeting housing needs and other regional planning objectives. KCOG's reduction target for per capita vehicular emissions is 5 percent by 2020 and 13 percent by 2035 (CARB, 2018b).

KCOG adopted the 2022 Regional Transportation Plan (RTP), which includes an SCS component in accordance with Senate Bill 375. The 2022 RTP is a 24-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County.

Assembly Bill 1493

In a response to the transportation sector accounting for more than half of California's CO_2 emissions, Assembly Bill 1493 was enacted by July 2002. Assembly Bill 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in 2004. When fully phased in, the near-term (2009-2012) standards will result in a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term standards will result in a reduction of about 30 percent.

California Green Building Standard Code

The State of California adopted the 2010 CALGreen Code, which became effective in January 2011. Building off of the initial 2008 California Green Building Code, the 2010 CALGreen Code represents a more stringent building code that requires, at a minimum, that new buildings and renovations in California meet certain sustainability and ecological standards. The 2010 CALGreen Code has mandatory Green Building provisions for all new residential buildings that are three stories or fewer (including hotels and motels) and all new non-residential buildings of any size that are not additions to existing buildings.

The California Building Standards Commission adopted the 2013 California Building Standards Code that also included the latest 2013 CALGreen Code, which became effective on January 1, 2014. The mandatory provisions of the code are anticipated to reduce GHG emissions by 3 $MMTCO_2e$ by 2020, reduce water use by 20 percent or more, and divert 50 percent of construction waste from landfills. Additionally, the California Building Code includes a requirement for a 20 percent reduction in indoor potable water usage. The 2013 California Energy Code (Title 24, Part 6), which is also part of the CALGreen Code (Title 24, Part 11, Chapter 5.2), became effective on July 1, 2014. The 2016 CALGreen Code became effective on January 1, 2017. The updated code addresses clean air vehicles and requirements for electric vehicle charging infrastructure. The CALGreen Code was most recently updated in 2022 to include new mandatory measures for residential as well as nonresidential uses; the new measures took effect on January 1, 2023.

California Renewables Portfolio Standard

California's Renewables Portfolio Standard (RPS) program was enacted in 2002 with Senate Bill 1078 and accelerated in 2006, requiring investor-owned utilities to obtain 20 percent of their electric supply from renewable energy sources, such as solar, by 2010. On April 12, 2011, Governor Brown signed Senate Bill 2X, requiring California retail electric providers, to procure 33 percent of their retail energy sales from eligible renewable sources by 2020. In October 2015, Governor Brown signed into legislation Senate Bill 350, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030 (CPUC, 2023).

Senate Bill 1020 (2022)

On September 16, 2022, Governor Newsom signed Senate Bill 1020, the Clean Energy, Jobs, and Affordability Act, which adds interim targets to the policy framework originally established in Senate Bill 100. The interim targets require renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent of all retail electricity sales by 2040. The bill also requires all state agencies to rely on 100 percent renewable energy and zero-carbon resources to power their own facilities by 2035 and encourages better information sharing and coordination between agencies for transmission planning.

Senate Bill 100

Senate Bill 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") was approved by the California legislature and signed by Governor Brown in September 2018. It increased the standards set forth in Senate Bill 350 establishing that 44 percent of the total electricity sold to retail customers in California per year by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030 be secured from qualifying renewable energy sources. Senate Bill 100 states that it is the policy of the State that eligible renewable energy resources and zero-carbon resources supply 100 percent of the retail sales of electricity to California. This bill requires that the achievement of 100 percent zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

Senate Bill 1368

Senate Bill 1368 requires the CPUC to establish a baseload generation standard for publicly owned or leased facilities which generate electricity at a GHG Emissions Performance Standard (EPS) of 1,100 pounds of CO_2e per megawatt-hour. Senate Bill 1368 also requires the posting of notices of public deliberations by publicly owned companies on the CPUC website and establishes a process to determine compliance with the EPS.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combined the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package included elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB, 2025).

CARB adopted the Advanced Clean Cars II regulations in November 2022, imposing the next level of low-emission and zero-emission vehicle standards for model years 2026-2035 that contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality targets. By 2035, all new passenger cars, trucks and SUVs sold in California will be required to be zero emissions (CARB, 2025). On June 12, 2025, President Trump signed three Congressional Review Act resolutions that rescind California's electric vehicle sales mandates and diesel engine rules. House Joint Resolution 88 revokes the USEPA's Clean Air Act waiver to California that allowed adoption of the Advanced Clear Cars Program. California, joined by other states, filed a lawsuit in federal court challenging the three resolutions. In the interim, Governor Newsom signed Executive Order N-27.25 directing CARB to develop new zero-emissions regulations. The Trump administration has challenged California's attempts to develop new regulations, and the State of Texas has intervened in that challenge.

CARB also adopted the Advanced Clean Truck Regulation to accelerate a large-scale transition of zero emission medium- and heavy-duty vehicles. The regulation requires the sale of zero-emission medium- and heavy-duty vehicles as an increasing percentage of total annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b to 3 truck sales, 75 percent of Class 4 to 8 straight truck sales, and 40 percent of truck tractor sales. By 2045, every new medium- and heavy-duty truck sold in California will be zero emission. Large employers, including retailers, manufacturers, brokers, and others, are required to report information about shipments and shuttle services to better ensure that fleets purchase available zero-emission trucks.

California Air Pollution Control Officers Association White Paper

The California Air Pollution Control Officers Association (CAPCOA) issued a "white paper" (*CEQA and Climate Change*—an authoritative report issued by any organization) on evaluating GHG emissions under CEQA (CAPCOA, 2008). The strategies provided in that document are guidelines only and have not been adopted by any regulatory agency. The white paper serves as a resource to assist lead agencies in evaluating GHGs during review of environmental information documents. The methodologies used in this GHG analysis are consistent with the CAPCOA guidelines.

Regional

2022 Regional Transportation Plan/Sustainable Communities Strategy

The latest RTP was prepared by the KCOG and was adopted on July 21, 2022. The 2022 RTP is a 24-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. It was developed through a continuing, comprehensive, and cooperative planning process, and provides for effective coordination between local, regional, State, and federal agencies. Included in the 2022 RTP is the SCS, which is required by California's Sustainable Communities and Climate Protection Act, of Senate Bill 375. CARB set targets for Kern's GHG emissions reductions from passenger vehicles and light-duty trucks at 9 percent per capita by 2020 and 15 percent per capita by 2035 as compared to 2005. In addition, Senate Bill 375 provides for closer integration of the RTP/SCS with the Regional Housing Needs Allocation (RHNA) ensuring consistency between low-income housing need and transportation planning. KCOG closely coordinated the RHNA and RTP/SCS development process using the same oversight committee for both. Local

jurisdictions will use the RHNA to identify locations to provide sufficient housing for all economic segments of the population and ensure that the state's housing goals are met.

Local

Construction and operation of the project would be subject to policies and regulations contained within the general and specific plans, including the Kern County General Plan, Kern County Zoning Ordinance, and the Kern County Code of Building Regulations, which include policies, goals, and implementation measures related to GHG emissions. The policies and implementation measures in the Kern County General Plan related to GHG emissions that are applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the project. These measures are not listed below, but as stated in **Chapter 2**, *Introduction*, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Kern County General Plan

The Land Use, Open Space, and Conservation Element of the Kern County General Plan provides goals, policies, and implementation measures applicable to air quality, which would also reduce project GHG emissions. These policies are provided below.

Chapter 1. Land Use, Conservation, and Open Space Element

Air Quality

Policies

Policy 18: The air quality implications of new discretionary land use proposals shall be considered in approval of major developments. Special emphasis will be placed on minimizing air quality degradation in the desert to enable effective military operations and in the valley region to meet attainment goals.

Policy 19: In considering discretionary projects for which an Environmental Impact Report must be prepared pursuant to the California Environmental Quality Act, the appropriate decision-making body, as part of its deliberations, will ensure that:

(1) All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and

(2) The benefits of the proposed project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to the extent that such a statement is required pursuant to the California Environmental Quality Act.

Policy 20: The County shall include fugitive dust control measures as a requirement for discretionary projects and as required by the adopted rules and regulations of the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District on ministerial permits.

Policy 21: The County shall support air districts efforts to reduce PM_{10} and $PM_{2.5}$ emissions.

Policy 22: Kern County shall continue to work with the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District toward air quality attainment with federal, State, and local standards.

Implementation Measures

Measure F: All discretionary permits shall be referred to the appropriate air district for review and comment.

Measure G: Discretionary development projects involving the use of tractor-trailer rigs shall incorporate diesel exhaust reduction strategies including, but not limited to:

1. Minimizing idling time.
2. Electrical overnight plug-ins.

Measure H: Discretionary projects may use one or more of the following to reduce air quality effects:

1. Pave dirt roads within the development.
2. Pave outside storage areas.
3. Provide additional low Volatile Organic Compounds (VOC) producing trees on landscape plans.
4. Use of alternative fuel fleet vehicles or hybrid vehicles.
5. Use of emission control devices on diesel equipment.
6. Develop residential neighborhoods without fireplaces or with the use of Environmental Protection Agency certified, low emission natural gas fireplaces.
7. Provide bicycle lockers and shower facilities on site
8. Increasing the amount of landscaping beyond what is required in the Zoning Ordinance (Chapter 19.86).
9. The use and development of park and ride facilities in outlying areas.
10. Other strategies that may be recommended by the local Air Pollution Control Districts.

Measure J: The County should include PM_{10} control measures as conditions of approval for subdivision maps, site plans, and grading permits.

Chapter 5. Energy Element

Solar Energy Development

Policies

Policy 1: The County shall encourage domestic and commercial solar energy uses to conserve fossil fuels and improve air quality.

Policy 3: The County should permit solar energy development in the desert and valley planning regions that does not pose significant environmental or public health and safety hazards.

In 2009, the Kern County Board of Supervisors approved the proposed list of Energy, Efficiency, and Conservation projects for which the County will request funding under the provisions of the American Recovery and Reinvestment Act of 2009. The Kern County Planning and Natural Resources Department has requested an allocation for the preparation of a Climate Change Action Plan (CCAP) for the Kern County General Plan. California's Climate Scoping Plan calls for local governments to reduce GHG

emissions through the adoption of local programs as an important strategy to reduce community scale GHG emissions. Project conformance with an adopted CCAP would ensure the goal of Assembly Bill 32 can be attained with the project.

Soledad Mountain Elephant Butte Specific Plan

The project is within the boundaries of the Soledad Mountain Elephant Butte Specific Plan. The plan addresses issues of importance in the area by stating goals, policies, implementation measures, and general provisions specific to the area. There are no goals, policies, or implementation measures in the Soledad Mountain Elephant Butte Specific Plan that are applicable to the project that would serve to reduce GHG emissions. In Kern County, specific plans are used to implement goals, objectives, and policies of the General Plan in a more detail and refined manner unique to a smaller area of the County. Since there are no applicable goals, policies, or implementation measures within the Soledad Mountain Elephant Butte Specific Plan, refer to the applicable policies, goals, and implementation measures of the Kern County General Plan above.

Eastern Kern Air Pollution Control District

In 2012, EKAPCD adopted an addendum to its CEQA *Guidelines* to address GHG impacts, including quantitative thresholds for determining significance for GHG emissions for new stationary sources where EKAPCD serves as the lead CEQA review agency. A project is considered to have a significant project or cumulative considerable impact if it generates 25,000 tons or more of CO_2e per year (22,680 $MTCO_2e$). This impact would be considered to be fully reduced to below the significance level if it meets one of the following conditions:

- The project demonstrates to EKAPCD that it is in compliance with a state GHG reduction plan such as Assembly Bill 32 or future GHG reduction plan if is more stringent than the state plan; or
- Project GHG emissions can be reduced by at least 20 percent below Business As Usual (BAU) through implementation of one or more of the following strategies:
  - Compliance with Best Performance Standard (BPS);
  - Compliance with GHG Offset; and/or
  - Compliance with an Alternative GHG Reduction Strategy.

4.8.4 Impacts and Mitigation Measures

Methodology

The project's potential impacts to GHGs have been evaluated using a variety of resources, including the Air Quality and GHG Technical Report (Tetra Tech, 2025) which is provided in **Appendix C1** of this EIR, and relevant literature including information and guidelines by CARB, USEPA, and the applicable provisions of CEQA. Additionally, the GHG savings from a 1,400 megawatt (MW) solar project with up to 8 gigawatt-hours (GWh) of battery energy storage capacity were estimated. Using the aforementioned resources and professional judgment, potential impacts were analyzed according to CEQA significance criteria described in the *Thresholds of Significance* section.

Construction and Decommissioning

The entire construction process was conservatively anticipated to occur over an approximately 34-month period. Short-term emissions are primarily from the construction phase of a project and are recognized to be short in duration and without lasting impacts on air quality. California Emissions Estimator Model (CalEEMod) Version 2022.1.1.21 was used to estimate emissions from construction worker vehicles and onsite construction equipment. Construction of the project would result in GHG emissions primarily associated with the use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. Detailed construction assumptions are provided in the Air Quality and GHG Technical Report, included in **Appendix C1** of this EIR.

The project has an anticipated operational life of up to 35 years, at which time the project proponent would determine whether the project site should be decommissioned and deconstructed or if it would seek an extension of its operation and the appropriate permitting pathways. As project decommissioning activities would be similar to project construction activities (using the same types of equipment and same general activities), the quantified emissions from construction are used as a surrogate for decommissioning activities. However, it is anticipated that decommissioning activities would be reduced from those estimated for construction activities as the efficiencies of construction equipment and on-road vehicles would be consistent with the future decommissioning year, which would require full compliance with stringent emissions standards for heavy-duty construction equipment resulting in anticipated substantial reductions in emissions from what is presented for construction activities.

Operations

Long-term operational emissions modeling included facility operations, worker commute trips, as well as haul truck trips and equipment operations (i.e., backup generators). CalEEMod Version 2022.1.1.21 was used to estimate emissions from operation of the project. Operational year 2028 was assumed for this analysis as it is anticipated project operations may commence as early as 2028. Detailed operational assumptions are provided in the Air Quality and GHG Technical Report, included in **Appendix C1** of this EIR. Emissions from each source (i.e., mobile source, energy, water and wastewater, and stationary) are discussed below:

- **Mobile Sources:** Mobile sources for the project would primarily be motor vehicles traveling to and from the project site. Annual miles traveled is estimated to be 37,621miles per year, accounting for the commutes and performance of regular inspection and maintenance activities by six full-time-equivalent staff. Regulatory measures related to mobile sources include Assembly Bill 1493 (Pavley) and related federal standards. Assembly Bill 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the State. In addition, the NHTSA and USEPA have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles, light-, medium-, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from project's motor vehicles. Note that carbon intensity reduction associated with the LCFS was not assumed in the analysis and, therefore, the analysis is considered conservative.
- **Water and Wastewater:** Supply, conveyance, treatment, and distribution of water for the project require the use of electricity, which would result in associated indirect GHG emissions. Water for

dust suppression and washing PV panels will come from either the Mojave Public Utility District, California City, or from groundwater sources via on-site wells. It is likely groundwater wells would utilize electricity generated onsite or from the local electrical grid; however, for a worst-case emissions generation perspective, a diesel generator has been assumed to power the water well pumps. The emissions are accounted for in the stationary source emission estimates.

- **Stationary:** Emissions from backup generators required for the project were quantified using spreadsheet calculations which are provided in **Appendix C1**. If required, there would be diesel-fired battery energy storage generators and natural gas-fired substation generators. The generators would need to be intermittently run for maintenance and testing purposes and in a manner consistent with CARB's Airborne Toxic Control Measures for Stationary Compression Ignition Engines (17 California Code of Regulations Section 93115). Accordingly, the amount of operational emissions released by the backup generators would be minimal.
- **Energy**: Operational energy emissions based on electricity consumption for security lighting, well pumps, and energy storage facilities was assumed to be provided by the project's electrical generation, supplied by the local power provider or via diesel generators. The emissions from the generator are accounted for in the stationary energy source emission estimates.

Once operational, the project would generate renewable energy with minimal associated GHG emissions. Therefore, operation of the project would result in displaced GHG emissions due to the gradual switch from non-renewable GHG-generating energy to renewable energy. Total annual electricity generation was assumed to be 3,832,500 megawatt-hours annually, based on an assumed capacity factor of 35 percent at 1,400 MW and accounting for 72,404 kilowatt-hours per year of electricity consumed by the project, based on water electricity intensity values for water supply, treatment, and distribution and electrical utility emission factors from CalEEMod.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project could potentially have a significant adverse effect on GHGs.

A project would have a significant impact on GHGs if it would:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The adopted CEQA *Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and global climate change impacts. Quantitative significance thresholds for this impact area have not been adopted by the State of California.

Kern County has not developed a quantified threshold of significance for GHG emissions, but a project found to contribute to a net decrease in GHG emissions and found to be consistent with the adopted implementation of the CARB Climate Change Scoping Plan is presumed to have less-than-significant GHG impacts.

In March 2012, EKAPCD adopted an addendum to their CEQA *Guidelines* to address GHG impacts, including quantitative thresholds for determining significance of GHG emissions when EKAPCD is the CEQA lead agency. In these circumstances, a project is considered to have a significant impact or cumulatively considerable impact if it exceeds the following criteria:

- Generate 25,000 MT or more of CO_2e per year

The above impact would be considered fully reduced to below the significance level if it meets one of the following conditions:

- The project demonstrates to EKAPCD that it is in compliance with a State GHG reduction plan such as Assembly Bill 32 or future federal GHG reduction plan if it is more stringent than the State plan; or
- Project GHG emissions can be reduced by at least 20 percent below business-as-usual through implementation of one or more of the following strategies:
    a. Compliance with a Best Performance Standard (BPS);
    b. Compliance with GHG Offset; and/or
    c. Compliance with an Alternative GHG Reduction Strategy.

Additionally, potential impacts were evaluated based on whether the project would be consistent with the State's applicable GHG reduction goals, plans, policies, and regulatory requirements. Specifically, those plans and policies established in accordance with Assembly Bill 32 and the State's RPS program as well as other federal, state, and local policies.

Project Impacts

Impact 4.8-1: The project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

GHG analysis is inherently cumulative. Project-related activities would contribute to the generation of GHG emissions during construction and operation and indirectly contribute to the reduction of GHG emissions during operation by providing low-GHG electricity to California customers and displacing higher GHG emitting resources. The applicable GHGs that have been quantitatively estimated for this project include CO_2, CH_4, and N_2O, presented as emissions of CO_2e. Although SF_6 or other insulating gases are used as insulation in electric power transmission and distribution equipment, their emissions would occur at very low rates due to the gas's low usage and minimal leak rate when contained by electric power equipment. As such, SF_6 or other insulating gas emissions have not been estimated for this project. Emissions from emergency backup generators have been estimated for this project, as the generators would need to be intermittently run for maintenance and testing purposes over the course of project operations, which would result in minimal emissions. In the event that emergency backup generators are required for project facilities such as project substations and battery energy storage systems, appropriate air permits will be obtained from EKAPCD. It is also expected that the diesel-powered emergency backup generators would be CARB-certified Tier 4 engines, and operated in accordance with applicable federal, state, regional, and local ordinances and regulations.

Directly emitted GHG emissions during construction, as well as indirect GHG emissions associated with electricity consumption for water use, would result in a less-than-significant, short-term impact to climate change. As summarized in **Table 4.8-2**, *Estimated Project Construction and Decommissioning Greenhouse Gas Emissions*, and detailed in **Appendix C1** of this EIR, the GHG emissions from the construction and decommissioning phases of the project would be well below EKAPCD's significance threshold of 25,000 tons per year of CO_2e (22,321 MT per year of CO_2e) with or without mitigation. Therefore, GHG emissions from construction and decommissioning of the project would result in less than significant impacts that are not cumulatively considerable.

TABLE 4.8-2: ESTIMATED PROJECT CONSTRUCTION, OPERATION AND DECOMMISSIONING GREENHOUSE GAS EMISSIONS

Phase		GHG Emissions CO_2e (metric tons)
Project Construction Emissions (year)		
	2025	1,414
	2026	6,717
	2027	5,388
	2028	352
	Total	**13,871**
Amortized Construction Emissions		**396**
Projected Amortized Decommissioning Emissions		**396**
Project Operations Emissions (metric tons/year)		**606**
Total		**1,399**
EKAPCD Threshold of Significance (metric tons/year) [a]		22,321
Exceed Threshold?		No

[a] The EKAPCD Threshold of Significance was taken from EKAPCD's *Addressing GHG Emission Impacts For Stationary Source Projects When Serving As Lead CEQA Agency* (EKAPCD, 2012). Although this threshold is intended for project operations only, it was applied to construction emissions for comparison purposes.
Note: See **Appendix C1** of this EIR for GHG emissions calculations. Note that the numbers have been rounded to the nearest metric ton and, therefore, values may not add exactly.
SOURCE: Tetra Tech, 2025

The total construction-related CO_2e emissions annualized over the project lifetime (35 years) is equivalent to approximately 396 MT per year of CO_2e. In addition, annual operational emissions (due to vehicle travel, electricity consumption for water use, and potential intermittent use of emergency backup generators) would total approximately 606 MT per year of CO_2e. Since decommissioning of the project assumes the same level of activity as construction, emissions are conservatively projected to be the same as construction, which would result in a total project emission of approximately 1,399 MT per year of CO_2e when considering construction, decommissioning, and operational emissions. This value is well below the EKAPCD threshold of 25,000 tons per year of CO_2e (22,680 MT per year of CO_2e). Therefore, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

In addition, because the project is intended to generate electricity from a renewable source of energy, it would not result in substantial GHG emissions due to the burning of fossil fuels once in operation. The project would create renewable energy over the anticipated operational 35-year life of the project. This energy would displace the GHG emissions which would otherwise be produced by existing BAU power generation resources (including natural gas, coal, and renewable combustion resources). The project would generate up to 1,400 MW of solar electricity as well as up to 8 GWh of battery energy storage capacity. As

shown in **Table 4.8-3**, *Displaced GHG Emissions Over 35-Year Operational Lifetime*, the project would potentially displace approximately 928,311MT of CO_2e of GHGs annually that would otherwise be emitted to produce an equivalent amount of energy from fossil fuel sources. Over the operational life of the project, the total potentially displaced emissions would be approximately 32,490,894 MT CO_2e. Such a reduction would assist in the attainment of the State's goal to reduce GHG emissions. Therefore, operation of the project would result in a substantial net reduction in GHG emissions, even when accounting for the very minimal operational GHG emissions of the project from a relatively small number of periodic maintenance and vehicle trips and intermittent use of emergency backup generators.

TABLE 4.8-3: DISPLACED GHG EMISSIONS OVER 35-YEAR OPERATIONAL LIFETIME

Emissions Category	CO_2e (metric tons)
Net Annual Displaced Emissions	928,311
Net Total Project Displaced Emissions (assumes a 30-year project lifetime)	32,490,894
SOURCE: Tetra Tech, 2025	

Given that the project would result in a net decrease of CO_2e emissions, potential impacts related to the generation of GHG emissions, either directly or indirectly, would be considered less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.8-2: The project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gas.

As discussed above, potential impacts were evaluated based on whether the project would be consistent with the State's applicable GHG reduction goals, plans, policies, and regulatory requirements as well as other federal, state, and local policies, as provided in the following analyses.

CARB Climate Change Scoping Plan

The project would comply with the strategies recommended by the State of California, the USEPA, and the Climate Change Scoping Plan, as shown in **Table 4.8-4**, *California Greenhouse Gas Emission Reduction Strategies*. In order to meet the Senate Bill 32 GHG emissions reduction mandate, the Climate Change Scoping Plan relies on achievement of RPS goals in Senate Bill 350, which require that 50 percent of electricity provided by electric utilities be from renewable sources by 2030 (Senate Bill 350's targets were increased by Senate Bill 100), as well as other measures listed in **Table 4.8-5**, *Consistency With Applicable Scoping Plan Actions For Proposed Project*. Further, as discussed previously, the project is reasonably expected to displace region-wide and Statewide emissions of GHGs over the expected operational life of the project. The project and other similar projects are essential to achieving the RPS.

TABLE 4.8-4: CALIFORNIA GREENHOUSE GAS EMISSION REDUCTION STRATEGIES

Strategy	Project Design/ Mitigation to Comply with Strategy
Vehicle Climate Change Standards: Assembly Bill 1493 (Pavley) required the State to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by CARB in September 2004.	These are CARB enforced standards; vehicles that access the project and are required to comply with the standards would comply with these strategies.
Other Light Duty Vehicle Technology: New standards would be adopted to phase in beginning in the 2017 model.	These are CARB enforced standards; vehicles that access the project and are required to comply with the standards would comply with these strategies.
Heavy-Duty Vehicle Emission Reduction Measures: Increased efficiency in the design of heavy-duty vehicles and an education program for the heavy-duty vehicle sector.	These are CARB enforced standards; vehicles that access the project and are required to comply with the standards would comply with these strategies.
Diesel Anti-Idling: In July 2004, CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.	Project would be subject to State law.
Hydrofluorocarbon Reduction: 1) Ban retail sale of HFC in small cans; 2) Require that only low global warming potential refrigerants be used in new vehicular systems; 3) Adopt specifications for new commercial refrigeration; 4) Add refrigerant leak tightness to the pass criteria for vehicular Inspection and Maintenance programs; 5) Enforce federal ban on releasing HFCs.	This measure applies to consumer products. When CARB adopts regulations for these reduction measures, any products that the regulations apply to would comply with the measures.
Transportation Refrigeration Units (TRU), Off-Road Electrification, Port Electrification: Strategies to reduce emissions from TRUs, increase off-road electrification, and increase use of shore-side/port electrification.	Not applicable
Manure Management: Reduction of volatile organic compounds from confined animal facilities through implementation of control options.	Not applicable
Alternative Fuels - Biodiesel Blends: CARB would develop regulations to require the use of one to four percent biodiesel displacement of California diesel fuel.	Not applicable
Alternative Fuels - Ethanol: Increased use of ethanol fuel.	Not applicable
Achieve 50 percent Statewide Recycling Goal: Achieving the State's 50 percent waste diversion mandate as established by the Integrated Waste Management Act of 1989 (Assembly Bill 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48 percent has been achieved on a Statewide basis. Therefore, a two percent additional reduction is needed.	The project would comply with the 1989 California Integrated Waste Management Act and the California Solid Waste Reuse and Recycling Access Act of 1991, as amended.
Zero Waste - High Recycling: Additional recycling beyond the State's 50 percent recycling goal.	The project would comply with the 1989 California Integrated Waste Management Act and the California Solid Waste Reuse and Recycling Access Act of 1991, as amended.
Landfill Methane Capture: Install direct gas use or electricity projects at landfills to capture and use emitted methane.	Not applicable

Strategy	Project Design/ Mitigation to Comply with Strategy
Urban Forestry: A new Statewide goal of planting five million trees in urban areas by 2020 would be achieved through the expansion of local urban forestry programs.	Not applicable
Afforestation/Reforestation Projects: Reforestation projects focus on restoring native tree cover on lands that were previously forested and are now covered with other vegetative types.	Not applicable
Water Use Efficiency: 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions.	The water used during operation of the project would be used in an efficient manner to reduce potential impacts to local water resources.
Building Energy Efficiency Standards in Place and in Progress: Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	The project would be consistent with State law.
Appliance Energy Efficiency Standards in Place and in Progress: Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	The project would be consistent with State law.
Cement Manufacturing: Cost-effective reductions to reduce energy consumption and to lower carbon dioxide emissions in the cement industry.	Not applicable
Smart Land Use and Intelligent Transportation Systems (ITS): Smart land use strategies encourage jobs/housing proximity, promote transit oriented development, and encourage high-density residential/commercial development along transit corridors. ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services.	Not applicable
Smart land use, demand management, ITS, and value pricing are critical elements for improving mobility and transportation efficiency. Specific strategies include: promoting jobs/housing proximity and transit-oriented development; encouraging high density residential/commercial development along transit/rail corridor; valuing and congestion pricing; implementing intelligent transportation systems, traveler information/traffic control, incident management; accelerating the development of broadband infrastructure; and comprehensive, integrated, multimodal/intermodal transportation planning.	Not applicable
Enteric Fermentation: Cattle emit methane from digestion processes. Changes in diet could result in a reduction in emissions.	Not applicable

Strategy	Project Design/ Mitigation to Comply with Strategy
Green Buildings Initiative: Green Building Executive Order, S-20-04 (CA 2005), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as compared with 2003 levels.	Not applicable

TABLE 4.8-5: CONSISTENCY WITH APPLICABLE SCOPING PLAN ACTIONS FOR PROPOSED PROJECT

Sector	Action	Project Consistency
GHG Emissions Reductions Relative to the Senate Bill 32 Target	40% below 1990 levels by 2030	As a renewable energy generation facility, one of the project objectives is to support efforts to reduce greenhouse gas emissions consistent with California Senate Bill 32, to at least 40 percent below the statewide greenhouse gas emissions limit by 2030.
Electricity Generation	Sector GHG target of 38 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) in 2030 and 30 $MMTCO_2e$ in 2035 Meet increased demand for electrification without new fossil gas-fired resources.	The project, as a renewable energy generation facility, will help meet electricity demand without fossil gas-fired resources.
Combined Heat and Power	Facilities retire by 2040	The energy from this project would help enable combined heat and power facilities to retire by 2040.
High GWP Potential Emissions	Low GWP refrigerants introduced as building electrification increases, mitigating HFC emissions	The project would implement use of low GWP refrigerants.
High GWP Gases	SF_6 Leak Reduction Gas Insulated Switchgear	Very low amounts of SF_6 are used as insulation in electric power transmission and distribution equipment in the project, and their emissions would occur at minimal leak rates when contained by electric power equipment.

SOURCE: CARB, 2022

KCOG's 2022 RTP

The 2022 RTP incorporates local land use projections and circulation networks in city and county general plans. The 2022 RTP is not directly applicable to the project because the underlying purpose of the 2022 RTP is to provide direction and guidance by making the best transportation and land use choices for future development. Nevertheless, the project would not conflict with the goals and policies of the 2022 RTP. In addition, the project would not impact local transportation or land use during operation.

Other Federal/State/Local Policies

Table 4.8-6, *Project Consistency with an Applicable Plan, Policy, or Regulation for GHG Emissions*, below, evaluates project consistency with other applicable federal, State and local policies regarding GHG

emissions. As shown in the table below, the project would fall below the annual emission triggers for compliance with federal regulations; therefore, federal regulations would not be applicable to the project. As a renewable energy project, the project would be exempt from State annual GHG reporting requirements and would be considered consistent with California's Emission Performance Standard and RPS requirements (described above under Subsection 4.8.3, *Regulatory Setting*, of this EIR).

TABLE 4.8-6: PROJECT CONSISTENCY WITH AN APPLICABLE PLAN, POLICY, OR REGULATION FOR GHG EMISSIONS

Adopted Plan, Policy, or Regulation	Consistency Determination	Project Consistency
Federal		
40 CFR Part 98. Mandatory Reporting of Greenhouse Gases Rule.	Not applicable	The project would have direct CO_2e operating emissions that are well below the 25,000 ton/year rule trigger.
40 CFR Part 52. Proposed Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule.	Not applicable	The project would have direct CO_2e operating emissions that are well below the 75,000 ton/year rule trigger.
State		
Senate Bill 1368. EPS Standard.	Consistent	The project, as a renewable energy generation facility, is determined by rule to comply with the GHG Emission Performance Standard requirements of Senate Bill 1368.
Senate Bill 351. 50% RPS Standard.	Indirectly consistent	This regulation is applicable to utilities, not generating facilities, but the energy from this project would help enable the utility buying the project's generation to comply with this legislation.
Senate Bill 100. 60% RPS by 2030 and 100% carbon-free by 2045	Indirectly consistent	This regulation is applicable to utilities, not generating facilities, but the energy from this project would help enable the utility buying the project's generation to comply with this legislation.
Assembly Bill 32. Annual GHG Emissions Reporting	Not applicable	The project, as a solar energy generation project, is exempt from the mandatory GHG emission reporting requirements for electricity generating facilities as currently required by the CARB for compliance with the California Global Warming Solutions Act of 2006 (Assembly Bill 32 Núñez, Statutes of 2006, Chapter 488, Health and Safety Code Sections 38500 et seq.).
Local		
Kern County General Plan - Air Quality Element Policies Goals and Implementation Measures	Consistent	Air Quality Mitigation Measures would ensure that the project is consistent with the Kern County General Plan Air Quality Element Policies, Goals, and Implementation Measures that will indirectly reduce GHG emissions by reducing fossil fuel combustion.
Soledad Mountain Elephant Butte Specific Plan	N/A	There are no goals, policies, or implementation measures in the Soledad Mountain Elephant Butte Specific Plan that are applicable to the project that would serve to reduce GHG emissions and the goals and policies of the Kern County General Plan are the governing tool for any development.

To achieve the 2030 goal of Senate Bill 32, Senate Bill 350 sets ambitious 2030 targets for energy efficiency and renewable electricity, among other actions aimed at reducing GHG emissions across the energy and transportation sectors, and Senate Bill 100 sets even more ambitious renewable energy targets. The project involves the construction and operation of a solar facility that would produce a new renewable source of energy in Kern County. Therefore, the project would directly support California's Renewable Portfolio Standard goal under Senate Bill 100 of increasing the percentage of electricity procured from renewable sources to 60 percent by 2030 and a target of 100 percent from eligible renewable energy resources and zero-carbon resources by 2045. The project additionally supports California's goal to increase renewable electricity procurement to 50 percent by 2030 as it provides a new source of renewable electricity for the State.

Global warming and climate change are a worldwide phenomenon, and project-level emissions cannot be correlated with specific impacts based on currently available science. However, based on the analysis above, the project would be consistent with California's strategies to reduce GHG emissions to the levels required by Assembly Bill 32, as well as state GHG emission reductions post-2020. As a renewable energy project generating approximately 1,400 MW and up to 8 GWh of battery energy storage capacity, the project would contribute to achieving the mandated emission reduction targets established by Assembly Bill 32. Additionally, the project would comply with any applicable forthcoming regulations or requirements adopted under Assembly Bill 32 or imposed by the State or federal government. Therefore, considering the project's minimal annual emissions and anticipated reduction in overall GHG emissions, the project is not expected to significantly contribute to global warming or climate change.

Mitigation Measures

No mitigation measures are required.

Level of Significance

Impacts would be less than significant.

4.8.5 Cumulative Setting, Impacts, and Mitigation Measures

Emissions of GHGs and their contribution to global climate change are considered a cumulative impact by definition. Therefore, the geographic extent of the project's cumulative area of impact would be worldwide.

The adopted CEQA *Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and global climate change impacts. Quantitative significance thresholds for this impact area have not been adopted by the State of California. In addition, Kern County has not adopted quantitative thresholds for determining significance of GHG emissions at the time of this writing. However, EKAPCD has recently adopted an addendum to its CEQA *Guidelines* titled: "Addressing GHG Emission Impacts for Stationary Source Projects When Serving as the Lead CEQA Agency" (EKAPCD, 2012). This addendum is the policy that EKAPCD will use when it is the lead agency for CEQA to determine the project-specific and cumulative significance of GHG emissions from new and

modified stationary source (industrial) projects. Under this policy, a project is considered to have a cumulatively considerable impact if it generates 25,000 metric tons or more of CO_2e per year.

Total GHG emissions of 13,871 $MTCO_2e$ for construction of the project are shown in **Table 4.8-2**, *Estimated Project Construction Greenhouse Gas Emissions*. In addition to these project GHG emissions, other cumulative projects in the vicinity of the project site, identified in **Chapter 3**, *Project Description*, **Table 3-5**, *Cumulative Projects List*, largely consist of utility-scale alternative power generation (i.e., solar and wind) facilities. The nature of these projects is such that, like the project, they would be consistent with the strategies of the Climate Change Scoping Plan. In order to meet the Assembly Bill 32 GHG emissions reduction mandate, the Climate Change Scoping Plan relies on achievement of the RPS target of 50 percent by 2030. In order to meet the Senate Bill 32 GHG emissions reduction mandate, the 2022 Scoping Plan relies on achievement of the RPS target of 50 percent of California's energy coming from renewable sources by 2030. As previously discussed, the RPS target was updated in September 2018 under Senate Bill 100 to 60 percent by 2030 and 100 percent carbon-free by 2045. The project and other similar projects are essential to achieving the RPS and the State's 2045 goal for 100 percent carbon-free electricity.

The main contribution of GHG emissions from the project would be from construction equipment usage during the construction phase and motor vehicles trips by employees and maintenance vehicles during project operations. Transportation sources account for 38 percent of California's total GHG emissions (CARB, 2024). The project's emissions would, therefore, contribute to the increase in emissions in the transportation sector. Construction emissions would be finite and temporary and would cease at the end of construction activities.

Although the project would result in a short-term contribution to cumulative GHG emissions in California, operation of the project would offset emissions from the electricity generation sector. While the project has an anticipated operational life of 35 years, the default is to estimate displaced emissions over a 30-year project lifetime. It is estimated that the project would displace approximately 32,490,894 $MTCO_2e$ over a 35-year lifespan (refer to **Table 4.8-3**, *Displaced GHG Emissions Over 35-Year Operational Lifetime*). Therefore, the total GHG construction emissions that would be associated with the project would likely be offset by less than one month of operations. Overall, the project would not contribute to cumulative GHG emissions in California because operation of the project would provide electric power with negligible operational GHG emissions over the long term when compared to traditional fossil-fueled generation technologies. Thus, the project would not have a cumulatively considerable impact on global climate change, and cumulative impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

Cumulative impacts would be less than significant.

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Section 4.9

Hazards and Hazardous Materials

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Section 4.9
Hazards and Hazardous Materials

4.9.1 Introduction

This section of the EIR describes the affected environment and regulatory setting pertaining to hazards and hazardous materials. This section also describes potential impacts on residences and other sensitive receptors that could result from implementation of the project (other than geologic hazards; see **Section 4.7**, *Geology and Soils*, of this EIR), and presents mitigation measures that would reduce these impacts, if applicable. Information in this section is based on publicly available databases, including the Department of Toxic Substances Control's (DTSC) EnviroStor and State Water Resources Control Board's (SWRCB) GeoTracker. This section is based on the Phase I Environmental Site Assessments (ESAs) conducted for the project parcels by Partner Engineering and Science, Inc. located in **Appendix H** of this EIR, which are incorporated by reference herein (Partner, 2025).

4.9.2 Environmental Setting

This section discusses the existing conditions related to hazards and hazardous materials on the project site and describes the environmental setting for hazardous materials and waste, airports, electromagnetic fields (EMF), and wildfire hazards. Residences and other sensitive receptors, such as schools, are also described as their proximate location to the project site affects their exposure to the potential hazards described below. The project and project site are defined in **Chapter 3**, *Project Description*, and depicted in **Figure 3-2**, *Aerial Map*.

Existing Setting

The project is located at the western edge of the Antelope Valley in the southeastern corner of the desert region in unincorporated Kern County. The project site has relatively flat terrain with site elevations ranging from approximately 2,970 to 3,790 feet above mean sea level due to being south of the Tehachapi Mountains where lands gradually slope downward from the northwest towards the southeast.

Current Uses Surrounding the Project Site

Surrounding land uses primarily comprise renewable energy development, rural residential development, livestock grazing, light and heavy industrial and mining uses, and undeveloped lands. The closest school is the Mojave Junior/Senior High School, located approximately 5.5 miles northeast of the project site. The nearest public airport to the project site is Mojave Air and Space Port Airport, located approximately 9 miles northeast of the project site. State Route (SR)-14 and SR-58 are the nearest highways to the project site, located approximately 5 miles east and 8 miles north from the project site, respectively.

Historical Property Use

The project site is privately owned, generally undeveloped land, much of which is highly disturbed from domestic sheep grazing. The project site contains existing dirt roads, multiple abandoned and/or previously occupied structures, as well as associated non-occupied accessory structures, and the Windswept Ranch Petting Zoo. Existing development in the project vicinity primarily consists of rural residential, livestock grazing, light and heavy industrial and mining uses, solar and wind energy production facilities, and transmission facilities. According to a review of the DTSC Envirostor database, there are no hazardous release sites located within the project site (DTSC, 2025). The SWRCB GeoTracker database shows no listed release sites within the project site (SWRCB, 2025).

Hazardous Materials and Waste

A hazardous material is any substance that, because of its quantity, concentration, or physical or chemical properties, may pose a hazard to human health and the environment. Under Title 22 of the California Code of Regulations (CCR), the term "hazardous substance" refers to both hazardous materials and hazardous wastes. Both of these are classified according to four properties: (1) toxicity; (2) ignitability; (3) corrosiveness; and (4) reactivity (22 CCR 11, Article 3). A hazardous material is defined as:

> *A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed* (22 CCR 66260.10).

Hazardous materials can pose significant risks, including death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. These hazards can occur during production, storage, transportation, use, or disposal of hazardous materials, impacting both human health and the environment.

"Recognized environmental concern" (REC) is one of the terms used to identify environmental liability within the context of a Phase I ESA. ASTM International defines a REC as:

> *The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions* (ASTM International 2021).

Phase I ESAs conducted for the project parcels were used to determine potential risks of encountering legacy contaminants at the site and the Project Summary (Partner, 2025) is included herein as **Appendix H** of this EIR. The Phase I ESAs did not identify any RECs on the project site.

Photovoltaic Solar Panels and Cadmium Telluride

Photovoltaic (PV) solar panels that would be installed on the project site are made from crystalline silicon or thin film technology.

Crystalline Silicon Solar Panels

Crystalline silicon solar panels may contain small amounts of solid materials that are considered to be hazardous. Because such materials are in a solid and non-leachable state, broken crystalline silicon solar panels would not pose a risk of pollution to surface water, stormwater, or groundwater. Crystalline silicon panels removed from the site would be recycled or otherwise disposed of at an appropriate waste disposal facility.

Cadmium Telluride Photovoltaic Solar Panels

PV solar panels that would be installed on the project site are made from a uniquely American thin film solar technology with a proven record that spans more than two decades. The thin semiconductor layer in the modules is in the environmentally stable form of a compound that is non-soluble in water, encapsulated between two sheets of heat-strengthened glass, and sealed with an industrial laminate material. Cadmium telluride (CdTe) PV systems generate electricity with no emissions to air, water, or soil. Independent researchers from leading institutions have assessed the environmental, health, and safety aspects of CdTe PV modules and concluded they do not present an environmental risk in the event of breakage, fire or natural disasters. End-of-life CdTe PV modules have been classified as federal non-hazardous waste. In addition, the PV module manufacturer provides CdTe module recycling services and has 20 years of experience operating in-house PV recycling facilities. Solar equipment and infrastructure would be recycled whenever feasible or disposed of in compliance with applicable laws.

Energy Storage System

The proposed energy storage system(s) is described in **Section 3.7.2**, *Battery Energy Storage System*, of **Chapter 3**, *Project Description.* The energy storage system(s) will comply with California Fire Code (CFC) Chapter 12, Section 1207 (Stationary Energy Storage Systems), applicable County standards, and National Fire Protection Association (NFPA) 855 (Standards for the Installation of Stationary Energy Storage Systems). These codes govern design, installation, commissioning, operation, maintenance, and decommissioning, and require approval by the Authority Having Jurisdiction (AHJ).

In addition, systems must be listed and labeled to Underwriters Laboratories (UL) 9540 (Energy Storage Systems and Equipment), with components conforming to applicable standards (e.g., UL 1973 for batteries and UL 1741 for inverters), and must undergo fire testing using UL 9540A (propagation test method) and large-scale fire testing (LSFT) as referenced by NFPA 855 and the CFC. Together, these standards impose stringent requirements for seismic and structural design, thermal management, detection and alarm, gas/deflagration control, equipment spacing, fire-flow and water supply, site access, signage, security, vegetation management, and minimum setbacks from lot lines, roads, and adjacent buildings. Compliance is intended to ensure safe installation and operation for site personnel, first responders, and neighboring communities.

While batteries may contain small quantities of hazardous materials, cells are sealed within casings. In the event of a casing failure, the electrolyte is non-aqueous and thus would not cause a leak. All battery storage systems will also adhere to Occupational Safety and Health Administration (OSHA) requirements.

Electromagnetic Fields

EMFs are associated with electromagnetic radiation, which is energy in the form of photons. Radiation energy spreads as it travels and originates from many natural and human-made sources. The electromagnetic spectrum, the scientific name given to radiation energy, includes various forms such as light, radio waves, and X-rays. Electric and magnetic fields are common throughout nature and are produced by all living organisms. Concern over EMF exposure generally pertains to humanmade sources of electromagnetism and the extent to which they may have adverse biological effects or interfere with other electromagnetic systems.

Commonly known human-made sources of EMF are electrical systems, such as electronics and telecommunications, as well as electric motors and other electrically powered devices. Radiation from these sources is invisible, non-ionizing, and of low frequency. In most environments, the levels of such radiation added to natural background sources are generally low.

Electric voltage (electric field) and electric current (magnetic field) from transmission lines create EMFs. Power frequency EMF is a natural consequence of electrical circuits and can be either directly measured using the appropriate measuring instruments or calculated using appropriate information. The project includes generation tie (gen-tie) lines and would interconnect to the existing power grid via connection to the Southern California Edison (SCE) Windhub Substation, thereby creating EMFs. Grid connection and gen-tie alignment are discussed in further detail in **Chapter 3**, *Project Description*, of this EIR.

On January 15, 1991, the California Public Utilities Commission (CPUC) initiated an investigation to consider its role in mitigating the health effects, if any, of electric and magnetic fields from utility facilities and power lines. A working group of interested parties, the California EMF Consensus Group, was created by the CPUC to advise on this issue. The California EMF Consensus Group's fact-finding process was open to the public, and its report incorporated public concerns. Its recommendations were filed with the CPUC in March 1992. Based on the work of the California EMF Consensus Group, written testimony, and evidentiary hearings, the CPUC's decision (93-11-013) was issued on November 2, 1993, to address public concern about possible EMF health effects from electric utility facilities. The conclusions and findings included the following:

> *We find that the body of scientific evidence continues to evolve. However, it is recognized that public concern and scientific uncertainty remain regarding the potential health effects of EMF exposure. We do not find it appropriate to adopt any specific numerical standard in association with EMF until we have a firm scientific basis for adopting any particular value.*

This continues to be the stance of the CPUC regarding standards for EMF exposure. Currently, the State has not adopted any specific limits or regulations regarding EMF levels from electric power facilities.

In addition to transmission lines, the project proposes energy storage system(s), which would use direct current (DC)-coupled and/or alternating current (AC)-coupled battery storage. The energy storage technology and design for energy storage facilities has not been determined at this time. Regardless of the energy storage system ultimately selected, the system would occur as DC or AC-coupled, which produce static EMFs that have not been associated with adverse health effects.

Increase in Ambient Temperatures

All exposed surfaces (e.g., houses, cars, and rocks) absorb heat produced by the sun. A "heat island" effect is generated when cities cover miles of land with structures (e.g., concrete buildings and asphalt roads), which absorb and store significantly more heat during the day than undeveloped earth. Additionally, these cities are filled with energy-consuming devices (e.g., engines, appliances, and heating, ventilation, and air conditioning systems) that generate waste heat.

Solar arrays consist of solar panels mounted on aluminum and steel support structures. The support structures have minimal exposure to sunlight. The project site would not be covered entirely with solar panels. The amount of the sun's heat absorbed by a solar panel is comparable to the amount of the sun's heat absorbed by open land. However, solar panels store less heat than the earth because they consist of a thin lightweight glass that is surrounded by airflow. As a result, heat dissipates more quickly from a solar panel compared to solid ground, which retains heat for longer periods. The project would have energy-consuming devices (e.g., inverters). Therefore, the project would generate marginal amounts of waste heat on the project site.

A study conducted in 2019 found that midday temperatures measured at 1.5 meters above solar PV panels were regularly 1.3 degrees Celsius warmer than an adjacent desert reference site. Afternoon measurements also showed that heating was confined to the air immediately adjacent to the solar PV panels, with temperature differences diminishing with height. At night, air just beneath the solar PV panels (0.4 meters) remained approximately 0.58 degrees Celsius warmer than the reference site, while no significant warming persisted above the panels at 1.5 meters (Broadbent et al., 2019). Although daytime warming data closely resembles the earlier work by Barron-Gafford et al. (2016), the reported nocturnal warming of 3-4 degrees Celsius greatly exceeds the approximately 0.58 degrees Celsius observed during the study. This difference in nightly temperature is likely due to differences in measurement height of air temperature and advection from being closer to urban areas during the Barron-Gafford et al. (2016) study. Although the Broadbent et al. (2019) study demonstrated that the areas around solar PV panels tended to be warmer than the nearby desert reference site, it concluded that the heat dissipates quickly and cannot be measured beyond 100 feet away from the solar PV systems. Therefore, any increases in ambient temperature would be localized and would not affect neighboring properties.

Hazardous Materials Transportation

The nearest major highways are SR-14, a four-lane highway located approximately 4 miles east of the project site, and SR-58, a four-lane highway located approximately 5 miles east and 8 miles north of the project site. The transportation of hazardous materials within the State of California is regulated by a combination of federal, state, and local laws. It is unlawful to transport explosives or inhalation hazards on public highways not designated for that purpose, unless such use is necessary to complete a delivery or access the loading/unloading location of such materials (California Vehicle Code, Sections 31602 (b) and 32104(a)). The California Highway Patrol (CHP) designates specific routes for the transportation of hazardous materials. Information on CHP requirements and regulatory authority is provided in **Section 4.9.3**, *Regulatory Setting*, below. According to Section 2.5.4 of the Kern County General Plan Circulation Element, both SR-14 and SR-58 are designated as adopted commercial hazardous materials shipping routes.

Airports

The nearest public airport to the project site is Mojave Air and Space Port Airport, located approximately 9 miles northeast of the project site. No portion of the project site or the 230-kilovolt (kV) gen-tie line are located within the Airport Influence Area of the Mojave Air and Space Port or any other airport regulated by the Kern County Airport Land Use Compatibility Plan (ALUCP; County of Kern, 2012); see **Figure 4.9-1** *Mojave Air and Space Port ALUCP Zones*. The ALUCP provides restrictions and criteria for development of land within each of the Compatibility Zones, including density limits, height limits, and restrictions on uses which may be inappropriate due to the types of users normally associated with each use, such as schools, hospitals, and nursing homes. Additionally, storage of fuels and other hazardous materials is restricted from Compatibility Zones A and B. Projects located within an Airport Influence Area must also meet the requirements of Federal Aviation Regulation 14 Code of Federal Regulations (CFR) Part 77, described below. **Table 4.9-1**, *Kern County ALUCP Compatibility Zones,* describes the Compatibility Criteria for each zone.

TABLE 4.9-1: KERN COUNTY ALUCP COMPATIBILITY ZONES

Zone	Location	Impact Elements	Maximum Densities		Required Open Land
			Residential (du/ac[a])	Other Uses (people/ac)	
A	Runway Protection Zone or within Building Restriction Line	• High risk • High noise level	0	10	All Remaining
B1	Approach/Departure Zone and Adjacent to Runway	• Substantial risk – aircraft commonly below 400 feet above ground level (AGL) or within 1,000 feet of runway. • Significant noise	0.1	60	30%
B2	Extended Approach/Departure Zone	• Significant risk – aircraft commonly below 800 feet AGL. • Significant noise	0.5	60	30%
C	Common Traffic Pattern	• Limited risk – aircraft at or below 1,000 feet AGL. • Frequent noise intrusion	15	150	15%
D	Other Airport Environs	• Negligible risk • Potential for annoyance from overflights	No Limit	No Limit	No Requirement
E	Special Land Use	• Compatibility issues	15	150	No Requirement

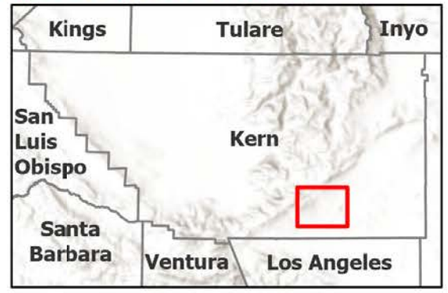
Notes: Additional criteria are provided in Table 2A of the Kern County ALUCP.
[a] du/ac = dwelling unit per acre

The project site is located within the military flyover area and the Joint Service Restricted R-2508 Complex of the Edwards Air Force Base, located approximately 20 miles west (see **Figure 4.9-2,** *Military Review Requirements*). Per Kern County Zoning Ordinance Section 19.08.160, Figure 19.08.160, military review is required within yellow delineated areas for all structures over 500 feet. The project overlaps with the military review area for all structures over 500 feet (yellow). No portion of the project site or the 230-kV gen-tie line is governed by the Kern County ALUCP.

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.9-1. Mojave Air and Space Port ALUCP zones



Windhub High-voltage Substation (Existing)

SCE Property (500kv)

Watercourse

Proposed Project Features

Project Site

Temporary Offsite Laydown Area

Gen-tie Line (New)

Medium-voltage/Transmission/Access Easements

Access Points

Other Applicant and/or Affiliate Controlled*

Step-up HV substation

Gen-tie Corridor

Airport Land Use Plan Zone

A

B1

B2

C

D

E1

E2

Noise Contours

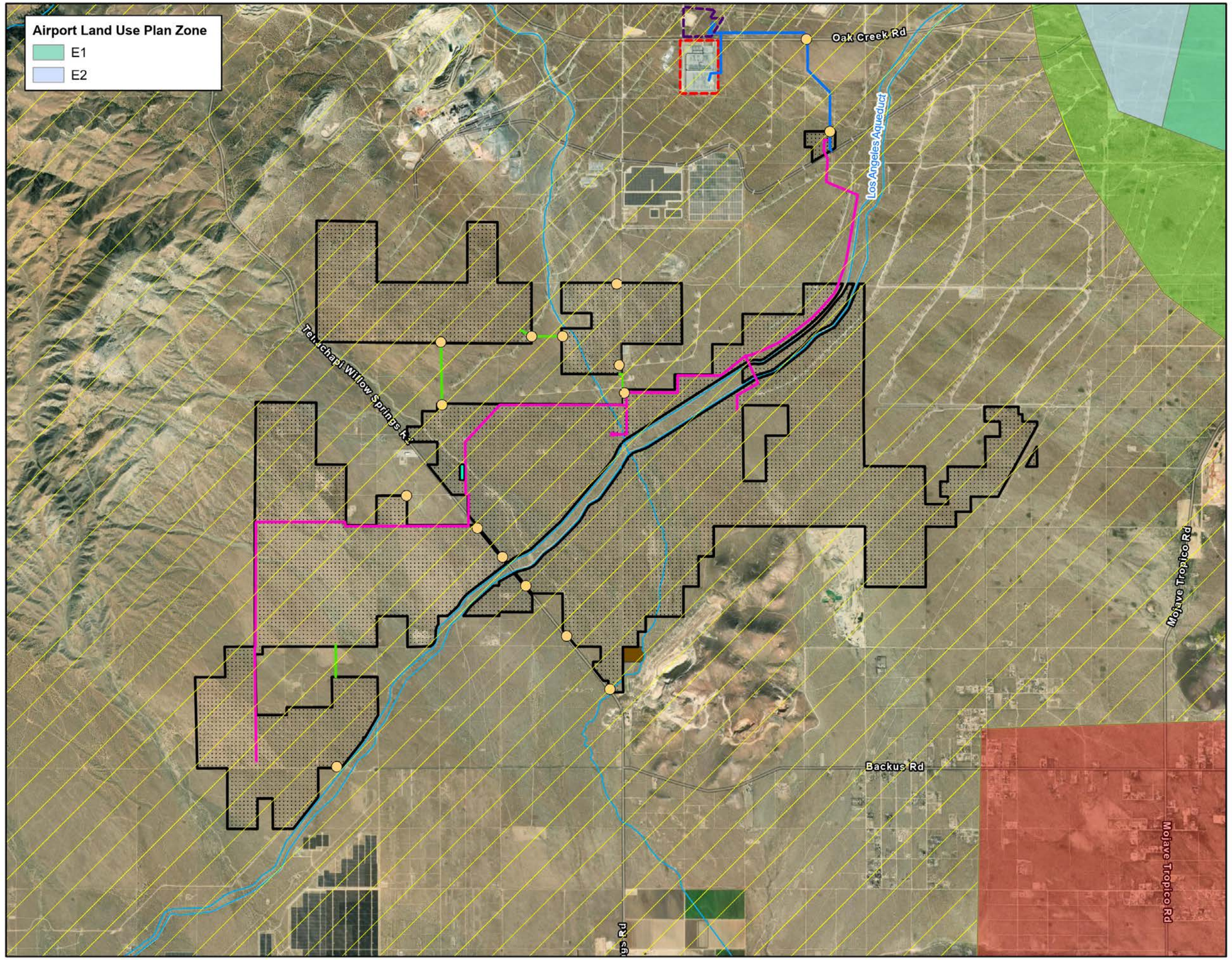
*Alreacy approved under separate projects.

N

0 1 2 Miles

Scale is 1:150,000 when printed at 11"x17"

Not for Construction



Discovery Solar PV and Storage Project

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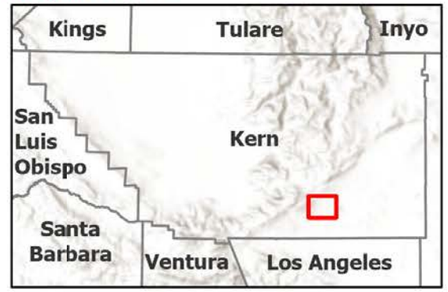
Figure 4.9-2. Military Review Requirements



- Windhub High-voltage Substation (Existing)
- SCE Property (500kv)
- Watercourse

Proposed Project Features

- Project Site
- Temporary Offsite Laydown Area
- Gen-tie Line (New)
- Medium-voltage/Transmission/ Access Easements
- Access Points

Other Applicant and/or Affiliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

Military Review Requirements

- All Structures over 500 feet
- All wind turbines & communication towers over 80 feet. All other structures over 100 feet
- No review requirement. County to provide building permit summary

*Alreacy approved under separate projects.

N

0 0.5 1 Miles

Scale is 1:150,000 when printed at 11"x17"

Not for Construction

Fire Hazard Areas

The California Department of Forestry and Fire Protection (CAL FIRE) requires counties within the state to develop fire protection management plans that address potential threats of wildland fires. The Kern County Wildland Fire Management Plan identifies federal, state, and local responsibility areas for the entire County to facilitate coordination efforts for fire protection services. According to the CAL FIRE Kern County Fire Hazard Severity Zone (FHSZ) Maps for Local Responsibility Areas (LRA) and State Responsible Areas (SRA), the southeastern portion of the project site is classified as LRA Moderate while the northwestern portion project site, including the gen-tie line route, is within areas categorized as SRA Moderate and SRA High (CAL FIRE, 2025). Given this designation, the project site is outside of areas identified by CAL FIRE as having a very high wildfire hazard level. The majority of the project site is located within a moderate fire hazard severity zone, which is typically characterized by low fire frequency and relatively mild fire behavior. The closest SRA Very High FHSZ is located approximately 5 miles northwest of the project site, and no LRA Very High FHSZs exist within Kern County. The landscape of the project site consists of primarily low topographic relief and sparse vegetation with little potential for fuel buildup as stated previously in **Chapter 3**, *Project Description*. Potential impacts related to wildfire hazards are further discussed in **Section 4.18**, *Wildfire*, of this EIR.

4.9.3 Regulatory Setting

Federal

U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (USEPA) was established in 1970 to consolidate a variety of federal research, monitoring, standard-setting, and enforcement activities to ensure environmental protection. The USEPA's mission is to protect human health and to safeguard the natural environment, air, water, and land, upon which life depends. The USEPA works to develop and enforce regulations that implement environmental laws enacted by Congress, is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for using permits and for monitoring and enforcing compliance. Where national standards are not met, the USEPA can issue sanctions and take other steps to assist the states and tribes in reaching the desired levels of environmental quality.

Federal Toxic Substances Control Act, Resource Conservation and Recovery Act, and Hazardous and Solid Waste Act

The Federal Toxic Substances Control Act (1976) and Resource Conservation and Recovery Act (RCRA) of 1976 established a program administered by the USEPA to regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle to grave" system of regulating hazardous wastes.

Comprehensive Environmental Response, Compensation, and Liability Act and Superfund Amendments and Reauthorization Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as "Superfund," was enacted by Congress on December 11, 1980. This law (42 United States Code [U.S.C.] 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA also enables the revision of the National Contingency Plan (NCP). The NCP (Title 40 CFR Part 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986. SARA reflected USEPA's experience in administering the complex Superfund program during its first 6 years and made several important changes and additions to the program. SARA also required USEPA to revise the Hazard Ranking System to ensure that it accurately assessed the relative degree of risk to human health and environment posed by uncontrolled hazardous waste sites that may be placed on the National Priorities List (NPL).

Clean Water Act and Spill Prevention, Control, and Countermeasure Rule

The Clean Water Act (CWA) (33 U.S.C. 1251 et seq., formerly known as the Federal Water Pollution Control Act of 1972) was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of waters of the United States (WOTUS). As part of the CWA, the USEPA oversees and enforces the Oil Pollution Prevention regulation contained in 40 CFR 112, which is often referred to as the "SPCC rule" because the regulations describe the requirements for facilities to prepare, amend, and implement spill prevention, countermeasure, and control (SPCC) plans. A facility is subject to SPCC regulations if a single oil storage tank has a capacity greater than 660 gallons, or the total aboveground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons, and if, due to its location, the facility could reasonably be expected to discharge oil into or upon the "Navigable Waters" of the United States.

Polychlorinated Biphenyls Regulations

The USEPA prohibited the use of polychlorinated biphenyls (PCBs) in the majority of new electrical equipment starting in 1979 and initiated a phase-out for much of the existing PCB-containing equipment. The inclusion of PCBs in electrical equipment and their handling are regulated by the provisions of the Toxic Substances Control Act. Relevant regulations include labeling and periodic inspection requirements for certain types of PCB-containing equipment and outline highly specific safety procedures for their disposal.

Additionally, Title 40 Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions, of the CFR provides specific authorizations allowing electric utilities to continue using transformers and other electrical equipment that contains PCBs for the remainder of their useful lives subject to specific use conditions and disposal requirements. In accordance with USEPA prohibitions, no PCB-containing equipment will be used at the project.

Federal Aviation Administration

The Federal Aviation Administration (FAA) regulates aviation at regional, public, private, and military airports, such as Mojave Air and Space Port, located approximately 9 miles northeast of the project site. The FAA regulates objects affecting navigable airspace and structures taller than 200 feet according to Federal Aviation Regulation 14 CFR Part 77. The U.S. and California Departments of Transportation also require the proponent to submit FAA Form 7460-1, Notice of Proposed Construction or Alteration. According to 14 CFR Part 77.5, notification allows the FAA to identify potential aeronautical hazards in advance, thus preventing or minimizing any adverse impacts on the safe and efficient use of navigable airspace. Any structure that would constitute a hazard to air navigation, as defined in 14 CFR Part 77, requires issuance of a permit from the California Department of Transportation's Aeronautics Program. The permit is not required if the FAA aeronautical study determines that the structure has no impact on air navigation.

As described in 14 § CFR 77.9 (construction or alteration requiring notice), each sponsor who proposes any of the following construction or alteration scenarios shall notify the FAA in the form and manner as follows:

(a) Any construction or alteration that is more than 200 ft. above ground level (AGL) at its site.

(b) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:

(1) 100 to 1 for a horizontal distance of 20,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 ft. in actual length, excluding heliports.

(2) 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 ft. in actual length, excluding heliports.

(3) 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.

(c) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) or (b) of this section.

(d) Any construction or alteration on any of the following airports and heliports:

(1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;

(2) A military airport under construction, or an airport under construction that will be available for public use;

(3) An airport operated by a Federal agency or the DOD.

(4) An airport or heliport with at least one FAA-approved instrument approach procedure.

(e) You do not need to file notice for construction or alteration of:

(1) Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;

(2) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;

(3) Any construction or alteration for which notice is required by any other FAA regulation.

(4) Any antenna structure of 20 feet or less in height, except one that would increase the height of another antenna structure.

Per 14 CFR 77.7, notification requirements include sending one executed form set of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area within which the construction or alteration will be located. The notice required must be submitted at least 45 days before the earlier of the following dates: (1) the date the proposed construction or alteration is to begin; or (2) the date an application for a construction permit is to be filed.

The U.S. Air Force implements FAA and U.S. Department of Defense policy and guidance regarding Special Use Airspace and Airspace for Special Use through various instructions, processes, and organizations. The Air Force Flight Standards Agency, AF/A30, Headquarters Air Force Encroachment Management Working Group, major command, and Unit Airspace Managers are responsible for identifying and evaluating projects that may adversely affect operations associated with military airfields, ranges, and airspace.

Other Regulations

Other federal regulations overseen by the USEPA relevant to hazardous materials and environmental contamination include 40 CFR Parts 100 to 149, Water Programs, 40 CFR Parts 239 to 259, Solid Wastes, and 40 CFR Parts 260 to 279, Hazardous Waste. These regulations designate hazardous substances under the Federal Water Pollution Control Act; determine the reportable quantity for each substance that is designated as hazardous; and establish quantities of designated substances equal to or greater than the reportable quantities that may be discharged into WOTUS.

Occupational Safety and Health Administration

OSHA's mission is to ensure the safety and health of U.S. workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. OSHA staff establish and enforce protective standards and reach out to employers and employees through technical assistance and consultation programs. OSHA

standards are listed in 29 CFR 1910, which include preparation of Health and Safety Plans (HASP). HASPs identify potential hazards associated with a proposed land use and may provide appropriate mitigation measures as required. 29 CFR Section 1910.120(e) requires all employees working on a site exposed to hazardous substances, health hazards, or safety hazards, their supervisors, and management responsible for the site to receive training that meets the requirements of this paragraph before they are permitted to engage in hazardous waste operations that could expose them to hazardous substances, safety, or health hazards. These employees shall receive any necessary review training.

NFPA 855 — Standard for the Installation of Stationary Energy Storage Systems (National Consensus Standard)

NFPA 855 is a National Consensus Standard that establishes minimum safety requirements for the design, installation, commissioning, operation, maintenance, and decommissioning of stationary energy storage systems (ESS) across technologies (including lithium-ion). The standard addresses siting and separation distances; maximum allowable quantities; ventilation, gas detection, and explosion (deflagration) control; fire detection; vehicle impact protection; monitoring and emergency planning; signage/marking; and documentation such as a Hazard Mitigation Analysis and Emergency Response Plan. NFPA 855 is adopted or incorporated by reference by many state and local codes (often through fire codes like the International Fire Code [IFC]/CFC), and compliance is typically required by AHJs, insurers, and financiers for ESS projects.

State

California Fire Code, Chapter 12

Chapter 12 of the 2025 CFC governs energy storage systems applicable to the proposed battery energy storage system. In particular, Section 1207 (Electrical Energy Storage Systems) applies to stationary energy storage systems with an aggregate nameplate capacity greater than 20 kilowatt-hours. Section 1207 addresses siting and protection features such as vehicle-impact protection, location and separation/clearances, means of egress, security, seismic and structural design, gas detection and ventilation (where required), fire detection and suppression, and related operational safeguards. The 2025 CFC framework is listing-based (e.g., UL 9540/9540A) and sets limits on unit capacity and aggregate capacities, along with installation conditions, to ensure safe construction, operation, inspection/maintenance, and decommissioning of ESS installations.

California Building Code, Section 322

Section 322 of the 2025 California Building Code includes requirements for the storage of lithium-ion and lithium metal batteries, which may include the proposed energy storage facilities pending final design. Section 322 includes structural design requirements for energy storage systems utilizing lithium-ion and lithium metal batteries, in addition to fire protection requirements for both indoor and outdoor storage systems. Section 322 also requires development of a fire safety plan.

California Building Code, Section 608

Section 608 of the California Building Code includes requirements for battery energy storage systems (BESS) greater than 20 kilowatt-hours, which includes the proposed energy storage facilities. Section 608 includes requirements for vehicle impact protection, location, spacing between batteries, egress, security, and fire suppression systems.

California Public Utilities Code Section 761.3

California Public Utilities Code Section 761.3 requires battery energy storage facilities to have an emergency response and emergency action plan covering the premises of the facility that is prepared in coordination with local emergency management agencies, unified program agencies, and local first responders.

California Public Utilities Commission General Order 95: Rules for Overhead Electric Line Construction

General Order (GO) 95 is the key standard governing the design, construction, operation, and maintenance of overhead electric lines within the state of California. It was adopted in 1941 and updated most recently in 2020. GO 95 includes safety standards for overhead electric lines, including minimum distances for conductor spacing, minimum conductor ground clearance, and standards for calculating maximum sag, electric line inspection requirements, and vegetation clearance requirements. The latter, governed by Rule 35, and inspection requirements, governed by Rule 31.2, are summarized below:

- Rule 35, *Tree Trimming*, defines minimum vegetation clearances around power lines. Rule 35 guidelines require 10-foot radial clearances for any conductor of a line operating at 110,000 volts or more, but at less than 300,000 volts. This requirement would apply to the proposed 230-kV lines.
- Rule 31.2, *Inspection of Lines*, requires that lines be inspected frequently and thoroughly for the purpose of ensuring that they are in good condition, and that lines temporarily out of service be inspected and maintained in such condition so as not to create a hazard.

Power Line Hazard Reduction (PRC 4292)

Public Resources Code (PRC) 4292 requires a 10-foot clearance around any tree branches or ground vegetation at the base of power poles carrying more than 110 kV. The firebreak clearances required by PRC 4292 are applicable within an imaginary cylindrical space surrounding each pole or tower on which a switch, fuse, transformer, or lightning arrester is attached and surrounding each dead-end or corner pole, unless such pole or tower is exempt from minimum clearance requirements by provisions of PRC 4296.

Power Line Clearance (PRC 4293)

PRC 4293 provides guidelines for line clearance, including a minimum of 10 feet of vegetation clearance around any conductor operating at 110 kV or higher.

Minimum Clearance Provisions (14 CCR 1254)

With respect to minimum clearance requirements, 14 CCR 1254 presents guidelines pertaining to non-exempt utility poles. The project structures would be exempt from the clearance requirements, with the exception of cable poles and dead-end structures.

The firebreak clearances required by 14 CCR 1254 are applicable within an imaginary cylindrical space surrounding each pole or tower on which a switch, fuse, transformer, or lightning arrester is attached and surrounding each dead-end or corner pole, unless such pole or tower is exempt from the minimum clearance requirements by the provisions of 14 CCR 1255 or PRC 4296. The radius of the cylindroid is 10 feet, which is measured horizontally from the outer circumference of the specified pole or tower, with the height equal to the distance from the intersection of the imaginary vertical exterior surface of the cylindroid to an intersection with a horizontal plane passing through the highest point at which a conductor is attached to such pole or tower. Flammable vegetation and materials located wholly or partially within the firebreak space would be treated as follows:

- At ground level: Remove flammable materials, including ground litter, duff, and dead or desiccated vegetation that would propagate fire.
- From 0 to 8 feet above ground level (AGL): Remove flammable trash, debris, or other materials, grass, and herbaceous and brush vegetation. Remove all limbs and foliage of living trees up to a height of 8 feet.
- From 8 feet to the horizontal plane of highest point of the conductor attachment: Remove dead, diseased, or dying limbs and foliage from living sound trees and any dead, diseased, or dying trees in their entirety.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs (Health and Safety Code, Division 20, Chapter 6.95, Article 1). Hazardous materials are defined as unsafe raw or unused materials that are part of a process or manufacturing step. They are not considered hazardous waste. Health concerns pertaining to the release of hazardous materials, however, are similar to those relating to hazardous waste.

A Hazardous Materials Business Plan (HMBP) must be submitted to the local Certified Unified Program Agency (i.e., the Kern County Public Health Services Department/Environmental Health Division) if the facility handles, uses, or stores a hazardous material or mixture containing a hazardous material that has a quantity equal to or greater than 55 gallons of liquid, 500 pounds of a solid substance, 200 cubic feet of compressed gas, a hazardous compressed gas in any amount, or hazardous waste in any amount. An HMBP must include the following:

- Inventory of hazardous materials at a facility;
- A site map that contains north orientation, adjacent streets, access and exit points, evacuation staging areas, hazardous material handling and storage areas, emergency response equipment, and, if present, loading areas, internal roads, storm and sewer drains, and emergency shutoffs;
- Emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material; and

- Training for all new employees and annual training for all employees in safety procedures in the event of a release or threatened release of a hazardous material.

Hazardous Waste Control Act

The Hazardous Waste Control Act created the State Hazardous Waste Management Program, which is similar to but more stringent than the federal RCRA program. The act is implemented by regulations contained in Title 26 CCR, which describes the following required aspects for the proper management of hazardous waste:

- Identification and classification;
- Generation and transportation;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying hazardous materials, including listed wastes from common manufacturing processes and specific industries, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with the DTSC.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

Senate Bill 1082 (1993) created the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program), which requires the administrative consolidation of six hazardous materials and waste programs (Program Elements) under one agency, a Certified Unified Program Agency (CUPA). The Program Elements consolidated under the Unified Program are as follows:

- Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs (i.e., Tiered Permitting);
- Aboveground Petroleum Storage Tank Program;
- Hazardous Materials Release Response Plans and Inventory Program (i.e., Hazardous Materials Disclosure or “Community-right-to-know”);
- California Accidental Release Prevention Program;
- Underground Storage Tank (UST) Program; and
- Uniform Fire Code Plans and Inventory Requirements.

The Unified Program is intended to provide relief to businesses in complying with the overlapping and sometimes conflicting requirements of formerly independently managed programs. The Unified Program is implemented at the local government level by CUPAs. Most CUPAs have been established as a function

of a local environmental health or fire department. Some CUPAs have contractual agreements with another local agency, a participating agency, which implements one or more Program Elements in coordination with CUPA. The CUPA in Kern County is the Environmental Health Division of the Kern County Public Services Department.

California Environmental Protection Agency

The California Environmental Protection Agency (Cal/EPA) was created in 1991 and unified California's environmental authority in a single cabinet-level agency and brought the California Air Resources Board (CARB), SWRCB, Regional Water Quality Control Board, California's Department of Resources Recycling and Recovery (known as CalRecycle), DTSC, Office of Environmental Health Hazard Assessment (OEHHA), and Department of Pesticide Regulation (DPR) under one agency. These agencies were placed within the Cal/EPA "umbrella" for the protection of human health and the environment and to ensure the coordinated deployment of State resources. Their mission is to restore, protect, and enhance the environment and to ensure public health, environmental quality, and economic vitality.

Department of Toxic Substances and Control

The DTSC, a department of Cal/EPA, is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. The DTSC regulates hazardous waste primarily under the authority of the RCRA and California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

U.S.C. 65962.5, commonly referred to as the Cortese List, includes the DTSC's hazardous waste Sites and the Site Cleanup List. The Cortese List also includes the Department of Health Services list of contaminated drinking water wells, sites listed by the SWRCB as having UST leaks or a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites with a known migration of hazardous waste/material.

California Office of Emergency Services

To protect public health and safety and the environment, the California Office of Emergency Services (OES) is responsible for establishing and managing statewide standards for business and area plans relating to the handling and release, or threatened release, of hazardous materials. The OES requires that basic information on hazardous materials handled, used, stored, or disposed of (including location, type, quantity, and health risks) be available to firefighters, public safety officers, and regulatory agencies. Typically, this information should be included in business plans to prevent or mitigate damage to the health and safety of persons and the environment from the release or threatened release of these materials into the workplace and environment. These regulations are covered under Chapter 6.95 of the California Health and Safety Code, Article 1, Hazardous Materials Release Response and Inventory Program (Sections 25500 to 25520), and Article 2, Hazardous Materials Management (Sections 25531 to 25543.3).

Title 19 CCR, Public Safety, Division 2, Office of Emergency Services, Chapter 4, Hazardous Material Release Reporting, Inventory, and Response Plans, Article 4 (Minimum Standards for Business Plans), establishes minimum statewide standards for HMBPs. These plans must include the following: (1) a hazardous material inventory in accordance with Sections 2729.2 to 2729.7; (2) emergency response plans

and procedures in accordance with Section 2731; and (3) training program information in accordance with Section 2732. Business plans contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the state. Each business will prepare an HMBP if that business uses, handles, or stores a hazardous material or an extremely hazardous material in quantities greater than or equal to the following:

- 500 pounds of a solid substance;
- 55 gallons of a liquid;
- 200 cubic feet of compressed gas;
- A hazardous compressed gas in any amount; or
- Hazardous waste in any quantity.

California Occupational Safety and Health Administration

California OSHA (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 337 to 340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings.

California Highway Patrol

A valid Hazardous Materials Transportation License, issued by the CHP, is required by the laws and regulations of State of California Vehicle Code Section 3200.5 for transportation of either:

- Hazardous materials shipments for which the display of placards is required by State regulations; or
- Hazardous materials shipments of more than 500 pounds, which would require placards if shipping greater amounts in the same manner.

Additional requirements on the transportation of explosives, inhalation hazards, and radioactive materials are enforced by the CHP under the authority of the State Vehicle Code. Transportation of explosives generally requires consistency with additional rules and regulations for routing, safe stopping distances, and inspection stops (14 CCR 6 (1) (1150 to 1152.10)). Inhalation hazards face similar, more restrictive rules and regulations (13 CCR 6 (2.5) (1157 to 1157.8)). Transportation of radioactive materials is restricted to specific safe routes.

Local

Construction and operation of the project would adhere to policies and regulations contained within the County's general and specific plans, including the Kern County General Plan, Kern County Zoning Ordinance, and Kern County Code of Building Regulations. These documents include policies, goals, and implementation measures pertaining to hazards and hazardous materials. The policies, goals, and implementation measures in the Kern County General Plan related to hazards and hazardous materials that are applicable to the project are provided below. Additionally, the Kern County General Plan contains

additional policies, goals, and implementation measures that are more general in nature and not specific to development such as the project. These measures are not listed below but, as stated in **Chapter 2**, *Introduction*, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Kern County General Plan

Chapter 1. Land Use, Open Space, and Conservation Element

1.1 Physical Constraints

Policies

Policy 1: Zoning and other land use controls will be used to regulate, and prohibit, if necessary, future development when physical hazards exist.

Policy 4: Kern County building, health, and fire codes and standards shall be strictly enforced to minimize the possibility of hazards relevant to certain physical constraints.

1.2 Public Facilities

Policy

Policy 7: New development will be required to demonstrate the availability of adequate fire protection and suppression facilities.

1.3 Physical and Environmental Constraints

Goal

Goal 1: To strive to prevent loss of life, reduce personal injuries and property damage, and minimize economic and social diseconomies resulting from natural disaster by directing development to areas that are not hazardous.

Policy

Policy 1: Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained (Map Code 2.1 [Seismic Hazard], Map Code 2.2 [Landslide], Map Code 2.3 [Shallow Groundwater], Map Code 2.5 [Flood Hazard], Map Codes 2.6–2.9 and Map Code 2.10 [Nearby Waste Facility], and Map Code 2.11 [Burn Dump Hazard]) to support such development unless appropriate studies establish that such development will not result in an unmitigated significant impact.

Chapter 2. Circulation Element

2.5.4 Transportation of Hazardous Materials

Transportation-related accidents and spills of hazardous materials pose a serious threat to the traveling public and nearby sensitive land uses. Transportation of hazardous materials poses a short-term threat to public health.

Goal

Goal 1: Reduce risk to public health from transportation of hazardous materials.

Policies

Policy 1: The commercial transportation of hazardous material, identification and designation of appropriate shipping routes will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.

Policy 2: Kern County and affected cities should reduce use of County-maintained roads and city-maintained streets for transportation of hazardous materials.

Implementation Measure

Measure A: Roads and highways utilized for commercial shipping of hazardous waste destined for disposal will be designated as such pursuant to Vehicle Code Sections 31303 et seq. Permit applications shall identify commercial shipping routes they propose to utilize for particular waste streams.

Chapter 4. Safety Element

4.2 General Policies and Implementation Measures, Which Apply to More Than One Safety Constraint

Implementation Measure

Measure F: The adopted multi-jurisdictional Kern County, California Multi-Hazard Mitigation Plan, as approved by the Federal Emergency Management Agency (FEMA), shall be used as a source document for preparation of environmental documents pursuant to the California Environmental Quality Act (CEQA), evaluation of project proposals, formulation of potential mitigation, and identification of specific actions that could, if implemented, mitigate impacts from future disasters and other threats to public safety.

4.9 Hazardous Materials

Policy

Policy 2: Innovative technologies to manage hazardous waste streams generated in Kern County will be encouraged.

Implementation Measure

Measure A: Facilities used to manufacture, store, and use of hazardous materials shall comply with the Uniform Fire Code, with requirements for siting or design to prevent onsite hazards from affecting surrounding communities in the event of inundation.

Chapter 5. Energy Element

5.4.5 Solar Energy Development

Policy

Policy 3: The County should permit solar energy development in the desert and valley planning regions that does not pose significant environmental or public health and safety hazards.

Soledad Mountain Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. There are no recommendations, analyses, or implementation measures in the Soledad Mountain Elephant Butte Specific Plan for hazards and hazardous materials applicable to the project. The Soledad Mountain Elephant Butte Specific Plan contains additional recommendations, analysis, and implementation measures that are more general in nature and are not specific to development such as the project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan are incorporated by reference.

Kern County Multi-Hazard Mitigation Plan

The latest Kern County Multi-Hazard Mitigation Plan was most recently updated in 2020. The plan was developed by a Hazard Mitigation Planning Committee and identifies goals, objectives, and actions pertaining to mitigating impacts from identified natural hazards. The public at large had an opportunity to comment prior to the completion of the plan's final draft. The Federal Emergency Management Agency (FEMA) realizes the importance of mitigation planning and offers incentives to communities that develop one. By following FEMA guidelines for approval of this plan, the County can be eligible for grant funding intended for mitigation projects (County of Kern, 2020).

Kern County Fire Department Wildland Fire Management Plan

The Kern County Fire Department (KCFD) Wildland Fire Management Plan documents the assessment of wildland fire situations throughout the SRAs within the County. The KCFD Wildland Fire Management Plan provides for systematically assessing the existing levels of wildland protection services and identifying high-risk and high-value areas that are potential locations for costly and damaging wildfires. The goal of the plan is to reduce costs and losses from wildfire by protecting assets at risk through focused pre-fire management prescriptions and increasing initial attack success. Based on this assessment, preventive measures are implemented, including the creation of wildfire protection zones (KCFD, 2009).

Kern County Fire Code

Chapter 17.32 of the Kern County Municipal Code details the Kern County Fire Code, which is an adoption of the 2022 CFC and the 2021 IFC with some amendments. The purpose of the Kern County Fire Code is to regulate the safeguarding of life, property, and public welfare to a reasonable degree from the hazards of fire, hazardous materials release and/or explosion due to handling of dangerous and hazardous materials, conditions hazardous to life or property in the occupancy and use of buildings and premises, the operation,

installation, construction, and location of attendant equipment, the installation and maintenance of adequate means of egress, and providing for the issuance of permits and collection of fees.

Kern County Fire Department Unit Strategic Fire Plan

The KCFD Unit Strategic Fire Plan, updated in April 2025, is the most current document that assesses the wildland fire situation throughout the SRA within the County. Similar to other plans, this document includes stakeholder contributions and priorities and identifies strategic targets for pre-fire solutions as defined by the people who live and work within the local fire problem. The plan provides for a comprehensive analysis of fire hazards, assets at risk, and level of services to systematically assess the existing levels of wildland protection services and identifies high-risk and high-value areas that are potential locations for costly and damaging wildfires. Additionally, the plan provides an annual report of unit accomplishments. The plan gives an overview of KCFD Battalions and ranks these areas in terms of priority needs as well as identifies the areas of SRA. The County is broken up into six different fuel management areas: Tehachapi, Western Kern, Northern Kern, Mt. Pinos Communities, Kern River Valley, and Valley. The project site is located within Battalion 1, Tehachapi (KCFD, 2025).

Fire Prevention Standard No. 1204-2 Solar Panels

The KCFD Fire Prevention Division adopted Standard No. 1204-2, Solar Panels (Ground Mounted (Commercial)), on May 25, 2023. The standard is implemented in accordance with the 2022 CFC and Kern County Ordinance and is an official interpretation of the Kern County Fire Marshal's Office. The standard outlines installation requirements for PV ground-mounted and roof-mounted solar panels. The proposed project would mount systems for the modules on steel support posts that would be pile-driven into the ground and would, therefore, comply with the ground-mounted requirements of this fire prevention standard. Ground-mounted solar panel requirements of this standard include water supply, clearance and combustibles, stationary storage battery/energy storage systems, clean agent system permits, fire extinguisher placement, and emergency vehicle access (KCFD, 2023).

Kern County Public Health Services Department/Environmental Health Services Division

The Kern County Public Health Services Department/Environmental Health Services is the CUPA for the project area, which provides site inspections of hazardous materials programs (aboveground storage tanks, USTs, hazardous waste treatment, hazardous waste generators, hazardous materials management and response plans, and the CFC). This department also provides emergency response to hazardous materials events, performing health and environmental risk assessment and substance identification.

Kern County and Incorporated Cities Hazardous Waste Management Plan

State Assembly Bill 2948 enacted legislation authorizing local governments to develop comprehensive hazardous waste management plans. The intent of each plan is to ensure that adequate treatment and disposal capacity is available to manage the hazardous wastes generated within the local government's jurisdiction.

The Kern County and Incorporated Cities Hazardous Waste Management Plan (Hazardous Waste Plan) was first adopted by Kern County and each incorporated city before September 1988 and was subsequently

approved by the State Department of Health Services. The Hazardous Waste Plan was updated and incorporated by reference into the Kern County General Plan in 2004 as permitted by Health and Safety Code Section 25135.7(b) and, thus, must be consistent with all other aspects of the Kern County General Plan.

The Hazardous Waste Plan provides policy direction and action programs to address current and future hazardous waste management issues that require local responsibility and involvement in Kern County. In addition, the Hazardous Waste Plan discusses hazardous waste issues and analyzes current and future waste generation in the incorporated Cities, County, and State and federal lands. The purpose of the Hazardous Waste Plan is to coordinate local implementation of a regional action to affect comprehensive hazardous waste management throughout Kern County. The action program focuses on development of programs to equitably site needed hazardous waste management facilities; to promote onsite source reduction, treatment, and recycling; and to provide for the collection and treatment of hazardous waste from small-quantity generators. An important component of the Hazardous Waste Plan is the monitoring of permitted hazardous waste management facilities to ensure compliance with federal and State hazardous waste regulations.

Kern County Airport Land Use Compatibility Plan

The Kern County ALUCP establishes procedures and criteria by which the County can address compatibility issues when making planning decisions concerning airports and military aviation operations. The ALUCP maps airport influence areas as zones as A, B1, B2, C, D, E1, and E2, ranging from the most restrictive Zone A to the least restrictive Zone E, and identifies polices and compatibility criteria within each of those zones.

Proposals for public or private land use developments that occur within defined airport influence areas are subject to compatibility review. The principal airport land use compatibility concerns addressed by the ALUCP are (1) exposure to aircraft noise; (2) land use safety with respect to both people and property on the ground and the occupants of the aircraft; (3) protection of airport air apace; and (4) general concerns related to aircraft overflights.

Neither the project site nor the 230-kV gen-tie line are located within the Airport Influence Area of Mojave Air and Space Port, according to the ALUCP. Section 4.9 of the ALUCP addresses the Mojave Air and Space Port, and land uses and procedures relative to its aviation and includes height restrictions, and other compatibility criteria.

Kern County Zoning Ordinance

The project site includes several zoning districts: A (Exclusive Agriculture), A-1 (Limited Agriculture), Estate (E), and Platted Lands (PL). Additionally, many project parcels contain one or more combined districts: Floodplain (FP), Floodplain Secondary (FPS), Wind Energy (WE), and Residential Suburban (RS). The project includes rezoning of parcels to A-1 zone district to A. Accordingly, the project site would be rezoned to A, apart from those parcels that are already in the A Zone District. Exclusive Agriculture (A) restricts height to 150 feet for radio, television, communication, and microwave towers and contains no height restrictions for nonresidential structures, except in areas of protected military airspace. Section 19.08.160 of the County's Zoning Ordinance contains military review requirements as they relate to the height of proposed structures. No zone changes are proposed for the combining zone districts (FP, FPS, WE, and RS)

4.9.4 Impacts and Mitigation Measures

Methodology

The methodology for determining impacts relating to hazardous materials focuses on (1) potential impacts related to the routine transport, use, or disposal of hazardous materials and the potential release of hazardous materials into the environment; and (2) proposed project components that could result in environmental contamination. The project's potential impacts to hazards and hazardous materials have been evaluated using a variety of resources, including public records and databases maintained by DTSC, SWRCB, and California Geologic Energy Management Division (CalGEM). The proposed project was evaluated for adequate accessibility for emergency responders based on the project location, construction plans, and site plans, and any potential alterations to existing evacuation routes and plans. The methodology for determining potential impacts relating to wildland fires focuses on the fire severity at the project site and the surrounding areas based on existing State and local maps and land characteristics. Using the aforementioned resources and professional judgment, impacts were analyzed according to CEQA significance criteria described below.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project could potentially have a significant adverse effect related to hazards and hazardous materials.

A project would have a significant impact related to hazards and hazardous materials if it would:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of an existing or proposed school;
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
e. For a project located within the adopted Kern County Airport Land Use Compatibility Plan, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
f. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan;
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires;
h. Generate vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste. Specifically, would the project exceed the following qualitative threshold:

   The presence of domestic flies, mosquitoes, cockroaches, rodents, and/or any other vectors associated with the project is significant when the applicable enforcement agency determines that any of the vectors:

i. Occur as immature stages and adults in numbers considerably in excess of those found in the surrounding environment; and
ii. Are associated with design, layout, and management of project operations; and
iii. Disseminate widely from the property; and
iv. Cause detrimental effects on the public health or well-being of the majority of the surrounding population.

Project Impacts

Impact 4.9-1: The project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Construction

Construction of the project would not involve the routine transport, use, or disposal of significant quantities of hazardous materials, as defined by the Hazardous Materials Transportation Uniform Safety Act. Most of the hazardous materials use and hazardous waste generated by the project would occur during the temporary construction period. These materials may include small quantities of gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliative, herbicides, and welding materials/supplies. Some solid hazardous waste, such as welding materials and dried paint, may also be generated during construction. Materials would be transported to the project site during construction, and any hazardous wastes produced as a result of project construction would be collected and transported away from the site in accordance with best management practices (BMPs).

During construction of the project, material Safety Data Sheets for all applicable materials present at the site would be made readily available to onsite personnel in accordance with required BMPs as part of a Stormwater Pollution Prevention Plan (see **Section 4.10**, *Hydrology and Water Quality,* of this EIR). Workers would be trained to properly identify and handle all hazardous materials and the project proponent would implement a site-specific Health and Safety Plan in accordance with OSHA requirements. Hazardous waste would be either recycled or disposed of at a permitted and licensed treatment and/or disposal facility. All hazardous waste shipped offsite for recycling or disposal would be transported by a licensed and permitted hazardous waste hauler and disposed of at an approved location.

Non-hazardous debris generated during project construction would be disposed of in local landfills. Sanitary waste would be managed using portable toilets located at a reasonably accessible onsite location.

Hazardous materials, such as petroleum fuels and lubricants used on field equipment, would be managed according to the Material Disposal and Solid Waste Management Plan, and SPCC Plan and other measures to limit releases of hazardous materials and wastes (see further discussion of BMP requirements in **Section 4.10**, *Hydrology and Water Quality*, of this EIR). Recyclable materials including wood, shipping materials, and metals would be separated when possible for recycling. Liquids and oils from transformers and other equipment would be handled in accordance with applicable regulations. The disposal of all oils, lubricants, and spent filters would be performed in accordance with all applicable regulations including the requirements of licensed receiving facilities.

Overall, the relatively limited use and small quantities of hazardous materials during construction, along with the transport and disposal of such materials, would be controlled through compliance with applicable regulations including the Kern County and Incorporated Cities Hazardous Waste Management Plan. Therefore, potential impacts during construction would be less than significant.

Operation

Primary operations and maintenance (O&M) activities that would occur on the project site during operation would consist of periodic panel washing but would also include, without limitation, liaison and remote monitoring; administration and reporting; semi-annual and annual services; remote operations of inverters and battery energy storage systems; site security and management; additional communication protocol; as-needed repair and maintenance of project facilities; and mowing and vegetation control. It is not anticipated that heavy equipment will be necessary during standard project operations. It is anticipated that approximately six permanent full-time staff employees would be required to maintain the facility.

O&M activities associated with PV solar facilities are relatively minor when compared to conventional power plants. These activities would require very limited use of hazardous materials and would generate minimal hazardous waste. O&M vehicles would include trucks (such as pickups and flatbeds), forklifts, and loaders for routine and unscheduled maintenance, as well as water trucks for solar panel washing. Large heavy-haul transport equipment and cranes may be brought to the project site infrequently for equipment repair or replacement. Long-term maintenance and equipment replacement would be scheduled in accordance with manufacturer recommendations. The project has an anticipated operational life of up to approximately 35 years. Moving parts, such as motors and tracking module drive equipment, motorized circuit breakers and disconnects, and inverter ventilation equipment, would be serviced on a regular basis, and unscheduled maintenance would be conducted as necessary.

Hazardous materials that pose a significant risk to the public or the environment generally would not be stored onsite during operations, except for the onsite batteries, which would be stored in accordance with Fire Code requirements. Limited amounts of hazardous materials would be used on the site during operations, which generally includes diesel fuel, gasoline and motor oil for vehicles, mineral oil to be sealed within the transformers. All transformers would be equipped with spill containment areas and battery storage would be in accordance with OSHA requirements such as inclusion of ventilation, acid-resistant materials, and spill response supplies.

The PV modules installed on the project site could utilize CdTe thin film technology and/or crystalline silicon panels. As described above in Section 4.9.2, *Environmental Setting*, research regarding the environmental, health, and safety risks posed by CdTe thin film technology has concluded that there are no potential environmental risks in the event of breakage, fire, or natural disasters. The panels are designed with a thin semiconductor layer that is not only environmentally stable, but also non-soluble in water. CdTe PV modules are classified as federal non-hazardous waste at end-of-life and can be effectively recycled. The project would include operational and maintenance protocols that would be used to identify and remove damaged or defective PV modules during annual inspections. As the PV module manufacturer provides recycling services, the project would utilize this service whenever feasibly possible or responsibly disposed of in accordance with applicable laws. Crystalline silicon solar panels may contain trace amounts of solid materials that are classified as hazardous. However, due to the solid and non-leachable nature of these materials, the risk of pollution to surface water, stormwater, or groundwater from broken crystalline silicon panels is minimal. Any damaged or defective crystalline silicon panels that are removed from the project site would be recycled or disposed of at the appropriate waste disposal facility, in compliance with

applicable laws. Therefore, neither CdTe thin film technology nor crystalline silicon panels would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during normal operations.

Mitigation Measure MM 4.9-1 requires the preparation of an HMBP 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. This would ensure that all handling, storage, and disposal of hazardous materials would be conducted in accordance with proven practices to minimize exposure to maintenance workers and/or the public. Any hazardous materials that would be used would be stored onsite and in designated areas in accordance with an HMBP.

All transformers would be equipped with spill containment areas and battery storage would be in accordance with OSHA requirements. All components would have a comprehensive SPCC Plan, in accordance with all applicable federal, State, and local regulations. Dust palliatives and herbicides, if used during operations to control vegetation, may be transported to the project site. These materials would be stored in appropriate containers to prevent accidental release. SR-14 and SR-58 would be the likely designated routes for the transport of hazardous materials located on or immediately adjacent to the project site. In addition, implementation of **Mitigation Measure MM 4.9-1** would further reduce potential impacts related to hazards and hazardous materials to a less-than-significant level.

The project site, onsite collector substations, 230-kV switchyard, and other areas requiring controlled access would be secured and enclosed by a fence to prevent public access. The project would interconnect to the grid via a new double-circuit gen-tie line to be installed within the gen-tie corridor previously approved and constructed as part of the Sanborn Solar Project (2020). These connections would not require use of hazardous materials during operation (see EMF discussion below).

Further, implementation of the project would not result in the significant risk of EMFs associated with overhead power lines, as the project would interconnect into the existing Windhub Substation and from there the electricity would be transmitted through existing SCE high-voltage transmission lines. In addition, the project would adhere to applicable CPUC and SCE requirements and guidelines on location of gen-tie lines and gen-tie connections. Therefore, potential impacts would be less than significant.

Decommissioning and Disposal

During the decommissioning and disposal process, it is expected that project structures and facilities would be fully removed from the ground. Aboveground equipment that would be removed includes module posts and support structures, on-site transmission poles that are not shared with third parties, and the overhead collection system within the site, inverters, transformers, electrical wiring, battery storage equipment, and equipment on the inverter pads. The onsite collector substations would be removed unless a public or private utility assumes ownership of the substations, in which case the equipment may remain on-site to be used as part of the utility service to supply other applications.

Equipment would be de-energized prior to removal, salvaged (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment offsite to be recycled or disposed of at an appropriately licensed disposal facility. Removal of the solar modules would include removing the racks on which the solar panels are attached and placing them in secure transport crates and a trailer for storage for ultimate transportation to another facility or to a recycling or disposal facility. The project would implement BMPs to ensure the collection and recycling of modules and to avoid the potential for modules to be disposed of as municipal waste.

Once the PV modules have been removed, the racks would be disassembled, and supporting structures would be removed. All other associated site infrastructure would be removed, including fences, concrete pads that may support the inverters, transformers and related equipment. The concrete posts will be removed down to grade level. The fence and gates would be removed, and all materials would be recycled to the extent feasible. Project roads would be restored to their preconstruction condition unless the landowner elects to retain the improved roads for access throughout that landowner's property. The area would be thoroughly cleaned and all debris removed. As discussed above, most panel materials would be recycled, with minimal disposal to occur in landfills in compliance with all applicable laws. A collection and recycling program would be established to promote recycling of project components and minimize disposal in landfills.

The PV module manufacturer would likely provide module collection and recycling services. Current PV modules meet federal leaching criteria for non-hazardous waste. Several peer-reviewed studies have evaluated the environmental, health, and safety aspects of PV modules. Disposal risks of end-of-life PV modules are minimized because of the low solubility of PV panel materials and because the modules can be effectively recycled at the end of their approximately 30- to 35-year life. Studies indicate that, unless the PV module is purposefully ground to a fine dust, use of PV modules does not generate any emissions (Fthenakis and Zweibel, 2003). These studies have consistently concluded that the disposal of PV modules does not present an environmental risk.

In California, batteries may be considered hazardous waste when they are discarded. Batteries will remain sealed while on the project site. As batteries are removed, they will be discharged (where safe to do so), packaged per U.S. Department of Transportation requirements, hauled offsite, and recycled or disposed of at a qualified facility in accordance with all applicable federal, state, and local hazardous material and hazardous waste requirements.

As described in **Section 4.17**, *Utilities and Service Systems*, of this EIR, **Mitigation Measure MM 4.17-1** requires that an onsite recycling coordinator be designated by the Project Proponent to facilitate recycling of all waste to the extent feasible, through coordination with the onsite contractors, local waste haulers, and/or other facilities that recycle construction/demolition wastes. The onsite recycling coordinator shall also be responsible for ensuring that wastes requiring special disposal are handled according to State and County regulations that are in effect at the time of disposal. The contact information of the coordinator shall be provided to the Kern County Planning and Natural Resources Department prior to issuance of building permits.

Therefore, potential impacts would be less than significant.

Mitigation Measures

Implement **Mitigation Measure MM 4.17-1** (see **Section 4.17**, *Utilities and System Services*, of this EIR, for full mitigation measure text), and:

MM 4.9-1: During the life of the project, including decommissioning, the project operator shall prepare and maintain a Hazardous Materials Business Plan (HMBP), as applicable, pursuant to Article 1 and Article 2 of California Health and Safety Code 6.95 and in accordance with Kern County Ordinance Code 8.04.030, by submitting all the required information to the California Environmental Reporting System (CERS) for review and acceptance by the Kern County Environmental Health Services Division/Hazardous Materials Section. The HMBP shall:

a. Delineate hazardous material and hazardous waste storage areas.

b. Describe proper handling, storage, transport, and disposal techniques.

c. Describe methods to be used to avoid spills and minimize impacts in the event of a spill.

d. Describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction and operation.

e. Establish public and agency notification procedures for spills and other emergencies including fires.

f. Include procedures to avoid or minimize dust from existing residual pesticides and herbicides that may be present on the site.

The project proponent shall ensure that all contractors working on the project are familiar with the facility's HMBP as well as ensure that one copy is available at the project site at all times. In addition, a copy of the accepted HMBP from CERS shall be submitted to the Kern County Planning and Natural Resources Department for inclusion in the project's permanent record.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.9-1** and **MM 4.17-1** (see **Section 4.17**, *Utilities and System Services*, of this EIR, for full mitigation measure text), potential impacts would be less than significant.

Impact 4.9-2: The project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Construction

According to CalGEM, the project site is not located within a known oil production field. Per the CalGem letter dated August 12, 2025, one oil and gas well is located within the northwest portion of the project site, however the well is plugged and abandoned (CalGEM, 2025; **Appendix A**). As a result, construction of the project is unlikely to expose employees or construction workers to the dangers associated with constructing a facility near an active oil well. In addition, the Phase I ESA Summary Report prepared for the project did not identify any Recognized Environmental Conditions on the project site (**Appendix H** of this EIR).

During project construction, equipment used will require onsite fueling and limited maintenance, which could potentially result in minor spills of petroleum products or hazardous materials. In addition, oil-containing transformers will be filled onsite with biodegradable oils prior to completion of construction. The likelihood of incidental spills would be minor because of the following reasons:

- Storage of any hazardous materials onsite during construction will be kept within appropriately sized secondary containment.
- Fueling operations will be conducted over designated spill containment areas. Filling of transformers will occur within appropriately sized secondary containment.

- Maintenance activities during construction may be performed onsite within designated areas with appropriate spill prevention and response measures in place.

If the site meets regulatory thresholds requiring an SPCC Plan, one will be developed and implemented as part of the project's BMPs for both construction activities and post-construction operations. Implementation of **Mitigation Measure MM 4.10-1** (see **Section 4.10**, *Hydrology and Water Quality,* of this EIR, for full mitigation measure text) would require the project to implement applicable BMPs included in a National Pollutant Discharge Elimination System-mandated Stormwater Pollution Prevention Plan (SWPPP) during construction to minimize potential impacts. Relevant BMPs include designated fueling and maintenance areas supplied with temporary spill containment equipment, such as absorbent booms and pads, and hazardous waste disposal containers. Further discussion regarding the construction SWPPP is provided in **Section 4.10**, *Hydrology and Water Quality*, of this EIR. Additionally, workers will be protected from exposure to hazardous wastes through the development and implementation of the Site Management/Health and Safety Plans in accordance with applicable laws and regulations.

Implementation of **Mitigation Measure MM 4.9-1** would provide methods for avoiding spills and minimizing potential impacts in the event of a spill by providing procedures for handling and disposing hazardous materials as well as public and agency notification procedures for spills and other emergencies including fires, would reduce this potential impact to a less-than-significant level.

Despite the relatively open spaces surrounding the project site, nearby sensitive receptors could be exposed to pollutant emissions during construction of the project. Risks associated with exposure to hazardous materials could result from the installation of transformers, grading of the site, application of herbicides, or other construction processes due to the proximity between the sensitive receptors and the project site. As described above, the Phase I ESA did not identify any Recognized Environmental Conditions on the site, making the risk of upset of hazardous materials due to grading low, and transformers would be filled within appropriately sized secondary containment. Further, Implementation of **Mitigation Measure MM 4.9-2**, which regulates the use of herbicides as described below, would reduce potential impacts related to sensitive receptors to a less-than-significant level.

Operation

Limited amounts of hazardous materials would be stored or used on the site during operations, these materials are commonly found on similar sites and operations and generally include but are not limited to diesel fuel, gasoline and motor oil for vehicles, and mineral oil to be sealed within the transformers. Appropriate spill containment and cleanup kits would be maintained during operation of the project. The PV modules would be recycled at the end of their life. Inverters would not produce any hazardous waste during operation. Each enclosed transformer at onsite collector substations would include mineral oil, but secondary containment would be provided in accordance with applicable federal, state, and local laws and regulations. The mineral oil contained in each transformer does not typically require replacement, and mineral oil disposal would be in accordance with all applicable federal, state, and local laws and regulations.

As stated in the environmental setting above, standard operation of either crystalline silicon or CdTe PV systems does not result in pollution emissions to air, water, or soil. Crystalline silicon panels removed from the site would be recycled or otherwise disposed at an appropriate waste disposal facility. The small traces of hazardous materials found within crystalline silicon panels are unlikely to occur during accidental breakage due to its solid and non-leachable nature. Similarly, fire damage is unlikely to release hazardous materials. The crystalline silicon PV panel does not pose a threat to nearby residences. In the event that

CdTe PV modules are used for the project, the likelihood of release occurring due to the accidental breakage or fires involving the PV modules is minimal. CdTe is a highly stable semiconductor compound that is non-soluble in water and sealed with an industrial laminate material. Potential impacts to soil, air, and groundwater quality from broken CdTe PV modules are highly unlikely to pose a potential health risk as they are below both human health screening levels and background levels. Therefore, the use of either crystalline silicon or CdTe PV modules would not create a significant hazard to the public or the environment through conditions involving accidental release of hazardous materials into the environment.

Under normal operations, energy storage facilities do not store or generate hazardous materials in quantities that would pose a risk to offsite receptors, and no reportable quantities of acutely or extremely hazardous materials will be transported, stored, or used at the site. As described further in **Chapter 3,** *Project Description*, in Section 3.7.2 ("Battery Energy Storage Systems"), the project would implement preventative measures—adhering to applicable CFC, NFPA, and CPUC requirements for ongoing inspection, testing, and maintenance of critical safety systems—to reduce the potential for accidents.

Nevertheless, because battery facilities store electrochemical energy, thermal runaway can occur if a cell (or portion of a cell) reaches elevated temperatures due to thermal failure, mechanical failure, internal short circuiting, or electrical abuse. In such events, state-of-the-art fire and safety systems would be in place to mitigate potential impacts. The project will use only outdoor cabinet-type BESS enclosures that have undergone LSFT to demonstrate that a fire within a cabinet does not propagate beyond the enclosure. In addition, the outdoor cabinet-type enclosures will be designed and equipped with UL-listed safety management equipment, integrated fire protection, and deflagration control systems designed to prevent thermal runaway and manage or mitigate associated risks if it occurs.

NFPA 855 and the CFC require preparation of a Hazard Mitigation Analysis (HMA) for review and approval from the fire AHJ. The HMA evaluates site and equipment-specific risks, credible failure modes, and measures used to detect, prevent and mitigate those hazards. The HMA will also include dispersion modeling (a "plume study") of un-ignited flammable or toxic gases that requires demonstration that reasonably foreseeable releases are not expected to result in offsite concentrations above applicable health standards at the property line. Lack of offsite impacts from battery failures is further supported by empirical environmental monitoring during and after documented battery fire incidents, as outlined below.

In the unlikely event of thermal runaway, the project's preventative measures and fire safety systems described herein are designed to contain the incident within a single battery enclosure and to minimize event duration and intensity, thereby reducing potential for offsite impacts. Pursuant to these measures, no significant impacts to the surrounding areas are anticipated.

While fires at BESS are rare, environmental monitoring that has occurred during and after outdoor cabinet-type battery energy storage system fires has shown no impact to the surrounding environment. For example, following an outdoor cabinet-type BESS fire at a San Diego Gas & Electric facility in Escondido, San Diego on September 5, 2024, County Hazmat conducted air monitoring over a 4-hour period during the incident at 11 different locations. The monitoring found only normal products combustion of a structure fire were detected and at levels well below exposure thresholds set by the National Institute for Occupational Safety and Health (NIOSH) and OSHA. A third-party contractor conducted additional air quality monitoring at 18 different locations during the incident and for an additional 12 hours after the fire was extinguished and concluded that at no time during the incident did the levels of oxygen deviate from 20.9 percent, which is considered normal atmospheric level. Any decrease in the percentage of oxygen

would indicate that there was some unknown gas in the atmosphere that was not able to be detected by monitoring equipment. No such deviation was detected (SDG&E, 2024a).

The project includes firewater tanks, consistent with KCFD requirements for other similar projects. The final amount of firewater storage is not expected to exceed 30,000 gallons of usable water. Due to the project electing to only use cabinet-type battery enclosures, the use of the fire water tank is only intended to cool adjacent uninvolved enclosures if needed during a fire and not directly used on a battery fire, thus eliminating any water runoff concerns both due to the limited water quantity and indirect application. By way of the same incident example, the fire water runoff used during the San Diego Gas & Electric fire in Escondido was sampled and found to have no levels of contamination above safe drinking water levels. Eurofins Calscience, an accredited environmental testing lab, in collaboration with San Diego County Wastewater Division, sampled for 17 different containments. Six samples had detectable concentrations, but all were below safe drinking water levels. The remaining 11 samples did not detect any levels of the sampled for contaminants. The San Diego County Wastewater Division at Hale Avenue Resource Recovery Facility confirmed that there were no concerns with this water entering the environment (SDG&E, 2024b).

Similarly, environmental monitoring and sampling during and after three BESS fires in New York, each site using different battery chemistries and configurations, reported "no harmful levels of toxins detected, and no long-term off-site impacts involving any migration of contaminants associated with the fires." Agencies involved included the Division of Homeland Security and Emergency Services, Office of Fire Prevention and Control, New York State Energy Research and Development Authority, New York State Department of Environmental Conservation, Department of Public Service, the Department of State, and the State Department of Health (New York State Inter Agency Fire Safety Working Group, 2023).

Removal and/or maintenance of vegetation may require herbicide use during operation. If not handled properly, these products could create a hazard to the public, affecting maintenance personnel, and nearby residents. **Mitigation Measure MM 4.9-2** would reduce potential impacts related to use of herbicides to a less-than-significant level. Additionally, only State of California–licensed pesticide applicators for all herbicide applications. All herbicide use shall be conducted in accordance with applicable California DPR requirements, county agricultural commissioner regulations, and product label instructions to ensure safe and compliant vegetation management practices.

As noted above, the project would not involve the routine transport, use, or disposal of significant quantities of hazardous materials, as defined by the Hazardous Materials Transportation Uniform Safety Act. The closest designated routes for the transport of hazardous materials are SR-14 and SR-58, located approximately 5 miles east and 8 miles north of the project site, respectively. Adherence to regulations and standard protocols during the storage, transportation, and usage of any hazardous materials would minimize and avoid the potential for impacts related to upset and accident conditions.

Overall, adherence to regulations and standard protocols during the storage, transportation, and usage of any hazardous materials, and implementation of **Mitigation Measures MM 4.9-1** and **MM 4.9-2**, would minimize or reduce potential impacts related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials to a less-than-significant level.

Decommissioning and Disposal

The decommissioning and disposal process is described under **Impact 4.9-1**, above. Panel materials would be recycled to the extent feasible, with minimal disposal to occur in landfills in compliance with all applicable laws. The PV module manufacturer would likely provide module collection and recycling

services. Additionally, current PV modules meet federal leaching criteria for non-hazardous waste, largely due to their low solubility of PV modules. Similarly, batteries within the energy storage facility would also be recycled to the extent feasible, with minimal disposal in landfills.

In California, batteries may be classified as hazardous waste when they are discarded and will remain sealed on the project site. Batteries would be placed in appropriate hazardous materials containers for proper handling and removal from the site. Once removed, they will be discharged (where safe to do so), transported offsite, and either recycled or disposed of at an appropriate location in accordance with all applicable hazardous waste requirements. **Mitigation Measure MM 4.17-1** (see **Section 4.17**, *Utilities and System Services*, of this EIR, for full mitigation measure text) requires that an onsite recycling coordinator be designated by the Project Proponent to facilitate recycling of all feasible waste through coordination with the onsite contractors, local waste haulers, and/or other facilities that recycle construction/demolition wastes. The onsite recycling coordinator shall also be responsible for ensuring that wastes requiring special disposal are handled according to State and County regulations that are in effect at the time of disposal. The name and phone number of the coordinator shall be provided to the Kern County Planning and Natural Resources Department prior to issuance of building permits.

Therefore, potential impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measures **MM 4.9-1**, **MM 4.17-1** (see **Section 4.17**, *Utilities and System Services*, of this EIR, for full mitigation measure text), **MM 4.10-1** (see **Section 4.10**, H*ydrology and Water Quality*, of this EIR, for full mitigation measure text), and:

MM 4.9-2: The project proponent/operator shall continuously comply with the following:

a. The construction contractor or project personnel shall use herbicides that are approved for use in California and are appropriate for application adjacent to natural vegetation areas (i.e., non-agricultural use). Personnel applying herbicides shall have all appropriate State and local herbicide applicator licenses and comply with all State and local regulations regarding herbicide use.

b. Herbicides shall be mixed and applied in conformance with the manufacturer's directions.

c. The herbicide applicator shall be equipped with splash protection clothing and gear, chemical resistant gloves, chemical spill/splash wash supplies, and material safety data sheets for all hazardous materials to be used. To minimize harm to wildlife, vegetation, and water bodies, herbicides shall not be applied directly to wildlife.

d. Products identified as non-toxic to birds and small mammals shall be used if nests or dens are observed; and herbicides shall not be applied if it is raining at the site, rain is imminent, or the target area has puddles or standing water.

e. Herbicides shall not be applied when wind velocity exceeds 10 miles per hour. If spray is observed to be drifting to a non-target location, spraying shall be discontinued until conditions causing the drift have abated.

f. A written record of all herbicide applications on the site, including dates and amounts shall be furnished annually to the Kern County Planning and Natural Resources Department.

Level of Significance after Mitigation

With implementation of Mitigation Measures **MM 4.9-1**, **MM 4.9-2, MM 4.10-1** (see **Section 4.10** *Hydrology and Water Quality*, of this EIR, for full mitigation measure text), and **MM 4.17-1** (see **Section 4.17**, *Utilities and System Services*, of this EIR, for full mitigation measure text), potential impacts would be less than significant.

Impact 4.9-3: The project would emit hazardous emissions or involves handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.

The nearest populated area to the project site is the unincorporated community of Mojave, located approximately 6 miles northeast. The closest school to the project site is the Mojave Junior/Senior High School, located approximately 6 miles northeast of the project site. There are no new schools proposed within the vicinity of the project site. Infrastructure related to the project will not emit hazardous materials or involve handling hazardous or acutely hazardous materials, substances, or waste within a quarter mile of an existing or proposed school. Therefore, potential impacts related to hazardous emissions within a 0.25 miles of a school would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.9-4: The project would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.

As discussed above, none of the project parcels are identified in any of the California hazardous materials databases. Searches were completed for the project parcels in the following hazardous materials lists: Cal/EPA's Cortese List including the California DTSC's EnviroStor database of hazardous substances release sites; and GeoTracker, the California database of leaking underground storage tanks (DTSC, 2025; SWRCB, 2025; **Appendix H** of this EIR). Finally, there are no active Cease and Desist Orders or Clean Up and Abatement Orders for hazardous materials/facilities in the immediate vicinity of the project site (SWRCB, 2025). Based on the records search, review of historical use, site visit, and interviews, the Phase 1 ESA Summary Report for the project revealed no evidence of RECs, controlled RECs (CREC), historical

RECs (HREC), or de minimis conditions in connection with the project site. Therefore, potential impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.9-5: The project would result in a safety hazard or excessive noise for people residing or working in the project area, for a project located within the vicinity of a private airstrip.

The project is not within the boundaries of any airport as identified in the Kern County ALUCP (County of Kern, 2012). The nearest public airport is the Mojave Air & Space Port, located approximately 9 miles northeast of the project site. The project site is not located within any safety or noise zones for the Mojave Air and Space Port. Due to the nature of the proposed land use, impacts from air traffic hazards or excessive aircraft noise are not anticipated to occur for people residing or working in the project area with respect to the project's proximity to an airport. Therefore, there would be no impact.

As stated previously in **Section 4.9.2**, *Environmental Setting*, the project site is located within the military flyover area and the Joint Service Restricted R-2508 Complex of the Edwards Air Force Base. The project site overlaps with the military review area for all structures over 500 feet. However, as there are no project structures that would be over 500 feet in height, military review would not be required.

A new 230-kV gen-tie line would extend between onsite collector substations internal to the project site, and then north from the project site to a new 230-kV switchyard to connect and/or route project gen-tie circuits into the previously constructed (approved as part of the Sanborn Solar Project) gen-tie corridor north and then west towards SCE's Windhub Substation. The proposed gen-tie line would have poles at a maximum height of up to 250 feet. Pole heights associated with the 230-kV switchyard would be less than 250 feet tall. A 230-kV to 500-kV step-up substation approved and constructed north of the Windhub Substation as part of the Enterprise Solar Storage Project would step up the voltage once again prior to interconnecting SCE's grid. The poles would be subject to FAA review under Federal Aviation Regulation Part 77 and require issuance of a Determination of No Hazard to Air Navigation prior to construction. Notably, these poles would be co-located within the existing gen-tie line corridor approved and constructed as part of the Sanborn Solar Project, which received FAA clearance. The project gen-tie line is also located in an area with existing utility-scale wind energy facilities, which include turbines over 480 feet in height.

Additionally, as detailed in **Section 4.1**, *Aesthetics*, project solar panels would be composed of anti-reflective material; therefore, glare resulting from the panels is not expected to be a concern for pilots. Finally, the proposed project would not result in an increase in air traffic levels or a change in location of air traffic patterns that would result in a substantial safety risk, as air traffic patterns would not be affected (the only mode of transport affected by the proposed project is automobile/truck operations).

For the reasons described above, the proposed project would not result in safety or operational hazards to aircraft that would represent a safety hazard to people residing or working in the area. Implementation of **Mitigation Measure MM 4.9-3** would ensure the project would be consistent with applicable Kern County

regulations by requiring the developer to coordinate with the FAA and obtain approval as needed. Potential impacts would be less than significant. See also **Section 4.1**, *Aesthetics*, for analysis of potential glare impacts.

Excessive Noise

The project would require approximately six full-time employees during operation who could experience airport noise. However, employees working at the project would not be exposed to excessive noise from the Mojave Air and Space Port. Additionally, employees working at the project during construction and decommissioning would not be exposed to excessive noise from the Mojave Air and Space Port. No portions of the project are located within the noise contours for Mojave Air and Space Port. Further, the project is not considered a sensitive use and would not introduce new residences on the project site. Therefore, the project would not result in excessive noise for people residing or working in the project area, and potential impacts would be less than significant. See also Section 4.13, *Noise*, for analysis of potential noise impacts.

Summary

With implementation of **Mitigation Measure MM 4.9-3**, the project would comply with the County's regulations, applicable FAA regulations, and military review requirements to ensure that there is no conflict with airport operations and no safety hazards are presented. Implementation of Mitigation Measure **MM 4.9-3** would also ensure the project would be consistent with the General Plan policies of Kern County by requiring the developer to obtain approval from FAA where applicable. Potential impacts would be less than significant with mitigation incorporated.

See also **Section 4.1**, *Aesthetics*, and **Section 4.13**, *Noise*, of this EIR for analysis of potential glare and noise impacts, respectively.

Mitigation Measures

MM 4.9-3: Prior to the issuance of grading or building permits, the project proponent/operator shall comply with the following:

1. Submit Form 7460-1 (Notification of Proposed Construction or Alteration) to the Federal Aviation Administration, in the form and manner prescribed in Code of Federal Regulation 77.17 for any project components that would meet noticing requirements under 14 CFR Part 77.
2. For project components meeting noticing requirements under 14 CFR Part 77, obtain a Federal Aviation Administration issued "Determination of No Hazard to Air Navigation."
3. Provide documentation to the Kern County Planning and Natural Resources Department demonstrating that a copy of the final site plans have been provided to the operators of Mojave Air Space and Port.

Level of Significance after Mitigation

Impacts would be less than significant with implementation of **Mitigation Measure MM 4.9-3**.

Impact 4.9-6: The project would impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

As discussed in **Section 4.15**, *Traffic and Transportation*, of this EIR, the project site is located in a rural area) allowing adequate egress/ingress to the site in the event of an emergency. Additionally, as part of the project, additional onsite access roadways (internal to the site) would be constructed. Therefore, development of the project would not physically interfere with emergency vehicle access or personnel evacuation from the site.

As further described in **Section 4.15**, *Traffic and Transportation*, of this EIR, increased project-related traffic would not cause a significant increase in congestion and or significantly worsen the existing service levels at intersections on area roads; therefore, project-related traffic would not affect emergency access to the project site or any other surrounding location. The proposed project would not require closures of public roads, which could inhibit access by emergency vehicles. For these reasons, project construction and operation would have a less-than-significant impact on emergency access.

While potential impacts would be less than significant, **Mitigation Measure MM 4.15-1** would provide further assurances for emergency access. **Mitigation Measure MM 4.15-1** requires the preparation of a Construction Traffic Control Plan that considers access for emergency vehicles to the project site.

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 CFC 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. Furthermore, the project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.14-1 (see Section 4.14,** *Public Services,* of this EIR, for full mitigation measure text) and **MM 4.15-1** (see **Section 4.15,** *Traffic and Transportation*, of this EIR, for full mitigation measure text) would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measure MM 4.14-1** and **MM 4.15-1**, impacts would be less than significant.

Impact 4.9-7: The project would expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

As discussed in **Section 4.18**, *Wildfire*, of this EIR, the project site is not located within a very high fire hazard severity zone; however, portions of the northwestern section of the project site are located within a high fire severity zone (CAL FIRE, 2025). Sparse vegetation is present onsite and site preparation would

involve the removal of additional vegetation, although natural vegetation may be maintained within the solar arrays if it does not interfere with project construction or the health and safety of onsite personnel.

The project includes a battery energy storage component where vegetation will be eliminated within the battery facility boundary. While batteries generally burn with difficulty, they can potentially catch fire. A battery fire does not produce embers like a typical structure or wildland fire, thus minimizing the spread of a battery fire to any adjacent vegetation. Instead, fire spread risk for a battery is typically through thermal energy transfer to nearby adjacent exposures. This is mitigated through spacing, barriers, and/or cooling. The project battery energy storage system will be constructed in accordance with the California Fire Code, which has specific, detailed design requirements for stationary electrical energy storage systems, and applicable NFPA standards. The CFC and NFPA 855 require rigorous large-scale fire testing, which requires these systems to pass performance-based criteria so that enclosures of energy storage systems may not pose a fire risk to adjacent exposures and a fire will not propagate beyond a single enclosure, even without the use of suppression. To achieve these results, energy storage systems typically employ various types of passive controls such as thermal runaway mitigation systems, equipment spacing, setbacks, vegetation control/rock cover, and fire-resistant and/or non-combustible construction materials. All documentation to prove the effectiveness of this strategy in accordance with the CFC and NFPA 855, including testing results, listing, plans, analysis, and drawings will be submitted with the building permit application to KCFD for review and approval. Should a battery fire occur, fire fighters are trained to allow the single enclosure to consume itself while observing the areas around it and utilizing fire water for cooling adjacent exposures, if needed. Any external wildland or brush fires impacting the battery facility are not a concern due to strict vegetation management of the site, setbacks, spacing, and non-combustible construction as described herein. The project will also comply with the requirements of California Public Utilities Code Section 761.3, which requires battery energy storage facilities to have an emergency response and emergency action plan covering the premises of the facility that is prepared in coordination with local emergency management agencies, unified program agencies, and local first responders.

Over the long term, project operation and maintenance could introduce potential ignition sources, such as maintenance vehicles used for various project maintenance activities. Although the proposed inverters and solar panels may represent a potential ignition source, the potential for fire risk for these components is considered low as the project would comply with the KCFD vegetation clearance requirements. Project vehicles would travel on roads that have been cleared of vegetation, making vegetation-related fires unlikely on the site. Additionally, battery components for the project would be installed within non-walking outdoor enclosures on electrically grounded concrete pads or foundations to minimize the potential for sparks or ignition to occur and include the integrated fire and safety systems within each enclosure as described above. Compliance with these standards would minimize the potential for the occurrence of fire.

Additionally, as discussed further in **Section 4.14**, *Public Services*, of this EIR, the project proponent would implement **Mitigation Measure MM 4.14-1**, which would require the preparation and submittal of a Fire Safety Plan to the KCFD for review and approval. The purpose of the Fire Safety Plan would be to eliminate causes of fire, prevent loss of life and property by fire, to comply with County and County Fire Protection District standards for solar facilities, and to comply with the OSHA standard of fire prevention, 29 CFR 1910.39. The fire safety plan would address fire hazards of the different components of the project, including the energy storage facility, and would include BMPs to reduce the potential for fire and extinguishment techniques if a fire were to occur. As discussed in more detail in **Section 4.18**, *Wildfire*, of this EIR, some portions of the northwestern section of the project site are classified as an SRA high fire

hazard severity zone, and proper site preparation such as vegetation clearance would take place to reduce fire risks.

The project site is not adjacent to urbanized areas and the desert flora is sparse and minimal; however, there are isolated residences in proximity to the project site. While the project is not anticipated to significantly increase the risk of wildfire, **Mitigation Measure MM 4.14-1** would be implemented which includes the development and implementation of a fire safety plan for construction and operation of the project. With mitigation, potential impacts from wildfire would be reduced to a less than significant level.

Mitigation Measures

Implementation of **Mitigation Measure MM 4.14-1** would be required (see **Section 4.14**, *Public Services*, for full mitigation text of **Mitigation Measure MM 4.14-1**.)

Level of Significance after Mitigation

With implementation of **Mitigation Measure MM 4.14-1**, potential impacts would be less than significant.

Impact 4.9-8: The project would generate vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste? Specifically, would the proposed project exceed the following qualitative threshold: the presence of domestic flies, mosquitoes, cockroaches, rodents, and/or any other vectors associated with the proposed project is significant when the applicable enforcement agency determines that any of the vectors:

- **i. Occur as immature stages and adults in numbers considerably in excess of those found in the surrounding environment; or**
- **ii. Are associated with design, layout, and management of proposed project operations; or**
- **iii. Disseminate widely from the property; or**
- **iv. Cause detrimental effects on the public health or well-being of the majority of the surrounding population.**

Project-related infrastructure is not expected to create conditions that provide habitats for vectors or pests such as mosquitoes, flies, cockroaches, or rodents (such as standing water, agricultural products, or agricultural waste). Factors such as standing water, agricultural products, or waste are not anticipated. During construction, the project site would generate a small amount of solid waste, such as paper, wood, glass, plastics from packing material, waste lumber, insulation, scrap metal and concrete, empty nonhazardous containers, and vegetation waste. These wastes would be separated and sorted for recycling whenever practical. Non-recyclable wastes would be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III landfill. **Mitigation Measure MM 4.1-1** would further reduce the potential to create conditions that provide habitats to vectors or pests by implementing a Maintenance, Trash Abatement, and Pest Management Program that would include protocols for debris clearing and trash removal. Construction and operation of the project solar arrays and associated facilities would not produce excessive wastes, standing water, or other features that would attract nuisance pests or vectors. Therefore, potential impacts would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measure MM 4.1-1** (see Section 4.1, *Aesthetics*, of this EIR for full mitigation measure text) would be required.

Level of Significance

With implementation of **Mitigation Measure MM 4.1-1**, impacts would be less than significant.

4.9.5 Cumulative Setting, Impacts, and Mitigation Measures

As described in **Chapter 3**, *Project Description*, of this EIR, multiple projects, including several utility-scale solar and wind energy production facilities, are proposed throughout Kern County. The geographic scope of impacts associated with hazardous materials generally encompasses the project site and a 0.25-mile-radius area around the site. A 0.25-mile-radius area allows for a conservative cumulative analysis that ensures that all potential cumulative impacts will be assessed. Similar to other potential impacts, such as those related to geology and soils, risks related to hazards and hazardous materials are typically localized in nature since they tend to be related to onsite existing hazardous conditions and/or hazards caused by the project's construction or operation. A geographic scope of a 0.25-mile-radius area also coincides with the distance used to determine whether hazardous emissions or materials would have a significant impact upon an existing or proposed school, as discussed above. The project's compliance with **Mitigation Measures MM 4.9-1** and **MM 4.9-2** is similar to existing regulatory requirements that other projects would be required to adhere to and would avoid hazardous material-related impacts from occurring at any of the schools of the area.

Impacts regarding the handling, use, and/or storage of hazardous materials would be project specific and would not cumulatively contribute to impacts. An accident involving a hazardous material release during project construction or operation through upset or accident conditions including site grading and the use and transport of petroleum-based lubricants, solvents, fuels, batteries, herbicides, and pesticides to and from the project site would be location specific. Conformance with existing State and County regulations, as well as project safety design features and implementation of **Mitigation Measures MM 4.9-1** and **MM 4.9-2** identified above, would further reduce cumulative impacts. In addition, implementation of appropriate safety measures during construction of the project, as well as other cumulative projects, would reduce the impact to a level that would not contribute to cumulative effects. Given the minimal risks of hazards at the project site, cumulative impacts are unlikely to occur. Therefore, impacts would not be cumulatively significant.

Hazardous materials to be used during decommissioning and removal activities are of low toxicity and would consist of fuels, oils, and lubricants. Because these materials are required for operation of construction vehicles and equipment, BMPs would be implemented to reduce the potential for or exposure to accidental spills or fires involving the use of hazardous materials. Impacts from minor spills or drips would be avoided by thoroughly cleaning up minor spills as soon as they occur. While foreseeable projects have the potential to cause similar impacts, it is assumed these projects would also implement similar BMPs. While the project would be proximate to other solar PV projects that may include similar battery energy storage systems, all battery energy storage systems would be required to include fire preventative

measures and fire and safety systems to reduce the potential for battery thermal runaway and other potentially hazardous events. All construction, operation, and decommissioning of the solar projects would need to follow the same safety standards and suppression systems.

The project site and surrounding 0.25-mile area is rural, has a limited residential population, is sparsely vegetated and lacks steep slopes, and all projects would be required to comply with Fire and Building Code requirements. Conformance with existing State and County regulations, as well as implementation of **Mitigation Measures MM 4.1-1** (of **Section 4.1,** *Aesthetics*)**, MM 4.9-1, MM 4.9-2,** and **MM 4.14-1** of **Section 4.14**, *Public Services* (Fire Safety Plan), would further reduce the potential for cumulative impacts. In addition, implementation of appropriate safety measures during construction of the project, as well as any other cumulative project, would reduce the impact to a level that would not contribute to cumulative effects. Therefore, potential impacts related to hazardous materials would not be cumulatively significant.

The project would be required to comply with FAA notification and approval requirements listed in **Mitigation Measure MM 4.9-3**, as would other projects within these influence areas. Thus, the project would not combine with any other to become cumulatively significant and there would be less than significant cumulative impacts associated with airports or airstrip land use plans or air traffic hazards.

Mitigation Measures

Implementation of Mitigation Measures **MM 4.1-1**, **MM 4.9-1, MM 4.9-2, MM 4.9-3,** and **MM 4.14-1** would be required (see **Sections 4.1,** *Aesthetics,* and **4.14**, *Public Services,* of this EIR for full mitigation text).

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.1-1**, **MM 4.9-1, MM 4.9-2, MM 4.9-3,** and **MM 4.14-1**, cumulative impacts would be less than significant.

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Section 4.10

Hydrology and Water Quality

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Section 4.10
Hydrology and Water Quality

4.10.1 Introduction

This section of the EIR describes the hydrological environmental and regulatory settings, addresses potential impacts of the project on hydrology and water quality, and discusses mitigation measures to reduce potential impacts, if applicable. The information in this section is based on multiple online sources and published documents, the Water Supply Assessment (**Appendix L1**) (Tetra Tech, 2025); the Preliminary Hydrology Study (**Appendix I**) (Westwood, 2025); the Preliminary Geologic CEQA Report (**Appendix G1**) (Terracon, 2025); Aquatic Resources Delineation Report (**Appendix D8**) and are incorporated by reference herein.

4.10.2 Environmental Setting

Regional Setting

The project site is located in the northwestern portion of the Mojave Desert towards the center of the Antelope-Fremont Valley Hydrologic Unit (HUC8: 18090206) (Tetra Tech, 2025). The Antelope Valley Region is a triangular-shaped, topographically closed basin bordered on the southwest by the San Gabriel Mountains, on the northwest by the Tehachapi Mountains, and on the east by a series of hills and buttes that generally follow the Los Angeles/San Bernardino County line.

Antelope Hydrologic Unit

The Antelope Hydrologic Unit is part of the Lahontan Regional Water Quality Control Board (RWQCB). The Antelope Hydrologic Unit includes portions of Los Angeles, Kern, and San Bernardino Counties and corresponds to the Antelope Valley Groundwater Basin (AVGB), which is a closed topographic basin with an area of about 2,400 square miles. Under the California Department of Water Resources mapping system used in the Lahontan Basin Plan, the Antelope Hydrologic Unit includes eight Hydrologic Areas: Chafee, Gloster, Willow Springs, Neenach, Lancaster, North Muroc, Buttes, and Rock Creek (Lahontan RWQCB, 2021). The project is located in the following sub-watersheds: Soledad Mountain (HUC12 180902062002), the Tropico Hill (HUC12 180902061705), and the Oak Creek (HUC12 180902061701). The Antelope Valley Watershed is a closed basin situated within the western Mojave Desert, with a system of Rosamond, Buckhorn, and Rogers dry lakes as the central watershed terminus.

Climate

As described above, the project site is located within the Mojave Desert, which is considered a warm-temperature desert situated between the subtropical Sonoran Desert to the south and the cold-temperature Great Basin to the north. The Mojave Desert is characterized by dramatic variations in daily temperatures and more arid conditions than other North American desert regions. Freezing temperatures regularly occur during winter months, particularly at higher elevations. Summer months are typically hot, dry, and windy. Precipitation in the region ranges from 3 to 5 inches per year. Almost all precipitation arrives in the winter, but the region also experiences rare, intense summer thunderstorms.

More specifically, the project site is located southwest of the community of Mojave, where, according to the nearest weather station, temperature ranges from an average monthly high of 97.6 degrees Fahrenheit in July to a low of 32.9 degrees Fahrenheit in December (WRCC, 2023). Average rainfall is approximately 5.93 inches annually. According to results from the Antecedent Precipitation Tool (APT), the Study Area was in a period of moderate wetness for the 90-day periods leading up the first two surveys in October 2023 and November 2023; the APT results showed that the Study Area was in wetter conditions for the 90-day period leading up to the third survey in January 2024, and was in a period of incipient wetness; for the 90-day period leading up to the fourth survey in March 2024, the APT results showed that the Study Area was in normal conditions and was in a period of mild wetness. The periods prior to the field surveys were generally wetter than normal and allowed for the potentially jurisdictional features to be more easily identifiable (Heritage Environmental Consultants, 2025).

Site Hydrology

Surface Hydrology and Drainage

The project is located at the western edge of the Antelope Valley in the southeastern corner of the desert region in unincorporated Kern County. The project site has a relatively flat terrain with site elevations ranging from approximately 2,970 to 3,760 feet above mean sea level due to being south of the Tehachapi Mountains where lands gradually slope downward from the northwest towards the southeast. The site is relatively flat with slopes of less than 2 percent, though there are locations where the slopes reach roughly 5 percent (Westwood, 2025). The western portion of the project site generally drains south, and the eastern portion of the project site generally drains south before either flowing southeast or southwest around Cactus Queen Mine. **Figure 4.10-1**, *Surface Hydrology and Drainage*, identifies mapped watercourses on the project site.

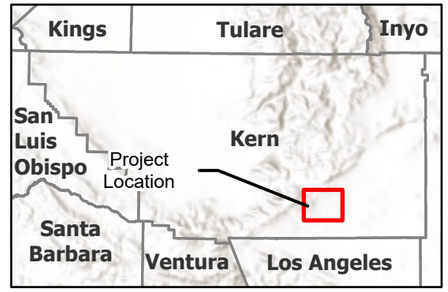
Floodplains

The Federal Emergency Management Agency (FEMA) delineates flood hazard areas on its Flood Insurance Rate Maps (FIRMs); FIRMs are discussed in more detail below under Section 4.10.3 (“Regulatory Setting”). According to the most recent FEMA FIRMs (06029C3650E, 06029C3675E, and 06029C3275E), and as shown on **Figure 4.10-2**, *Flood Hazard*, a portion of the project is located within Zone A of the FEMA FIRM, which indicates a Special Flood Hazard Area. There is one FEMA Zone A Flood hazard located through the middle of the project site (see **Figure 4.10-2**, *Flood Hazard*). A FEMA Zone A flood hazard is a 100-year flood hazard with no base flood elevation determined. The remaining portions of the project site are located within FEMA Zone X. FEMA Zone X (unshaded) are the areas of minimal flood hazard, which are higher than the elevation of the 0.2-percent annual chance flood.

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.10-1. Surface Hydrology and Drainage



Windhub High-voltage Substation (Existing)

Proposed Project Features

Project Site

Gen-tie Line (New)

Other Applicant and/or Affiliate Controlled*

Step-up HV substation

Gen-tie Corridor

National Hydrography Dataset

Intermittent

Ephemeral

*Already approved under separate projects.

N

0 0.38 0.75 1.5 Miles

Scale is 1:70,000 when printed at 11"x17"

Not for Construction

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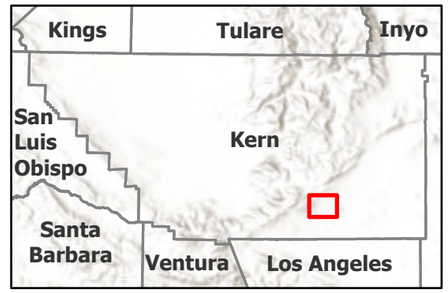
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.10-2. Flood Hazard



Windhub High-voltage Substation (Existing)

Other Applicant Controlled Parcels

Proposed Project Features

Project Site

Temporary Offsite Laydown Area

Medium-voltage/Transmission/ Access Easements

Gen-tie Line (New)

Access Points

Other Applicant and/or Affiliate Controlled*

Step-up HV substation

Gen-tie Corridor

FEMA Flood Zone

Zone A - 1% Annual Chance Flood Hazard

Zone X - 0.2% Annual Chance Flood Hazard

Zone X – Area of Minimal Flood Hazard

*Already approved under separate projects.

N

0 0.25 0.5 1 Miles

Scale is 1:50,000 when printed at 11"x17"

Not for Construction

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Soil Types and Erosion

Surficial soils at the project site consist of fill and alluvium as discussed in the *Discovery Solar Preliminary Geologic CEQA Report* (Terracon, 2025), included as **Appendix G1** of this EIR. Soils are primarily classified as Hydrologic Soil Group A and C within the project site, as described in the *Preliminary Hydrology Study* (Westwood, 2025) included as **Appendix I** of this EIR. Group A soils, which are less present than Group C soils, have a high infiltration rate (low runoff potential) when thoroughly wet. These are mainly deep, well-drained to excessively drained sands or gravelly sands. Sandy soils typically have low cohesion and have a relatively higher potential for erosion when exposed to wind or moving water. Group C soils are defined as having a slow infiltration rate when thoroughly wet and having a soil layer that impedes the downward movement of water or soils of moderately fine texture. These soils are considered to have a slow rate of water transmission. A small area at the northwestern corner of the project site has Group D soils. Group D soils have very slow infiltration rates when thoroughly wetted, consisting chiefly of clayey soils or clay layer at or near the surface. These soils have a very slow rate of water transmission. Since the project site has minimal to no vegetation cover, erosion potential is slightly higher than it would be if it was densely vegetated. Conversely, the low topographic relief of the site reduces erosion potential. See also **Section 4.7,** *Geology and Soils*, for more information on soil erosion potential.

Groundwater Resources

Fremont Valley and Antelope Valley Groundwater Basins

The project site overlaps the Fremont Valley Groundwater Basin (FVGB) and the Antelope Valley Groundwater Basin (AVGB). The FVGB underlies an extensive alluvial valley in the western Mojave Desert. The FVGB is bounded to the south and southeast by the AVGB, to the east by the crystalline rocks of Red Mountain, the Rand Mountains, Castle Butte, the Bissell Hills, and the Rosamond Hills; and to the west and north by the Sierra Nevada, the Tehachapi Mountains, and the El Paso Mountains (Tetra Tech, 2025). The boundary between the FVGB and the AVGB occurs along a groundwater divide approximated by a line connecting the mouth of Oak Creek through Middle Butte to the exposed basement rock near Gem Hill, and to the southeast of California City. **Figure 4.10-3,** *Groundwater Basins*, displays the groundwater basins near the project site.

Natural recharge of the FVGB includes percolation of ephemeral streams that flow in from the Sierra Nevada. The general groundwater flow direction is toward Koehn Lake at the center of the Fremont Valley (one basin north of the Antelope Valley Hydrologic Unit), with no appreciable quantity of groundwater flowing out of the basin (DWR, 2004). Total storage capacity is estimated at 4,800,000 acre-feet (AF). Groundwater quality is generally adequate for domestic, agricultural, and municipal uses, being of sodium bicarbonate character in the southeastern part of the basin and of sodium bicarbonate or calcium–sodium sulfate character in the southwest part of the basin (DWR, 2004). Historical total dissolved solids (TDS) content has ranged from 400 to 700 milligrams per liter (mg/L) in the southeastern part of the FVGB, and from 800 to 1,000 mg/L in the southwestern part of the FVGB (DWR, 2004). Data from 10 public supply wells in the basin show an average TDS content of 596 mg/L and a range of 398 to 1,400 mg/L (DWR, 2004). Groundwater in parts of the FVGB is locally impaired with high concentrations of fluoride and sodium; however, these impairments are more common in the northern and central subunits, especially in the Koehn Subunit.

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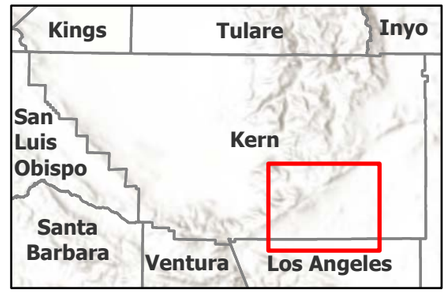
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.10-3 Groundwater Basins



- Preliminary Well Location
- Windhub High-voltage Substation (Existing)
- County

Groundwater Basin

- Antelope Valley
- Brite Vally
- Cummings Valley
- Fremont Valley
- Tehachapi Valley East
- Tehachapi Valley West

Proposed Project Features

- Project Site
- Gen-tie Line (New)
- Medium-voltage/Transmission/ Access Easements

Other Applicant and/or Affliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

*Already approved under separate projects.

N

0 1.25 2.5 5 Miles

Scale is 1:200,000 when printed at 11"x17"

Not for Construction

6-046 FREMONT VALLEY
6-045 TEHACHAPI VALLEY EAST
5-028 TEHACHAPI VALLEY WEST
5-027 CUMMINGS VALLEY
5-080 BRITE VALLEY
6-044 ANTELOPE VALLEY
Well 1 (N)
Well 2 (S)
Marcel
Cable
Golden Hills
Tehachapi
Tehachapi Valley
Cameron
Barren Ridge
Pine Tree Canyon
State Highway 14
California City
Fremont Valley
Horned Toad Hills
Cummings Mountain
7977 ft
Tejon Canyon
6354 ft
6787 ft
Twin Lakes
Oak Creek Rd
Tehachapi Willow Springs Rd
State Highway 58
Sanborn
Fleta
Bissell
Soledad Mountain
Actis
Bissell Hills
Rosamond Hills
Cottonwood Creek
Rosamond Blvd
Rosamond
90th St W
Sierra Hwy
170th St W
140th St W
Kern County
Los Angeles County
Antelope Valley
W Avenue D
Redman

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Natural recharge to the AVGB is primarily sourced from perennial runoff from the surrounding mountains and hills. Most recharge occurs at the foot of the mountains and hills by percolation through the head of alluvial fan systems. The Big Rock and Little Rock Creeks, in the southern part of the basin, contribute about 80 percent of runoff into the basin. Other minor recharge is from return of irrigation water and septic system effluent (DWR, 2004). The total storage capacity has been reported at 68,000,000 AF and 70,000,000 AF. For the part of the basin between 20 and 220 feet in depth, the storage capacity has been reported to be 5,400,000 AF (DWR, 2004). Groundwater is typically calcium bicarbonate in character near the surrounding mountains and is sodium bicarbonate or sodium sulfate character in the central part of the basin. In the eastern part of the basin, the upper aquifer has sodium-calcium bicarbonate-type water and the lower aquifer has sodium bicarbonate type water. TDS content in the basin averages 300 mg/L and ranges from 200 to 800 mg/L. Data from 213 public supply wells show an average TDS content of 374 mg/L and ranges from 123 to 1,970 mg/L (DWR, 2004).

Prior to the California Sustainable Groundwater Management Act (SGMA), the primary method for solving groundwater disputes and protecting groundwater basins was litigation. When over-pumping led to a crisis like seawater intrusion or chronic overdraft, people had little choice but to file a lawsuit—called an adjudication—in which all rights to water in a basin could be defined by a court. The SGMA now ensures that basins can be managed sustainably through local management plans. In October 2015, Governor Brown signed Assembly Bill No. 1390, which is legislation that provides a comprehensive adjudication process for all groundwater basins that are regulated under the SGMA. Groundwater basins that have been adjudicated by court decision are subject to management by a court-approved Watermaster.

As stated above, the project site is within the FVGB, which is not subject to a court adjudication; however, the AVGB is subject to a court adjudication. Groundwater pumping within the FVGB peaked in the 1950s with the cultivation of agricultural crops such as alfalfa, pasture, and field crops, then declined as greater pumping lifts and increasing energy costs made the use of groundwater in the area less economical for agricultural uses. The delivery of State Water Project (SWP) water to the region starting in 1972 also decreased farmers' reliance on groundwater for irrigation. Agriculture within the FVGB largely ceased by the late 1970s. In more recent years, groundwater pumping has lessened because of reduced agricultural production in the area and the availability of imported SWP supplies. Groundwater within the FVGB is currently extracted to support domestic, industrial, and renewable energy and limited municipal demands (Tetra Tech 2025). Groundwater levels in the AVGB have experienced high variance. Between 1975 through 1998, groundwater level changes ranged from an increase of 84 feet to a decrease of 66 feet. Groundwater pumping has caused subsidence of the ground surface, as well as earth fissures to appear in Lancaster and on Edwards Air Force Base (DWR, 2004). Land subsidence in the AVGB has permanently reduced aquifer-system storage by about 50,000 acre-feet (DWR, 2004).

Based on low population density, negative growth projections, low numbers of private and public supply wells, and the lack of irrigated agriculture within the FVGB, the basin is designated as a low-priority basin by the California Department of Water Resources (DWR). Adjudicated basins are not applicable to SGMA requirements and therefore the AVGB has been prioritized as low priority under SGMA. As low-priority basins, the FVGB and AVGB are not required to develop a groundwater sustainability plan in accordance with the SGMA; however, California City, Mojave Public Utility District (MPUD), and other regional stakeholders have partnered in the development of a Fremont Valley Basin Groundwater Management Plan to promote regional groundwater sustainability. Similarly, regional stakeholders partnered to create the Antelope Valley Integrated Regional Water Management Plan (IRWMP). The FVGB Groundwater Management Plan provides supporting information used in the Fremont Basin IRWMP. The Regional Plan discusses overall water supply reliability within the Fremont Basin region, including the integrated use of

surface and groundwater supplies and the interrelationship of the Fremont Basin with the Antelope Valley East Kern Water Agency's (AVEK) integrated management of surface and groundwater supplies within the AVGB to the south.

4.10.3 Regulatory Setting

Federal

Clean Water Act

The Clean Water Act (CWA) (33 United States Code [U.S.C.] Section 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA required states to set standards to protect, maintain, and restore water quality through the regulation of point-source and certain nonpoint-source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). In California, NPDES permitting authority is delegated to, and administered by, the nine RWQCBs. The project site is within the Lahontan RWQCB. Projects that disturb one or more acres, including the project, typically are required to obtain NPDES coverage under the Construction General Permits.

CWA Section 401, Water Quality Certification. Section 401 of the CWA requires that, prior to issuance of any federal permit or license, any activity, including river or stream crossing during road, pipeline, or transmission line construction, which may result in discharges into waters of the United States, the activity must be certified by the state, as administered by the RWQCB. This certification ensures that the proposed activity does not violate state and/or federal water quality standards.

CWA Section 402, National Pollutant Discharge Elimination System. Section 402 of the CWA authorizes the State Water Resources Control Board (SWRCB) to issue an NPDES General Construction Storm Water Permit (Water Quality Order 2009-0009-DWQ), referred to as the General Construction Permit. Construction activities can comply with and be covered under the General Construction Permit provided that they:

- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) that specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters.
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States.
- Perform inspections of all BMPs.

NPDES regulations are administered by the Lahontan RWQCB at the project site.

CWA Section 404, Discharge of Dredged or Fill Materials. Section 404 of the CWA establishes programs to regulate the discharge of dredged and fill material in waters of the United States, including wetlands. For purposes of Section 404 of the CWA, the limits of non-tidal waters extend to the ordinary high-water line, defined as the line on the shore established by the fluctuation of water and indicated by physical characteristics, such as natural line impressed on the bank, changes in the character of the soil, and

presence of debris. When an application for a CWA Section 404 permit is made, the applicant must show it has:

- Taken steps to avoid impacts to wetlands or waters of the United States. where practicable;
- Minimized unavoidable impacts on waters of the United States. and wetlands; and
- Provided mitigation for unavoidable impacts.

Section 404 of the CWA requires a permit for construction activities involving placement of any kind of fill material into waters of the United States or wetlands. A water quality certification pursuant to Section 401 of the CWA is required for Section 404 permit actions.

CWA Section 303, Water Quality Standards and Implementation Plans. Section 303(d) of the CWA (33 U.S.C. 1250, et seq., at 1313(d)) requires states to identify "impaired" water bodies as those which do not meet water quality standards. States are required to compile this information in a list and submit the list to the U.S. Environmental Protection Agency for review and approval. This list is known as the Section 303(d) list of impaired waters. As part of this listing process, states are required to prioritize waters and watersheds for future development of total maximum daily load (TMDL) requirements. The SWRCB and RWQCBs have ongoing efforts to monitor and assess water quality, to prepare the Section 303(d) list, and to develop TMDL requirements.

National Flood Insurance Act

FEMA is responsible for managing the National Flood Insurance Program (NFIP), which makes federally backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. The NFIP, established in 1968 under the National Flood Insurance Act, requires that participating communities adopt certain minimum floodplain management standards, including restrictions on new development in designated floodways, a requirement that new structures in the 100-year flood zone be elevated to or above the 100-year flood level (known as base flood elevation), and a requirement that subdivisions be designed to minimize exposure to flood hazards.

To facilitate identifying areas with flood potential, FEMA has developed FIRMs that can be used for planning purposes, including floodplain management, flood insurance, and enforcement of mandatory flood insurance purchase requirements. Kern County is a participating jurisdiction in the NFIP and, therefore, all new development must comply with the minimum requirements of the NFIP.

State

Department of Water Resources

The major responsibilities of DWR include preparing and updating the California Water Plan to guide development and management of the state's water resources; planning, designing, constructing, operating, and maintaining the State Water Resources Development System; regulating dams; providing flood protection; assisting in emergency management to safeguard life and property; educating the public; and serving local water needs by providing technical assistance. In addition, DWR cooperates with local agencies on water resources investigations, supports watershed and river restoration programs, encourages water conservation, explores conjunctive use of ground and surface water, facilitates voluntary water transfers, and, when needed, operates a state drought water bank.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act; Water Code Sections 13000 et seq.), passed in 1969, requires protection of water quality by appropriate designing, sizing, and construction of erosion and sediment controls. The Porter-Cologne Act established the SWRCB and divided California into nine regions, each overseen by a RWQCB. The SWRCB is the primary State agency responsible for protecting the quality of the State's surface and groundwater supplies and has delegated primary implementation authority to the nine RWQCBs. The Porter-Cologne Act assigns responsibility for implementing the CWA Sections 401, 402, and 303(d) to the SWRCB and the nine RWQCBs.

The Porter-Cologne Act requires the development and periodic review of water quality control plans (basin plans) that designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters, provide the technical basis for determining waste discharge requirements, identify enforcement actions, and evaluate clean water grant proposals. The basin plans are updated every three years. Compliance with basin plans is primarily achieved through implementation of the NPDES, which regulates waste discharges as discussed above.

The Porter-Cologne Act requires that any person discharging waste or proposing to discharge waste within any region other than to a community sewer system, which could affect the quality of the waters of the State, file a report of waste discharge. Absent a potential effect on the quality of waters of the State, no notification is required. However, the RWQCB encourages implementation of BMPs similar to those required for NPDES stormwater permits to protect the water quality objectives and beneficial uses of local surface waters as provided in the Lahontan Region Water Quality Control Plan (Basin Plan) (Lahontan RWQCB, 2016).

Sustainable Groundwater Management Act

SGMA requires the formation of locally controlled groundwater sustainability agencies in high- and medium-priority groundwater basins. These groundwater sustainability agencies are responsible for developing and implementing a Groundwater Sustainability Plan (GSP) to ensure the basin is operated within its sustainable yield without causing undesirable results. The FVGB and AVGB are currently designated as a low-priority basin under SGMA. Thus, the agencies within the region are not subject to SGMA requirements for the groundwater basin at this time.

Although a GSP is not required, California City, MPUD, and other regional stakeholders have partnered in the development of a Groundwater Management Plan for the FVGB to promote regional groundwater sustainability (California City, 2018). The Groundwater Management Plan was developed to document groundwater conditions to help inform future decisions regarding long-term sustainable management. The plan describes high levels of groundwater pumping for agricultural use from the late 1950s through the 1970s and by MPUD from 1968 through 1980, with resulting declines in groundwater levels. In more recent years, groundwater pumping has lessened because of reduced agricultural production in the area and the availability of imported SWP supplies. In general, the reduced pumping has resulted in more stable groundwater levels with recovery in some areas (California City, 2018). Overall, the basin has been able to provide sufficient supply to meet demands, but there is a limited understanding of storage and withdrawal capacity. For this reason, the Groundwater Management Plan targets to define the basin's safe yield by 2027 and to manage the basin such that the 10-year average change in groundwater levels is zero. The Groundwater Management Plan provides background technical information used in the Fremont Basin IRWMP (Fremont Basin Regional Water Management Group, 2019). The regional plan provides additional information about overall water supply reliability within the Fremont Basin region, including the integrated

use of surface and groundwater supplies. Importantly, the regional plan addresses the interrelationship of the Fremont Basin with the AVEK's integrated management of surface and groundwater supplies within the AVGB to the south. To increase regional water supply reliability, AVEK has developed groundwater banking programs that allow storage of excess SWP supplies during wet years, allowing for recovery when needed. These programs increase water supply reliability throughout AVEK's entire service area, including customers within the Fremont Basin (Fremont Basin Regional Water Management Group, 2019). The project would not use the AVGB as a water supply source and, therefore, it is not discussed further in this section.

Streambed Alteration Agreement (California Fish and Game Code)

Section 1602 of the California Fish and Game Code protects the natural flow, bed, channel, and bank of any river, stream, or lake designated by the California Department of Fish and Wildlife (CDFW) in which there is, at any time, any existing fish or wildlife resources or benefit for the resources. Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state, and requires any person, state or local governmental agency, or public utility to notify the CDFW before beginning any activity that will:

- Substantially divert or obstruct the natural flow of any river, stream, or lake;
- Substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

During final engineering and design of a project, if it is determined that any project-related actions would have the potential to necessitate a streambed alteration agreement, such an agreement would be prepared and implemented prior to construction of the project, thus maintaining compliance with Section 1602 of the California Fish and Game Code. A streambed alteration agreement is required if the CDFW determines the activity could substantially adversely affect an existing fish and wildlife resource. The agreement includes measures to protect fish and wildlife resources while conducting the project.

Local

Construction and operation of the project would be subject to policies and regulations contained within the County's general and specific plans, including the Kern County General Plan, the Soledad Mountain Elephant Butte Specific Plan, Kern County Zoning Ordinance, and the Kern County Code of Building Regulations, which include policies, goals, and implementation measures related to hydrology and water quality. The policies and implementation measures in the Kern County General Plan related to hydrology and water quality that are applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the project. These measures are not listed below, but as stated in **Chapter 2**, *Introduction*, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Kern County General Plan

Land Use, Open Space, and Conservation Element

1.3 Physical and Environmental Constraints

Policies

Policy 1: Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained (Map Code 2.1 [Seismic Hazard], Map Code 2.2 [Landslide], Map Code 2.3 [Shallow Groundwater], Map Code 2.5 [Flood Hazard], Map Codes from 2.6 – 2.9, Map Code 2.10 [Nearby Waste Facility], and Map Code 2.11 [Burn Dump Hazard]) to support such development unless appropriate studies establish that such development will not result in unmitigated significant impact.

Policy 8: Encourage the preservation of the floodplain's flow conveyance capacity, especially in floodways, to be open space/passive recreation areas throughout the County.

Policy 9: Construction of structures that impede water flow in a primary floodplain will be discouraged.

Policy 10: The County will allow lands which are within flood hazard areas, other than primary floodplains, to be developed in accordance with the General Plan and Floodplain Management Ordinance, if mitigation measures are incorporated so as to ensure that the proposed development will not be hazardous within the requirements of the Safety Element (Chapter 4) of this General Plan.

Policy 11: Protect and maintain watershed integrity within Kern County.

Implementation Measures

Measure F: The County will comply with the Colbey-Alquist Floodplain Management Act in regulating land use within designated floodways.

Measure H: Development within areas subject to flooding, as defined by the appropriate agency, will require necessary flood evaluations and studies.

Measure J: Compliance with the Floodplain Management Ordinance prior to grading or improvement of land for development or the construction, expansion, conversion or substantial improvements of a structure is required.

Measure N: Applicants for new discretionary development should consult with the appropriate Resource Conservation District and the California Regional Water Quality Control Board regarding soil disturbances issues.

1.9 Resources

Policy

Policy 11: Minimize the alteration of natural drainage areas. Require development plans to include necessary mitigation to stabilize runoff and silt deposition through utilization of grading and flood protection ordinances.

1.10 General Provisions

1.10.6 Surface Water and Groundwater

Policies

Policy 34: Ensure that water quality standards are met for existing users and future development.

Policy 40: Encourage utilization of community water system rather than the reliance on individual wells

Policy 41: Review development proposals to ensure adequate water is available to accommodate projected growth.

Policy 43: Drainage shall conform to the Kern County Development Standards and the Grading Ordinance.

Policy 44: Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of impervious surfaces as required by the California Environmental Quality Act (CEQA), to prevent the degradation of the watershed to the extent practical.

Implementation Measure

Measure Y: Promote efficient water use by utilizing measures such as:

(i) Requiring water-conserving design and equipment in new construction;

(ii) Encouraging water-conserving landscaping and irrigation methods; and

(iii) Encouraging the retrofitting of existing development with water conserving devices.

Soledad Mountain Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. The recommendations, analysis, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan for hydrology and water quality applicable to the project are provided below. The Soledad Mountain Elephant Butte Specific Plan contains additional recommendations, analysis, and implementation measures that are more general in nature and are not specific to developments such as this project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan are incorporated by reference.

Conservation

Item 1. Conservation, Development, and Utilization of Natural Resources

Including:

a) Underground waters

b) Surface waters

c) Forests [Not applicable]

d) Vegetation and soils [Not applicable]

e) Rivers, creeks, and streams

f) Fish and wildlife [Not applicable]

Recommendation - a) Underground Waters - The quality and quantity of underground waters shall not be degraded.

b) Surface Waters - None in the area.

e) Rivers, Creeks, and Streams - None in the area.

Analysis - The Developer reports that the underground water supply will be adequate to serve the development. Should overdraft occur in the future, rationing could be necessary, or annexation to the Mojave Public Utility District may be considered.

Implementation - a) Quality and quantity of underground water supply shall be monitored by the appropriate agency.

b) None necessary.

e) None necessary.

Item 2. Standards for Flood Control

Recommendation - All residential properties shall be free from flooding.

Analysis - Most flood control problems will be solved in accordance with the requirements of the Public Works Department. All sub-divisions should come under this control.

Implementation - Compliance with the requirements of the Public Works Department.

Item 3. Standards for Prevention and Control of Pollution of Rivers, Streams, and Creeks

Recommendation - None necessary.

Analysis - There are no bodies of running water within the Plan boundaries.

Item 4. Standards of Protection of Watershed Areas

Recommendation - No watershed area shall be degraded as a result of a development within the area.

Analysis - Review of watersheds is made in conjunction with drainage control and water quality control. Standards have been established.

Implementation - Compliance with the existing standards of the Regional Water Quality Control Board and the Public Works Department.

Kern County Zoning Ordinance

Chapter 19.70 Floodplain Combining District

Section 19.70.040 prohibits the following uses in the Floodplain Combining District, as applicable to the proposed project:

Implementation Measures

Measure B: All uses that will likely increase the flood hazard or affect the water-carrying capacity of the floodplain beyond the limits resulting from encroachment as specified in Section 19.70.130.

Measure C: Dumping, stockpiling, or storage of floatable substances or other materials which, in the opinion of the Kern County and Survey Services Department, will add to the debris loads of the stream or watercourse, unless protected by flood control devices approved by the Kern County Public Works Department and constructed in accordance with Section 19.70.130.

Measure D: Storage of junk or salvage operations.

Measure E: Oil storage tanks or processing equipment, unless flood-proofed or sufficiently elevated above the Base Flood Elevation, as determined by the Kern County Public Works Department.

Measure G: Sources of water supply (e.g., wells, springs) unless protected by flood control devices approved by the Kern County Public Works Department and constructed in accordance with the requirements of the Kern County Health Department so as to minimize infiltration of floodwaters.

Kern County Code of Building Regulations

Grading Code (Chapter 17.28)

Chapter 17.28 Kern County Grading Code. Requirements of the Kern County Grading Code will be implemented. A grading permit will be obtained prior to commencement of construction activities. Of particular note with respect to hydrology and water quality is Section 17.28.140, Erosion Control, which addresses the following:

- **Slopes.** The faces of cut-and-fill slopes shall be prepared and maintained to control against erosion. This control may consist of effective planting. The protection for the slopes shall be installed as soon as practicable and prior to calling for final approval. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted.
- **Other Devices.** Where necessary, check dams, cribbing, riprap or other devices or methods shall be employed to control erosion and provide safety.
- **Temporary Devices.** Temporary drainage and erosion control shall be provided as needed at the end of each workday during grading operations, such that existing drainage channels would not be blocked. Dust control shall be applied to all graded areas and materials and shall consist of applying water or another approved dust palliative for the alleviation or prevention of dust nuisance. Deposition of rocks, earth materials, or debris onto adjacent property, public roads, or drainage channels shall not be allowed.

Kern County Floodplain Management Ordinance (17.48)

Any construction that takes place within areas of special flood hazards, areas of flood-related erosion hazards, and areas of mudslide (i.e., mudflow) hazards within the jurisdiction of unincorporated Kern County will comply with the requirements and construction design specifications of this ordinance. Any

required development permits will be obtained prior to commencement of construction activities. Sections 17.48.250 through 17.48.350 of the ordinance elaborate on the standards of construction in the special flood hazards area. This includes the requirement of 1 foot of freeboard clearance above the calculated maximum flood depths for all facilities within a 100-year floodplain.

Kern County Development Standards

The Kern County Development Standards apply to all developments within Kern County that are outside of incorporated cities. These standards establish minimum design and construction requirements that will result in improvements that are economical to maintain and will adequately serve the general public. The requirements set forth in these standards are considered minimum design standards and will require the approval of the entity that will maintain the facilities to be constructed prior to approval by the County.

Kern County Water Quality Control Plan

Each of the nine RWQCBs adopts a Water Quality Control Plan that recognizes and reflects regional differences in existing water quality, the beneficial uses of the region's groundwater and surface waters, and local water quality conditions and problems. Water quality problems in the regions are listed in these plans, along with the causes, if they are known. Each RWQCB is to set water quality objectives that will ensure the reasonable protection of beneficial uses and the prevention of nuisance, with the understanding that water quality can be changed somewhat without unreasonably affecting beneficial uses.

The Kern County Engineering and Survey Services Department requires the completion of an NPDES applicability form for all construction projects disturbing one or more acre within Kern County. This form requires the project proponent to provide background information on construction activities. Applicants must apply for the permit under one of the following four conditions:

1. *All storm water is retained onsite and no storm water runoff, sediment, or pollutants from onsite construction activity can discharge directly or indirectly offsite or to a river, lake, stream, municipal storm drain, or offsite drainage facilities.*
2. *All storm water runoff is not retained onsite but does not discharge to a water of the United States (i.e. drains to a terminal drainage facility). Therefore, a SWPPP has been developed and BMPs must be implemented.*
3. *All storm water runoff is not retained onsite and the discharge is to a water of the United States. Therefore, a Notice of Intent (NOI) must be filed with the State Regional Water Resources Control Board prior to issuance of the building permit. Also, a SWPPP has been developed and BMPs must be implemented.*
4. *Construction activity is between 1 to 5 acres and an Erosivity Waiver was granted by the SWRCB. BMPs must be implemented.*

Water Rights Adjudication

A groundwater rights adjudication process has been underway for over 15 years to manage the Antelope Valley basin through the Antelope Valley IRWMP, which includes the project site. The parties to the adjudication include non-governmental overlying users, appropriative users, non-user overlying landowners and federally reserved water rights. The case defines who controls and uses the water in the basin.

In May 2011, the Santa Clara Superior Court issued an official decision determining that the adjudication area is in a state of overdraft and establishing a safe yield for the basin of 110,000 acre-feet per year (AFY), although pumping in the area has ranged up to 150,000 AFY.

4.10.4 Impacts and Mitigation Measures

Methodology

This section analyzes potential impacts on hydrology and water quality from implementation of the project based on changes to the environmental setting as described above, identified drainage conditions in the project site, and the current regulatory framework. The project's potential impacts to hydrology and water quality have been evaluated using the *Water Supply Assessment* (Tetra Tech, 2025), located in **Appendix L1** of this EIR; the *Preliminary Hydrology Study* (Westwood, 2025), located in **Appendix I** of this EIR; the *Preliminary Geotechnical CEQA Report* (Terracon, 2025), located in **Appendix G1** of this EIR; and multiple online sources and published documents. Using the aforementioned resources and professional judgment, impacts were analyzed according to CEQA significance criteria described below.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project could potentially have a significant adverse effect on hydrology and water quality.

A project could have a significant impact on hydrology and water quality if it would:

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- Result in substantial erosion or siltation onsite or offsite;
- Substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;
    i. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
    ii. Impede or redirect flood flows.

d. Result in a flood hazard, tsunami, or seiche zones, or risk release of pollutants due to project inundation;

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Project Impacts

Impact 4.10-1: The project would violate water quality standards or waste discharge requirements or otherwise degrade water quality.

Construction and Decommissioning

Project construction would include mowing, excavation, and grading portions of the project site. Conventional grading would be performed selectively throughout the project site; however, because the project site is relatively flat, it is anticipated that conventional grading would be limited in most areas. Grading and excavation would be required for project infrastructure such as the energy storage system(s), inverters, and transformers. Installation of the solar panels would not require grading of the site with the exception of roads to meet fire code standards and micro-grading in select areas to accommodate solar tracker grade tolerances. These activities would affect current drainage patterns and erosion on the project site. Potential impacts on water quality from erosion and sedimentation are expected to be localized and temporary during construction. Stormwater runoff from the project site would not discharge to waters of the United States because the project is within a watershed that is not hydrologically connected to a navigable waterway. However, according to the Kern County Public Works Department NPDES applicability form, the project would be required to implement a Stormwater Pollution Prevention Plan (SWPPP) during construction. 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 project, including the solar arrays, associated facilities, and the generation tie (gen-tie) line. In addition, prior to the commencement of construction activities, the project proponent would be required to adhere to the requirements of the Kern County Grading Code. This includes implementation of various measures designed to prevent erosion and control drainage onsite, thereby further preventing the potential sedimentation and subsequent degradation of stormwater.

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. Based on the findings of the *Preliminary Hydrologic Study* provided as **Appendix I** to this EIR (Westwood, 2025), the Final Drainage Plan would recommend an onsite design that ensures facilities are located in such a way to lessen their impact on drainage patterns and erosion. Designing the site grading and access roads in compliance with County standards, and as required by **Mitigation Measure MM 4.10-2**, would prevent substantial alterations to drainage patterns and erosion within the project site. Impervious surfaces from construction of access roads, photovoltaic module foundations, switchyards, substations, and other improvements would be relatively limited compared to the overall perviousness of the approximately 7,700-acre project site plus 13.8-acre temporary offsite laydown area.

During project construction, any construction activity that results in the accidental release of pollutants, hazardous materials, or potentially hazardous materials could result in water quality degradation. Materials that could contribute to this impact include, but are not limited to, diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, lubricant grease, cement slurry, and other fluids utilized by construction and maintenance vehicles and equipment. Motorized equipment could leak hazardous materials such as motor oil, transmission fluid, or antifreeze due to inadequate or improper maintenance, unnoticed or unrepaired damage, improper refueling, or operator error.

As noted in **Section 4.9**, *Hazards and Hazardous Materials*, of this EIR, **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. With implementation of this mitigation measure, the potential for the accidental release of hazardous materials would be reduced.

Decommissioning impacts would be similar to those described for construction and would be required to comply with the same applicable water quality regulations that would apply during construction. Ground-disturbing activities during decommissioning would also require coverage under the Construction General Permit and a SWPPP to effectively control erosion, sedimentation, and the release of pollutants during decommissioning activities.

Therefore, with implementation of **Mitigation Measures MM 4.9-1, MM 4.10-1**, and **MM 4.10-2**, potential impacts to water quality would be less than significant during construction and decommissioning.

Operation

Project facilities would require limited use of certain hazardous materials for routine operations and maintenance. Accidental release of such materials could include fuels, paints, coatings, lubricants, and transformer oil, which would result in water quality degradation should the materials become entrained in stormwater. This would result in a potentially significant impact on water quality. However, as described above, implementation of **Mitigation Measure MM 4.9-1** would require implementation of a Hazardous Materials Business Plan that would ensure safe handling of hazardous materials onsite and provide the means for prompt cleanup in the event of an accidental hazardous material release. There would be no hazardous materials associated with the interconnections to the gen-tie lines. Further, as discussed in **Section 4.9,** *Hazards and Hazardous Materials*, of this EIR, the energy storage facilities do not store or generate hazardous materials in quantities that would represent a risk to offsite receptors and no reportable quantities of acutely or extremely hazardous materials will be transported, stored, or used at the site. The project also would include preventative measures, such as energy management systems and building management systems, to reduce the potential for accidents to occur.

Water quality could also be degraded by non-hazardous materials during operation activities. During dry periods, impervious surfaces (i.e., hardscape surfaces such as foundations and buildings) can collect greases, oils, and other vehicle-related pollutants. During storm events, these pollutants can mix with stormwater and degrade water quality. However, 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. The Final Drainage Plan would include post-construction structural and nonstructural BMPs that could include features such as drainage swales for collection of runoff prior to offsite discharge. Adherence to these requirements would minimize potential for operation-period water quality degradation. Apart from infrequent cleaning of panels with water that would result in minimal runoff, no other discharges would occur when the project is operational. Therefore, with implementation of **Mitigation Measures MM 4.9-1** and **MM 4.10-2**, project operation would not violate water quality standards or waste discharge requirements or otherwise degrade water quality.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.9-1** would be required (see **Section 4.9,** *Hazards and Hazardous Materials*, for full mitigation measure text), and:

MM 4.10-1: Prior to issuance of a grading permit, the project proponent/operator shall submit a Stormwater Pollution Prevention Plan (SWPPP) for review and approval by the Kern County Planning and Natural Resources Department and/or Kern County Public Works Department. The SWPPP shall be designed to minimize runoff and shall specify best management practices to prevent all construction pollutants from contacting stormwater, with the intent of keeping sediment or any other pollutants from moving offsite and into receiving waters. The requirements of the SWPPP shall be incorporated into design specifications and construction contracts. Recommended best management practices to be incorporated in the SWPPP may include the following:

a. Minimization of vegetation removal;

b. Implementing sediment controls, including silt fences a necessary;

c. Installation of a stabilized construction entrance/exit and stabilization of disturbed areas;

d. Properly containing and disposing of hazardous materials used for construction onsite;

e. Properly covering stockpiled soils to prevent wind erosion;

f. Proper protections and containment for fueling and maintenance of equipment and vehicles; and

g. Appropriate disposal of demolition debris, concrete and soil, and aggressively controlling litter.

h. Cleanup of silt and mud on adjacent street due to construction activity.

i. Checking all lined and unlined ditches after each rainfall.

j. Restore all erosion control devices to working order to the satisfaction of the Kern County Planning and Natural Resources Department and/or Kern County Public Works Department after each rainfall runoff.

k. Install additional erosion control measures as may be required due to uncompleted grading operations or unforeseen circumstances which may arise.

MM 4.10-2: Prior to the issuance of grading permits, the project proponent/operator shall complete a Final Drainage Plan designed to evaluate and minimize potential increases in runoff from the project site. The study shall include, but is not limited to, the following:

a. A numerical stormwater model for the project site that evaluates existing and proposed (with project) drainage conditions during storm events ranging up to the 100-year event.

b. The study shall also consider potential for erosion and sedimentation in light of modeled changes in stormwater flow across the project area that would result from project implementation.

c. Engineering recommendations to be incorporated into the project design and applied within the site boundary. Engineering recommendations will include measures to offset increases in stormwater runoff that would result from the project, as well as implementation of design measures to minimize or manage flow concentration and changes in flow depth or velocity so as to minimize erosion, sedimentation, and flooding onsite or offsite.

d. A specification that the final design of the solar arrays shall include one foot of freeboard clearance above the calculated maximum flood depths for the solar arrays or the finished floor of any permanent structures. Solar panels placed within a 100-year floodplain shall be graded to direct potential flood waters without increasing the water surface elevations more than one foot or as required by Kern County's Floodplain Management Ordinance.

e. The Final Drainage Plan shall be prepared in accordance with the Kern County Grading Code and Kern County Development Standards, and approved by the Kern County Public Works Department prior to the issuance of grading permits.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.9-1, MM 4.10-1**, and **MM 4.10-2**, impacts would be less than significant.

Impact 4.10-2: The project would substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Construction of the project is anticipated to use approximately 1,266 AF of water over the approximately 34-month construction period. Water demand during construction is expected to be the same if the proposed project is constructed during a year with normal precipitation, a year with less than average precipitation, or a multiyear period of less than average precipitation. Project operations is anticipated to use approximately 700 AF over a 35-year duration (20 AFY). Project decommissioning is conservatively estimated to require approximately 1,266 AF of water over a 34-month duration.

Water is anticipated to be obtained from onsite wells or offsite source(s). Pipelines for water conveyance may be constructed above ground and/or below ground. The primary source of water during construction, operations, and decommissioning would be sourced from two proposed wells (or any potential existing onsite wells) located on the project site (see **Figure 4.10-3**, *Groundwater Basins*, for the locations of all known prospective project well sites), within the boundaries of the FVGB. Supplemental water may be sourced from RMR Water Trucks and Rental Equipment, Inc. (RMR) and MPUD. RMR and MPUD have provided will-serve letters for the project, included as **Appendix L2** to this EIR. MPUD has agreed to provide a total of 200 AF during the planned construction period, or approximately 40 percent of the estimated demand. This amount is within MPUD's available surplus in all year types. RMR has agreed to provide 2 acre-feet per day during project construction and operations.

The FVGB covers a surface area of 523 square miles and includes the towns of Mojave and California City. The FVGB is identified as a low-priority basin by DWR. The groundwater storage capacity of the basin has been calculated to be 4,800,000 AF, with limited groundwater level declines over the last part of the 20th century (DWR, 2004). According to the IRWMP, average groundwater recharge has been estimated as 13,800 AFY for the FVGB. As provided in the WSA prepared for the project, the IRWMP includes water

demand estimates which account for the entire FVGB and provide projected values for residential, industrial, and agricultural uses over the period from 2015 to 2060 (the approximate decommissioning date of the Project). To consider drought scenarios, the IRWMP relies on the historical record for precedents of single-year and multiple-year droughts, and uses values based on the actual water supplied for specific drought conditions. The IRWMP data show a variable but significant water supply to the region, including supply to the Fremont Valley area, including imported surface water from AVEK. The IRWMP also indicates that groundwater recharge is expected to result in sustainable groundwater management for most growth scenarios in the area. Further, recent evaluations of water supply availability within the FVGB indicate that MPUD will have an available surplus of water through 2060.

Based on the information presented above, sufficient water is available for construction of the project, especially given the surplus water available from MPUD (795 to 888 AF) during the anticipated construction period. The same is true for decommissioning, given the IRWMP's water demand estimates extending to 2060, as well as a surplus of water available from MPUD. Further, there is ample supply in the basin as a whole, primarily from a significant groundwater resource. This groundwater resource has had some declines in water levels in the past, but more recently has shown signs of stabilization and even rebound in some areas (DWR, 2004; AVIRWMG, 2019). The amount of water stored in the FVGB is relatively large compared to project demand. The FVGB also is a low priority basin and is not experiencing overdraft conditions.

Sufficient water is also available for project operations. The operational water requirement is expected to be approximately 20 AF per year and would be provided from new or existing onsite water wells, or supplemental RMR and MPUD supply, extracting groundwater from the FVGB. In both of these cases, groundwater from the FVGB would be wholly or partially used to supply the project's water demands. Project operations will require a modest yield, considered negligible within the overall context of the groundwater in storage and ongoing annual extractions from this non-adjudicated, low-priority basin that is not in, or projected by DWR to be in, a state of overdraft. Therefore, extractions from either onsite wells or from MPUD for project operations are not expected to affect the FVGB.

The project would result in an increase in impervious surfaces on the site due to project facilities and equipment foundations. Project access roads would not be paved; improved roads would be constructed of compacted earthen or gravel materials that are pervious. Although the PV panels and panel foundations are impervious, stormwater falling on the panels would drip off and infiltrate the surrounding pervious ground surfaces. Therefore, the project would leave the majority of the site's pervious surfaces intact that would continue to absorb stormwater runoff and would thus not result in a significant reduction of groundwater infiltration rates. The project would have a less than significant impact on groundwater supplies related to groundwater recharge at the site.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.10-3: The project would substantially alter the existing drainage patterns of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner than would result in substantial erosion and/or sedimentation on-site or off-site.

Drainage patterns within the project site are muted. The western portion of the project site generally drains south, and the eastern portion of the project site generally drains south before either flowing southeast or southwest around Cactus Queen Mine. The project site is located on the lower end of a broad alluvial slope called a bajada, and is comprised of a network of alluvial fans, active channels, dormant channels, abandoned channels, braided streams, interfluves, and floodplains that emanate from the Tehachapi range, as described in the *Aquatic Resource Delineation Report* included as **Appendix D8** of this EIR (Heritage Environmental Consultants, 2025). The project site is currently generally undeveloped. Maintained and unmaintained dirt roadways and roadway berms are present throughout most of the project site.

The project site has been designed to minimize grading to reduce the possibility for erosion or siltation onsite or offsite. The project would include limited grading such that offsite flow that enters the site would continue to flow through the site much as it does currently. Proposed stormwater basins would also reduce the volume and velocity of stormwater discharging from the site. Stormwater basins would be designed in accordance with Kern County Development Standards for Drainage. These include retention volume design specifications based off of anticipated impervious coverage. The design volume of basins is calculated via the Intermediate Storm Design Discharge (ISDD) five-day storm, sourced from the Kern County Engineering Bulletin 11-02. Proposed basins are permitted after they have been tested to meet equipment manufacturer recommendations, complete operation and maintenance manuals, drainage rate standards and associated drainage tests. However, installation of project facilities discussed in **Chapter 3**, *Project Description*, of this EIR could alter existing onsite drainage patterns and flow paths to some degree and could alter the way that stormwater from upgradient flows across the project site during major storm events. Given the unconsolidated and erosive nature of soils within the project site and its vicinity, these changes could result in increased erosion onsite. Additionally, if the project controls stormwater run on to the site through berms or other engineered channels, increased concentration of flows could cause head-cutting, scour, and other erosional processes. Increases in erosion could result in sedimentation downstream. Finally, new impervious surfaces created by development of the project would generate additional stormwater runoff onsite. This could exacerbate potential erosion and sedimentation onsite or downstream.

As described above, the project would implement a SWPPP per **Mitigation Measure MM 4.10-1** that would require preservation of existing vegetation and topography to the maximum extent feasible, as well as include erosion and sediment control BMPs designed to prevent erosion and sedimentation from occurring during project construction. Compliance with the Kern County Grading Code requires erosion prevention measures be implemented. In addition, large amounts of pervious ground surface would remain during project operation that would continue to absorb the majority of surface flows. Further, **Mitigation Measure MM 4.10-2** would require preparation of a Final Drainage Plan for the project and would evaluate and minimize potential increases in runoff and ensure that the retention basins and other stormwater management features are implemented consistently with existing regulatory requirements. With mitigation, potential impacts would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2** would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2**, impacts would be less than significant.

Impact 4.10-4: The project would substantially alter the existing drainage patterns of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in flooding onsite or offsite.

As discussed under **Impact 4.10-3** above, grading and installation of project facilities could alter existing onsite drainage patterns and flow paths. This could cause localized flooding during major events along the margins of the project site, or within the project site, depending upon how stormwater is managed under final project design. As described above, the proposed project would implement a SWPPP per **Mitigation Measure MM 4.10-1** that would require preservation of existing vegetation and topography to the maximum extent feasible to minimize risk of flooding. During operation of the project, a large amount of pervious ground surface would remain onsite that would continue to absorb the majority of surface flows. Proposed stormwater basins would also reduce the volume and velocity of stormwater discharging from the site. Stormwater basins would be designed in accordance with Kern County Development Standards for Drainage. These include retention volume design specifications based off of anticipated impervious coverage. The design volume of basins is calculated via the ISDD five-day storm, sourced from the Kern County Engineering Bulletin 11-02. Proposed basins are permitted after they have been tested to meet equipment manufacturer recommendations, complete operation and Maintenance manuals, drainage rate standards and associated drainage tests. In addition, **Mitigation Measure MM 4.10-2** would require preparation of a Final Drainage Plan prior to issuance of a grading permit that would detail the design and implementation of any necessary stormwater control features to onsite that would ensure runoff is not substantially increased by the proposed facilities. **Mitigation Measure MM 4.10-2** would also require that grading for the project facilities does not alter the ground surface such that the extent of flooding during flood events is substantially increased. Additionally, as per **Mitigation Measure MM 4.4-18,** from **Section 4.4,** *Biological Resources*, prior to issuance of any grading or building permit, the project proponent/operator shall submit to Kern County a jurisdictional delineation report detailing identified ephemeral drainages within the project boundary. Such a report includes options for how any jurisdictional features might be avoided as well as compensatory measures if needed. Therefore, with implementation of **Mitigation Measures MM 4.4-18, MM 4.10-1** and **MM 4.10-2**, potential impacts related to flooding would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.4-18, MM 4.10-1** and **MM 4.10-2** would be required (see **Section 4.4,** *Biological Resources,* for mitigation measure text).

Level of Significance after Mitigation

With implementation of **Mitigation Measure MM 4.4-18, MM 4.10-1** and **MM 4.10-2**, impacts would be less than significant.

Impact 4.10-5: The project would create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

The project site is located in a remote, rural region with no existing or planned stormwater infrastructure. The project would be required to adhere to Kern County Public Works Department stormwater requirements, which include measures to address stormwater controls on both management of runoff volume and water quality, including controlling erosion and protection of water quality of stormwater runoff. As described above, the proposed project would implement a SWPPP per **Mitigation Measure MM 4.10-1**, which would include BMPs designed to prevent soil erosion and discharge of other construction-related pollutants that could contaminate water quality. **Mitigation Measure MM 4.10-2** would require preparation of a Final Drainage Plan for the project and would evaluate and minimize potential increases in runoff and ensure that the retention basins and other stormwater management features are implemented consistently with existing regulatory requirements. During operation, most of the project site would remain as pervious surfaces, thus allowing infiltration of the runoff produced by new impervious surfaces. Implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2** would minimize potential increases in stormwater flow and other project-induced changes to drainage patterns to less than significant levels.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2** would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2**, impacts would be less than significant.

Impact 4.10-6: The project would place within a 100-year flood hazard area structures that would impede or redirect flood flows.

As noted in Section 4.10.3 (“Regulatory Setting”), above, there is a FEMA Zone A Flood hazard located through the middle of the project site (see **Figure 3-5,** *Floodplain Map*). The project would introduce structures on the project site such as a switchyard, substations and battery energy storage foundations that could impede or redirect flood flows. However, most project facilities consist of solar panels, mounted on steel posts distributed across the project site which would not be expected to impede or redirect flood flows. Up to two permanent, onsite operations and maintenance facilities and/or small satellite offices may be built onsite to facilitate rapid repair of equipment; if these are located within flood hazard areas, they will comply with Kern County Code Article III, § 17.48.270, which specifies that all new construction will be elevated one foot above base flood elevation. As described above, the proposed project would implement a SWPPP per **Mitigation Measure MM 4.10-1** that would require preservation of existing vegetation and topography to the maximum extent feasible to minimize risk of flooding. Implementation of **Mitigation Measure MM 4.10-2** would require preparation of Final Drainage Plan that would design project facilities to have one foot of freeboard clearance above the calculated maximum flood depths for the solar arrays or the finished floor of any permanent structures. Additionally, per **Mitigation Measure MM 4.10-2**, grading for the project would be designed so that water surface elevations during flood events would not be increased by more than one foot.

Mitigation Measures

Implementation of **Mitigation Measure MM 4.10-1** and **MM 4.10-2** would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measure MM 4.10-1** and **MM 4.10-2**, impacts would be less than significant.

Impact 4.10-7: The project would result in a flood hazard, tsunami, or seiche zone, and risk release of pollutants due to project inundation.

As described above, there is a FEMA Zone A Flood hazard onsite located through the middle of the project site (see **Figure 3-5,** *Floodplain Map*). As noted above, implementation of a Final Drainage Plan required by **Mitigation Measure MM 4.10-1** would ensure that storage of hazardous materials would be required to have at least 1 foot of freeboard above the calculated flood depth. As discussed more thoroughly in **Section 4.9**, *Hazards and Hazardous Materials*, the project would not include the use, storage, or disposal of significant quantities of hazardous materials. In addition, the project site is located well inland and far from the ocean or any enclosed or semi-enclosed water body such that there would be no potential threat from tsunami or seiche hazards. Therefore, considering the limited area of the site that is in the flood hazard area, and the limited amount of storage of hazardous materials at the site, a SWPPP per **Mitigation Measure MM 4.10-1** would be required that would require preservation of existing vegetation and topography to the maximum extent feasible to minimize risk of flooding and polluted runoff. With implementation of the Final Drainage Plan required by **Mitigation Measure MM 4.10-2**, which would provide flood protection measures, the potential for release of pollutants due to project inundation would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2** would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2**, impacts would be less than significant.

Impact 4.10-8: The project would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

As noted above, the project site is located within the Lahontan RWQCB and is subject to the applicable requirements of the Basin Plan administered by the RWQCB in accordance with the Porter-Cologne Act. As discussed above, the project would include required BMPs and drainage control requirements that would be consistent with the Basin Plan.

The project site is also located within the FVGB, which is not an adjudicated groundwater basin. However, it is also located within the AVGB, which is an adjudicated basin. The FVGB and the AVGB are currently designated as low-priority basins under SGMA. Thus, the agencies within the region are not subject to SGMA requirements for the groundwater basin at this time and are not required to prepare and implement a sustainable groundwater management plan. Although a GSP is not required, California City, MPUD, and other regional stakeholders have partnered in the development of a Groundwater Management Plan to promote regional groundwater sustainability (Tetra Tech, 2025). Other regional stakeholders have also

prepared an IRWMP for the AVGB to better manage its water resources. The project would not use the AVGB as a water supply source and, thus, there are no anticipated project impacts to the AVGB. Overall, the FVGB has been able to provide sufficient supply to meet demands, and the Groundwater Management Plan targets to define the basin's safe yield by 2027 and to manage the basin such that the 10-year average change in groundwater levels is zero. As discussed above, with the commitment from RMR and MPUD to supply the project with water along with water supplied by two onsite water wells, there is sufficient water available for the proposed project through 2060, including single and multiple dry-water years (Tetra Tech, 2025). The amount of water stored in the FVGB is relatively large compared to the estimated demand associated with the project; therefore, the project would not conflict with the groundwater management of the area and potential impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

Impacts would be less than significant.

4.10.5 Cumulative Setting, Impacts, and Mitigation Measures

As described in **Chapter 3**, *Project Description*, of this EIR, 49 cumulative projects are proposed throughout the Antelope Valley in Kern County and in the desert portion of Kern County outside the Antelope Valley. All projects are located within the Antelope Valley Hydrologic Unit and FVGB.

Similar to the project, all cumulative projects would not discharge to waters of the United States due to their location within the Antelope Valley, which is a closed basin with no outlet to the Pacific Ocean. All projects that would not retain all runoff onsite would be required to prepare a SWPPP, just as with the proposed project under **Mitigation Measure MM 4.10-1**, which would include BMPs designed to prevent the mixture of sediment and other pollutants with stormwater and degrading water quality. Furthermore, the proposed project would implement a Hazardous Materials Business Plan as part of **Mitigation Measure MM 4.9-1** that would require appropriate handling of hazardous materials onsite to ensure they do not come into contact with stormwater and affect water quality. All other projects in the vicinity that would handle hazardous materials would also be required to comply with hazardous material regulations. Therefore, cumulative scenario impacts associated with water quality degradation would not be cumulatively considerable, and the project would not contribute to a cumulative impact on water quality.

With regard to water supply, the proposed project would obtain its water supply from the FVGB. The Basin is not in a state of overdraft and is currently considered a low-priority basin by SGMA. The rating is based on low population density, negative growth projections, low numbers of private and public supply wells, and a lack of irrigated agriculture within the FVGB. As described above, there are sufficient supplies for project construction, operation, and decommissioning through 2060. Groundwater levels in the FVGB appeared to stabilize after the 1980s after declining levels of the 1950s and 1960s and have started recovering since that time as a result of decreased groundwater pumping for agriculture and imported surface water deliveries to urban users being introduced to the groundwater management plan area. Therefore, considering the relatively low demand associated with solar projects in general and the increasing monitoring and management of the basin through development and implementation of a

groundwater management plan, together with the projected surplus for water supplies as determined in the Water Supply Assessment prepared for the project, the proposed project would not combine with the cumulative projects to create an adverse effect to water supplies of the FVGB. The cumulative impact would be less than significant.

With respect to erosion, drainage, and flooding, the project would implement **Mitigation Measures MM 4.10-1** and **MM 4.10-2**, which would minimize direct impacts on erosion, drainage, and flooding. It is anticipated that other cumulative scenario projects would be required to implement similar measures, in order to minimize erosion, drainage, and flooding-related impacts. Additionally, drainage-related impacts from cumulative scenario projects would be primarily localized. Therefore, cumulative scenario impacts on erosion, drainage, and flooding are not anticipated to be cumulatively considerable, and the project would not contribute to a cumulative impact on flooding, erosion, or drainage.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.9-1, MM 4.10-1**, and **MM 4.10-2** would be required (see **Section 4.9**, *Hazards and Hazardous Materials*, for text of **Mitigation Measure MM 4.9-1**).

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.9-1**, **MM 4.10-1**, and **MM 4.10-2**, impacts would be less than significant.

Section 4.11

Land Use and Planning

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Section 4.11
Land Use and Planning

4.11.1 Introduction

This section of the EIR describes the affected environment and regulatory setting of the project for impacts that may affect land use and planning. It also describes the environmental and regulatory setting and discusses the need for mitigation measures where applicable. The information in this section is based primarily, but not exclusively, on a review of the project's consistency with the Kern County General Plan, Soledad Mountain Elephant Butte Specific Plan, and the Kern County Zoning Ordinance.

4.11.2 Environmental Setting

Onsite Land Uses

The project site is generally undeveloped, with multiple abandoned and/or previously occupied structures, as well as associated non-occupied accessory structures, and the Windswept Ranch Petting Zoo. Elevations across the project site range from approximately 2,970 feet above mean sea level in the southeast portion of the site to 3,760 feet above mean sea level in the northwest portion of the

As discussed in **Section 4.2**, *Agriculture and Forestry Resources*, the project site is not designated by the California Department of Conservation (DOC) as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland; the DOC designates the project site as Grazing Land and Nonagricultural or Natural Vegetation. None of the project parcels are subjected to a Williamson Act Land Use contract; however, approximately 5,213 acres of Kern County Agricultural Preserve Number 24 are within the project site. A Petition of Exclusion to remove the project site from the Agricultural Preserve would not be required by Kern County as solar facilities are permitted on lands zoned A (Exclusive Agriculture), as further discussed in Appendix B of this EIR.

As shown on **Figure 3-5**, *Floodplain Map*, a Federal Emergency Management Agency (FEMA)-designated flood zone, Flood Zone "A," extends through the central portion of the project, indicating that this area could flood during a 100-year flood event. 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.

While Kern County produces a significant amount of oil compared to the rest of the country, the project is not located within a known oil production field, nor are there any known active wells located within the project site. One plugged and abandoned oil and gas well is located within the northwest portion of the project site (CalGEM, 2024). Additionally, the majority of the project site is not located within a designated mineral and petroleum resource site within the Kern County General Plan (County of Kern, 2009). The approved and under construction step-up high-voltage substation where minor upgrades are proposed, as well as a small portion of southeastern section of the project site are located within an area designated by the County General Plan as 8.4 Mineral and Petroleum (Minimum 5 Arce Parcel Size); however, there are no active or inactive petroleum extraction facilities within or immediately adjacent to the project site. The project site is not located within the NR (Natural Resources) or PE (Petroleum Extraction) zoned districts.

No portion of the project site, or the 230-kilovolt (kV) generation tie (gen-tie) line, is located within the Mojave Airport Sphere of Influence for the East Kern Airport District, per the Kern County Airport Land Use Compatibility Plan (ALUCP; County of Kern, 2012). The project site is located approximately 20 miles west of Edwards Air Force Base (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. The project does not propose structures in conflict with these height limits.

The project site is located within unincorporated Kern County and the administrative boundaries of the Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan. As shown in **Table 4.11-1**, *Project Site and Surrounding Land Uses,* the project parcels are zoned A (Exclusive Agriculture), A-1 (Limited Agriculture), Estate (E) and Platted Lands (PL), with many also having a Floodplain Combining, Floodplain Secondary Combing, Residential Suburban Combining, and Wind Energy Combining district overlay. The project site would be rezoned to A, with the exception of those portions which are already in the A Zone District. 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 Conditional Use Permit (CUP).

TABLE 4.11-1: PROJECT SITE AND SURROUNDING LAND USES

Location	Existing Land Use	Existing Map Code Designation[a]	Existing Zone Classification[b]
Project Site	Generally undeveloped/ vacant land, various named and unnamed dirt roads, wind turbines and transmission lines, possible grazing.	8.3 8.3/2.5, 8.4, 8.4/2.4, 8.5/2.5, 4.1 (Low Density Residential)	A, A-1, PL, FP, FPS, RS, WE
North	Vacant land, wind and solar power facilities, Windhub Substation, CalPortland Mojave Cement Plant, Union Pacific Railroad	1.1, 7.3, 8.3, 8.4, 4.1 (Low Density Residential)	A, A-1, M-3, PL, R-2, WE, FP
East	Vacant land, residential properties	4.3, 8.3, 4.1 (Low Density Residential)	A, A-1, E, PL
South	Vacant land, Catalina Solar Project, Big Beau Solar Project, Holiday Rock Quarry,	1.1, 8.2, 8.3, 8.4	A, A-1, E, FP, FPS, RS, MH, WE

Location	Existing Land Use	Existing Map Code Designation[a]	Existing Zone Classification[b]
	residential properties, possible grazing.		
West	Vacant land, residential properties, BLM land, possible grazing.	1.1, 8.2, 8.3, 8.4	A, E, OS, PL, RS, WE

[a] Kern County General Plan (KCGP) and Specific Plan (SP) Map Code Designation:
1.1 (State and Federal Land)
2.4 (Steep Slope)
2.5 (Flood Hazard)
4.1 (Accepted County Plan Areas)
4.3 (Specific Plan Required)
7.3 (Heavy Industrial)
8.2 (Resource Agriculture)
8.3 (Extensive Agriculture)
8.4 (Mineral and Petroleum, Min 5 Acre Parcel Size)
8.5 (Resource Management, Min. 20 Acre Parcel Size)

[b] Kern County Zoning District:
A (Exclusive Agriculture); A-1 (Limited Agriculture); E (Estate); FP (Floodplain Combining); FPS (Floodplain Secondary Combining); M-3 (Heavy Industrial); MH (Mobile Home Combining); OS (Open Space); PL (Platted Lands); R-2 (Medium Density Residential); RS (Residential Suburban Combining); WE (Wind Energy Combining)

Surrounding Land Uses

As described in **Table 4.11-1**, *Project Site and Surrounding Land Uses*, surrounding land uses are composed primarily of generally undeveloped land, rural residential development, livestock grazing, light and heavy industrial and mining uses, and renewable energy development. Existing development in the project vicinity includes rural access roads, scattered rural residences, light and heavy industrial mining uses, and large-scale renewable energy facilities. The project site is approximately 6 miles southwest of the unincorporated community of Mojave, approximately 8 miles northwest of the unincorporated community of Rosamund, 9 miles southeast of the City of Tehachapi, and approximately 20 miles west of Edwards AFB. Portions of the project are adjacent to and on both sides of the Tehachapi Willow Springs Road and the Los Angeles Department of Water and Power (LADWP) aqueduct.

4.11.3 Regulatory Setting

Federal

There are no applicable federal regulations for this issue area.

State

There are no applicable State regulations for this issue area.

Local

Land use and planning decisions within and adjacent to the project site are guided and regulated by the Kern County General Plan, Soledad Mountain Elephant Butte Specific Plan, and Kern County Zoning Ordinance. The Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan contain goals, objectives, and policies and provides an overall foundation for establishing land use patterns. For this land use impact analysis, this section lists all relevant goals, objectives, policies, and implementation measures related to the project. The Zoning Ordinance contains regulations through which the General Plan's provisions are implemented. The most relevant regulations pertaining to solar energy development are presented below.

Kern County General Plan

The Kern County General Plan is a policy document designed to provide long-range guidance for planning decisions that affect the growth and resources of unincorporated Kern County. Included in the Kern County General Plan is the Land Use, Open Space, and Conservation Element, which provides for a variety of land uses for future economic growth while also assuring the conservation of Kern County's agricultural, natural, and resource attributes. Within the Land Use, Open Space and Conservation Element, policy areas are separated by overlay designations, known as "Map Codes", which are identified on the Kern County General Plan maps for each section of the County and include the following categories: (1) non-jurisdictional land (State and federal); (2) environmental constraints overlay; (3) public facilities; (4) non-jurisdictional land (accepted county plan areas, rural communities and specific plan required); (5) residential; (6) commercial; (7) industrial; and (8) resource. The project site has the following Kern County General Plan land use designations:

- Non-Jurisdictional Land
  - 1.1 (State and Federal Land) - Applied to all property under the ownership and control of the various State and federal agencies operating in Kern County (military, U.S. Forest Service, Bureau of Land Management, Department of Energy, etc.).
- Physical and Environmental Constraint
  - 2.4 (Steep Slope) - Land with an average slope of 30 percent or steeper.
  - 2.5 (Flood Hazard) - Special Flood Hazard Areas (Zone A), as identified on the Flood Insurance Rate Maps (FIRM) of the Federal Emergency Management Agency (FEMA) and supplemented by floodplain delineating maps that have been approved by the Kern County Engineering and Survey Services Department.
- Special Treatment Areas
  - 4.1 (Accepted County Plan Areas) - A designation of areas for which specific land use plans have already been prepared and approved. These plans are accepted and incorporated by this reference and the respective land use map associated with each such plan is hereby adopted as the General Plan diagram for each such area. Each plan area is indicated on the General Plan map. See Appendix A of the Kern County General Plan for details of accepted County plans.
  - 4.3 (Specific Plan Required) - A designation used to identify settlements in the County that have individual character which, in past plans, have been broadly merged with the surrounding countryside. These settlements are recognized as unique communities; each with its own

character, special advantages, and problems which should more appropriately be addressed at a specific plan level of detail. See Appendix B of the Kern County General Plan for details and maps of interim rural community plans.

- Industrial
  - 7.3 (Heavy Industrial) - Large-scale industrial activities that are incompatible with other land uses because of potential severe environmental impacts and/or high employee densities. Uses shall include, but are not limited to, the following: Manufacturing, assembling and processing activities, transportation facilities, material and equipment storage, sawmills, foundries, refineries, and petroleum product storage.
- Resource
  - 8.2 (Resource Agriculture) - Areas of mixed natural resource characteristics, such as rangeland, woodland, and wildlife habitat which occur within an established County water district. Minimum parcel size is 20 acres gross, except lands subject to a Williamson Act Contract/Farmland Security Zone Contract, in which case the minimum parcel size shall be 80 acres gross. Uses shall include, but are not limited to, the following: Livestock grazing; dry land farming; ranching facilities; wildlife and botanical preserves; and timber harvesting; one single-family dwelling unit; irrigated croplands; water storage or groundwater recharge areas; mineral; aggregate; and petroleum exploration and extraction; recreational activities, such as gun clubs and guest ranches; and land within development areas subject to significant physical constraints.
  - 8.3 (Extensive Agriculture) - Agricultural uses involving large amounts of land with relatively low value-per-acre yields, such as livestock grazing, dry land farming, and woodlands. Minimum parcel size is 20 acres gross, except lands subject to a Williamson Act Contract/ Farmland Security Zone Contract, in which case the minimum parcel size shall be 80 acres gross. Uses shall include, but are not limited to, the following: Livestock grazing; dry land farming; ranching facilities; wildlife and botanical preserves; and timber harvesting; one single-family dwelling unit; irrigated croplands; water storage or groundwater recharge areas; mineral; aggregate; and petroleum exploration and extraction; and recreational activities, such as gun clubs and guest ranches; and land within development areas subject to significant physical constraints.
  - 8.4 (Mineral and Petroleum, Min 5 Acre Parcel Size) - Areas which contain producing or potentially productive petroleum fields, natural gas, and geothermal resources, and mineral deposits of regional and Statewide significance. Uses are limited to activities directly associated with the resource extraction. Minimum parcel size is five acres gross. Uses shall include, but are not limited to, the following: Mineral and petroleum exploration and extraction, including aggregate extraction; extensive and intensive agriculture; mineral and petroleum processing (excluding petroleum refining); natural gas and geothermal resources; pipelines; power transmission facilities; communication facilities; equipment storage yards; and borrow pits.
  - 8.5 (Resource Management, Min. 20 Acre Parcel Size) - Primarily open space lands containing important resource values, such as wildlife habitat, scenic values, or watershed recharge areas. These areas may be characterized by physical constraints, or may constitute an important watershed recharge area or wildlife habitat or may have value as a buffer between resource areas and urban areas. Other lands with this resource attribute are undeveloped, non-urban areas that do not warrant additional planning within the foreseeable future because of current population (or anticipated increase), marginal physical development, or no subdivision activity. Minimum parcel size is 20 acres gross, except lands subject to a Williamson Act

Contract/Farmland Security Zone Contract, in which case the minimum parcel size shall be 80 acres gross. Uses shall include, but are not limited to, the following: Recreational activities; livestock grazing; dry land farming; ranching facilities; wildlife and botanical preserves; and timber harvesting; one single-family dwelling unit; irrigated croplands; water storage or groundwater recharge areas; mineral; aggregate; petroleum exploration and extraction; open space and recreational uses; one single-family dwelling on legal residentially zoned lots on effective date of this General Plan; land within development areas subject to significant physical constraints; State and federal lands which have been converted to private ownership.

The project site is located within unincorporated Kern County and the administrative boundaries of the Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan. The existing General and Specific Plan designations are shown in **Figure 3-6,** *Existing General Plan Map*, and **Figure 4.11-1**, *Project Site Existing General and Specific Plan Designations*, and listed in **Table 3-3**, *Assessor Parcel Numbers, Existing and Proposed Land Use Zoning, and Acreages*. In addition to the Land Use, Open Space, and Conservation Element, the Kern County General Plan includes other elements related to circulation, noise, and energy. Each element establishes goals, policies, and implementation measures that guide planning decisions in unincorporated Kern County. The goals, policies, and implementation measures relevant to the project are listed below.

Chapter 1. Land Use, Open Space, and Conservation Element

1.3 Physical and Environmental Constraints

Goal

Goal 1: To strive to prevent loss of life, reduce personal injuries, and property damage, minimize economic and social diseconomies resulting from natural disaster by directing development to areas which are not hazardous.

Policies

Policy 1: Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained ((Map Code 2.1 (Seismic Hazard), Map Code 2.2 (Landslide), Map Code 2.3 (Shallow Groundwater), Map Code 2.5 (Flood Hazard), Map Codes from 2.6 – 2.9, Map Code 2.10 (Nearby Waste Facility), and Map Code 2.11 (Burn Dump Hazard) to support such development unless appropriate studies establish that such development will not result in unmitigated significant impact.

Policy 8: Encourage the preservation of the floodplain's flow conveyance capacity, especially in floodways, to be open space/passive recreation areas throughout the County.

Policy 9: Construction of structures that impede water flow in a primary floodplain will be discouraged.

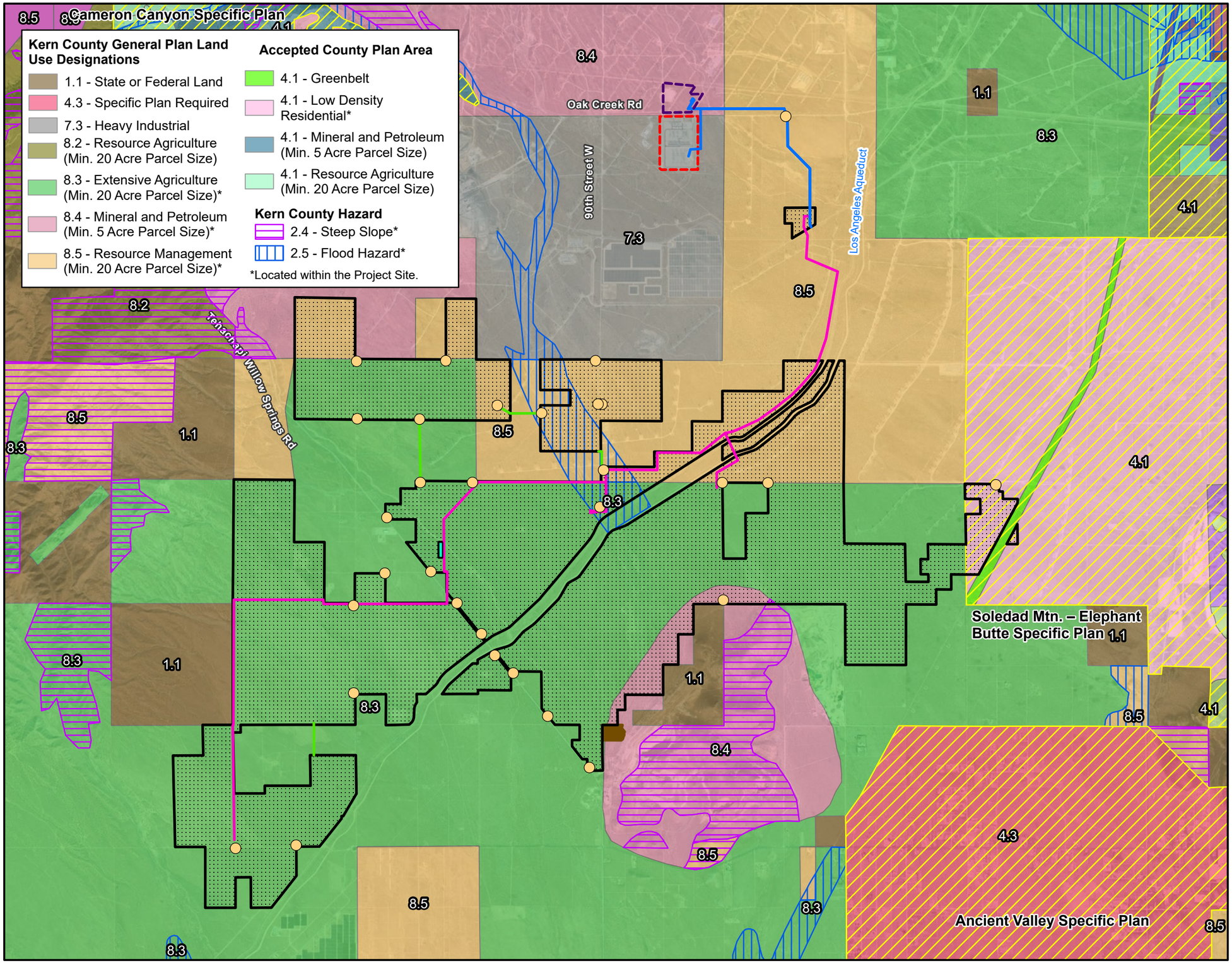
Policy 10: The County will allow lands which are within flood hazard areas, other than primary floodplains, to be developed in accordance with the General Plan and Floodplain Management Ordinance, if mitigation measures are incorporated so as to ensure that the proposed development will not be hazardous within the requirements of the Safety Element (Chapter 4) of this General Plan.

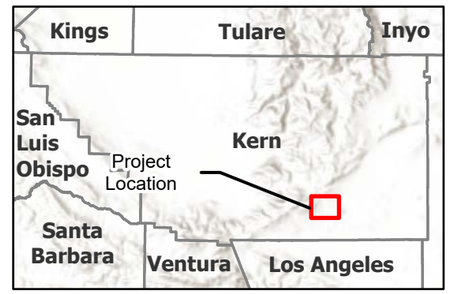
Policy 11: Protect and maintain watershed integrity within Kern County.

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.11-1. Project Site Existing General and Specific Plan Designations





- Windhub High-voltage Substation (Existing)
- SCE Property (500kv)
- Specific Plan

Proposed Project Features

- Project Site
- Temporary Offsite Laydown Area
- Medium-voltage/Transmission/ Access Easements
- Gen-tie Line (New)
- Access Points

Other Applicant and/or Affiliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

*Already approved under separate projects.

N

0 0.25 0.5 1 Miles

Scale is 1:50,000 when printed at 11"x17"

Not for Construction

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Implementation Measures

Measure D: Review and revise the County's current Grading Ordinance as needed to ensure that its standards minimize permitted topographic alteration and soil erosion while maintaining soil stability.

Measure F: The County will comply with the Colbey-Alquist Floodplain Management Act in regulating land use within designated floodways.

Measure H: Development within areas subject to flooding, as defined by the appropriate agency, will require necessary flood evaluations and studies.

Measure J: Compliance with the Floodplain Management Ordinance prior to grading or improvement of land for development or the construction, expansion, conversion or substantial improvements of a structure is required.

Measure N: Applicants for new discretionary development should consult with the appropriate Resource Conservation District and the California Regional Water Quality Control Board regarding soil disturbances issues.

1.4 Public Facilities and Services

Goals

Goal 1: Kern County residents and businesses should receive adequate and cost effective public services and facilities. The County will compare new urban development proposals and land use changes to the required public services and facilities needed for the proposed project.

Goal 5: Ensure that adequate supplies of quality (appropriate for intended use) water are available to residential, industrial, and agricultural users within Kern County.

Goal 7: Facilitate the provision of reliable and cost effective utility services to residents of Kern County.

Policies

Policy 1: New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.

Policy 3: Individual projects will provide availability of public utility service as per approved guidelines of the serving utility.

Policy 6: The County will ensure adequate fire protection to all Kern County residents.

Policy 7: The County will ensure adequate police protection to all Kern County residents.

Policy 15: Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the CEQA documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development.

Implementation Measures

Measure B: Determine local costs of County facility and infrastructure improvements and expansion which are necessitated by new development of any type and prepare a schedule of charges to be levied on the developer at the site of approval of the Final Map. This implementation can be effectuated by the formation of a County work group.

Measure C: Project developers shall coordinate with the local utility service providers to supply adequate public utility services.

Measure D: Involve utility providers in the land use and zoning review process.

Measure L: Prior to the approval of development projects, the County shall determine the need for fire protection services. New development in the County shall not be approved unless adequate fire protection facilities and resources can be provided.

1.9 Resources

Goals

Goal 1: To contain new development within an area large enough to meet generous projections of foreseeable need, but in locations which will not impair the economic strength derived from the petroleum, agriculture, rangeland, or mineral resources, or diminish the other amenities which exist in the County.

Goal 2: Protect areas of important mineral, petroleum, and agricultural resource potential for future use.

Goal 3: To ensure that the development of resource areas minimizes effects of neighboring resource lands.

Goal 4: Encourage safe and orderly energy development within the County, including research and demonstration projects, and to become actively involved in the decision and actions of other agencies as they affect energy development in Kern County.

Goal 5: Conserve prime agricultural lands from premature conversion.

Goal 6: Encourage alternative sources of energy, such as solar and wind energy, while protecting the environment.

Policies

Policy 1: Appropriate resource uses of all types will be encouraged as desirable and consistent interim uses in undeveloped portions of the County regardless of General Plan designation.

Policy 7: Areas designated for agricultural use, which include Class I and II and other enhanced agricultural soils with surface delivery water systems, should be protected from incompatible residential, commercial, and industrial subdivision and development activities.

Policy 11: Minimize the alteration of natural drainage areas. Require development plans to include necessary mitigation to stabilize runoff and silt deposition through utilization of grading and flood protection ordinances.

Policy 12: Areas identified by the Natural Resources Conservation Service (NRCS) (formerly Soil Conservation Service) as having high range-site value should be conserved for Extensive Agriculture uses or as Resource Reserve, if located within a County water district.

Policy 14: Emphasize conservation and development of identified mineral deposits.

Policy 17: Lands classified as MRZ-2, as designated by the State of California, should be protected from encroachment of incompatible land uses.

Implementation Measures

Measure F: Prime agricultural lands, according to the Kern County Interim-Important Farmland 2000 map produced by the Department of Conservation, which have Class I or II soils and a surface delivery water system shall be conserved through the use of agricultural zoning with minimum parcel size provisions.

Measure H: Use the California Geological Survey's latest maps to locate mineral deposits until the regional and statewide importance mineral deposits map has been completed, as required by the Surface Mining and Reclamation Act.

1.10 General Provisions

Goal

Goal 1: Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving valuable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

1.10.1 Public Services and Facilities

Policies

Policy 9: New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure which it generates and upon which it is dependent.

Policy 15: Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the California Environmental Quality Act (CEQA) documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development.

Policy 16: The developer shall assume full responsibility for costs incurred in service extension or improvements that are required to serve the project. Cost sharing or other forms of recovery shall be available when the service extensions or improvements have a specific quantifiable regional significance.

Implementation Measures

Measure C: Project developers shall coordinate with the local utility service providers to supply adequate public utility services.

Measure D: Involve utility providers in the land use and zoning review process.

Measure E: All new discretionary development projects shall be subject to the Standards for Sewage, Water Supply and Preservation of Environmental Health Rules and Regulations administered by the County's Public Health Services Department. Those projects having percolation rates of less than five minutes per inch shall provide a preliminary soils study and site specific documentation that characterize the quality of upper groundwater in the alternative septic systems would adversely impact groundwater quality. If the evaluation indicated that the uppermost groundwater at the proposed site already exceeds groundwater quality objectives of the Regional Water Quality Control Board or would if the alternative septic system is installed, the applicant would be required to supply sewage collection, treatment, and disposal facilities.

1.10.2 Air Quality

Policies

Policy 18: The air quality implications of new discretionary land use proposals shall be considered in approval of major developments. Special emphasis will be placed on minimizing air quality degradation in the desert to enable effective military operations and in the valley region to meet attainment goals.

Policy 19: In considering discretionary projects for which an Environmental Impact Report must be prepared pursuant to the California Environmental Quality Act, the appropriate decision making body, as part of its deliberations, will ensure that:

(1) All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and

(2) The benefits of the proposed project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to the extent that such a statement is required pursuant to the California Environmental Quality Act.

Policy 20: The County shall include fugitive dust control measures as a requirement for discretionary projects and as required by the adopted rules and regulations of the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District on ministerial permits.

Policy 21: The County shall support air districts efforts to reduce PM10 and PM2.5 emissions.

Policy 22: Kern County shall continue to work with the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District toward air quality attainment with federal, state, and local standards.

Implementation Measures

Measure F: All discretionary permits shall be referred to the appropriate air district for review and comment.

Measure G: Discretionary development projects involving the use of tractor-trailer rigs shall incorporate diesel exhaust reduction strategies including, but not limited to:

a. Minimizing idling time.

b. Electrical overnight plug-ins.

Measure H: Discretionary projects may use one or more of the following to reduce air quality effects:

a. Pave dirt roads within the development.

b. Pave outside storage areas.

c. Provide additional low Volatile Organic Compounds (VOC) producing trees on landscape plans.

d. Use of alternative fuel fleet vehicles or hybrid vehicles.

e. Use of emission control devices on diesel equipment.

f. Develop residential neighborhoods without fireplaces or with the use of Environmental Protection Agency certified, low emission natural gas fireplaces.

g. Provide bicycle lockers and shower facilities on site.

h. Increasing the amount of landscaping beyond what is required in the Zoning Ordinance (Chapter 19.86).

i. The use and development of park and ride facilities in outlying areas.

j. Other strategies that may be recommended by the local Air Pollution Control Districts.

Measure J: The County should include PM_{10} control measures as conditions of approval for subdivision maps, site plans, and grading permits.

1.10.3 Archaeological, Paleontological, Cultural, and Historical Preservation

Policy

Policy 25: The County will promote the preservation of cultural and historic resources which provide ties with the past and constitute a heritage value to residents and visitors.

Implementation Measures

Measure K: Coordinate with the California State University, Bakersfield's Archaeology Inventory Center.

Measure L: The County shall address archaeological and historical resources for discretionary projects in accordance with CEQA.

Measure M: In areas of known paleontological resources, the County should address the preservation of these resources where feasible.

Measure N: The County shall develop a list of Native American organizations and individuals who desire to be notified of proposed discretionary projects. This notification will be accomplished through the established procedures for discretionary projects and CEQA documents.

Measure O: On a project-specific basis, the County Planning Department shall evaluate the necessity for the involvement of a qualified Native American monitor for grading or other construction activities on discretionary projects that are subject to a CEQA document.

1.10.5 Threatened and Endangered Species

Policies

Policy 27: Threatened or endangered plant and wildlife species should be protected in accordance with State and federal laws.

Policy 28: County should work closely with State and federal agencies to assure that discretionary projects avoid or minimize impacts to fish, wildlife, and botanical resources.

Policy 29: The County will seek cooperative efforts with local, State, and federal agencies to protect listed threatened and endangered plant and wildlife species through the use of conservation plans and other methods promoting management and conservation of habitat lands.

Policy 31: Under the provisions of the California Environmental Quality Act, the County, as lead agency, will solicit comments from the California Department of Fish and Game and the U.S. Fish and Wildlife Service when an environmental document is prepared.

Policy 32: Riparian areas will be managed in accordance with the USACE and the CDFW rules and regulations to enhance the drainage, flood control, biological, recreational, and other beneficial uses while acknowledging existing land use patterns.

Implementation Measures

Measure Q: Discretionary projects shall consider effects to biological resources as required by CEQA.

Measure R: Consult and consider the comments from responsible and trustee wildlife agencies when reviewing a discretionary project subject to CEQA.

1.10.6 Surface Water and Groundwater

Policies

Policy 34: Ensure that water quality standards are met for existing users and future development.

Policy 41: Review development proposals to ensure adequate water is available to accommodate projected growth.

Policy 43: Drainage shall conform to the Kern County Development Standards and the Grading Ordinance.

Policy 44: Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of impervious surfaces as required by the California Environmental Quality Act (CEQA), to prevent the degradation of the watershed to the extent practical.

Implementation Measure

Measure Y: Promote efficient water use by utilizing measures such as:

(i) Requiring water-conserving design and equipment in new construction;

(ii) Encouraging water-conserving landscaping and irrigation methods; and

(iii) Encouraging the retrofitting of existing development with water conserving devices.

1.10.7 Light and Glare

Policies

Policy 47: Ensure that light and glare from discretionary new development projects are minimized in rural as well as urban areas.

Policy 48: Encourage the use of low-glare lighting to minimize nighttime glare effects on neighboring properties.

Implementation Measure

Measure AA: The County shall utilize CEQA Guidelines and the provisions of the Zoning Ordinance to minimize the impacts of light and glare on adjacent properties and in rural undeveloped areas.

Chapter 2. Circulation Element

2.1 Introduction

Goals

Goal 4: Kern County will plan for a reduction of environmental effects without accepting a lower quality of life in the process.

Goal 5: Maintain a minimum [level of service] LOS D for all roads throughout the County.

2.3.3 Highway Plan

Goal

Goal 5: Maintain a minimum Level of Service (LOS) D.

Policies

Policy 1: Development of roads within the County shall be in accordance with the Circulation Diagram Map. The charted roads are usually on section and mid-section lines. This is because the road center line can be determined by an existing survey.

Policy 2: This plan requires, as a minimum, construction of local road widths in areas where the traffic model estimates little growth through and beyond 2010. Where the Kern County Planning and Natural Resources Department's growth estimates indicate more than a local road is required, expanded facilities shall be provided. The timing and scope of required facilities should be set up and implemented through the Kern County Land Division Ordinance. However, the County shall routinely protect all surveyed section lines in the Valley and Desert regions for arterial right-of-way. The County shall routinely protect all

midsection lines for collector highways in the same regions. The only possible exceptions shall be where the County adopts special studies and where Map Code 4.1 (Accepted County Plan) areas occur. In the Mountain Region where terrain does not allow construction on surveyed section and midsection lines, right-of-way width shall be the size shown on the diagram map. No surveyed section and midsection "grid" will comprehensively apply to the Mountain Region.

Policy 3: This plan's road-width standards are listed below. These standards do not include state highway widths that would require additional right-of-way for rail transit, bike lanes, and other modes of transportation. Kern County shall consider these modifications on a case-by-case basis.

- Expressway [Four Travel Lanes] Minimum 110-foot right-of-way;
- Arterial [Major Highway] Minimum 110-foot right-of-way;
- Collector [Secondary Highway] Minimum 90-foot right-of-way;
- Commercial-Industrial Street Minimum 60-foot right-of-way; and
- Local Street [Select Local Road] Minimum 60-foot right-of-way.

Implementation Measure

Measure A: The Planning Department shall carry out the road network Policies by using the Kern County Land Division Ordinance and Zoning Ordinance, which implements the Kern County Development Standards that includes road standards related to urban and rural planning requirements. These ordinances also regulate access points. Planning Department can help developers and property owners in identifying where planned circulation is to occur.

Measure D: Elimination of non-strategic section and mid-section alignment crossings and intersections that intersect existing or planned freeways, expressways, railroads, runways and waterways must be reviewed and approved in conjunction with project adoption on an individual basis.

2.3.4 Future Growth

Goal

Goal 1: To provide ample flexibility in this plan to allow for growth beyond the 20-year planning horizon.

Policies

Policy 2: The County should monitor development applications as they relate to traffic estimates developed for this plan. Mitigation is required if development causes affected roadways to fall below Level of Service (LOS) D. Utilization of the CEQA process would help identify alternatives to or mitigation for such developments. Mitigation could involve amending the Land Use, Open Space and Conservation Element to establish jobs/housing balance if projected trips in any traffic zone exceed trips identified for this Circulation Element. Mitigation could involve exactions to build offsite transportation facilities. These enhancements would reduce traffic congestion to an acceptable level.

Policy 4: As a condition of private development approval, developers shall build roads needed to access the existing road network. Developers shall build these roads to County standards

unless improvements along State routes are necessary then roads shall be built to Caltrans standards. Developers shall locate these roads (width to be determined by the Circulation Plan) along centerlines shown on the circulation diagram map unless otherwise authorized by an approved Specific Plan Line. Developers may build local roads along lines other than those on the circulation diagram map. Developers would negotiate necessary easements to allow this.

Policy 5: When there is a legal lot of record, improvement of access to County, city or State roads will require funding by sources other than the County. Funding could be by starting a local benefit assessment district or, depending on the size of a project, direct development impact fees.

Policy 6: The County may accept a developer's road into the county's maintained road system. This is at Kern County's discretion. Acceptance would occur after the developer follows the above requirements. Roads are included in the County road maintenance system through approval by the Board of Supervisors.

Implementation Measure

Measure C: Project development shall comply with the requirements of the Kern County Zoning Ordinance, Land Division Ordinance, and Development Standards.

2.3.6 Vacation of Existing or Recorded Future Streets, Highways, or Public Easements

Goal

Goal 1: Provide a means for guiding decisions on vacating public roads.

Policies

Policy 1: A road vacation influencing the construction or operation of expressway, an arterials or collector highway may occur with, or after, amending this Element. Kern County will not vacate any public expressway, arterial or collector highway right-of-way without amendment to this Element. The County will need to amend the right-of way status to local or commercial-industrial streets.

Policy 2: A study, prepared at the applicant's expense, shall accompany the road vacation application. The study should provide information that will aid in finding the importance of the entire length of the right-of-way. The study would include a review of existing and proposed land uses and localized traffic modeling. This will help Kern County decide what corresponding changes are needed to the Land Use, Open Space and Conservation Element, or affected specific plan. This also will help Kern County decide if additional public road services or other traffic management are required elsewhere.

Policy 3: If the road vacation applicant is a private entity, all costs for the public hearing shall be borne by the applicant. Also, costs associated with providing any necessary additional public road services or other traffic management caused by the road vacation shall be paid by the applicant.

Policy 4: The vacation of a road shall not take away legal access to adjacent properties or "land-lock" any legal lot or parcel of record. Legal access shall be determined through a report submitted with the application for road vacation.

Policy 5: If Kern County determines that the right-of-way is not needed for circulation in the general area, a road vacation may be authorized. An acceptable project shall be determined through a report submitted with the road vacation application and in keeping with traffic modeling parameters of this Plan.

Policy 6: A road vacation may be authorized if physical conditions such as natural, or manmade topography prevent rational extension of the facility. Physical conditions affecting roadways shall be determined through a report submitted with the road vacation application.

Policy 7: A road vacation shall only affect public, recorded rights-of-way or public service easements. The potential effects of a road vacation upon rights-of-way and easements are to be determined by a report submitted with the road vacation application. A vacation of private access or private service easement is not under County jurisdiction. Kern County considers these matters "civil" actions. These civil actions should be acted upon accordingly.

Policy 8: A road vacation may be authorized if the right-of-way is not improved or used for its original purpose. Existing improvements and facility use shall be determined by a report submitted with the road vacation application.

Policy 9: A road vacation may be authorized to remove excess right-of-way caused by relocation, or at the beginning of a general plan amendment proceeding. Excess right-of-way shall be determined through a report submitted with the road vacation application.

Policy 10: A road vacation may be approved if there is an agreement to close a public street. A road vacation may be approved with acknowledgment of an impassable street. A road vacation may be approved with a land division map over the area of vacation if the project has comparable methods of vehicular access.

Policy 11: A road vacation procedure may be used for considering public service easement or utility service easement abandonments. The procedure is the same as any public right-of-way vacation.

Policy 12: A vacation of improved road right-of-way, or public service easement, should not occur until the lead agency makes findings. One important finding is the land is no longer needed for public use. A vacation of improved road right-of-way, or public service easement, should not occur until the right-of-way is superseded by relocation, and improved to acceptable Kern County Development standards. The Board of Supervisors shall have accepted the replacement facility into the maintained road system.

Policy 13: A general vacation proceeding (consistent with State of California Streets and Highway Code) will require a public hearing when the vacation affects existing in place facilities or is a project caused by relocating right-of-way.

Policy 14: A summary vacation shall be consistent with State of California Streets and Highway Code. A summary vacation may be used when the right-of-way does not exist, is unused, or moved. A summary vacation may be used where right-of-way is impassable, unnecessary for present or prospective public use, or is excess or public service easement land.

2.3.10. Congestion Management Programs

Goals

Goal 1: To satisfy the trip reduction and travel demand requirements of the Kern COG's CMP.

Goal 2: To coordinate congestion management and air quality requirements and avoid multiple and conflicting requirements.

Policies

Policy 1: Pursuant to California Government Code 65089(a), Kern County has designated the Kern COG as the County's Congestion Management Agency (CMA).

Policy 2: The CMA is responsible for developing, adopting, and annually updating a CMP. The CMP is to be developed in consultation with, and with the cooperation of, the regional transportation agency (also the Kern COG), regional transportation providers, local governments, Caltrans, and the air pollution control district.

Implementation Measures

Measure A: The Kern COG should request the proper consultation from County of Kern to develop and update the proper congestion management program.

Measure B: The elements within the Kern Congestion Management Program are to be implemented by each incorporated city and the County of Kern. Specifically, the land use analysis program, including the preparation and adoption of deficiency plans is required. Additionally, the adoption of trip reduction and travel demand strategies are required in the Congestion Management Program.

2.5.1 Trucks and Highways

The Kern County road network handles a high ratio of heavy truck traffic. State highways carry most of this traffic. Most of the trucks are interstate carriers. As such, interstate trucking is not under the direct control of County officials. In as much as this traffic affects County residents and taxpayers, they need actions to guarantee State highways in Kern County receive a fair share of California’s transportation investment.

Goals

Goal 1: Provide for Kern County's heavy truck transportation in the safest way possible.

Goal 2: Reduce potential overweight trucks.

Goal 3: Use State Highway System improvements to prevent truck traffic in neighborhoods.

Policies

Policy 1: Caltrans should be made aware of the heavy truck activity on Kern County's roads.

Policy 2: Start a program that monitors truck traffic operations.

Policy 3: Promote a monitoring program of truck lane pavement condition.

2.5.4 Transportation of Hazardous Materials

Goal

Goal 1: Reduce risk to public health from transportation of hazardous materials.

Policy

Policy 1: The commercial transportation of hazardous material, identification and designation of appropriate shipping routes will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.

Policy 2: Kern County and affected cities should reduce use of County-maintained roads and city-maintained streets for transportation of hazardous materials.

Implementation Measure

Measure A: Roads and highways utilized for commercial shipping of hazardous waste destined for disposal will be designated as such pursuant to Vehicle Code Sections 31303 et seq. Permit applications shall identify commercial shipping routes they propose to utilize for particular waste streams.

Chapter 3. Noise Element

3.3 Sensitive Noise Areas

Goals

Goal 1: Ensure that residents of Kern County are protected from excessive noise and that moderate levels of noise are maintained.

Goal 2: Protect the economic base of Kern County by preventing the encroachment of incompatible land uses near known noise producing roadways, industries, railroads, airports, oil and gas extraction, and other sources.

Policies

Policy 1: Review discretionary industrial, commercial, or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses.

Policy 3: Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise

Policy 4: Utilize good land use planning principles to reduce conflicts related to noise emissions.

Policy 7: Employ the best available methods of noise control.

Implementation Measures

Measure A: Utilize zoning regulations to assist in achieving noise-compatible land use patterns.

Measure C: Review discretionary development plans, programs and proposals, including those initiated by both the public and private sectors, to ascertain and ensure their conformance to the policies outlined in this element.

Measure E: Review discretionary development plans to ensure compatibility with adopted Airport Land Use Compatibility Plans.

Measure F: Require proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB L_{dn} and interior noise levels in excess of 45 dB L_{dn}.

Measure G: At the time of any discretionary approval, such as a request for a General Plan Amendment, zone change or subdivision, the developer may be required to submit an acoustical report indicating the means by which the developer proposes to comply with the noise standards. The acoustical report shall:

a) Be the responsibility of the applicant.

b) Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.

c) Be subject to the review and approval of the Kern County Planning Department and the Environmental Health Services Department. All recommendations therein shall be complied with prior to final approval of the project.

Measure I: Noise analyses shall include recommended mitigation, if required, and shall:

a) Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.

b) Include estimated noise levels, in terms of CNEL, for existing and projected future (10 – 20 years hence) conditions, with a comparison made to the adopted policies of the Noise Element.

c) Include recommendations for appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element.

d) Include estimates of noise exposure after the prescribed mitigation measures have been implemented. If compliance with the adopted standards and policies of the Noise Element will not be achieved, a rationale for acceptance of the project must be provided.

Measure J: Develop implementation procedures to ensure that requirements imposed pursuant to the findings of an acoustical analysis are conducted as part of the project permitting process.

Chapter 4. Safety Element

4.1 Introduction

Goal

Goal 1: Minimize injuries and loss of life and reduce property damage.

4.2 General Policies and Implementation Measures, Which Apply to More Than One Safety Constraint

Implementation Measures

Measure F: The adopted multi-jurisdictional Kern County, California Multi-Hazard Mitigation Plan, as approved by the Federal Emergency Management Agency (FEMA), shall be used as a source document for preparation of environmental documents pursuant to the California Environmental Quality Act (CEQA), evaluation of project proposals, formulation of potential mitigation, and identification of specific actions that could, if implemented, mitigate impacts from future disasters and other threats to public safety.

4.3 Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure

Policy

Policy 1: The County shall require development for human occupancy to be placed in a location away from an active earthquake fault in order to minimize safety concerns.

Implementation Measure

Measure B: Require geological and soils engineering investigations in identified significant geologic hazard areas in accordance with the Kern County Code of Building Regulations.

Measure C: The fault zones designated in the Kern County Seismic Hazard Atlas should be considered significant geologic hazard areas. Proper precautions should be instituted to reduce seismic hazard, whenever possible in accordance with State and County regulations.

4.5 Landslides, Subsidence, Seiche, and Liquefaction

Policies

Policy 1: Determine the liquefaction potential at sites in areas of shallow groundwater (Map Code 2.3) prior to discretionary development and determine specific mitigation to be incorporated into the foundation design, as necessary, to prevent or reduce damage from liquefaction in an earthquake

Policy 3: Reduce potential for exposure of residential, commercial, and industrial development to hazards of landslide, land subsidence, liquefaction, and erosion.

Implementation Measure

Measure D: Discretionary actions will be required to address and mitigate impacts from inundation, land subsidence, landslides, high groundwater areas, liquefaction and seismic events through the CEQA process.

4.6 Wildland and Urban Fire

Policies

Policy 1: Require discretionary projects to assess impacts on emergency services and facilities.

Policy 3: The County will encourage the promotion of fire prevention methods to reduce service protection costs and costs to taxpayers.

Policy 4: Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.

Policy 6: All discretionary projects shall comply with the adopted Fire Code and the requirements of the Fire Department.

Implementation Measures

Measure A: Require that all development comply with the requirements of the Kern County Fire Department or other appropriate agency regarding access, fire flows, and fire protection facilities.

4.9 Hazardous Materials

Implementation Measure

Measure A: Facilities used to manufacture, store, and use of hazardous materials shall comply with the Uniform Fire Code, with requirements for siting or design to prevent onsite hazards from affecting surrounding communities in the event of inundation.

Chapter 5. Energy Element

5.2 Importance of Energy to Kern County

Policies

Policy 7: The processing of all discretionary energy project proposals shall comply with California Environmental Quality Act (CEQA) Guidelines directing that the environmental effects of a project must be taken into account as part of project consideration.

Policy 8: The County should work closely with local, state, and federal agencies to assure that energy projects (both discretionary and ministerial) avoid or minimize direct impacts to fish, wildlife, and botanical resources, wherever practical.

Policy 10: The County should require acoustical analysis for energy project proposals that might impact sensitive and highly-sensitive uses in accordance with the Noise Element of the General Plan.

5.4.5 Solar Energy Development

Goal

Goal 1: Encourage safe and orderly commercial solar development.

Policies

Policy 1: The County shall encourage domestic and commercial solar energy uses to conserve fossil fuels and improve air quality.

Policy 3: The County should permit solar energy development in the desert and valley planning regions that does not pose significant environmental or public health and safety hazards.

5.4.7 Transmission Lines

Goal

Goal 1: To encourage the safe and orderly development of transmission lines to access Kern County's electrical resources along routes, which minimize potential adverse environmental effects.

Policy

Policy 5: The County should discourage the siting of above-ground transmission lines in visually sensitive areas.

Soledad Mountain Elephant Butte Specific Plan

A. Land Use

Item 5. Agriculture

Recommendation - Grazing shall be allowed only in accordance with the Zoning Ordinance and where permitted by right.

Analysis - Two-thirds of the land within the Plan area is zoned either A-1 or A-2, which allows grazing. Approximately one half of this would have grazing capabilities. Grazing should be kept to a minimum to protect the desert ecosystem.

Implementation - Compliance with the existing Zoning Ordinance.

B. Circulation

Item 1. Location & Extent of Existing Streets

Recommendation - All roads shall be maintained as they now exist. An O.P. line shall be established for a 110-foot right-of-way along the general alignment of Silver Queen Road from the State Route 14 interchange to the South line of Section 12, T.10N., R.13W., S.B.B.&M.

Analysis - Silver Queen Road may be expected to carry a substantial volume of traffic as future development occurs due to its geographic location and full interchange at State Route 14.

Implementation - The County Surveyor and Road Commissioner to furnish data necessary to compile maps by the Planning Staff; hearings to be held in accordance with effective laws.

Item 4. Proposed Local Streets

Recommendation - Location, extent and improvement of local streets should be reviewed during consideration of tentative subdivision or parcel maps.

Analysis - Since the parcel map procedure has all but replaced sub• divisions in eastern Kern County, review of such maps should include requests for reservation of easements for future local street alignments.

Implementation - Compliance with applicable Sections of the Subdivision of Land Ordinance.

D. Conservation

Item 1. Conservation, Development, and Utilization of Natural Resources

Including:

a) Underground waters
b) Surface waters
c) Forests (not applicable)
d) Vegetation and soils (not applicable)
e) Rivers, creeks, and streams
f) Fish and wildlife (not applicable)

Recommendation a) Underground Waters - The quality and quantity of underground waters shall not be degraded.

d) Vegetation and Soils – All existing vegetation that must be cleared for building sites shall be removed from the site prior to completion of construction. Preservation of native plant life pursuant to Item C-2 herein.

f) Fish and Wildlife – Adherence to the guidelines recommended herein will produce the least negative effect on wildlife, other than no development at all.

Analysis The Developer reports that the underground water supply will be adequate to serve the development. Should overdraft occur in the future, rationing could be necessary, or annexation to the Mojave Public Utility District may be considered.

Implementation a) Quality and quantity of underground water supply shall be monitored by the appropriate agency.
d) Compliance with and review by the Public Works Department for appropriate approval.
f) Compliance with Specific Plan Recommendations.

Item 5. Standards for Prevention, Control, and Correction of Soil Erosion Caused by Subdivision Roads and Other Sources

Recommendation No construction shall be allowed unless mitigating measures are implemented to prevent erosion.

Analysis In an area of naturally scenic landscape, all measures should be taken to prevent unsightly scarring of land. Cuts, fills, and “padding” of lots should be minimized.

Implementation Initially, compliance with the Building Code and reseeding of all fill or cut with native seed mix at 40 pounds per acre properly fertilized; development and

adoption of a grading and erosion control ordinance for lot grading and road construction.

Item 6. Standards of Protection of Watershed Areas

Recommendation	No watershed area shall be degraded as a result of a development within the area.
Analysis	Review of watersheds is made in conjunction with drainage control and water quality control. Standards have been established.
Implementation	Compliance with the existing standards of the Regional Water Quality Control Board and the Public Works Department.

E. Open Space

Item 1(a). Natural Resource Land, Botanical Communities

Recommendation	All possible safeguards shall be initiated to prevent destruction of Joshua Trees.
Analysis	There are no botanical communities designated within the Plan area, however, there are scattered stands of Joshua Trees which should be protected.
Implementation	Review by local agencies as development occurs.

Item 4. Scenic Lands

Recommendation	All possible safeguards should be made to protect the scenic lands along State Route 14, designated as a proposed Scenic Highway, and other County roadways.
Analysis	No billboards or unsightly construction should be allowed within the scenic lands along roadways. All utilities along the route should be underground. State Route 14 provides an excellent example of scenic desert lands for visitors traveling through eastern Kern County and should be protected.
Implementation	Compliance with existing Zoning Ordinance, where applicable.

Kern County Zoning Ordinance

Title 19 of the Kern County Ordinance provides a description of permitted uses for the various zoning classifications within the County. The Zoning Ordinance consists of a Zoning Map that delineates the boundaries of zoning districts and a Zoning Code that explains the purpose of the districts, specifying permitted and conditional uses along with development and performance standards. The Zoning Code aims to protect public health, safety, and the general welfare of residents and visitors in the County. Together with the Zoning Map, the Zoning Code identifies the particular uses permitted on each parcel of land in the County and sets forth regulations and standards for development to ensure that the policies, goals, and objectives of the General Plan are implemented. In addition to land use regulations, the Zoning Code contains development standards that can lessen a new structure's impacts on a location or area. These standards control the height, setbacks, parking, lot coverage, gross floor area, etc. for new structures. The Zoning Code also regulates which uses are permitted in each of the County's zoning districts to ensure

compatibility between land uses. Listed below and shown in **Figure 4.11-2**, *Project Site Existing Zoning Classification*, are base and combining districts found within the existing and proposed project site:

- A (Exclusive Agriculture) District - The purpose of the A District is to designate areas suitable for agricultural uses and to prevent the encroachment of incompatible uses onto agricultural lands and the premature conversion of such lands to nonagricultural uses. Uses in the A District are limited primarily to agricultural uses and other activities compatible with agricultural uses.

- A-1 (Limited Agriculture) District - The purpose of the A-1 District is to designate areas suitable for a combination of estate-type residential development, agricultural uses, and other compatible uses. Final map residential subdivisions are not allowed in the A-1 District.

- E (Estate) District - The purpose of the E District is to designate areas suitable for larger lot residential living environments. Uses are limited to those typical of and compatible with quiet residential neighborhoods. The minimum lot size shall be one-quarter (1/4) acre (10,890 square feet) unless the E District is combined with the Lot Size Combining District (Chapter 19.54 of this title) where a larger minimum lot size is specified. The minimum lot size may be reduced when any E District is combined with the Cluster (CL) Combining District (Chapter 19.58 of this title). Agricultural uses permitted in the E District are accessory uses and shall not be established until a primary use is established.

- PL (Platted Lands) District - The purpose of the PL District is to recognize legally existing lots within recorded subdivisions which had been rendered nonconforming with regard to minimum lot size requirements of the various Resource designations (8.1, 8.2, 8.3, 8.4, and 8.5) of the County General Plan. Uses in the PL District are limited primarily to residential uses and other activities compatible with the area to which the PL District is applied. Future land divisions within the PL District are prohibited.

- FP (Floodplain) Combining District - The purpose of the FP Combining District is to protect the public health and safety and minimize property damage by designating areas that are potentially subject to flooding and by establishing reasonable restrictions on land use in such areas. The FP District shall be applied to those areas lying within Zone A on the Flood Insurance Rate Maps (FIRM) or those areas potentially subject to flooding as designated by the Kern County Engineering and Survey Services Department pending reclassification of such areas into the Floodplain Primary (FPP) District or the Floodplain Secondary (FPS) Combining District. The regulations established by the FP District shall be in addition to the regulations of the base district with which the FP District is combined.

- FPS (Floodplain Secondary) Combining District - The purpose of the FPS Combining District is to protect the public health and safety and minimize property damage by designating areas that are subject to flooding with relatively low velocities or depths and by establishing reasonable restrictions on land use in such areas. The FPS District shall be applied to those areas lying within special flood hazard areas designated as Zones AO and AH, and Zone A1-A30 on the Flood Insurance Rate Maps (FIRM), but excluding the floodway on the Flood Boundary Floodway Maps (FBFM), the Designated Floodway on the State of California's Board of Reclamation’s Kern River Designated Floodway Studies, or other maps where engineering studies have been made and adopted by the County Board of Supervisors. The regulations established by the FPS District shall be in addition to the regulations of the base district with which the FPS District is combined.

- WE (Wind Energy) Combining District - It is the intent of the Board of Supervisors, in adopting this chapter, to promote the use of proven wind-driven generators for energy recovery, and to promote safeguards ensuring the maintenance of the health, safety, and welfare of the citizens of the County. In addition, in adopting this chapter, it is the intent of the Board of Supervisors to promote the use of an alternative to fossil-fuel-generated electrical power in areas of the County which are identified to have suitable wind resources for production of commercial quantities of wind-generated electrical power. Furthermore, it is the intent of the Board of Supervisors that site-specific application of this chapter shall occur only in a manner that provides a harmonious balance between the suitability of a project site with existing area land use and physical surroundings.

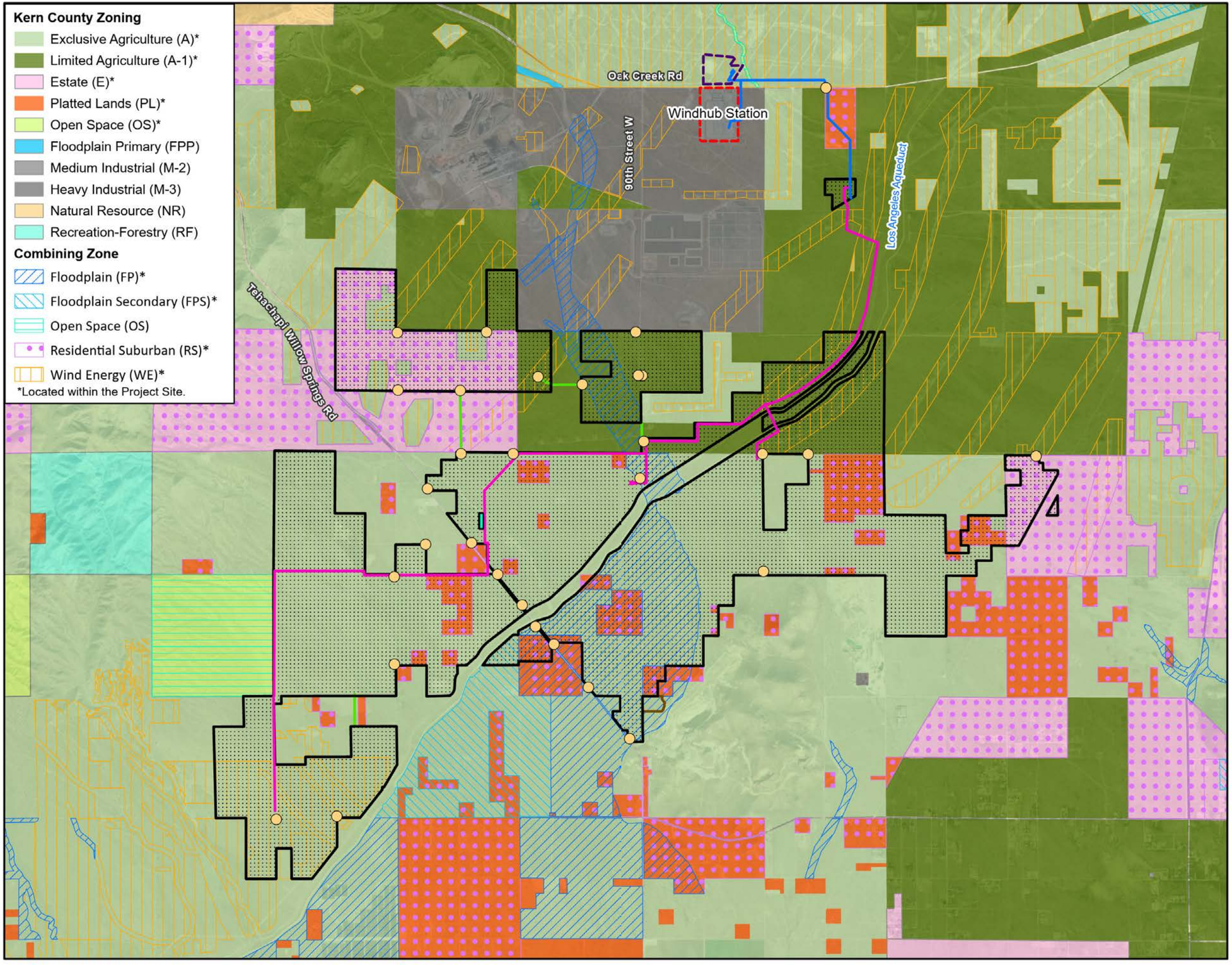
The proposed project includes requests for Zone Variances for instances where the proposed project includes changes to base zoning to A (Exclusive Agriculture) for parcels that do not meet the minimum 20-acre requirement, or are not part of proposed Vesting Tentative Parcel Maps (VTPMs) for parcel mergers and re-subdivisions to that meet the 20-acre requirements, pursuant to Section 19.12.050, *Minimum Lot Size*, of the Kern County Zoning Ordinance (see **Figure 4.11-3,** *Project Site Proposed Zoning Classification*).

- Chapter 19.106 - *Variances* - Where special physical circumstances exist limiting the development of a particular property in accordance with development standards of a zoning district, relief from the development standards may be secured by the granting of a variance from those standards. The granting or denial of a variance will be based on whether the particular circumstances conform to the standards of this chapter. Under no circumstances will a variance from permitted or conditionally permitted uses be considered or granted.

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.11-2. Project Site Existing Zoning Classification



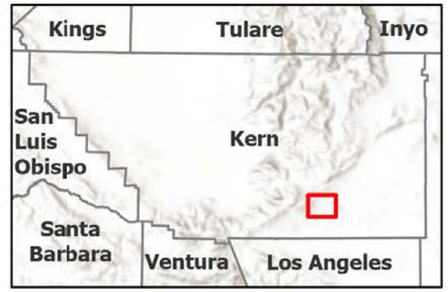
Kern County Zoning

- Exclusive Agriculture (A)*
- Limited Agriculture (A-1)*
- Estate (E)*
- Platted Lands (PL)*
- Open Space (OS)*
- Floodplain Primary (FPP)
- Medium Industrial (M-2)
- Heavy Industrial (M-3)
- Natural Resource (NR)
- Recreation-Forestry (RF)

Combining Zone

- Floodplain (FP)*
- Floodplain Secondary (FPS)*
- Open Space (OS)
- Residential Suburban (RS)*
- Wind Energy (WE)*

*Located within the Project Site.



- Windhub High-voltage Substation (Existing)
- SCE Property (500kv)

Proposed Project Features

- Project Site
- Temporary Offsite Laydown Area
- Medium-voltage/Transmission/ Access Easements
- Gen-tie Line (New)
- Access Points

Other Applicant and/or Affiliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

*Already approved under separate projects.

N

0 0.25 0.5 1 Miles

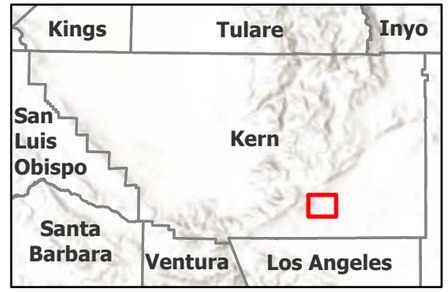
Scale is 1:50,000 when printed at 11"x17"

Not for Construction

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.11-3. Project Site Proposed Zoning Classification



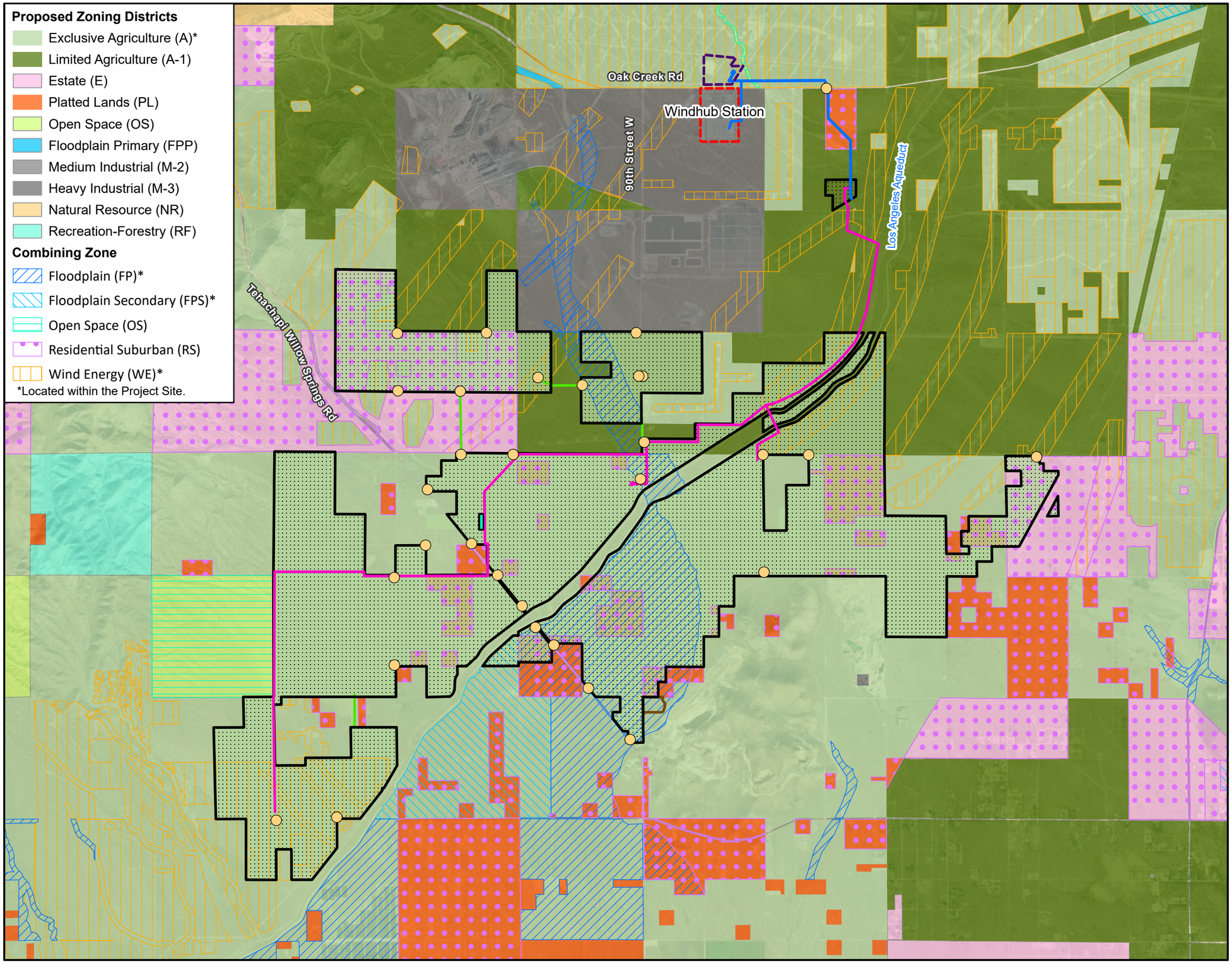
Proposed Zoning Districts

- Exclusive Agriculture (A)*
- Limited Agriculture (A-1)
- Estate (E)
- Platted Lands (PL)
- Open Space (OS)
- Floodplain Primary (FPP)
- Medium Industrial (M-2)
- Heavy Industrial (M-3)
- Natural Resource (NR)
- Recreation-Forestry (RF)

Combining Zone

- Floodplain (FP)*
- Floodplain Secondary (FPS)*
- Open Space (OS)
- Residential Suburban (RS)
- Wind Energy (WE)*

*Located within the Project Site.



- Windhub High-voltage Substation (Existing)
- SCE Property (500kv)

Proposed Project Features

- Project Site
- Temporary Offsite Laydown Area
- Medium-voltage/Transmission/ Access Easements
- Gen-tie Corridor (New)
- Access Points

Other Applicant and/or Affiliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

*Already approved under separate projects.

N

0 0.25 0.5 1 Miles

Scale is 1:50,000 when printed at 11"x17"

Not for Construction

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Regional Transportation Plan

The latest Regional Transportation Plan (RTP) was prepared by the Kern Council of Governments (KCOG) and was adopted on July 21, 2022. The 2022 RTP is a 24-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. It was developed through a comprehensive and collaborative planning process, providing effective coordination between local, regional, State, and federal agencies. Included in the 2022 RTP is the Sustainable Communities Strategy (SCS), which is required by California's Sustainable Communities and Climate Protection Act, of Senate Bill 375. The California Air Resources Board (CARB) sets targets for the County's greenhouse gas (GHG) emissions reductions from passenger vehicles and light-duty trucks at 9 percent per capita by 2020 and 15 percent per capita by 2035 as compared to 2005. In addition, Senate Bill 375 provides for closer integration of the RTP/SCS with the Regional Housing Needs Allocation (RHNA), ensuring consistency between low-income housing needs and transportation planning. KCOG closely coordinated the RHNA and RTP/SCS development process using the same oversight committee for both. Local jurisdictions will use the RHNA to identify locations to provide sufficient housing for all economic segments of the population and ensure that the state's housing goals are met.

The intent of the SCS is to achieve the State's emissions reduction targets for automobiles and light trucks. The SCS will also provide opportunities for a stronger economy, healthier environment, and safer quality of life for community members in Kern County. The RTP seeks to improve economic vitality; improve air quality; improve the health of communities; improve transportation and public safety; promote the conservation of natural resources and undeveloped land; increase access to community services; increase regional and local energy independence; and increase opportunities to help shape the community's future.

The 2022 RTP/SCS financial plan identifies how much money is available to support the region's transportation investments. The plan includes a core revenue forecast of existing local state and federal sources along with funding sources that may be considered reasonably available over the time horizon of the RTP/SCS. This RTP promotes a more efficient transportation system that calls for fully funding alternative transportation modes, while emphasizing transportation demand and transportation system management approaches for new capacity (KCOG, 2022). The RTP is updated on a 4-year cycle, with the next update scheduled for 2026 (Kern COG, 2025).

Kern County's Solid Waste Management Plan

The Solid Waste Management Plan is a comprehensive guide for all solid waste management activities in the County. The plan identifies the existing solid waste generation and disposal facilities in Kern County, estimates future solid waste disposal demand, and identifies programs to meet this future need.

Kern County and Incorporated Cities Hazardous Waste Management Plan

The Kern County and Incorporated Cities Hazardous Waste Management Plan focuses on the siting of hazardous waste disposal facilities, the transport of hazardous waste in the County, protection of water resources from hazardous waste contamination, and public education concerning the use and disposal of hazardous waste.

4.11.4 Impacts and Mitigation Measures

Methodology

Potential impacts associated with the project are evaluated on a qualitative basis through a comparison of the existing land use and the proposed land uses, in consideration of the applicable planning goals identified above. Compliance with the aforementioned policies is illustrated in consistency tables provided in the Project Impacts section below. The change in the land use on the project site is significant if the effect described under the thresholds of significance below occurs as a result of the project. Using the aforementioned resources and professional judgment, impacts were analyzed according to CEQA significance criteria described below.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project could potentially have a significant adverse effect on land use.

A project could have a have a significant adverse effect on land use if the project would:

a. Physically divide an established community;

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect;

Project Impacts

Impact 4.11-1: The project would physically divide an established community.

The project would be developed on generally undeveloped desert land. Land uses surrounding the project are primarily renewable energy development, rural residential development, livestock grazing, light and heavy industrial and mining uses, and generally undeveloped land. The project site is located approximately 6 miles southwest of the community of Mojave. However, the project is sited in a manner that would not physically divide or restrict access to the community of Mojave.

It is 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 public access easements are proposed to be vacated through parcel maps submitted separately to the Kern County Land Division Unit for review and approval (see **Section 3.6**, *Project Description*, of **Chapter 3**, *Project Description*, for details). The purpose of the request is to optimize the layout of solar panels by removing recorded, but unused/undeveloped, public and private easements and other rights-of-way on vacant land. These easements and unaccepted offers of dedication have been established by grant deed or parcel maps, and some dirt roads exist within the project development footprint. As requested, the easement vacations would not eliminate any legal access for any property or persons in the area. In cases where one of the proposed vacations remove primary access to a parcel, the project proponent would be responsible for recording private easements for access purposes prior to or concurrent with the vacation being recorded such that legal access remains. Typically, the

proposed private easements would be recorded along with the vacation of the original public easement. Therefore, the project is not anticipated to physically divide or restrict access to the community of Mojave, or any other community and impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance

Impacts would be less than significant.

Impact 4.11-2: The project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

The Kern County General Plan, Soledad Mountain Elephant Butte Specific Plan, and the Kern County Zoning Ordinance establish land use policies and regulations that are applicable to the project. The following discussion evaluates the project's conformity to these plans, policies and regulations. The project would require approval of Zone Classification Change No. 56 Map 197; Zone Classification Change No. 71, Map 198 ; Zone Classification Change No. 29, Map 214 and Zone Change Case No. 16, Map 215, to rezone various parcels to A, excluding the combining zone districts, with the exception of those parcels which are already in the A Zone District. With the requested zone change, the entirety of the project would be zoned A (Exclusive Agriculture). The project would require approval of CUP No. 22, Map 197; CUP No. 24, Map 197; CUP No. 47, Map 198; CUP No. 50, Map 214; and CUP No. 19, Map 215 to allow for the construction and operation of a solar facility and associated infrastructure, including energy storage, a 230-kV switchyard, and temporary construction staging and equipment storage, under this zoning. The project would include General Plan Amendment No. 18, Map 197; General Plan Amendment No. 5, Map 198; General Plan Amendment No. 10, Map 214; and General Plan Amendment No. 7, Map 215 to the Circulation Element of the Kern County General Plan to remove future road reservations on section and mid-section lines within the project boundary. The project would require Zone Variance No. 20, Map 197; Zone Variance No. 36, Map 198; Zone Variance No. 15, Map 214; and Zone Variance No. 3, Map 15 to authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning. Outside of the project site, the project would require CUP No. 51, Map 214 to allow for a temporary, offsite construction laydown area. Additionally, the project would require a Franchise Agreement for the right-of-way (ROW) along 90th Street to use for underground medium-voltage transmission.

Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan

Table 4.11-2, *Consistency Analysis with Kern County General Plan for Land Use* (at the end of Section 4.11.5), presents an evaluation of the project's consistency with the Kern County General Plan. **Table 4.11-3,** *Consistency Analysis with the Soledad Mountain Elephant Butte Specific Plan for Land Use*, presents an evaluation of the project's consistency with the Soledad Mountain Elephant Butte Specific Plan. The tables list the goals and policies identified above in the regulatory setting and provide analysis on the project's general consistency with overarching policies. Additionally, the tables provide goals and policies of issue areas that are presented in more detail in other sections of the EIR. As evaluated in detail in **Table 4.11-2**,

Consistency Analysis with Kern County General Plan for Land Use, and **Table 4.11-3**, *Consistency Analysis with the Soledad Mountain Elephant Butte Specific Plan for Land Use*, the project is consistent with the goals and policies of the Kern County General Plan and the Soledad Mountain Elephant Butte Specific Plan.

Removal of Road Reservations

The project includes a request for an amendment to the Circulation Element of the Kern County General Plan to eliminate road reservations designated for potential future arterial and collector roadways along section and mid-section lines within the project site. The majority of the road reservations within the General Plan are north of the LADWP aqueduct. The proposed removal of mid-section and section future road reservations within the Circulation Element designated roadways is shown on **Figure 3-11**, *Proposed General Plan Amendment (Circulation)*.

Implementation of the Circulation Element of the Kern County General Plan and the Soledad Mountain Elephant Butte Specific Plan Circulation Element goals, policies, and implementation measures would ensure consistency between the project and land use plan for the project area. Furthermore, the proposed amendment would be consistent with the surrounding land uses in the project vicinity. Therefore, the project's proposed amendment to the Circulation Element of the Kern County General Plan and the Circulation Element of the Soledad Mountain Elephant Butte Specific Plan would not result in conflict with the applicable land use plan, and impacts would be less than significant.

Kern County Zoning Ordinance

As described above, the project is subject to the provisions of the Kern County Zoning Ordinance. As shown in **Table 4.11-1**, *Project Site and Surrounding Land Uses*, and **Figure 3-7**, *Existing Zoning Classifications*, in Chapter 3, *Project Description*, the Kern County Zoning Ordinance designates portions of the project site as being within the A (Exclusive Agriculture), A-1 (Limited Agriculture), Estate (E), and Platted Lands (PL). Many project parcels also contain one or multiple of the following combining districts: Floodplain (PF), Floodplain Secondary (FPS), Wind Energy (WE), and Residential Suburban (RS).

The project proponent is requesting Zone Classification Changes and Zone Variances within Zone Maps 197, 198, 214, and 215. The Zone Classification Changes, if approved, would rezone the project site to A (Exclusive Agriculture), excluding the combining zone districts. The Zone Variances, if approved, would authorize multiple parcels of substandard size where a minimum of 20 acres is required for each change in base zoning. In addition, the project would require the approval of a CUP for each Zone Map in the project area pursuant to Chapter 19.12.030 G and 19.14.030 K of the Kern County Zoning Ordinance. With the Zone Classification Change (ZCC) approvals, the project would be consistent with the Exclusive Agriculture zoning classification, which allows solar facilities as a permitted use with a Conditional Use Permit (CUP). As such, with approval of the CUPs, the project would be consistent with applicable land use policies and regulations, and potential impacts related to consistency with the zoning ordinance would be less than significant.

Kern County Airport Land Use Compatibility Plan

There are no portions of the project site, or the new 230-kV gen-tie line, located within the Airport Influence Area of the Mojave Air and Space Port. The project is not within the boundaries of any airport as identified

in the Kern County ALUCP. The gen-tie line would have poles at a maximum height of up to 250 feet and would be subject to Federal Aviation Administration (FAA) review under Federal Acquisition Regulation Part 77 and require issuance of a Determination of No Hazard to Air Navigation prior to construction. As discussed in **Section 4.9**, *Hazards and Hazardous Materials*, implementation of **Mitigation Measure MM 4.9-3** would ensure the project would be consistent with the applicable Kern County regulations by requiring the developer to coordinate with the FAA and obtain approval as needed. With implementation of this mitigation measure, potential impacts would be less than significant. For a more detailed discussion of consistency with the ALUCP, see **Section 4.9**, *Hazards and Hazardous Materials*, **Impact 4.9-5**.

Mitigation Measures

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

With implementation of **Mitigation Measure MM 4.9-3**, impacts would be less than significant.

4.11.5 Cumulative Setting, Impacts, and Mitigation Measures

The geographic scope of analysis for this chapter is the Western Antelope Valley within Kern County. This scope was selected to analyze the cumulative impact to regional land use patterns of project development in the area, and because there is some uniformity to existing land use patterns in these regions. As described in more detail in **Table 3-5**, *Cumulative Projects List* in **Chapter 3**, *Project Description*, of this EIR, 43 projects are proposed within the geographic scope. While the surrounding area is relatively rural in nature, the project, along with other projects, has the potential to contribute to a cumulative influence on proposed land uses in and around the project site.

The anticipated impacts of the project in conjunction with cumulative development in the area of the project would increase the urbanization and result in the loss of open space. As discussed above, the project would be located in a generally undeveloped and unincorporated area of Kern County with little residential development, and would not divide an established community. Related projects in Kern County would be developed in similarly low-populated and generally undeveloped areas. However, potential land use impacts require evaluation on a case-by-case basis because of the interactive effects of a specific development and its immediate environment. As described in **Table 4.11-2**, *Consistency Analysis with Kern County General Plan for Land Use*, and **Table 4.11-3**, *Consistency Analysis with the Soledad Mountain Elephant Butte Specific Plan for Land Use* below, the project would be consistent with the goals and policies of the Kern County General Plan and the Soledad Mountain Elephant Butte Specific Plan, respectively. In addition, with approval of the CUPs, the project would be an allowable use that would not conflict with the land use or zoning classification for the project site. Therefore, as proposed the project would be consistent with the goals and policies of the Kern County General Plan and the Kern County Zoning Ordinance and would therefore not contribute to a cumulatively considerable impact regarding land use.

Furthermore, all related projects would be required to separately undergo environmental review on a case-by-case basis in accordance with the requirements of CEQA. Each related project would also be required

to demonstrate consistency with all applicable planning documents governing the related project site, including the Kern County General Plan, the Kern County Zoning Ordinance, and the Soledad Mountain Elephant Butte Specific Plan. Should potential impacts be identified, appropriate mitigation would be prescribed that would likely reduce potential impacts to less-than-significant levels. Compliance with such regulations would ensure that cumulative impacts are less than significant.

With regard to cumulative effects of utility-scale solar power generation facilities, there is a potential that outside factors, such as the development of newer technology, change in State or national policy that encourages the construction of such facilities, or other economic factors, could result in the abandonment of such facilities. Unlike other facilities that, once constructed, can be retrofitted and utilized for another specific use, solar power generation facilities have little opportunity for other uses should the project be abandoned. The potential for the cumulative effects caused by the abandonment of multiple solar facilities in Kern County could result in impacts on surrounding land uses should it be determined that these facilities are no longer viable commercial operations. Therefore, **Mitigation Measure MM 4.11-1**, which would require implementation of a decommissioning plan to be carried out by the project proponent once the life of the project has ended, has been included to establish safeguards to ensure the maintenance of the health, safety, and welfare of the citizens of the County. While it is the intent of Kern County to promote the use of an alternative to fossil-fuel-generated electrical power in areas of the County that are identified to have suitable characteristics for production of commercial quantities of solar photovoltaic (PV)-generated electrical power, it is necessary to protect surrounding landowners from potential impacts associated with the abandonment of such facilities. With implementation of **Mitigation Measure MM 4.11-1**, cumulative land use impacts would be considered less than significant.

Mitigation Measures

MM 4.11-1: Prior to issuance of building permits, the project operator shall provide a Decommission Plan for review and approval by the Kern County Engineering, Surveying, and Permit Services Department or a County-contracted consulting firm at a cost to be borne by the project operator. The Decommission Plan shall factor in the cost to remove the solar panels and support structures, replacement of any disturbed soil from removal of support structures, and control of fugitive dust on the remaining undeveloped land. Salvage value for the solar panels and support structures shall be included in the financial assurance calculations. The assumption, when preparing the estimate, is that the project operator is incapable of performing the work or has abandoned the solar facility, thereby requiring Kern County to hire an independent contractor to perform the decommissioning work. In addition to submitting a Decommission Plan, the project operator shall post or establish and maintain financial assurances with Kern County related to the deconstruction of the site as identified on the approved Decommission Plan in the event that at any point in time the project operator determines it is not in the company's best interest to operate the facility.

The financial assurance required prior to issuance of any building permit shall be established using one of the following:

a. An irrevocable letter of credit;

b. A surety bond;

c. A trust fund in accordance with the approved financial assurances to guarantee the deconstruction work will be completed in accordance with the approved decommission plan; or

d. Other financial assurances as reviewed and approved by the respective County administrative offices, in consultation with the Kern County Planning and Natural Resources Department.

The financial institution or Surety Company shall give the County at least 180 days' notice of intent to terminate the letter of credit or bond. Financial assurances shall be reviewed annually by the Kern County Engineering, Surveying, and Permit Services Department or County contracted consulting firm(s) at a cost to be borne by the project operator to substantiate those adequate funds exist to ensure deconstruction of all solar panels and support structures identified on the approved Decommission Plan. Should the project operator deconstruct the site on their own, the County will not pursue forfeiture of the financial assurance.

Once deconstruction has occurred, financial assurance for that portion of the site will no longer be required and any financial assurance posted shall be adjusted or returned accordingly. Any funds not utilized through decommission of the site by the County shall be returned to the project operator.

Should any portion of the solar field not be in operational condition for a consecutive period of twelve 12 months that portion of the site shall be deemed abandoned and shall be removed within sixty (60) days from the date a written notice is sent to the property owner and solar field owner, as well as the project operator, by the County. Within this sixty (60) day period, the property owner, solar field owner, or project operator may provide the director of the Kern County Planning and Natural Resources Department a written request and justification for an extension for an additional twelve (12) months. The Kern County Planning and Natural Resources Director shall consider any such request at a Director's Hearing as provided for in Section 19.102.070 of the Kern County Zoning Ordinance. In no case shall a solar field that has been deemed abandoned be permitted to remain in place for more than forty-eight (48) months from the date the solar facility was first deemed abandoned.

Level of Significance after Mitigation

With implementation of **Mitigation Measure MM 4.11-1**, cumulative impacts would be less than significant.

Project Consistency with the Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan

Table 4.11-2, *Consistency Analysis with Kern County General Plan Policies for Land Use*, summarizes the consistency of the project with all applicable goals and policies of the Kern County General Plan, and **Table 4.11-3**, *Consistency Analysis with the Soledad Mountain Elephant Butte Specific Plan for Land Use*, presents an evaluation of the project's consistency with the Soledad Mountain Elephant Butte Specific Plan.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
Chapter 1. Land Use, Open Space and Conservation Element		
1.3 Physical and Environmental Constraints		
Goal 1: To strive to prevent loss of life, reduce personal injuries, and property damage, minimize economic and social diseconomies resulting from natural disaster by directing development to areas which are not hazardous.	Consistent with implementation of **Mitigation Measure MM 4.10-2**.	Consistent with this policy, the project includes construction and operation of solar PV power generation, energy storage, and support facilities that are not located on a hazardous site. See **Section 4.9**, *Hazards and Hazardous Materials*, of this EIR. As described in **Section 4.7**, *Geology and Soils*, of this EIR, the project site is not transected by a known active or potentially active fault and is not located within a State of California Alquist-Priolo Earthquake Fault Zone. In addition, construction of the project would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08). Adherence to all applicable regulations would mitigate any potential impacts associated with fault rupture adjacent to the project site. Based on the absence of any known active faults that cross, or are located in proximity to, the project site and project compliance with applicable ordinances of the Kern County Building Code, the potential impact of fault rupture would be less than significant. Additionally, the project would implement the recommendations of the site-specific finals geotechnical study. The final study's recommendations would be consistent with the Kern County Building Code (Chapter 17.08) and the most recent version of the California Building Code. As described in **Section 4.10**, *Hydrology and Water Quality*, of this EIR, there is one FEMA Zone A Flood hazard located in the middle of the project site. A FEMA Zone A flood hazard is a 100-year flood hazard with no base flood elevation determined. Implementation of **Mitigation Measure MM 4.10-2** would require preparation of a Final Drainage Plan that would design project facilities to have one-foot of freeboard clearance above the calculated maximum flood depths for the solar arrays or the finished floor of any permanent structures and grading for the project would be designed so that water surface elevations during flood events would not be increased by more than one foot. Further, the project would be developed in accordance with the Kern County General Plan and Floodplain

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
		Management Ordinance. Thus, final review of the project by the Kern County Planning and Natural Resources Department, as well as adherence to all applicable local, state and federal regulations, would ensure that the project would not pose significant environmental or public health and safety hazards. As such, with implementation of mitigation measures the project would be consistent with this goal.
Policy 1: Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained (Map Code 2.1 (Seismic Hazard), Map Code 2.2 (Landslide), Map Code 2.3 (Shallow Groundwater), Map Code 2.5 (Flood Hazard), Map Codes from 2.6 – 2.9, Map Code 2.10 (Nearby Waste Facility), and Map Code 2.11 (Burn Dump Hazard)) to support such development unless appropriate studies establish that such development will not result in unmitigated significant impact.	Consistent	See 1.3, *Physical and Environmental Constraints*, Goal 1, of the Kern County General Plan, above.
Policy 8: Encourage the preservation of the floodplain's flow conveyance capacity, especially in floodways, to be open space/passive recreation areas throughout the County.	Consistent with implementation of **Mitigation Measure MM 4.10-2**.	See **Section 4.10**, *Hydrology and Water Quality*, of this EIR. As described therein, project facilities would be designed to maintain clearance above the maximum flood depths and grading would not substantially increase flooding depths. Further, the project would be developed in accordance with the Kern County General Plan and Floodplain Management Ordinance and would implement **Mitigation Measure MM 4.10-2**, as described above. Therefore, the project would be consistent with this policy.
Policy 9: Construction of structures that impede water flow in a primary floodplain will be discouraged.	Consistent with implementation of **Mitigation Measure MM 4.10-2**.	See **Section 4.10**, *Hydrology and Water Quality*, of this EIR. As described therein, project facilities would be designed to maintain clearance above the maximum flood depths and grading would not substantially increase flooding depths. Further, the project would be developed in accordance with the General Plan and Floodplain Management Ordinance and would implement **Mitigation Measure MM 4.10-2**, as described above. Therefore, the project would be consistent with this policy.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
Policy 10: The County will allow lands which are within flood hazard areas, other than primary floodplains, to be developed in accordance with the General Plan and Floodplain Management Ordinance, if mitigation measures are incorporated so as to ensure that the proposed development will not be hazardous within the requirements of the Safety Element (Chapter 4) of this General Plan.7	Consistent with implementation of **Mitigation Measure MM 4.10-2**.	See **Section 4.10**, *Hydrology and Water Quality*, of this EIR. As described therein, the project would not increase the potential for flooding beyond existing conditions. Flooding in this location would not result in a safety hazard, as the project would not establish a permanent population onsite. Further, the project would be developed in accordance with the Kern County General Plan and Floodplain Management Ordinance and would implement **Mitigation Measure MM 4.10-2**, as described above. Therefore, the project would be consistent with this policy.
Policy 11: Protect and maintain watershed integrity within Kern County.	Consistent with implementation of **Mitigation Measures MM 4.9-1** and **MM 4.10-2**.	As discussed in **Section 4.10**, *Hydrology and Water Quality*, the project would implement best management practices (BMP) during construction to avoid impacts to water quality as described in **Mitigation Measure MM 4.10-2**. The project would also implement **Mitigation Measure MM 4.9-1**, which would require the project proponent provide a Hazardous Materials Business Plan, as described in **Section 4.9**, *Hazards and Hazardous Materials*, of this EIR, to reduce mixing of pollutants with stormwater onsite, thereby maintaining the integrity of the watershed.
Measure D: Review and revise the County's current Grading Ordinance as needed to ensure that its standards minimize permitted topographic alteration and soil erosion while maintaining soil stability.	Consistent with implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2**.	The project would implement **Mitigation Measure MM 4.10-2**, which would require the preparation of a Final Drainage Plan. The Final Drainage Plan shall be prepared in accordance with the Kern County Grading Code and Kern County Development Standards. Since project construction would disturb over an acre of ground, the project operator would conform to the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit Program through the preparation of a Stormwater Pollution Prevention Plan (SWPPP) that would include erosion control and sediment control BMPs designed to prevent disturbed soils from moving offsite, as required by **Mitigation Measure MM 4.10-1**. The project would also be required to implement a Final Drainage Plan that would minimize the potential for changes in onsite drainage patterns that could increase erosion and sedimentation (See **Section 4.10**, *Hydrology and Water Quality*, of this EIR

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
		for more details). A grading permit would be obtained from Kern County prior to commencement of construction activities. According to Chapter 17.28 of the Kern County Grading Ordinance, this includes submittal of grading plans to the County for review prior to issuance of a grading permit and grading activities on the project site. County review of grading plans would ensure that appropriate erosion control measures have been implemented on site. Therefore, the project would be consistent with this measure.
Measure F: The County will comply with the Colbey-Alquist Floodplain Management Act in regulating land use within designated floodways.	Consistent with implementation of **Mitigation Measure MM 4.10-2**	See **Section 4.10**, *Hydrology and Water Quality,* of this EIR. Most of the project site is within FEMA Flood Zone X, indicating areas not in a flood hazard zone. However, there is a section in the middle of the project site within FEMA Flood Zone A, indicating a Special Flood Hazard Area (see **Figure 3-5**, *Floodplain Map*, in **Chapter 3** of this EIR). Project facilities would be designed to maintain clearance above the maximum flood depths and grading would not substantially increase flooding depths. Further, the project would be developed in accordance with the Kern County General Plan, Floodplain Management Ordinance and **Mitigation Measure MM 4.10-2**. Ultimately, impacts related to flooding were determined to be less than significant in this EIR. Therefore, the project would be consistent with this measure.
Measure H: Development within areas subject to flooding, as defined by the appropriate agency, will require necessary flood evaluations and studies.	Consistent with implementation of **Mitigation Measure MM 4.10-2**.	As described in **Section 4.10**, *Hydrology and Water Quality*, of this EIR, the project site is located within the 100-year floodplain. Specifically, a portion located in the middle of the project site is categorized as FEMA Flood Zone A, indicating a Special Flood Hazard Area (see **Figure 3-5**, *Floodplain Map*). The project would be developed in accordance with the Kern County General Plan, Floodplain Management Ordinance and **Mitigation Measure MM 4.10-2**. Therefore, the project would be consistent with this measure.
Measure J: Compliance with the Floodplain Management Ordinance prior to grading or improvement of land for development or the	Consistent with implementation of **Mitigation Measure MM 4.10-2**.	See 1.3, *Physical and Environmental Constraints,* Measure H, of the Kern County General Plan, above.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
construction, expansion, conversion or substantial improvements of a structure is required.		
Measure N: Applicants for new discretionary development should consult with the appropriate Resource Conservation District and the California Regional Water Quality Control Board regarding soil disturbances issues.	Consistent within implementation of **Mitigation Measure MM 4.10-1**	**Sections 4.7**, *Geology and Soils*, and **4.10**, *Hydrology and Water Quality*, of this EIR discuss impacts related to soil-disturbing activities. As discussed therein and required by **Mitigation Measure MM 4.10-1**, the project operator would conform to the requirements of State Water Resources Control Board's NPDES General Construction Permit Program through the preparation of a SWPPP that would include erosion control and sediment control BMPs designed to prevent disturbed soils from moving offsite. Thus, the project would be consistent with this measure.
1.4 Public Facilities and Services		
Goal 1: Kern County residents and businesses should receive adequate and cost effective public services and facilities. The County will compare new urban development proposals and land use changes to the required public services and facilities needed for the proposed project.	Consistent with implementation of **Mitigation Measures MM 4.14-2** through **MM 4.14-3**.	As discussed in **Section 4.14**, *Public Services*, of this EIR, **Mitigation Measures MM 4.14-2** through **MM 4.14-4** require the project to pay applicable fees and taxes to reduce significant impacts to fire or police protection services resulting from the project. With payment of applicable fees and taxes, any additional fire or police protection services, facilities or personnel required as a result of the project would be appropriately funded, and the project would be consistent with this goal.
Goal 5: Ensure that adequate supplies of quality (appropriate for intended use) water are available to residential, industrial, and agricultural users within Kern County.	Consistent.	Public utility impacts are evaluated in **Section 4.17**, *Utilities and Service Systems*, of this EIR. As described therein, there is sufficient water available to meet the future water demands of the project during normal, single dry, and multiple dry years through 2060. Impacts related to water supply were determined to be less than significant in this EIR. Therefore, the project would be consistent with this goal.
Goal 7: Facilitate the provision of reliable and cost-effective utility services to residents of Kern County	Consistent	The project includes the development of a solar PV power generating facility that would generate up to 1,400 megawatt (MW) of solar energy with up to 8 gigawatt-hours (GWh) of energy storage capacity, both of which would be delivered to the grid, reducing dependence on fossil fuel based energy.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
Policy 1: New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.	Consistent with implementation of **Mitigation Measures MM 4.14-2** through **MM 4.14-4**.	The project includes the construction and operation of a 1,400-MW solar facility with up to 8 GWh of energy storage capacity. The project would also include a generation tie (gen-tie) line and 230-kV switchyard to connect the project to the existing Southern California Edison (SCE) Windhub Substation. All infrastructure improvements associated with the project would be fully funded by the project proponent. Additionally, implementation of **Mitigation Measures MM 4.14-2** and **MM 4.14-3** would require the project pay applicable fees and taxes to reduce significant impacts to fire or police protection services resulting from the project.
Policy 3: Individual projects will provide availability of public utility service as per approved guidelines of the serving utility.	Consistent with implementation of **Mitigation Measure MM 4.17-1**.	Public utility impacts are evaluated in **Section 4.17**, *Utilities and Service Systems*. As described therein, the project would have less-than-significant impacts on water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities. With implementation of **Mitigation Measures MM 4.1-1** and **MM 4.17-1**, a Maintenance, Trash Abatement, and Pest Management Program and a Waste Disposal and Recycling Coordinator would ensure the separation and proper disposal of recyclable materials and solid waste during construction and operation, resulting in less than significant impact to solid waste providers.
Policy 6: The County will ensure adequate fire protection to all Kern County residents.	Consistent with implementation of **Mitigation Measures MM 4.14-2** through **MM 4.14-4.**	See 1.4, *Public Services and Facilities*, Goal 1, above.
Policy 7: The County will ensure adequate police protection to all Kern County residents.	Consistent with implementation of **Mitigation Measures MM 4.14-2** through **MM 4.14-4**.	See 1.4, *Public Services and Facilities*, Goal 1, above.
Policy 15: Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the CEQA documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development.	Consistent with implementation of **Mitigation Measure MM 4.17-1**.	See 1.4, *Public Services and Facilities*, Policy 3, above.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
Measure B: Determine local costs of County facility and infrastructure improvements and expansion which are necessitated by new development of any type and prepare a schedule of charges to be levied on the developer at the site of approval of the Final Map. This implementation can be effectuated by the formation of a County work group.	Consistent with implementation of **Mitigation Measures MM 4.14-2** through **MM 4.14-4**.	See 1.4, *Public Services and Facilities*, Goal 1, above.
Measure C: Project developers shall coordinate with the local utility service providers to supply adequate public utility services.	Consistent	Project effects related to utilities are discussed in **Section 4.17**, *Utilities and Service Systems*, of this EIR. The project would result in less-than-significant impacts to utilities. Furthermore, the project includes the development of a solar PV power generating facility that would generate up to 1,400 MW of solar energy and up to 8 GWh of energy storage capacity, both of which would be delivered to the grid, reducing dependence on fossil fuel based energy.
Measure D: Involve utility providers in the land use and zoning review process.	Consistent	See 1.4, *Public Services and Facilities*, Policy 3, above.
Measure L: Prior to the approval of development projects, the County shall determine the need for fire protection services. New development in the County shall not be approved unless adequate fire protection facilities and resources can be provided.	Consistent with implementation of **Mitigation Measures MM 4.14-1** through **MM 4.14-4**.	Impacts to fire protection services are evaluated in **Section 4.14**, *Public Services*, of this EIR. **Mitigation Measure MM 4.14-1** requires implementation of a Fire Safety Plan during project construction and operation that would include notification procedures and emergency fire precautions to help reduce fire risks and the consequential need for fire protection services onsite. **Mitigation Measures MM 4.14-2** through **MM 4.14-4** require the project to pay applicable fees and taxes to reduce significant impacts to fire or police protection services resulting from the project. Project implementation would not result in the need to construct new, or physically alter or expand existing sheriff's office and fire protection services. In addition, the proposed project would not impede the effective operation of these services.
1.9 Resources		
Goal 1: To contain new development within an area large enough to meet generous projections of foreseeable need, but in locations which will not	Consistent	With project approval, the project site would be located on land that is zoned as A (Exclusive Agriculture). Other uses besides agriculture, including solar energy generation and storage, are

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
impair the economic strength derived from the petroleum, agriculture, rangeland, or mineral resources, or diminish the other amenities which exist in the County.		permitted within the A District with the approval of a Conditional Use Permit (CUP). The project would not involve additional change in the existing environment besides those described in this EIR and would not directly lead to other projects that would result in the loss of grazing land. Additionally, discussed in **Section 4.12**, *Mineral Resources,* of this EIR, the project site is not located within the bounds of a mineral resource area. The project site is not located in areas of existing agricultural use or in areas containing petroleum, or mineral resources. These amenities would not be diminished in other parts of the County as a result of construction or operation of the project. Therefore, the project would be consistent with this goal.
Goal 2: Protect areas of important mineral, petroleum, and agricultural resource potential for future use.	Consistent	See 1.9, *Resource,* Goal 1, above. As discussed in **Section 4.12**, *Mineral Resources,* of this EIR, the project site is not located within the bounds of a mineral resource area.
Goal 3: Ensure the development of resource areas minimize effects on neighboring resource lands.	Consistent	The solar facilities would be compatible with open space, agriculture, and other neighboring resource management land uses.
Goal 4: Encourage safe and orderly energy development within the County, including research and demonstration projects, and to become actively involved in the decision and actions of other agencies as they affect energy development in Kern County.	Consistent	Consistent with this goal, the project would develop solar PV facilities that would generate up to 1,400 MW of solar energy and up to 8 GWh of energy storage capacity and would offset an equivalent amount of fossil fuel-generated electrical power. The site is on generally undeveloped land and is located at a distance from established communities. The location of the site would ensure safe and orderly development of the project facilities.
Goal 5: Conserve prime agricultural lands from premature conversion	Consistent	As discussed in **Section 4.2**, *Agriculture and Forestry Resources,* of this EIR, the project site is not designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. Consistent with this policy, Prime Farmlands would not be affected by the project.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
Goal 6: Encourage alternative sources of energy, such as solar and wind energy, while protecting the environment.	Consistent	Consistent with this policy, the project would develop a solar photovoltaic (PV) power generating facility designed to generate up to 1,400 MW of solar energy and up to 8 GWh of energy storage capacity. The project would develop a clean energy source that would create fewer fossil fuel emissions, thus protecting the environment.
Policy 1: Appropriate resource uses of all types will be encouraged as desirable and consistent interim uses in undeveloped portions of the County regardless of General Plan designation.	Consistent	Impacts on natural resources are avoided or minimized through the design of the project and would not affect long-term use of the site. The project implements the Kern County General Plan policy of maximizing utilization of available solar resources.
Policy 7: Areas designated for agricultural use, which include Class I and II and other enhanced agricultural soils with surface delivery water systems, should be protected from incompatible residential, commercial, and industrial subdivision and development activities.	Consistent	See 1.9, *Resource*, Goal 5, of the Kern County General Plan, above.
Policy 11: Minimize the alteration of natural drainage areas. Require development plans to include necessary mitigation to stabilize runoff and silt deposition through utilization of grading and flood protection ordinances.	Consistent with implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2**.	As discussed in **Section 4.10**, *Hydrology and Water Quality*, of this EIR, the project would be required to adhere to the Kern County Development Standards and Kern County Code of Building Regulations which require site drainage plans that include development standards designed to protect water quality. Specifically, the project proponent would be required to prepare and submit a drainage plan to the Kern County Public Works Department, for approval of post-construction structural and nonstructural BMPs that could include Low Impact Development (LID) features such as drainage swales for collection of runoff prior to offsite discharge. Routine structural BMPs are intended to address water quality impacts related to drainage that are inherent in development. Consistent with this policy, the project would require the submission of a drainage plan to the County for review would implement **Mitigation Measure MM 4.10-2**, which requires a Final Drainage Plan designed to evaluate and minimize potential increases in runoff from the project site. Also, as required by **Mitigation Measure MM 4.10-1**, the project operator would conform to the requirements of State Water Resources Control Board's NPDES

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
		General Construction Permit Program through the preparation of a SWPPP that would include erosion control and sediment control BMPs designed to prevent disturbed soils from moving offsite.
Policy 12: Areas identified by the Natural Resources Conservation Service (NRCS) (formerly Soil Conservation Service) as having high range-site value should be conserved for Extensive Agriculture uses or as Resource Reserve, if located within a County water district.	Consistent	See 1.9, Resource, Goal 5, of the Kern County General Plan, above.
Policy 14: Emphasize conservation and development of identified mineral deposits.	Consistent	As discussed in **Section 4.12**, *Mineral Resources*, of this EIR, the project site does not contain mineral resources including petroleum. Consistent with this policy, no development would occur that would impact identified mineral deposits.
Policy 17: Lands classified as MRZ-2, as designated by the State of California, should be protected from encroachment of incompatible land uses.	Consistent	As discussed in **Section 4.12**, *Mineral Resources*, of this EIR, the project site is not located on lands classified as Mineral Resource Zones (MRZ) by the California Geological Survey (CGS), nor is the majority of the site zoned for or immediately adjacent to lands designated as Mineral and Petroleum areas by the Soledad Mountain Elephant Butte Specific Plan or the Kern County General Plan. The approved and under construction step-up high-voltage substation where minor upgrades are proposed, as well as a small portion of southeastern section of the project site are located within an area designated by the County General Plan as 8.4 Mineral and Petroleum (Minimum 5 Arce Parcel Size); however, there are no active or inactive petroleum extraction facilities within or immediately adjacent to the site. Neither the project site nor adjacent areas include land classified as MRZ. As such, no lands classified as MRZ-2 would be encroached upon from incompatible land uses.
Measure F: Prime agricultural lands, according to the Kern County Interim-Important Farmland 2000 map produced by the Department of Conservation, which have Class I or II soils and a surface delivery water system shall be conserved through the use of	Consistent	As discussed in **Section 4.2**, *Agriculture and Forestry Resources*, of this EIR, the project site is not designated as Prime Farmland as identified by the California Department of Conservation. Consistent with this policy, no prime agricultural

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
agricultural zoning with minimum parcel size provisions.		lands, which have Class I or II soils and a surface delivery water system, would be impacted by the project.
Measure H: Use the California Geological Survey's latest maps to locate mineral deposits until the regional and statewide importance mineral deposits map has been completed, as required by the Surface Mining and Reclamation Act.	Consistent	As discussed in **Section 4.12**, *Mineral Resources*, of this EIR, neither the project site nor surrounding areas contain State-designated mineral resource areas. Consistent with this measure, this EIR utilized the California Geological Survey's latest maps to identify local mineral deposits in the vicinity of the project site.
1.10 General Provisions		
Goal 1: Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving valuable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.	Consistent	Consistent with this policy, the project would develop a clean energy source that will reduce fossil fuel emissions, thereby reducing greenhouse gas (GHG) emissions, preserving natural resources, and promoting a safe and healthful environment. As described in **Section 4.9**, *Hazards and Hazardous Materials*, of this EIR, the project site is not located on a hazardous site. As described in **Section 4.10**, *Hydrology and Water Quality*, of this EIR, the project site is located within the 100-year floodplain. Specifically, the central portion of the project site is within Federal Emergency Management Agency (FEMA) Flood Zone A, indicating a Special Flood Hazard Area (see **Figure 3-5,** *Floodplain Map*). Further, the project would be developed in accordance with the General Plan, Floodplain Management Ordinance and **Mitigation Measure MM 4.10-2**. As discussed in **Section 4.14**, *Public Services*, of this EIR, implementation of **Mitigation Measures MM 4.14-2** and **MM 4.14-3** would require the project to pay applicable fees and taxes to reduce significant impacts to fire or police protection services resulting from the project. With payment of the required fees and taxes, any additional fire or police protection services, facilities or personnel required as a result of the project would be appropriately funded. Therefore, the project would be consistent with this measure.
1.10.1 Public Services and Facilities		

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
Policy 9: New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure which it generates and upon which it is dependent.	Consistent with implementation of **Mitigation Measures MM 4.14-2** through **MM 4.14-4**.	See 1.4, *Public Facilities and Services*, Goal 1, above. Impacts to public services are evaluated in **Section 4.14**, *Public Services*, of this EIR.
Policy 15: Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the California Environmental Quality Act (CEQA) documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development.	Consistent	Public service impacts are evaluated in **Section 4.14**, *Public Services*, of this EIR. This EIR serves to comply with this policy.
Policy 16: The developer shall assume full responsibility for costs incurred in service extension or improvements that are required to serve the project. Cost sharing or other forms of recovery shall be available when the service extensions or improvements have a specific quantifiable regional significance.	Consistent	See 1.4, *Public Facilities and Services*, Goal 1 and Policy 1, above.
Measure C: Project developers shall coordinate with the local utility service providers to supply adequate public utility services.	Consistent	See 1.4, *Public Facilities and Services*, Policy 3, above.
Measure D: Involve utility providers in the land use and zoning review process.	Consistent	See 1.4, *Public Facilities and Services*, Policy 3, above.
Measure E: All new discretionary development projects shall be subject to the Standards for Sewage, Water Supply and Preservation of Environmental Health Rules and Regulations administered by the County's Public Health Services Department. Those projects having percolation rates of less than five minutes per inch shall provide a preliminary soils study and site specific documentation that characterize the quality of upper groundwater in the alternative septic systems would adversely impact groundwater quality. If the evaluation indicated that the uppermost groundwater at the proposed site	Consistent	Water and wastewater impacts are evaluated in **Section 4.10**, *Hydrology and Water Quality*, and **Section 4.17**, *Utilities and Service Systems*, of this EIR. A sanitary water supply would not be required during construction because restroom facilities would be provided by portable units to be serviced by licensed providers. Onsite operations and maintenance facilities may alternatively pursue the installation of an onsite septic system, which would be permitted in accordance with the Kern County Public Health Environmental Health Division permitting process. During operations, water would be sourced from trucked water, well water, and/or bottled water would be provided for staff. Final review of the project by the Kern

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
already exceeds groundwater quality objectives of the Regional Water Quality Control Board or would if the alternative septic system is installed, the applicant would be required to supply sewage collection, treatment, and disposal facilities.		County Planning and Natural Resources Department, as well as adherence to all applicable local, state and federal regulations, would ensure that the project would not pose significant environmental or public health and safety hazards, consistent with this measure.
1.10.2 Air Quality		
Policy 18: The air quality implications of new discretionary land use proposals shall be considered in approval of major developments. Special emphasis will be placed on minimizing air quality degradation in the desert to enable effective military operations and in the valley region to meet attainment goals.	Consistent with implementation of **Mitigation Measures MM 4.3-1**, **MM 4.3-2**, **MM 4.3-3**, and **MM 4.3-4**.	Air quality and GHG impacts are evaluated in **Sections 4.3**, *Air Quality*, and **4.8**, *Greenhouse Gas Emissions*, of this EIR. Consistent with this policy, the project would implement **Mitigation Measures MM 4.3-1**, **MM 4.3-2**, **MM 4.3-3**, and **MM 4.3-4**, which would reduce impacts to a less than significant level. Air quality mitigation measures include diesel emission-reduction measures, fugitive dust control measures, and Valley Fever exposure minimization measures.
Policy 19: In considering discretionary projects for which an Environmental Impact Report must be prepared pursuant to the California Environmental Quality Act, the appropriate decision making body, as part of its deliberations, will ensure that: (1) All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and (2)The benefits of the proposed project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to the extent that such a statement is required pursuant to the California Environmental Quality Act.	Consistent	See 1.10.2, *Air Quality*, Policy 18, above. This EIR serves to comply with this policy.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
Policy 20: The County shall include fugitive dust control measures as a requirement for discretionary projects and as required by the adopted rules and regulations of the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District on ministerial permits.	Consistent with implementation of **Mitigation Measures MM 4.3-2**	Air quality impacts are evaluated in **Section 4.3**, *Air Quality*, of this EIR. As discussed therein, implementation of **Mitigation Measure MM 4.3-2** would further reduce fugitive dust emissions through preparation of a comprehensive Site-Specific Fugitive Dust Control Plan, in compliance with the adopted rules and regulations of the Eastern Kern County Air Pollution Control District on ministerial permits.
Policy 21: The County shall support air districts efforts to reduce PM_{10} and $PM_{2.5}$ emissions.	Consistent with implementation of **Mitigation Measures MM 4.3-1 and MM 4.3-2**.	Air quality impacts are evaluated in **Section 4.3**, *Air Quality*, of this EIR. As discussed in that section, implementation of **Mitigation Measures MM 4.3-1** and **MM 4.3-2** would reduce PM_{10} and $PM_{2.5}$ emissions during construction to a less than significant level. The project would not generate ambient constructions of PM_{10} and $PM_{2.5}$ above the applicable thresholds during operation.
Policy 22: Kern County shall continue to work with the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District toward air quality attainment with federal, state, and local standards.	Consistent with implementation of **Mitigation Measures MM 4.3-1, MM 4.3-2, MM 4.3-3,** and **MM 4.3-4**.	Air quality impacts are evaluated in **Section 4.3**, *Air Quality*, of this EIR. Consistent with this policy, the project would implement **Mitigation Measures MM 4.3-1**, **MM 4.3-2**, **MM 4.3-3**, and **MM 4.3-4**, which would reduce impacts to air quality to a less than significant level. The project would be in compliance with all applicable Eastern Kern County Air Pollution Control District rules and regulations.
Measure F: All discretionary permits shall be referred to the appropriate air district for review and comment.	Consistent	Air quality impacts are evaluated in **Section 4.3**, *Air Quality*, of this EIR. Consistent with this measure, the necessary discretionary permits shall be referred to the Eastern Kern Air Pollution Control District for review and comment.
Measure G: Discretionary development projects involving the use of tractor-trailer rigs shall incorporate diesel exhaust reduction strategies including, but not limited to: a. Minimizing Idling time. b. Electrical overnight plug-ins.	Consistent with implementation of **Mitigation Measures MM 4.3-3**	Air quality impacts are evaluated in **Section 4.3**, *Air Quality*, of this EIR. Consistent with this measure, implementation of **Mitigation Measure MM 4.3-3** would require diesel exhaust reduction strategies.
Measure H: Discretionary projects may use one or more of the following to reduce air quality effects: a. Pave dirt roads within the development.	Consistent with implementation of **Mitigation MM 4.3-1, MM 4.3-2, MM 4.3-3,** and **MM 4.3-4**.	Air quality impacts are evaluated in **Section 4.3**, *Air Quality*, of this EIR. Consistent with this measure, implementation of **Mitigation Measures MM 4.3-1, MM 4.3-2, MM 4.3-3**, and **MM 4.3-4** would further reduce adverse air quality effects.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
b. Pave outside storage areas. c. Provide additional low Volatile Organic Compounds (VOC) producing trees on landscape plans. d. Use of alternative fuel fleet vehicles or hybrid vehicles. e. Use of emission control devices on diesel equipment. f. Develop residential neighborhoods without fireplaces or with the use of Environmental Protection Agency certified, low emission natural gas fireplaces. g. Provide bicycle lockers and shower facilities on site. h. Increasing the amount of landscaping beyond what is required in the Zoning Ordinance (Chapter 19.86). i. The use and development of park and ride facilities in outlying areas. j. Other strategies that may be recommended by the local Air Pollution Control Districts.		
Measure J: The County should include PM_{10} control measures as conditions of approval for subdivision maps, site plans, and grading permits.	Consistent with implementation of **Mitigation Measures MM 4.3-1** and **MM 4.3-2**.	Air quality impacts are evaluated in Section 4.3, *Air Quality*, of this EIR. As discussed in that section, implementation of **Mitigation Measures MM 4.3-1** and **MM 4.3-2** would reduce PM_{10} and $PM_{2.5}$ emissions during construction to a less than significant level. The project would not generate ambient constructions of PM_{10} and $PM_{2.5}$ above the applicable thresholds during operation.
1.10.3 Archaeological, Paleontological, Cultural, and Historical Preservation		
Policy 25: The County will promote the preservation of cultural and historic resources which provide ties with the past and constitute a heritage value to residents and visitors.	Consistent with implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5**.	Cultural resource impacts are evaluated in **Section 4.5**, *Cultural Resources*, of this EIR. This EIR serves to comply with this policy and includes **Mitigation Measures MM 4.5-1** through **MM 4.5-5** to promote the preservation of cultural and historic resources where necessary.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
Measure K: Coordinate with the California State University, Bakersfield's Archaeology Inventory Center.	Consistent **Mitigation Measure MM 4.5-3**.	Cultural resource impacts are evaluated in **Section 4.5**, *Cultural Resources,* of this EIR. Consistent with this measure, copies of reports will be provided to the Kern County Planning and Natural Resources Department and to the Southern San Joaquin Valley Information Center at California State University, Bakersfield, per **Mitigation Measure MM 4.5-3**.
Measure L: The County shall address archaeological and historical resources for discretionary projects in accordance with CEQA.	Consistent with implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5.**	Cultural resource impacts are evaluated in **Section 4.5**, *Cultural Resources,* of this EIR. Consistent with this measure, impacts to archaeological and historical resources are evaluated in accordance with the California Environmental Quality Act (CEQA). This EIR serves to comply with this policy.
Measure M: In areas of known paleontological resources, the County should address the preservation of these resources where feasible.	Consistent with implementation of **Mitigation Measures MM 4.7-3**, **MM 4.7-4**, **MM 4.7-5**, and **MM 4.7-6**.	Paleontological resource impacts are evaluated in **Section 4.7**, *Geology and Soils,* of this EIR. **Mitigation Measures MM 4.7-3**, **MM 4.7-4**, **MM 4.7-5**, and **MM 4.7-6** would reduce potential impacts to known paleontological resources through hiring a qualified paleontologist to carry out all mitigation measures related to paleontological resources. A Paleontological Resources Awareness Training program would also be prepared for all construction personnel working on the Project.
Measure N: The County shall develop a list of Native American organizations and individuals who desire to be notified of proposed discretionary projects. This notification will be accomplished through the established procedures for discretionary projects and CEQA documents.	Consistent.	Tribal Cultural resource impacts are evaluated in **Section 4.16**, *Tribal Cultural Resources,* of this EIR. Consistent with this measure, notification regarding the project would be accomplished in accordance with the established procedures for discretionary projects and CEQA documents.
Measure O: On a project-specific basis, the County Planning Department shall evaluate the necessity for the involvement of a qualified Native American monitor for grading or other construction activities on discretionary projects that are subject to a CEQA document.	Consistent with implementation of **Mitigation Measure MM 4.5-1**.	Cultural resource impacts are evaluated in **Section 4.5**, *Cultural Resources,* of this EIR. This EIR serves to comply with this measure and includes **Mitigation Measure MM 4.5-1**, which would require consultation with the Native American monitor(s) to conduct a Cultural Resources Sensitivity Training for all personnel working on the project.
1.10.5 Threatened and Endangered Species		
Policy 27: Threatened or endangered plant and wildlife species should be protected in accordance with State and federal laws.	Consistent with implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-17**.	Biological resource impacts are evaluated in **Section 4.4**, *Biological Resources*, of this EIR. This EIR serves to comply with this policy and reduce potential impacts with mitigation.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
		Additionally, the project would be developed and operated in accordance with all local, State, and federal laws pertaining to the preservation of sensitive species.
Policy 28: County should work closely with State and federal agencies to assure that discretionary projects avoid or minimize impacts to fish, wildlife, and botanical resources.	Consistent with implementation of **Mitigation Measures MM 4.4-1** through **MM 4.4-17**.	Biological resource impacts are evaluated in **Section 4.4**, *Biological Resources*, of this EIR. This EIR serves to comply with this policy and reduce potential impacts with mitigation. As part of the biological resources evaluation and habitat assessment conducted for the project, relevant State and federal agencies were contacted to ensure that appropriate information about the project site were being gathered. Specifically, the Notice of Preparation/Initial Checklist Form of this EIR was sent to State and federal agencies requesting their input on the biological resource evaluation. Similarly, this EIR will also be circulated to these agencies, and staff will have the opportunity to comment on the biological resources evaluation. Therefore, the County is complying with this policy for the project.
Policy 29: The County will seek cooperative efforts with local, State, and federal agencies to protect listed threatened and endangered plant and wildlife species through the use of conservation plans and other methods promoting management and conservation of habitat lands.	Consistent with implementation of **Mitigation Measures MM 4.4-1 and MM 4.4-17**.	Biological resource impacts are evaluated in **Section 4.4**, *Biological Resources*, of this EIR. The project site is located within the administrative boundaries of the Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan. Consistency with the applicable policies of these plans are discussed below. Additionally, implementation of **Mitigation Measures 4.4-1 and MM 4.4-17** would further increase cooperative efforts with local, State, and federal agencies to support threatened and endangered plant and wildlife.
Policy 31: Under the provisions of the California Environmental Quality Act, the County, as lead agency, will solicit comments from the California Department of Fish and Game and the U.S. Fish and Wildlife Service when an environmental document is prepared.	Consistent	See 1.10.5, *Threatened and Endangered Species,* Policy 28, above.
Policy 32: Riparian areas will be managed in accordance with the USACE and the CDFW rules and regulations to enhance the drainage, flood	Consistent with implementation of **Mitigation Measures MM 4.4-19** and **MM 4.4-20**	Biological resource impacts and impacts to riparian areas are evaluated in **Section 4.4**, *Biological Resources*, of this EIR. The project site does not contain any wetlands or non-wetland waters that are subject to USACE jurisdiction. Consistent with this policy, if California Department of Fish and Wildlife and/or

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
control, biological, recreational, and other beneficial uses while acknowledging existing land use patterns.		Regional Water Quality Control Board jurisdictional resources cannot be avoided, **Mitigation Measures MM 4.4-19** and **MM 4.4-20** would require consultation with these agencies to obtain a Lake and Streambed Alteration Agreement and/or Waste Discharge Requirements, and comply with all avoidance, minimization, and compensatory mitigation as set forth in permits issued to the project by CDFW and/or RWQCB. Impacts to riparian areas would be less than significant with these mitigation measures. The County will also respond to all comments from reviewing agencies during the CEQA process.
Measure Q: Discretionary projects shall consider effects to biological resources as required by CEQA.	Consistent	Biological resource impacts are evaluated in **Section 4.4**, *Biological Resources*, of this EIR. Consistent with this measure, the evaluation of impacts to biological resources was performed in accordance with CEQA.
Measure R: Consult and consider the comments from responsible and trustee wildlife agencies when reviewing a discretionary project subject to CEQA.	Consistent with implementation of **Mitigation Measure MM 4.4-1** through **MM 4.4-19**.	Biological resource impacts are evaluated in **Section 4.4**, *Biological Resources*, of this EIR. Consistent with this measure, the project would implement mitigation measures that require consultation with the California Department of Fish and Wildlife. The County has and will respond to all comments from reviewing agencies during the CEQA process.
1.10.6 Surface Water and Groundwater		
Policy 34: Ensure that water quality standards are met for existing users and future development.	Consistent with implementation of **Mitigation Measures MM 4.9-1, MM 4.10-1**, and **MM 4.10-2**.	Water quality impacts are evaluated in **Section 4.10**, *Hydrology and Water Quality*, of this EIR. Consistent with this policy, the project would implement **Mitigation Measure MM 4.10-2**, which requires a Final Drainage Plan designed to evaluate and minimize potential increases in runoff from the project site. Also, as required by **Mitigation Measure MM 4.10-1**, the project operator would conform to the requirements of State Water Resources Control Board's NPDES General Construction Permit Program through the preparation of a SWPPP that would include erosion control and sediment control BMPs designed to prevent disturbed soils from moving offsite. The project would also implement **Mitigation Measure MM 4.9-1**, requiring preparation and maintenance of a Hazardous Materials Business

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
		Plan to reduce mixing of pollutants with stormwater onsite, thereby maintaining the integrity of the watershed.
Policy 41: Review development proposals to ensure adequate water is available to accommodate projected growth.	Consistent	See 1.4, *Public Facilities and Services*, Goal 5, above.
Policy 43: Drainage shall conform to the Kern County Development Standards and the Grading Ordinance.	Consistent with implementation of **Mitigation Measure MM 4.10-2**.	See 1.9, *Resources*, Policy 11, above.
Policy 44: Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of impervious surfaces as required by the California Environmental Quality Act (CEQA), to prevent the degradation of the watershed to the extent practical.	Consistent with implementation of **Mitigation Measures MM 4.9-**1, **MM 4.10-1**, and **MM 4.10-2.**	See 1.10.6, *Surface Water and Groundwater*, Policy 34, above.
Measure Y: Promote efficient water use by utilizing measures such as: (i) Requiring water-conserving design and equipment in new construction; (ii) Encouraging water-conserving landscaping and irrigation methods; and (iii) Encouraging the retrofitting of existing development with water conserving devices.	Consistent.	See 1.4, *Public Facilities and Services*, Goal 5, above.
1.10.7 Light and Glare		
Policy 47: Ensure that light and glare from discretionary new development projects are minimized in rural as well as urban areas.	Consistent with implementation of **Mitigation Measures MM 4.1-6** and **MM 4.1-7.**	Light and glare impacts are evaluated in **Section 4.1**, *Aesthetics*, of this EIR. Consistent with this policy, the project would implement **Mitigation Measures MM 4.1-6** and **MM 4.1-7**, which include design requirements to limit unnecessary lighting, minimize glare from solar panels, and utilize non-reflective materials on buildings. **MM 4.1-6** also requires the project to comply with Kern County's Dark Skies Ordinance. Light and glare impacts were determined to be less than significant with implementation of **Mitigation Measures MM 4.1-6** and **MM 4.1-7**.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
Policy 48: Encourage the use of low-glare lighting to minimize nighttime glare effects on neighboring properties.	Consistent with implementation of **Mitigation Measures MM 4.1-5** through **MM 4.1-7**.	See 1.10.7, *Light and Glare*, Policy 47, above.
Measure AA: The County shall utilize CEQA Guidelines and the provisions of the Zoning Ordinance to minimize the impacts of light and glare on adjacent properties and in rural undeveloped areas.	Consistent	Light and glare impacts are evaluated in **Section 4.1**, *Aesthetics*, of this EIR. Consistent with this measure, light and glare impacts are evaluated in accordance with CEQA. This EIR serves to comply with this policy.
Chapter 2. Circulation Element		
2.1 Introduction		
Goal 4: Kern County will plan for a reduction of environmental effects without accepting a lower quality of life in the process.	Consistent	See 1.3, *Physical and Environmental Constraints*, Goal 1, of the Kern County General Plan, above.
Goal 5: Maintain a minimum [level of service] LOS D for all roads throughout the County.	Consistent with implementation of **Mitigation Measures MM 4.15-1** and **4.15-2**.	Traffic impacts are evaluated in **Section 4.15**, *Transportation*, of this EIR. Pursuant to Senate Bill 743, the focus in evaluating transportation impacts under CEQA has shifted from traffic delays (Level of Service [LOS]) to total vehicle miles traveled (VMT). Traffic and transportation impacts have been thoroughly analyzed in this EIR, pursuant to CEQA requirements. As discussed in **Section 4.15**, *Transportation*, of this EIR, local roadways in the vicinity of the project site generally are free flowing, with few if any existing delays and adequate LOS (Tetra Tech, 2025). Temporary construction traffic would not significantly alter current road conditions and would be consistent with LOS standards. Upon completion of project construction, operations and maintenance traffic would be minimal, as the project would only require approximately six permanent full-time staff employees. Additionally, as discussed in **Section 4.15**, *Transportation*, of this EIR, with implementation of **Mitigation Measures MM 4.15-1** and **MM 4.15-2**, which require preparation of a Construction Traffic Control Plan and measures to reduce worker trips during peak AM and PM hours, the project would result in less than significant impacts related to traffic and transportation. Therefore, the project would be consistent with this policy.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
2.3.3 Highways Plan		
Goal 5: Maintain a minimum Level of Service (LOS) D.	Consistent	See 2.1, *Introduction*, Goal 5, above.
Policy 1: Development of roads within the County shall be in accordance with the Circulation Diagram Map. The charted roads are usually on section and mid-section lines. This is because the road center line can be determined by an existing survey.	Consistent	**Section 4.15**, *Transportation*, of this EIR, provides a discussion of County circulation consistency. The project would include internal service roads. Consistent with this policy, all road improvements would be completed per Caltrans and/or Kern County code and regulations. If access roads need to be built along lines other than those on the circulation diagram map, the project proponent would negotiate necessary easements to allow this, in cooperation with Kern County.
Policy 3: This plan's road-width standards are listed below. These standards do not include state highway widths that would require additional right-of-way for rail transit, bike lanes, and other modes of transportation. Kern County shall consider these modifications on a case-by-case basis. • Expressway [Four Travel Lanes] Minimum 110-foot right-of-way; • Arterial [Major Highway] Minimum 110-foot right-of-way; • Collector [Secondary Highway] Minimum 90-foot right-of-way; • Commercial-Industrial Street Minimum 60-foot right-of-way; and • Local Street [Select Local Road] Minimum 60-foot right-of-way.	Consistent	Potential traffic impacts are evaluated in **Section 4.15**, *Transportation*, of this EIR. Consistent with this measure, the project would be in compliance with the road network policies and would implement the Kern County Development Standards as they relate to road standards and planning requirements.
Measure A: The Planning Department shall carry out the road network Policies by using the Kern County Land Division Ordinance and Zoning Ordinance, which implements the Kern County Development Standards that includes road standards related to urban and rural planning requirements. These ordinances also regulate access points.	Consistent	See 2.3.3, *Highway Plan*, Policy 3, of the Kern County General Plan, above.

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Goals and Policies	Consistency Determination	Project Consistency
Planning Department can help developers and property owners in identifying where planned circulation is to occur.		
Measure D: Elimination of non-strategic section and mid-section alignment crossings and intersections that intersect existing or planned freeways, expressways, railroads, runways and waterways must be reviewed and approved in conjunction with project adoption on an individual basis.	Consistent	See 2.3.3, *Highway Plan*, Policy 3, of the Kern County General Plan, above.
2.3.4 Future Growth		
Goal 1: To provide ample flexibility in this plan to allow for growth beyond the 20-year planning horizon.	Consistent	See 2.3.3, *Highway Plan*, Policy 3, of the Kern County General Plan, above.
Policy 2: The County should monitor development applications as they relate to traffic estimates developed for this plan. Mitigation is required if development causes affected roadways to fall below Level of Service (LOS) D. Utilization of the CEQA process would help identify alternatives to or mitigation for such developments. Mitigation could involve amending the Land Use, Open Space and Conservation Element to establish jobs/housing balance if projected trips in any traffic zone exceed trips identified for this Circulation Element. Mitigation could involve exactions to build offsite transportation facilities. These enhancements would reduce traffic congestion to an acceptable level.	Consistent	See 2.1, *Introduction*, Goal 5, above.
Policy 4: As a condition of private development approval, developers shall build roads needed to access the existing road network. Developers shall build these roads to County standards unless improvements along State routes are necessary then roads shall be built to Caltrans standards. Developers shall locate these roads (width to be determined by	Consistent	See 2.3.3, *Highway Plan*, Policy 1, above.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
the Circulation Plan) along centerlines shown on the circulation diagram map unless otherwise authorized by an approved Specific Plan Line. Developers may build local roads along lines other than those on the circulation diagram map. Developers would negotiate necessary easements to allow this.		
Policy 5: When there is a legal lot of record, improvement of access to County, city or State roads will require funding by sources other than the County. Funding could be by starting a local benefit assessment district or, depending on the size of a project, direct development impact fees.	Consistent	Consistent with this policy, the project proponent would fund improvements to project driveways that provide access to any County, city, or State roads.
Policy 6: The County may accept a developer's road into the county's maintained road system. This is at Kern County's discretion. Acceptance would occur after the developer follows the above requirements. Roads are included in the County road maintenance system through approval by the Board of Supervisors.	Consistent	The project would not develop a public road. However, consistent with this policy, the project proponent would be required to negotiate approval with the County where any proposed private access driveways would intersect public right-of-way.
Measure C: Project development shall comply with the requirements of the Kern County Zoning Ordinance, Land Division Ordinance, and Development Standards.	Consistent	Traffic impacts are evaluated in **Section 4.15**, *Transportation*, of this EIR. Consistent with this policy, the project would comply with the requirements of the Kern County Zoning Ordinance, Land Division Ordinance, and Development Standards.
2.3.6 Vacation of Existing or Recorded Future Streets, Highways, or Public Easements		
Goal 1: Provide a means for guiding decisions on vacating public roads.	Consistent	As discussed in **Chapter 3**, *Project Description*, of this EIR, the project would include easement vacations to remove public access easements within the solar facility and would process parcel maps to merge smaller parcels into larger ones. The purpose of the request is to facilitate the optimal layout of solar panels by removal of record but unused/undeveloped public rights-of-way on vacant land. These easements and unaccepted offers of dedication have been created by grant deed or parcel maps, and some dirt roads exist within the project footprint. As requested, the easement vacations would not eliminate any legal

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
		access for any property or persons in the area. In the cases where one of the proposed vacations removes primary access to a parcel, the project applicant/proponent would be responsible for recording public/private easements for access purposes prior to or concurrently with the vacation being recorded such that legal access remains. In most cases, the proposed public/private easements would be recorded along with the vacation of the original public easement. The vacations would occur in an area that is not densely developed and would not substantially affect current or future traffic volumes, as significant traffic volumes are not generated or anticipated. Any roadway vacation requests would be subject to approval by the Kern County Board of Supervisors and public hearing as applicable in the planning and approval process. With the approval of the aforementioned requests for either a nonsummary street vacation or a parcel merger, the project would be consistent with this goal.
Policy 1: A road vacation influencing the construction or operation of expressway, an arterials or collector highway may occur with, or after, amending this Element. Kern County will not vacate any public expressway, arterial or collector highway right-of-way without amendment to this Element. The County will need to amend the right-of way status to local or commercial-industrial streets.	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1, above.
Policy 2: A study, prepared at the applicant's expense, shall accompany the road vacation application. The study should provide information that will aid in finding the importance of the entire length of the right-of-way. The study would include a review of existing and proposed land uses and localized traffic modeling. This will help Kern County decide what corresponding changes are needed to the Land Use, Open Space and Conservation Element, or affected specific plan. This also will help Kern County decide if additional	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1, above. All applicable information listed in Policy 2 would be included within the project design and as part of the project review and approval process.

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Goals and Policies	Consistency Determination	Project Consistency
public road services or other traffic management are required elsewhere.		
Policy 3: If the road vacation applicant is a private entity, all costs for the public hearing shall be borne by the applicant. Also, costs associated with providing any necessary additional public road services or other traffic management caused by the road vacation shall be paid by the applicant.	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1 and Policy 2, above. If subsequent vacations are required, the applicant would adhere to the requirements of the listed policy.
Policy 4: The vacation of a road shall not take away legal access to adjacent properties or "land-lock" any legal lot or parcel of record. Legal access shall be determined through a report submitted with the application for road vacation.	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1 and Policy 3, above. In the cases where one of the proposed vacations removes primary access to a parcel, the project proponent would be responsible for recording private easements for access purposes prior to the vacation being recorded such that legal access remains.
Policy 5: If Kern County determines that the right-of-way is not needed for circulation in the general area, a road vacation may be authorized. An acceptable project shall be determined through a report submitted with the road vacation application and in keeping with traffic modeling parameters of this Plan.	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1 and Policies 2, 3, and 4, above.
Policy 6: A road vacation may be authorized if physical conditions such as natural, or manmade topography prevent rational extension of the facility. Physical conditions affecting roadways shall be determined through a report submitted with the road vacation application.	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1 and Policies 2, 3, and 4, above.
Policy 7: A road vacation shall only affect public, recorded rights-of-way or public service easements. The potential effects of a road vacation upon rights-of-way and easements are to be determined by a report submitted with the road vacation application. A vacation of private access or private service easement is not under County jurisdiction. Kern	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1 and Policies 2, 3, and 4, above. Any proposed roadway vacations would be submitted in the applicable reporting form. If a private vacation is needed, it would be handled under a civil action.

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Goals and Policies	Consistency Determination	Project Consistency
County considers these matters "civil" actions. These civil actions should be acted upon accordingly.		
Policy 8: A road vacation may be authorized if the right-of-way is not improved or used for its original purpose. Existing improvements and facility use shall be determined by a report submitted with the road vacation application.	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1 and Policies 2, 3, 4, and 7, above.
Policy 9: A road vacation may be authorized to remove excess right-of-way caused by relocation, or at the beginning of a general plan amendment proceeding. Excess right-of-way shall be determined through a report submitted with the road vacation application.	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1 and Policies 2, 3, 4, and 7, above.
Policy 10: A road vacation may be approved if there is an agreement to close a public street. A road vacation may be approved with acknowledgment of an impassable street. A road vacation may be approved with a land division map over the area of vacation if the project has comparable methods of vehicular access.	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1 and Policies 2, 3, 4, and 7, above.
Policy 11: A road vacation procedure may be used for considering public service easement or utility service easement abandonments. The procedure is the same as any public right-of-way vacation.	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1 and Policies 2, 3, 4, and 7, above.
Policy 12: A vacation of improved road right-of-way, or public service easement, should not occur until the lead agency makes findings. One important finding is the land is no longer needed for public use. A vacation of improved road right-of-way, or public service easement, should not occur until the right-of-way is superseded by relocation, and improved to acceptable Kern County Development standards. The Board of Supervisors shall have accepted the replacement facility into the maintained road system.	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1 and Policies 2, 3, 4, and 7, above.

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Goals and Policies	Consistency Determination	Project Consistency
Policy 13: A general vacation proceeding (consistent with State of California Streets and Highway Code) will require a public hearing when the vacation affects existing in place facilities or is a project caused by relocating right-of-way.	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1, above.
Policy 14: A summary vacation shall be consistent with State of California Streets and Highway Code. A summary vacation may be used when the right-of-way does not exist, is unused, or moved. A summary vacation may be used where right-of-way is impassable, unnecessary for present or prospective public use, or is excess or public service easement land.	Consistent	See 2.3.6, *Vacation of Existing or Recorded Future Streets, Highways, or Public Easements*, Goal 1 and Policies 2, 3, 4, and 7, above.
2.3.10. Congestion Management Programs		
Goal 1: To satisfy the trip reduction and travel demand requirements of the Kern COG's CMP.	Consistent with implementation of **Mitigation Measures MM 4.15-1** and **MM 4.15-2**.	Potential traffic impacts are evaluated in **Section 4.15**, *Transportation*, of this EIR. Consistent with this goal, the project would implement **Mitigation Measures MM 4.15-1** and **MM 4.15-2**, and comply with the requirements of the Kern Council of Government's Congestion Management Program. In addition, the project is an alternative energy facility which would not generate a substantial volume of trips or VMT during construction or operation.
Goal 2: To coordinate congestion management and air quality requirements and avoid multiple and conflicting requirements.	Consistent with implementation of **Mitigation Measures MM 4.15-1** and **Mitigation Measures MM 4.3-1** through **MM 4.3-4**.	Potential traffic impacts are evaluated in **Section 4.15**, *Transportation*, and air quality impacts are evaluated in **Section 4.3**, *Air Quality*, of this EIR. Consistent with this goal, the project would implement **Mitigation Measures MM 4.15-1** and **MM 4.15-2**, requiring the approval of a Construction Traffic Control Plan, measures to reduce worker trips during peak AM and PM hours, and encroachments and or other necessary permits by the California Department of Transportation (Caltrans) and/or the Kern County Roads Department. The project would also implement Mitigation **Measures MM 4.3-1**, **MM 4.3-2**, **MM 4.3-3**, and **MM 4.3-4**, which would reduce impacts to air quality to the extent feasible.

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Goals and Policies	Consistency Determination	Project Consistency
Policy 1: Pursuant to California Government Code 65089(a), Kern County has designated the Kern COG as the County's Congestion Management Agency (CMA).	Consistent with implementation of **Mitigation Measures MM 4.15-1** and **MM 4.15-2**.	See 2.3.10, *Congestion Management Programs*, Goal 1, above.
Policy 2: The CMA is responsible for developing, adopting, and annually updating a CMP. The CMP is to be developed in consultation with, and with the cooperation of, the regional transportation agency (also the Kern COG), regional transportation providers, local governments, Caltrans, and the air pollution control district.	Consistent with implementation of **Mitigation Measures MM 4.15-1** and **MM 4.15-2**.	See 2.3.10, *Congestion Management Programs*, Goal 1 and Goal 2, above. The project would be in compliance with all applicable Eastern Kern County Air Pollution Control District, rules and regulations.
Measure A: The Kern COG should request the proper consultation from County of Kern to develop and update the proper congestion management program.	Consistent with implementation of **Mitigation Measures MM 4.15-1** and **MM 4.15-2**.	See 2.3.10, *Congestion Management Programs*, Goal 1, above.
Measure B: The elements within the Kern Congestion Management Program are to be implemented by each incorporated city and the County of Kern. Specifically, the land use analysis program, including the preparation and adoption of deficiency plans is required. Additionally, the adoption of trip reduction and travel demand strategies are required in the Congestion Management Program.	Consistent with implementation of **Mitigation Measures MM 4.15-1** and **MM 4.15-2**.	See 2.3.10, *Congestion Management Programs*, Goal 1, above.
2.5.4 Transportation of Hazardous Materials		
Goal 1: Reduce risk to public health from transportation of hazardous materials.	Consistent with implementation of **Mitigation Measure MM 4.9-1**.	**Section 4.9**, *Hazards and Hazardous Materials*, of this EIR, provides a discussion of Hazardous Materials Transportation and existing regulatory requirements that pertain to transport of hazardous materials and wastes. Consistent with this policy, the project would not pose a significant risk to public health from transportation of hazardous materials with implementation of **Mitigation Measure MM 4.9-1**, which 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 impacts in the

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
		event of a spill, would ensure that all handling, storage, and disposal of hazardous materials would be conducted in accordance with proven practices to minimize exposure to maintenance workers and/or the public.
Policy 1: The commercial transportation of hazardous material, identification and designation of appropriate shipping routes will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.	Consistent with implementation of **Mitigation Measure MM 4.9-1**.	See 2.5.4, *Transportation of Hazardous Materials*, Goal 1, above.
Policy 2: Kern County and affected cities should reduce use of County-maintained roads and city-maintained streets for transportation of hazardous materials.	Consistent with implementation of **Mitigation Measure MM 4.9-1**.	See 2.5.4, *Transportation of Hazardous Materials*, Goal 1, above.
Measure A: Roads and highways utilized for commercial shipping of hazardous waste destined for disposal will be designated as such pursuant to Vehicle Code Sections 31303 et seq. Permit applications shall identify commercial shipping routes they propose to utilize for particular waste streams.	Consistent with implementation of **Mitigation Measure MM 4.9-1**.	See 2.5.4, *Transportation of Hazardous Materials*, Goal 1, above.
Chapter 3. Noise Element		
3.3 Sensitive Noise Areas		
Goal 1: Ensure that residents of Kern County are protected from excessive noise and that moderate levels of noise are maintained.	Consistent with implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-3**.	Noise impacts, sensitive receptors and County noise thresholds are evaluated in **Section 4.13**, *Noise*, of this EIR. As discussed in that section, noise impacts would be minimized during construction and decommissioning with implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-3**. All noise impacts would be less than significant with implementation of mitigation, and sensitive receptors would not be exposed to excessive noise levels. Thus, the project would be consistent with this goal.
Goal 2: Protect the economic base of Kern County by preventing the encroachment of incompatible land uses near known noise producing roadways,	Consistent	This section of the EIR (**Section 4.11**, *Land Use*), discusses the land uses proposed by the project. As discussed in this section,

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
industries, railroads, airports, oil and gas extraction, and other sources.		the project would be consistent with existing land use designations of the project site.
Policy 1: Review discretionary industrial, commercial, or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses.	Consistent with implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-4**.	See 3.3, *Sensitive Noise Areas*, Goal 1, above.
Policy 3: Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.	Consistent with implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-4**.	See 3.3, *Sensitive Noise Areas*, Goal 1, above. The project does not include noise sensitive uses that would be affected by roadway noise. Project-related noise would be consistent with this policy.
Policy 4: Utilize good land use planning principles to reduce conflicts related to noise emissions.	Consistent	See 3.3, *Sensitive Noise Areas*, Goal 2, above. Noise-sensitive land uses are evaluated in Section 4.13, *Noise*, of this EIR.
Policy 7: Employ the best available methods of noise control.	Consistent with implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-4**.	See 3.3, *Sensitive Noise Areas*, Goal 1, above.
Measure A: Utilize zoning regulations to assist in achieving noise-compatible land use patterns.	Consistent	This section of the EIR discusses the land uses proposed by the project. As discussed in this section, with the ZCC and CUP approvals, the project would incorporate design features that adhere to special development standards and conditions of approval pertinent to noise reduction, and ultimately be subject to conformity with applicable land use policies and regulations, as well as the Kern County zoning and noise ordinance.
Measure C: Review discretionary development plans, programs and proposals, including those initiated by both the public and private sectors, to ascertain and ensure their conformance to the policies outlined in this element.	Consistent	Consistent with this measure, the project will be reviewed for conformance with the policies outlined in this element.
Measure E: Review discretionary development plans to ensure compatibility with adopted Airport Land Use Compatibility Plans.	Consistent	As referenced in **Section 4.9**, *Hazards and Hazardous Materials*, of this EIR, no portion of the project site or the 230-kV gen-tie line is governed by the Kern County ALUCP.
Measure F: Require proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise	Consistent with implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-4**.	See 3.3, *Sensitive Noise Areas*, Goal 1 and Measure A, above.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
levels in excess of 65 dB L_{dn} and interior noise levels in excess of 45 dB L_{dn}.		
Measure G: At the time of any discretionary approval, such as a request for a General Plan Amendment, zone change or subdivision, the developer may be required to submit an acoustical report indicating the means by which the developer proposes to comply with the noise standards. The acoustical report shall: a) Be the responsibility of the applicant. b) Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics. c) Be subject to the review and approval of the Kern County Planning Department and the Environmental Health Services Department. All recommendations therein shall be complied with prior to final approval of the project.	Consistent	Consistent with this measure, the project has prepared an acoustical analysis in accordance with the requirements of Chapter 3, *Noise Element*, Measure G, of the Kern County General Plan. The Acoustical Analysis Report is included as **Appendix J** of this EIR.
Measure I: Noise analyses shall include recommended mitigation, if required, and shall: a) Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions. b) Include estimated noise levels, in terms of CNEL, for existing and projected future (10 – 20 years hence) conditions, with a comparison made to the adopted policies of the Noise Element. c) Include recommendations for appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element. d) Include estimates of noise exposure after the prescribed mitigation measures have been implemented. If compliance with the adopted standards and policies of the Noise Element will not	Consistent with implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-3**.	Consistent with this measure, a noise assessment was conducted for the project and is included as Appendix J and referenced in **Section 4.13**, *Noise*, of this EIR. In accordance with this measure, the noise assessment includes representative noise measurements, recommended best management practices, estimated noise levels, in terms of Community Noise Equivalent Level (CNEL), and estimates of noise exposure. As discussed in that section, noise impacts would be minimized during construction and decommissioning with implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-3**. All noise impacts were determined to be less than significant with mitigation incorporated.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
be achieved, a rationale for acceptance of the project must be provided.		
Measure J: Develop implementation procedures to ensure that requirements imposed pursuant to the findings of an acoustical analysis are conducted as part of the project permitting process.	Consistent.	Consistent with this measure, the recommendations and requirements imposed pursuant to the findings of the acoustical analysis would be included with project implementation.
Chapter 4. Safety Element		
4.1 Introduction		
Goal 1: Minimize injuries and loss of life and reduce property damage.	Consistent	Consistent with this goal, the project would be required to comply with adopted safety regulations, such as the Fire Code, and related policies in the General Plan.
4.2 General Policies and Implementation Measures, Which Apply to More Than One Safety Constraint		
Measure F: The adopted multi-jurisdictional Kern County, California Multi-Hazard Mitigation Plan, as approved by the Federal Emergency Management Agency (FEMA), shall be used as a source document for preparation of environmental documents pursuant to the California Environmental Quality Act (CEQA), evaluation of project proposals, formulation of potential mitigation, and identification of specific actions that could, if implemented, mitigate impacts from future disasters and other threats to public safety.	Consistent	Consistent with this measure, **Section 4.9**, *Hazards and Hazardous Materials*, of this EIR, includes a discussion of the Kern County Multi-Hazard Mitigation Plan, and utilizes the document as guidance for potential mitigation measures pursuant to CEQA.
4.3 Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure		
Policy 1: The County shall require development for human occupancy to be placed in a location away from an active earthquake fault in order to minimize safety concerns.	Consistent	Consistent with this policy, the project does not include development for human occupancy and would not be located near an active earthquake fault.
Measure B: Require geological and soils engineering investigations in identified significant geologic hazard areas in accordance with the Kern County Code of Building Regulations.	Consistent	See 1.3, *Physical and Environmental Constraints*, Measure D, of the Kern County General Plan, above.

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
Measure C: The fault zones designated in the Kern County Seismic Hazard Atlas should be considered significant geologic hazard areas. Proper precautions should be instituted to reduce seismic hazard, whenever possible in accordance with State and County regulations.	Consistent	See 1.3, *Physical and Environmental Constraints*, Goal 1, of the Kern County General Plan, above.
4.5 Landslides, Subsidence, Seiche, and Liquefaction		
Policy 1: Determine the liquefaction potential at sites in areas of shallow groundwater (Map Code 2.3) prior to discretionary development and determine specific mitigation to be incorporated into the foundation design, as necessary, to prevent or reduce damage from liquefaction in an earthquake.	Consistent	See 1.3, *Physical and Environmental Constraints*, Goal 1, of the Kern County General Plan, above.
Policy 3: Reduce potential for exposure of residential, commercial, and industrial development to hazards of landslide, land subsidence, liquefaction, and erosion.	Consistent with implementation of **Mitigation Measure MM 4.10-1**	As discussed in **Section 4.7**, *Geology and Soils*, of this EIR, the potential for landslides on the project site is considered low given relatively flat terrain and distance to the surrounding mountain ranges. With implementation of **Mitigation Measure MM 4.10-1**, grading would be subject to compliance with the NPDES General Construction Permit requirements and implementation of required BMPs would have the ability to minimize the potential for erosion or loss of topsoil. Adherence to the requirements of the Kern County Building Code and the California Building Code would also ensure that effects from seismic-related ground failure including liquefaction would be minimized. Shallow groundwater is not expected on the project site. See **Section 4.7**, *Geology and Soils*, of this EIR.
Measure D: Discretionary actions will be required to address and mitigate impacts from inundation, land subsidence, landslides, high groundwater areas, liquefaction and seismic events through the CEQA process.	Consistent with implementation of **Mitigation Measure MM 4.10-1**	See 1.5, *Landslides, Subsidence, Seiche, and Liquefaction*, Policy 3, above.
4.6 Wildland and Urban Fire		
Policy 1: Require discretionary projects to assess impacts on emergency services and facilities.	Consistent with implementation of **Mitigation Measures MM 4.14-1**, **MM 4.14-2**, and **MM 4.14-3**.	Consistent with this policy, impacts on emergency services and facilities are discussed and evaluated in **Section 4.14**, *Public Services*, of this EIR. **Mitigation Measure MM 4.14-1** requires

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
		implementation of a Fire Safety Plan during project construction and operation that would include notification procedures and emergency fire precautions to help reduce fire risks and the consequential need for fire protection services onsite. **Mitigation Measures MM 4.14-2** and **MM 4.14-3** require the project proponent to pay applicable fees and taxes to reduce significant impacts to fire or police protection services resulting from the project.
Policy 3: The County will encourage the promotion of fire prevention methods to reduce service protection costs and costs to taxpayers.	Consistent with implementation of **Mitigation Measure MM 4.14-1**.	The project would not interfere or prohibit Kern County's ability to meet this policy. **Mitigation Measure MM 4.14-1** requires the proponent to develop a Fire Safety Plan for use during construction and operational activities. All onsite employees would be trained on fire safety and how to respond to onsite fires, should they occur. See **Sections 4.9**, *Hazards and Hazardous Materials*, **4.14**, *Public Services*, and **4.18**, *Wildfire*, of this EIR.
Policy 4: Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.	Consistent with implementation of **Mitigation Measure MM 4.15-1** and **MM 4.15-2**.	**Section 4.15**, *Transportation*, of this EIR includes Mitigation **Measures MM 4.15-1** and **MM 4.15-2**, which requires the approval of a Construction Traffic Control Plan, measures to reduce worker trips during peak AM and PM hours, and issuance of encroachments and other necessary permits by Caltrans and/or the Kern County Roads Department, where required. The project proponent would develop and implement a Fire Safety Plan for use during construction and operation, and project site access would comply with emergency vehicle access requirements.
Policy 6: All discretionary projects shall comply with the adopted Fire Code and the requirements of the Fire Department.	Consistent with implementation of **Mitigation Measure MM 4.14-1**.	Consistent with this policy, the project would be required to comply with the adopted Fire Code and the requirements of the Kern County Fire Department.
Measure A: Require that all development comply with the requirements of the Kern County Fire Department or other appropriate agency regarding access, fire flows, and fire protection facilities.	Consistent with implementation of **Mitigation Measures MM 4.14-1** through **MM 4.14-3**.	Consistent with this measure, the project would implement **Mitigation Measure MM 4.14-1**, which would require preparation and implementation of a Fire Safety Plan to ensure the provision of appropriate access. Additionally, the project would implement **Mitigation Measures MM 4.14-2** and **MM 4.14-3** requiring the project proponent to pay applicable fees and taxes to reduce significant impacts to fire or police

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
		protection services resulting from the project. The project would be consistent with this policy.
4.9 Hazardous Materials		
Measure A: Facilities used to manufacture, store, and use of hazardous materials shall comply with the Uniform Fire Code, with requirements for siting or design to prevent onsite hazards from affecting surrounding communities in the event of inundation.	Consistent with implementation of **Mitigation Measure MM 4.14-1**.	See 4.6, *Wildland and Urban Fire*, Policy 6, above. The project would comply with the Uniform Fire Code.
Chapter 5. Energy Element		
5.2 Importance of Energy to Kern County		
Policy 7: The processing of all discretionary energy project proposals shall comply with California Environmental Quality Act (CEQA) Guidelines directing that the environmental effects of a project must be taken into account as part of project consideration	Consistent	Consistent with this policy, environmental effects of the project would be analyzed in accordance with CEQA guidelines. This EIR serves to comply with this policy.
Policy 8: The County should work closely with local, state, and federal agencies to assure that energy projects (both discretionary and ministerial) avoid or minimize direct impacts to fish, wildlife, and botanical resources, wherever practical.	Consistent	See 1.10.5, *Threatened and Endangered Species,* Policy 28, above.
Policy 10: The County should require acoustical analysis for energy project proposals that might impact sensitive and highly-sensitive uses in accordance with the Noise Element of the General Plan.	Consistent	See 3.3, *Sensitive Noise Areas*, Goal 1, above.
5.4.5 Solar Energy Development		
Goal 1: Encourage safe and orderly commercial solar development.	Consistent	Consistent with this goal, the project would develop solar PV facilities capable of generating up to 1,400 MW of solar energy and up to 8 GWh of energy storage capacity and would offset an equivalent amount of fossil fuel-generated electrical power. The site is on generally undeveloped land and is located at a distance from established communities. The location of the site

TABLE 4.11-2: CONSISTENCY ANALYSIS WITH KERN COUNTY GENERAL PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
		would ensure a safe and orderly development of the solar facilities.
Policy 1: The County shall encourage domestic and commercial solar energy uses to conserve fossil fuels and improve air quality.	Consistent	Consistent with this policy, the project would develop solar PV facilities capable of generating up to 1,400 MW of solar energy and up to 8 GWh of energy storage capacity and would offset an equivalent amount of fossil fuel-generated electrical power. Operation of the project would improve air quality within the County and assist the County in meeting attainment goals. See **Section 4.3**, *Air Quality*, of this EIR.
Policy 3: The County should permit solar energy development in the desert and valley planning regions that does not pose significant environmental or public health and safety hazards.	Consistent	Consistent with this policy, the project proposes the development of PV power generation and storage facilities in the desert region of Kern County. Final review of the project by the Kern County Planning and Natural Resources Department, as well as adherence to all applicable local, state, and federal regulations, would ensure that the project would not pose significant environmental or public health and safety hazards.
5.4.7 Transmission Lines		
Goal 1: To encourage the safe and orderly development of transmission lines to access Kern County's electrical resources along routes, which minimize potential adverse environmental effects.	Consistent	Final review of the project by the Kern County Planning and Natural Resources Department, as well as adherence to all applicable local, state and federal regulations, would ensure that the project's transmission lines would not pose significant environmental or public health and safety hazards.
Policy 5: The County should discourage the siting of above-ground transmission lines in visually sensitive areas.	Consistent	See 5.4.7, Transmission Lines, Goal 1, above. Further, visual impacts are evaluated in **Section 4.1**, *Aesthetics*, of this EIR.

TABLE 4.11-3: CONSISTENCY ANALYSIS WITH THE SOLEDAD MOUNTAIN ELEPHANT BUTTE SPECIFIC PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
A. Land Use		
Item 5. Agriculture		
Recommendation: Grazing shall be allowed only in accordance with the Zoning Ordinance and where permitted by right.	Consistent	Consistent with this recommendation, the project would not introduce grazing uses in areas where such uses conflict with the Zoning Ordinance. As discussed in **Section 4.2**, *Agriculture and Forestry Resources*, of this EIR, the project would result in less than significant impacts related to agricultural resources.
Implementation: Compliance with existing Zoning Ordinance	Consistent	Consistent with this implementation measure, the project would comply with the County's Zoning Ordinance.
B. Circulation		
Item 1. Location & Extent of Existing Streets		
Recommendation: All roads shall be maintained as they now exist. An O.P. line shall be established for a 110-foot right-of-way along the general alignment of Silver Queen Road from the State Route 14 interchange to the South line of Section 12, T.10N., R.13W., S.B.B.&M.	Consistent	Consistent with this recommendation, the project would be in compliance with the road network policies and would implement the Kern County Land Division Ordinance as they relate to road standards and planning requirements. The portion of Silver Queen Road described in the recommendation is not in the vicinity of the project site.
Implementation: The County Surveyor and Road Commissioner to furnish data necessary to compile maps by the Planning Staff; hearings to be held in accordance with effective laws.	Consistent	Consistent with this implementation measure, the project would be in compliance with the road network policies and would implement the Kern County Land Division Ordinance as they relate to road standards and planning requirements.
Item 4. Proposed Local Streets		
Recommendation: Location, extent and improvement of local streets should be reviewed during consideration of tentative subdivision or parcel maps.	Consistent	Consistent with this recommendation, the project would be in compliance with the road network policies and would implement the Kern County Land Division Ordinance as it relates to road standards and planning requirements.
Implementation: Compliance with applicable Sections of the Subdivision of Land Ordinance.	Consistent	Consistent with this implementation measure, the project would be in compliance with the road network policies and would implement the

TABLE 4.11-3: CONSISTENCY ANALYSIS WITH THE SOLEDAD MOUNTAIN ELEPHANT BUTTE SPECIFIC PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
		Kern County Land Division Ordinance as it relates to road standards and planning requirements.
D. Conservation		
Item 1. Conservation, Development, and Utilization of Natural Resources		
Recommendation: a) Underground Waters – The quality and quantity of underground waters shall not be degraded. d) Vegetation and Soils – All existing vegetation that must be cleared for building sites shall be removed from the site prior to completion of construction. Preservation of native plant life pursuant to Item C-2 herein. f) Fish and Wildlife – Adherence to the guidelines recommended herein will produce the least negative effect on wildlife, other than no development at all.	Consistent with implementation of **Mitigation Measures MM 4.10-2**, **MM 4.4-1** through **MM 4.4-17** and **MM 4.10-1**.	Regarding groundwater and water quality, see **Table 4.11-2**, Section 1.3, *Physical and Environmental Constraints*, Goal 1, above. Regarding vegetation, see **Table 4.11-2**, Section 1.10.5, *Threatened and Endangered Species*, Policy 29, above. Regarding soils, see **Table 4.11-2**, Section 1.3, *Physical and Environmental Constraints*, Measure D, above. Regarding fish and wildlife, see **Table 4.11-2**, Section 1.10.5, *Threatened and Endangered Species*, Policy 28, above.
Implementation: a) Quality and quantity of underground water supply shall be monitored by the appropriate agency. d) Compliance with and review by the Public Works Department for appropriate approval. f) Compliance with Specific Plan Recommendations.	Consistent	Consistent with these implementation measures, the project would be reviewed by the Public Works Department and would comply with all applicable recommendations of the Soledad Mountain Elephant Butte Specific Plan. Regarding groundwater and water quality, see **Table 4.11-2**, Section 1.3, *Physical and Environmental Constraints*, Goal 1, above.

TABLE 4.11-3: CONSISTENCY ANALYSIS WITH THE SOLEDAD MOUNTAIN ELEPHANT BUTTE SPECIFIC PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
Item 5. Standards for Prevention, Control, and Correction of Soil Erosion Caused by Subdivision Roads and Other Sources		
Recommendation: No construction shall be allowed unless mitigating measures are implemented to prevent erosion.	Consistent with Implementation of **Mitigation Measures MM 4.7-2**, **MM 4.10-1** and **MM 4.10-2**.	See **Table 4.11-2**, Section 1.10.6, *Surface Water and Groundwater*, Policy 34, and Section 4.5, *Landslides, Subsidence, Seiche, and Liquefaction*, Policy 3, above. **Section 4.7**, *Geology and Soils*, of this EIR, discusses erosion. **Section 4.10**, *Hydrology and Water Quality*, of this EIR, discusses water quality.
Implementation: Initially, compliance with the Building Code and reseeding of all fill or cut with native seed mix at 40 pounds per acre properly fertilized; development and adoption of a grading and erosion control ordinance for lot grading and road construction.	Consistent with Implementation of **Mitigation Measures MM 4.7-2, MM 4.10-1**, and **MM 4.10-2**.	See **Table 4.11-2**, Section 1.10.6, *Surface Water and Groundwater*, Policy 34, and Section 4.5, *Landslides, Subsidence, Seiche, and Liquefaction*, Policy 3, above.
Item 6. Standards of Protection of Watershed Areas		
Recommendation: No watershed area shall be degraded as a result of a development within the area.	Consistent	See **Table 4.11-2**, Section 1.3, *Physical and Environmental Constraints*, Policy 11, of the Kern County General Plan, above.
Implementation: Compliance with the existing standards of the Regional Water Quality Control Board and the Public Works Department.	Consistent with Implementation of **Mitigation Measures MM 4.9-2**, **MM 4.10-1**, and **MM 4.10-2**.	See **Table 4.11-2**, Section 1.10.6, *Surface Water and Groundwater*, Policy 34 and Policy 44, above. **Section 4.10**, *Hydrology and Water Quality*, of this EIR, discusses water quality. The project would comply with the standards of the Regional Water Quality Control Board (RWQCB) and Public Works Department.
E. Open Space		
Item 1(a). Natural Resource Land, Botanical Communities		
Recommendation: All possible safeguards shall be initiated to prevent destruction of Joshua Trees.	Consistent with implementation of **Mitigation Measures MM 4.4-7**.	See **Table 4.11-2**, Section 1.10.5, *Threatened and Endangered Species*, Policy 27, Policy 28, Policy 29, Policy 32, and Measure Q above.
Implementation: Review by local agencies as development occurs.	Consistent	Consistent with this implementation measure, review of the project's potential impacts on western Joshua trees is included **Section 4.4**, *Biological Resources*, of this EIR.

TABLE 4.11-3: CONSISTENCY ANALYSIS WITH THE SOLEDAD MOUNTAIN ELEPHANT BUTTE SPECIFIC PLAN FOR LAND USE

Goals and Policies	Consistency Determination	Project Consistency
Item 4. Scenic Lands		
Recommendation: All possible safeguards should be made to protect the scenic lands along State Route 14, designated as a proposed Scenic Highway, and other County roadways.	Consistent with implementation of **Mitigation Measures MM 4.1-1** through **MM 4.1-7**.	Potential impacts to scenic resources, and specifically scenic highways, are evaluated in **Section 4.1**, *Aesthetics*, of this EIR. Consistent with this recommendation, the project would implement **Mitigation Measures MM 4.1-1** through **MM 4.1-7**, which would reduce potential impacts to the extent feasible. The project would result in less than significant visual impacts to scenic highways.
Implementation: Compliance with existing Zoning Ordinance, where applicable.	Consistent	Consistent with this implementation measure, with the ZCC and CUP approvals, the project would be in compliance with the Zoning Ordinance.

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Section 4.12

Mineral Resources

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Section 4.12
Mineral Resources

4.12.1 Introduction

This section of the EIR describes the affected environment and regulatory setting for mineral resources. It also describes potential impacts on mineral resources that could result from implementation of the proposed project, and mitigation measures that would reduce these impacts, if applicable. Information used in the preparation of this section includes: the California Department of Conservation California Geological Survey (CGS) and Kern County publications and maps as cited throughout this section.

4.12.2 Environmental Setting

The nonrenewable characteristic of mineral deposits necessitates the careful and efficient development of mineral resources to prevent the unnecessary waste of these deposits due to careless exploitation and uncontrolled urbanization. Proper management of these mineral resources will protect not only future development of mineral deposit areas but will also limit the exploitation of mineral deposits so that adverse impacts caused by mineral extraction can be reduced or eliminated. This section discusses the existing conditions related to mineral resources within the region including the project site.

Regional Setting

Mineral and petroleum resources are critical to Kern County's economy, as the County produces more oil than any other county in California and 3 percent of the total U.S. oil production (Kern Economic Development Foundation, 2021). Borax, cement, and construction aggregates constitute major economic mineral resources for the County. The Surface Mining and Reclamation Act of 1975 (SMARA) requires the State Geologist to classify land into Mineral Resource Zones (MRZs) according to its known or inferred mineral potential. The State Geologist has classified 2,971 square miles of land in Kern County as MRZs of varying significance. Mineral resources in Kern County include numerous mining operations that extract a variety of materials, including sand and gravel, stone, gold, dimensional stone, limestone, clay, shale, gypsum, pumice, decorative rock, silica, and specialty sand. Significant mineral resources located in southeastern Kern County include borates, limestone, gold, and dimension stone. The MRZ categories are defined as follows (CGS, 1999):

MRZ-1: Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

MRZ-2a: Areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present. Areas classified MRZ-2a contain discovered mineral deposits that are either measured or indicated reserves. Land included in MRZ-2a is of prime importance because it contains known economic mineral deposits.

MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain inferred mineral resources as determined

by their lateral extension from proven deposits or their similarity to proven deposits. Further exploration could result in upgrading areas classified MRZ-2b to MRZ-2a.

MRZ-3a: Areas containing known mineral occurrences of undetermined economic significance. Further exploration could result in reclassification of all or part of these areas into the MRZ-2a or MRZ-2b categories.

MRZ-3b: Areas containing inferred mineral occurrences of undetermined economic significance. Further exploration could result in the reclassification of all or part of these areas into the MRZ-2a or MRZ-2b categories.

MRZ-4: Areas containing no known mineral occurrence.

Table 4.12-1, *Classified Mineral Resources within Kern County*, discusses the classified mineral resources within Kern County that are part of the MRZ-2 group and, therefore, have a demonstrated mineral significance (as opposed to the MRZ-3 group, which has an undetermined mineral significance).

TABLE 4.12-1: CLASSIFIED MINERAL RESOURCES WITHIN KERN COUNTY

Mineral Resource	MRZ Classification	Number of Areas	Total Acreage
Borates	MRZ-2a and 2b	2	2,564
Limestone	MRZ-2a	4	2,008
	MRZ-2b	2	157
Silica	MRZ-2a	1	119
Pozzolan (essential cement additive)	MRZ-2b	1	72
Gold	MRZ-2a	3	849
Gold	MRZ-2b	8	6,619
Dimension Stone	MRZ-2a	2	527

Source: CGS, 1999.

Petroleum Resources

As mentioned above, Kern County produces more oil than any other county in California (Kern Economic Development Foundation, 2021). The valley floor area of Kern County and the surrounding lower elevations of the mountain ranges contain numerous deposits of oil and gas resources, a major economic resource for the County. The project site is not located within a known oil production field and does not have known active wells within the project site. However, a known plugged and abandoned well is present within the northwest portion of the project site (CalGEM, 2024a, Appendix A). The abandoned well does not have an active permit and is considered a dry hole, meaning there were no significant reserves of oil found when the well was drilled (CalGEM, 2024b). Additionally, the majority of the project site is not located within a designated mineral and petroleum resource site within the Kern County General Plan. Although a small section of the southern portion of the project site is designated by the County General Plan as 8.4 Mineral and Petroleum (Minimum 5 Acre Parcel Size), there are no active or inactive petroleum extraction facilities within or immediately adjacent to the 8.4 designated areas. The project site is not located within the NR (Natural Resources) or PE (Petroleum Extraction) zoned districts. No significant petroleum resources have been discovered to date in the eastern Mojave Desert.

Sand and Gravel

Construction aggregates are a major mineral resource for Kern County (CGS 2018). Sand and gravel have been determined to be important resources for construction, development, and physical maintenance, from highways and bridges to swimming pools and playgrounds. The availability of sand and gravel affects construction costs, tax rates, and affordability of housing and commodities. The State of California has statutorily required the protection of sand and gravel operations. Because transportation costs are a significant portion of the cost of sand and gravel, the long-term availability of local sources of this resource is an important factor in maintaining the economic attractiveness of a community to residents, business, and industry. The major resources of sand and gravel in Kern County are in stream deposits along the eastern side of the San Joaquin Valley and in the Sierra Nevada foothills, approximately 185 miles north of the project site, and in alluvial fan deposits along the north flank of the San Emidio and Tehachapi Mountains at the southern end of the County, located northwest of the project site. Most of the recent alluvium in the San Joaquin Valley floor is composed of sand used as a source of road base material. There are no sand and gravel extraction activities located in the project site.

Borax

Borax constitutes a major mineral resource for Kern County (CGS, 1999). Borax, a borate mineral (a compound that contains Boron and oxygen), was discovered and put into production in 1872 in Nevada and later, in 1881, in Death Valley. Ironically, for 5 years the route traveled by Pacific Coast Borax Company's famous 20-mule team trains would pass within 15 miles of a buried deposit that would produce in about 6 minutes the equivalent tonnage hauled by the mule team during each trip. The discovery of borates in southeastern Kern County in the Kramer District was accidental, when a water well penetrated lakebeds containing colemanite (calcium borate) in 1913. In 1927, underground mining of the minerals kernite and borax began and continued until 1957, when underground operations ceased and open-pit mining began, eventually becoming the largest open-pit mine in California. Annually, over 1.8 million tons are removed from this mine, which supplies about 40 percent of the world's supply of borates. There are several other sources of borate minerals in the County (CGS, 1999).

Limestone

Carbonate rocks were initially quarried in 1888 as a source of lime. By 1909, the limestone resources were used for the manufacture of Portland cement during the construction of the first Los Angeles aqueduct. Limestone has been mined continuously since 1921, just northeast of Tehachapi, for the manufacture of Portland cement. The Tehachapi Plant was joined by California Portland Cement Company's Mojave Plant in 1955 and National Cement Company's Lebec Plant in 1976, making Portland cement production second only to borates in terms of economic importance to the region. Cement production is a major economic resource in the County (CGS, 1999).

Dimension Stone

Dimension stone is defined as natural rock materials quarried for the purpose of obtaining blocks or slabs that meet specification as to size (width, length, and thickness) and shape. Color, grain, texture, and pattern, and surface finish, durability, strength, and polish ability are important selection criteria in determining dimension stone. Deposits of marble, sandstone, schist, and other rocks in Kern County have been sources of modest tonnages of building stone that have been utilized as dimension stone, field stone, rubble, and

flagstone. Most of the dimension stone (marble and flagstone) was mined until 1904; field stone and flagstone have been mined mostly since about 1952 in the area around Randsburg (CGS, 1999).

Precious Minerals (Gold and Silver)

In terms of total dollar value and number of deposits, gold is the most important metallic mineral commodity that has been mined in Kern County. The earliest mining in Kern County was in 1851 at placer gold deposits in Greenhorn Gulch, which drains into the Kern River about midway between Democrat Springs and Miracle Hot Springs. The first lode mining was in 1852, and by 1865, gold was being mined in four districts around the Kern River. Gold was first prospected in eastern Kern in the 1860s, with the two largest mines being established in the 1890s. The Yellow Aster and Golden Queen mines located in eastern Kern County have yielded almost half of the total gold output of the County. The principal sources of silver in Kern County have been deposits in eastern Kern County. Although gold is the chief mineral in value, silver is predominant by a 5:1 ratio and is an important by-product of the gold ore (CGS, 1999).

Local Setting

The project site is located in the southeastern portion of Kern County, directly southwest of the community of Mojave, and largely consists of undeveloped land. The project site is not designated as a mineral recovery area by the Kern County General Plan, nor is it identified as an MRZ by the Department of Conservation's State Mining and Geology Board. Neither the project site nor adjacent areas include land classified as a MRZ (Conservation Biology Institute, 2024). The approved and under construction step-up high-voltage substation where minor upgrades are proposed, as well as a small portion of the southeastern section of the project site, are located in an area designated by the County General Plan as 8.4 Mineral and Petroleum (Minimum 5 Acre Parcel Size). The next closest area designated by the County as 8.4 is directly north of the project site (CGS, 2024). There is one oil and gas well located within the northwest portion of the project site; however, this well is plugged (CalGEM, 2024a). Additionally, there are no active mines or petroleum extraction facilities within the project site (USGS, 2024). The nearest mine to the project site is the Leona Tungsten Mine, located 0.02-mile north of the project site, which produces tungsten metal. The next-closest mine is the Middle Buttes (Cactus) Deposit, which has historically produced metals such as gold, silver, copper, and lead and is 0.2-mile south of the project site (USGS, 2024). **Figure 4.12-1,** *Mines within the Project Vicinity*, shows the mines within a 3-mile radius of the project. **Table 4.12-2,** *Mines within the Project Vicinity*, lists the mines within a 3-mile radius of the project, their status, and the commodity being mined.

TABLE 4.12-2: MINES WITHIN THE PROJECT VICINITY

Mine Title	Status	Primary Commodities	Distance to the Project Site
Leona Tungsten Mine	Producer	Tungsten	0.02 mile north
Middle Buttes (Cactus) Deposit	Past Producer	Gold Silver Copper Lead	0.20 miles south
Quien Sabe	Producer	Gold	0.25 miles south
Cactus Gold Mine	Plant	Gold Silver Copper Lead	0.28 miles south
Cactus Queen Mine	Producer	Gold Silver	0.28 miles south
Rosamond-Mojave	Producer	Gold	0.87 miles southeast
California Portland Cement Co.	Past Producer	Limestone	0.87 miles north

Mine Title	Status	Primary Commodities	Distance to the Project Site
Burton-Brite-Blank Mine	Producer	Gold	1.05 miles south
Burton-Brite-Blank Mine	Past Producer	Gold Silver	1.05 miles south
Middle Butte Mine	Past Producer	Gold Silver Uranium	1.09 miles south
Middle Butte	Producer	Gold	1.09 miles south
Middle Butte Mine	Past Producer	Gold	1.11 miles south
Section 13-24 Quarry	Past Producer	Stone, Crushed/Broken	1.13 miles north
Monolith Portland Cement Co.	Producer	Limestone Clay	1.13 miles west
Marie Celesle	Past Producer	Gold Silver	1.42 miles west
Elephant Group	Producer	Gold	1.79 miles east
Willow Springs Pit	Past Producer	Sand and Gravel	1.86 miles south
Mojave Pit	Past Producer	Sand and Gravel	1.86 miles south
Bobtail Mine	Past Producer	Gold Silver	1.89 miles east
Bobtail Mine	Producer	Gold	2.02 miles east
Silver Queen Mine	Past Producer	Silica	2.04 miles east
Excelsior	Past Producer	Gold	2.08 miles east
Wegman Group	Past Producer	Gold	2.09 miles east
Wegman	Producer	Gold	2.09 miles east
Sailor Boy Mine	Past Producer	Gold Silver	2.14 miles east
Elephant Eagle	Past Producer	Gold	2.17 miles east
Soledad Mountain Deposit	Past Producer	Gold Silver Copper Lead Antimony	2.18 miles east
Echo	Past Producer	Gold	2.34 miles east
Golden Queen	Producer	Gold	2.46 miles east
Golden Queen Mine	Past Producer	Gold Silver	2.46 miles east
Queen Esther	Past Producer	Gold	2.64 miles east
Monarch Mine	Past Producer	Gold Silver	2.66 miles east
Soledad Mountain Project	Plant	Gold Silver	2.86 miles east
Yellow Dog Mine	Past Producer	Gold Silver	2.96 miles east
Yellow Dog Mine	Producer	Gold Silver	2.96 miles east
Mojave Mining and Milling Co.	Past Producer	Gold Silver	2.98 miles east

Source: USGS, 2024.

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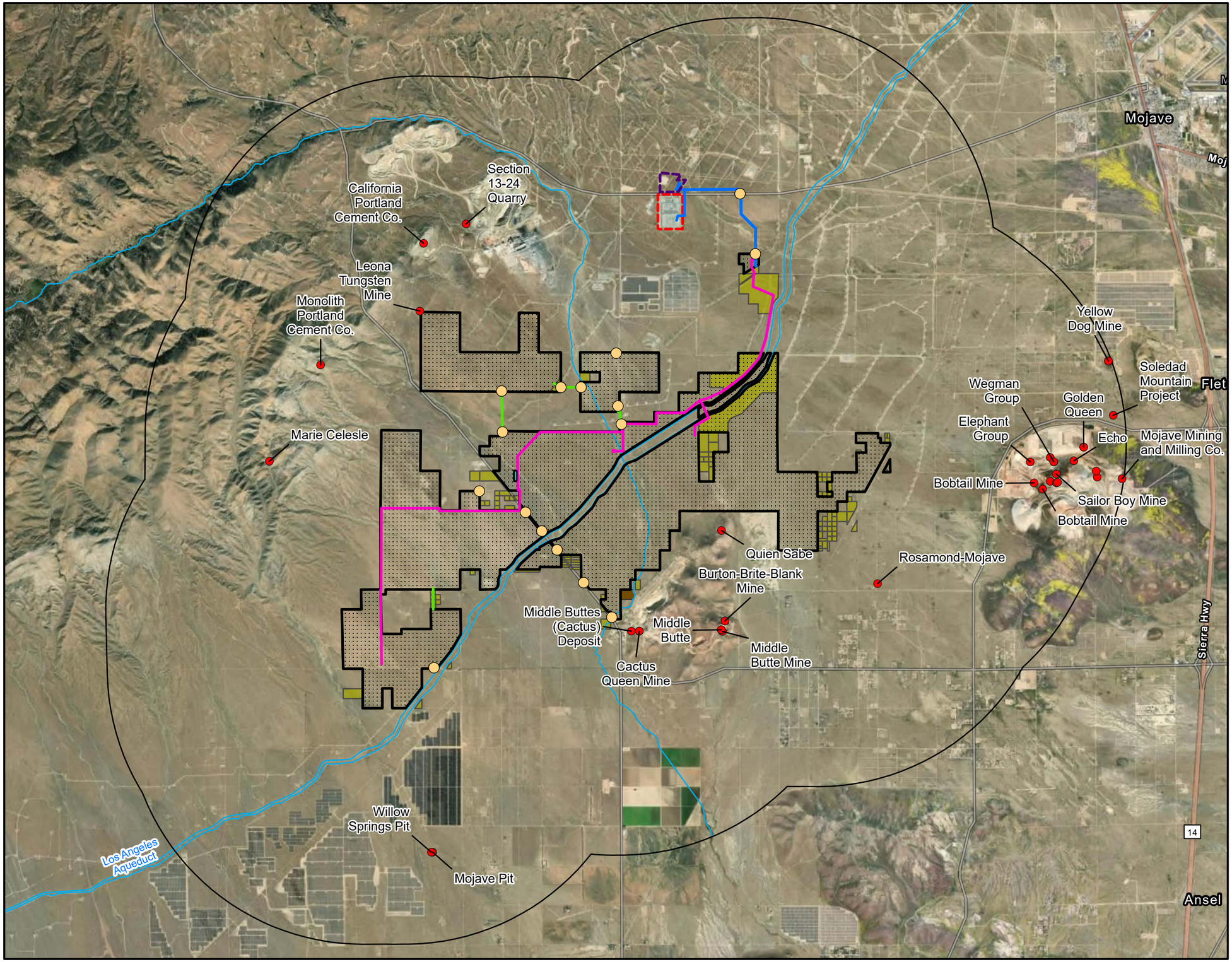
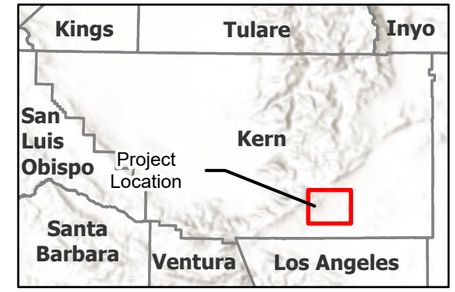
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.12-1. Mines within the Project Vicinity





- Windhub High-voltage Substation (Existing)
- SCE Property (500kv)
- Other Applicant Controlled Parcels
- Buffer (3-mile)
- Proximal Mine

Proposed Project Features

- Project Site
- Temporary Offsite Laydown Area
- Gen-tie Line (New)
- Medium-voltage/Transmission/ Access Easements
- Access Points

Other Applicant and/or Affiliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

*Already approved under separate projects.

N

0 0.5 1 2 Miles

Scale is 1:77,000 when printed at 11"x17"

Not for Construction

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4.12.3 Regulatory Setting

Federal

There are no applicable federal regulations for this issue area.

State

Geologic Energy Management Division (formerly Division of Oil, Gas, and Geothermal Resources)

The Division of Oil, Gas, and Geothermal Resources was created in 1915 to permit and regulate oil and gas wells, as well as to track information about production. Assembly Bill 1057 was signed into law in October 2019, changing the official name to the California Geologic Energy Management (CalGEM) Division. CalGEM is a State agency responsible for supervising the drilling, operation, maintenance, plugging, and abandonment of oil, gas, and geothermal wells. CalGEM's regulatory program promotes the wise development of oil, natural gas, and geothermal resources in California through sound engineering practices, prevention of pollution, and implementation of public safety programs. To implement this regulatory program, CalGEM requires avoidance of building over or near plugged or abandoned oil and gas wells or requires the remediation of wells to current CalGEM standards (DOC, 2024).

Surface Mining and Reclamation Act of 1975

SMARA (Public Resources Code, Sections 2710-2796) regulates surface mining operation to ensure that adverse environmental impacts are minimized, and that mined lands are reclaimed to a usable condition. SMARA requires the State Geologist to classify land into MRZs according to its known or inferred mineral potential. The primary products are mineral land classification maps and reports. Local agencies are required to use the classification information when developing land-use plans and when making land-use decisions (CGS, 2025). MRZs are defined in detail in the Regional Setting, above.

Local

Kern County General Plan

The policies, goals, and implementation measures in the Kern County General Plan for mineral resources applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and are not specific to development such as the project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Chapter 1. Land Use, Open Space and Conservation Element

1.9 Resource

Goals

Goal 1: To contain new development within an area large enough to meet generous projections of foreseeable need, but in locations that will not impair the economic strength derived from the petroleum, agriculture, rangeland, or mineral resources or diminish the other amenities that exist in the County.

Goal 2: To protect areas of important mineral, petroleum, and agricultural resource potential for future use.

Goal 3: To ensure that the development of resource areas minimizes effects of neighboring resource lands.

Goal 6: Encourage alternative sources of energy, such as solar and wind energy, while protecting the environment.

Policy

Policy 14: Emphasize conservation and development of identified mineral deposits.

Policy 17: Lands classified as MRZ-2, as designated by the State of California, should be protected from encroachment of incompatible land uses.

Implementation Measure

Measure H: Use the California Geological Survey's latest maps to locate mineral deposits until the regional and statewide importance mineral deposits map has been completed, as required by the Surface Mining and Reclamation Act.

Soledad Mountain Elephant Butte Specific Plan

There are no recommendations, analysis, or implementation measures in the Soledad Mountain Elephant Butte Specific Plan addressing mineral resources that are applicable to the project. In Kern County, specific plans are used to implement goals, objectives, and policies of the Kern County General Plan in a more detailed and refined manner unique to a smaller area of the County. Since there are no applicable recommendations, analysis, or implementation measures within the Soledad Mountain Elephant Butte Specific Plan, refer to the applicable policies, goals, and implementation measures of the Kern County General Plan above.

4.12.4 Impacts and Mitigation Measures

Methodology

The proposed project's potential impacts to mineral resources have been evaluated using a variety of sources, including a review of information from the California Department of Conservation, CGS, and Kern County publications and maps. Using the aforementioned resources and professional judgment, impacts were analyzed according to CEQA significance criteria described below.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the *CEQA Guidelines*, to determine if a project could potentially have a significant adverse effect on mineral resources.

A project would have a significant adverse effect on mineral resources if it would:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State; or

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Project Impacts

Impact 4.12-1: Would the project result in the loss of availability of a known mineral resource that would be of value to the region and residents of the State?

The project site is not located on lands classified as MRZs by the CGS, nor is the majority of the project site located on lands designated as Mineral and Petroleum areas by the Kern County General Plan or the Soledad Mountain Elephant Butte Specific Plan. Although the approved and under construction high-voltage step-up substation where minor upgrades are proposed and a small portion of the project site are located in an area designated by the County General Plan as 8.4 Mineral and Petroleum (Minimum 5 Acre Parcel Size), there are no active or inactive mines or extraction facilities in proximity to the project site. According to the Soledad Mountain Elephant Butte Specific Plan, the project site is outside of the Mineral Extraction and Processing specific land designation. There are several active and inactive mines in the vicinity of the project site, as shown on **Figure 4.12-1,** *Mines within the Project Vicinity*, and listed in **Table 4.12-2,** *Mines within the Project Vicinity*. However, no active mines occur within the project site. The project would not interfere with nearby mineral extraction operations and would not result in the loss of land designated for mineral resources. Therefore, the proposed project would not result in the loss of availability of a known mineral resource, and the potential impact to future mineral resources is less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.12-2: Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The project site is not located on a locally important mineral resource recovery site delineated by the Kern County General Plan or Soledad Mountain Elephant Butte Specific Plan. Furthermore, the installation of project facilities would not preclude future on-site mineral resource development, should the site be

determined to contain mineral resources in the future. Therefore, loss of availability of mineral resources impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

Impacts would be less than significant.

4.12.5 Cumulative Setting, Impacts, and Mitigation Measures

As described in **Chapter 3**, *Project Description*, there are approximately 43 cumulative projects proposed or approved throughout the Antelope Valley in Kern County and in the desert portion of Kern County outside the Antelope Valley, including some utility-scale solar production facilities as shown in **Table 3-5**, *Cumulative Projects List*. The geographic scope of impacts associated with mineral resources generally encompasses the project site and a 0.25-mile-radius area around the project site. This scope is appropriate because of the localized nature of mineral resource impacts. There are no MRZs within a 0.25-mile-radius area around the project site. Although a small portion of the project site is designated 8.4 Mineral and Petroleum (Minimum 5 Acre Parcel Size), there are no active or inactive mines or extraction facilities on or in proximity of the designated area. Therefore, the proposed project, in conjunction with other related projects, would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site and would not contribute to any cumulative impacts to mineral resources.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

Cumulative impacts would be less than significant.

Section 4.13
Noise

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Section 4.13
Noise

4.13.1 Introduction

This section of the EIR describes the affected environment and regulatory setting for noise and provides an analysis of potential impacts related to noise and ground-borne vibration that could result from project implementation. Additionally, mitigation measures to reduce potential noise and vibration impacts are identified, if necessary. The information and analysis in this section is based on the *Acoustical Analysis Report of the Discovery Solar PV and Storage Project* prepared by Tetra Tech (Tetra Tech, 2025a), located in **Appendix J1** of this EIR, and the *Discovery Solar PV and Storage Project 230-kilovolt Switchyard – Construction, Operation, and Decommissioning Noise Results* memo (Tetra Tech, 2025b), located in **Appendix J2** of this EIR.

Noise Fundamentals

An understanding of the physical characteristics of sound is useful for evaluating environmental noise. The methods and metrics used to quantify noise exposure, human response, and relative judgment of loudness are also discussed, and noise levels of common noise environments are presented.

Noise is generally defined as loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity and interferes with or disrupts normal activities. The effects of noise on people can be grouped into four general categories:

- Subjective effects (dissatisfaction, annoyance);
- Interference effects (communication and sleep interference, learning);
- Physiological effects (startle response); and
- Physical effects (hearing loss).

Although exposure to high noise levels has been demonstrated to cause physical (i.e., to the body itself) and physiological (i.e., to body functions) effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. The subjective responses of individuals to similar noise events are diverse and influenced by many factors, including the type of noise, the perceived importance of the noise, its appropriateness to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity.

Interference effects of environmental noise refer to those effects that interrupt daily activities and include interference with human communication activities, such as normal conversations, watching television, and telephone conversations, and interference with sleep. Sleep interference effects can include both awakening from sleep and arousal to a lesser state of sleep.

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air, and are sensed by the human ear. Sound is generally characterized by several variables, including frequency and amplitude. Frequency describes the sound's pitch (tone) and is measured in cycles per second (hertz [Hz]), while amplitude describes the sound's pressure (loudness). Because the range of sound pressures that

occurs in the environment is extremely large, it is convenient to express these pressures on a logarithmic scale that compresses the wide range of pressures into a more useful range of numbers. The standard unit of sound measurement is the decibel (dB). Hz is a measure of how many times each second the crest of a sound pressure wave passes a fixed point. For example, when a drummer beats a drum, the skin of the drum vibrates a given number of times per second. If the drum vibrates 100 times per second, it generates a sound pressure wave that is oscillating at 100 Hz, and this pressure oscillation is perceived by the ear/brain as a tonal pitch of 100 Hz. Sound frequencies between 20 and 20,000 Hz are within the range of sensitivity of the healthy human ear.

Sound levels are expressed by reference to a specified national/international standard. The sound pressure level is used to describe sound pressure (loudness) and is specified at a given distance or specific receptor location. In expressing sound pressure level on a logarithmic scale, sound pressure (dB) is referenced to a value of 20 micropascals (µPa). Sound pressure level depends not only on the power of the source but also on the distance from the source to the receiver and the acoustical characteristics of the sound propagation path (absorption, reflection, etc.).

Outdoor sound levels decrease logarithmically as the distance from the source increases. This decrease is due to wave divergence, atmospheric absorption, and ground attenuation. Sound radiating from a source in a homogeneous and undisturbed manner travels in spherical waves. As the sound waves travel away from the source, the sound energy is dispersed over a greater area, decreasing the sound pressure of the wave. Spherical spreading of the sound wave from a point source reduces the noise level at a rate of 6 dB per doubling of distance.

Atmospheric absorption also influences the sound levels received by an observer. The greater the distance traveled, the greater the influence of the atmosphere and the resultant fluctuations. Atmospheric absorption becomes important at distances greater than 1,000 feet. The degree of absorption varies depending on the frequency of the sound as well as the humidity and temperature of the air. For example, atmospheric absorption is lowest (i.e., sound carries farther) at high humidity and high temperatures, and lower frequencies are less readily absorbed (i.e., sound carries farther) than higher frequencies. Over long distances, lower frequencies become dominant as the higher frequencies are more rapidly attenuated. Turbulence, gradients of wind, and other atmospheric phenomena also play a significant role in determining the degree of attenuation. For example, certain conditions, such as temperature inversions, can channel or focus the sound waves, resulting in higher noise levels than would result from simple spherical spreading.

Sound from a tuning fork contains a single frequency (a pure tone), but most sounds in the environment do not consist of a single frequency. Instead, they are a broad band of many frequencies differing in sound level. Because of the broad range of audible frequencies, methods have been developed to quantify these values into a single number representative of human hearing. The most common method used to quantify environmental sounds consists of evaluating all frequencies of a sound according to a weighting system that is reflective of human hearing characteristics. Human hearing is less sensitive at low frequencies and extremely high frequencies than at the mid-range frequencies. This process is termed “A weighting,” and the resulting dB level is termed the “A-weighted” decibel (dBA).

Because A-weighting is designed to emulate the frequency response characteristics of the human ear and reflect the way people perceive sounds, it is widely used in local noise ordinances and state and federal guidelines, including those of the State of California and Kern County. Unless specifically noted, the use of A-weighting is always assumed with respect to environmental sound and community noise, even if the notation does not include the “A.”

In terms of human perception, a sound level of 0 dBA is the threshold of human hearing and is barely audible by a healthy ear under extremely quiet listening conditions. This threshold is the reference level against which the amplitude of other sounds is compared. Normal speech has a sound level of 60 dBA. Sound levels above about 120 dBA begin to be felt inside the human ear as discomfort, progressing to pain at still higher levels. Humans are much better at discerning relative sound levels than absolute sound levels. The minimum change in the sound level of individual events that an average human ear can detect is about 1 to 3 dBA. A 3 to 5 dBA change is readily perceived. An increase (or decrease) in sound level of about 10 dBA is usually perceived by the average person as a doubling (or halving) of the sound's loudness.

Because of the logarithmic nature of the decibel, sound levels cannot be added or subtracted directly. However, some simple rules are useful in dealing with sound levels. First, if a sound's acoustical energy is doubled, the sound level increases by 3 dBA, regardless of the initial sound level (e.g., 60 dBA + 60 dB = 63 dBA; 80 dBA + 80 dBA = 83 dBA). However, an increase of 10 dBA is required to double the perceived loudness of a sound, and a doubling or halving of the acoustical energy (a 3 dBA difference) is at the lower limit of readily perceived change.

Although dBA may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most ambient environmental noise includes a mixture of noise from nearby and distant sources that creates an ebb and flow of sound, including some identifiable sources plus a relatively steady background noise in which no particular source is identifiable. A single descriptor, termed the equivalent sound level (L_{eq}), is used to describe sound that is constant or changing in level. L_{eq} is the energy-mean dBA during a measured time interval. It is the "equivalent" sound level produced by a given constant source equal to the acoustic energy contained in the fluctuating sound level measured during the interval. In addition to the energy-average level, it is often desirable to know the acoustic range of the noise source being measured. This is accomplished through the maximum instantaneous (L_{max}) and minimum instantaneous (L_{min}) noise level indicators that represent the root-mean-square maximum and minimum noise levels measured during the monitoring interval. The L_{min} value obtained for a particular monitoring location is often called the acoustic floor for that location.

To describe the time-varying character of environmental noise, the statistical or percentile noise descriptors L_{10}, L_{50}, and L_{90} may be used, which represent the noise levels equaled or exceeded during 10 percent, 50 percent, and 90 percent of the measured time interval, respectively. Sound levels associated with L_{10} typically describe transient or short-term events, L_{50} represents the median sound level during the measurement interval, and L_{90} levels are typically used to describe background noise conditions.

The Day-Night Average Sound Level (L_{dn} or DNL) represents the average sound level for a 24-hour day and is calculated by adding a 10 dBA penalty to sound levels during the night period (10:00 p.m. to 7:00 a.m.). The L_{dn} is the descriptor of choice and used by nearly all federal, State, and local agencies throughout the United States to define acceptable land use compatibility with respect to noise. Within California, the Community Noise Equivalent Level (CNEL) is sometimes used. CNEL is very similar to L_{dn}, except that an additional 5 dBA penalty is applied to the evening hours (7:00 p.m. to 10:00 p.m.). Because of the time-of-day penalties associated with the L_{dn} and CNEL descriptors, the L_{dn} or CNEL dBA value for a continuously operating sound source during a 24-hour period will be numerically greater than the dBA value of the 24-hour L_{eq}. Thus, for a continuously operating noise source producing a constant noise level operating for periods of 24 hours or more, the L_{dn} will be 6 dBA higher than the 24-hour L_{eq} value. For convenience, a summary of common noise metrics is provided in **Table 4.13-1**, *Common Noise Metrics*. To provide a frame of reference, common sound levels are presented in **Figure 4.13-1**, *Common Sound Levels*.

TABLE 4.13-1: COMMON NOISE METRICS

Unit of Measure		Description
dB	Decibel	Decibels, which are units for measuring the volume of sound, are measured on a logarithmic scale, representing points on a sharply rising curve. For example, 10 dB sounds are 10 times more intense than 1 dB sounds, and 20 dB sounds are 100 times more intense. A 10 dB increase in sound level is perceived by the human ear as a doubling of the loudness of the sound.
dBA	A-Weighted Decibel	A sound pressure level that has been weighted to quantitatively reduce the effect of high- and low-frequency noise. It was designed to approximate the response of the human ear to sound.
CNEL	Community Noise Equivalent Level	A metric representing the 24-hour average sound level that includes a 5 dBA penalty during relaxation hours (7 PM to 10PM) and a 10 dBA penalty for sleeping hours (10 PM to 7 AM).
L_{dn}	Day-Night Average Noise	The 24-hour average sound level, expressed in a single decibel rating, for the period from midnight to midnight obtained after the addition of a 10 dBA penalty to sound levels for the periods between 10 PM and 7 AM.
L_{eq}	Equivalent Noise Level	The average acoustic energy content of noise for a stated period of time. The L_{eq} of a time-varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time. The L_{eq} may also be referred to as the average sound level.
L_{max}	Maximum Noise Level	L_{max} represents the maximum instantaneous noise level experienced during a given period of time. It reflects peak operating conditions and addresses the annoying aspects of intermittent noise.
L_{min}	Minimum Noise Level	L_{min} represents the minimum instantaneous noise level experienced during a given period of time. It reflects baseline operating conditions and is commonly referenced as the noise floor.
L_1, L_{10}, L_{50}, L_{90}	Percentile Noise Exceedance Levels	The A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 1%, 10%, 50%, and 90% of a stated time period.

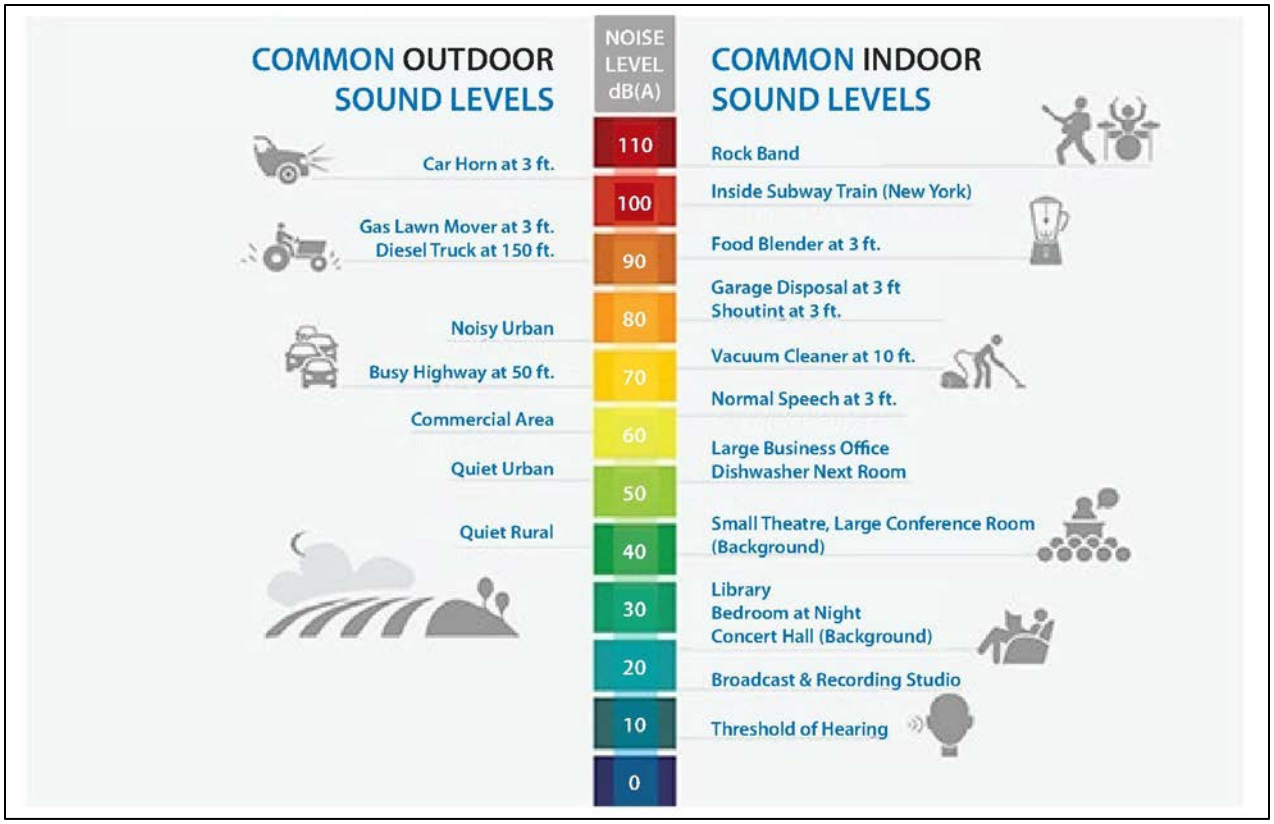

Figure 4.13-1 Common Sound Levels

Fundamentals of Vibration

As described in the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment Manual* and **Appendix J1**, ground-borne vibration can be a serious concern for nearby neighbors of a transit system route or maintenance facility, causing buildings to shake and rumbling sounds to be heard. In contrast to airborne noise, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving, and operation of heavy earth-moving equipment.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (vibration decibel [VdB]) is commonly used to measure RMS. The relationship of PPV to RMS velocity is expressed in terms of the "crest factor," defined as the ratio of the PPV amplitude to the RMS amplitude. PPV is typically 1.7 to 6 times greater than RMS vibration velocity, as described in **Appendix J1**. The decibel notation acts to compress the range of numbers required to describe vibration.

Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration sensitive equipment.

The effects of ground-borne vibration include movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile-driving during construction. Annoyance from vibration often occurs when the vibration levels exceed the threshold of perception by only a small margin. A vibration level that causes annoyance will be well below the damage threshold for normal buildings. The FTA measure of the threshold of architectural damage for conventional sensitive structures is 0.2 inches per second (in/sec) PPV, while the standard for even the most sensitive and fragile structures is 0.12 in/sec PPV, as described in **Appendix J1**.

In residential areas, the background vibration velocity level is usually around 50 VdB (approximately 0.0013 in/sec PPV). This level is well below the vibration velocity level threshold of perception for humans, which is approximately 65 VdB. A vibration velocity level of 75 VdB is considered to be the approximate dividing line between barely perceptible and distinctly perceptible levels for many people, as described in **Appendix J1**.

Sensitive Receptors

Human response to noise varies considerably from one individual to another. Effects of noise at various levels can include interference with sleep, concentration, and communication, and can cause physiological and psychological stress and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others. In general, residences, schools, hotels, hospitals, and nursing homes are considered to be the most sensitive to noise. These locations are referred to as Noise Sensitive Areas (NSAs). Places such as churches, libraries, and cemeteries, where people tend to pray, study, and/or contemplate also are NSAs. Commercial and industrial uses are considered the least noise sensitive.

4.13.2 Environmental Setting

Project Location

The project is located in an unincorporated area in southeastern Kern County, on generally undeveloped and privately owned land, along the northern edge of the Antelope Valley. The project site is located approximately 6 miles southwest of the unincorporated community of Mojave, approximately 9 miles southeast of the City of Tehachapi, approximately 8 miles northwest of the unincorporated community of Rosamond, and approximately 20 miles west of Edwards Air Force Base. State Route (SR)-58 is approximately 6 miles north of the project site, SR-14 is approximately 4 miles east of the project site, and Tehachapi Willow-Springs Road runs between the project site's boundaries. A network of existing named and unnamed dirt roads traverses the project site. While the Los Angeles Department of Water and Power (LADWP) aqueduct roughly bisects the project site, it is not included within the project site.

Surrounding land uses primarily comprise renewable energy development, rural residential development, livestock grazing, light and heavy industrial and mining uses, and undeveloped lands. Elevations across the project site are relatively flat, ranging from approximately 2,970 to 3,760 feet above mean sea level. The project site is located within the USGS Monolith, Willow Springs, and Soledad Mountain 7.5-Minute

Topographic Quadrangle maps. The project and project site are defined in **Chapter 3**, *Project Description*, and depicted in **Figure 3-1**, *Vicinity Map*.

The nearest sensitive noise receptor to the project site is a potential residence located approximately 0.06 miles (303 feet) from the project site. **Figure 4.13-2,** *Noise Sensitive Areas and Monitoring Locations*, shows other noise-sensitive receptors (i.e., rural residential structures) in proximity to the project site. There are no rural residences or other noise sensitive land uses in proximity to the generation tie (gen-tie) line and the existing Southern California Edison (SCE) Windhub Substation.

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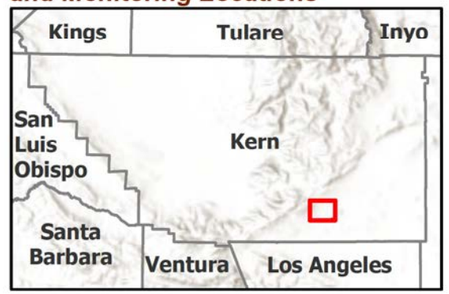
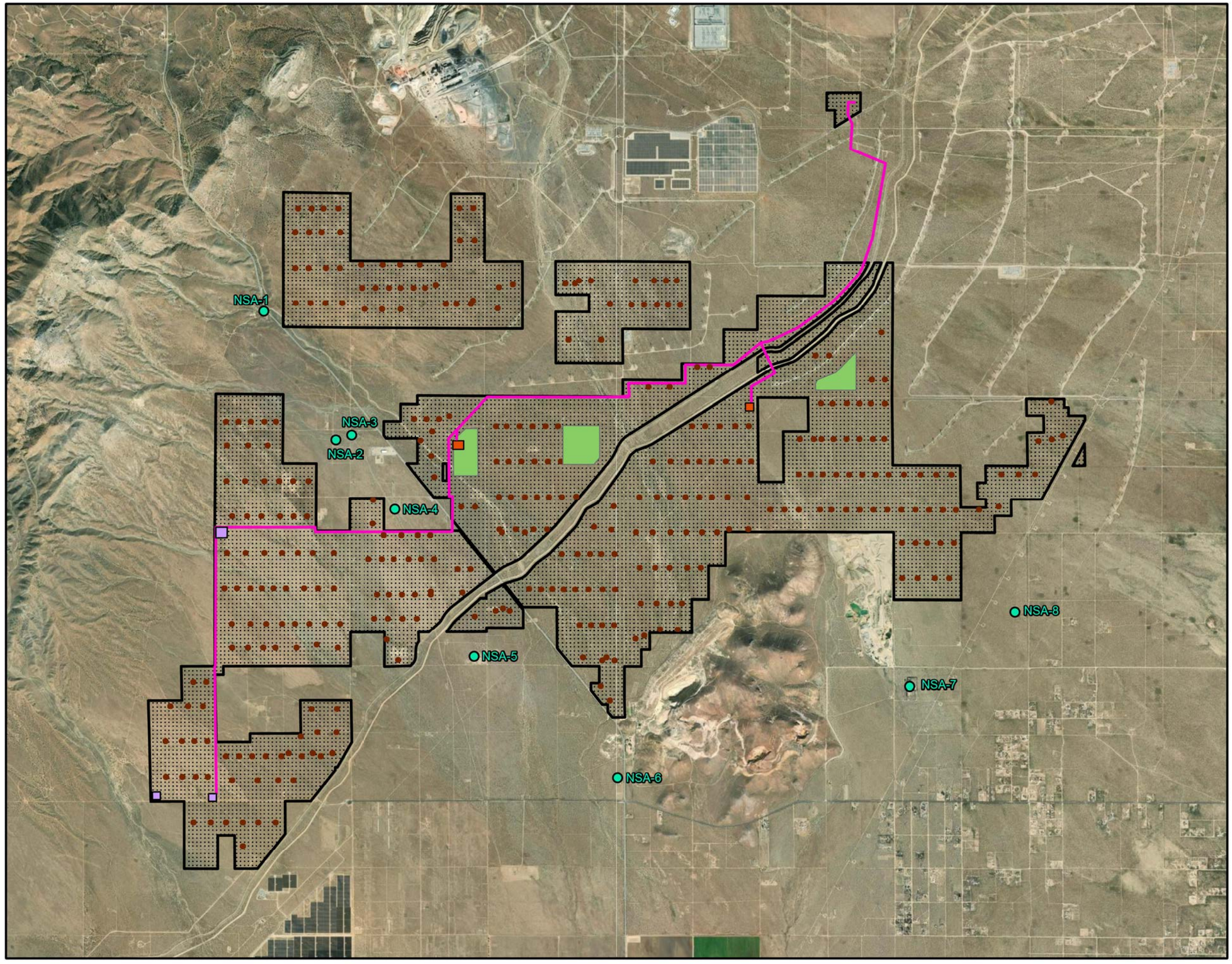
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.13-2. Noise Sensitive Areas and Monitoring Locations





Noise Sensitive Area (NSA)

Proposed Project Features

- Project Site
- Substation
- Substation Alternative
- BESS Area
- Inverter Skids
- Gen-tie Line (New)

N

0 0.25 0.5 1 Miles

Scale is 1:45,000 when printed at 11"x17"

Not for Construction

Document Path: G:\GIS\Projects\Discovery\PROJECT\SITERA_DEVTEAM_HUB 2020\Discovery\PROJECT\Discovery_Noise.aprx

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Existing Acoustical Environment

The existing noise environment of the project site is characteristic of its location and adjacent noise sources. The project site is located in an area of low population density and largely undeveloped land and is traversed by a network of dirt roads. SR-58 is north of the project site, SR-14 is east of the project site, and Tehachapi Willow-Springs Road runs between the project site's boundaries. Additional land uses relative to the proposed project include the Mojave Air and Space Port, residential properties, wind and solar electrical generation facilities, and vacant land. Therefore, the existing noise environment in the project area is defined primarily by vehicular traffic on roadways, intermittent aircraft overflights, residential land uses, existing wind and solar electrical generation facilities, and bird vocalizations. Daytime ambient noise levels would be anticipated to be generally characteristic of rural areas.

To document the existing conditions, baseline sound level measurements were performed on April 24 and 25, 2024, as well as on September 15 and 16, 2025. The monitoring locations (MLs) were selected to be representative of the surroundings of potential receptors relative to the project site. The ambient sound survey included short-term measurements in the presence of a field engineer for a minimum duration of 30 minutes. The short-term measurements were made during both daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) periods at noise sensitive areas (NSAs).

All measurements were conducted using a Larson Davis Model 831 precision integrating sound-level meter that meets the requirements of American National Standards Institute (ANSI) Standards for Type 1 precision instrumentation. This sound analyzer has an operating range of 5 dB to 140 dB, and an overall frequency range of 8 to 20,000 Hz. During the measurement program, microphones were fitted with a windscreen, set upon a tripod at a height of approximately 1.5 meters (5 feet) above ground level, and located out of the influence of any vertical reflecting surfaces. The sound analyzer was calibrated at the beginning and end of the measurement period using a Larson Davis Model CAL200 acoustic calibrator following procedures that are traceable to the National Institute of Standards and Technology. The sound level meters were programmed to sample and store A-weighted and octave band sound level data, including L_{eq} and the percentile sound levels.

During the survey, weather conditions were conducive to accurate data collection. Weather conditions were mainly sunny with few clouds and no precipitation occurring during the measurement period. Temperatures ranged from 74-86 degrees Fahrenheit during the day to 52-64 degrees Fahrenheit during the nighttime.

Three short-term, attended sound measurements were performed at public locations near residential properties proximate to the project site. The monitoring locations were selected to represent ambient conditions at land uses in the vicinity of the project site. The locations and results of the short-term monitoring are described in **Table 4.13-2**, *Ambient Noise Level Measurements (Existing) (dBA)* and mapped on **Figure 4.13-2,** *Noise Sensitive Areas and Monitoring Locations.*

TABLE 4.13-2: AMBIENT NOISE LEVEL MEASUREMENTS (EXISTING) (DBA)

Monitoring Location	Coordinates (Universal Transverse Mercator Zone 11)		Time Period	L_{eq} (dBA)	L_{dn} (dBA)
	Easting (meters)	Northing (meters)			
ML-1	379117	3872832	Day	66	69
			Night	61	
ML-2	390985	3873352	Day	46	44
			Night	23	

dBA = A-weighted decibel; L_{eq} = equivalent sound level; L_{DN} = day-night averaged sound level; ML = monitoring location
Source: **Appendix J1**

The results of the ambient noise survey reflect noise levels that range between 46 and 66 dBA L_{eq} during the day and between 23 and 61 dBA L_{eq} during the night. The most significant sources of noise in the vicinity of the project are other adjacent industrial land uses including mining operations and existing solar and wind turbine operations, as well as noise from nearby roads. Aircraft also contribute to intermittent noise levels.

Figure 4.13-2, *Noise Sensitive Areas and Monitoring Locations*, shows the NSAs within 0.5 mile of the project site that have been included in this analysis and their representative ambient noise monitoring locations. The representative ambient noise level for each NSA is summarized below in **Table 4.13-3**, *Summary of Noise Sensitive Areas*.

TABLE 4.13-3: SUMMARY OF NOISE SENSITIVE AREAS

NSA	Land Use	Coordinates (Universal Transverse Mercator Zone 11)		Distance to Project Site (feet)	Representative Ambient Noise Monitoring Location	Representative Ambient Noise Level (dBA, L_{eq})		
		Easting (meters)	Northing (meters)			Day, L_{eq}	Night, L_{eq}	L_{dn}
NSA-1	Residential	377808	3874253	703	ML-1	66	61	69
NSA-2	Residential	378656	3872706	1216	ML-1	66	61	69
NSA-3	Residential	378846	3872763	1208	ML-1	66	61	69
NSA-4	Residential	379354	3871868	491	ML-1	66	61	69
NSA-5	Residential	380286	3870098	999	ML-3	66	61	69
NSA-6	Residential	381990	3868628	2554	ML-3	66	61	69
NSA-7	Residential	385500	3869687	3443	ML-2	46	23	44
NSA-8	Residential	386770	3870566	2232	ML-2	46	23	44

dBA = A-weighted decibel; L_{eq} = equivalent sound level; L_{dn} = day-night averaged sound level; ML = monitoring location; NSA = noise sensitive area

4.13.3 Regulatory Setting

Federal

Noise Control Act of 1972 (42 U.S.C. 4910)

This act establishes a national policy to promote an environment for all Americans to be free from noise that jeopardizes their health and welfare. To accomplish this, the act establishes a means for the coordination of federal research and activities in noise control, authorizes the establishment of federal noise emissions standards for products distributed in commerce, and provides information to the public with respect to the noise-emission and noise-reduction characteristics of such products.

United States Environmental Protection Agency, Environmental Noise Levels

The United States Environmental Protection Agency (USEPA) provided guidance on environmental noise levels in *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*, commonly referenced as the "Levels Document," that establishes an L_{dn} of 55 dBA as the requisite level, with an adequate margin of safety, for areas of outdoor uses, including residences and recreation areas. This document does not constitute USEPA regulations or standards but identifies safe levels of environmental noise exposure without consideration of costs for achieving these levels or other potentially relevant considerations.

Occupational Safety and Health Administration Occupational Noise Exposure

The Occupational Safety and Health Administration (OSHA) stipulates that protection against the effects of noise exposure shall be provided for employees when sound levels exceed 90 dBA over an 8-hour exposure period. Protection shall consist of feasible administrative or engineering controls. If such controls fail to reduce sound levels to within acceptable levels, personal protective equipment shall be provided and used to reduce exposure of the employee. Additionally, a Hearing Conservation Program must be instituted by the employers whenever employee noise exposure equals or exceeds the action level of an 8-hour time-weighted average sound level of 85 dBA. The Hearing Conservation Program requirements consist of periodic area and personal noise monitoring, performance and evaluation of audiograms, provision of hearing protection, annual employee training, and record keeping.

Federal Transit Administration

The FTA issued the *Transit Noise and Vibration Assessment Manual* (FTA manual), updated in 2018, to guide the assessment of noise and vibration impacts for federally funded transportation projects consistent with the requirements of the National Environmental Policy Act. The proposed project does not meet the criteria for a transit project defined by the FTA; however, the construction activities and equipment associated with the project are similar to those addressed in the FTA manual. The FTA manual establishes guidelines for assessing construction noise, which may be useful when local criteria are not well defined. The FTA construction noise guidelines established fixed thresholds and guidelines that consider the duration of construction activities when a detailed construction evaluation is warranted. **Table 4.13-4**, *Detailed Analysis Construction Noise Criteria*, provides a guideline for a detailed assessment of noise impacts during the construction phase of a project based on the combined 30-day average noise level of all

equipment. If these thresholds are surpassed, the project, or areas of the project, may result in adverse impacts to the surrounding area.

TABLE 4.13-3: DETAILED ANALYSIS CONSTRUCTION NOISE CRITERIA

	$L_{eq.equipment}$ (8 hour) (dBA)		$L_{dn.equipment}$ (30 day) (dBA)
Land Use	**Day**	**Night**	**30-Day Average**
Residential	80	70	75
Commercial	85	85	80
Industrial	90	90	85

$L_{dn.equipment}$ = cumulative sound exposure for a receiver from equipment over a specified time period; dBA = A-weighted decibel
Source: FTA 2018.

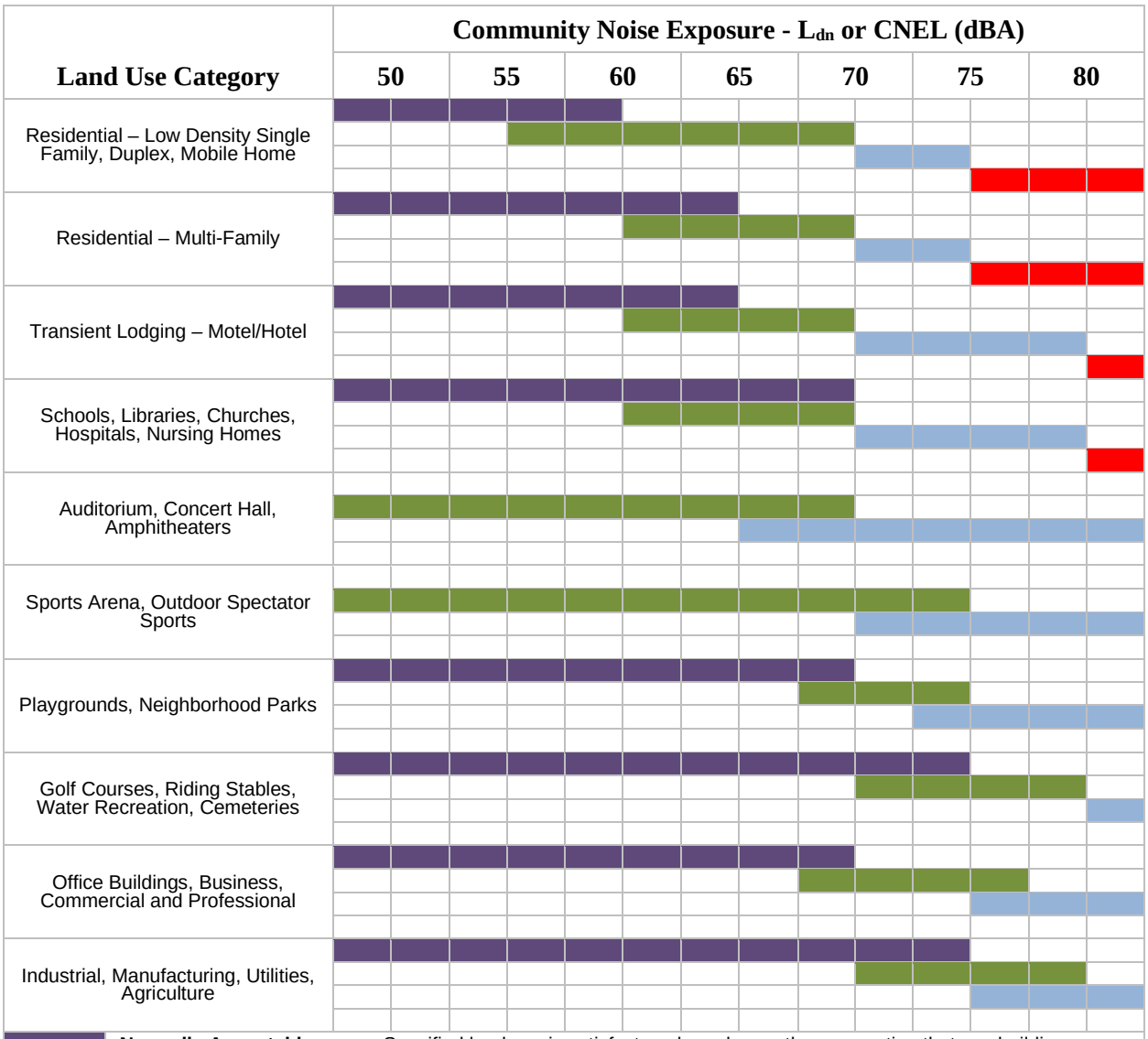
State

The California Department of Health Services has studied the correlation of noise levels and their effects on various land uses and established guidelines for evaluating the compatibility of various land uses, for the noise elements of local general plans, as a function of community noise exposure. The guidelines are the basis for most noise element land use compatibility guidelines in California.

The State requires all municipalities to prepare and adopt a comprehensive long-range general plan. General plans must contain a noise element (California Government Code Section 65302(f) and Section 46050.1 of the Health Safety Code). The requirements for the noise element of the general plan include describing the noise environment quantitatively using a cumulative noise metric such as CNEL or L_{dn}, establishing noise/land use compatibility criteria, and establishing programs for achieving and/or maintaining land use compatibility. Noise elements should address all major noise sources in the community, including mobile and stationary noise sources. In California, most cities and counties have also adopted noise ordinances which serve as enforcement mechanisms for controlling noise.

The land use compatibility for community noise environment chart identifies the normally acceptable range for several different land uses, as shown in **Figure 4.13-3,** *Land Use Compatibility for Community Noise Environment.* Persons in low-density residential settings are most sensitive to noise intrusion, with noise levels of 60 dBA CNEL and below are considered "acceptable." For land uses such as schools, libraries, churches, hospitals, and parks, acceptable noise levels are up to 70 dBA CNEL.

The CEQA *Guidelines* (Public Resources Code Section 21000 et seq.) require the identification of "significant" environmental impacts and their feasible mitigation. Section XI of Appendix G to the CEQA *Guidelines* (California Code of Regulations [CCR] Title 14, Appendix G) lists some indicators of potentially significant impacts, which are included in **Section 4.13.4** under the heading *Thresholds of Significance*.



Source: State of California, Governor's Office of Planning and Research, 2017.

Figure 4.13-3 Land Use Compatibility for Community Noise Environment

Local

Construction and operation of the project would be subject to policies and regulations contained within the general and specific plans, including the Kern County General Plan, Kern County Zoning Ordinance, and the Kern County Noise Ordinance, which include policies, goals, and implementation measures related to noise. The policies, goals, and implementation measures in the Kern County General Plan related to noise that are applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the project.

Kern County General Plan

The noise element of a general plan is a mandatory element as required by California Government Code Section 65302(f). The State requires that local jurisdictions prepare statements of policy indicating their intentions regarding noise and noise sources, establish desired maximum noise levels according to land use categories, set standards for noise emission from transportation and fixed-point sources, and prepare implementation measures to control noise.

The Noise Element of the Kern County General Plan identifies noise-sensitive land uses and noise sources, defines areas of noise impact, and establishes goals, policies, and programs to ensure that County residents are protected from excessive noise, and to develop an implementation program which could effectively mitigate potential noise problems. The implementation measures have been designed so that they will not subject residential or other sensitive noise land uses to exterior noise levels in excess of 65 dBA L_{dn}, and interior noise levels in excess of 45 dBA L_{dn}.

In accordance with the Energy Element of the Kern County General Plan, Policy 10, the County may also require the preparation of an acoustical analysis for energy project proposals that might impact sensitive and highly-sensitive uses.

Applicable goals, policies, and implementation measures from the Noise and Energy Elements of the County's General Plan, relevant to the proposed project, are summarized below.

Chapter 3. Noise Element

3.2 Noise Sensitive Areas

Goals

Goal 1: Ensure that residents of Kern County are protected from excessive noise and that moderate levels of noise are maintained.

Goal 2: Protect the economic base of Kern County by preventing the encroachment of incompatible land uses near known noise producing roadways, industries, railroads, airports, oil and gas extraction, and other sources.

Policies

Policy 1: Review discretionary industrial, commercial, or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses.

Policy 2: Require noise level criteria applied to all categories of land uses to be consistent with the recommendations of the California Division of Occupational Safety and Health (DOSH).

Policy 3: Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.

Policy 4: Utilize good land use planning principles to reduce conflicts related to noise emissions.

Policy 7: Employ the best available methods of noise control.

Implementation Measures

Measure A: Utilize zoning regulations to assist in achieving noise-compatible land use patterns.

Measure F: Require proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB L_{dn} and interior noise levels in excess of 45 dB L_{dn}.

Measure G: At the time of any discretionary approval, such as a request for a General Plan Amendment, zone change or subdivision, the developer may be required to submit an acoustical report indicating the means by which the developer proposes to comply with the noise standards. The acoustical report shall:

a) Be the responsibility of the applicant.

b) Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.

c) Be subject to the review and approval of the Kern County Planning Department and the Environmental Health Services Department. All recommendations therein shall be complied with prior to final approval of the project.

Measure I: Noise analyses shall include recommended mitigation, if required, and shall:

a) Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.

b) Include estimated noise levels, in terms of CNEL, for existing and projected future (10 – 20 years hence) conditions, with a comparison made to the adopted policies of the Noise Element.

c) Include recommendations for appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element.

d) Include estimates of noise exposure after the prescribed mitigation measures have been implemented. If compliance with the adopted standards and policies of the Noise Element will not be achieved, a rationale for acceptance of the project must be provided.

Measure J: Develop implementation procedures to ensure that requirements imposed pursuant to the findings of an acoustical analysis are conducted as part of the project permitting process.

Chapter 5. Energy Element

Policies

Policy 10: The County should require acoustical analysis for energy project proposals that might impact sensitive and highly-sensitive uses in accordance with the Noise Element of the General Plan.

Kern County Zoning Ordinance

Section 19.80.030.S (1) of the Kern County Zoning Ordinance restricts noise generated by commercial or industrial uses within 500 feet of a residential use or residential zone district. The commercial or industrial use shall not generate noise that exceeds an average 65 dB L_{dn} between the hours of 7:00 a.m. and 10:00 p.m. and shall not generate noise that exceeds 65 dB, or which would result in an increase of 5 dB or more from ambient sound levels, whichever is greater, between the hours of 10:00 PM and 7:00 AM. Commercial or industrial facilities that are located in the M-3 zone district are exempt from these noise-generation restrictions. The nighttime level of 65 dB was used for this assessment as it is the greater between 65 dB and ambient plus 5 dB.

Kern County Noise Ordinances

The Kern County Code of Ordinances, Chapter 8.36 (Noise Control), includes acceptable hours of construction, and limitations on construction related noise impacts on adjacent sensitive receptors.

Section 8.36.020 - Prohibited sounds

It is unlawful for any person to do, or cause to be done, any of the following acts within the unincorporated areas of the county:

H. To create noise from construction, between the hours of nine (9:00) p.m. and six (6:00) a.m. on weekdays and nine (9:00) p.m. and eight (8:00) a.m. on weekends, which is audible to a person with average hearing faculties or capacity at a distance of one hundred fifty (150) feet from the construction site, if the construction site is within one thousand (1,000) feet of an occupied residential dwelling except as provided below:

   1. The development services agency director or their designated representative may for good cause exempt some construction work for a limited time.

   2. Emergency work is exempt from this section.

Soledad Mountain Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. There are no recommendations, analysis, or implementation measures in the Soledad Mountain Elephant Butte Specific Plan that are applicable to noise and vibration. In Kern County, specific plans are used to implement goals, objectives, and policies of the Kern County General Plan in a more detailed and refined manner unique to a smaller area of the County. Since there are no applicable goals, policies, or implementation measures

within the Soledad Mountain Elephant Butte Specific Plan, refer to the applicable policies, goals, and implementation measures of the Kern County General Plan above.

Ground-borne Vibration

There are currently no federal, State, or local regulatory standards for ground-borne vibration. However, the FTA has developed vibration criteria based on potential structural damage risks and human annoyance in the FTA manual, as described in **Appendix J1**. While the proposed project would not be subject to FTA oversight, guidance by the agencies nonetheless provides ground-borne vibration criteria that are useful in establishing thresholds of impact.

The degree of annoyance cannot always be explained by the magnitude of the vibrations alone. Phenomena, such as ground-borne noise and rattling, visual effects (e.g., movement of hanging objects), and time of day, all influence the response of individuals. The American National Standards Institute (ANSI) and the International Organization for Standardization (ISO) has developed criteria for evaluation of human exposure to vibrations. The recommendations of these standards and other studies evaluating human response to vibrations have been incorporated into the Federal Transit Administration's (FTA) Transit Noise and Vibration Impact Assessment Manual (2018). The criteria within this manual are used to assess noise and vibration impacts from transit operations. **Table 4.13-5**, *Typical Levels of Ground-Borne Vibration*, provides common vibration sources as well as human and structural response to ground-borne vibrations.

TABLE 4.13-4: TYPICAL LEVELS OF GROUND-BORNE VIBRATION

Human/Structural Response	PPV (in/sec)	Velocity Level (VdB)[a]	Typical Sources (50 feet from source)
Threshold, Minor Cosmetic Damage, Fragile Buildings	0.4	100	Blasting from Construction Projects
	0.2	94	Heavy Tracked Construction Equipment
Difficulty with Tasks, Such as Reading a Computer Screen	0.125	90	N/A
	0.074	85	Commuter Rail, Upper Range
Residential Annoyance, Infrequent Events	0.04	80	Rapid Transit, Upper Range
	0.013	75	Commuter Rail, Typical
	0.023	72	Bus or Truck Bump Over
Residential Annoyance, Frequent Events	0.013	70	Rapid Transit, Typical
Approximate Threshold of Human Perception	0.007	65	N/A
	0.005	62	Bus or Truck, Typical
	0.0013	50	Typical Background Vibration Levels

NOTE:
[a] RMS Vibration velocity in VdB reference to 10^{-6} inches/second
PPV = peak particle velocity; RMS = root mean square; VdB = vibration decibel
Source: 2018 FTA manual (see **Appendix J1**)

In contrast to airborne noise, ground-borne vibration is not an everyday occurrence for humans. The background vibration velocity levels within residential areas are usually 50 VdB or lower, which is well

below the human perception threshold of approximately 65 VdB. The FTA's threshold of architectural damage for conventional sensitive structures from ground-borne vibration is measured as 0.2 inch per second PPV or 94 VdB (decibel units of 1 micro inch per second). The FTA measure of human annoyance at residential uses is 72 VdB for "Frequent Events," or fewer than 70 vibration events of the same kind per day.

4.13.4 Impacts and Mitigation Measures

Methodology

Potential noise impacts associated with the project were evaluated on a quantitative and qualitative basis through a review of existing literature and available information, and by using professional judgment in comparing the anticipated proposed project effects on noise with existing conditions. The evaluation of proposed project potential impacts is based on significance criteria established by Appendix G of the CEQA Guidelines, which the Lead Agency has determined to be appropriate criteria for this EIR.

Short-Term Construction Noise

Acoustic emission levels for activities associated with project construction were based upon typical ranges of energy equivalent noise levels at construction sites, as documented in the FTA manual and described in **Appendix J1**.

The basic model assumed spherical wave divergence from a point source located at the centroid of the nearest buildable area to each receptor structure. In addition to this, the noise impacts from the worst-case construction stage, identified as stage 4 of system installation, were calculated from the closest inverter skid location to each receptor.

Furthermore, the model conservatively assumed that all pieces of construction equipment associated with an activity would operate simultaneously for the duration of that activity. An additional level of conservatism was built into the construction noise model by excluding potential shielding effects due to intervening structures and buildings along the propagation path from the project site to receiver locations such as residential buildings.

Long-Term Operational Noise

Standard acoustical engineering methods were used in the noise analysis. The acoustical model, CadnaA by DataKustik GmbH of Munich, Germany, was used to calculate sound pressure levels from the operation of the project. The sound propagation factors used in the model have been adopted from International Organization for Standardization (ISO) 9613-2: *Acoustics—Attenuation of Sound During Propagation Outdoors*, as described in **Appendix J1**. Atmospheric absorption was estimated for conditions of 50 degrees Fahrenheit and 70 percent relative humidity (conditions that favor propagation) and computed in accordance with ISO 9613-1.

Construction Vibration Impacts

Ground-borne vibration levels associated with construction-related activities were evaluated utilizing typical ground-borne vibration levels rates associated with construction equipment, obtained from the FTA manual (see **Appendix J1**). Potential ground-borne vibration impacts related to structural damage and human annoyance were evaluated taking into account the distance from construction activities to nearby land uses and typically applied criteria for structural damage and human annoyance.

Operational Vibration Impacts

Since operation of the proposed project would involve minor operational traffic, including operations and maintenance staff and regular maintenance truck and panel washing activity, potential project-related vibration impacts would not have any measurable effect on offsite sensitive receptors.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project could potentially have a significant noise-related adverse effect.

A project could have a significant noise-related adverse effect if it would result in:

a. Generation of a substantial temporary or permanent increase in the ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies;

b. Generation of, excessive ground-borne vibration or ground-borne noise levels;

c. For a project within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

Project Impacts

Impact 4.13-1: The project would result in the generation of a substantial temporary or permanent increase in the ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies.

Construction

The project construction phase is anticipated to occur over a period of approximately 34 months. Construction activities for the project generally fall into three main phases: site preparation; system installation; and testing, commissioning, and cleanup.

Table 4.13-6, *Summary of Proposed Construction Equipment*, summarizes the proposed equipment to be used for each stage and the associated noise level of the equipment. **Table 4.13-7**, *Summary of Construction Noise Levels at NSAs*, summarizes the received construction noise levels at each NSA. **Table 4.13-8**,

Summary of Worst-case Construction Stage Noise Levels at NSAs, summarizes the construction levels associated with the worst-case construction stage occurring at the nearest inverter skid to each NSA.

TABLE 4.13-6: SUMMARY OF PROPOSED CONSTRUCTION EQUIPMENT

			Equipment			
Construction Category	**Stage**	**Activity**	**Equipment Type**	**Quantity**	**Usage Factor (%)**	**USEPA Construction Noise Level (50 ft), dBA L_{max}**
General Overhead	0	Site Transportation (34 months)	DOT Truck/Car	68	40	55
Site Preparation/Grading	1	Perimeter Fence Installation (6 months)	Skid Steer Loaders	6	40	80
			Pickup Trucks	6	40	55
			Water Trucks	2	50	85
			Flatbed Trucks	2	40	84
	2	Site Preparation, Clearing/Grading, and Roads (15 months)	Water Trucks	6	50	85
			Graders	3	40	85
			Bulldozers	3	40	85
			Rollers	6	20	85
			Tractors	2	40	84
			Pickup Trucks	6	40	55
	3	Underground Work (Trenching) (15 months)	Excavators	3	40	85
			Water Trucks	6	50	85
			Aussie Padders	2	50	84
			Rollers	2	20	85
			Forklifts	3	40	80
			Tractor	4	40	84
			Pickup Trucks	4	40	55
System Installation	4	System Installation (24 months)	Forklifts	12	40	80
			Skid Steer Loaders	18	40	80
			Tractors	6	40	84
			ATVs	40	40	55
			Pile Drivers	16	20	95
			Pickup Trucks	12	40	55
			Generators	8	50	82
			School Bus	11	40	84

Construction Category	Stage	Activity	Equipment Type	Quantity	Usage Factor (%)	USEPA Construction Noise Level (50 ft), dBA L_{max}
			Equipment			
	5	Gen-tie Construction (6 months)	Line Truck	1	40	80
			Boom Truck	1	40	80
			Crane	1	16	85
			Pickup Trucks	8	40	55
	6	Energy Storage System (4-6 months)	Crane	1	16	85
			Grader	1	50	85
			Lift	1	40	80
			Skid Steer Loaders	2	40	80
Testing, Commissioning, and Cleanup	7	Testing and Commissioning (22 months)	Pickup Trucks	10	40	55
	8	Site Cleanup, Reclamation, and Restoration (4 months)	Graders	3	40	85
			Skid Loaders	3	40	80
			Drill Seed Drums	2	40	84
			Broadcast Seed Belts	2	40	84
			Water Trucks	4	50	85

dBA = A-weighted decibels; L_{max} = maximum sound level; USEPA = U.S. Environmental Protection Agency

TABLE 4.13-7: SUMMARY OF CONSTRUCTION NOISE LEVELS AT NSAS

NSA	UTM Coordinates (meters)		Distance to Construction Centroid (feet)	Construction Noise Level per Stage (dBA, L_{eq})								
	Easting	Northing		0	1	2	3	4	5	6	7	8
NSA-1	377808	3874253	2,920	34	53	58	58	66	51	49	25	56
NSA-2	378656	3872706	3,700	32	51	56	56	64	49	48	24	54
NSA-3	378846	3872763	3,075	34	53	58	58	66	51	49	25	56
NSA-4	379354	3871868	2,800	34	54	59	59	66	52	50	26	57
NSA-5	380286	3870098	1,500	40	59	64	64	72	57	56	31	62
NSA-6	381990	3868628	7,425	26	45	50	50	58	43	42	18	48
NSA-7	385500	3869687	8,200	25	44	49	49	57	42	41	17	48
NSA-8	386770	3870566	7,050	26	46	51	50	58	44	42	18	49

dBA = A-weighted decibels; L_{max} = maximum sound level; NSA = noise sensitive area; UTM = Universal Transverse Mercator

TABLE 4.13-8: SUMMARY OF WORST-CASE CONSTRUCTION STAGE NOISE LEVELS AT NSAS

NSA	UTM Coordinates (meters)		Distance to Closest Inverter Skid (feet)	Construction Noise Level (dBA, L_{eq})
	Easting	Northing		
NSA-1	377808	3874253	1,250	73
NSA-2	378656	3872706	1,900	70
NSA-3	378846	3872763	2,475	67
NSA-4	379354	3871868	975	76
NSA-5	380286	3870098	1,600	71
NSA-6	381990	3868628	3,100	66
NSA-7	385500	3869687	4,275	63
NSA-8	386770	3870566	2,975	66

dBA = A-weighted decibels; L_{max} = maximum sound level; NSA = noise sensitive area; UTM = Universal Transverse Mercator

Noise levels resulting from construction activities would vary depending on several factors such as the type and age of equipment, specific equipment manufacture and model, the operations being performed, and the overall condition of the equipment and exhaust system mufflers. Construction would primarily occur during daylight hours, Monday through Friday, between 6:00 a.m. and 6:00 p.m.; however, some work may occur on Saturday and Sunday, as required, to meet the construction schedule and/or to promote the health and safety of workers. The Kern County Noise Ordinance (Chapter 8.36) limits noise from construction from 9:00 p.m. and 6:00 a.m. on weekdays and 9:00 p.m. to 8:00 a.m. on weekends when occurring within 1,000 feet of an occupied residential dwelling. Project construction work would conform to the County's ordinance. Construction activities that may need extended hours would be coordinated with the County and appropriate agencies before the activity occurs.

The FTA has published construction noise impact criteria levels of an 80 dBA 8-hour L_{eq} during the day for residential land uses. **Table 4.13-7**, *Summary of Construction Noise Levels at NSAs*, shows that the highest construction noise levels at a receptor will be 72 dBA L_{eq} at NSA-5, which will occur during Stage 4 construction activities. Furthermore, **Table 4.13-8**, *Summary of Worst-case Construction Stage Noise Levels at NSAs,* shows that the highest worst-case construction noise level at a receptor will be 76 dBA L_{eq} at NSA-4. This level is below the FTA guidance level of 80 dBA L_{eq}; therefore, construction of the project will comply with the Kern County Noise Ordinance and FTA construction noise guidelines. Due to these circumstances, the temporary increase in noise due to construction is considered to be a less than significant impact.

In addition, the construction noise impacts associated with the project's 230-kV switchyard have been assessed in **Appendix J2** and shown to comply with all applicable limits. Due to this, the temporary increase in noise due to switchyard construction is considered to be a less than significant impact.

Construction Traffic

Using the peak vehicle counts from the Traffic Impact Analysis and the FTA methodology for calculating the roadway hourly L_{eq} at 50 feet, the 2026 cumulative condition peak hour traffic L_{eq} will range from 63 dBA to 64 dBA at 50 feet from Tehachapi Willow Springs Road and will range from 60 dBA to 64 dBA at

50 feet from Backus Road. The 2026 cumulative plus peak construction peak hour traffic L_{eq} will range from 66 dBA to 68 dBA at 50 feet from Tehachapi Willow Springs Road and will range from 64 dBA to 67 dBA at 50 feet from Backus Road.

Construction would primarily occur during daylight hours, Monday through Friday, between 6:00 a.m. and 6:00 p.m.; however, some work may occur on Saturday and Sunday, as required, to meet the construction schedule and/or to promote the health and safety of workers. The Kern County Noise Ordinance (Chapter 8.36) limits noise from construction from 9:00 p.m. and 6:00 a.m. on weekdays and 9:00 p.m. to 8:00 a.m. on weekends when occurring within 1,000 feet of an occupied residential dwelling. Project construction work would conform to the County's ordinance. Any construction activities that may need extended hours would be coordinated with the County and appropriate agencies before the activity occurs.

The noise levels associated with the addition of construction traffic are below the FTA guidance level of 80 dBA L_{eq}; therefore, noise associated with construction traffic will comply with the Kern County Noise Ordinance and FTA construction noise guidelines.

Operation

The CadnaA computer noise model was used to calculate sound pressure levels from the operation of the project equipment in the vicinity of the project site. The current ISO standard for outdoor sound propagation, ISO 9613-2: *Acoustics—Attenuation of Sound during Propagation Outdoors*, was used within CadnaA, as described in **Appendix J1**. The method described in this standard calculates sound attenuation under weather conditions that are favorable for sound propagation, such as for downwind propagation or atmospheric inversion, conditions which are typically considered worst-case. Offsite topography was obtained using the publicly available U.S. Geological Survey (USGS) digital elevation data. A default ground attenuation factor of 0.5 was assumed for sound propagation over acoustically "mixed" ground. The project's general arrangement was reviewed and directly imported into the acoustic model so that onsite equipment could be easily identified, buildings and structures could be added, and sound emission data could be assigned to sources as appropriate.

The primary noise sources during operations are the inverter skids, the 230-kilovolt ampere (kVA) substation transformers, and the battery energy storage system (BESS) units. It is anticipated that the project will include up to three onsite collector substations; however, the westernmost substation would be in one of three alternate locations. All onsite collector substation locations, except the most southwestern alternative, were modeled to conservatively analyze operational noise. The most southwestern alternative substation is located the furthest away from sensitive receptors, and as such, if this location is selected, the noise impacts will be less than the other two modeled alternative locations. It is expected that all equipment will operate in a consistent manner during daylight hours. Between sunset and sunrise, all equipment will remain operational except for the inverters. Reference sound power levels input to CadnaA were provided by the project proponent and equipment manufacturers. The sound levels used in the noise model are shown below in **Table 4.13-9**, *Modeled Sound Power Level (L_w) for Major Pieces of Project Equipment*.

TABLE 4.13-9: MODELED SOUND POWER LEVEL (L_W) FOR MAJOR PIECES OF PROJECT EQUIPMENT

Sound Source	Sound Power Level (L_w) by Octave Band Frequency, Hz, dBA									Broadband Level, dBA
	31.5	63	125	250	500	1k	2k	4k	8k	
Inverter Skid	59	73	83	89	90	92	93	88	79	98
Substation Transformer	65	85	97	99	105	102	98	93	84	108
BESS Unit	--	59	63	81	84	86	82	76	65	90

BESS = battery energy storage system; dBA = A-weighted decibels; Hz = hertz

From the proposed easternmost onsite collector substation, a 230-kV gen-tie would be constructed to connect the project to its point of interconnection. The Electric Power Research Institute has conducted several studies of corona effects, as described in **Appendix J1**. The typical noise levels for transmission lines with wet conductors are shown in **Table 4.13-10**, *Transmission and Sub-transmission Line Voltage and Audible Noise Levels*. It can be assumed that the proposed 230-kV gen-tie will produce a sound level of 40 dBA directly under the conductors during worst-case wet conditions.

TABLE 4.13-10: TRANSMISSION AND SUB-TRANSMISSION LINE VOLTAGE AND AUDIBLE NOISE LEVELS

Line Voltage (kilovolts)	Audible Noise Level Directly Below the Conductor (A-weighed decibels)
138	34
240	40
360	51

Broadband (dBA) sound pressure levels were calculated for expected normal project operation assuming that all components identified previously are operating continuously and concurrently at the representative manufacturer-rated sound. The sound energy was then summed to determine the equivalent continuous A-weighted downwind sound pressure level at a point of reception. Sound contour plots displaying broadband (dBA, L_{dn}) sound levels presented as color-coded isopleths are provided in **Figure 4.13-4,** *Received Sound Levels, Project Operation*. The sound contours are graphical representations of the cumulative noise associated with operation of the equipment over a 24-hour period and show how operational noise would be distributed over the surrounding area of the project site. The contour lines shown are analogous to elevation contours on a topographic map, i.e., the noise contours are continuous lines of equal noise level around some source, or sources, of noise.

Discovery Solar PV and Storage Project

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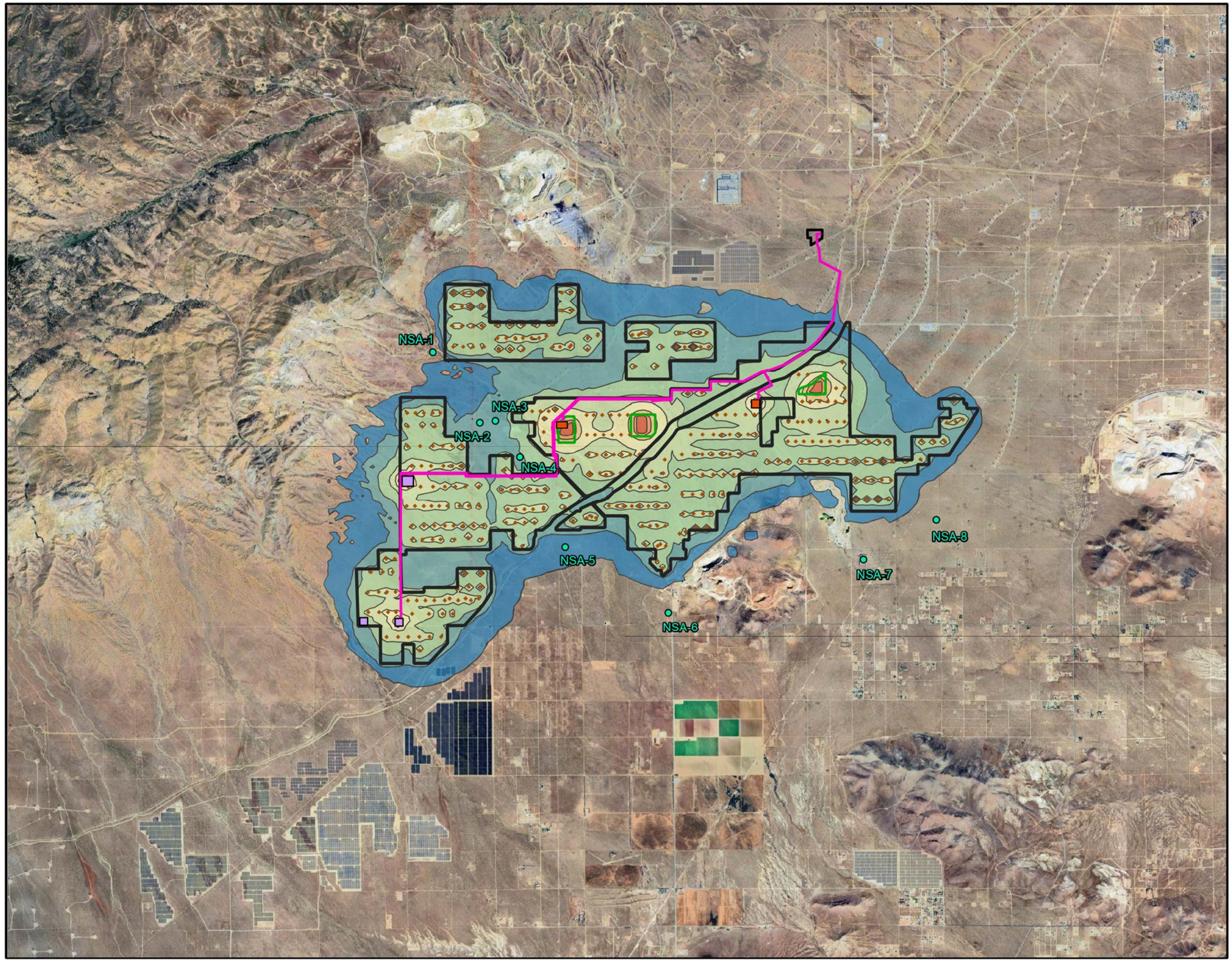
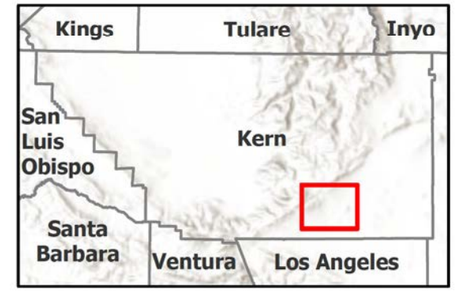
Figure 4.13-4. Received Sound Levels, Project Operation





Noise Sensitive Area (NSA)

Proposed Project Features

- Project Site
- Inverter Skids
- Substation
- Substation Alternative
- BESS Area
- Gen-tie Line (New)

Received Sound Levels (dBA Ldn)

- 45.0-50.0
- 50.0-55.0
- 55.0-60.0
- 60.0-65.0
- 65.0-70.0
- 70.0-75.0
- 75.0-80.0
- 80.0-85.0

N

0 0.75 1.5 3 Miles

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

Not for Construction

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Table 4.13-11, *Operational Acoustic Modeling Results, dBA*, shows the projected exterior sound levels at each NSA. Because nighttime is defined as occurring between 10:00 p.m. and 7:00 a.m., there will be a period of time during the early morning in which the sun has risen and all equipment is operational, including the inverters, but is still considered nighttime. This is why the more conservative nighttime ambient is presented in **Table 4.13-11**, *Operational Acoustic Modeling Results, dBA*, and is used to assess the incremental increase to ambient. Full equipment operations during these early morning "nighttime" hours were also accounted for in the L_{dn} calculations.

TABLE 4.13-11: OPERATIONAL ACOUSTIC MODELING RESULTS, DBA

NSA	UTM Coordinates (meters)		Modeled Operational L_{max}, dBA	Modeled Operational Nighttime L_{eq}, dBA	Modeled Operational L_{dn}, dBA	Ambient L_{dn}, dBA	Modeled Operational + Ambient L_{dn}, dBA	Increase Above Ambient, dBA
	Easting	Northing						
NSA-1	377808	3874253	41	37	44	69	<1	
NSA-2	378656	3872706	47	44	51	69	69	<1
NSA-3	378846	3872763	47	45	52	69	69	<1
NSA-4	379354	3871868	51	46	54	69	69	<1
NSA-5	380286	3870098	46	40	48	69	69	<1
NSA-6	381990	3868628	38	33	41	69	69	<1
NSA-7	385500	3869687	36	32	39	44	45	1
NSA-8	386770	3870566	39	34	41	44	46	2

dBA = A-weighted decibels; L_{dn} = day-night average sound level; L_{eq} = equivalent sound level; L_{max} = maximum instantaneous noise level; NSA = noise sensitive area

The results indicate that the highest project operational noise levels would be 51 dBA L_{max} and 54 dBA L_{dn} at NSA-4. These levels show that the project would comply with the Kern County General Plan Noise Element 65 dBA L_{dn} exterior limit and the Kern County Zoning Ordinance 65 dBA L_{dn}. These levels would also comply with the Kern County Zoning Ordinance 65 dBA L_{max} limit between the hours of 10:00 p.m. and 7:00 a.m. Regarding the Kern County General Plan Noise Element 45 dBA L_{dn} interior limit, typical residential construction provides approximately 15 to 20 dB of additional noise reduction with windows closed and approximately 10 dB of additional noise reduction with windows in an open position (Harris 1998). Thus, the highest exterior Project operational noise level of 54 dBA L_{dn} would be reduced to 44 dBA L_{dn} at the interior with windows open and will comply with the Kern County General Plan Noise Element 45 dBA L_{dn} interior limit.

Long-term permanent increases in noise levels would be primarily associated with onsite operational activities. Based on the noise standards in the Kern County General Plan (2009), long-term operational noise impacts would be considered significant if the proposed project would result in a substantial increase in ambient noise levels that would exceed the Plan's established noise standard of 65 dBA L_{dn} at the outdoor activity area of the nearest NSA. In instances where the ambient noise level is greater than the noise standard, the applicable noise standard would be the ambient noise level. At NSAs where the ambient L_{dn} is higher than 65 dBA, the combined operational noise plus the current ambient level does not exceed the current ambient L_{dn}. At NSAs where the current ambient L_{dn} is lower than 65 dBA, the combined operational noise plus the current ambient L_{dn} does not exceed 65 dBA.

In addition, the operational noise impacts associated with the project's 230-kV switchyard have been assessed in **Appendix J2** and shown to comply with all applicable limits. Due to this, the long-term operational noise associated with switchyard operation is considered to be a less than significant impact.

Maintenance Activities

Project maintenance activities would include solar panel washing. These activities are expected to occur one to two times per year and would not generate a significant amount of traffic or create a substantial increase in vehicular noise in the area. Any increase in traffic would be minimal and sporadic; therefore, potential impacts from vehicular noise would be less than significant.

Decommissioning Noise

Noise levels from decommissioning would be similar to those during construction. The same types of heavy equipment and vehicles would be used to decommission the project site as were used to construct it. Decommissioning activities, like construction, would comply with Kern County construction noise ordinance standards as detailed previously. Therefore, potential noise impacts from project decommissioning would be less than significant.

Summary

In summary, construction activities associated with the proposed project would be in accordance with the hourly limitations specified in the Kern County Code of Ordinances, potentially with certain limited exceptions in accordance with code requirements. 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**. Additional components to this mitigation measure have also been included to further minimize noise levels associated with construction activities. Implementation of **Mitigation Measures MM 4.13-1** and **MM 4.13-2** below 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.

Potential operational noise impacts would be below Kern County noise standards and would result in less than significant impacts.

Activities associated with decommissioning of the project would result in similar or lower noise levels than those that would be experienced under the loudest phases of construction. Potential impacts would be less than significant; however, to reduce any potential noise impact to offsite sensitive receptors, **Mitigation Measures MM 4.13-1** and **MM 4.13-2** would be implemented.

Mitigation Measures

MM 4.13-1: The following measures are to be implemented to further reduce short-term noise levels associated with project construction and decommissioning:

a. Construction and decommissioning activities at the project site shall comply with the hourly restrictions for noise-generating construction activities, as specified in the Kern County Noise Ordinance, Chapter 8.36. Construction activities shall be prohibited between the hours of 9:00 p.m. to 6:00 a.m. on weekdays, and between 9:00 p.m. to 8:00 a.m. on weekends, if they result in noise which is audible to a person with average hearing faculties or capacity at a distance of 150 feet from the construction site, if the

construction site is within 1,000 feet of an occupied residential dwelling. These hourly limitations shall not apply to activities where hourly limitations would result in increased safety risk to workers or the public, such as commissioning and maintenance activities that must occur after dark to ensure photovoltaic arrays are not energized, unanticipated emergencies requiring immediate attention, or security patrols.

b. Stage equipment in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during construction to the extent practical. Place stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site, where feasible.

c. Ensure construction equipment is fitted with noise-reduction features such as mufflers and engine shrouds that are no less effective than those originally installed by the manufacturer.

d. Limit haul trucks from idling for periods greater than 5 minutes, except as needed to perform a specified function (e.g., concrete mixing).

e. Limit onsite vehicle speeds to 15 miles per hour, or less (except in cases of emergency).

f. Adjust back-up beepers for construction equipment to the lowest noise levels possible, provided that the Occupational Safety and Health Administration and California Division of Occupational Safety and Health's safety requirements are not violated. On vehicles where back-up beepers are not available, employ alternative safety measures such as escorts and spotters.

MM 4.13-2: Prior to the issuance of grading permits, the construction contractor shall establish a Noise Disturbance Coordinator for the project during construction. The Noise Disturbance Coordinator is responsible for responding to any complaints about construction noise. The Noise Disturbance Coordinator shall be responsible for determining the cause of the complaint and shall be required to implement reasonable measures to resolve the complaint. Contact information for the Noise Disturbance Coordinator shall be submitted to the Kern County Planning and Natural Resources Department prior to commencement of any ground disturbing activities.

MM 4.13-3: Prior to commencement of any onsite construction and decommissioning activities (i.e., fence construction, mobilization of construction equipment, initial grading, etc.), the project proponent/operator shall provide written notice to the public through mailing a notice, which shall include:

a. The mailing notice shall be to all residences within 1,000 feet of the project site, 15 days or less prior to construction activities. The notices shall include the construction schedule and a telephone number and email address where complaints and questions can be registered with the noise disturbance coordinator.

b. A minimum of one sign, legible at a distance of 50 feet, shall be posted at the construction site, or adjacent to the nearest public access to the main construction entrance, throughout construction activities that shall provide the construction schedule (updated as needed) and a telephone number where noise complaints can be registered with the noise disturbance coordinator.

c. Documentation that the public notice has been sent and the sign has been posted shall be provided to the Kern County Planning and Natural Resources Department.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-3**, potential impacts would be less than significant.

Impact 4.13-2: The project would expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.

Vibration levels for activities associated with project construction were based on the average of source levels in PPV published with the FTA manual, which documents several types of construction equipment measured under a wide variety of construction activities. Using the documented vibration levels as input into a basic propagation model, construction vibration levels were calculated at the nearest project site boundary and then at the NSA structure.

This vibration analysis evaluated the worst-case vibration source, which would be the pile driver. Based on vibration propagation calculations, the highest construction vibration levels are predicted to be 0.003 PPV in/sec, or 56 VdB, at NSA (NSA-4), which is approximately 975 feet from the nearest source of construction. These levels are based on the worst-case vibration-producing equipment, and it is expected that other vibration-generating equipment proposed for the project construction would result in lower vibration levels. The highest vibration levels received by an NSA will be below the human perception threshold level for frequent event of 65 VdB and the threshold for sensitive structures at 94 VdB.

Since operation of the proposed project would involve minor operational traffic, including operations and maintenance staff and regular maintenance truck and panel washing activity, potential project-related vibration impacts would not have any measurable effect on offsite sensitive receptors.

In addition, the vibratory impacts associated with the project's 230-kV switchyard have been assessed in **Appendix J2** and shown to comply with all applicable limits. Due to this, the vibration associated with switchyard construction and operation is considered to be a less than significant impact.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

Potential impacts would be less than significant.

Impact 4.13-3: For a project within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people be residing or working in the project area to excessive noise levels?

The project is not within 2 miles of a public airport or public use airport or in the vicinity of a private airstrip or an airport land use plan. There would be no impact.

Mitigation Measures

No mitigation measures would be required.

Level of Significance

No impact.

4.13.5 Cumulative Setting, Impacts, and Mitigation Measures

Construction Noise

The cumulative scenario for the analysis of operational noise impacts considers potential impacts from present or reasonably foreseeable projects, shown in **Table 3-5**, *Cumulative Projects List*. Of these, the Apollo Solar Project, Bullhead Solar I/II Project, and the Windstar Upper and Lower BESS Project have been included in this assessment of potential cumulative impacts. The Kern Organics Waste to Energy and Pacific Steel Mojave Micro Mill projects have not been included as they are located too far, 4 to 6 miles, from the Discovery Solar PV and Storage Project to contribute to a potential noise cumulative impact. Apollo Solar and Bullhead Solar I/II have both prepared a noise study, while a noise study for the Windstar Upper and Lower BESS Project is not available.

Potential construction-related cumulative noise impacts would not be generated from the Apollo Solar Project as it has already finished construction. The closest receptor to the Windstar Upper and Lower BESS Project relative to the Discovery Solar PV and Storage Project is NSA-4, which is approximately 2 miles from the Windstar Upper and Lower BESS Project. The highest received level from construction activities associated with the Discovery Solar PV and Storage Project at this receptor is 66 dBA L_{eq}. Considering the 2-mile distance from the Windstar Upper and Lower BESS Project, a potential cumulative impact from construction would be less than significant with implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-3**.

The closest receptor to the Bullhead Solar I/II Project relative to the Discovery Solar PV and Storage Project is NSA-6, which is located approximately 2.2 miles from the Bullhead Solar I/II Project. The highest received level from construction activities associated with the Discovery Solar PV and Storage Project at this receptor is 58 dBA L_{eq}. Considering the 2.2-mile distance from the Bullhead Solar I/II Project, a potential cumulative impact from construction would be less than significant with implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-3**. Potential cumulative noise impacts associated with decommissioning activities would be similar to construction activities, and as such would be less than significant.

Operational Noise

The closest receptor relative to the Apollo Solar Project and the Discovery Solar PV and Storage Project is NSA-5. The Noise Memorandum for the Apollo Solar Project, provided as Appendix I of the Apollo Solar Project DEIR (QK 2018), does not give the operational noise level at this receptor, but implies it will be

less than 53 dBA L_{dn}, while the operational noise level from the Discovery Solar PV and Storage Project at this receptor will be 47 dBA L_{dn}. These individual levels result in a cumulative level of 54 dBA L_{dn} (see *Noise Fundamentals* section earlier) and show that the potential cumulative operational impact will comply with the Kern County General Plan Noise Element 65 dBA L_{dn} exterior limit and the Kern County Zoning Ordinance 65 dBA L_{dn}, 65 dBA L_{max} limit, and also would not result in an increase of 5 dBA above ambient limits.

The closest receptor relative to the Bullhead I/II Solar Project and the Discovery Solar PV and Storage Project is NSA-5. The Noise Technical Report Addendum for the Bullhead I/II Solar Project, provided as Appendix M of the Bullhead Solar I/II Project DEIR (ICF 2024), does not give the operational noise level at this receptor as it is too far away. The operational noise level from the Discovery Solar PV and Storage Project at this receptor will be 48 dBA L_{dn}. The receptor that was assessed in the Bullhead I/II Noise Technical Report Addendum that is closest to this location showed a maximum operational noise level of 35 L_{dn}. These individual levels result in a cumulative level of 48 dBA L_{dn} and show that the potential cumulative operational impact will comply with the Kern County General Plan Noise Element 65 dBA L_{dn} exterior limit and the Kern County Zoning Ordinance 65 dBA L_{dn}, 65 dBA L_{max} limit, and also would not result in an increase of 5 dBA above ambient limits.

The closest receptor relative to the Windstar Upper and Lower BESS Project and the Discovery Solar PV and Storage Project is NSA-4. The Windstar Upper and Lower BESS Project would also be required to comply with the noise limits prescribed in the County noise ordinance. The operational noise level from the Discovery Solar PV and Storage Project at this NSA-4 would be 54 dBA L_{dn}. In order for the Discovery Solar PV and Storage Project to contribute to an exceedance of the 65 dBA limit, it would need to produce a level that is less than 10 dBA below the limit, e.g., 55 dBA plus 65 dBA would still equal 65 dBA. As this level is 10 dBA below the applicable County thresholds, the project's contribution to potential cumulative impacts would not be cumulatively considerable.

Due to the above, potential cumulative noise impacts associated with project operation would be less than significant.

Vibration

The project's vibration levels would not exceed any applicable thresholds for ground-borne noise or vibration and would result in a less than significant impact. Due to the rapid attenuation of ground-borne vibration, none of the cumulative projects are close enough to contribute to a potential cumulative impact for vibration. Therefore, potential vibration impacts would not be cumulatively considerable, and potential impacts would be less than significant.

Cumulative operation could also result in the exposure of people to or the generation of excessive ground-borne vibration. However, since operation of the proposed project and related projects would involve operational traffic, including operations and maintenance staff and regular maintenance trucks (0.076 in/sec PPV), and panel washing activity (not measurable), potential project-related vibration impacts would not have any measurable effect on the nearest sensitive receptors. Therefore, potential cumulative vibrational impacts would be less than significant.

Mitigation Measures

With implementation of **Mitigation Measures MM 4.13-1** through **MM 4.13-3**, impacts would be less than significant.

Level of Significance after Mitigation

Cumulative impacts would be less than significant.

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Section 4.14

Public Services

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Section 4.14
Public Services

4.14.1 Introduction

This section of the EIR describes the affected environment and regulatory setting pertaining to public services, which include fire and police protection. This section also addresses potential impacts on public services that could result from implementation of the project, and mitigation measures that would reduce potential impacts, if applicable. Information for this section was taken from numerous sources, including websites and service agency plans.

4.14.2 Environmental Setting

Fire Protection

The Kern County Fire Department (KCFD) provides primary fire protection services, fire prevention, emergency medical, and rescue services to more than 800,000 people in unincorporated areas of Kern County and nine incorporated cities. KCFD operates 47 full-time fire stations within 7 battalions and is equipped with 58 fire engines, 6 ladder trucks, 54 patrol vehicles, 30 command vehicles, 6 dozers, 2 helicopters, 3 hazardous material response teams, and other ancillary vehicles and equipment. KCFD is staffed with 621 permanent employees, which include 521 uniformed firefighters (KCFD, 2025).

The project site is located within Battalion 1, Tehachapi, which serves the southeastern portion of Kern County and is divided by State Route (SR)-58 that runs east/west and by SR-14 that runs north/south. Battalion 1 covers 951,600 acres, of which 351,276 acres is State Responsibility Area (SRA) land area, and the California Department of Forestry and Fire Protection (CAL FIRE) has a legal responsibility to provide fire protection for this SRA land area (KCFD, 2025). The SRA land area is bounded by the California Aqueduct on the east, and the San Joaquin Valley to the west (KCFD, 2025). As shown in **Figure 4.14-1**, *Fire Hazard Severity Zones for State Responsibility Areas and Local Responsibility Areas*, the project site, including the proposed generation tie (gen-tie) line, is within areas categorized as SRA Moderate and SRA High (CAL FIRE, 2023). The closest SRA Very High FHSZ is located approximately 5 miles northwest of the project site, and no Local Responsibility Area (LRA) Very High FHSZs exist within Kern County. Given these designations, the project site is outside of areas identified by CAL FIRE as having a very high wildfire hazard level. Moderate zones are typically wildland supporting areas of low fire frequency and relatively modest fire behavior. High zones include wildland supporting areas with a higher wildfire hazard potential (CAL FIRE, 2007). The project site generally consists of undeveloped desert lands that have mostly been used for grazing. The surrounding land primarily consists of rural residential, agricultural, undeveloped land, and large-scale renewable energy developments.

Fire Station No. 14 (Mojave), located at 1953 SR-58, is approximately 5 miles to the northeast of the project site at its closest point and would be the primary responder to a fire or emergency at the project site. In the event of a major fire or when short staffed, other stations would be called on to respond, as necessary, including Fire Station No. 15 (Rosamond), located at 3219 35th Street West; Fire Station No. 12 (Tehachapi), located at 800 South Curry Street; and Kern County Fire Department Air & Wildland Camp

8, located at 20569 Eumatilla Street in Tehachapi. Information on the four closest fire stations to the project site is included in **Table 4.14-1**, *List of Nearby Fire Stations*. The table identifies each type of facility, the name and address of the facility, and the approximate distance from the project site. In remote County areas like the project site, the average response time is approximately 21 minutes (CPSM, 2019).

Kern County has 14 mutual-aid agreements with neighboring fire suppression organizations to further strengthen the emergency services (KCFD, 2025). The County has a mutual aid agreement with the Los Angeles County Fire Department (LACFD) in the event that KCFD is unable to be the primary responder to an emergency. The LACFD has 175 fire stations throughout Los Angeles County. The LACFD is divided into 22 battalions with nearly 5,000 fire series personnel (LACFD, 2024). The nearest LACFD fire station to the project site is Station No. 112, located at 8812 W. Avenue E-8, Lancaster, approximately 13 miles southeast of the project site.

Kern County applies and utilizes the National Fire Code set forth by the National Fire Protection Association, the California Fire Code, the California Building Code, and the Kern County Ordinance Code to regulate fire safety.

The Kern County Emergency Medical Services Division (EMS) is the lead agency for the emergency medical services system in Kern County and is responsible for coordinating all system participants in the County, which include the public, fire departments, ambulance companies, other emergency service providers, hospitals, and Emergency Medical Technician training programs throughout the County. The EMS includes a system of services organized to provide rapid response to serious medical emergencies, including immediate medical care and patient transport to a hospital setting. The division also covers day to day emergencies, disaster medical response planning and preparation, and preventative health care (Kern Public Health, 2024). The nearest hospital is Adventist Health Tehachapi Valley at 1100 Magellan Drive in the City of Tehachapi, approximately 9 miles to the northwest of the project site.

An inventory of fire facilities in the project area is provided below in **Table 4.14-1,** *List of Nearby Fire Stations* and shown in **Figure 4.14-2**, *Public Services Locations*. The table identifies each type of facility, the name and address of the facility, and the approximate distance from the project site.

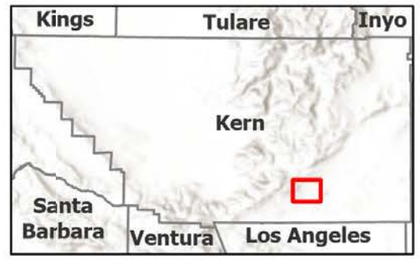
TABLE 4.14-1: LIST OF NEARBY FIRE STATIONS

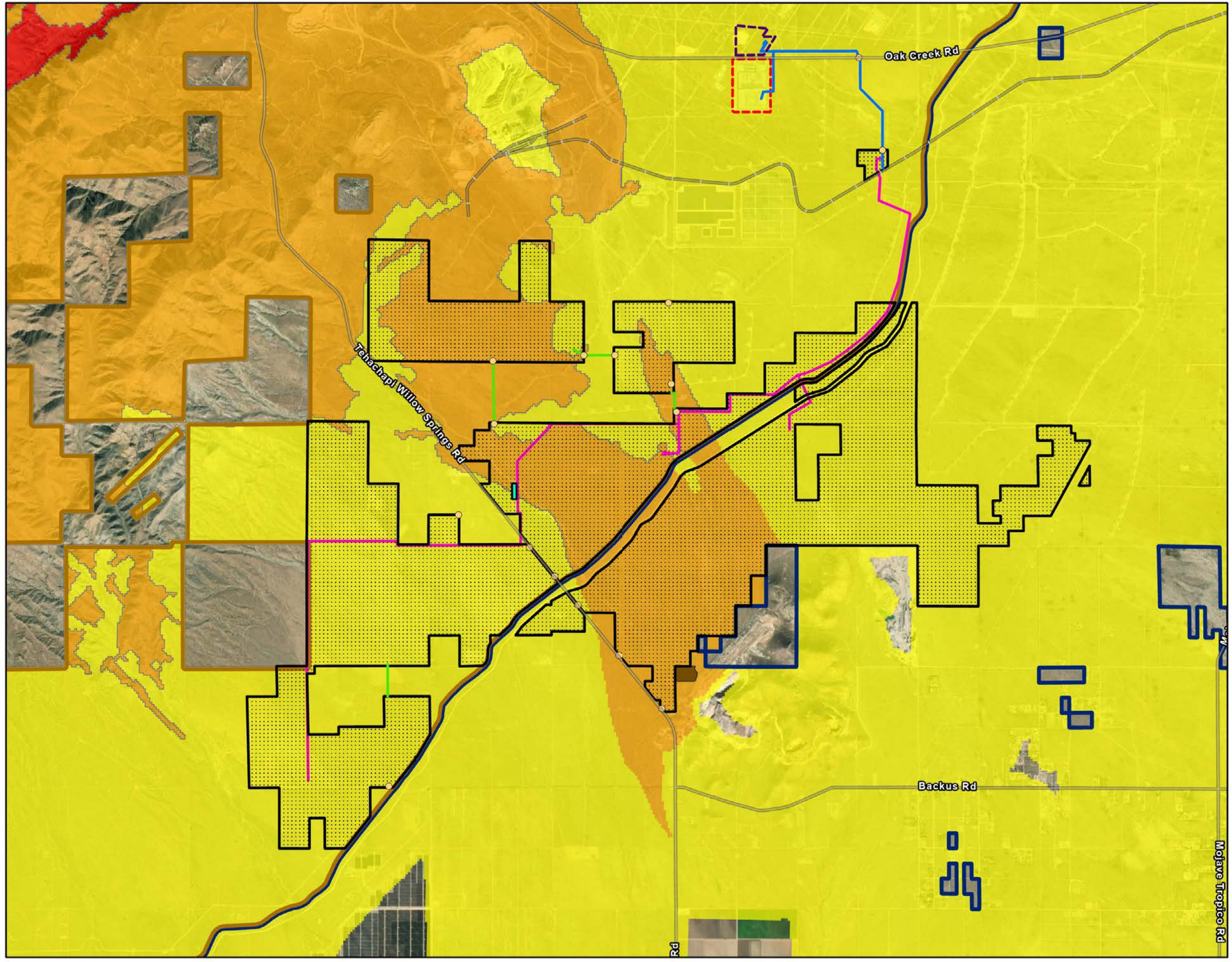
Agency	Facility	Address	Approximate Distance from Project Site
KCFD	Fire Station No. 14	1953 State Route 58 Mojave, CA 93560	5 miles northeast
KCFD	Fire Station No. 15	3219 35th Street West Rosamond, CA 93560	8 miles southeast
KCFD	Air and Wildland Camp 8	20569 Eumatilla Street Tehachapi, CA 93561	7 miles northwest
KCFD	Fire Station No. 12	800 S Curry Street Tehachapi, CA 93561	10 miles northwest

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.14-1. Fire Hazard Severity Zones for State Responsibility Areas and Local Responsibility Areas





Windhub High-voltage Substation (Existing)

SCE Property (500kv)

Proposed Project Features

Project Site

Temporary Offsite Laydown Area

Gen-tie Line (New)

Medium-voltage/Transmission/ Access Easements

Access Points

Step-up HV substation

Step-up HV substation

Gen-tie Corridor

State Responsibility Areas

Local Responsibility Area (LRA)

State Responsibility Area (SRA)

Fire Hazard Severity Zone

High

Moderate

Very High

*Alreacy approved under separate projects.

N

0 0.5 1 Miles

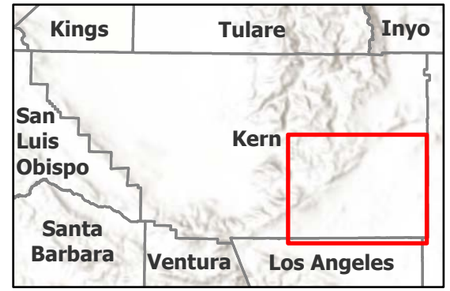
Scale is 1:150,000 when printed at 11"x17"

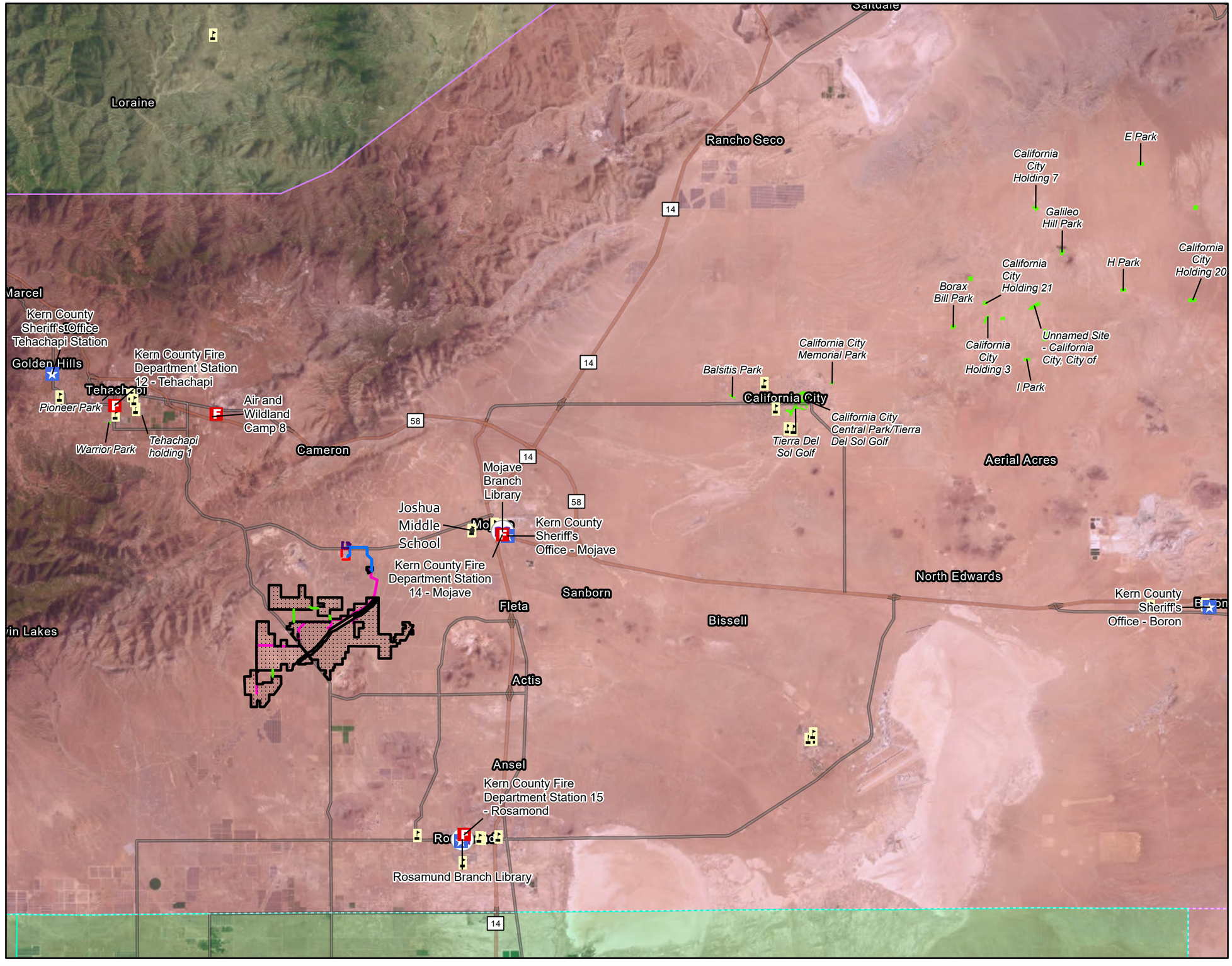
Not for Construction

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.14-2 Public Services Locations





Windhub High-voltage Substation (Existing)

City/Municipal Park

Fire Stations/EMS Stations

Sheriff Substations

Schools

CHP Areas

Central

Inland

Southern

Project Site

Project Site

Gen-tie Line (New)

Medium-voltage/Transmission/Access Easements

Other Applicant and/or Affiliate Controlled*

Step-up HV substation

Gen-tie Corridor

*Already approved under separate projects.

N

0 2.5 5 Miles

Scale is 1:150,000 when printed at 11"x17"

Not for Construction

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Law Enforcement Protection

Kern County Sheriff's Department

The Kern County Sheriff's Office (KCSO) provides basic law enforcement services in the unincorporated areas of the County, which includes the project site. The KCSO enforces local, State, and federal laws and is responsible for crime prevention, field patrol (ground and air), crime investigation, the apprehension of offenders, regulation of noncriminal activity, and related support services such as patrolling off-highway vehicle recreation areas in the desert and mountainous areas of the County. Traffic and parking control functions are also provided along with investigation of property damage reports and traffic accidents. Complete investigations are conducted for injury, fatal, intoxication-related, and hit-and-run accidents.

The headquarters for the KCSO is located at 1350 Norris Road in the City of Bakersfield. The KCSO consists of 14 substations that provide patrol services (KCSO, 2024a). The nearest substation that would provide service to the project site is the Mojave Substation located approximately 5miles northeast of the project site at 1771 Highway 58 in the community of Mojave. This substation geographically covers approximately 1,320 square miles, making it one of the largest response areas of Kern County substations and providing services to approximately 14,000 residents in the southeastern-most end of Kern County (KCSO, 2024a). Other substations in proximity to the project site include Tehachapi Substation and Rosamond Substation. Information on the four closest KCSO substations to the project site is included in **Table 4.14-2**, *List of Nearby Sheriff Substations* and shown in **Figure 4.14-2**, *Public Services Locations*.

The KCSO strives to respond to calls as quickly as possible. Response times naturally vary depending on the severity of the call, available staff, and location of patrol car. In 2019, the last year for which data are available, the average response time for the KCSO was 5 minutes or less for an emergency or immediate-response incident (e.g., a crime that is in progress and/or a life-or-death situation) and 8 to 10 minutes for routine calls (e.g., a crime that has already occurred and/or an incident that is not life-threatening).

TABLE 4.14-2. LIST OF NEARBY SHERIFF SUBSTATIONS

Agency	Facility	Address	Approximate Distance from Project Site
KCSO	Mojave Substation	1771 State Highway 58 Mojave, CA 93501	5 miles northeast
KCSO	Rosamond Substation	3179 35th Street West Rosamond, CA 93560	9 miles southeast
KCSO	Tehachapi Substation	22209 Old Town Road Tehachapi, CA 93581	12.3 miles northwest
KCSO	Boron Substation	26949 Cote Street Boron, CA 93516	32.9 miles east

Off-highway Vehicle Enforcement Team

In 2000, the KCSO created the Off-highway Vehicle (OHV) Enforcement Team that can be deployed to off-road riding areas and adjacent communities in Kern County, as needed. The goal of the OHV Enforcement Team is to provide a safe and secure environment for the OHV community and nearby residents, and to help protect sensitive natural resources. Kern County attracts over 800,000 visitors per year to the local OHV riding areas. The OHV Enforcement Team patrols numerous off-road riding areas in

Kern County, including a popular riding area near a portion of the Pacific Crest Trail that runs through Rosamond, Mojave, and Tehachapi. The OHV Enforcement Team works closely with officers from the U.S. Bureau of Land Management (BLM), California State Parks, and other local law enforcement agencies (KCSO, 2024b).

California Highway Patrol

As a major statewide law enforcement agency, the California Highway Patrol (CHP) is responsible for managing and regulating traffic for the safe, lawful, and efficient use of California highways. The CHP patrols State highways and all County roadways, enforces traffic regulations, responds to traffic accidents, and provides service and assistance to disabled vehicles. The CHP has a mutual aid agreement with KCSO.

The CHP is divided into eight divisions that provide services in areas of California (CHP, 2025a) (see **Figure 4.14-2**, *Public Services Locations)*. The project site is within the jurisdiction of the Inland Division, which includes the most intensely congested roads in the nation at the intersections of Interstates 10, 15, and 215, and Highways 60, 71, 91, and 210 (CHP, 2025b). The nearest Inland Division office to the project site is located at 1313 Highway 58, in the community of Mojave, approximately 5.9 miles northeast of the project site.

Schools/Parks/Other Facilities

The closest school is the Joshua Middle School, located approximately 4.4 miles north of the project site. The Kern County Parks and Recreation Department manages 8 regional parks, 16 public buildings, and 40 neighborhood parks (Kern County, 2024). There are no recreational facilities currently serving the project, nor are there existing parks located within 1 mile of the project site. The Kern County Library system consists of 22 branches throughout Kern County, with the main branch library (the Beale Memorial Library) located in Bakersfield. Materials for use at County branches include books, government documents, computers, CDs, and other informational media. The Kern County library system maintains a collection of 1.15 million books, audiovisual items, periodicals, and other informational sources. The closest libraries to the proposed project are the Mojave Branch Library, located approximately 5.2 miles northeast of the project site at 15555 O Street, Mojave, and the Rosamond Branch Library, located approximately 8.6 miles southeast of the project site at 3611 Rosamond Boulevard, Rosamond. Locations of the facilities mentioned above are shown in **Figure 4.14-2**, *Public Services Locations*.

4.14.3 Regulatory Setting

Federal

There are no applicable federal regulations for this issue area.

State

California Fire Code

The 2022 California Fire Code (Title 24, Part 9 of the California Code of Regulations [CCR]) establishes the minimum requirements consistent with nationally recognized good practices to safeguard the public

health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operation. Chapter 6 (Building Services and Systems) of the Code focuses on building systems and services as they relate to potential safety hazards and when and how they should be installed. Chapter 12 of the California Fire Code includes requirements for energy storage systems, which includes the proposed energy storage facilities.

Building services and systems which are addressed include emergency and standby power systems, electrical equipment, wiring and hazards, and stationary storage battery systems. Chapter 33 (Fire Safety During Construction and Demolition) of the Code outlines general fire safety precautions to maintain required levels of fire protection, limit fire spread, establish the appropriate operation of equipment, and promote prompt response to fire emergencies. Features regulated include fire protection systems, firefighter access to the site and building, means of egress, hazardous materials storage and use, and temporary heating equipment and other ignition sources.

California Department of Forestry and Fire Protection (CAL FIRE)

Under Title 14 of the CCR, CAL FIRE has the primary responsibility for implementing wildfire planning and protection for SRAs. CAL FIRE develops regulations and issues fire-safe clearances for land within a fire district of the SRA. More than 31 million acres of California's privately owned wildlands are under CAL FIRE's jurisdiction.

CAL FIRE adopted Fire Hazard Severity Zone maps for SRAs and LRAs in 2007. Fire hazard is a way to measure the physical fire behavior so that people can predict the damage a fire is likely to cause. Fire hazard measurement includes the speed at which a wildfire moves, the amount of heat the fire produces, and most importantly, the burning fire brands that the fire sends ahead of the flaming front. As provided above, the southeastern portion of the project site is classified as LRA Moderate, and the northwestern portion of the project site, including the proposed gen-tie line, is within an area categorized as SRA Moderate and SRA High.

In addition to wildland fires, CAL FIRE's planning efforts involve responding to other types of emergencies, including medical aids, hazardous material spills, search and rescue missions, and floods. Through contracts with local government, CAL FIRE provides emergency services in 36 of California's 58 counties (CAL FIRE, 2023).

Local

Construction and operation of the project would be subject to policies and regulations contained within the County's general and specific plans, including the Kern County General Plan, Kern County Zoning Ordinance, and the Kern County Code of Building Regulations, which include policies, goals, and implementation measures related to public services.

The policies, goals, and implementation measures in the Kern County General Plan for public services applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and are not specific to development such as the project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Kern County General Plan

Chapter 1. Land Use, Conservation, and Open Space Element

1.4 Public Facilities and Services

Policies

Policy 1: New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.

Policy 6: The County will ensure adequate fire protection to all Kern County residents.

Policy 7: The County will ensure adequate police protection to all Kern County residents.

Implementation Measures

Measure B: Determine local costs of County facility and infrastructure improvements and expansion which are necessitated by new development of any type and prepare a schedule of charges to be levied on the developer at the site of approval of the Final Map. This implementation can be effectuated by the formation of a County work group.

Measure L: Prior to the approval of development projects, the County shall determine the need for fire protection services. New development in the County shall not be approved unless adequate fire protection facilities and resources can be provided.

1.10 General Provisions

Goal

Goal 1: Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving viable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

1.10.1 Public Services and Facilities

Policies

Policy 9: New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure that it generates and upon which it is dependent.

Policy 15: Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the California Environmental Quality Act (CEQA) documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development.

Policy 16: The developer shall assume full responsibility for costs incurred in service extension or improvements that are required to ensure the project. Cost sharing or other forms of recovery shall be available when the service extensions or improvements have a specific quantifiable regional significance.

Chapter 4. Safety Element

4.6 Wildland and Urban Fire

Policies

Policy 1: Require discretionary projects to assess impacts on emergency services and facilities.

Policy 3: The County will encourage the promotion of fire prevention methods to reduce service protection costs and costs to taxpayers.

Policy 4: Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.

Policy 6: All discretionary projects shall comply with the adopted fire code and the requirements of the fire department.

Implementation Measure

Measure A: Require that all development comply with the requirements of the Kern County Fire Department or other appropriate agency regarding access, fire flows, and fire protection facilities.

Soledad Mountain Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. There are no recommendations, analysis, or implementation measures in the Soledad Mountain Elephant Butte Specific Plan that are applicable to public services for non-housing development. In Kern County, specific plans are used to implement goals, objectives, and policies of the General Plan in a more detailed and refined manner unique to a smaller area of the County. Since there are no applicable recommendations, analysis, and implementation measures within the Soledad Mountain Elephant Butte Specific Plan for non-housing development, refer to the applicable policies, goals, and implementation measures of the Kern County General Plan above.

Kern County Fire Department Hazards Mitigation Plan

The purpose of the KCFD Hazards Mitigation Plan is to reduce or eliminate long-term risk to people and property from natural hazards and their effects in Kern County. The Plan includes specific recommendations for actions that can mitigate future disaster losses, as well as a review of the County's current capabilities to reduce hazards impacts. This multi-jurisdictional plan includes Kern County and the incorporated municipalities of Arvin, Bakersfield, California City, Delano, Maricopa, Ridgecrest, Shafter, Taft, Tehachapi, and Wasco. The Plan also covers 49 special districts that include school, recreation and park, water, community service, and other districts. The Plan has been formally adopted by each participating entity and is required to be updated a minimum of every 5 years (County of Kern, 2021).

Kern County Fire Department Wildland Fire Management Plan

The KCFD Wildland Fire Management Plan assesses the wildland fire situation throughout the SRA within the County. The Plan includes stakeholder contributions and priorities and identifies strategic targets for pre-fire solutions as defined by the people who live and work within the SRA. The plan systematically

assesses the existing levels of wildland protection services and identifies high-risk and high-value areas, which are potential locations for costly and damaging wildfires. The goal of the plan is to reduce costs and losses from wildfire by protecting assets at risk through focused pre-fire management prescriptions and increasing initial attack success. Based on this assessment, preventive measures are implemented, including the creation of wildfire protection zones (KCFD, 2009).

Kern County Fire Code

Chapter 17.32 of the Kern County Municipal Code details the Kern County Fire Code, which adopts the 2022 California Fire Code and the 2021 International Fire Code with some amendments. The purpose of the Kern County Fire Code is to regulate the safeguarding of life, property, and public welfare to a reasonable degree from the hazards of fire, hazardous materials release, and/or explosion due to handling of dangerous and hazardous materials; conditions hazardous to life or property in the occupancy and use of buildings and premises; the operation, installation, construction, and location of attendant equipment; the installation and maintenance of adequate means of egress; and to provide for the issuance of permits and collection of fees (County of Kern, 2024).

Kern County Fire Department Unit Strategic Fire Plan

The KCFD Unit Strategic Fire Plan, adopted in April of 2022 and updated in April of 2024, is the most current document that assesses wildland fire throughout the SRA within the County. Similar to other plans, this document includes stakeholder contributions and priorities and identifies strategic targets for pre-fire solutions as defined by the people who live and work within the local fire problem. The Plan provides for a comprehensive analysis of fire hazards, assets at risk, and level of services to systematically assess the existing levels of wildland protection services and identify high-risk and high-value areas that are potential locations for costly and damaging wildfires. Additionally, the Plan provides an annual report of unit accomplishments, which, in 2021, included completion of a number of fuel reduction projects, the establishment of wildland fire facility “Camp 8,” and establishment of a seasonal type 6 engine within Battalion 8’s service area. The Plan gives an overview of KCFD Battalions and identifies the areas of SRA that each Battalion covers. The County is broken up into six different fuel management areas: Tehachapi, Western Kern, Northern Kern, Mt. Pinos Communities, Kern River Valley, and Valley. The project site is located within Battalion 1 (Tehachapi), which is within a moderate fire hazard severity zone.(KCFD, 2025).

Fire Prevention Standard No. 503-507 Solar Panels

The KCFD Fire Prevention Division adopted Standard No. 503-507 Solar Panels (Ground Mounted, Commercial) on April 8, 2021. The standard is implemented in accordance with the 2019 California Fire Code and Kern County Ordinance and is an official interpretation of the Kern County Fire Marshal’s Office. The standard outlines installation requirements for photovoltaic ground-mounted and roof-mounted solar panels. The proposed project would mount systems for the modules on steel support posts that would be pile-driven into the ground and would therefore comply with the ground-mounted requirements of this fire prevention standard. Ground-mounted solar panel requirements of this standard include water supply, clearance and combustibles, and access of support emergency vehicles (KCFD, 2021).

4.14.4 Impacts and Mitigation Measures

Methodology

The methodology used to evaluate potential public services impacts includes the following: (1) evaluation of existing fire and police services and personnel for the fire and law enforcement stations serving the project site; (2) determination of whether the existing fire and law enforcement services and personnel are capable of servicing the proposed project, in addition to the existing population and building stock; and (3) determining whether the proposed project's contribution to the future service population would cause fire or police station(s) to operate beyond service capacity. Determination of potential impacts the project may have on fire protection and emergency medical and police protection services serving the County considers the level of services required by the proposed project and the ability of KCFD and KCSO to provide this level of service and maintain the regular level of service provided throughout the County, which in turn could require the construction of new or expansion of existing facilities. The methodology for this analysis included a review of published information pertaining to KCFD and KCSO. Using the aforementioned resources and professional judgment, potential impacts were analyzed according to CEQA significance criteria described below.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project would have a significant adverse effect on public services:

A project would have a significant impact on public services if it would:

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

    i. Fire Protection

    ii. Police Protection

    iii. Schools

    iv. Parks

    v. Other Public Facilities

Project Impacts

Impact 4.14-1: Would the Project result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services or police protection and law enforcement services?

Fire Protection

Construction

The onsite construction workforce is expected to peak at approximately 660 individuals; however, the average daily workforce is expected to be approximately 470 construction, supervisory, support, and construction management personnel onsite during construction. The presence of construction workers at the project site would be temporary during the approximately 34-month construction period. The project includes the development of a photovoltaic (PV) solar facility and associated infrastructure necessary to generate up to 1,400 megawatts (MW) of renewable electrical energy with up to 8 gigawatt-hours (GWh) of battery energy storage capacity on an approximately 7,700-acre project site in unincorporated Kern County, California.

A portion of the northwest section of the project site (including the proposed gen-tine line) is categorized as an SRA high fire hazard severity zone (CAL FIRE, 2023). However, most of the project site is categorized as SRA Moderate and LRA Moderate fire hazard severity zones. The landscape of the project site consists of primarily low topographic relief and sparse vegetation with little potential for fuel buildup, which is indicative that the potential for wildfires to occur would be relatively low. Additionally, site preparation includes trash removal, mowing, and clearing of vegetation that would unduly interfere with project construction or the health and safety of onsite personnel, further reducing vegetation fuel buildup.

Fire protection requirements are based on the number of residents and workers in the KCFD primary service areas. Service demand is primarily tied to population, not building size, because emergency medical calls typically make up the majority of responses provided by the fire department. As the number of residents and workers increases, so does the number of emergency medical calls. There are no residential uses proposed as a part of the project. Therefore, no residents would occupy the project site and an increase in service demands as a result of an increase in residential uses would not occur.

Service demands as a result of construction personnel onsite would occur during construction of the proposed project. Typically, service demands per employee are less than service demands per resident. Nevertheless, the addition of construction personnel on the project site would result in an increase in demand for fire protection services. While this would be an increase above existing levels, the presence of construction personnel on site would be temporary, as the construction period for the proposed project would last approximately 34 months.

While construction of the proposed project would increase the number of people on the project site, the increase would be temporary and would therefore not substantially increase the service demand for fire protection services in Kern County. In addition, the project site is not located within an area of very high fire hazard, as determined by the County (County of Kern, 2009) and CAL FIRE (CAL FIRE, 2023 and

2007). 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. Given the temporary nature of the project's construction phase and with implementation of **MM 4.14-1**, potential impacts to fire protection services and facilities during project construction would be less than significant.

Operation

During operations of the project, a permanent O&M facility and/or small satellite portable office trailers may be placed onsite to facilitate rapid repair of equipment. It is anticipated that approximately six permanent full-time staff employees would be needed to maintain the facility. Additional employees may visit the project site for short periods of time to conduct certain maintenance activities such as panel washing. Although unlikely, maintenance activities could introduce fire risks to the project site from maintenance vehicles. However, all maintenance activities would be required to comply with the Fire Safety Plan implemented per **Mitigation Measure MM 4.14-1**, which would reduce fire risks onsite. In addition, all project facilities will be designed, constructed, and operated pursuant to the current California Fire Code and Kern County building code requirements such that fire hazards are reduced and/or avoided.

The proposed project includes an energy storage facility that would have a fire rating in conformance with current County and California Building and Fire Code standards. The energy storage facility would include specialized fire suppression systems installed for the battery rooms to minimize fire risk. In accordance with **Mitigation Measure MM 4.14-1**, a Fire Safety Plan would be prepared to ensure the energy storage facility is constructed and operated in accordance with current County and California Building and Fire Code standards that will minimize potential impacts to public services and associated fire hazards. See also **Section 4.9**, *Hazards and Hazardous Materials*, and **Section 4.18**, *Wildfire*, for additional discussion of the fire safety systems applicable to the project's energy storage facility.

Through implementation of **Mitigation Measure MM 4.14-2**, the project shall 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 (CIC). Through the 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 (SCIC) shall be paid for the difference annually up to $3,000 per megawatt. Through implementation of **Mitigation Measure MM 4.14-4**, the project proponent/operator shall work with the County to determine how the use of sales and use taxes from construction of the project can be maximized. With implementation of Mitigation Measures **MM 4.14-1** through **MM 4.14-4**, any potential operational impacts on public services would be reduced. The project would not result in the need for new or physically altered KCFD facilities and potential impacts would be less than significant.

Law Enforcement Protection

Construction

As described above in **Section 4.14.2**, *Environmental Setting*, the KCSO provides primary law enforcement protection services for the project site and surrounding areas. The Mojave Substation is located approximately 5 miles northeast of the project site and would provide primary law enforcement services to the project site. Similar to fire protection services, the need for sheriff protection services would increase temporarily during construction of the proposed project.

The project site is located in a relatively remote location surrounded by generally undeveloped land and sparse rural residential development. It is unlikely that construction of the project would attract attention that would make project facilities susceptible to crime. Therefore, a large increase for KCSO services is not expected. Construction activities may temporarily increase traffic volumes along SR-58 and SR-14 during the project construction period. However, the added traffic associated with workers commuting to the project site, haul routes, deliveries, and other project-related traffic would be temporary and, therefore, would not have a significant adverse effect on the KCSO protective service provision or CHP's ability to patrol the highways.

Additionally, fencing would be installed around the perimeter of the project site, onsite collector substations, 230-kilovolt switchyard, and other areas requiring controlled access, as needed for safety and security purposes. Locking gates would be installed at access roads entering the site. Limiting access to the site would be necessary both to ensure the safety of the public and to protect the equipment from potential theft and vandalism. Fencing would remain for the life of the project.

While project construction would increase the number of people on the project site, the increase would be temporary and negligible and, thus, would not substantially increase the service demand for police protection services in Kern County. Therefore, new or physically altered KCSO or CHP facilities would not be required to accommodate the limited increase in needs from the project during construction and potential impacts to police services are less than significant.

Operation

Project operation could potentially attract vandals or present other security risks. As described above, the project site is located in a relatively remote location in a rural community and is thus unlikely to attract attention that would make project facilities susceptible to crime. The security fencing around the perimeter of the project site and other areas requiring controlled access, and motion-sensitive security lights and cameras, would minimize the need for sheriff surveillance and response during project operation. Furthermore, facility personnel, contractors, agency personnel, and visitors would normally be within the project facility premises during normal business hours. Therefore, new or physically altered KCSO facilities would not be required to accommodate the proposed project. The additional volume of vehicles associated with workers commuting to the project site during routine maintenance would be minor and is not expected to adversely affect traffic (see **Section 4.15**, *Transportation*, for more details). Therefore, impacts to the CHP patrol are not anticipated. In addition, as part of **Mitigation Measures MMs 4.14-2** through **4.14-4**, the project operator would be required to pay Kern County a cumulative impact charge to compensate for any potential impacts to public services provided by Kern County General Fund (including law enforcement services) resulting from operation of the proposed project. With implementation of these mitigation measures, potential impacts would be less than significant.

Schools/Parks/Other Facilities

Construction

The construction workforce for the project is expected to peak at 660 workers; however, the average daily workforce is expected to be approximately 470 workers during the project construction period. Most of the construction workforce is expected to live in the region and would commute to the project site from various local communities where their children are enrolled in school. Even if workers came from out of the area, they would likely return to their out-of-town residences once the facilities were built and would not take their children out of their current schooling. If temporary housing should be necessary for construction workers, sufficient accommodations are expected to be available in nearby hotels in Rosamond, Mojave, Lancaster, or other local communities. Therefore, it is not expected that a substantial temporary increase in population would occur that would adversely affect local school populations, park facilities, or local public facilities such as post offices, courthouses, and library services. As a result, potential impacts to schools, parks, or other public services resulting from project construction are anticipated to be less than significant.

Operation

Operation of the project would have up to six permanent full-time employees to maintain the facility. Employees would likely commute to the project site from their existing permanent residences in the surrounding communities; however, even if the maintenance employees were hired from out of the area and had to relocate to eastern Kern County, the resulting addition of potential families to this area would not result in a substantial increase in the number of users at local schools, parks, or other public facilities. Thus, potential impacts to schools, parks, or other public services resulting from project operations are anticipated to be less than significant.

Decommissioning

Potential Impacts related to public services such as fire protection, law enforcement, schools, parks, and other related facilities resulting from decommissioning of the project are expected to be similar to or less than those experienced during construction.

Mitigation Measures

Mitigation Measures MM 4.14-1 through **MM 4.14-5**, as described below, would be implemented.

MM 4.14-1: Prior to the issuance of grading or building permits, the project proponent/operator shall develop and implement a Fire Safety Plan for use during construction, operation, and decommissioning.

The project proponent/operator shall submit the plan, along with maps of the project site and access roads, to the Kern County Fire Department for review and approval. A copy of the approved Fire Safety Plan shall be submitted to the Kern County Planning and Natural Resources Department. The Fire Safety Plan shall contain notification procedures and emergency fire precautions including, but not limited to, the following:

a. All internal combustion engines, both stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order.

b. Light trucks and cars with factory installed (type) mufflers shall be used only on roads where the roadway is cleared of vegetation. These vehicle types will maintain their factory installed (type) muffler in good condition.

c. Fire rules shall be posted on the project bulletin board at the contractor's field office and areas visible to employees.

d. Procedures shall be established for minimizing potential ignition, including, but not limited to, vegetation clearing and management, parking requirements/restrictions, idling restrictions, smoking restrictions, and proper use of gas-powered equipment.

e. Personnel shall be trained in the practices of the fire safety plan relevant to their duties. Construction and maintenance personnel shall be trained and equipped to extinguish small fires to prevent them from growing into more serious threats.

f. The project proponent/operator shall make an effort to restrict the use of chainsaws, chippers, vegetation masticators, grinders, drill rigs, tractors, torches, and explosives to periods outside of the official fire season. When the above tools are used, water tanks equipped with hoses, fire rakes, and axes shall be easily accessible to personnel.

g. Building plans shall be included for the energy storage system to verify adherence to Kern County and California Building and Fire Code standards.

h. Information for first responders about the type of battery energy storage technology on site, potential hazards and mitigations, and recommended firefighting tactical procedures in case of an accidental fire.

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 Cumulative Impact Charge (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, above.

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

2. Calculation of Cumulative Impact Charge (CIC) and annual payment

A. A payment 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 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 (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 County Administrative Office Fiscal Division (CAO) by written response.

MM 4.14-3: Written verification of ownership of the proposed project shall be submitted to the Kern County Planning and Natural Resources Department by April 15 of each calendar year. If the project is sold to a city, county, or utility company that pays assessed taxes that total less than $3,000 per megawatt per year, then a Supplemental Cumulative Impact Charge (SCIC) shall be paid for the difference annually up to $3,000 per

megawatt. The SCIC payments shall be made annually directly to the County Administrative Office (CAO) Fiscal Division and labeled "Supplemental Cumulative Impact Charge (SCIC)" with the project name and phase number. The fee shall be paid to the Kern County Auditor/Controller by April 30 of each calendar year.

MM 4.14-4: The project proponent/operator shall work with the County to determine how the use of sales and use taxes from construction of the project can be maximized. This process shall include, but is not necessarily limited to, the project proponent/operator obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, and registering this address with the State Board of Equalization. As an alternative to the aforementioned process, the project proponent/operator may make arrangements with Kern County for a guaranteed single payment that is equivalent to the amount of sales and use taxes that would have otherwise been received (less any sales and use taxes actually paid); with the amount of the single payment to be determined via a formula approved by Kern County. The project proponent/operator shall allow the County to use this sales tax information publicly for reporting purposes.

MM 4.14-5: Prior to the issuance of building permits, the project operator shall submit a letter detailing the hiring efforts prior to commencement of construction, which encourages all contractors of the project site to hire at least 50 percent of their workers from local Kern County communities. The project operator shall provide the contractors a list of training programs that provide skilled workers and shall require the contractor to advertise locally for available jobs, notifying the training programs of job availability, all in conjunction with normal hiring practices of the contractor.

Level of Significance after Mitigation

With implementation of Mitigation Measures **MM 4.14-1** through **MM 4.14-5**, impacts would be less than significant.

4.14.5 Cumulative Setting, Impacts, and Mitigation Measures

As described in **Table 3-5**, *Cumulative Projects List*, in **Chapter 3**, *Project Description*, of this EIR, multiple projects, including several utility-scale solar and wind energy production facilities, are proposed throughout Kern County. The cumulative study area is based on the service area for each of the fire, sheriff, and other governmental offices/facilities serving the project site. Since the proposed project would not induce population growth in the area, project implementation would not result in the need to construct new, or physically alter or expand, existing sheriff's office and fire protection services. In addition, the proposed project would not impede the effective operation of these services.

As discussed above, fire and sheriff service impacts related to the proposed project would be less than significant with mitigation, while impacts to schools, parks, and other local facilities would be less than significant with no mitigation required. **Mitigation Measure MM 4.14-1** requires implementation of a Fire Safety Plan during project construction and operation that would include notification procedures and emergency fire precautions to help reduce fire risks and the consequential need for fire protection services

onsite. Implementation of **Mitigation Measures MM 4.14-2** through **MM 4.14-5** would also prevent the decline of services in unincorporated communities that result in physical impacts on neighborhoods. Such cumulative impacts include an increase in vandalism on public spaces such as parks; lack of maintenance of roads and park facilities; abandoned vehicles and buildings; trash abandonment on private property and lack of funding for code enforcement of regulations for public health and safety; lack of services for homeless prevention programs as well as lack of services and facilities for elder, adolescent, and child health safety services and general mental health facilities. **Mitigation Measures MM 4.14-3** through **4.14-5** would also address potential impacts related to public services. Implementation of these mitigation measures would require the project proponent to pay certain assessed taxes, work with the County to determine how sales and use taxes from project construction can be maximized, and provide a letter detailing efforts encouraging contractors to hire at least 50 percent of works from local Kern County communities. With implementation of these mitigation measures, potential impacts from the proposed project's cumulative contribution to the decline of services would be less than significant.

Incorporation of **Mitigation Measures MM 4.14-1** through **MM 4.14-5** would reduce potential project impacts to a less-than-significant level. In addition, the application of similar mitigation at all other past, present, and reasonably foreseeable future projects located within these fire and sheriff service areas would reduce potential cumulative impacts to a less than significant level. Therefore, the project would not be a cumulatively considerable contributor to significant cumulative impacts related to public services with incorporation of **Mitigation Measures MM 4.14-1** through **MM 4.14-5**.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.14-1** through **MM 4.14-5** would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.14-1** through **MM 4.14-5**, cumulative impacts would be less than significant.

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Section 4.15
Transportation

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Section 4.15
Transportation

4.15.1 Introduction

This section of the EIR describes the affected environment and regulatory setting for transportation. It also describes potential transportation impacts that could result from implementation of the project, and mitigation measures that would reduce these impacts, if applicable. Information in this section is based primarily on the *Traffic Impact Assessment* (Tetra Tech, 2025), prepared by Tetra Tech, Inc. (Tetra Tech), located in **Appendix K** of this EIR and incorporated by reference herein.

4.15.2 Environmental Setting

The project is located on approximately 7,700 acres in the southeastern portion of Kern County, approximately 6 miles southwest of the unincorporated community of Mohave, approximately 9 miles southeast of the City of Tehachapi, approximately 8 miles northwest of the unincorporated community of Rosamond, and approximately 20 miles west of Edwards Air Force Base. The circulation system in the vicinity of the project site is made up of a combination of State- and County-jurisdiction facilities. Major components of the circulation system are discussed below and shown on **Figure 3-1**, *Vicinity Map*, in **Chapter 3**, *Project Description*, of this EIR. The project and project site are defined in **Chapter 3**, *Project Description* and depicted on **Figure 3-2**, *Aerial Map.*

Regional Setting

Major Highways

The project site is located near two major highways that would provide access to the general vicinity of the proposed project during the construction and operation phases. State Route (SR)-58 is approximately 6 miles north of the project site and SR-14 is approximately 4 miles east of the project site.

SR-58 is an east-west divided highway that provides regional access to the project site. SR-58 connects San Luis Obispo County and San Bernardino County. SR-58 bypasses Mojave, but a connector, Business West Route 58, intersects SR-14 northeast of the project site. North of the project site, SR-58 is a four-lane divided freeway.

SR-14 is a divided highway that runs parallel to Interstate 5 (I-5) in the eastern portion of Kern County, providing regional access to the project site. SR-14 connects Santa Clarita (Los Angeles County) and Inyokern (Kern County). SR-14 is a four-lane divided freeway with grade-separated interchanges at Backus Road and Silver Queen Road near the project site.

According to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System, there are no Designated State Scenic Highways within Kern County (see **Subsection 4.15.3**, *Regulatory Setting*, for more information on the State Scenic Highway Mapping System. The closest

Eligible Scenic Highways are SR-14 (portion north of SR-58), located approximately 5.4 miles northeast of the project site, and SR-58 (portion east of SR-14), located approximately 7.7 miles northeast of the project site (Caltrans 2019).

In addition to the State Scenic Highway Mapping System, the Kern County General Plan Circulation Element designates scenic routes and defines a scenic route as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality and must be officially set as a Scenic Route by the Kern County Board of Supervisors or the State of California. The Kern County General Plan Circulation Element identifies that Kern County has the discretion to designate local scenic routes if circumstances warrant. The General Plan Circulation Element also identifies three State highways in Kern County as Eligible State Scenic Highways including the portion of SR-14 north of Mojave (approximately to the Inyo County line, SR-58 between Mojave and Boron, each with their closest portion 6 miles from the project, and SR-41 in northwest Kern County more than 100 miles from the project site.

As part of the Kern County General Plan Circulation Element goals, policies, and implementation measures, Kern County adopted a Scenic Corridor Combining District to designate areas that contain unique visual and scenic resources as viewed from a major highway or freeway. The project site is not within a Scenic Corridor Combining District.

Public Transportation

Public transportation in Kern County is provided by Kern Regional Transit, which offers 17 fixed routes throughout the County and a dial-a-ride general public transportation service for residents in Frazier Park, Kern River Valley, Lamont, Mojave, Rosamond, and Tehachapi. The transit system offers intercity service along with local transit service as well as connections to Metrolink in Lancaster. The East Kern Express provides fixed route scheduled services between Bakersfield and Lancaster on SR-58 and SR-14, with stops in the communities of Tehachapi, Keene, Mojave, and Rosamond. No public transit routes pass or stop near the project site.

Non-Motorized Transportation

Bicycling is considered an effective alternative mode of transportation that can help to improve air quality, reduce the number of vehicles traveling along existing roads and highways, and reduce energy consumption. There are 67 miles of existing bicycle facilities in the unincorporated portions of Kern County. There are no dedicated bicycle facilities in the immediate vicinity of the project site or along the surrounding roadways.

A portion of the Pacific Crest National Scenic Trail (commonly known as the Pacific Crest Trail or PCT) is located approximately 2.5 miles northwest of the project site.

Railways

There are two mainline railways located in vicinity to the project site. The Union Pacific Railroad runs parallel to SR-14 approximately 4.5 miles east of the project site. The Burlington Northern and Santa Fe Railway runs generally parallel to SR-58 approximately 5.5 miles north of the project site.

As noted in the Notice of Preparation (**Appendix A**), the California High Speed Rail Authority (CHSRA) is planning and permitting a high-speed train corridor from northern to southern California. The Bakersfield to Palmdale section of the high-speed train corridor was evaluated in a joint CEQA/National Environmental

Policy Act document, completed in August 2021. A portion of the approved and adopted alignment crosses through part of the project site, however this segment has not yet started construction. Furthermore, this Department has not yet received documentation indicating that the land currently required for this alignment has been secured or is controlled by the CHSRA.

Airport Facilities

Public and private airports located within a 20-mile radius of the project site are described below.

Mojave Air & Space Port is a public airfield located approximately 9 miles northeast of the project site. This airport has three asphalt runways (with lengths of 3,946, 7,049, and 12,503 feet) and primarily serves general aviation aircraft, with some commercial, air taxi, and military flights also using the facility. In operation since 1940, the airport serves an average of 48 flight operations per day. In 2004, this facility was the first to be certified as a spaceport by the Federal Aviation Administration (FAA).

Rosamond Skypark is a privately-owned and operated residential airport that is open for public use and is located approximately 8 miles southeast of the project site. This airport has a 3,600-foot asphalt runway and exclusively serves general aviation aircraft. In operation since 1953, the facility serves an average of 29 flight operations per day.

California City Municipal Airport is a public airfield located approximately 17 miles northeast of the project site. This airport has a 6,000-foot asphalt runway and primarily serves general aviation aircraft, with some military flights also using the facility. In operation since 1963, the airport serves an average of 68 flight operations per week.

Lloyd's Landing Airport is a privately-owned and operated airstrip, located approximately 3 miles south of the project site. Lloyd's Landing Airport is a private facility with an approximately 1,370-foot dirt runway. The facility receives no regular scheduled flights and is not publicly accessible.

Edwards Air Force Base is a military base whose airstrip is located approximately 20 miles east of the project site. The base is owned and operated by the U.S. Air Force (not open to public use) and includes three runways that range in length from 8,000 feet to 12,000 feet and that are paved with concrete or asphalt. The base covers more than 301,000 acres, and also includes additional landing areas on the hard packed surface of the Rogers Dry Lake and Rosamond Dry Lake.

General William J. Fox Airfield is a public airfield located about 16 miles southeast of the project site. This airport has a 7,200-foot asphalt runway and serves general aviation aircraft, limited scheduled cargo service, and U.S. Forest Service aircraft. In operation since 1959, the airfield serves an average of 224 flight operations per day.

Mountain Valley Airport is a private airport that allows public access located approximately 7 miles northwest of the project site. The airport has two runways, each 4,890 feet long, and primarily serves general aviation aircraft, with some military flights also using the facility. In operation since 1968, the airport serves an average of 137 flight operations per day.

Local Setting

Site Access

Regional access to the project would be provided by SR-14 to/from the south and northeast and SR-58 to/from the northwest. Locally, the project site can be accessed via Tehachapi Willow Springs Road, Backus Road, and 90th Street West. Design and construction would adhere to applicable Kern County and Caltrans requirements and guidelines, and all necessary permits, such as encroachment permits, will 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 six non-contiguous areas (five solar sites and a 230-kilovolt switchyard). Site access is described below and shown on **Figure 4.15-1**, *Site Access and Construction-Related Traffic*. Construction-related traffic traveling to the project site to/from the south would use SR-14 and Tehachapi Willow Springs Road. Construction-related traffic traveling to the project site to/from the north, including the community of Mojave, would use SR-14. Traffic on SR-14 would exit at Backus Road then head west towards Tehachapi-Willow Springs Road. Construction-related traffic traveling to the project site to/from the northwest, including the communities of Bakersfield and Tehachapi, would use SR-58 and Tehachapi Willow Springs Road. Construction-related traffic would use Tehachapi-Willow Springs Road as the primary access to the project site driveways. To access the northern portions of the project site including the gen-tie line, construction-related traffic would use Oak Creek Road.

Traffic Analysis

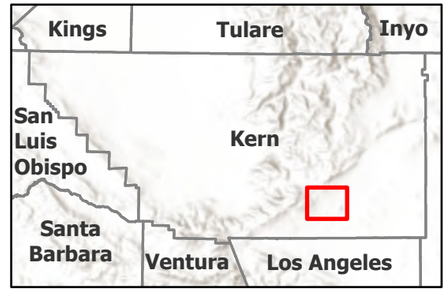
Trip generation estimates were developed for project construction and operation based on the expected number of workers, delivery truck, and onsite trucks. These estimates include both average daily traffic (ADT) and peak hour (AM and PM) volumes.

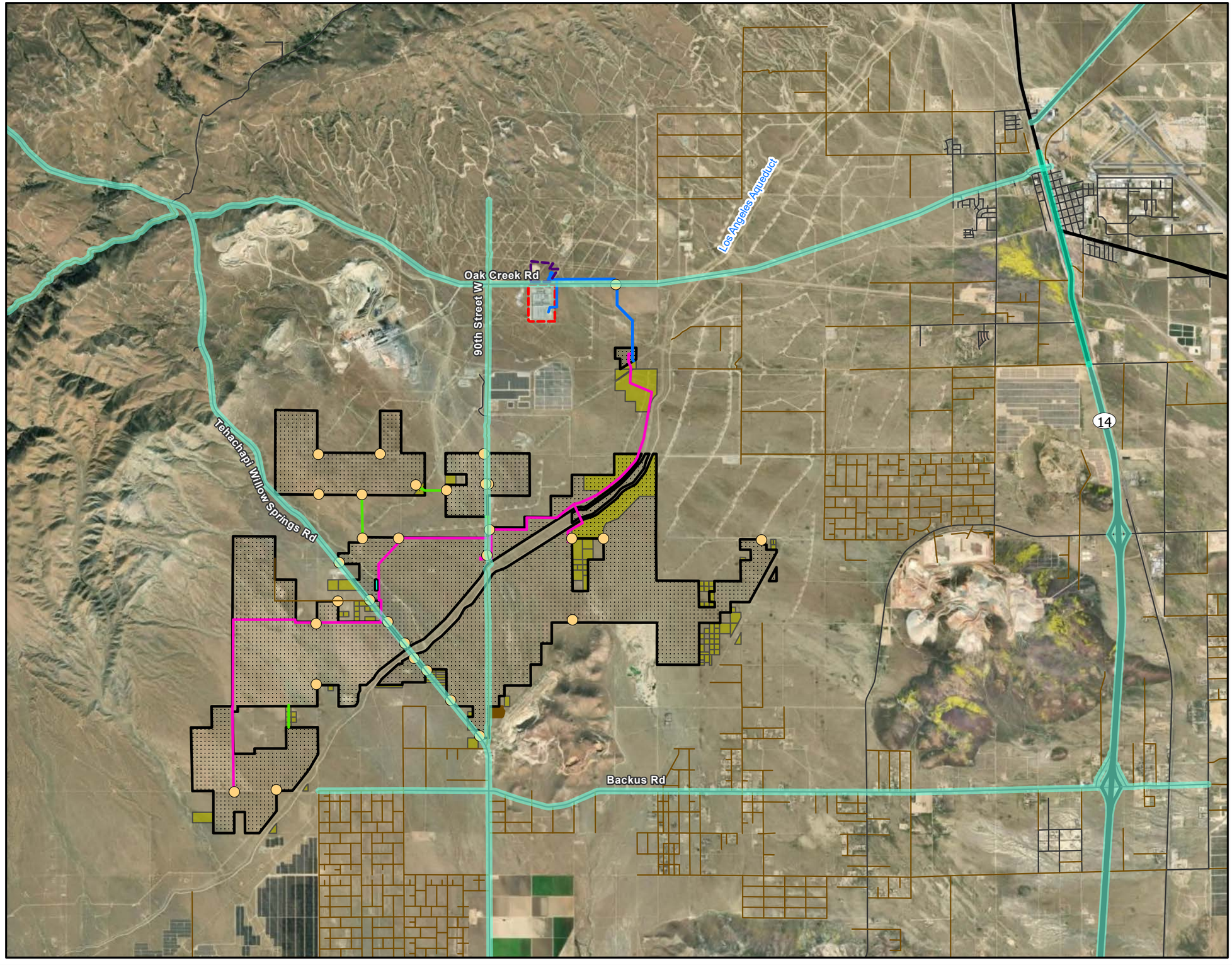
Pursuant to Senate Bill 743, the focus in evaluating transportation impacts under the California Environmental Quality Act (CEQA) has shifted from traffic delays (Level of Service [LOS]) to total vehicle miles traveled (VMT) (OPR, 2018 as provided in **Appendix K**). The intent of Senate Bill 743 is to align transportation impacts under CEQA with the State's overall goals of increasing long-term sustainability by encouraging infill development, increasing reliance on mass transit, and reducing greenhouse gas (GHG) emissions. The VMT analysis focuses on automobile and light-duty truck trips, although heavy duty truck trips can be included in the analysis for convenience (OPR, 2018 as provided in **Appendix K**). An evaluation of VMT related to project construction and operation was conducted based on the guidelines implementing CEQA (CEQA *Guidelines*). Construction trips typically are not analyzed in a VMT analysis because they are temporary and would not impact overall per capita VMT in the region.

Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.15-1: Site Access and Construction-Related Traffic





- Construction-Related Traffic
- Highway
- County and Local Roads
- Dirt Road
- Windhub High-voltage Substation (Existing)
- SCE Property (500kv)
- Other Applicant Controlled Parcels

Proposed Project Features

- Project Site
- Temporary Offsite Laydown Area
- Medium-voltage/Transmission/ Access Easements
- Gen-tie Line (New)
- Access Points

Other Applicant and/or Affiliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

*Already approved under separate projects.

N

0 0.38 0.75 1.5 Miles

Scale is 1:50,000 when printed at 11"x17"

Not for Construction

Document Path: \\cesi\7\0gis\1\cesiprojects\POR\projects\194_PROJECTS\TERRA_CEN\194_1403_0001_Discovery\PRODS\Discovery_Figures_2024_EIR.aprx

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4.15.3 Regulatory Setting

Federal

Federal Aviation Administration

The FAA regulates aviation at regional, public, and private airports. The FAA regulates objects affecting navigable airspace. According to 49 Code of Federal Regulations Part 77.9, any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA of:

- Any construction or alteration exceeding 200 feet above ground level;
- Any construction or alteration:
  - Within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway where the longest airport runway exceeds 3,200 feet in actual length;
  - Within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway where the longest airport runway is less than 3,200 feet in actual length; and
  - Within 5,000 feet of a public use heliport which exceeds a 25:1 surface;
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed the above standards;
- When requested by the FAA; and
- Any construction or alteration located on a public use airport or heliport regardless of height or location.

Failure to comply with the provisions of Federal Aviation Regulation Part 77 is subject to civil penalty under Section 902 of the Federal Aviation Act of 1958, as amended, and pursuant to 49 United States Code Section 46301(a).

State

California Department of Transportation

Caltrans has jurisdiction over state highways and sets maximum load limits for trucks and safety requirements for oversized vehicles that operate on highways. Eastern Kern County (i.e., including the project site and surrounding area) has been under the jurisdiction of Caltrans District 9 as of November 2015; prior to that time, all of Kern County was under the jurisdiction of Caltrans District 6. The Caltrans regulations below apply to potential transportation and traffic impacts of the project.

California Vehicle Code (CVC), Division 15, Chapters 1 through 5 (Size, Weight, and Load). Includes regulations pertaining to licensing, size, weight, and load of vehicles operated on highways.

California Street and Highway Code, Sections 660-711, 670-695. Requires permits from Caltrans for any roadway encroachment during truck transportation and delivery, includes regulations for the care and

protection of State and county highways and provisions for the issuance of written permits, and requires permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.

Project Development Procedures Manual, Chapter 27. Access Control Modification. Requires Caltrans approval of proposed connections to a public road through submittal of a proposal to Caltrans (Caltrans 2016).

California Environmental Quality Act

Senate Bill 743. Codified in Public Resources Code (PRC) Section 21099, Senate Bill 743 required changes to the CEQA *Guidelines* (California Code of Regulations [CCR], Title 14, Div. 6, Ch. 3, § 15000 *et seq*.) regarding the analysis of transportation impacts. Pursuant to PRC Section 21099(b)(1), the criteria for determining the significance of transportation impacts must "promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses." (See adopted CEQA *Guidelines* Section 15064.3(b), Criteria for Analyzing Transportation Impacts). To that end, in developing the criteria, the Governor's Office of Planning and Research (OPR) proposed, and the California Natural Resources Agency certified and adopted, changes to the CEQA *Guidelines* that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. With the California Natural Resources Agency's certification and adoption of the changes to the CEQA *Guidelines*, automobile delay, as measured by "level of service" and other similar metrics, no longer constitutes a significant environmental effect under CEQA (PRC Section 21099(b)(3)).

California Environmental Quality Act Guidelines Section 15064.3, subdivision (b). Describes specific considerations for evaluating a project's transportation impacts. Generally, VMT is the most appropriate measure of transportation impacts. VMT refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) regarding roadway capacity projects, a project's effect on automobile delay shall not constitute a significant environmental impact.

Local

Construction and operation of the project would be subject to policies and regulations contained within the County's general and specific plans, including the Kern County General Plan, Kern County Zoning Ordinance, and the Kern County Code of Building Regulations, which include policies, goals, and implementation measures related to transportation. The policies, goals, and implementation measures in the Kern County General Plan related to transportation that are applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the project. These measures are not listed below, but as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Kern County General Plan

Circulation Element

2.1. Introduction

Goals

Goal 4: Kern County will plan for a reduction of environmental effects without accepting a lower quality of life in the process.

Goal 5: Maintain a minimum [level of service] LOS D for all roads throughout the County.

2.3.3. Highway Plan

Goal

Goal 5: Maintain a minimum LOS D.

Policies

Policy 1: Development of roads within the County shall be in accordance with the Circulation Diagram Map. The charted roads are usually on section and midsection lines. This is because the road centerline can be determined by an existing survey.

Policy 2: This plan requires, as a minimum, construction of local road widths in areas where the traffic model estimates little growth through and beyond 2010. Where the Kern County Planning and Natural Resources Department's growth estimates indicate more than a local road is required, expanded facilities shall be provided. The timing and scope of required facilities should be set up and implemented through the Kern County Land Division Ordinance. However, the County shall routinely protect all surveyed section lines in the Valley and Desert regions for arterial right-of-way. The County shall routinely protect all midsection lines for collector highways in the same regions. The only possible exceptions shall be where the County adopts special studies and where Map Code 4.1 (Accepted County Plan) areas occur. In the Mountain Region where terrain does not allow construction on surveyed section and midsection lines, right-of-way width shall be the size shown on the diagram map. No surveyed section and midsection "grid" will comprehensively apply to the Mountain Region.

Policy 3: This plan's road-width standards are listed below. These standards do not include state highway widths that would require additional right-of-way for rail transit, bike lanes, and other modes of transportation. Kern County shall consider these modifications on a case-by-case basis.

- Expressway [Four Travel Lanes] Minimum 110-foot right-of-way;
- Arterial [Major Highway] Minimum 110-foot right-of-way;
- Collector [Secondary Highway] Minimum 90-foot right-of-way;
- Commercial-Industrial Street Minimum 60-foot right-of-way; and
- Local Street [Select Local Road] Minimum 60-foot right-of-way.

Implementation Measure

Measure A: The Planning Department shall carry out the road network policies by using the Kern County Land Division Ordinance and Zoning Ordinance, which implements the Kern County Development Standards that includes road standards related to urban and rural planning requirements. These ordinances also regulate access points. The Planning Department can help developers and property owners in identifying where planned circulation is to occur.

2.3.4. Future Growth

Goal

Goal 1: To provide ample flexibility in this plan to allow for growth beyond the 20-year planning horizon.

Policies

Policy 2: The County should monitor development applications as they relate to traffic estimates developed for this plan. Mitigation is required if development causes affected roadways to fall below LOS D. Utilization of the CEQA process would help identify alternatives to or mitigation for such developments. Mitigation could involve amending the Land Use, Open Space, and Conservation Element to establish jobs/housing balance if projected trips in any traffic zone exceed trips identified for this Circulation Element. Mitigation could involve exactions to build offsite transportation facilities. These enhancements would reduce traffic congestion to an acceptable level.

Policy 4: As a condition of private development approval, developers shall build roads needed to access the existing road network. Developers shall build these roads to County standards unless improvements along state routes are necessary then roads shall be built to Caltrans standards. Developers shall locate these roads (width to be determined by the Circulation Plan) along centerlines shown on the circulation diagram map unless otherwise authorized by an approved Specific Plan Line. Developers may build local roads along lines other than those on the circulation diagram map. Developers would negotiate necessary easements to allow this.

Policy 5: When there is a legal lot of record, improvement of access to County, city or State roads will require funding by sources other than the County. Funding could be by starting a local benefit assessment district or, depending on the size of a project, direct development impact fees.

Policy 6: The County may accept a developer's road into the County's maintained road system. This is at Kern County's discretion. Acceptance would occur after the developer follows the above requirements. Roads are included in the County road maintenance system through approval by the Board of Supervisors.

Implementation Measures

Measure C: Project development shall comply with the requirements of the Kern County Zoning Ordinance, Land Division Ordinance, and Development Standards.

2.3.6 Vacation of Existing or Recorded Future Streets, Highways, or Public Easements

Goal

Goal 2: Kern County intends to set up a system maintaining and coordinating road vacation procedures in all elements of the General Plan and the incorporated cities general plans.

Policies

Policy 1: A road vacation influencing the construction or operation of expressway, an arterials or collector highway may occur with, or after, amending this Element. Kern County will not vacate any public expressway, arterial or collector highway right-of-way without amendment to this Element. The County will need to amend the right-of way status to local or commercial-industrial streets.

Policy 2: A study, prepared at the applicant's expense, shall accompany the road vacation application. The study should provide information that will aid in finding the importance of the entire length of the right-of-way. The study would include a review of existing and proposed land uses and localized traffic modeling. This will help Kern County decide what corresponding changes are needed to the Land Use, Open Space and Conservation Element, or affected specific plan. This also will help Kern County decide if additional public road services or other traffic management are required elsewhere.

Policy 3: If the road vacation applicant is a private entity, all costs for the public hearing shall be borne by the applicant. Also, costs associated with providing any necessary additional public road services or other traffic management caused by the road vacation shall be paid by the applicant.

Policy 4: The vacation of a road shall not take away legal access to adjacent properties or "land-lock" any legal lot or parcel of record. Legal access shall be determined through a report submitted with the application for road vacation.

Policy 5: If Kern County determines that the right-of-way is not needed for circulation in the general area, a road vacation may be authorized. An acceptable project shall be determined through a report submitted with the road vacation application and in keeping with traffic modeling parameters of this Plan.

Policy 6: A road vacation may be authorized if physical conditions such as natural, or manmade topography prevent rational extension of the facility. Physical conditions affecting roadways shall be determined through a report submitted with the road vacation application.

Policy 7: A road vacation shall only affect public, recorded rights-of-way or public service easements. The potential effects of a road vacation upon rights-of-way and easements are to be determined by a report submitted with the road vacation application. A vacation of private access or private service easement is not under County jurisdiction. Kern County considers these matters "civil" actions. These civil actions should be acted upon accordingly.

Policy 8: A road vacation may be authorized if the right-of-way is not improved or used for its original purpose. Existing improvements and facility use shall be determined by a report submitted with the road vacation application.

Policy 9: A road vacation may be authorized to remove excess right-of-way caused by relocation, or at the beginning of a general plan amendment proceeding. Excess right-of-way shall be determined through a report submitted with the road vacation application.

Policy 10: A road vacation may be approved if there is an agreement to close a public street. A road vacation may be approved with acknowledgment of an impassable street. A road vacation may be approved with a land division map over the area of vacation if the project has comparable methods of vehicular access.

Policy 11: A road vacation procedure may be used for considering public service easement or utility service easement abandonments. The procedure is the same as any public right-of-way vacation.

Policy 12: A vacation of improved road right-of-way, or public service easement, should not occur until the lead agency makes findings. One important finding is the land is no longer needed for public use. A vacation of improved road right-of-way, or public service easement, should not occur until the right-of-way is superseded by relocation, and improved to acceptable Kern County Development standards. The Board of Supervisors shall have accepted the replacement facility into the maintained road system.

Policy 13: A general vacation proceeding (consistent with State of California Streets and Highway Code) will require a public hearing when the vacation affects existing in place facilities or is a project caused by relocating right-of-way.

Policy 14: A summary vacation shall be consistent with State of California Streets and Highway Code. A summary vacation may be used when the right-of-way does not exist, is unused, or moved. A summary vacation may be used where right-of-way is impassable, unnecessary for present or prospective public use, or is excess or public service easement land.

Implementation Measures

Measure A: Kern County should require a research fee to determine if a complex vacation application is acceptable.

Measure B: In resolving a vacation request, the Board of Supervisors will follow the policies and laws applicable to such vacation request. Before taking final action, the Board of Supervisors may require the applicant to submit additional study(s). Staff shall oversee the applicant's information gathering process and suggest alternatives if necessary.

Measure C: The Planning Department shall issue guidelines for applicants to use in the preparation of road vacation applications and attendant reports.

2.3.10. Congestion Management Programs

State law requires that urbanized counties prepare an annual congestion management program (CMP). City and county eligibility for new gas tax subventions is contingent upon their participation in the congestion management program. To qualify for funding provided through the State Transportation Improvement

Program (STIP) or the Federal Transportation Improvement Program (FTIP), the regional transportation agency must keep current a Regional Transportation Program (RTP) that contains the CMP. Also, the CMP offers local jurisdictions the opportunity to find cooperative solutions to the multi-jurisdictional problems of air pollution and traffic congestion.

The CMP has links with air quality requirements. The California Clean Air Act requires that cities and counties implement transportation control measures (TCMs) to attain, and maintain, the State air quality standard.

Goals

Goal 1: To satisfy the trip reduction and travel demand requirements of the Kern COG's CMP.

Goal 2: To coordinate congestion management and air quality requirements and avoid multiple and conflicting requirements.

Policies

Policy 1: Pursuant to California Government Code 65089(a), Kern County has designated the Kern COG as the County's Congestion Management Agency (CMA).

Policy 2: The CMA is responsible for developing, adopting, and annually updating a CMP. The CMP is to be developed in consultation with, and with the cooperation of, the regional transportation agency (also the Kern COG), regional transportation providers, local governments, Caltrans, and the air pollution control district.

Implementation Measures

Measure A: The Kern COG should request the proper consultation from County of Kern to develop and update the proper congestion management program.

Measure B: The elements within the Kern Congestion Management Program are to be implemented by each incorporated city and the County of Kern. Specifically, the land use analysis program, including the preparation and adoption of deficiency plans is required. Additionally, the adoption of trip reduction and travel demand strategies are required in the Congestion Management Program.

2.5.1. Trucks and Highways

The Kern County road network handles a high ratio of heavy truck traffic. State highways carry most of this traffic. Most of the trucks are interstate carriers. As such, interstate trucking is not under the direct control of County officials. In as much as this traffic affects County residents and taxpayers, they need actions to guarantee State highways in Kern County receive a fair share of California's transportation investment.

Goals

Goal 1: Provide for Kern County's heavy truck transportation in the safest way possible.

Goal 2: Reduce potential overweight trucks.

Goal 3: Use State Highway System improvements to prevent truck traffic in neighborhoods.

Policies

Policy 1: Caltrans should be made aware of the heavy truck activity on Kern County's roads.

Policy 2: A program that monitors truck traffic operations.

Policy 3: Promote a monitoring program of truck lane pavement condition.

Soledad Mountain Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. The recommendations, analysis, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan for traffic and transportation applicable to the project are provided below. The Soledad Mountain Elephant Butte Specific Plan contains additional recommendations, analysis, and implementation measures that are more general in nature and are not specific to development such as the project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan are incorporated by reference.

Item 1. Location & Extent of Existing Streets

Recommendation - All roads shall be maintained as they now exist. An O.P. line shall be established for a 110-foot right-of-way along the general alignment of Silver Queen Road from the State Route 14 interchange to the South line of Section 12, T.10N, R.13W., S.B.B.6M.

Analysis - Silver Queen Road may be expected to carry a substantial volume of traffic as future development occurs due to its geographic location and full interchange at State Route 14.

Implementation - The County Surveyor and Road Commissioner to furnish data necessary to compile maps by the Planning Staff; hearings to be held in accordance with effective laws.

Item 4. Proposed Local Streets

Recommendation - Location, extent and improvement of local streets should be reviewed during consideration of tentative subdivision or parcel maps.

Analysis - Since the parcel map procedure has all but replaced subdivisions in eastern Kern County, review of such maps should include requests for reservation of easements for future local street alignments.

Implementation - Compliance with applicable Sections of the Subdivision of Land Ordinance.

Kern Council of Governments Congestion Management Program

All urbanized areas with a population larger than 200,000 residents are required to have a Congestion Management System, program, or process. The Kern Council of Governments (COG) refers to its congestion management activities as the CMP. The Kern COG was designated as the CMA.

The CMP provides a systematic process for managing congestion and information regarding (1) transportation system performance, and (2) alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet State and local needs. The purpose of the CMP is to ensure that a balanced transportation system is developed that relates population growth, traffic,

growth and land use decisions to transportation system LOS performance standards and air quality improvement. The program attempts to link land use, air quality, transportation, and advanced transportation technologies as integral and complementary parts of this region's plans and programs.

The purpose of defining the CMP network is to establish a system of roadways that will be monitored in relation to established LOS standards. At a minimum, all State highways and principal arterials must be designated as part of the Congestion Management System of Highways and Roadways. Kern County has 18 designated State highways.

Regional Transportation Plan

The latest Regional Transportation Plan (RTP) was prepared by the Kern COG and was adopted on July 21, 2022. The 2022 RTP is a 24-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. It was developed through a continuing, comprehensive, and cooperative planning process, and provides for effective coordination between local, regional, State, and federal agencies. Included in the 2022 RTP is the Sustainable Communities Strategy (SCS), which is required by California's Sustainable Communities and Climate Protection Act of Senate Bill 375. The California Air Resources Board (CARB) set targets for Kern's GHG emissions reductions from passenger vehicles and light-duty trucks at 9 percent per capita by 2020 and 15 percent per capita by 2035 as compared to 2005. In addition, Senate Bill 375 provides for closer integration of the RTP/SCS with the Regional Housing Needs Allocation (RHNA) ensuring consistency between low-income housing need and transportation planning. Kern COG closely coordinated the RHNA and RTP/SCS development process using the same oversight committee for both. Local jurisdictions will use the RHNA to identify locations to provide sufficient housing for all economic segments of the population and ensure that the state's housing goals are met.

The intent of the SCS is to achieve the State's emissions reduction targets for automobiles and light trucks. The SCS will also provide opportunities for a stronger economy, healthier environment, and safer quality of life for community members in Kern County. The RTP seeks to improve economic vitality; improve air quality; improve the health of communities; improve transportation and public safety; promote the conservation of natural resources and undeveloped land; increase access to community services; increase regional and local energy independence; and increase opportunities to help shape the community's future.

The 2022 RTP/SCS financial plan identifies how much money is available to support the region's transportation investments. The plan includes a core revenue forecast of existing local state and federal sources along with funding sources that may be considered reasonably available over the time horizon of the RTP/SCS. This RTP promotes a more efficient transportation system that calls for fully funding alternative transportation modes, while emphasizing transportation demand and transportation system management approaches for new capacity (Kern COG, 2022).

4.15.4 Impacts and Mitigation Measures

Methodology

The proposed project's potential impacts to transportation have been evaluated using a variety of resources, including the *Traffic Impact Analysis* (Tetra Tech, 2025) prepared for the proposed project, which is

attached as **Appendix K** of this EIR. Traffic impacts from implementation of the proposed project were evaluated for the site by establishing trip generation rates for both the construction and operational phases of the project. Trip generation is based primarily on the number of workers and the types of equipment that would be used.

An evaluation of VMT related to project construction and operation was conducted based on the CEQA *Guidelines* Section 15064.3(b). Construction trips typically are not analyzed in a VMT analysis because they are temporary and would not impact overall per capita VMT in the region.

Project Trip Generation, Distribution, and Assignment

The majority of construction vehicle trips would be associated with construction employees traveling to and from the site during peak hours. It was assumed that the construction workforce would be drawn from within an approximately one-hour drive to the project site. It is assumed that construction staff not drawn from the local labor pool would stay in the local hotels in Rosamond, Mojave, Lancaster, Bakersfield, or other local communities. The weighted average one-way commuting trip length is 35.7 miles, as described in the *Traffic Impact Analysis* (Tetra Tech, 2025) provided as **Appendix K** to this EIR.

It is anticipated the construction workforce would commute to the site each day from local communities and report to the designated construction staging yards prior to the beginning of each workday. The combined critical peak demand periods of project traffic and adjacent street traffic are anticipated to occur during weekday morning (6:00 to 9:00 AM) and weekday evening (4:00 to 7:00 PM) peak periods. The peak periods represent the highest cumulative total traffic for the Project and adjacent street system.

Methodology and assumptions for the traffic assessment included the following:

Construction Trips

Construction traffic for the solar facilities would consist of worker passenger vehicles and heavy trucks delivering parts, equipment, and materials to the project site. Construction of the project is anticipated to last up to 34 months. The highest volume of site-related trips would occur during the peak construction phase of the project. Therefore, trip generation estimates associated with the peak construction phase workforce levels were used as a conservative assessment.

Construction activities for the project generally fall into three main phases: site preparation; panel installation; and testing, commissioning, and cleanup. It is anticipated that the project site could experience peak construction workforce levels of up to 664 construction workers at one time. Construction hours of operation generally would not occur between the hours of 9:00 PM and 6:00 AM on weekdays and between 9:00 PM and 8:00 AM on weekends in compliance with Kern County's Noise Ordinance, Chapter 8.36. Peak construction activities are currently anticipated to occur for a period of approximately 3 months. The remainder of the Project construction period is anticipated to generate fewer vehicle trips.

It is estimated that there would be an average of 60 trucks, a combination of delivery and onsite trucks, that will be traveling to and from the site daily. Trip generation estimates for project construction phase are shown in **Table 4.15-1**, *Construction Passenger Car Equivalent Trip Generation*, under **Impact 4.15-1** below.

Operation and Maintenance Trips

The project would operate year-round. It is anticipated that approximately six permanent full-time staff employees would be needed to maintain the facility. Additional staff would also be needed for certain activities such as solar panel washing. Typical O&M activities that would occur onsite include, but are not limited to, liaison and remote monitoring; administration and reporting; semi-annual and annual services; remote operations of inverters and battery energy storage systems; site security and management; additional communication protocol; repair and maintenance of solar facilities, battery storage facilities, substations, electrical transmission lines, and other project facilities; vegetation management; and periodic panel washing. It is expected that staff would primarily operate from an operations facility that is offsite; however, small satellite portable office trailers may be utilized to help facilitate rapid repair of equipment.

Routine O&M activities at the project site are not anticipated to result in a measurable increase in vehicle traffic. The number of maintenance workers traveling to the project site is low; therefore, impacts to local traffic are not expected.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project could potentially have a significant adverse effect on traffic.

A project could have a significant adverse effect on transportation if it would:

a. Conflict with a program, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;

b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);

c. Substantially increases hazards due to a geometric design feature (such as sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or

d. Result in inadequate emergency access.

Project Impacts

Impact 4.15-1: The project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Construction

To determine construction-related trip generation for the proposed project, the project description and construction staging operations were reviewed to identify construction worker-related trips and system/materials delivery-related trips. The majority of construction vehicle trips to and from the project site would be associated with construction workers and trucks making deliveries. Heavy equipment used at the project site would not be hauled to and from the site daily, but would be hauled in at the beginning of construction and hauled out upon completion of construction. Construction trips would occur throughout the day, but because the proposed project does not require intense grading/offsite hauling, the majority of the trips

would be associated with construction workers traveling to and from the site during the peak hours. The construction peak workforce is up to 664 workers, and the average daily workforce onsite during construction is expected to include 470 construction, supervisory, support, and construction management personnel.

According to Kern County Ordinance Section 8.36.020, all construction shall be limited to the hours of 6 AM to 9 PM on weekdays and 8 AM to 9 PM on weekends. Therefore, construction may occur during AM peak (7 to 9 AM) or PM peak (4 to 6 PM) commute periods on weekdays. However, as is typical with construction activities, trips are anticipated to be distributed over longer AM and PM periods and would not necessarily coincide with the traditional commuting peak periods of 7 to 9 AM or 4 to 6 PM. However, to provide a worst-case scenario, the traffic analysis assumed that all construction workers would arrive at the project site during the AM peak hour and depart the project site during the PM peak hour. The maximum of 36 offsite delivery trucks (trucks delivering materials from offsite locations), and 24 onsite trucks (trucks delivering workers and/or materials between the work areas) were assumed be evenly distributed over the course of the entire workday.

As shown in **Table 4.15-1**, *Peak Construction Passenger Car Equivalent Trip Generation*, construction-related activity associated with the proposed project is forecast to generate (during the peak construction phase overlap) up to approximately 1,422 passenger car equivalent (PCE) vehicle trips. There would be up to an estimated 585 PCE vehicle trips during the AM and PM peak hours.

TABLE 4.15-1: PEAK CONSTRUCTION PASSENGER CAR EQUIVALENT TRIP GENERATION

			AM Peak Hour		PM Peak Hour	
Vehicle Type	**Daily Quantity**	**Daily Trips[a]**	**Inbound**	**Outbound**	**Inbound**	**Outbound**
Workers	664	1062	531	0	0	531
Delivery Trucks	36	216	33	33	33	33
Onsite Trucks	24	144	22	22	22	22
	Total Trips	**1,422**	**585**	**54**	**54**	**585**

NOTE:
[a] A vehicle occupancy rate of 1.25 was applied to workers; a passenger car equivalent factor of 3.0 was applied to delivery trucks and onsite trucks.
SOURCE: Tetra Tech, 2025 (provided as **Appendix K**).

Although project construction would result in an estimated 585 PCE vehicle trips during the AM and PM peak hours, construction traffic would be temporary and would not result in long-term or permanent changes to local roadway conditions. The Study Area evaluated in the *Traffic Impact Analysis* (Tetra Tech, 2025) provided as **Appendix K** to this EIR includes six intersections and five roadway segments. The analysis indicates that ample capacity is available to support the peak construction workforce levels associated with the project. The analyzed roadways operate well below capacity at LOS B or better under existing and future year conditions with or without the project, as shown in **Table 4.15-2**, *2024 Existing Plus Project Weekday Daily Roadway Segment LOS* and in **Figure 4.15-2**, *Existing Plus Peak Construction Peak Hour Traffic Volumes*.

TABLE 4.15-2: 2024 EXISTING PLUS PROJECT WEEKDAY DAILY ROADWAY SEGMENT LOS

Roadway Segment	Configuration	LOS "D" ADT	Existing ADT[a]	Existing LOS[b]	Project Traffic	Existing Plus Project ADT	Existing Plus Project LOS
SR-14 (South of Silver Queen Road)	4 Lane Divided	55,700	19,600[c]	A	1,422	21,022	A
SR-14 (North of Rosamond Boulevard)	4 Lane Divided	55,700	21,200[c]	A	1,422	22,622	A
Backus Road (Between SR-14 NB Ramps & SR-14 Southbound Ramps)	2 Lane Undivided	14,000	1,013[d]	A	1,422	2,435	A
Backus Road (West of Silver Queen Road)	2 Lane Undivided	14,000	2,194[e]	A	1,422	3,616	A
Tehachapi Willow Springs Road (South of Highline Road)	2 Lane Undivided	14,000	4,296[f]	A	1,422	5,718	B

NOTES:
[a] Average Daily Traffic
[b] Level of Service
[c] Caltrans Traffic Census Program (2024). Latest available traffic volumes reflect 2022 Average Annual Daily Traffic (AADT).
[d] 2022 ADT grown to 2024 ADT based on Ruettgers & Schuler Civil Engineers (2022).
[e] ADT collected on June 4, 2024, by Tetra Tech.
[f] ADT collected on January 11, 2024. Available on the Kern Council of Governments Traffic Count Database.

As shown in **Table 4.15-3**, *2024 Existing Plus Project Weekday Peak Hour Intersection LOS*, analyzed intersections are anticipated to operate below capacity at acceptable LOS C or better for the 2024 Existing Plus Project weekday commuter peak hour conditions. Detailed LOS worksheets are included in **Appendix K** to this EIR.

Accordingly, construction of the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including the Kern COG CMP, such that the impact would be less than significant. The proposed project would be consistent with the Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan, as well as countywide, State, and regional transportation plans.

While construction traffic would be temporary and would not impact local free-flowing roadway conditions, potential temporary impacts to intersections proposed to be utilized for site access could occur during peak hour construction commute periods. Therefore, the proposed project includes **Mitigation Measures MM 4.15-1** and **4.15-2**, below, which 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.

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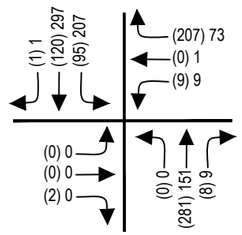
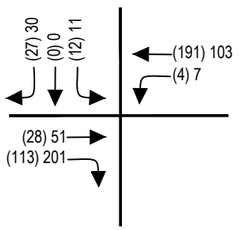
COUNTY ROADWAYS
LOCAL ROADWAYS
STATE ROADWAYS
RAILROAD
EXISTING GEN-TIE LINE
PROJECT BOUNDARY
PROJECT ACCESS ROADS
STUDY INTERSECTIONS
(#) # (AM) PM PEAK HOUR VOLUMES

TEHACHAPI MOUNTAIN RANGE
OAK CREEK ROAD
TEHACHAPI WILLOW SPRINGS ROAD
100TH STREET W
90TH STREET W
80TH STREET W
AQUEDUCT ROAD
CAMELOT BOULEVARD
PURDY AVENUE
GENERAL PETROLEUM ROAD
JACKPINE AVENUE
MOUNTAIN VIEW
60TH STREET W
SILVER QUEEN ROAD
TROTTER AVENUE
75TH STREET W
MAXWELL AVENUE
95TH STREET W
AQUEDUCT ROAD
BACKUS ROAD
110TH STREET W
100TH STREET W
TEHACHAPI WILLOW SPRINGS ROAD
80TH STREET W
70TH STREET W
GIBBS AVENUE
MONTIVERDE ROAD
GENERAL PETROLEUM ROAD

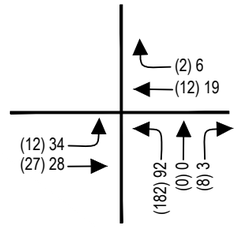
1 Tehachapi Willow Springs Rd @ Backus Rd



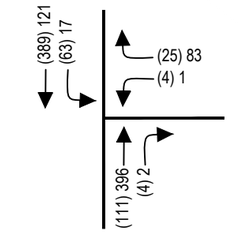
2 SR-14 SB Ramps @ Backus Rd



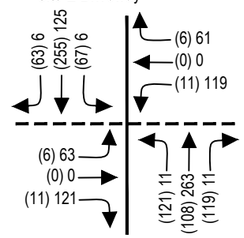
3 SR-14 NB Ramps @ Backus Rd



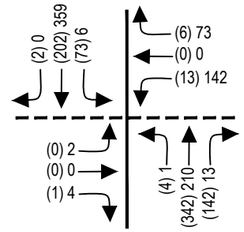
4 Tehachapi Willow Springs Rd @ Old Creek Rd



5 Tehachapi Willow Springs Rd @ Site A/B/C Driveway and Site E Driveway



6 Tehachapi Willow Springs Rd @ Site D Driveways



TETRA TECH

Discovery Solar PV and Storage Project
Kern County, CA

FIGURE
4.15-2

EXISTING PLUS PEAK CONSTRUCTION PEAK HOUR TRAFFIC VOLUMES

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TABLE 4.15-3: 2024 EXISTING PLUS PROJECT WEEKDAY PEAK HOUR INTERSECTION LOS

			Existing Conditions								Existing Plus Project Conditions							
			AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
No.	Intersection & Movement		V/C [a]	Delay [b]	LOS [c]	95th Q (feet) [d]	V/C	Delay	LOS	95th Q (feet) [d]	V/C	Delay	LOS	95th Q (feet) [d]	V/C	Delay	LOS	95th Q (feet) [d]
1	Tehachapi Willow Springs Road @ Backus Road	NB	0.10	7.9	A	7.5	0.17	8.1	A	15.0	0.47	12.8	B	62.5	0.22	9.1	A	20.0
		SB	0.00	7.0	A	0	0.00	7.6	A	0.0	0.00	8.4	A	0.0	0.00	8.7	A	0.0
		EB	0.08	8.9	A	7.5	0.08	7.6	A	7.5	0.41	13.5	B	50.0	0.13	8.9	A	10.0
		WB	0.25	9.0	A	25	0.15	8.1	A	12.5	0.37	11.8	B	42.5	0.66	15.8	C	127.5
2	SR-14 Southbound Ramps @ Backus Road	WB Left	0.00	7.5	A	0	0.01	7.4	A	0.0	0.00	7.6	A	0.0	0.01	7.8	A	0.0
		WB Through	0.00	0.0	A	0	0.00	0.0	A	0.0	0.00	0.0	A	0.0	0.00	0.0	A	0.0
		SB	0.03	9.4	A	2.5	0.05	9.2	A	5.0	0.07	10.4	B	5.0	0.06	9.5	A	5.0
3	SR-14 Northbound Ramps @ Backus Road	NB Left	0.07	9.4	A	5	0.10	9.4	A	7.5	0.31	11.1	B	32.5	0.13	9.9	A	10.0
		EB Left	0.01	7.3	A	0	0.01	7.4	A	0.0	0.01	7.3	A	0.0	0.03	7.4	A	2.5
		EB	0.00	0.0	A	0	0.00	0.0	A	0.0	0.00	0.0	A	0.0	0.00	0.0	A	0.0
4	Tehachapi Willow Springs Road @ Oak Creek Road	WB	0.04	9.9	A	2.5	0.12	10.0	B	10.0	0.05	10.6	B	5.0	0.15	12.0	B	12.5
		SB Left	0.05	7.7	A	5	0.02	8.2	A	2.5	0.05	7.7	A	5.0	0.02	8.9	A	2.5
		SB Through	0.00	0.0	A	0	0.00	0.0	A	0.0	0.00	0.0	A	0.0	0.00	0.0	A	0.0
5	Tehachapi Willow Springs Road @ Site A, B, C, & Site E Driveways	NB Left	*Intersection does not exist in Existing Conditions.*				*Intersection does not exist in Existing Conditions.*				0.11	8.3	A	10.0	0.01	7.5	A	0.0
		NB Through									0.00	0.0	A	0.0	0.00	0.0	A	0.0
		EB									0.05	14.5	B	2.5	0.30	12.8	B	32.5
		WB									0.06	18.2	C	5.0	0.43	18.5	C	52.5
		SB Left									0.06	7.9	A	5.0	0.01	7.9	A	0.0
		SB Through									0.00	0.0	A	0.0	0.00	0.0	A	0.0
6	Tehachapi Willow Springs Road @ Site D Driveways	NB Left	*Intersection does not exist in Existing Conditions.*				*Intersection does not exist in Existing Conditions.*				0.00	7.7	A	0.0	0.00	8.1	A	0.0
		NB Through									0.00	0.0	A	0.0	0.00	0.0	A	0.0
		EB									0.00	9.4	A	0.0	0.01	12.4	B	0.0
		WB									0.06	16.9	C	5.0	0.50	20.4	C	70.0
		SB Left									0.08	8.7	A	5.0	0.01	7.7	A	0.0
		SB Through									0.00	0.0	A	0.0	0.00	0.0	A	0.0

NOTE:
[a] Volume to Capacity Ratio
[b] Delay in seconds per vehicle
[c] Level of Service
[d] Vehicle queues measured in feet
EB = eastbound; NB = northbound; SB = southbound; WB = westbound

Operation and Maintenance

Approximately six permanent staff employees would be needed to maintain the facility and would travel to the site during project operations. During project operations, solar panel washing is expected to occur one to two times per year to increase operational efficiency. Panel washing is expected to take 15 to 30 days to complete per wash cycle. Up to 10 individuals may assist in panel washing and are expected to be hired from the local community. Trips associated with routine O&M would generate a maximum of 12 peak hour trips, which are considered negligible in terms of traffic impact. Panel washing activities are not anticipated to result in a measurable increase in vehicle traffic, and would only occur up to twice a year.

When feasible, required planned maintenance would be scheduled to avoid peak load periods, and maintenance and security personnel would travel to the site during off-peak times. Unplanned maintenance would typically be responded to as needed depending on the event. These maintenance activities would not generate trips on a regular basis, and the estimated trips by full-time project personnel would generate minimal operational traffic. Trips generated by project operation and maintenance would be substantially lower than the trips generated by project construction, and as stated above, the impact during construction would be less than significant. Operation of the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including the Kern COG CMP. The proposed project also would be consistent with the Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan; as well as countywide, State, and regional transportation plans. Impacts would be less than significant.

Decommissioning

At the end of the project site's operational term, the project operator may determine that the project site should be decommissioned and deconstructed, which would adhere to the requirements of the appropriate governing authorities and in accordance with all applicable federal, state, and county regulations. Decommissioning impacts would be relatively similar to those identified for construction of the proposed project and would be short-term and temporary. Thus, decommissioning of the proposed project would result in a less-than-significant impact and would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including the Kern COG Congestion Management Program. The proposed project also would be consistent with the Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan; as well as countywide, State, and regional transportation plans.

Transit, Bicycle, and Pedestrian Facilities

There are no dedicated pedestrian or bicycle facilities in the immediate vicinity of the project site or along the surrounding roadways. Due to the rural nature of the project area, bicycle traffic is limited. The project is not located along an existing bus route and few bus stops exist on the roadways likely to be used during construction and operation. The project would not house residents or employees and, therefore, would not have characteristics that could influence alternative means of transportation. Therefore, impacts would be less than significant.

As discussed previously, the CHSRA is planning and permitting a high-speed train corridor from northern to southern California. The Bakersfield to Palmdale section of the high-speed train corridor was evaluated in a joint CEQA/National Environmental Policy Act document, completed in August 2021. A portion of the approved and adopted alignment crosses through part of the project site, however this segment has not

yet started construction. Furthermore, this Department has not yet received documentation indicating that the land currently required for this alignment has been secured or is controlled by the CHSRA.

Removal of Road Reservations, Vacation of Easements, and Vesting Tentative Parcel Maps

The road reservations requested to be removed are listed in **Table 3-3**, *Road Reservations Requested for Removal,* in **Chapter 3,** *Project Description*. The project includes General Plan Amendments to the Circulation Element of the Kern County General Plan to remove future road reservations at section and mid-section lines (see **Figure 3-11**, *Proposed General Plan Amendment* (*Circulation),* in **Chapter 3,** *Project Description*).

Additionally, 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 public access easements are proposed to be vacated through parcel maps to facilitate the optimal layout of solar panels by removal of record of unused/undeveloped public and private easements and other rights- of- way on vacant land. These easements and unaccepted offers of dedication have been created by grant deed or parcel maps, and some dirt roads exist within the project development footprint. As requested, the easement vacations would not eliminate any legal access for any property or persons in the area. In the cases where one of the proposed vacations removes primary access to a parcel, the project proponent would be responsible for recording public or private easements for access purposes prior to or concurrent with the vacation being recorded such that legal access remains. In most cases, the proposed alternate public or private easements would be recorded along with the vacation of the original public easement. The vacations are included in **Figure 3-12**, *Parcel Maps and Easements.* Parcel maps are shown in **Figure 3-13**, *Proposed Vesting Tentative Parcel Map Boundaries*, **Figure 3-14**, *Assessor's Parcelization Map,* and **Exhibit 1** in **Chapter 3,** *Project Description.*

The project would comply with Kern County General Plan Circulation Section 2.3.6 Vacation of Existing or Recorded Future Streets, Highways, or Public Easements, Goal 2, and Policies 1 through 14 related to the maintenance and coordination of proposed street vacations. The proposed vacations would not restrict the traveling public or neighboring property owners access to areas outside the project boundary. It should also be noted the proposed easement vacations and road reservation removals have been reviewed for adequacy by the Kern County Public Works Department. As such, impacts related to the approval of the removal of road reservations, vacation of easements, and vesting tentative parcel maps would be less than significant.

Mitigation Measures

Though the impact is less than significant, implementation of **Mitigation Measures MM 4.15-1** and **MM 4.15-2** would further reduce impacts.

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 along Tehachapi Willow Springs Road;
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 Tehachapi Willow Springs Road,
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. Dedicate a 55-foot half-width right-of-way for Tehachapi Willow Springs Road, where the project borders and/or fronts said roadway, provided such lands are controlled by project proponent/operator shall dedicate required right-of-way as designated for Tehachapi Willow Springs Road, where project borders and/or fronts said roadway, provided such lands are controlled by the project proponent/operator.

f. Provide and/or dedicate access rights (private or public easements) to properties that do not belong to the project such that they are not land locked, unless existing private or public easements provide sufficient access. Such easements shall remain open during construction and operation of the project or the project proponent/operator shall provide temporary or permanent alternative access easements.

g. 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.

MM 4.15-2: Prior to the issuance of grading or building permits, the project proponent/operator shall implement measures to reduce construction worker vehicle trips during the AM and PM peak hours. These measures may include, but are not limited to the following:

a. The Construction Traffic Control Plan (see **MM 4.15-1**, above) shall outline the methods used to control the number of worker vehicles arriving and departing from the project site during peak AM and PM hours, and document all reasonable efforts made to avoid impacts to area intersections.

b. The project proponent/operator shall limit construction worker vehicle trips to and from the site to the extent possible during the AM and PM peak periods (i.e., 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) by implementing such measures as:

1. Instituting incentives and providing options for construction workers to carpool and/or vanpool to and from the project site.
2. Scheduling construction worker shifts so that a majority of the workers arrive and depart the project site outside the AM and PM peak periods.
3. Staggering construction worker shifts so that construction worker vehicle trips are distributed over a broader period (i.e., construction workers arrive in staggered shifts starting from 6:00 a.m. and depart in staggered shifts starting from 2:00 p.m.).

Level of Significance

Impacts would be less than significant and implementation of **Mitigation Measures MM 4.15-1** and **MM 4.15-2** would further reduce impacts.

Impact 4.15-2: The project would conflict with or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b).

CEQA *Guidelines* Section 15064.3, subdivision (b) was adopted in December 2018 by the California Natural Resources Agency. These revisions to the CEQA *Guidelines* criteria for determining the significance of transportation impacts are primarily focused on projects within transit priority areas, and shift the focus from driver delay to reduction of GHG emissions, creation of multimodal networks, and promotion of a mix of land uses. VMT is a measure of the total number of miles driven to or from a development and is sometimes expressed as an average per trip or per person.

Guidelines for assessing project VMT as part of a transportation impact analysis under CEQA are contained in the State of California Office of Planning and Research's "Technical Advisory on Evaluating

Transportation Impacts in CEQA," dated December 2018, as described in **Appendix K**. This advisory includes methodology recommendations for analyzing a project's VMT. The advisory describes a series of "screening thresholds" to identify when a project should be expected to cause less-than-significant impact without conducting a detailed study. As discussed in the document, the screening threshold for small projects is "Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with an SCS or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact."

Construction

The calculation of VMT of any project is the number of project-generated trips multiplied by the travel length of each trip. Project-generated daily construction VMT was estimated separately for each project trip type, based on project-specific data for average construction activity for the duration of the construction effort, as detailed in the *Traffic Impact Analysis* (Tetra Tech, 2025) provided as **Appendix K** to this EIR.

Average daily construction activity was used for the VMT analysis to provide a more accurate analysis of the total project impacts to the regional roadway system. It is anticipated that the average daily construction workforce would be 471 workers, as shown in **Table 4.5-4**, *Project Average Construction Trip Generation Estimates*. It is assumed that trucking activity to/from the project site would remain at a consistent level throughout the duration of construction. To develop a more accurate VMT estimate for trucks, no PCE factor was applied. During the average construction phase, the project is estimated to generate 874 vehicle trips per day.

TABLE 4.15-4: PROJECT AVERAGE CONSTRUCTION TRIP GENERATION ESTIMATES

Vehicle Type	Daily Quantity	Daily Trips[a]
Workers	471	754
Delivery Vehicles	36	72
Onsite Trucks	24	48
	Total Trips	**874**

NOTE:
[a] A vehicle occupancy rate of 1.25 was applied to worker trips.

Table 4.15-5, *Worker Vehicle Miles Traveled,* identifies communities that are sources of employees, their commuting trip length, as well as daily and total project VMT.

TABLE 4.15-5: WORKER VEHICLE MILES TRAVELED

Town/City	Distance to Site (miles)[a]	Project Worker Population by City[b]	Construction Inbound Worker Trips[c]	Construction Outbound Worker Trips[c]	Total Daily Worker Trips (D + E)	Daily Worker Vehicle Miles Traveled (B x F)	Number of Workdays per week	Construction Duration (weeks)[d]	Total Worker Vehicle Miles Traveled (G x H x I)
A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**
Mojave, CA	14	1.37%	5	5	10	140	5	143	100,100
Rosamond, CA	13	4.06%	15	15	30	390	5	143	278,850
Lancaster, CA	25	34.11%	129	129	258	6,450	5	143	4,611,750
Palmdale, CA	35	20.24%	76	76	152	5,320	5	143	3,803,800
Sun Village, CA	46	3.09%	12	12	24	1,104	5	143	789,360
Boron, CA	44	0.29%	1	1	2	88	5	143	62,920
Gorman, CA	45	0.51%	2	2	4	180	5	143	128,700
California City, CA	29	2.12%	8	8	16	464	5	143	331,760
Tehachapi, CA	18	5.78%	22	22	44	792	5	143	566,280
Bakersfield, CA	56	28.43%	107	107	214	11,984	5	143	8,568,560
	Total	**100.00%**	**377**	**377**	**754**	**26,912**			**19,242,080**

NOTES:

[a] Approximate distance between the project site and the town/city population centroid.

[b] Proportion of workers travelling to/from a given town/city. Based on United States Census population data and assumes a maximum of one-hour drivetime to/from the project site. Census tracts in unincorporated areas were assigned to the nearest population centroid.

[c] 377 average construction worker trips account for a 1.25 carpool reduction factor.

[d] Assumes a 34-month construction schedule, provided by the project proponent.

Daily Truck Haul Trips

As presented in **Table 4.15-4**, *Project Average Construction Trip Generation Estimates*, the average daily construction truck haul delivery trip generation is estimated at 72 daily trips for the project. Additionally, the origins of truck haul trips were assumed to be similar to workforce commuting patterns. **Table 4.15-6**, *Haul Truck Vehicle Miles Traveled*, identifies communities that are sources of truck haul delivery trips, their trip length, as well as daily and total project truck haul VMT.

TABLE 4.15-6: HAUL TRUCK VEHICLE MILES TRAVELED

Town/City	Distance to Site (miles)[a]	Project Worker Population by City[b]	Construction Inbound Haul Truck Trips[c]	Construction Outbound Haul Truck Trips[c]	Total Daily Haul Truck Trips (D + E)	Daily Haul Truck Vehicle Miles Traveled (B x F)	Number of Workdays per week	Construction Duration (weeks)[d]	Total Haul Truck Vehicle Miles Traveled (G x H x I)
A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**
Mojave, CA	14	1.37%	1	1	2	28	5	143	20,020
Rosamond, CA	13	4.06%	2	2	4	52	5	143	37,180
Lancaster, CA	25	34.11%	12	12	24	600	5	143	429,000
Palmdale, CA	35	20.24%	7	7	14	490	5	143	350,350
Sun Village, CA	46	3.09%	1	1	2	92	5	143	65,780
Boron, CA	45	0.51%	0	0	0	0	5	143	0
Gorman, CA	44	0.29%	0	0	0	0	5	143	0
California City, CA	29	2.12%	1	1	2	58	5	143	41,470
Tehachapi, CA	18	5.78%	2	2	4	72	5	143	51,480
Bakersfield, CA	56	28.43%	10	10	20	1,120	5	143	800,800
Total	**35.7**	**100.00%**	**36**	**36**	**72**	**2,512**			**1,796,080**

NOTES:

[a] Approximate distance between the project site and the town/city population centroid.

[b] Proportion of trucks traveling to/from a given town/city. Based on United States Census population data and assumes a maximum of one-hour drivetime to/from the project site. Census tracts in unincorporated areas were assigned to the nearest population centroid.

[c] 36 average daily construction haul truck trips are taken from Table 4.15-4.

[d] Assumes a 34-month construction schedule, provided by project proponent.

Daily On-Site Truck Trips

As shown in **Table 4.15-4**, *Project Average Construction Trip Generation Estimates*, the average daily on-site construction truck trip generation is estimated at 24 entering trucks and 24 exiting trucks for a total of 48 truck trips per day for the project. On-site truck trips are expected to enter the public roadway system up to 2 times a week. Additionally, the average length of truck haul trips was assumed to be 5 miles to provide a conservative estimate of trucks entering the public roadway system between project parcels. **Table 4.15-7**, *Onsite Truck Vehicle Miles Traveled*, identifies communities that are sources of truck haul trips, their trip length, as well as daily and total project VMT.

TABLE 4.15-7: ONSITE TRUCK VEHICLE MILES TRAVELED

Town/City	Distance to Site (miles)[a]	Construction Inbound On-Site Truck Trips[b]	Construction Outbound On-Site Truck Trips[b]	Total Daily On-Site Truck Trips (C + D)	Daily Onsite Truck Vehicle Miles Traveled (B x E)	Number of Workdays per week[c]	Construction Duration (weeks)[d]	Total Onsite Truck Vehicle Miles Traveled (F x G x H)
A	B	C	D	E	F	G	H	I
Local Roadways	5	24	24	48	240	2	143	68,640

NOTES:

[a] Assumes that Onsite Truck Trips would travel along local roadways in the vicinity of the project site and travel a maximum of 5 miles before returning to the site.

[b] 24 average daily construction on-site truck trips are taken from Table 4.15-4.

[c] Assumes each truck would impact the public roadway system up to 2 times a week for the duration of the project.

[d] Assumes a 34-month construction schedule.

As described in detail in the *Traffic Impact Analysis* (Tetra Tech 2025) provided as **Appendix K** to this EIR, the project is estimated to generate an average weekday daily VMT of approximately 26,912 miles for worker commuting trips, 2,512 miles for truck haul trips, and an additional 240 miles related to onsite truck trips (which would only occasionally access the public roadway system). The 26,912 miles for commute trips was divided by the average number of anticipated workers on site during project construction (471 workers), resulting in a daily per capita VMT of 57.1 miles. The number of daily haul truck trips (72) was divided by two (one worker driving two one-way trips to and from the project site). The total daily haul truck VMT of 2,512 miles was then divided by 36 drivers, resulting in a daily per capita VMT of 69.8 miles for haul truck trips. The number of daily onsite truck trips (48) was divided by two (one worker driving two one-way trips to and from the project site). The total daily onsite truck VMT of 240 miles was then divided by 24 drivers, resulting in a daily per capita VMT of 10 miles for onsite truck trips.

The total construction-related project VMT impacts were analyzed by multiplying the daily VMT by the estimated number of working days in the project. The project construction phase is expected to last for approximately 34 months (147 weeks), with an assumed 5-day work week for construction worker commuting and truck haul trips. Onsite trucks are expected to impact the public roadway system up to two times per week while traveling between project parcels. Based on these assumptions, the total constructed-related VMT for worker commuting trips is estimated to be 19,242,080 miles, with 1,796,080 miles traveled for truck haul trips, and an additional 68,640 miles travel for onsite trucks. This would result in a total net increase of 21,106,800 VMT at the site over an approximately 34-month construction period, given there is minimal VMT generated currently.

The intent of Senate Bills 32 and 743 is to understand the long-term GHG emissions generated by new developments. The project's construction-related net increase in VMT is a temporary condition and would not result in long-term GHG emissions. Construction VMT is provided in this EIR for informational purposes. Further, VMT primarily is a metric for assessing project-related GHG emissions impacts. The analysis related to GHG emissions associated with project-related construction traffic is analyzed elsewhere in this EIR; see Section 4.8, *Greenhouse Gas Emissions*. Overall, as the project would provide clean renewable energy to the grid and would offset GHG emissions that would have otherwise resulted from producing energy from a non-renewable source, the project would have a net beneficial impact in offsetting GHG emissions. Therefore, because the increase in VMT related to construction is temporary and localized, project construction is not anticipated to result in long-term, permanent changes to the surrounding vehicle transportation system. Impacts from project construction would be less than significant.

Operations

During the O&M phase, the project is expected to generate approximately 12 vehicle trips per day and would result in a less-than-significant transportation impact. The Office of Planning and Research's technical advisory guidance (described in **Appendix K**) indicates that projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

Decommissioning

The decommissioning phase is conservatively anticipated to generate a similar number of trips as during project construction. Impacts would be less than significant.

Mitigation Measures

No mitigation would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.15-3: The project would substantially increase hazards due to a geometric design feature (such as sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

During construction, the project would require the delivery of heavy construction equipment and photovoltaic solar components using area roadways, some of which may require transport by oversize vehicles. Heavy equipment associated with these components would not be hauled to/from the site daily, but rather would be hauled in and out on an as-needed basis. Nevertheless, the use of oversize vehicles during construction can create a hazard to the public by limiting motorist views on roadways and by the obstruction of space, which is considered a potentially significant impact. However, the project would be required under existing regulations to obtain California Highway Patrol escorts, as well as coordinate the timing of transport, in oversize load permits from Caltrans and Kern County, as appropriate.

The project would not include a design feature or utilize vehicles with incompatible uses that would create a hazard on the roadways surrounding the project site. Security fencing would be installed around the perimeter of each site, substation, switchyard, and other areas requiring controlled access, prior to commencement of construction, for safety and security purposes. All fence installation requirements would be evaluated, and the best-fit scenario would be incorporated in the site. The fencing would remain for the life of the project. Additionally, the project would not include the development of sharp curves, dangerous intersections or other hazardous design features. The project would be set back from the roadways as required by Kern County Zoning Ordinance. Impacts would be less than significant.

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 and to avoid any potentially hazardous routes. This measure would also ensure that construction-related oversize vehicle loads are in compliance with applicable California Vehicle Code sections and California Street and Highway Codes applicable to licensing, size, weight, load, and roadway encroachment of construction vehicles.

Mitigation Measures

Implementation of **Mitigation Measure MM 4.15-1** would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measure MM 4.15-1**, impacts would be less than significant.

Impact 4.15-4: The project would result in inadequate emergency access.

The project site is located in a rural area with the primary access roads (Backus Road, SR-14, Tehachapi Willow Springs Road, Rosamond Boulevard, and Oak Creek Road) allowing adequate egress/ingress to the site in the event of an emergency. Additionally, as part of the project, additional onsite access roadways (internal to the site) would be constructed. Therefore, the development of the proposed project would not physically interfere with emergency vehicle access or personnel evacuation from the site.

As described above, increased project-related traffic would not alter existing road conditions; therefore, project-related traffic would not affect emergency access to the project site or any other surrounding location. The proposed project would not require closures of public roads, which could inhibit access by emergency vehicles.

The proposed project will be required to comply with all emergency access requirements adopted by the Kern County Fire Department. Emergency vehicle access must be maintained at all times throughout construction activities, in accordance with the County's routine/standard construction specifications. While impacts would be less than significant, **Mitigation Measure MM 4.15-1** would provide further assurances for emergency access. **Mitigation Measure MM 4.15-1** requires the preparation of a Construction Traffic Control Plan that considers access for emergency vehicles to the project site. Internal access roads would be up to 25 feet wide and would be cleared and compacted for travel and access to the solar blocks in accordance with County standards, ensuring emergency access within the site during operations is adequate.

Mitigation Measures

Implementation of **Mitigation Measure MM 4.15-1** would be required.

Level of Significance after Mitigation

With implementation of **Mitigation Measure MM 4.15-1**, impacts would be less than significant.

4.15.5 Cumulative Setting, Impacts, and Mitigation Measures

The potential for cumulative transportation impacts exists where there are multiple projects proposed in an area that have an overlapping construction schedule and/or project operations that could affect similar transportation resources. Projects with overlapping construction schedules and/or operations could possibly result in an elevated contribution to increased traffic throughout the surrounding roadway network; contribute to hazardous roadway conditions; and/or possibly adversely affect emergency access or circulation. A cumulative impact related to transportation could result if a project's incremental effects were combined with impacts of other past, present, or reasonably foreseeable future projects.

A list of cumulative projects is provided in **Chapter 3**, *Project Description*. The cumulative projects are projects that are proposed and in the review process, but not yet fully approved; or projects that have been approved, but not fully constructed or occupied.

Due to the rural nature of the project site and the different schedules for construction among the various projects, project construction combined with other past, present, or reasonably foreseeable future projects

is not anticipated to substantially conflict with circulation patterns or operations, including roadway, bicycle, transit, and pedestrian facilities during construction. The Windstar Upper and Lower BESS Project, the Bullhead Solar Project, and the Apollo Solar Project (Syracuse, Tours, and Sunbow Sites) would include trips on roadways also used by the project; however, the peak construction trips would not coincide with the project's period of peak construction, such that there would not be cumulative impacts to roadway or intersection performance.

At the request of Kern County Public Works Department's Transportation Division, the *Traffic Impact Analysis* (Tetra Tech, 2025) provided as **Appendix K** to this EIR analyzed cumulative traffic associated with the Pacific Steel Group Steel Mill and TNRE Organic Waste to Energy Facility to distribute trips associated with these projects along SR-14, Bacus Road, and Sierra Highway. As presented in Appendix K, roadway segments are anticipated to operate at acceptable LOS B or better and the analyzed intersections are anticipated to operate at acceptable LOS B or better during both peak hours.

Implementation of **Mitigation Measure MM 4.15-1**, requiring a Construction Traffic Control Plan, and **Mitigation Measure MM 4.15-2** would further reduce project-related impacts and ensure that the project would not cumulatively contribute to a significant cumulative impact. Other projects similarly would be expected to require construction traffic control plans, such that cumulative impacts would be less than significant.

Transportation impacts involving a project's VMT are long term and cumulative in nature. Project construction activities, and the construction activities of other cumulative projects, would be temporary and would not result in long-term or permanent changes in VMT. Project operations are estimated to generate minimal vehicle trips. Cumulative impacts from the project during operation, when considered with nearby, reasonably foreseeable planned projects, would be minimal. Since the project would result in a negligible increase of vehicle traffic, the project, in conjunction with the existing, approved, proposed, and reasonably foreseeable projects in the vicinity of the site, would result in a less than significant cumulative impacts.

On the project-level (including the development of the gen-tie line), the proposed project would not include a design feature or utilize vehicles with incompatible uses that would create a hazard on the surrounding roadways, nor would the project result in inadequate emergency access. Implementation of **Mitigation Measure MM 4.15-1**, would further ensure the proposed project's cumulative contribution to emergency access and design hazards would be less than significant.

Mitigation Measures

Mitigation Measures MM 4.15-1 and **MM 4.15-2** shall be implemented. **Mitigation Measure MM 4.15-1** would require the project proponent/operator to ensure 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 and to avoid any potentially hazardous routes. This measure would also ensure that construction-related oversize vehicle loads are in compliance with applicable California Vehicle Code sections and California Street and Highway Codes applicable to licensing, size, weight, load, and roadway encroachment of construction vehicles. **Mitigation Measure MM 4.15-2** would require the project proponent to implement measures limiting peak-hour construction worker vehicle trips during the AM and PM peak hours to minimize potential temporary impacts to intersections during project construction.

Level of Significance after Mitigation

Potential impacts would be less than significant and implementation of **Mitigation Measures MM 4.15-1** and **MM 4.15-2** would further reduce impacts.

Section 4.16

Tribal Cultural Resources

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Section 4.16
Tribal Cultural Resources

4.16.1 Introduction

This section of the EIR provides an assessment of potential impacts related to tribal cultural resources that could result from implementation of the proposed project. The analysis in this section is based on the results included in the *Cultural Resource Phase I Investigation Report, Discovery Solar PV and Storage Project, Kern County, California* (**Appendix E**) and results of the Native American consultation conducted by the County for purposes of compliance with the California Environmental Quality Act (CEQA) requirements prompted by Assembly Bill 52 and Senate Bill 18. Due to the culturally sensitive nature of the information in the cultural report, confidential information has been removed, and a non-confidential version of the technical report is included as **Appendix E** to this EIR (pursuant to California Code of Regulations § 15120(d)).

4.16.2 Environmental Setting

Refer to **Section 4.5**, *Cultural Resources*, of this EIR for further discussion of the tribal cultural resources environmental setting. The Study Area for tribal cultural resources includes the area in which the cultural resources assessment was conducted for the project and encompasses the 7,700-acre project site and gen-tie line, as depicted in **Appendix E**. See **Figure 4.16-1,** *Phase I Cultural Resource Surveyed Area*, for the Phase 1 cultural resource surveyed area.

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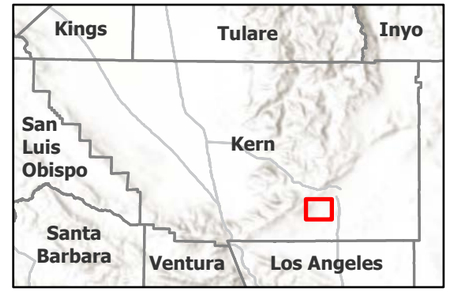
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.16-1
Phase I Cultural Resource Surveyed Area



Surveyed Area

Windhub High-voltage Substation (Existing)

Proposed Project Features

Project Site

Study Area

Other Applicant and/or Affiliate Controlled*

Step-up HV substation

Gen-tie Corridor

*Already approved under separate projects.

N

0 0.25 0.5 1 Miles

Scale is 1:48,000 when printed at 11"x17"

Not for Construction

\\tt.local\GIS\US\CES\Projects\BOT\GIS\PROJECTS\EDSAN_3_SOLAR_1403-0001\CULTURAL\MAPS\Discovery_Cultural_Report_Figures.aprx

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Existing Tribal Cultural Resources

Native American Correspondence, Senate Bill 18 and Assembly Bill 52 Consultation

A Sacred Lands File (SLF) search was requested from the California Native American Heritage Commission (NAHC) for the proposed project. The NAHC responded via a letter dated November 9, 2022, stating that no sacred lands were identified by its database within or near the project. The SLF search from the NAHC is included as an appendix in the cultural resources report prepared for the proposed project (Tetra Tech, 2025).

Pursuant to Assembly Bill 52, formal government-to-government consultation is required by the lead CEQA agency. Coordination and consultation with Native American tribes may provide additional tribal traditional ecological knowledge regarding tribal cultural resources and the treatment of such resources within the Study Area (Public Resources Code [PRC] Section 21074 [a][1][A]-[B]).

On April 10, 2024, the County provided Assembly Bill 52 letters to the following Tribes:

- Torres Martinez Desert Cahuilla Indians
- Twenty-Nine Palms Band of Mission Indians
- Yuhaaviatam of San Manuel Nation
- Tejon Indian Tribe

The Yuhaaviatam San Manuel Nation (YSMN) replied on April 23, 2024, and noted that parts of the project are located in Serrano ancestral territory and that the project is of interest to the Tribe. The YSMN also requested copies of the cultural report, geotechnical report (if required for the project), and project plans illustrating the depth of proposed disturbance. The Tribe also stated the requested documents and information will help the YSMN determine their participation as a consulting party under CEQA, enabling them to actively participate in the project's review and implementation moving forward. The Tribe also noted that if the documents cannot be provided within the Tribe's 30-day response window, the Tribe automatically elects to be a consulting party under CEQA, as stipulated in Assembly Bill 52. The County sent the Tribe a link to the cultural report via email on July 16, 2025. To date, no additional responses have been received.

On September 12, 2025, the Twenty-Nine Palms Band of Mission Indians replied and noted that the project lies within the Chemehuevi Traditional Use Area and, while no known cultural resources are currently identified within the project site, there is a possibility of uncovering surface or buried archaeological materials. The Tribe requests adherence to specific conditions regarding cultural resources in all development plans or entitlement applications. They look forward to working with Kern County but clarify that this letter does not constitute a formal government-to-government consultation. Further communications or meetings may be requested, and contact information for the Tribal Historic Preservation Office was provided for questions.

Pursuant to Senate Bill 18, formal government-to-government consultation is required by the lead CEQA agency (Government Code Section 65352.3 and 65352.4) due to the inclusion of the requested General Plan Amendments (GPAs). The County sent a Senate Bill 18 request to the NAHC for a list of Tribes with

Traditional lands within the Study Area. The NAHC replied on April 29, 2024, and provided the County with a list of Tribes. The County sent out Senate Bill 18 consultation letters to the following NAHC listed Tribes:

- Barbareño/Ventureño Band of Mission Indians
- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation
- Kitanemuk & Yowlumne Tejon Indians
- Morongo Band of Mission Indians
- Northern Chumash Tribal Council
- Quechan Tribe of the Fort Yuma Reservation
- San Fernando Band of Mission Indians
- Serrano Nation of Mission Indians
- Tejon Indian Tribe
- Tule River Indian Tribe
- Yuhaaviatam of San Manuel Nation

The YSMN and County correspondence include the following:

- A response was received from the YSMN on October 11, 2024, stating the Tribe did not see a conflict with the zoning changes. In addition, the Tribe requested an update regarding their request for formal consultation with the lead agency pursuant to CEQA and California PRC 210803.1 and any cultural or geotechnical reports for the project in a previous letter dated April 23, 2024. The County sent the Tribe a link to the cultural report via email on July 16, 2025. To date, no additional responses have been received.
- On October 14, 2025, the County replied to the Tribe and acknowledged receipt of the Senate Bill 18 notification and notes that while the original consultation request under AB 52 was received in April, compliance with Senate Bill 18 was only recently addressed. The project has not advanced much further in the CEQA process as the applicant is working on clarifications. Once the Cultural Report, Geotechnical Report, and disturbance depth plans are received, they will be promptly shared. Further communication is expected soon.
- On July 16, 2025, the County provided the Tribe with a link to the Discovery Solar Cultural Report.
- On August 26, 2025, the Tribe replied regarding receipt of the cultural reports and apologizes for the delayed response. They note that only a small part of the project area is within their Tribe's current territory and inquire whether other Tribes are also consulting on the project and have provided mitigation measures.
- On August 26, 2025, the County replied that the Tejon Indian Tribe have also reviewed the Discovery Solar Cultural Report and has generally concurred with the mitigation measures outlined in the report.

- On August 26, 2025, the YSMN replied and stated they are missing the mitigation measures from the report and requested a copy.
- On August 26, 2025, the County replied that the County had not yet adopted any mitigation measures for the project, but the upcoming Draft EIR will include measures based on those recommended in the report (Section 8.3, Pages 8-10 to 8-13). Feedback on the recommended language in the report is welcome.
- On August 26, 2025, the YSMN replied that the Tribe did not see the recommended management measures and requests that the document containing that information be shared.
- On August 26, 2025, the County provided the Tribe with a link to the Discovery Solar Cultural Report containing the mitigation measures.
- On August 26, 2025, the YSMN replied and acknowledged receipt of the report and stated a portion of the proposed project area falls within Serrano ancestral territory, making it of interest to the Tribe. However, based on current knowledge and the project's nature and location, the YSMN has no concerns about its planned implementation. The YSMN concur with the recommended mitigation measures but will not request to monitor the project. The contact person is available for any further questions.

The Tejon Indian Tribe and County Correspondence includes the following:

- On August 5, 2025, the Tribe recommended Native American Monitoring during all ground disturbance.
- On August 6, 2025, the County thanked the Tribe for comments and stated they would follow up with a call and provided the Tribe with a link to the Discovery Solar Cultural Report.
- On August 6, 2025, the Tribe thanked the County for the report and requested time to review the investigation report and details of each archaeological site before providing additional recommendations. They agree with the mitigation measures outlined in Section 8, specifically MMCUL-1 through MMCUL-5. They also request a copy of the Cultural Resources Treatment Plan when available and express interest in participating in the project's ongoing process.
- On August 13, 2025, the Tribe emphasized that the project area is highly culturally sensitive due to numerous archaeological sites and artifacts present, with the potential for more discoveries during project activities. The landscape may have changed since the last survey conducted over two years ago. The Tribe notes the area’s historical and cultural significance, including nearby archaeological sites, habitation areas, known water sources, village sites, burial sites, and indigenous rock art, reflecting long-term use by Native peoples. They strongly recommend employing Native American Monitoring Services for all ground-disturbing activities and conducting an updated survey before construction. They also suggest a cultural presentation for construction personnel and a curation agreement for any discoveries. The Tribe looks forward to ongoing consultation on the project.
- On August 13, 2025, the Tejon Tribe stated they appreciate the Cultural Report for providing valuable new information. In their updated formal comments, they reaffirm the recommendation for Native American Monitoring due to the many archaeological sites and artifacts in the project

area, acknowledging this is included in the mitigation measures. They request to be kept informed as the project advances and look forward to continued consultation.

The Morongo Band of Mission Indians replied on October 1, 2024, and acknowledges receipt of the letter regarding the project and states that the proposed project is not within the ancestral territory or traditional use area of the Cahuilla and Serrano people of their Tribe. They thank the County for the notification and encourage consultation with Tribes more closely connected to the project's location.

The Fort Yuma Quechan Indian Tribe replied on October 24, 2024, and stated that the Tribe does not wish to comment on this project, and the Tribal Historic Preservation Office defers to more local Tribes on this matter.

4.16.3 Regulatory Setting

Federal

There are no applicable federal regulations for this issue area.

State

Native American Heritage Commission

PRC Section 5097.91 established the NAHC, the duties of which include inventorying places of religious or social significance to Native Americans and identifying known graves and cemeteries of Native Americans on private lands. PRC Section 5097.98 specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

Assembly Bill 52 and Related Public Resources Code Sections

Assembly Bill 52 was approved by California State Governor Edmund Gerry "Jerry" Brown, Jr. on September 25, 2014. The act amended California PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) will be filed on or after July 1, 2015. The primary intent of Assembly Bill 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as tribal cultural resources.

Under PRC Section 21074, (a) tribal cultural resources are:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either of the following:
   (A) Included or determined to be eligible for the inclusion in the CRHR, or;
   (B) Included in a local register of historical resources as defined by subdivision (k) of Section 5020.1 (designated or recognized historically significant by a local government pursuant to local ordinances or resolution).

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the CEQA *Guidelines*, which was approved by the Office of Administrative Law on September 27, 2016.

PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency's formal notification and the lead agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)).

If a California Native American Tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American Tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND (PRC Section 21082.3(d)(2) and (3)).

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American Tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the Tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

California Senate Bill 18

Senate Bill 18 (Statutes of 2004, Chapter 905), which went into effect January 1, 2005, requires cities and counties to conduct consultations with California Native American tribes before the local officials adopt or amend their general plans and to provide notice to tribes at certain key points in the planning process. The intent is to "provide California Native American Tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places" (Governor's Office of Planning and Research, 2005). These consultations are for preserving or mitigating impacts to Native American historic, cultural, sacred sites, features, and objects located within the city or county. The city or county must protect the confidentiality of information about the specific identity, location, character, and use of those places, features, and objects, consistent with the General Plan Guidelines issued by the Governor's Office of Planning and Research.

According to the Tribal Consultation Guidelines: Supplement to General Plan Guidelines (Governor's Office of Planning and Research, 2005), the following are the contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).
- In accordance with Senate Bill 18 and the California Tribal Consultation guidelines, the appropriate native groups were consulted with respect to the project's potential impacts on Native American places, features, and objects.

California Native American Graves Protection and Repatriation Act of 2001

Codified in the California Health and Safety Code Sections 8010-8030, the California Native American Graves Protection and Repatriation Act (Cal NAGPRA) is consistent with the federal NAGPRA. Intended to "provide a seamless and consistent state policy to ensure that all California Indian human remains and cultural items be treated with dignity and respect," Cal NAGPRA also encourages and provides a mechanism for the return of remains and cultural items to lineal descendants, Section 8025 established a Repatriation Oversight Commission to oversee this process. The Cal NAGPRA also provides a process for non-federally recognized tribes to files claims with agencies and museums for repatriation of human remains and cultural items.

California Health and Safety Code, Sections 7050 through 7053

California Health and Safety Code, Section 7050.5, declares that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground disturbance must cease, and the county coroner must be notified. Sections 7052 and 7052.5 establish a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives or to dispose as permitted by law. Section 7053 makes it a misdemeanor to arrest, attach, detain, or claim to detain any human remains for any debt or demand, or upon any pretended lien or charge, or to fail to release any human remains, the personal effects, or any certificate or permit required under Division 102 (commencing with Section 102100) upon the delivery of authorization for the release signed by the next of kin or by any person entitled to the custody of the remains.

Local

Components of the two local land use plans (the Kern County General Plan and the Soledad Mountain Elephant Butte Specific Plan) related to tribal cultural resources are described in **Section 4.5.4**, *Cultural Resources – Regulatory Setting*, of this EIR. There are no recommendations, analysis, or mitigation measures in the Soledad Mountain Elephant Butte Specific Plan that address tribal cultural resources.

4.16.4 Impacts and Mitigation Measures

Methodology

The project's potential impacts to tribal cultural resources have been evaluated using a variety of means, including an SLF search conducted by the NAHC, tribal notification letters in accordance with Assembly Bill 52 and Senate Bill 18, and cultural resources assessments (**Appendix E**). On April 10, 2024, Kern County sent notification letters to Native American groups on the County's Master List for Kern County to solicit information regarding the presence of tribal cultural resources. Using these methods and professional judgment, potential impacts were analyzed according to CEQA significance criteria described below.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project could potentially have a significant adverse effect on tribal cultural resources.

A project would have a significant impact on tribal cultural resources if it would:

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

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

    b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources

Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Project Impacts

Impact 4.16-1a: The project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

The SLF search conducted by the NAHC did not indicate the presence of sacred lands within the Study Area. Furthermore, the County's government-to-government consultation efforts with interested Native American groups conducted pursuant to Assembly Bill 52 and Senate Bill 18 did not result in the identification of any tribal cultural places under Senate Bill 18 or tribal cultural resources under CEQA within the Study Area.

As described in **Section 4.5.5**, *Cultural Resources – Regulatory Setting*, of this EIR, the Study Area has the potential to contain previously unknown archaeological deposits that may underlie the ground surface. Should buried archaeological deposits be uncovered during project implementation, and should such resources qualify as tribal cultural resources under CEQA, they could be subject to significant impacts. To reduce potential impacts to less than significant, **Mitigation Measures MM 4.5-1** through **MM 4.5-5** require cultural resources, including tribal cultural resources, sensitivity training for construction workers; establishment of an exclusion area around archaeological and tribal cultural resource sites for avoidance or, if sites cannot be avoided, implementation of a subsurface testing plan, if appropriate, to evaluate California Register of Historical Resources eligibility status, and development of additional mitigation strategies in consultation with a Native American monitor for sites that qualify as tribal cultural resources under CEQA; archaeological and Native American monitoring during construction; and appropriate treatment of unearthed archaeological and tribal cultural resources during construction.

There is no indication, either from research results or the archaeological survey, that any particular location within the Study Area has been used for human burial purposes in the recent or distant past. In the event that human remains are inadvertently discovered during project construction activities, the human remains could be damaged or disturbed, which would be a significant impact. Existing regulations identified as **Mitigation Measure MM 4.5-5** would ensure that any human remains encountered during project construction are properly treated, thus reducing potential impacts to a less-than-significant level.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5** would be required (see **Section 4.5**, *Cultural Resources*, of this EIR for full mitigation measure text).

Level of Significance

With implementation of the Mitigation Measures **MM 4.5-1** through **MM 4.5-5**, impacts would be less than significant (see **Section 4.5**, *Cultural Resources*, of this EIR).

Impact 4.16-1b: The project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

As noted above, no tribal cultural resources were identified as part of the County's government-to-government notification and consultation efforts with interested Native American groups conducted pursuant to Assembly Bill 52 and Senate Bill 18.

Although no tribal cultural resources have been identified within or immediately adjacent to the Study Area based on the *Cultural Resource Phase I Investigation Report* (**Appendix E**) prepared for this project, the Tejon Indian Tribe stated in their formal response dated August 13, 2025, the following cultural sensitivity characterization of the project site (note: statement paraphrased to omit confidential tribal cultural resource locational information):

> *Indigenous groups are known to have hunted sheep near the east side of the project, near Soledad Mountain. Archaeologists have recently discovered ancestral remains and much archaeological material on a nearby project. There are multiple precontact archaeological habitation sites and numerous archaeological sites in the region. The area includes indigenously known water sources, precontact village sites, and precontact sites with indigenous rock art and artifacts. The region is recognized as culturally sensitive by the Tejon Tribe due to its indigenous historical significance and the presence of numerous precontact archaeological sites.*

As noted previously, the commenter reviewed the submitted *Cultural Resource Phase I Investigation Report*, as well as the redacted confidential materials, and concurred with the proposed mitigation measures listed therein. Based on the findings within the report and the responses received in consultation with affected tribes, the proposed project is not expected to cause a substantial adverse change in the significance of a tribal cultural resource. Impacts would be less than significant. Therefore, implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5** included in **Section 4.5**, *Cultural Resources*, of this EIR, would further reduce potential impacts to tribal cultural resources.

4.16.5 Cumulative Setting, Impacts, and Mitigation Measures

The geographic scope for cumulative cultural resources impacts is considered the Antelope Valley. This geographic scope of analysis is appropriate because the tribal cultural resources within the region are expected to be similar to those that may occur within the Study Area because of their proximity, their similarities in environments and landforms, and their location within the same Native American tribal territories. Further, this is a large enough area to encompass any effects of the proposed project on tribal cultural resources that may combine with similar effects caused by other past, current, and reasonably foreseeable future projects, and provides a reasonable context wherein cumulative actions could affect cultural resources. As shown in **Figure 3-18**, *Cumulative Projects*, there are cumulative projects proposed, approved, or recently constructed in the Antelope Valley vicinity.

Development of the proposed project, in combination with other projects in the area, has the potential to contribute to a cumulatively significant tribal cultural resources impact due to the potential loss of tribal cultural resources unique to the region. However, as discussed above, no tribal cultural resources have been identified in the Study Area and the proposed project would not have a significant impact on tribal cultural resources. Therefore, the proposed project's incremental effect is not cumulatively considerable when viewed in connection with the effects of other closely related past projects, the effects of other current projects and the effects of probable future projects; thus, the proposed project would not have a cumulatively considerable contribution to impacts to tribal cultural resources.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5** would be required (see **Section 4.5**, *Cultural Resources,* of this EIR for full mitigation measure text).

Level of Significance

With implementation of **Mitigation Measures MM 4.5-1** through **MM 4.5-5**, cumulative impacts would be less than significant.

Section 4.17

Utilities and Service Systems

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Section 4.17
Utilities and Service Systems

4.17.1 Introduction

This section of the EIR describes the affected environment and regulatory setting of the project pertaining to demand for operational utilities (water, stormwater control, wastewater, and solid waste disposal). This section describes existing infrastructure and levels of service and evaluates whether any improvements are necessary to accommodate the project. This section is based, in part, on public information pulled from multiple online sources and published documents, Will-serve letters provided by RMR Water Trucks and Rental Equipment, Inc. (RMR) and the Mojave Public Utility District (**Appendix L2**) (RMR, 2024; MPUD, 2024), the Preliminary Hydrology Study (**Appendix I**) (Westwood, 2025), and the Water Supply Assessment (**Appendix L1**) (Tetra Tech, 2025) of this Draft EIR and incorporated by reference herein.

4.17.2 Environmental Setting

Water Supply

There are typically three sources of supply water: (1) natural sources, (2) human-made sources, and (3) reclamation. Natural sources include rivers, lakes, streams, and groundwater stored in aquifers. Humanmade sources include runoff water that is treated and stored in reservoirs and other catchment structures. Reclaimed water is wastewater that has been conveyed to a treatment plant and then treated to a sufficient degree that it may again be used for certain uses (such as irrigation). However, reclaimed water is not potable (drinkable) and must be conveyed in a separate system to ensure that there is no possibility of direct human consumption.

The project site is located in an unincorporated area in southeastern Kern County (County) within the boundaries of the Antelope Valley-East Kern Water Agency (AVEK) service area, which is within the Fremont Valley Groundwater Basin (FVGB) and the Antelope Valley Groundwater Basin (AVGB). AVEK is a wholesaler of State Water Project (SWP) supplies to potable water purveyors, such as the Mojave Public Utility District (MPUD) and California City, and a retail provider of untreated SWP supplies to agricultural users (AVEK, 2021). While the project site is within the boundaries of AVEK's service area, there is no public water system that currently supplies water to the project site or general area. The project site is located on unincorporated lands away from urban areas and, therefore, is not covered by an active Urban Water Management Plan (UWMP). However, because the project site is located within the same groundwater basin as California City, FVGB, which does have a UWMP, assessment of available water supply incorporates information from the California City UWMP (California City, 2018).

The project site is not located within the service area of a public water system; however, it is located within the service area of a local water wholesaler, AVEK, whom MPUD and California City can rely upon as a source of supplementary water in addition to what they produce from groundwater wells within their service areas.

The project site is currently generally undeveloped land that has been historically used for grazing operations as described in **Section 4.2**, *Agriculture and Forestry Resources*, of this EIR. There is minimal existing water demand onsite and the native vegetation subsists on natural rainfall.

Groundwater Supply

The project site is located in southeastern Kern County at the southern end of the FVGB and the northern end of the AVGB (see **Figure 4.10-2**, *Groundwater Basins*). The FVGB is bounded to the south and southeast by the AVGB; to the east by crystalline rocks of Red Mountain, the Rand Mountains, Castle Butte, the Bissell Hills, and the Rosamond Hills; and to the west and north by the Sierra Nevada Mountains, the Tehachapi Mountains, and the El Paso Mountains (DWR, 2021; Tetra Tech, 2025). The AVGB is bounded on the northwest by the Garlock fault zone at the base of the Tehachapi Mountains and on the southwest by the San Andreas fault zone at the base of the San Gabriel Mountains (DWR 2004). The boundary between the FVGB and the AVGB occurs along a groundwater divide approximated by a line connecting the mouth of Oak Creek through Middle Butte to the exposed basement rock near Gem Hill and to the southeast of California City (Tetra Tech, 2025; see Figure 4), approximately 1.5 miles southwest of Southern California Edison's (SCE) existing Windhub Substation. For a discussion of FVGB characteristics, please refer to **Section 4.10**, *Hydrology and Water Quality*, of this EIR.

Groundwater Basin Adjudication

Prior to the California Sustainable Groundwater Management Act (SGMA), the primary method for solving groundwater disputes and protecting groundwater basins was litigation. When over-pumping led to a crisis-like seawater intrusion or chronic overdraft, people had little choice but to file a lawsuit—called an adjudication—in which all rights to water in a basin could be defined by a court. The SGMA now ensures that basins can be managed sustainably through local management plans. In October 2015, Governor Brown signed Assembly Bill 1390, which is legislation that provides a comprehensive adjudication process for all groundwater basins that are regulated under the SGMA. Groundwater basins that have been adjudicated by court decision are subject to management by a court-approved Watermaster.

As stated above, the project site is within the FVGB. The FVGB is not subject to a court adjudication. Groundwater pumping within the FVGB peaked in the 1950s with the cultivation of agricultural crops such as alfalfa, pasture, and field crops, then declined as greater pumping lifts and increasing energy costs made the use of groundwater in the area less economical for agricultural uses. The delivery of SWP water to the region starting in 1972 also decreased farmers' reliance on groundwater for irrigation. Agriculture within the FVGB largely ceased by the late 1970s. In more recent years, groundwater pumping has lessened because of reduced agricultural production in the area and the availability of imported State Water Project (SWP) supplies. Groundwater within the FVGB is currently extracted to support domestic, industrial, and renewable energy and limited municipal demands (Tetra Tech, 2025).

Based on low population density, negative growth projections, low numbers of private and public supply wells, and the lack of irrigated agriculture within the FVGB, it is designated as a low-priority basin by the California Department of Water Resources (DWR). As a low-priority basin, the FVGB is not required to develop a groundwater sustainability plan in accordance with the SGMA; however, California City, MPUD, and other regional stakeholders have partnered in the development of a Fremont Valley Basin Groundwater Management Plan to promote regional groundwater sustainability. The FVGB Groundwater Management Plan (California City, 2018) provides supporting information used in the Fremont Basin Integrated Regional Water Management Plan (IRWMP). The IRWMP discusses overall water supply reliability within the Fremont Basin region, including the integrated use of surface and groundwater supplies and the

interrelationship of the Fremont Basin with the AVEK's integrated management of surface and groundwater supplies within the Antelope Valley Basin to the south. The project would not use the AVGB as a water supply source and, therefore, it is not discussed further in this section.

Wastewater

The Kern Sanitation Authority provides maintenance and wastewater service for the County. The project site is currently generally undeveloped, and there are three unconfirmed locations of septic systems or wastewater infrastructure within the project site boundary. Any wastewater generation occurring as part of project operations would be collected within individual portable toilets that would be emptied at an existing, approved, offsite disposal site as part of regular, ongoing project-related maintenance. Onsite operations and maintenance (O&M) facilities may pursue the installation of an onsite septic system, which would be permitted in accordance with the Kern County Public Health Environmental Health Division permitting process.

Stormwater Drainage

As stated previously, the project site is generally undeveloped, with the exception of dirt roads and a few scattered structures present. Therefore, stormwater drainage onsite follows natural drainage patterns on the land surface. On the project site and in the surrounding area, ephemeral drainages convey stormwater from the Tehachapi Mountain foothill areas to the desert floor. During rainfall events that produce overland flow, runoff concentrates in the defined channels of the Tehachapi Mountains and/or stormwater conveyance systems within/around the Town of Rosamond, proximal to the project site, towards Willow Springs and Rosamond Dry Lake, an endorheic basin (i.e., an enclosed basin with no drainage outlet) approximately 10miles southeast of the project site. **Figure 4.10-1**, *Surface Hydrology and Drainage*, shows natural drainage patterns across the project site and vicinity.

Stormwater drainage within the project site is limited to poorly defined/shallow swales and discontinuous ephemeral channels. Throughout the project site, drainage features are scattered and discontinuous. This suggests a natural tendency for surface runoff events to be both brief and infrequent, with rapid infiltration into the sandy substrate, and/or shallow ponding in low-lying areas quickly followed by high evaporation.

Solid Waste

Solid waste generally refers to garbage, refuse, sludge, and other discarded solid materials that come from residential, industrial, and commercial activities. Construction, demolition, and inert wastes are also classified as solid waste. Such wastes include nonhazardous building materials, such as asphalt, concrete, brick, drywall, fencing, metal, packing materials, pallets, pipe, and wood. The general waste classifications used for California waste management units, facilities, and disposal sites are outlined below. Nonhazardous solid waste consists of organic and nonorganic solid, semi-solid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes, and other discarded waste, provided that such wastes do not contain hazardous materials or soluble pollutants in concentrations that would exceed applicable water quality objectives or cause a degradation of waters of the State.

California State law regulates the types of waste that can be disposed of at the different classes of landfills. Class I landfills may accept hazardous and nonhazardous wastes. Class II landfills may accept designated and nonhazardous waste, and Class III landfills may accept nonhazardous waste.

Landfills

The Kern County Public Works Department operates seven active landfills throughout the County. Landfills are located in Bakersfield, Boron, Mojave-Rosamond, Ridgecrest, Shafter-Wasco, Taft, and Tehachapi. The closest operational landfill to the project site has been identified as the Mojave-Rosamond Recycling and Sanitary Landfill, located approximately 5 miles to the east of the project. This Class III landfill accepts waste from construction and demolition and agricultural, industrial, and mixed municipal sources (CalRecycle, 2019a; County of Kern, 2023a). The other nearby landfill is the Tehachapi Sanitary Landfill, which is located approximately 10 miles northwest of the project area. The Tehachapi Sanitary Landfill is located in Tehachapi, over the Tehachapi Mountains. The Tehachapi Sanitary Landfill is also a Class III Landfill (CalRecycle, 2019b; County of Kern, 2023b). The location of the landfills expected to serve the proposed project, their capacity, and their anticipated closure dates are presented in **Table 4.17-1**, *Summary of Kern County Public Works Landfills*.

TABLE 4.17-1: SUMMARY OF KERN COUNTY PUBLIC WORKS LANDFILLS

Landfill	Maximum Permitted Capacity	Remaining Capacity (cubic yards)	Maximum Permitted Throughput (tons/day)	Anticipated Year of Closure
Mojave-Rosamond 400 Silver Queen Road, Mojave	78,000,000	76,310,297	3,000	2123
Tehachapi 12001 Tehachapi Boulevard, Tehachapi	4,000,000	522,298	1,000	Unknown

Sources: CalRecycle, 2019a; CalRecycle, 2019b; County of Kern, 2023b.

Electricity, Natural Gas, and Telecommunications

There are existing electrical and telecommunications facilities that extend through the site. The project proponent will work with the utility providers to obtain any needed agreements with those providers to ensure no impacts to their existing facilities would occur. In addition, the project would connect to telecommunication fiberoptic lines owned and managed by AT&T or an alternative provider. AT&T and SCE operate existing distribution facilities in the project area along with larger facilities consisting of the 500-kilovolt (kV) SCE Tehachapi Renewable Transmission Project, SCE Whirlwind Substation, and SCE Windhub Substation. The project would interconnect via new and existing gen-tie facilities to the SCE Windhub Substation.

4.17.3 Regulatory Setting

Federal

There are no applicable federal regulations for this issue area.

State

California Energy Commission

The California Energy Commission (CEC) is the state's primary energy policy and planning agency. Created in 1974, the CEC has five major responsibilities: forecasting future energy needs and keeping historical energy data, licensing thermal power plants 50 megawatts (MW) or larger, promoting energy efficiency through appliance and building standards, developing energy technologies, licensing renewable energy projects through its opt-in permitting program, and planning for and directing the state response to energy emergencies.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies, in addition to authorizing video franchises. In 1911, the CPUC was established by Constitutional Amendment as the Railroad Commission. In 1912, the legislature passed the Public Utilities Act, expanding the Commission's regulatory authority to include natural gas, electric, telephone, and water companies as well as railroads and marine transportation companies. In 1946, the Commission was renamed the CPUC. It is tasked with ensuring that safe, reliable utility service is available to consumers, setting retail energy rates, and protecting against fraud.

California Department of Resources Recycling and Recovery

California Department of Resources Recycling and Recovery (CalRecycle) is the state agency designated to oversee, manage, and track California's 76 million tons of waste generated each year. It is one of the six agencies under the umbrella of the California Environmental Protection Agency. CalRecycle administers and provides oversight for all of California' State-managed, nonhazardous waste handling and recycling programs. CalRecycle provides training and ongoing support for local enforcement agencies that regulate and inspect California's active and closed solid waste landfills (CalRecycle, 2023).

State Water Resources Control Board and Regional Water Quality Control Board

The primary responsibility for the protection of water quality in California rests with the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCB). The SWRCB sets statewide policy for implementation of state and federal laws and regulations. The RWQCBs adopt and implement Water Quality Control Plans (Basin Plans), which recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities. The project site is within the jurisdiction of the Lahontan RWQCB.

California Department of Water Resources

The DWR is responsible for protecting, conserving, developing, and managing much of California's water supply. These duties include: preventing and responding to floods, droughts, and catastrophic events; informing and educating the public on water issues; developing scientific solutions; restoring habitats; planning for future water needs, climate change impacts, and flood protection; constructing and maintaining facilities; generating power; ensuring public safety; and providing recreational opportunities.

Integrated Solid Waste Management Act of 1989 or Assembly Bill 939

Pursuant to the California Integrated Solid Waste Management Act of 1989 (Public Resources Code [PRC] 40050, et seq.) or Assembly Bill 939, all cities in California are required to reduce the amount of solid waste disposed in landfills. Assembly Bill 939 required a reduction of 25 percent by 1995 and 50 percent by 2000. Contracts that include work that will generate solid waste, including construction and demolition debris, have been targeted for participation in source reduction, reuse, and recycling programs. The contractor is urged to manage solid waste generated by the work to divert waste from disposal in landfills (particularly Class III landfills) and maximize source reduction, reuse, and recycling of construction and demolition debris.

Assembly Bill 939 also required cities and counties to prepare solid waste planning documents (e.g., the Source Reduction and Recycling Element, the Household Hazardous Waste Element, and the Non-disposal Facility Element). All three of these documents, as well as the Integrated Waste Management Plan, approved February 1998 by the California Integrated Waste Management Board (now CalRecycle), have been approved for Kern County. The Kern County Integrated Waste Management Plan is the long-range planning document for landfill facilities.

Assembly Bill 341

Since the passage of Assembly Bill 939, diversion rates in California have been reduced to approximately 65 percent, the statewide recycling rate is approximately 50 percent, and the beverage container recycling rate is approximately 80 percent. In 2011, the State passed Assembly Bill 341, which established a policy goal that a minimum of 75 percent of solid waste must be reduced, recycled, or composted by the year 2020. The State provided the following strategies to achieve that 75 percent goal:

1. Moving organics out of the landfill;
2. Expanding the recycling/manufacturing infrastructure;
3. Exploring new approaches for state and local funding of sustainable waste management programs;
4. Promoting state procurement of post-consumer recycled content products; and
5. Promoting extended producer responsibility.

To achieve these strategies, the State recommended legislative and regulatory changes, including mandatory organics recycling, solid waste facility inspections, and revising packaging. With regard to construction and demolition, the State recommended an expansion of California Green Building Code standards that incentivize green building practices and increase diversion of recoverable construction and demolition materials. Current standards require 65 percent recycling, and salvage for reuse of nonhazardous construction and demolition waste. The State also recommends promotion of the recovery of construction and demolition materials suitable for reuse, compost, or anaerobic digestion before residual wastes are considered for energy recovery.

Senate Bills 610 and 221

Passed in 2001, Senate Bill 610 and Senate Bill 221 are companion measures that seek to promote more collaborative planning among local water suppliers and cities and counties. They require that water supply assessment occur early in the land use planning process for all large-scale development projects. If groundwater is the proposed supply source, the required assessments must include detailed analyses of historic, current, and projected groundwater pumping and an evaluation of the sufficiency of the groundwater basin to sustain a new project's demands. They also require an identification of existing water entitlements, rights, and contracts and a quantification of the prior year's water deliveries. In addition, the supply and demand analysis must address water supplies during single and multiple dry years presented in 5-year increments for a 20-year projection. In accordance with these measures, a Water Supply Assessment (**Appendix L1**) was prepared for the proposed project as it is an industrial use of more than 40 acres (California Water Code Section 10912).

California Solid Waste Reuse and Recycling Access Act of 1991 or Senate Bill 1327

The California Solid Waste Reuse and Recycling Access Act of 1991 (PRC Chapter 18) identified a lack of adequate areas for collecting and loading recyclable materials, resulting in a significant impediment to diverting solid waste. This act requires state and local agencies to address access to solid waste for source reduction, recycling, and composting activities. Each local agency must adopt an ordinance related to adequate areas for collecting and loading recyclable materials for development projects.

California Water Code Section 13260

California Water Code Section 13260 requires any person who discharges waste, other than into a community sewer system, or proposes to discharge waste that could affect the quality of waters of the State, to submit a report of waste discharge to the applicable RWQCB. The project is within the jurisdiction of the Lahontan RWQCB.

Local

Construction and operation of the solar facility would be subject to policies and regulations contained within the general and specific plans, including the Kern County General Plan, Kern County Zoning Ordinance, and Kern County Code of Building Regulations, which include policies, goals, and implementation measures related to utilities and service systems. The policies and implementation measures in the Kern County General Plan related to utilities and service systems that are applicable to the project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development, such as the project. These measures are not listed below, but, as stated in **Chapter 2**, *Introduction*, all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

California Green Building Code

As part of compliance with the State of California Green Building Code Requirements (known as CALGreen) that took effect beginning January 2011, Kern County implemented the following construction waste diversion requirements:

- Submittal of a Construction Waste Management Plan prior to project construction for approval by the Kern County Building Department;
- Recycling and/or reuse of a minimum 50 percent of construction and demolition waste; and
- Recycling or reuse of 100 percent of tree stumps, rocks, and associated vegetation and soils resulting from land clearing.

Kern County Integrated Waste Management Plan

The Kern County Public Works Department is required by the State to plan and implement waste management activities and programs in the County's unincorporated area to ensure compliance with Assembly Bill 939 and subsequent State mandates. The Kern County Integrated Waste Management Plan includes a Reduction and Recycling Element, Household Hazardous Waste Element, and Non-disposal Facility Element. The Plan was approved February 1998 by the California Integrated Waste Management Board (now CalRecycle). The Kern County Integrated Waste Management Plan is the long-range planning document for landfill facilities.

Fremont Basin Integrated Regional Water Management Plan

The Fremont Basin IRWMP is a joint water management group, developed to provide planning for the Fremont Valley Groundwater Basin. It was formed in October of 2014 to include the following agencies (collectively referred to as a Regional Water Management Group or RWMG): City of California City, the Mojave Public Utilities District, and the Antelope Valley-East Kern Water Agency. The RWMG has funded and provided leadership and guidance for IRWM planning and implementation in the FVGB. The Regional objectives of the Fremont Basin IRWMP include the following:

- How to increase regional water supply reliability to meet demands;
- How to ensure sustainable use of the Fremont Valley Groundwater Basin;
- How to provide drinking water that meets regulatory requirements and customer needs;
- How to protect water quality in groundwater basins in the region;
- How to reduce negative impacts associated with stormwater;
- How to support water needs of open space/recreational/migratory habitat areas;
- How to support agricultural land uses;
- How to improve integrated land uses planning to support water management;
- How to mitigate climate change.

The proposed project site is located partially within the FVGB and anticipates water use solely from this basin for project use (California City, 2019).

Antelope Valley Integrated Regional Water Management Plan

The Antelope Valley IRWMP is a joint water planning effort aimed at ensuring water supply reliability for the Antelope Valley Region, undertaken by agencies that joined to form a Regional Water Management Group, including the following: AVEK Water Agency, Antelope Valley State Water Contractors Association, City of Lancaster, City of Palmdale, Littlerock Creek Irrigation District, Los Angeles County Sanitation District Nos. 14 and 20, Los Angeles County Waterworks District No. 40, Palmdale Water

District, Quartz Hill Water District, and Rosamond Community Services District. These agencies have collectively defined a water resource management plan in the Antelope Valley IRWMP, which describes a course of action to meet the expected demands for water within the entire Antelope Valley Region through 2040.

The primary goals of the Antelope Valley IRWMP are to address the following:

- How municipal and industrial (M&I) purveyors can reliably provide the quantity and quality of water that will be demanded by a growing population;
- Options to satisfy agricultural users' demand for reliable supplies of reasonable cost irrigation water; and
- Opportunities to protect and enhance the current water resources (including groundwater) and the environmental resources within the Antelope Valley Region (AVIRWMG, 2019).

The proposed project site is located within the planning area for the Antelope Valley IRWMP. However, the focus of the plan is on the Antelope Valley rather than the Fremont Valley because the AVGB is subject to the court adjudication for groundwater rights, is under greater development pressure, and is expected to face greater challenges with respect to water supply than the northern portion of the IRWMP area within the Fremont Valley.

Antelope Valley-East Kern Water Agency Urban Water Management Plan

The AVEK Water Agency adopted an updated UWMP in 2021. AVEK delivers California SWP water used by customers in lieu of or in addition to local groundwater resources. AVEK constructed potable groundwater wells in 2015. Delivery of SWP can be unreliable and is dependent upon multiple factors, such as climatic variations and other users of SWP water; therefore, to ensure water supply reliability, AVEK has established use of supply enhancement programs, such as groundwater banking in the Antelope Valley Groundwater Basin and conjunctive water use (AVEK, 2021).

The project area is located within AVEK's service area, which is a wholesale water supplier to utilities and local government agencies, including MPUD and California City. Therefore, the project area is addressed in the UWMP of the wholesaler. MPUD is included in the 2021 AVEK UWMP and was given an expected future allocation from AVEK of 84 acre-feet per year (AFY) through 2040 (AVEK, 2021).

Kern County Water Wells Program

The Kern County Water Wells Program issues permits to construct, reconstruct, and destroy water wells and evaluates the construction and water quality of existing water wells. It reviews and approves applications for new wells and issues associated permits (Kern County, 2025).

Kern County Public Health Services Onsite Wastewater Treatment System Permitting

The Kern County Public Health Services Department is responsible for permitting, inspecting, and approving onsite wastewater treatment systems, including septic tank wastewater disposal systems. The agency provides leach line requirements, seepage pit requirements, percolation testing standards, and other regulations for land development related to wastewater treatment systems.

Kern County Public Works Department Recycling Programs

The Kern County Public Works Department administers or sponsors the following recycling programs, which contribute toward meeting State-mandated solid waste diversion goals to achieve 75 percent recycling, composting, or source reduction of solid waste by 2020:

- Recycling programs at landfills to recycle or divert a wide variety of products, such as wood waste, cathode ray tubes, tires, inert materials, appliances, etc.
- Drop-off recycling centers for household recyclables. The county- and the city-operated drop-off recycling centers, which are located in the unincorporated metropolitan area and the city, may be used by both county and city residents.
- Financial assistance for operation of the City of Bakersfield Green Waste Facility.
- The Kern County Special Waste Facility for the disposal of household hazardous waste. Services are provided to all Kern County residents.
- Semi-annual "bulky waste" collection events, which are held in the Bakersfield area and available to both county and city residents (co-sponsor).
- Christmas tree recycling campaign (participates jointly with the City of Bakersfield).
- Telephone book recycling program (co-sponsors with Community Clean Sweep).
- Community Clean Sweep summer workshops called "Trash to Treasure," which educate children about recycling and other Kern County Waste Management Department programs (sponsor).
- An innovative elementary school program called the "Clean Kids Hit the Road Puppet Show" (operates in collaboration with Community Clean Sweep).
- Recycling trailers for churches, schools, and nonprofit organizations.

Kern County General Plan

1.4 Public Facilities and Services

Policies

Policy 1: New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.

Policy 3: Individual projects will provide availability of public utility service as per approved guidelines of the serving utility.

Implementation Measures

Measure C: Project developers shall coordinate with the local utility service providers to supply adequate public utility services.

Measure D: Involve utility providers in the land use and zoning review process.

1.10 General Provisions, 1.10.1 Public Services and Facilities

Policies

Policy 9: New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure which it generates and upon which it is dependent.

Policy 15: Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the CEQA documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development.

Policy 16: The developer shall assume full responsibility for costs incurred in service extension or improvements that are required to serve the project. Cost sharing or other forms of recovery shall be available when the service extensions or improvements have a specific quantifiable regional significance.

Implementation Measures

Measure E: All new discretionary development projects shall be subject to the Standards for Sewage, Water Supply and Preservation of Environmental Health Rules and Regulations administered by the County's Public Health Services Department. Those projects having percolation rates of less than five minutes per inch shall provide a preliminary soils study and site specific documentation that characterize the quality of upper groundwater in the alternative septic systems would adversely impact groundwater quality. If the evaluation indicated that the uppermost groundwater at the proposed site already exceeds groundwater quality objectives of the Regional Water Quality Control Board or would if the alternative septic system is installed, the applicant would be required to supply sewage collection, treatment, and disposal facilities.

Soledad Mountain Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. The recommendations, analysis and implementation measures in the Soledad Mountain Elephant Butte Specific Plan for utilities applicable to the project are provided below. The Soledad Mountain Elephant Butte Specific Plan contains additional recommendations, analysis, and implementation measures that are more general in nature and are not specific to developments such as this project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Soledad Mountain Elephant Butte Specific Plan are incorporated by reference.

Conservation

Item 1. Conservation, Development, and Utilization of Natural Resources

Including:

a) Underground waters
b) Surface waters
c) Forests (not applicable)
d) Vegetation and soils (not applicable)

e) Rivers, creeks, and streams
f) Fish and wildlife (not applicable)

Recommendation a) Underground Waters - The quality and quantity of underground waters shall not be degraded.

b) Surface Waters - None in the area.

e) Rivers, Creeks, and Streams - None in the area.

Analysis The Developer reports that the underground water supply will be adequate to serve the development. Should overdraft occur in the future, rationing could be necessary, or annexation to the Mojave Public Utility District may be considered.

Implementation a) Quality and quantity of underground water supply shall be monitored by the appropriate agency.

b) None necessary.

d) Vegetation and soils - All existing vegetation that must be cleared for building sites shall be removed from the site prior to completion of construction. Preservation of native plant life pursuant to Item C-2 herein.

e) None necessary.

Item 2. Standards for Flood Control

Recommendation All residential properties shall be free from flooding.

Analysis Most flood control problems will be solved in accordance with the requirements of the Public Works Department. All subdivisions should come under this control.

Implementation Compliance with the requirements of the Public Works Department.

Item 3. Standards for Prevention and Control of Pollution of Rivers, Streams, and Creeks

Recommendation None necessary.

Analysis There are no bodies of running water within the Plan boundaries.

Item 4. Standards of Protection of Watershed Areas

Recommendation No watershed area shall be degraded as a result of a development within the area.

Analysis Review of watersheds is made in conjunction with drainage control and water quality control. Standards have been established.

Implementation Compliance with the existing standards of the Regional Water Quality Control Board and the Public Works Department.

4.17.4 Impacts and Mitigation Measures

Methodology

Potential impacts to water supply, wastewater, and stormwater associated with construction and operation of the proposed project were evaluated qualitatively and quantitatively using the Water Supply Assessment

(**Appendix L1**; Tetra Tech, 2025), will-serve letters (**Appendix L2**; RMR, 2024 and MPUD, 2024), the Preliminary Hydrology Study (**Appendix I**; Westwood, 2025), and a variety of other resources, including multiple online sources and published documents. In addition, current data obtained from Kern County and the State of California about the capacity of landfills was used to identify potential solid waste impacts. The evaluation of potential impacts is based on professional judgment, analysis of the County's land use policies, and significance criteria established in Appendix G of the CEQA *Guidelines*, which the County has determined appropriate for the EIR.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project could potentially have a significant adverse effect on utilities and service systems.

A project could have a significant adverse effect on utilities and service systems if it would:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
c. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

Project Impacts

Impact 4.17-1: The project would require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Construction and Decommissioning

Water

The proposed project would require an estimated (approximate) 1,266 AF of water during the approximately 34-month construction period. Therefore, the yearly water demand for the project is assumed to be approximately 452 AFY ([34 months/12 months] multiplied by 452) for common construction-related purposes, including, but not limited to, dust suppression, soil compaction, and grading and dust control for ingress and egress of onsite construction vehicle equipment traffic and for project facilities construction (Tetra Tech, 2025). It is assumed a similar quantity of water would be required during decommissioning,

approximately 1,266 AF over a 34-month period. Water is anticipated to be obtained from onsite wells or offsite source(s). Pipelines for water conveyance may be constructed above ground and/or below ground. The primary source of water used during construction and decommissioning would be from two proposed wells (or any potential existing onsite wells) located on the project site. Supplemental water may be sourced from RMR and Mojave Public Utilities District (MPUD; Tetra Tech, 2025); well water is not expected to require treatment for construction use. For these reasons, the proposed project would not require or result in the construction of new water facilities, which could cause significant environmental effects; thus, potential impacts during construction and decommissioning would be less than significant.

Wastewater Treatment

Construction and decommissioning of the project would generate a minimal volume of wastewater. During construction activity, wastewater would be contained within portable toilet facilities and disposed of at an approved disposal site. The same would be true during decommissioning. The Kern County Environmental Health Services Division is responsible for monitoring the use of portable toilet facilities, and a condition of approval would require the project applicant/proponent to provide documentation of a portable toilet pumping contract. No offsite sewage or disposal connections to a municipal sewer system exist or are proposed; thus, potential impacts during construction and decommissioning would be less than significant.

Stormwater Drainage

Water used during construction would run off into drainage features on the project site, which, as previously mentioned, are scattered and discontinuous. As a result, surface runoff events would generally be brief and infrequent, with rapid infiltration into the sandy substrate, and/or shallow ponding in low-lying areas quickly followed by high evaporation. Nonetheless, as described in **Section 4.10**, *Hydrology and Water Quality*, of this EIR, **Mitigation Measure MM 4.10-1** would require implementation of a Stormwater Pollution Prevention Plan (SWPPP) during construction, which would include best management practices (BMP) designed to prevent the occurrence of soil erosion and discharge of other construction-related pollutants that could contaminate water quality. There are no constructed stormwater drainage systems present onsite and stormwater on the project site either percolates onsite or drains offsite by way of existing ephemeral drainages. Further, 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. The Final Drainage Plan would include post-construction structural and nonstructural BMPs that could include features such as drainage swales for collection of runoff prior to offsite discharge. The Final Drainage Plan would demonstrate the ability of any planned onsite storm drainage to adequately collect onsite stormwater flows in accordance with all applicable standards and BMPs. Thus, the project would not increase or alter runoff patterns such that new or expanded stormwater drainage facilities would be required. No offsite connections to a municipal stormwater facility exist or are proposed. Similar impacts are expected during decommissioning. Thus, potential impacts during construction and decommissioning would be less than significant.

Electrical Power

Power required for project construction and decommissioning activities, such as for the temporary construction trailers, would be provided via portable generators or temporary local distribution. SCE operates distribution circuits in the project area. The project proponent would coordinate with SCE to obtain access to a nearby distribution circuit, if needed. The improvements needed to interconnect into the distribution circuit would occur within the proposed development footprint. The proposed project does include the construction of gen-tie line and overhead and/or underground line(s) that would transmit

electricity to the existing SCE Windhub Substation. However, all potential impacts from this work are discussed within the respective sections of this EIR. Thus, potential impacts during construction and decommissioning would be less than significant.

Natural Gas

Natural gas would not be required to support construction or decommissioning activities. No offsite natural gas connections are proposed during construction; thus, no impacts during construction or decommissioning would occur.

Telecommunication Facilities

Telecommunications via fiber optic lines would not be required to support construction or decommissioning activities. Telecommunications would be supported by satellite and cellular service during construction. No offsite telecommunication connections are proposed during construction; thus, no impacts during construction or decommissioning would occur.

Operation

Water

During operations, the primary source of water would be from two proposed wells (or any potential existing onsite wells) located on the project site. Supplemental water may be sourced from RMR and MPUD (Tetra Tech, 2025). Water would be required for photovoltaic (PV) panel washing, equipment washing, and other miscellaneous water uses including O&M building use (if constructed), and a permanent water source in the form of trucked water, well water, or bottled water would be provided for staff. Although PV panel washing is expected to occur once per year, the panels may need to be washed up to twice a year based on site conditions, such as usual weather occurrences, wild/forest fires, local air pollutants, and other similar conditions. Water consumption is expected to be approximately 0.28 gallon per square yard of panel, based on other similar operations. Given a 1,400-MW facility, with two cycles per year, the annual water usage is expected to be approximately 20 AF of water. This amount includes the water necessary for project operations, fire suppression, and site maintenance. Onsite water resources would also include a number of aboveground fire water tanks, which would be placed at designated locations throughout the project site, including near BESS locations. Final locations and tank volumes would be subject to review and approval by the Kern County Fire Department.

As stated above, water sourced for the project would be derived from the unadjudicated FVGB. Supplemental water, if needed, will be provided by RMR, or potentially, from MPUD SWP water. Well water is not expected to require treatment and could be pulled directly from the well for operational use. Installation of onsite wells would be in accordance with Kern County standards and requirements and, thus, would not result in impacts. For these reasons, the proposed project would not require or result in the construction of new water facilities which could cause significant environmental effects; thus, potential impacts during operations and maintenance would be less than significant.

Wastewater Treatment

The project would not require or result in the relocation or construction of new or expanded municipal wastewater facilities, and no connection to a public wastewater system is required or proposed. It is anticipated that approximately six permanent, full-time employees would be needed to maintain the project. Up to two permanent, onsite O&M facilities and/or small satellite offices may be built onsite to facilitate rapid repair of equipment. Permanent restroom facilities with septic tanks and/or portable toilets would be

used for sanitary purposes. Wastewater generated from the six employees is expected to be minimal and would not require connection to a wastewater treatment provider. Wastewater generation occurring within the project site contained in portable toilets would be emptied at an existing, approved, offsite disposal site as part of regular, ongoing project-related maintenance. Onsite O&M facilities may alternatively pursue the installation of an onsite septic system, which would be permitted in accordance with the Kern County Public Health Environmental Health Division permitting process. Therefore, potential impacts would be less than significant.

Stormwater Drainage

As previously mentioned, there are no constructed stormwater drainage systems present onsite. As noted above and discussed in **Section 4.10**, *Hydrology and Water Quality*, of this EIR, **Mitigation Measure MM 4.10-2** would be implemented as a part of the proposed project and requires preparation of a Final Drainage Plan to reduce potential increases in stormwater runoff onsite and would detail any necessary physical structures required to control stormwater. These structures would be developed onsite along with the rest of project construction. No offsite disposal connections to a municipal stormwater facility exist or are proposed; thus, potential impacts during operations and maintenance would be less than significant.

Electrical Power

Power for O&M activities would be provided by the proposed project's electrical generation or supplied by the local power provider. SCE operates distribution circuits in the project area. The project proponent would coordinate with SCE to obtain access to a nearby distribution circuit, if needed. The proposed project would not require or result in the construction of new electrical facilities, which could cause significant environmental effects; thus, potential impacts during operation and maintenance would be less than significant.

Natural Gas

No natural gas is anticipated to be required for operation and maintenance of the project. The proposed project would not require or result in the construction of new gas facilities, which could cause significant environmental effects; thus, no impacts during operation and maintenance would occur.

Telecommunication Facilities

Telecommunications via fiber optic lines would be required to support O&M facilities. The proposed project would use local exchange carrier services for telecommunication to support remote monitoring requirements. It would connect to telecommunication fiberoptic lines owned and managed by AT&T or an alternative provider. Telecommunications would be supported by fiber optic lines installed underground within the footprint of the proposed project to connect the supervisory control and data acquisition equipment within the solar collector substations to local telecommunication lines within the project area. No offsite telecommunication connections are proposed during operation and maintenance located beyond the development footprint; thus, potential impacts during operation and maintenance would be less than significant.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2** would be required (see **Section 4.10,** *Hydrology and Water Quality*, for the full mitigation measure text).

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.10-1** and **MM 4.10-2**, impacts would be less than significant.

Impact 4.17-2: The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

RMR, MPUD, and/or two proposed wells (or any potential existing onsite wells) located on the project site would supply the proposed project with water for both its construction demand and operational demand (MPUD, 2024; RMR, 2024; Tetra Tech, 2025). MPUD would provide water to the project site through purchasing water, as available, from AVEK and selling it to the project proponent through a hydrant or well and making it available for use during the construction phase. The primary source of water used during construction and operations would be from two proposed wells (or any potential existing onsite wells) located on the project site. Supplemental water may be sourced from RMR and MPUD.

Construction of the proposed project is expected to last for approximately 34 months. Water requirements for the project during construction and operation were determined in the Water Supply Assessment prepared for the project (see **Appendix L1** of this EIR). The project's construction water demand is estimated to be approximately 1,266 AF during the construction period and approximately 700 AF throughout the anticipated operational life of the project (approximately 35 years; 20 AFY). Bottled potable water for drinking and domestic use during construction, operation, and decommissioning would be trucked to the project site. The water required during decommissioning is anticipated to be similar to construction water demands, approximately 1,266 AF. Non-potable water required during construction, operation, and decommissioning would be supplied by two onsite wells, or MPUD or RMR, who would draw their water from the FVGB. MPUD derives some of their supplies from the FVGB. The will-serve letter provided by MPUD on May 3, 2024, states that MPUD would provide construction water for the proposed project for up to 3 years and 200 AFY (see **Appendix L2** of this EIR). The will-serve letter provided by RMR on May 15, 2024, states that RMR would provide construction and operations water for the proposed project of an amount up to 2 AF per day (see **Appendix L2** of this EIR). The proposed project well sites are located within the FVGB and the AVGB; as described above, there is no adjudication process for the FVGB as it is designated as a low-priority basin by the DWR. The DWR has determined that the FVGB is not currently in overdraft (Tetra Tech, 2025). The AVGB is adjudicated; however, the project does not anticipate withdrawing any water from the AVGB.

California City, MPUD, and other regional stakeholders have partnered in the development of an FVGB Groundwater Management Plan to promote regional groundwater sustainability. The FVGB Groundwater Management Plan provides supporting information used in the Fremont Basin IRWMP. The Regional Plan discusses overall water supply reliability within the Fremont Basin region, including the integrated use of surface and groundwater supplies and the interrelationship of the Fremont Basin with the AVEK's integrated management of surface and groundwater supplies within the Antelope Valley Basin to the south. The FVGB Groundwater Management Plan (California City, 2018) describes high levels of groundwater pumping for agricultural use from the late 1950s through the 1970s and by MPUD from 1968 through 1980, with resulting declines in groundwater levels followed by recovery and stabilization of groundwater levels because of reduced agricultural use and the availability of imported SWP supplies. The FVGB Groundwater Management Plan also anticipates future increases in demand in the basin. Groundwater level data indicates that groundwater levels in the vicinity of the Project are increasing.

Additionally, according to the Water Supply Assessment prepared for the project, average groundwater recharge has been estimated as 13,800 AFY for the FVGB. The IRWMP includes water demand estimates which account for the entire FVGB and provide projected values for residential, industrial, and agricultural uses over the period from 2015 to 2060 (the approximate decommissioning date of the Project). The IRWMP data show a variable but significant water supply to the region, including supply to the Fremont Valley area, including imported surface water from AVEK. The IRWMP also indicates that groundwater recharge is expected to result in sustainable groundwater management for most growth scenarios in the area. Further, recent evaluations of water supply availability within the FVGB indicate that MPUD will have an available surplus of water through 2060. For example, **Table 4.17-2**, *Projected Water Provider Supply Availability*, compares the available supply for construction and operation for the project demand. Based on the information presented, sufficient water is available for construction and operations of project, especially given the surplus water available from MPUD (795 to 888 AF) during the construction period. The same is true for decommissioning, given the IRWMP's water demand estimates extending to 2060, as well as a surplus of water available from MPUD. Further, there is ample supply in the basin as a whole, primarily from a significant groundwater resource. This groundwater resource has had some declines in water levels in the past, but more recently has shown signs of stabilization and even rebound in some areas (DWR, 2004; RWMG, 2019). The amount of water stored in the FVGB is relatively large compared to the proposed demand associated with the project. The FVGB also is a low priority basin and is not experiencing overdraft conditions. Extractions from either onsite wells or water supplied by RMR or from MPUD are not expected to significantly affect groundwater levels in the Fremont Valley groundwater basin.

Based on estimated project water demands, the supplemental commitments from MPUD and RMR to supply the project with water, and the underlying aquifer to support development of onsite groundwater wells without adverse effects, there is sufficient water available to meet the future water demands of the proposed project during normal, single dry, and multiple dry years through 2060. Therefore, potential impacts related to water supply would be less than significant.

TABLE 4.17-2: PROJECTED WATER PROVIDER SUPPLY AVAILABILITY

Water Purveyor	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2050[b] (AFY)	2060[b] (AFY)
MPUD[a]						
Groundwater Production	2,108	2,108	2,108	2,108	2,108	2,108
AVEK Supply	84	84	84	84	84	84
Demand	1,214	1,307	1,408	1,516	1,757	2,037
Available Surplus	888	795	694	586	345	65

Notes:
[a] AVEK, 2021b; Jacobs, 2022.
[b] Projected supply values based on current numbers; demand numbers have been increased based on projection rates similar to those in the years 2030, 2035, and 2040.
AFY = acre-feet per year; AVEK = Antelope Valley – East Kern Water Agency; MPUD = Mojave Public Utilities District

Mitigation Measures

No mitigation would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.17-3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Construction and Decommissioning

Construction and decommissioning of the project would generate a minimal volume of wastewater. During construction activity, wastewater would be contained within portable toilet facilities and disposed of at an approved disposal site. The Kern County Environmental Health Services Division is responsible for monitoring the use of portable toilet facilities, and a County-standard condition of approval would require the project proponent to provide documentation of a portable toilet pumping contract. No offsite sewage or disposal connections to a municipal sewer system exist or are proposed.

Operation

The proposed project would not require or result in the relocation or construction of new or expanded municipal wastewater facilities, and no connection to a public wastewater system is required or proposed. During operation, there would be six permanent employees primarily operating from an offsite operations facility; however, small, satellite, portable office trailers may be placed onsite for rapid equipment repair. Wastewater generated from the six employees is expected to be minimal and would not require connection to a wastewater treatment provider. Any wastewater generation occurring within the project site would be collected in portable toilets that would be emptied as part of regular, ongoing project-related maintenance and disposed of at an existing, approved, offsite disposal site. Onsite O&M facilities may alternatively pursue the installation of an onsite septic system, which would be permitted in accordance with the Kern County Public Health Environmental Health Division permitting process.

Mitigation Measures

No mitigation would be required.

Level of Significance

Impacts would be less than significant.

Impact 4.17-4: The project would generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Construction

It is anticipated the project would not generate substantial amounts of nonrecyclable waste during construction. Currently, the project site is largely undeveloped and, therefore, there would be minimal demolition or removal of large debris. The project anticipates the demolition of multiple abandoned and/or previously occupied structures, as well as associated non-occupied accessory structures. Materials brought to the project site would be used to construct facilities, and few residual materials are expected. Solar modules would be delivered to the site via shipping containers packaged using wood and cardboard materials. The shipping containers materials for module deliveries would be recycled and are not anticipated to generate nonrecyclable waste. Common construction waste may include paper, wood, glass, plastics from packing material, waste lumber, insulation, scrap metal and concrete, empty nonhazardous containers, and

vegetation wastes. With the implementation of **Mitigation Measure MM 4.1-1,** as discussed in **Section 4.1,** *Aesthetics*, of this EIR, a Maintenance, Trash Abatement, and Pest Management Program would be required to establish proper debris clearing, trash removal, and recycling protocols. Any hazardous waste generated during construction would be disposed of at an approved location.

Nonhazardous construction refuse and solid waste would either be collected and recycled or disposed of at a local landfill. The Mojave-Rosamond Recycling and Sanitary Landfill (located approximately 5 miles to the east of the project area) is the closest landfill to the project site and, therefore, would be the most likely recipient of solid waste generated during project construction. The Mojave-Rosemond Recycling and Sanitary Landfill has a remaining capacity of 76,310,297 cubic yards with an anticipated closure year of 2123 (CalRecycle, 2019a). The next closest landfill is the Tehachapi Sanitary Landfill, which is located approximately 10 miles northwest of the project, with a remaining capacity of 522,298 cubic yards. Both landfills are Class III landfills and, therefore, accept wastes from construction and demolition as well as industrial sources, but do not accept hazardous waste, hot ashes, or liquids of any kind. As shown in **Table 4.17-1**, *Summary of Kern County Public Works Landfills,* both landfills have significant capacity remaining (CalRecycle 2019a, 2019b). In addition, with implementation of **Mitigation Measure MM 4.17-1**, a recycling coordinator would ensure the separation and proper disposal of recyclable materials and solid waste during construction. Therefore, potential impacts to existing landfills during project construction are anticipated to be less than significant.

Operation

During operation, little to no solid waste would be generated. The operations and maintenance would include approximately six permanent employees, and the only waste generated onsite would result from O&M activities. The Mojave-Rosamond Recycling and Sanitary Landfill would continue to operate through 2123 and is expected to continue to serve the project throughout the rest of its operation. In addition, with implementation of **Mitigation Measure MM 4.17-1**, as discussed below, a recycling coordinator would ensure the separation and proper disposal of recyclable materials and solid waste generated during project operation, thereby further reducing solid waste generated during operation. Therefore, potential impacts related to landfill capacity would be less than significant with implementation of **Mitigation Measure MM 4.17-1**.

Decommissioning

At the end of the proposed 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, removal of all solar energy generation structures would be removed to facilitate conversion of the site to other uses in accordance with the applicable land use regulations in effect at that time. Solar PV panels contain valuable materials that would likely be reused and recycled at the end of their useful life. Solar panel manufacturers have identified that approximately 90 percent of materials in solar panel modules can be recycled. Site infrastructure would be removed, including the fences and the concrete pads that may support the inverters, transformers, and related equipment, and concrete posts will be removed to grade level, and all materials would be recycled to the extent feasible. As the energy storage system is dismantled and removed, the batteries will be discharged, hauled offsite, and recycled or disposed of at an appropriate location in accordance with all applicable hazardous waste requirements. Decommissioning of the gen-tie line would not generate substantial amounts of solid waste.

As stated above, the Mojave-Rosamond Recycling and Sanitary Landfill is expected to be in operation through 2123 and would serve as a solid waste disposal location during project decommissioning.

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. Project roads would be restored to their pre-construction condition unless the landowner elects to retain the improved roads for access throughout that landowner's property. The area would be thoroughly cleaned, and all debris removed. A collection and recycling program would be executed to promote recycling of project components and minimize disposal in landfills. Therefore, potential impacts related to landfill capacity would be less than significant during decommissioning with implementation of **Mitigation Measure MM 4.17-1**.

Mitigation Measures

MM 4.17-1: Prior to issuance of a grading or building permit, an onsite Waste Disposal and Recycling Coordinator shall be designated by the project proponent/operator to facilitate waste disposal and recycling as part of the Maintenance, Trash Abatement, and Pest Management Program. The provisions listed below shall apply to the project:

a. The project proponent/operator shall provide a storage area (or areas) for waste and recyclable materials within the fenced project site that is clearly identified for waste and recycling. This area shall be maintained on the site during construction, operations and decommissioning.

b. During construction, operation, and decommissioning, debris and waste generated shall be recycled to the extent feasible.

c. The Waste Disposal and Recycling Coordinator shall facilitate recycling of all construction and decommissioning waste through coordination with contractors, local waste haulers, and/or other facilities that recycle construction/demolition wastes.

d. The Waste Disposal and Recycling Coordinator shall coordinate with Kern County Public Works Department – Solid Waste Division the acceptance for disposal or recycling of construction and decommissioning waste prior to being transported to any public disposal facility.

e. The Waste Disposal and Recycling Coordinator shall ensure that materials transported to public disposal facilities for recycling shall be separated by material type so as not to be co-mingled or contaminated with waste material.

f. The Waste Disposal and Recycling Coordinator shall also be responsible for ensuring wastes requiring special disposal are handled according to State and County regulations that are in effect at the time of disposal.

g. Contact information of the coordinator shall be provided to the Kern County Planning and Natural Resources Department prior to issuance of building permits.

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.1-1 and MM 4.17-1**, impacts would be less than significant.

Impact 4.17-5: The project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

The proposed project would generate solid waste during construction, operation, and decommissioning. Common construction waste may include paper, wood, glass, plastics from packing material, waste lumber, insulation, scrap metal and concrete, empty nonhazardous containers, and vegetation wastes. The 1989 California Integrated Waste Management Act (Assembly Bill 939) requires Kern County to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the project. In 2011, the State passed Assembly Bill 341, which established a policy goal that a minimum of 75 percent of solid waste must be reduced, recycled, or composted by the year 2020. In addition, as part of compliance with CALGreen requirements, Kern County implements the following construction waste diversion requirements:

- Submittal of a Construction Waste Management Plan;
- Recycle and/or reuse a minimum of 65 percent of construction and demolition waste; and
- Recycle or reuse 100 percent of tree stumps, rocks, and associated vegetation and soils resulting from land clearing.

Furthermore, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the project design. Implementation of **Mitigation Measure MM 4.17-1** would ensure compliance with all waste diversion and recycling requirements by requiring recycling during construction, operation, and decommissioning of the project. The proposed project would be required to comply with all Federal, State, and local statutes and regulations related to the handling and disposal of solid waste. Therefore, implementation of the project would result in less than significant impacts.

Mitigation Measures

Implementation of Mitigation Measure **MM 4.17-1** would be required.

Level of Significance after Mitigation

With implementation of the Mitigation Measure **MM 4.17-1**, impacts would be less than significant.

4.17.5 Cumulative Setting, Impacts, and Mitigation Measures

Past, present, or reasonably foreseeable future projects within the Antelope Valley are listed in **Table 3-5**, *Cumulative Projects List*, in **Chapter 3**, *Project Description*, of this EIR. The geographic scope for impacts to utilities and service systems includes projects within the service area for each of the utility providers described above, which includes demands on water supply, wastewater, stormwater drainage, and solid waste disposal. The scope for impacts to water and wastewater includes projects within the FVGB. The

scope for impacts to stormwater drainage and solid waste disposal includes projects that rely on the same infrastructure and solid waste disposal facilities. Impacts of the proposed project would be cumulatively considerable if the incremental effects of the proposed project, when combined with other past, present, or reasonably foreseeable projects would result in a significant cumulative effect.

Physical impacts to public services, utilities, and service systems are usually associated with population in-migration and growth in an area, which increase the demand for a particular service, leading to the need for expanded or new facilities. There is little to no growth associated with the project and nearby other solar and wind energy projects, thereby limiting the potential to contribute to demand for a particular service. As described above, the project would place few demands on water, wastewater, stormwater drainage, electricity telecommunications, and solid waste disposal (during construction and operation). As described above, the project would place no demands on natural gas.

Water Supply

As described in **Chapter 3**, *Project Description*, of this EIR, 43 projects are proposed in the project vicinity that have the potential to impact existing water supply, if the projects were also to draw water from the FVGB. These projects source water from a variety of supply sources; therefore, impacts from them to the FVGB may be limited. The projects could potentially draw from MPUD, which include a series of existing wells. Given the limited water supply in the area, other projects are expected to either rely on new or existing water service hydrants, wells, transmission pipelines, or truck in their water supply. Therefore, the cumulative projects have the potential to result in significant impact on water supply within the local vicinity.

As described under **Impact 4.17-2**, the proposed project would need minimal water supply during construction, operation, and decommissioning. Non-potable water would be supplied by two onsite wells, or MPUD or RMR wells that draw from the FVGB and have proven to have sufficient water supply in comparison to the proposed project demand as shown in **Table 4.17-2**, *Projected Water Provider Supply Availability*. Therefore, the proposed project's contribution to cumulative water supply impacts would be less than cumulatively considerable.

Wastewater

With regard to wastewater, the project is located in an area with no wastewater treatment provider and is not expected to generate a significant amount of wastewater. Wastewater produced during construction would be collected in portable toilet facilities and disposed of at an approved facility. Wastewater generated during project operations would be collected in portable toilets emptied as part of regular ongoing project-related maintenance and disposed of at an existing, approved, offsite disposal site. Onsite O&M facilities may alternatively pursue the installation of an onsite septic system, which would be permitted in accordance with the Kern County Public Health Environmental Health Division permitting process. Well water used onsite is not anticipated to require treatment for construction and operational uses; bottled potable water would be trucked to the site during construction. Similar to the proposed project, other solar projects would generate the same minimal amounts of wastewater. Therefore, the proposed project would not substantially contribute to a cumulative impact on regional wastewater treatment facilities or capacity.

Stormwater Drainage

As described above, there are no constructed stormwater drainage systems present onsite and stormwater on the project site either percolates onsite or drains offsite by way of existing ephemeral drainages. Per **Mitigation Measure MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*, for full mitigation measure text), a Final Drainage Plan would be prepared in accordance with the Kern County Development Standards and Kern County Code of Building Regulations. The Final Drainage Plan would include post-construction structural and nonstructural BMPs that could include features such as drainage swales for collection of runoff prior to offsite discharge. The Final Drainage Plan would demonstrate the ability of any planned onsite storm drainage to adequately collect onsite stormwater flows in accordance with all applicable standards and BMPs. Thus, the project would not increase or alter runoff patterns such that new or expanded stormwater drainage facilities would be required. These structures would be developed onsite along with the rest of project construction. Surrounding projects would also be required to prepare a drainage plan in accordance with Kern County Development Standards and Kern County Code of Building Regulations, which would help avoid substantial increases of stormwater generated onsite by their proposed ground disturbance; depending on the findings of their drainage plan, these projects may need to construct stormwater control structures onsite to reduce the potential for increased stormwater runoff. Additionally, as with the proposed project, all projects that would not retain all runoff onsite would be required to prepare a SWPPP, per **Mitigation Measure MM 4.10-1**, which would include BMPs designed to prevent the mixture of sediment and other pollutants with stormwater and degrading water quality. Therefore, the project would not contribute to cumulatively considerable impacts related to stormwater drainage facilities.

Solid Waste

The proposed project would generate a minimal amount of nonrecyclable solid waste. The Mojave-Rosamond Landfill is expected to operate until 2123. To ensure that the proposed project reduces the amount of waste sent to these landfills, implementation of **Mitigation Measure MM 4.17-1** requires that debris and waste generated shall be recycled to the extent feasible, and an onsite recycling coordinator be designated by the project proponent to facilitate recycling efforts. Additionally, **Mitigation Measure MM 4.1-1,** as discussed in **Section 4.1,** *Aesthetics*, of this EIR, a Maintenance, Trash Abatement, and Pest Management Program would require the project to implement a debris clearing, trash removal, and recycling protocol to further promote proper waste management. Surrounding projects would also be required to comply with all applicable ordinances in place designed to reduce the amount of solid waste disposed in landfills. Therefore, the proposed project would not contribute to a cumulatively considerable impact related to landfill capacity exceedance.

Electricity

The proposed project includes construction of a gen-tie line that would tie into the existing Windhub Substation and generate up to 1,400 MW of renewable electrical energy and up to 8,000 MW-hours of energy storage capacity to the statewide utility grid. Electricity demand for the project would be minimal during construction and operations, and would be provided by the onsite PV system in combination with SCE distribution facilities. This project, in combination with other cumulative solar projects in East Kern County, would provide renewable energy to support existing demand and projected growth and, therefore, provide a beneficial cumulative impact on electrical demand and facilities.

Natural Gas

The proposed project does not include the relocation of existing natural gas facilities on the project site and natural gas would not be required for construction or operation of the project. Therefore, the project would not contribute to a cumulatively considerable impact related to natural gas demand and facilities.

Telecommunications

The proposed project, in combination with cumulative projects, would increase demand on telecommunication facilities. However, demand associated with energy projects and other cumulative development would be minimal and is expected to be within the planning forecasts of the affected telecommunications provider. Therefore, cumulative impacts related to telecommunications facilities would be less than significant.

In conclusion, the proposed project would be largely self-contained and would not have a significant impact on public utilities. The incremental effects of the proposed project would also not be substantial enough to result in a cumulatively considerable impact on utilities and service systems with implementation of **Mitigation Measures MM 4.10-1**, **MM 4.10-2**, and **MM 4.17-1**. Furthermore, the proposed project would result in a beneficial impact on utility services and offset future stress on energy service providers as energy demand grows in Kern County and Southern California.

Mitigation Measures

Implementation of **Mitigation Measures MM 4.1-1, MM 4.10-1**, **MM 4.10-2**, and **MM 4.17-1** would be required (see **Section 4.1,** *Aesthetics*, and **Section 4.10**, *Hydrology and Water Quality*, for full mitigation measure text).

Level of Significance after Mitigation

With implementation of **Mitigation Measures MM 4.1-1, MM 4.10-1**, **MM 4.10-2**, and **MM 4.17-1**, cumulative impacts would be less than significant.

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Section 4.18
Wildfire

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4.18.1 Introduction

This section of the EIR describes the affected environment and regulatory setting for wildfire. It also discusses potential impacts related to wildland wildfire that could result from implementation of the project, and includes mitigation measures that would reduce potential impacts, if applicable. This section is based on the project plans and California Department of Forestry and Fire Protection (CAL FIRE) and Kern County Fire Hazards Severity Zone Maps.

4.18.2 Environmental Setting

Site Characteristics and Fire Environment

As discussed in **Section 4.3**, *Air Quality*, of this EIR, the project site is located within the Mojave Desert Air Basin (MDAB). During the summer, the MDAB is generally influenced by a Pacific subtropical high-pressure cell that sits off the coast to the west, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south. Average temperatures recently recorded in the nearby City of Lancaster in eastern Los Angeles County range from a low of 29 degrees Fahrenheit (°F) in December to highs of 95 °F in July. Annual rainfall averages approximately 5.1 inches per year. The MDAB averages between 3 and 7 inches of precipitation per year (from 16 to 30 days with at least 0.01 inch of precipitation). The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, which indicates at least 3 months have maximum average temperatures over 100.4 °F.

The CAL FIRE maps Fire Hazard Severity Zones (FHSZs), based on factors such fuel, slope, and fire weather to identify the degree of fire hazard throughout California (i.e., moderate, high, or very high). While FHSZs do not predict when or where a wildfire will occur, they do identify areas where wildfire hazards could be more severe and, therefore, are of greater concern.

According to the CAL FIRE Kern County FHSZ Maps for the Local Responsibility Areas (LRA), and as shown in **Figure 4.18-1,** *Fire Hazard Severity Zones for Local Responsibility Areas* (CAL FIRE, 2007), the southeastern portion of the project site is classified as LRA Moderate. Further, according to the CAL FIRE, Kern County FHSZ Maps for the State Responsible Areas (SRA), and as shown in **Figure 4.18-2**, *Fire Hazard Severity Zones for State Responsibility Areas*, the northwestern portion project site, including the proposed generation tie (gen-tie) line route, is classified as SRA Moderate and SRA High (CAL FIRE, 2023). The closest SRA Very High FHSZ is located approximately 5 miles northwest of the project site, and no LRA Very High FHSZs exist within Kern County. Given this designation, the project site is outside of areas identified by CAL FIRE as having substantial or very high wildfire risk. Moderate zones are typically wildland supporting areas of low fire frequency and relatively modest fire behavior. High zones include wildland supporting areas with a higher wildfire hazard potential. The project site generally consists of undeveloped desert lands that have mostly been used for grazing. The surrounding land primarily consists of renewable energy development, rural residential development, livestock grazing, light and heavy industrial mining uses, and undeveloped land.

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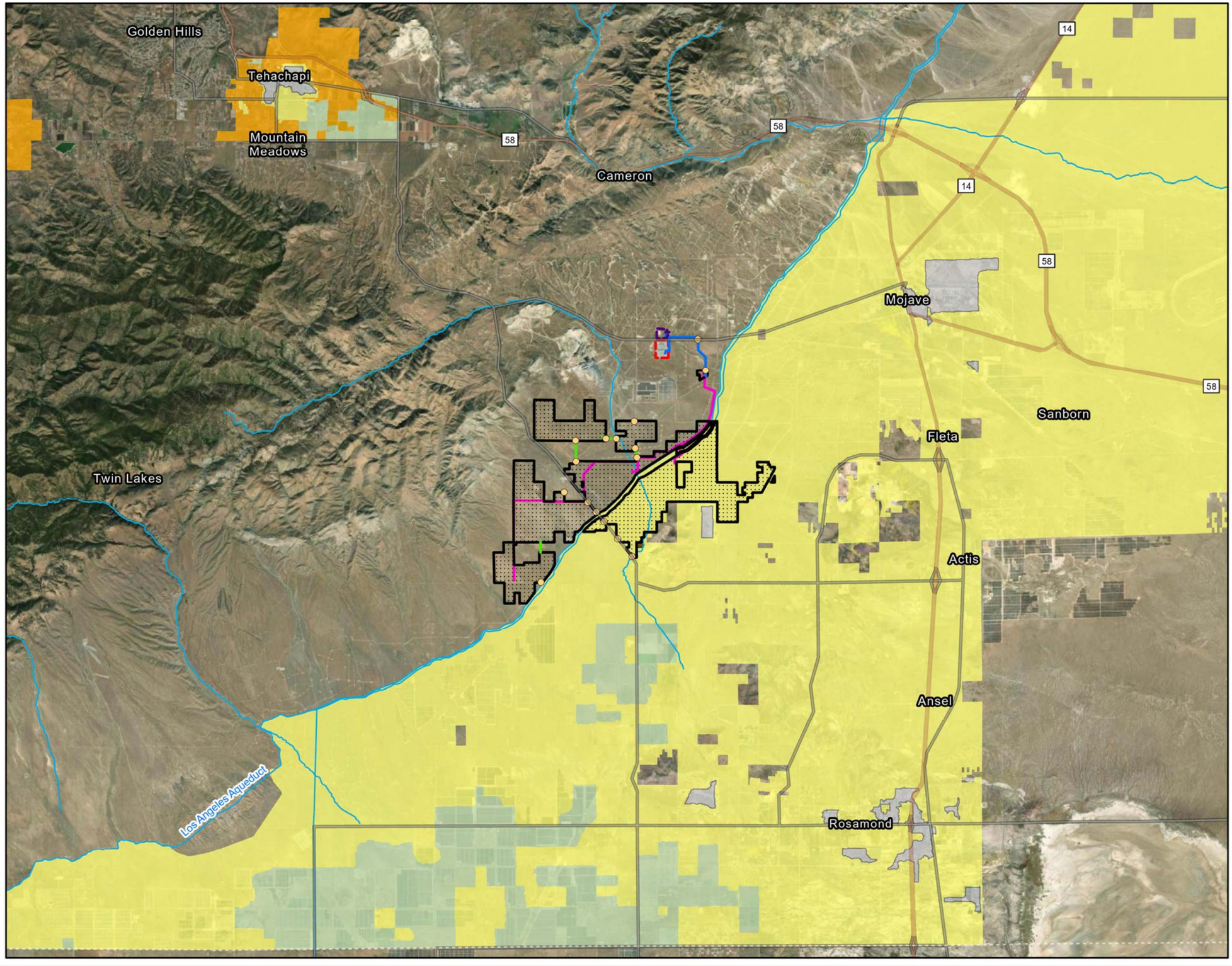
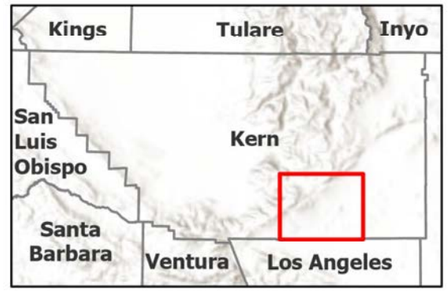
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.18-1. Fire Hazard Severity Zones for Local Responsibility Areas





Windhub High-voltage Substation (Existing)

SCE Property (500kv)

Fire Hazard Severity Zone

- High
- Moderate
- Non-Wildland/Non-Urban
- Urban Unzoned

Proposed Project Features

- Project Site
- Temporary Offsite Laydown Area
- Gen-tie Line (New)
- Medium-voltage/Transmission/ Access Easements
- Access Points

Other Applicant and/or Affiliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

*Already approved under separate projects.

N

0 1.5 3 Miles

Scale is 1:150,000 when printed at 11"x17"

Not for Construction

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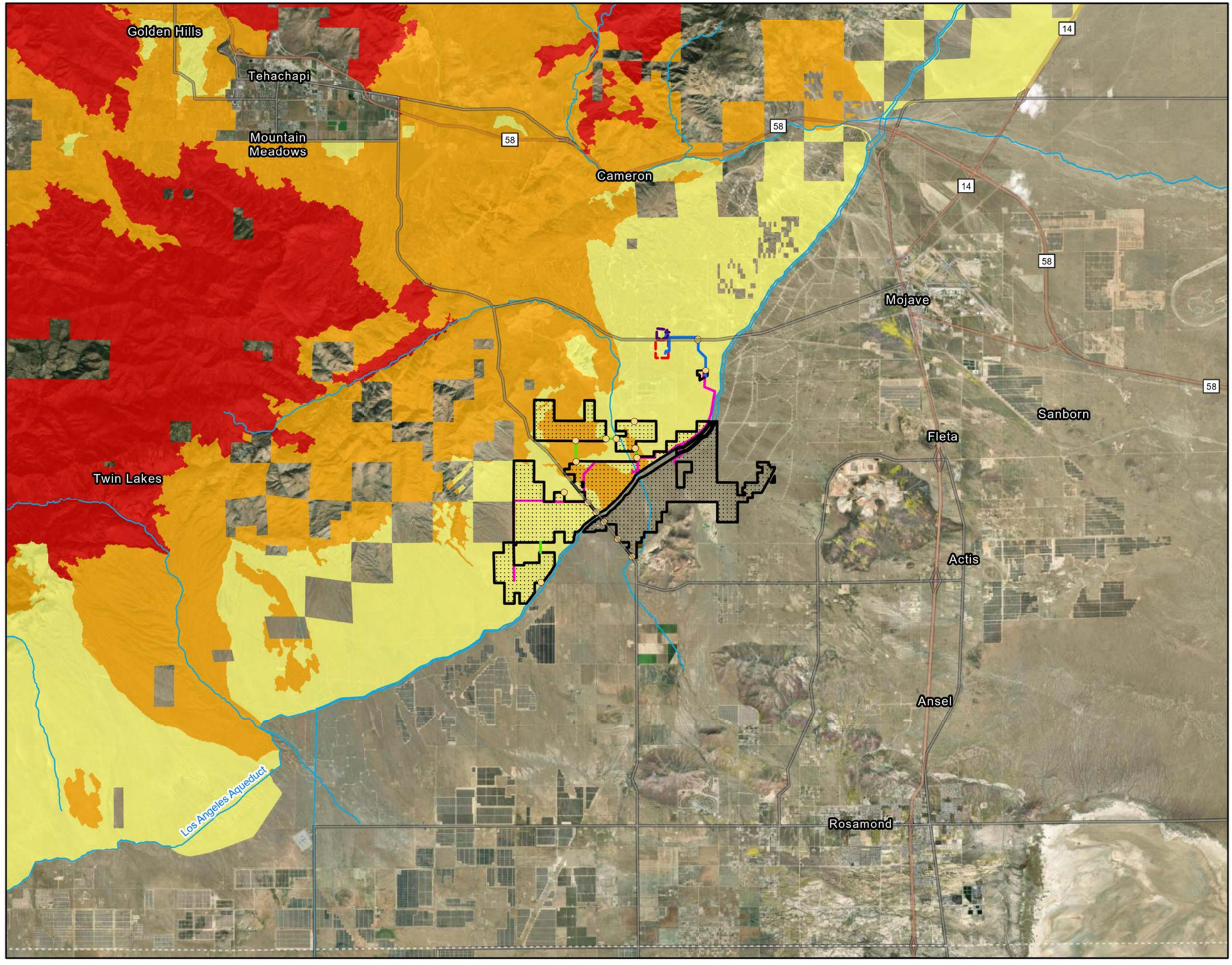
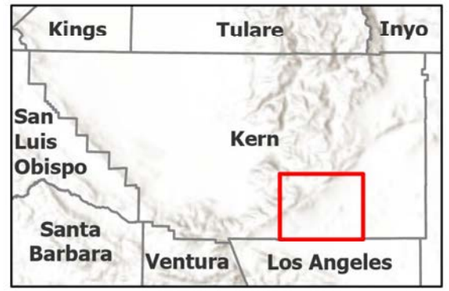
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.18-2. Fire Hazard Severity Zones for State Responsibility Areas





Windhub High-voltage Substation (Existing)

SCE Property (500kv)

Fire Hazard Severity Zones

- Very High
- High
- Moderate

Proposed Project Features

- Project Site
- Temporary Offsite Laydown Area
- Gen-tie Line (New)
- Medium-voltage/Transmission/ Access Easements
- Access Points

Other Applicant and/or Affiliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

*Already approved under separate projects.

N

0 1.5 3 Miles

Scale is 1:150,000 when printed at 11"x17"

Not for Construction

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Fire History

Fire history information can provide an understanding of fire frequency, fire type, most vulnerable project areas, and significant ignition sources. Fire history represented in this section uses CAL FIRE's Incidents Search Tool (CAL FIRE, 2024a) and CAL FIRE's Fire and Resource Assessment Program (FRAP) database (CAL FIRE, 2024b). Since 2015, 70 fires have occurred in Kern County and 105 wildfires have occurred in Los Angeles County, primarily within the mountains to the west/northwest of the project site and south/southwest of the project site, respectively. No fires have burned across the project site or within the surrounding area within this timeframe. According to the National Wildfire Coordinating Group (NWCG), a national interagency group comprising 12 member agencies, a large fire is defined as a fire burning more than a specified area of land (e.g., 300 acres), which is also the size threshold of a Class E Fire. Fire classes range from Class A at 0.25-acre or less, to Class G at 5,000 acres or more (NWCG, 2024). Fires larger than 300 acres and documented within 30 miles of the project site are as shown in **Figure 4.18-3**, *Fires Over 300 Acres Within 30 Miles of the Project Site*, and **Table 4.18-1**, *Fires Over 300 Acres Within 30 Miles of the Project Site by Date*, organized by date (CAL FIRE, 2024a).

TABLE 4.18-1: FIRES OVER 300 ACRES WITHIN 30 MILES OF THE PROJECT SITE BY DATE

Name	Start Date	Counties	Acres Burned	Approximate Distance (mile) from Project Site
Turbine Fire	8/12/2024	Kern	329	15 miles west
White Fire	7/13/2024	Kern	5,646	26 miles west
Orchard Fire	7/03/2024	Kern	830	20 miles northwest
Columbia Fire	6/26/2024	Los Angeles	356	22 miles southwest
Max Fire	6/16/2024	Los Angeles	338	23 miles southwest
West Fire	6/15/2024	Los Angeles	300	20 miles southwest
Gaskell Fire	6/06/2024	Kern	403	17 miles southwest
West Fire	5/30/2024	Kern	1,575	11 miles southwest
Holiday Fire	5/25/2024	Kern	398	13 miles southwest
WeeVill Fire	5/20/2021	Los Angeles	300	29 miles southwest
Lake Fire	8/12/2020	Los Angeles	31,089	30 miles southwest

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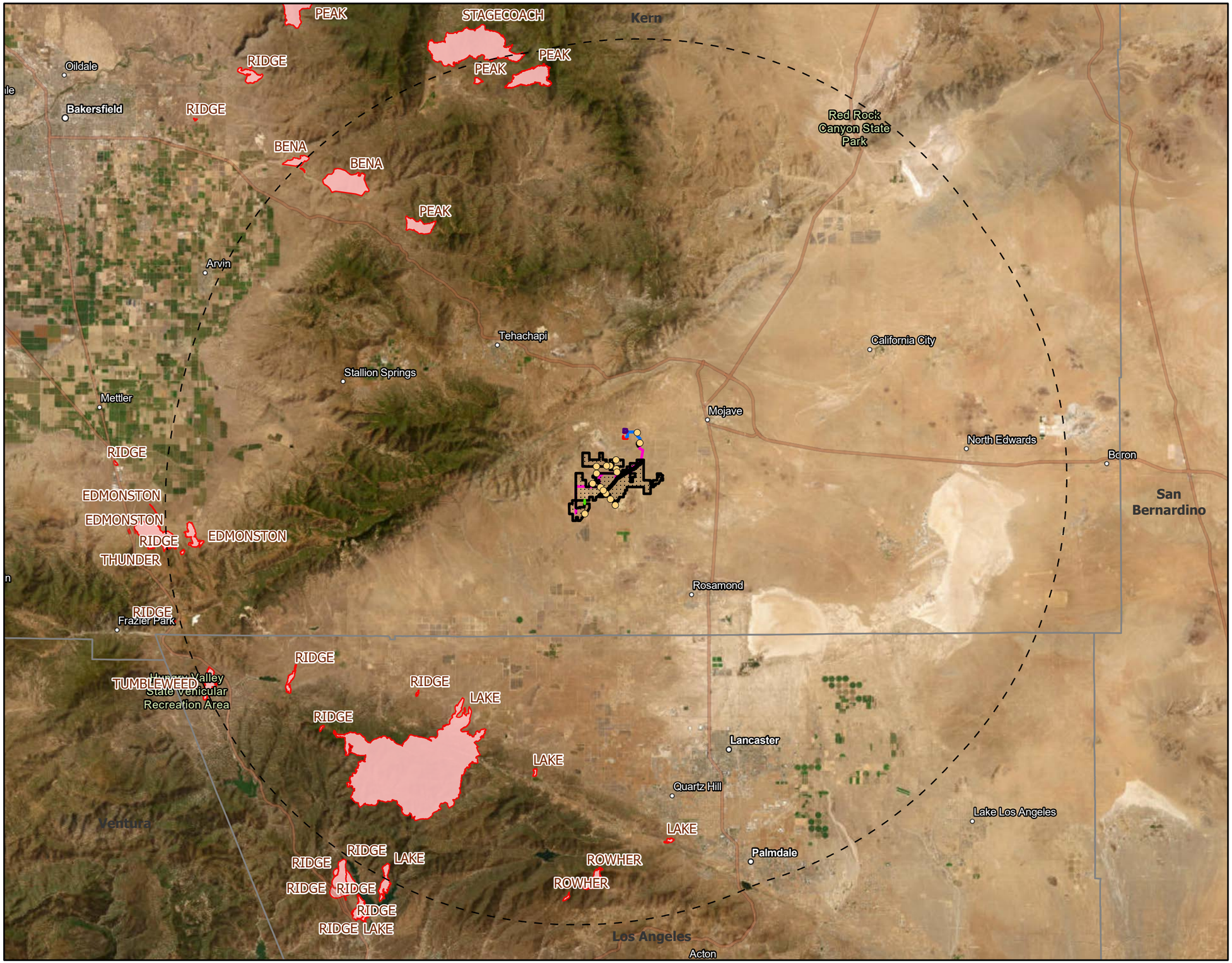
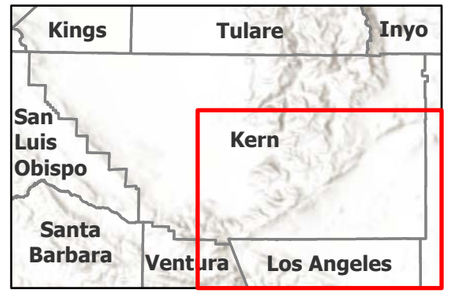
Discovery Solar PV and Storage Project

Kern County, CA

Figure 4.18-3. Fires Over 300 Acres Within 30 Miles of the Project Site





- California Fire Perimeters
- 30-mile Buffer
- Windhub High-voltage Substation (Existing)

Proposed Project Features

- Project Site
- Temporary Offsite Laydown Area
- Gen-tie Line (New)
- Medium-voltage/Transmission/ Access Easements
- Access Points

Other Applicant and/or Affiliate Controlled*

- Step-up HV substation
- Gen-tie Corridor

*Already approved under separate projects.

N

0 5 10 Miles

Scale is 1:150,000 when printed at 11"x17"

Not for Construction

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Vegetation (Fuels)

Desert vegetation dominates the regional landscape of the area and comprises allscale scrub (*Atriplex polycarpa*), creosote bush scrub (*Larrea tridentata*), cheesebush scrub (*Ambrosia salsola – Bebbia juncea* Shrubland Alliance), California buckwheat scrub (*Eriogonum fasciculatum – Viguiera parishii* Shrubland Alliance), California juniper woodland (*Juniperus californica* Woodland Alliance), desert needlegrass grassland (*Stipa speciosa* Herbaceous Alliance), brittle bush scrub (*Encelia farinosa* Shrubland Alliance), and others, as described in **Table 4.4-1**, *Plant Community and Land Cover Mapped Acreage within the Survey Area*, in **Section 4.4**, *Biological Resources*, of this EIR. Fuels can include natural materials, such as dead tree leaves, twigs, branches, dead or live trees, brush, and dry grasses, as well as humanmade structures. The topography of the area, including the project site, is relatively flat as the project site is south/southeast of the Tehachapi Mountains.

California Public Utilities Commission-designated Wildfire Hazard Zones

Pursuant to its Fire Safety Rulemaking, the California Public Utilities Commission (CPUC) mapped high fire threat areas where more stringent inspection, maintenance, vegetation clearance, and wire clearance requirements (as required by CPUC General Orders 95 and 165, described in Section 4.18.3 under the heading "California Public Utilities Commission Requirements," below) would be implemented due to the elevated risk for powerline fires. The CPUC High Fire Threat District Map identifies three tiers of elevated risk for fires associated with utilities. As neither the gen-tie line nor any other overhead wiring would be located within the Tier 2 High Fire Threat District area, the project is not subjected to the enhancement requirements detailed in CPUC General Orders 95 and 165 (CPUC, 2024).

4.18.3 Regulatory Setting

Federal

National Electric Safety Code (NESC) and American National Standards Institute (ANSI) Guidelines

A variety of line and tower clearance standards are used throughout the electric transmission industry. Nationally, most transmission line owners follow the NESC rules or ANSI guidelines, or both, when managing vegetation around transmission system equipment. The NESC rules address electrical infrastructure safety, including transmission wire clearance standards, whereas the applicable ANSI code addresses the practice of pruning and removal of vegetation.

North American Electric Reliability Corporation (NERC) Reliability Standards

In compliance with Section 215 of the Federal Power Act, NERC developed mandatory and enforceable reliability standards such as emergency preparedness and operations; facilities design, connections, and maintenance; personnel performance, training, and qualifications; and protection and control. These standards would ensure reliable energy production as well as safe operation and maintenance practices.

State

California Public Resources Code

California Public Resources Code (PRC) Section 4290 requires CAL FIRE to adopt regulations implementing minimum fire safety standards for defensible space that would be applicable to lands within the SRA and lands within Very High FHSZs.

SRAs are defined by California PRC Section 4102 as areas of the state in which CAL FIRE has determined that the financial responsibility for preventing and suppressing fires lies with the State of California. SRAs are lands in California where CAL FIRE has legal and financial responsibility for wildfire protection. SRA lands typically are unincorporated areas of a county, are not federally owned, have wildland vegetation cover, have housing densities lower than three units per acre, and have watershed or range/forage value. In SRAs, CAL FIRE is required to delineate three hazard ranges: moderate, high, and very high; whereas LRAs, which are under the jurisdiction of local entities (e.g., cities, counties), are required to only identify very high fire hazard severity zones. The hazard ranges are measured quantitatively based on vegetation, topography, weather, crown fire potential (a fire's tendency to burn upward into trees and tall brush), and ember production and movement within the area of question. Where SRAs contain built environment or development, the local government agency assumes responsibility for fire protection.

The California PRC includes fire safety provisions that apply to SRAs during the time of year designated as having hazardous fire conditions. During the fire hazard season, these regulations restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on equipment that has an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire-suppression equipment that must be provided onsite for various types of work in fire-prone areas. Additional codes require that any person who owns, controls, operates, or maintains any electrical transmission or distribution line must maintain a firebreak clearing around and adjacent to any pole, tower, or conductors that carry electric current as specified in PRC Sections 4292 and 4293. Section 4292 also requires that a 10-foot area around the base of poles be cleared of all flammable vegetation.

LRAs include lands that do not meet criteria for SRAs or federal responsibility areas, or are lands in cities, cultivated agricultural lands, and nonflammable areas in the unincorporated parts of a county. LRAs can include flammable vegetation and wildland-urban interface areas. LRA fire protection is provided by the local fire departments, fire protection districts, county fire departments, or by contract with CAL FIRE.

As provided above, the southeastern portion of the project site is classified as LRA Moderate, and the northwestern portion of the project site, including the proposed generation tie (gen-tie) line route, is within an area categorized as SRA Moderate and SRA High.

California Fire Code

The California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the California Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. Chapter 6 (Building Services and Systems) of the California Fire Code

focuses on building systems and services as they relate to potential safety hazards and when and how they should be installed. Building services and systems that are addressed include emergency and standby power systems, electrical equipment, and wiring and hazards. Chapter 12 has specific, detailed design requirements for stationary electrical energy storage systems to ensure fire safe construction, operation, and decommissioning. Chapter 33 (Fire Safety During Construction and Demolition) of the California Fire Code outlines general fire safety precautions to maintain required levels of fire protection, limit fire spread, establish the appropriate operation of equipment and promote prompt response to fire emergencies. The California Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire service features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

California Building Code, Chapter 7A

Chapter 7A of the California Building Code details the materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface Fire Area. A Wildland-Urban Interface Area is defined in Section 702A as a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with PRC Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. The building code details the materials, systems, and assemblies used for structural fire resistance and fire-resistance-rated construction separation of adjacent spaces to safeguard against the spread of fire and smoke within a building and the spread of fire to or from buildings.

California Building Code, Section 608

Section 608 of the California Building Code includes requirements for battery energy storage systems greater than 20 kilowatt-hours, which includes the proposed energy storage facilities. Section 608 includes requirements for vehicle impact protection, location, spacing between batteries, egress, security, and fire suppression systems.

Public Resources Code 4291-4299

California PRC Sections 4291-4299 et seq. require that brush, flammable vegetation, or combustible growth within 100 feet of buildings be maintained. Vegetation that is more than 30 feet from the building, less than 18 inches high, and important for soil stability, may be maintained; as may single specimens of trees or other vegetation that is maintained so as to manage fuels and not form a means of rapid fire transmission from other nearby vegetation to a structure. Additionally, the PRC outlines infraction fees, certification, and compliance procedures applicable with state and local building standards, including those described in subdivision (b) of Section 51189 of the Government Code.

2018 Strategic Fire Plan for California

Developed by the Board of Forestry and Fire Protection, the Strategic Fire Plan outlines goals and objectives to implement CAL FIRE's overall policy direction and vision. The 2018 Strategic Fire Plan goals revolve around fire prevention, natural resource management, and fire suppression efforts, as broadly construed (CAL FIRE, 2018).

California Public Utilities Commission Requirements

General Order 95

General Order 95 governs the design, construction, and maintenance of overhead electrical lines and applies to work conducted by Southern California Edison (SCE). Investor-Owned Utilities (IOUs) are private electricity and natural gas providers. The CPUC regulates IOUs. The replacement of poles, towers, or other structures is considered reconstruction and requires adherence to all strength and clearance requirements of this order. CPUC Decision 17-12-024 created enhanced requirements under Rule 18A, Rule 35, and Rule 38, which apply to overhead electric lines located in Tier 2 or Tier 3 High Fire Threat Districts (HFTD). A portion of the westernmost section of the project site is within a Tier 2 HFTD; however, no electrical lines are planned to be located within the Tier 2 HFTD area (CPUC, 2021). Therefore, the enhanced requirements would not apply.

General Order 165

General Order 165 establishes requirements for the inspection of electric distribution and transmission facilities that are not contained within a substation. Utilities must perform "patrol" inspections, defined as a simple visual inspection of utility equipment and structures that is designed to identify obvious structural problems and hazards, and must be performed at least once per year for each piece of equipment and structure. "Detailed" inspections, where individual pieces of equipment and structures are carefully examined, are required every 5 years for all overhead conductors and cables, transformers, switching/protective devices, and regulators/capacitors. By July 1 of each year, each utility subject to this General Order must submit an annual report of its inspections for the previous year under penalty of perjury (CPUC, 2017).

Senate Bill 1028

Senate Bill 1028 (2016) requires each electrical corporation to construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment, and makes a violation of these provisions by an electrical corporation a crime under state law. The bill also requires each electrical corporation to annually prepare a Wildfire Mitigation Plan (WMP) and submit it to the CPUC for review. The plan must include a statement of objectives, a description of preventive strategies and programs that are focused on minimizing risk associated with electric facilities, and a description of the metrics that the electric corporation uses to evaluate the overall WMP performance and assumptions that underlie the use of the metrics. SCE filed the 2023-2025 WMP on March 27, 2023 (SCE, 2023).

Senate Bill 901

Senate Bill 901 (2018) expanded upon the WMP requirements of Senate Bill 1028 and included a number of provisions related to wildfire risk and management in California including, but not limited to, the following: budget adjustments related to emergency response and readiness, the creation of a CAL FIRE Wildfire Resilience Program, and increasing the maximum penalties that can be issued by the CPUC to a public utility that fails to comply with CPUC requirements. SCE filed the 2023-2025 WMP on March 27, 2023 (SCE, 2023). Additionally, the legislation requires that utilities prepare WMPs that include elements specified in the bill, such as the following:

1. A description of the preventive strategies and programs to be adopted by the electrical corporation to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.
2. Protocols for disabling reclosers, such as circuit breakers that are used to isolate circuit segments when abnormal system conditions are detected, and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.
3. Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the electrical corporation's service territory.

SCE Wildfire Mitigation Plan

Pursuant to Senate Bill 901 and Senate Bill 1028, SCE submitted its 2023-2025 WMP to the California Office of Energy Infrastructure Safety (OEIS or Energy Safety) on March 27, 2023. The WMP describes SCE's approach to assessing and mitigating wildfire risk. The WMP represents the continuous refinement, expansion, and improvement of wildfire and Public Safety Power Shutoffs (PSPS) mitigation efforts. The WMP is also characterized by a continued execution of SCE's Integrated Wildfire Mitigation Strategy (IWMS), which further aligns grid hardening, inspections, and vegetation management activities. The WMP includes 40 activities with program targets to reduce the risk of wildfires and support service communities.

The "primary objective of [the] 2023-2025 WMP is to reduce the risk of wildfires associated with utility equipment and to reduce the scope, scale, frequency, and impacts of PSPS events" (SCE, 2023).

California Office of the Attorney General Wildfire and CEQA Guidance

In October 2022, the California Office of the Attorney General issued guidance (2022 AG Guidance) outlining best practices for analyzing and mitigating wildfire impacts of development projects under CEQA. The 2022 AG Guidance does not impose additional legal requirements on local governments, nor does it alter any applicable laws or regulations. It is intended to help local governments' evaluation and approval considerations for development projects in fire-prone areas, and to help project design in a way that minimized wildfire ignition and incorporates emergency access and evacuation measures. The 2022 AG Guidance recommends the following:

- **Baseline Conditions**—An EIR's discussion of existing environmental (baseline) conditions should include information about open space areas and habitats within the project area that may be fire prone, a discussion of fire history and fuels on the project site and existing available water supplies for firefighting.
- **Thresholds of Significance**—To identify when an increase in wildfire risk is considered a "significant impact" under CEQA, relevant factors include: (1) the project's impacts on ignition risk; (2) the likelihood of fire spread; and (3) the extent of exposure for existing and new residents, based on various fire scenarios. The 2022 AG Guidance notes that "wildfire ignitions are primarily human-caused in California."
- **Modeling**—Modeling fire scenarios means "quantifying" increased wildfire risks resulting from a project adding more people to wildfire prone areas and assessing risks according to the threshold of significance, including fires that start in, near or far from the project site and "extreme weather conditions that exacerbate fire spread". The 2022 AG Guidance states that a conclusion that conversion of wildland vegetation into paved development "reduces or does not increase wildfire

risk" is "contrary to existing evidence" and cannot be used to avoid analyzing and modeling wildfire risk.

To qualitatively assess a project's impact on wildfire risk, the 2022 AG Guidance recommends considering the following relevant variables:

- **Project Density**—Project density influences how likely a fire is to start or spread and how likely it is that occupants will be in danger. The 2022 AG Guidance states that "Fire spread and structure loss is more likely to occur in low- to intermediate-density developments."
- **Location in the Landscape**—Where a project's structures are placed in the landscape relative to fire environment features (vegetation, topographical features, and wind alignments) also influences wildfire risk. Terrain including wind corridors or steep slopes may increase risk while flatter terrain and natural fire breaks may reduce risk if the project is "strategically located" should be considered.
- **Water Supply and Infrastructure**—In addition to analyzing the water supply and infrastructure needed to address firefighting within the project site, the potential loss of water pressure or power during a fire should also be considered.

For potential measures to reduce wildfire risk, the 2022 AG Guidance recommends that wildfire reduction measures be tailored to the specifics of the project, the surrounding landscape, and nearby existing uses. The 2022 AG Guidance recommends lead agencies consider:

- Increasing residential density and consolidated project design, relying on higher density infill developments "as much as possible";
- Avoiding and minimizing low-density development patterns or "leapfrog-type" developments with undeveloped wildland between developed areas;
- Decreasing a project's "edge" or wildland interface area and creating buffer zones and defensible space measures within and adjacent to the project;
- Siting projects to maximize the role of low-flammability landscape features and limiting development along steep slopes and amidst rugged terrain;
- Undergrounding power lines;
- Upgrading building materials and installation techniques beyond applicable building code requirements to increase a structure's resistance to heat, flames and embers (i.e., "fire hardening"), and requiring fire-hardened communication facilities (including internet) to the project site;
- Requiring onsite water supply and/or storage to augment ordinary supplies that may be lost during a wildfire;
- Parking limitations to ensure access roads are not clogged with parked vehicles; and
- Placing development close to adequate emergency services, existing or planned ingress/egress, and designated evacuation routes.

In addition to evaluating the potential increased risk of ignition, the 2022 AG Guidance recommends, for a project located in a fire-prone area, the lead agency should analyze the project's impact on evacuation and emergency access. This analysis is relative to the project's particular impacts and risks (e.g., higher density infill projects within developed areas would require less detailed analysis than a new low-density development within a high wildfire risk area and/or surrounded by open space). Additionally, the 2022 AG Guidance recommends that evacuation modeling and planning should be required for all projects located in fire-prone areas that present an increased risk of ignition and/or evacuation impacts. Lead agencies

should require evacuation modeling and planning to be developed prior to project approval in order to provide maximum flexibility in design modifications necessary to address wildfire risks and impacts. The 2022 AG Guidance recommends evacuation modeling and analysis augment existing information when necessary, as follows:

- Evaluation of the capacity of roadways to accommodate project and community evacuation and simultaneous emergency access;
- Assessment of the timing for evacuation;
- Identification of alternative plans for evacuation;
- Evaluation of the project's impacts on existing evacuation plans;
- Consideration of the adequacy of emergency access, including the project's proximity to existing fire services and the capacity of existing services; and
- Traffic monitoring to quantify travel times under various likely scenarios.

Local

Kern County General Plan

Chapter 4: Safety Element

4.1 Introduction

Goal 1: Minimize injuries and loss of life and reduce property damage.

4.6 Wildland and Urban Fire

Policies

Policy 1: Require discretionary projects to assess impacts on emergency services and facilities.

Policy 4: Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.

Policy 6: All discretionary projects shall comply with the adopted Fire Code and the requirements of the Fire Department.

Implementation Measures

Measure A: Require that all development comply with the requirements of the Kern County Fire Department or other appropriate agency regarding access, fire flows, and fire protection facilities.

Soledad Mountain Elephant Butte Specific Plan

The Soledad Mountain Elephant Butte Specific Plan addresses issues of importance in the area by stating recommendations, analysis, and implementation measures specific to the area. There are no recommendations, analyses, or implementation measures in the Soledad Mountain Elephant Butte Specific Plan for wildfire applicable to the project. The Soledad Mountain Elephant Butte Specific Plan contains additional recommendations, analysis, and implementation measures that are more general in nature and are not specific to development such as the project. Therefore, they are not listed below, but all policies, goals,

and implementation measures in the Soledad Mountain Elephant Butte Specific Plan are incorporated by reference.

Kern County Multi-Jurisdictional Hazard Mitigation Plan

The latest Kern County Multi-Hazard Mitigation Plan was most recently updated in 2020. The Plan was developed by a Hazard Mitigation Planning Committee and identifies goals, objectives and actions pertaining to mitigating impacts from identified natural hazards. The public at large had an opportunity to comment prior to the completion of the Plan's final draft. The Federal Emergency Management Agency (FEMA) realizes the importance of mitigation planning and offers incentives to communities that develop one. By following FEMA guidelines for approval of this plan, Kern County can be eligible for grant funding intended for mitigation projects (County of Kern, 2020).

Kern County Fire Department Wildland Fire Management Plan

The Kern County Fire Department (KCFD) Wildland Fire Management Plan assesses the wildland fire situation throughout the SRA within the County. The Plan includes stakeholder contributions and priorities and identifies strategic targets for pre-fire solutions as defined by the people who live and work within the SRA. The plan systematically assesses the existing levels of wildland protection services and identifies high-risk and high-value areas, which are potential locations for costly and damaging wildfires. The goal of the plan is to reduce costs and losses from wildfire by protecting assets at risk through focused pre-fire management prescriptions and increasing initial attack success. Based on this assessment, preventive measures are implemented, including the creation of wildfire protection zones (KCFD, 2009).

Kern County Fire Code

Chapter 17.32 of the Kern County Municipal Code details the Kern County Fire Code, which is an adoption of the 2022 California Fire Code and the 2021 International Fire Code with some amendments. The purpose of the Kern County Fire Code is to regulate the safeguarding of life, property, and public welfare to a reasonable degree from the hazards of fire, hazardous materials release and/or explosion due to handling of dangerous and hazardous materials, conditions hazardous to life or property in the occupancy and use of buildings and premises, the operation, installation, construction, and location of attendant equipment, the installation and maintenance of adequate means of egress, and providing for the issuance of permits and collection of fees therefore.

Kern County Fire Department Unit Strategic Fire Plan

The KCFD Unit Strategic Fire Plan, updated in April 2025, is the most current document that assesses the wildland fire situation throughout the SRA within Kern County. Similar to other plans, this document includes stakeholder contributions and priorities, and identifies strategic targets for pre-fire solutions as defined by the people who live and work within the SRA. The plan provides for a comprehensive analysis of fire hazards, assets at risk, and level of services to systematically assess the existing levels of wildland protection services and identifies high-risk and high-value areas that are potential locations for costly and damaging wildfires. Additionally, the plan provides an annual report of unit accomplishments. The plan gives an overview of KCFD Battalions and ranks these areas in terms of priority needs as well as identifies the areas of SRA. The project site is located within Battalion 1, Tehachapi (KCFD, 2025).

Fire Prevention Standard No. 503-507 Solar Panels

The Kern County Fire Department Fire Prevention Division adopted Standard No. 503-507 Solar Panels (Ground Mounted, Commercial & Residential) on April 8, 2021. The standard is implemented in accordance with the 2019 California Fire Code and Kern County Ordinance and is an official interpretation of the Kern County Fire Marshal's Office. The standard outlines installation requirements for photovoltaic (PV) ground-mounted and roof-mounted solar panels. The proposed project would mount systems for the modules on steel support posts that would be pile-driven into the ground and would therefore comply with the ground mounted requirements of this fire prevention standard. Ground-mounted solar panel requirements of this standard include water supply, clearance and combustibles, stationary storage battery/energy storage systems, clean agent system permits, fire extinguisher placement, and emergency vehicle access (KCFD, 2021).

4.18.4 Impacts and Mitigation Measures

Methodology

Wildfire impacts are considered on the basis of landscape characteristics and the potential for the project to start or exacerbate wildfires. The project's potential impacts associated with wildfires have been evaluated using a variety of resources, including CAL FIRE maps showing FHSZs, FRAP, and fire history, project location maps, and project characteristics. Using the aforementioned resources and professional judgment, potential impacts were analyzed according to California Environmental Quality Act (CEQA) significance criteria described below.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA *Guidelines*, to determine if a project could potentially have a significant impact with respect to Wildfires.

A project would have a significant impact with respect to wildfires if it would be located in or near state responsibility areas or lands classified as very high fire hazard severity zones, and if the project would:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan;

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment;

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes.

Project Impacts

Impact 4.18-1: The project would substantially impair an adopted emergency response plan or emergency evacuation plan.

The project site is not classified as being within a Very High FHSZ and is not anticipated to physically impede existing emergency response plans, emergency vehicle access, or personnel access to the site. The site is located in a rural, sparsely developed area with limited population. The project site is not located along an identified emergency evacuation route and is not identified in any adopted emergency evacuation plan. The project would comply 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.

As noted in **Section 4.15**, *Transportation*, the need for and number of any escorts of equipment transported during construction (i.e., from California Highway Patrol), as well as the timing of transport, would be reviewed by the California Department of Transportation (Caltrans) and Kern County, and would be detailed in respective oversize load permits. **Mitigation Measure MM 4.15-1** in **Section 4.15**, *Traffic and Transportation*, 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 a.m. and p.m. 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.

Therefore, the project would not conflict with the implementation of, or physical interference with, an adopted emergency response plan or emergency evacuation plan and potential impacts would be less than significant.

Mitigation Measure

Implementation of **Mitigation Measure MM 4.15-1** would be required (See **Section 4.15**, *Transportation*, for full mitigation text).

Level of Significance

With implementation of **Mitigation Measure MM 4.15-1**, impacts would be less than significant.

Impact 4.18-2: The project would, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Slope and wind speed can influence the spread of fires. Upslope topography eventually increases the spread rate of the fire in all fuel beds when compared to flat conditions. As described in **Chapter 3**, *Project Description*, of this EIR, elevations across the project site range from approximately 2,970 and 3,760 feet

above mean sea level. As such, due to the project site having low topographic relief and being relatively flat, slope will not be a material contributing factor to the spread rate of potential fires.

The proposed project would introduce temporary onsite employees during construction and six permanent employees during operation. When a wildfire occurs, pollutants such as ash are released. In the event of a wildfire within the area, any employees occupying the site would be evacuated at the time of the event, and/or evacuated well in advance of an approaching wildfire, in conformance with applicable County evacuation directives put in place. Such measures would ensure that the exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire from prevailing winds would be minimized to the extent feasible.

Most of the project site is classified as both SRA and LRA Moderate FHSZs; however, there are some portions of the northwestern section of the project site (including a segment of the proposed gen-tie line route) that are classified as an SRA High FHSZ. However, the landscape of the project site consists of primarily low topographic relief and sparse vegetation with little potential for fuel buildup as stated previously in **Chapter 3**, *Project Description.* Site preparation includes trash removal, mowing, and clearing of vegetation that would unduly interfere with project construction or the health and safety of onsite personnel, and further reducing vegetation fuel build up. Additionally, project construction would comply with applicable existing codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, cleanup of spills of flammable materials, and vegetation management.

The California Fire Code (CFC), Chapter 12, has specific, detailed design requirements for stationary electrical energy storage systems, to ensure fire safe construction, operation, and decommissioning. As detailed further in Section 3.7.2 (Battery Energy Storage Systems) of **Chapter 3,** *Project Description*, the project will be designed to comply with Chapter 12 of the CFC and applicable National Fire Protection Association (NFPA) standards, which contain strict fire safety requirements for stationary electrical energy storage facilities. Specifically, CFC Section 1207.8.3 requires a minimum 10-foot setback from other exposures (i.e., buildings, combustible materials like vegetation, etc.). The 10-foot setback was originally established by the NFPA 855 Committee, which was later reflected in the International Fire Code and then CFC, as an acceptable distance between a battery fire and another combustible exposure based on the Committees experts understanding of fire dynamics plus the protection requirements of the fire code. Project design established a 100-foot setback by eliminating all vegetation within 100 feet of the battery energy storage yards to align with the definition of a “remote” facility (CFC Section 1207.8.1) and to provide a conservative fire break setback. The project will also comply with the requirements of California Public Utilities Code Section 761.3, which requires battery energy storage facilities to have an emergency response and emergency action plan covering the premises of the facility that is prepared in coordination with local emergency management agencies, unified program agencies, and local first responders. The project proponent/operator will work with first responders to develop these plans and to coordinate site-specific training for first responders.

Wildfire risk associated with the battery energy storage systems (BESS) would be minimal due to a combination of factors including installation/use of only outdoor cabinet-type BESS enclosures like the examples in **Figure 3-16,** *Battery Energy Storage System*, which limit the “fuel” in a fire event because they are made of non-combustible metals; conducting large-scale fire testing (LSFT) that, during a worst case fire scenario within a cabinet, ensures the fire does not extend beyond a single enclosure; implementation of requisite spacing and setbacks per the fire code and hazard mitigation analysis (HMA) based on the LSFT; installation of rock/aggregate base foundations; and strict vegetation clearing and

ongoing management per the Fire Safety Plan. If an outdoor battery cabinet-type BESS enclosure were to catch fire, the primary fuel is gas from the breakdown of electrolytes and synthetic polymers because the materials of the enclosure structure are non-combustible metals; therefore, no embers are produced. Instead, a cabinet-type battery fire spreads to other exposures primarily through thermal radiation (i.e., adjacency to heat). As part of the HMA, which will be submitted for KCFD approval as part of the building permit application, a thermal radiation analysis will be performed to confirm that a battery fire will not pose an ignition risk to other exposures (including vegetation) at a 100-foot distance. As stated, project design includes a conservative 100-foot setback from onsite vegetation to battery cabinets, which is well beyond the 10-foot CFC Section 1207.8.3 requirement. In addition, the project includes a minimum 300-foot setback to adjacent property lines. Therefore, sufficient distance between BESS containers and onsite or offsite vegetation will be established and continuously maintained to eliminate risk of fire spread to adjacent vegetation. Further, no BESS fires in the United States have resulted in offsite fires. Therefore, potential wildfire risk impacts associated with BESS at the project site are considered less than significant.

As discussed in **Section 4.14**, *Public Services,* of this EIR, the project proponent/operator shall 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**. Under the Fire Safety Plan, construction and maintenance personnel would also be trained and equipped to extinguish small fires, thus reducing the risk of fire onsite, and information would be provided to first responders about the type of battery energy storage technology onsite, potential hazards and mitigations, and recommended firefighting tactical procedures in case of a fire incident.

While fires at BESS are rare, environmental monitoring that has occurred during and after outdoor cabinet-type battery energy storage system fires has shown no impact to the surrounding environment. For example, following an outdoor cabinet-type BESS fire at a San Diego Gas & Electric facility in Escondido, San Diego on September 5, 2024, County Hazmat conducted air monitoring over a four-hour period during the incident at eleven different locations. The monitoring found only normal products combustion of a structure fire were detected and at levels well below exposure thresholds set by the National Institute for Occupational Safety and Health and Occupational Safety and Health Administration. A third-party contractor conducted additional air quality monitoring at eighteen different locations during the incident and for an additional 12 hours after the fire was extinguished and concluded that at no time during the incident did the levels of oxygen deviate from 20.9 percent, which is considered normal atmospheric level. Any decrease in the percentage of oxygen would indicate that there was some unknown gas in the atmosphere that was not able to be detected by monitoring equipment. No such deviation was detected (SDG&E, 2024a).

The project includes firewater tanks, consistent with KCFD requirements for other similar projects. The final amount of firewater storage is not expected to exceed 30,000 gallons of usable water. Due to the project electing to only use cabinet-type battery enclosures, the use of the fire water tank is only intended to cool adjacent uninvolved enclosures if needed during a fire and not directly used on a battery fire, thus eliminating any water runoff concerns both due to the limited water quantity and indirect application. By way of the same incident example, the fire water runoff used during the San Diego Gas & Electric fire in Escondido was sampled and found to have no levels of contamination above safe drinking water levels. Eurofins Calscience, an accredited environmental testing lab, in collaboration with San Diego County Wastewater Division, sampled for 17 different containments. Six samples had detectable concentrations,

but all were below safe drinking water levels. The remaining 11 samples did not detect any levels of the sampled for contaminants. The San Diego County Wastewater Division at Hale Avenue Resource Recovery Facility confirmed that there were no concerns with this water entering the environment (SDG&E, 2024b).

Similarly, environmental monitoring and sampling during and after three BESS fires in New York, each site using different battery chemistries and configurations, reported "no harmful levels of toxins detected, and no long-term off-site impacts involving any migration of contaminants associated with the fires". Agencies involved included the Division of Homeland Security and Emergency Services, Office of Fire Prevention and Control, New York State Energy Research and Development Authority, New York State Department of Environmental Conservation, Department of Public Service, the Department of State, and the State Department of Health (New York State Inter Agency Fire Safety Working Group, 2023).

Wildfire risk along the gen-tie corridor would be minimal due to the lack of substantial vegetation, and concrete foundations would further reduce the spread of fire. As described previously, fire safety measures would be implemented to ensure that operation of the project components, including the gen-tie line, in accordance with applicable fire protection and environmental, health, and safety requirements.

Although the potential for wildfire does exist, the project site's flat topography and equipment layout, sparse vegetation, strict vegetation management during construction and operation, employee and fire fighter training, and implementation of **Mitigation Measure MM 4.14-1,** the project would not create conditions that would exacerbate wildfire risks. There is a low potential that the project would expose project occupants to pollutant concentrations from a wildfire or lead to the uncontrolled spread of wildfire due to slope, prevailing winds, and other factors. Therefore, potential impacts would be less than significant.

Mitigation Measure

Implementation of **Mitigation Measure MM 4.14-1** would be required (see **Section 4.14**, *Public Services*, for text of **Mitigation Measure MM 4.14-1**).

Level of Significance after Mitigation

With implementation of **Mitigation Measure MM 4.14-1**, impacts would be less than significant.

Impact 4.18-3: The project would require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

The project would include the construction of solar PV panels, energy storage system(s), electrical collection systems and inverters, onsite collector substations, a gen-tie line, a 230- kilovolt (kV) switchyard, telecommunications facilities, supporting equipment, and access roads that could potentially exacerbate fire risk and result in temporary or ongoing impacts to the environment. The collection system would connect to the solar panels via above- and underground wiring. Underground electrical cables (underground collection system) would be installed from groups of solar arrays that would be arranged into power blocks. All electrical inverters and the transformers would be dispersed among the arrays and installed on prefabricated metal skids that would sit on steel pier foundations or concrete foundations, depending on the design. The inverter pad transformers would step up the voltage of the array output, which would be collected at the onsite circuit breakers or switchgear positions. From the circuit breakers or switchgear positions, the medium-voltage collector lines would be routed underground or aboveground to onsite

collector substations. The onsite collector substations are the termination point of the collection system of 34.5-kV alternating current (AC) electricity. The onsite collector substations would host the grid intertie safety equipment, transformers and switches required to step the voltage up from 34.5-kV to 230kV and interconnect to the high-voltage transmission system (gen-tie line). Ultimately, the power would then be delivered via a new, 230-kV gen-tie line extending from an onsite collector substation to the proposed 230-kV switchyard, and to a step-up substation previously approved and constructed as part of the Enterprise Solar Storage Project, located north of the SCE-owned Windhub Substation, where it will be stepped up to 500 kV for final grid interconnection at the Windhub Substation. These facilities would be installed in accordance with all County and State building codes.

New internal unpaved roads would be constructed to serve as access roads from the existing road network to the solar array blocks. All road improvements would be completed per Caltrans and/or County code and regulations. These roads would be up to 25 feet wide and would be cleared and compacted for equipment and emergency vehicle travel and access to the solar blocks and equipment within the project site. These project site access roads would remain in place for ongoing operations and maintenance activities after construction is completed. All new roads would comply with development requirements for emergency access and, therefore, would not exacerbate fire risk that could result in temporary or ongoing impacts to the environment.

Finally, the project would include a number of aboveground fire water tanks for operations, exposure cooling, and non-battery fire suppression, which would be placed at designated locations throughout the project site, including near battery energy storage system locations. Final locations and tank volumes would be subject to review and approval by KCFD. As discussed in **Section 4.17**, *Utilities and Service Systems*, of this EIR, there is sufficient water available to meet the future water demands of the proposed project during normal, single dry, and multiple dry years through 2060.

An energy storage system is proposed as part of the project. Fires at BESS are uncommon; in the rare instances where fires have occurred, modern safety features and protocols are designed to protect operators, first responders and neighbors, and confine an incident to a single battery enclosure. As described in **Impact 4.18-2**, the CFC, Chapter 12 (Energy Systems), includes specific, detailed requirements for stationary electrical energy storage systems to promote fire safe construction, operation, and decommissioning. The project will be designed to comply with Chapter 12 of the CFC and applicable NFPA standards, which establish stringent fire safety requirements for stationary electrical energy storage facilities.

Unlike typical structural or wild-land fires, a battery enclosure fire does not produce embers, which reduces the likelihood of ignition of adjacent vegetation or offsite areas. Instead, the principal spread mechanism is radiant or convective heat transfer to adjacent exposures. This risk is mitigated through enclosure spacing, barriers, and/or cooling. The CFC and NFPA 855 require rigorous large-scale fire testing, with performance-based criteria demonstrating that listed enclosures do not pose credible fire risk to adjacent enclosures and that a fire will not propagate beyond a single enclosure under testing conditions, even without the use of suppression. To achieve these results, energy storage systems designs typically employ various types of passive controls such as thermal runaway mitigation systems, equipment spacing, setbacks, vegetation control/rock cover, and fire-resistant and/or non-combustible construction materials. Documentation demonstrating compliance with the CFC and NFPA 855—including testing results, listings, plans, analysis, and drawings—will be submitted with the building permit application to KCFD for review and approval.

Should a battery fire occur, incident response tactics—determined by the fire Authority Having Jurisdiction and consistent with project-specific training and pre-incident Emergency Response Planning—may include

allowing the single affected enclosure to burn while monitoring surrounding areas and applying water to cool adjacent exposures, as needed. As noted above, no BESS fires in the United States have resulted in offsite fires.

The ignition sources for most fires in the desert are typically lightning or vehicles. Further, the use of maintenance vehicles can increase fire risk due to driving heated mufflers over vegetated areas. However, as described above, vegetation control measures will be utilized during the construction and operation of the project. The proposed project would result in a minimal increase in fire risks that could result in temporary or ongoing impacts to the environment.

As discussed in **Section 4.14**, *Public Services*, of this EIR, the project proponent/operator will develop and implement a Fire Safety Plan that contains notification procedures and emergency fire precautions consistent with the California and Kern County Fire Code for use during construction, operation and decommissioning, per implementation of **Mitigation Measure MM 4.14-1**. The Fire Safety Plan will contain procedures and protocols to ensure that first responders are adequately trained to control a fire emergency at the site during both project development and operation. Implementation of this plan would ensure that potential impacts related to installation or maintenance of infrastructure associated with the energy storage system would be reduced to a level less than significant.

Mitigation Measure

Implementation of **Mitigation Measure MM 4.14-1** would be required (see **Section 4.14**, *Public Services*, for text of Mitigation Measure **MM 4.14-1**).

Level of Significance after Mitigation

With implementation of **Mitigation Measure MM 4.14-1**, impacts would be less than significant.

Impact 4.18-4: The project would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes.

Development of the proposed project would alter existing onsite drainage patterns and flowpaths compared to existing conditions and include the introduction of new impervious surfaces. In accordance with **Mitigation Measure MM 4.10-1** (see **Section 4.10,** *Hydrology and Water Quality*, for full mitigation measure text), the project would require implementation of a Stormwater Pollution Prevention Plan (SWPPP), which would include erosion and sediment control best management practices (BMP) during construction, thereby reducing the potential of erosion and siltation during construction and would control potential flooding events that could occur during construction. Additionally, the proposed new impervious surfaces would generate additional stormwater runoff onsite, albeit in minor quantities compared to existing conditions. However, this could exacerbate potential erosion and sedimentation onsite or downstream. As discussed in **Section 4.10**, *Hydrology and Water Quality*, of this EIR, Kern County requires development of a drainage plan with the site development grading permit, which will manage stormwater and reduce the risk for offsite impacts due to erosion and impacts on water quality, as implemented by **Mitigation Measure MM 4.10-1**. Design measures are intended to minimize or manage flow concentration and changes in flow depth or velocity so as to minimize erosion, sedimentation, and flooding on or off site. The drainage plan would include engineer recommendations meant to offset increases in stormwater runoff and would incorporate them into the project design. Since the project site is generally undeveloped under existing conditions, the project would result in a net increase in the amount of impervious surfaces as a result of

constructing equipment foundations. However, a majority of the project site would remain pervious. Implementation of **Mitigation Measure MM 4.10-1** would minimize potential increases in runoff and ensure that the retention basins and other stormwater management features are implemented to minimize erosion and sedimentation to less than significant. As discussed in **Section 4.10**, *Hydrology and Water Quality*, of this EIR, most of the drainage flow within the project site infiltrates into the soils onsite.

The project site is located east of the Tehachapi Mountains and is relatively flat. Based on the fire history immediately surrounding the site, predominately moderate zone designation, soil types, and surface hydrology, there is a low potential for the project site to be at risk of post-fire instability or drainage changes.

While the project would introduce new structures to the project site, the structures would not be placed in a highly flammable landscape. In addition, as described further in **Section 4.7**, *Geology and Soils*, conditions for landslides are not present at the project site, which is characterized by relatively gradual inclines across the site. Furthermore, with implementation of **Mitigation Measure MM 4.10-1**, any potential impacts from runoff and erosion would be minimized. Therefore, the project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Potential impacts would be less than significant with incorporation of **Mitigation Measure MM 4.10-1**.

Mitigation Measure

Implementation of **Mitigation Measure MM 4.10-1** would be required (see **Section 4.10**, *Hydrology and Water Quality*, for full mitigation measure text).

Level of Significance after Mitigation

With implementation of **Mitigation Measure MM 4.10-1**, impacts would be less than significant.

4.18.5 Cumulative Setting, Impacts, and Mitigation Measures

The geographic scope for wildfire impacts is considered the Antelope Valley. This geographic scope was selected because the land within the region possesses relatively similar uses, including sparse desert vegetation, rural access roads, scattered rural residences, producing and non-producing water wells, cattle ranching and maintenance facilities, mining, wind and solar energy uses. As shown in **Chapter 3**, *Project Description*, there are 43 projects proposed or approved throughout the Antelope Valley in Kern County and in the desert portion of Kern County outside the Antelope Valley. Of the 43 total projects in Kern County, 33 would be located within 6 miles of the project site and 7 would be located within 1 mile of the project site. Furthermore, of these cumulative projects, related projects would be located within either LRA Moderate or SRA Moderate FHSZs with the exception of the Windstar Upper and Lower BESS project, which is located within a SRA High FHSZ. Apart from the Windstar Upper and Lower BESS project, most cumulative projects similar in nature to the proposed project would be located outside of High or Very High FHSZs, which are primarily located in the Tehachapi Mountains to the west/northwest of Antelope Valley (see **Figure 4.18-1**, *Fire Hazard Severity Zones for Local Responsibility Areas*).

With regard to impairment of an adopted emergency response plan or emergency evacuation plan, all of the related projects would be required to provide adequate emergency access in accordance with County Fire Code and Building Code requirements and prior to the issuance of a building permit. Further, the project

site is located in a rural, sparsely developed area with limited population, is sparsely vegetated and lacks steep slopes, and would be in compliance with Fire Code and Building Code requirements including fire prevention and emergency response training for site personnel. Additionally, as discussed in **Section 4.14**, *Public Services*, of this EIR, the project proponent/operator will develop and implement a Fire Safety Plan that contains notification procedures and emergency fire precautions consistent with the California Fire Code and Kern County Fire Code for use during construction, operation and decommissioning, per implementation of **Mitigation Measure MM 4.14-1**. All related projects would also be required to implement Fire Safety Plans and to comply with applicable California and Kern County Fire Codes. As concluded in the discussion of project impacts above, the project would have a less than significant impact related to impairment of an adopted emergency response or evacuation plan. Nevertheless, given the location in a rural area and limited infrastructure, the project and related projects have the potential to result in a cumulative impact to an adopted emergency response plan or emergency evacuation plan and, thus, would result in a significant and unavoidable cumulative impact.

With regard to cumulative impacts related to exposure of project occupants to pollutant concentrations from a wildfire, the proposed project is not within an LRA, SRA, or FRA identified as having a very high fire risk, and all related projects would be located within either LRA Moderate or SRA Moderate FHSZs. No related cumulative projects would be located within either High or Very High FHSZs, as these areas are primarily located in the Tehachapi Mountains to the west/northwest of Antelope Valley. Similar to the proposed project, all related projects would be required to implement a Fire Safety Plan similar to the one required by **Mitigation Measure MM 4.14-1** and would be required to implement building and landscape design features in accordance with the Fire Code and Building Code to reduce wildfire risk and exposure of occupants to pollutant concentrations from a wildfire. Adherence to the Fire Code and Building Code requirements would minimize potential impacts related to exposure to and the uncontrolled spread of a wildfire. Furthermore, with the exception of certain topographical features located throughout Antelope Valley, the region is relatively flat overall and does not contain many steep slopes, although elevations gradually increase towards the Tehachapi Mountains. Thus, cumulative projects in Antelope Valley would not exacerbate wildfire risks due to slope. Potential pollutant concentrations occurring at cumulative projects are unlikely to impact proposed project occupants due to distance. Conversely, potential pollutant concentrations occurring at the project site are unlikely to impact cumulative project occupants due to distance. As concluded in the discussion of project impacts above, the project would have a less-than-significant impact related to exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Nevertheless, given the location in a rural area and limited infrastructure, the project and related projects have the potential to result in a cumulative impact related to exposure of project occupants to pollutant concentrations from a wildfire and, thus, would result in a significant and unavoidable cumulative impact.

Related projects may require associated infrastructure such as roads, fuel breaks, and power lines that could exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. These projects would be reviewed by Kern County for land use and zoning consistency and compliance with applicable requirements, and potentially analyzed for environmental impacts. The placement of infrastructure associated with cumulative projects would adhere to all fire codes to minimize the potential fire risk such as siting and design. The proposed project would include the construction of solar PV panels, energy storage system(s), electrical collection systems and inverters, collector substations, a 230-kV switchyard, a gen-tie line, telecommunications facilities, supporting equipment, and access roads. While the potential for fire is considered predominately moderate, **Mitigation Measure MM 4.14-1** would be implemented to ensure that a Fire Safety Plan is prepared, that contains notification procedures and emergency fire precautions

consistent with the California and Kern County Fire Codes, for use during project construction, operation and decommissioning. All related projects would also be required to implement Fire Safety Plans. Similarly, all cumulative projects would be required to mitigate any significant impacts to public services, utilities, and transportation, as does the proposed project. As described above, the project would result in a less than significant impact related to the exacerbation of fire risk associated with the installation or maintenance of project infrastructure. Nevertheless, given the location in a rural area and limited infrastructure, the project and related projects have the potential to result in a cumulative impact related to the installation or maintenance of associated infrastructure and, thus, would result in a significant and unavoidable cumulative impact.

Some related projects could be proposed in areas that could expose people or structures to risks from downslope or downstream flooding or landslides as a result of post-fire instability. Based on the recent fire events in California, all projects would be required to adhere to Kern County's zoning and land use designations and codes, State and local fire codes, and regulations associated with drainage and site stability. These regulations, policies, and codes would reduce the potential for exposing people or structures to risks from downslope or downstream flooding or landslides as a result of post-fire instability. There are no landslide areas within Antelope Valley (DOC, 2024), and with the exception of certain topographical features, the area is relatively flat overall and does not contain many steep slopes, although elevations gradually increase towards the Tehachapi Mountains. Thus, cumulative projects would not be located in areas where post-fire slope instability is a concern. Regarding runoff and drainage, each cumulative project would also require site-specific hydrology and drainage studies for effective drainage design, as is required for the project with implementation of **Mitigation Measure MM 4.10-1**. Further, all cumulative projects would disturb more than an acre of ground, therefore requiring conformance with the requirements of the National Pollutant Discharge Elimination System General Construction Permit Program through the preparation of a SWPPP, which would include erosion and sediment control BMPs during construction, thereby reducing the potential of erosion and siltation during construction and would control potential flooding events that could occur during construction. As concluded in the discussion of project impacts above, with implementation of **Mitigation Measure MM 4.10-1**, the project would not expose people or structures to significant risks due to post-fire slope instability or drainage changes and would have a less-than-significant impact. Nevertheless, given the location in a rural area and limited existing infrastructure, the project and related projects have the potential to result in a cumulative impact related to exposing people or structures to runoff, post-fire slope instability, or drainage changes with implementation of the projects and, thus, would result in a significant and unavoidable cumulative impact.

Mitigation Measures

Implementation of Mitigation Measures **MM 4.10-1** and **MM 4.14-1** would be required (see **Section 4.10**, *Hydrology and Water Quality*, and **Section 4.14**, *Public Services*, for full mitigation measure text).

Level of Significance after Mitigation

Even with implementation of **Mitigation Measures MM 4.10-1** and **MM 4.14-1**, impacts would remain significant and unavoidable.

Chapter 5
Consequences of Project Implementation

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Chapter 5
Consequences of Project Implementation

5.1 Environmental Effects Found to Be Less than Significant

Section 15128 of the California Environmental Quality Act (CEQA) *Guidelines* requires that an Environmental Impact Report (EIR) "contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR."

Kern County has engaged the public in the scoping of the environmental document. Comments received during scoping have been considered in the process of identifying issue areas that should receive attention in the EIR. The EIR's contents were established based on the Notice of Preparation (NOP) located in **Appendix A** of this EIR that was prepared in accordance with the CEQA *Guidelines* and in consideration of public and agency input received during the scoping process.

Issues that were found to have no impact or less-than-significant impacts do not need to be addressed further in this EIR. Based on the findings of the NOP and the results of scoping, it was determined that the project would have no impact with regard to the following impact thresholds:

- Population and Housing
- Recreation

The NOP determined that up to 660 full-time employees per day would be required during peak construction periods for the project. Project construction is anticipated to take approximately 34 months. Therefore, the majority of project-generated jobs would be from the local and regional area and would occur on a temporary and short-term basis. Construction workers are expected to travel to the project site from various local communities and locations throughout Southern California, and few, if any workers are expected to relocate to the surrounding area because of these temporary jobs. If temporary housing should be necessary, it is expected that accommodations (i.e., extended stay hotels, apartments, recreational vehicle parks, homes for rent or sale) would be available in the nearby communities of California City, Mojave, and Rosamond. Therefore, the project is not anticipated to directly or indirectly induce the development of any new housing or businesses within the local communities.

The project is located on private land owned or leased by Discovery Solar PV and Storage, LLC (project applicant/proponent) and no residents would be displaced as part of the project. Parcels with existing residences and the petting zoo within the project site have been acquired by the project proponent, and existing structures will be demolished as part of project construction, in accordance with Kern County demolition permits and other applicable regulations. The project is not anticipated to displace existing housing that would necessitate the construction of replacement housing elsewhere.

The project itself does not include new recreational facilities and is not anticipated to increase demands on existing facilities. The number of workers needed during the construction phase would largely depend on the specific stage of construction and peak at 660 workers. These workers are not likely to visit local parks

or recreation facilities during the workday and the workers that are relocating temporarily during construction would create little or no impact on local recreational resources after work hours.

Operation of the project would require up to six full-time employees for maintenance and monitoring activities, but they would likely be drawn from the local labor force and would commute from their existing permanent residence to the project site. However, even if the maintenance/monitoring employees were hired from out of the area and relocated to eastern Kern County, the addition of any such families to the project area would not result in a substantial increase in the number of users at local parks or recreational facilities. As a result, there would not be a detectable increase in the use of existing neighborhood or regional parks or other recreational facilities, and therefore, no deterioration of any such facilities would occur or require the construction of new facilities as a result of project implementation.

As a result, the project would not directly or indirectly induce the development of any new housing or businesses, and there would not be a detectable increase in the use of parks or other recreational facilities. No impacts to population and housing or recreation would occur and no further analysis is warranted.

For all other resource areas, this EIR contains a comprehensive analysis of potential environmental impacts.

After further study and environmental review, as provided in this EIR, it was determined that project-level impacts in the following areas would be less than significant or could be reduced to less-than-significant levels with mitigation measures; however, these resource areas are evaluated in this EIR for their potential significance:

- Agriculture and Forestry Resources;
- 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

5.2 Significant Environmental Effects that Cannot Be Avoided

Section 15126.2(b) of the CEQA *Guidelines* requires that the EIR describe any significant impacts, including those that can be mitigated but not reduced to less-than-significant levels. Potential environmental effects of the project and proposed mitigation measures are discussed in detail in Chapter 4 of this EIR.

After further study and environmental review, as provided in this EIR, it was determined that project-level and cumulative impacts in the following areas, as shown in **Table 5-1**, *Summary of Significant and Unavoidable Impacts of the Project*, would be significant and unavoidable for the project, even with the incorporation of feasible mitigation measures, which would reduce impacts to the greatest extent feasible.

TABLE 5-1: SUMMARY OF SIGNIFICANT AND UNAVOIDABLE IMPACTS OF THE PROJECT

Resources	Project Impacts	Cumulative Impacts
Aesthetics	Implementation of the project would result in significant visual impacts to the existing visual quality or character of the site and surrounding area. Mitigation Measures MM 4.1-1 through MM 4.1-5 would reduce visual impacts associated with the project by limiting vegetation removal, planting native vegetation, providing privacy fencing or similar view-screening materials, 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 natural screening of project components. Furthermore, the color treatment of buildings would help these components to better blend in with the natural landscape. However, because there are no feasible mitigation measures that can be implemented to maintain the existing, open and undeveloped desert landscape character of the project site, even with implementation of Mitigation Measures MM 4.1-1 through MM 4.1-5, project level impacts to visual character and quality would remain **significant and unavoidable.**	While other projects in the region would also be required to implement various mitigation measures to reduce impacts, the conversion of thousands of acres a developed landscape cannot be mitigated to a degree in which impacts are no longer significant. Even with implementation of Mitigation Measures MM 4.1-1 through MM 4.1-5, the project's contribution to significant cumulative impacts associated with visual character in the Mojave Desert and Antelope Valley areas would be **cumulatively significant and unavoidable.**
Biological Resources	Implementation of the project would have a substantial adverse effect, either directly or through habitat modifications on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations by the CDFW. Approximately 80 percent of western Joshua tree (WJT) stems at the project are within the WJT Impact Area and are subject to potential direct impacts. The remainder of WJT stems (20 percent) would be preserved onsite within Woodland Habitat Preservation Areas. However, while implementation of the project design features and Mitigation Measures MM 4.4-7 and MM 4.4-1 through MM 4.4-3 would reduce impacts to WJT, the County considers impacts to WJT to be **significant and unavoidable** due to the number of WJT that would be impacted to implement the project. Impacts would be less than significant for all other affected species.	Implementation of the project in addition to the other projects under way or proposed within Kern County would impact wildlife species. Given the number of present and reasonably foreseeable future development projects in the Antelope Valley, the project, when combined with other projects, would result in a significant and unavoidable cumulative loss of foraging and nesting habitat for special-status species. While the project would have less-than-significant impacts with the implementation of Mitigation Measures MM 4.1-1 through MM 4.1-3, MM 4.4-1 through MM 4.4-20 and MM 4.10-1 and 4.10-2, when combined with related projects, the project would contribute to impacts that would be **cumulatively significant and unavoidable**.
Wildfire	There would be no significant and unavoidable project impacts.	Despite implementation of Mitigation Measures MM 4.10-1 and MM 4.14-1, given the project's location in a rural area and limited infrastructure, the project and related projects have the potential to result in a cumulative impact related to exposing people or structures to risks as a result of

Resources	Project Impacts	Cumulative Impacts
		runoff, post-fire slope instability, or drainage changes and, thus, would result in a **significant and unavoidable** cumulative impact.

5.3 Irreversible Impacts

Section 15126.2(c) of the CEQA *Guidelines* defines an irreversible impact as an impact that uses nonrenewable resources during the initial and continued phases of the project. Irreversible impacts can also result from damage caused by environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to ensure that such consumption is justified.

Build-out of the project would commit nonrenewable resources during project construction. During project operations, oil, gas, and other fossil fuels and nonrenewable resources would be consumed, primarily in the form of transportation fuel for project employees, construction vehicles and equipment, as well as any power sources (e.g. portable generators) to facilitate construction activities. Therefore, an irreversible commitment of nonrenewable resources would occur as a result of long-term project operations. However, assuming that those commitments occur in accordance with the adopted goals, policies, and implementation measures of the Kern County General Plan and the Soledad Mountain Elephant Butte Specific Plan, as a matter of public policy, those commitments have been determined to be acceptable and necessary to successfully implement the project and achieve project objectives. The Kern County General Plan ensures that any irreversible environmental changes associated with those commitments will be minimized.

5.4 Growth Inducement

The Kern County General Plan recognizes that certain forms of growth are beneficial, both economically and socially. Section 15126.2(d) of the CEQA *Guidelines* provides the following guidance on growth-inducing impacts:

> *A project is identified as growth-inducing if it "would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment."*

Growth inducement can be a result of new development that requires an increase in employment levels, removes barriers to development, or provides resources that lead to secondary growth. With respect to employment, the project would not induce substantial growth. There would be six permanent employees during operations. It is anticipated that the construction workforce would commute to the sites each day from local and regional communities, and the majority would likely come from the existing labor pool as construction workers travel from site to site as needed. Construction staff not drawn from the local and regional labor pool would stay in any of the local hotels in local communities.

Although the project would contribute to the energy supply, which supports growth, the development of power infrastructure is a response to increased market demand. It does not induce new growth. Kern County planning documents already permit and anticipate a certain level of growth in the area of the project and in the State as a whole, along with attendant growth in energy demand. It is this anticipated growth that drives energy-production projects, not vice versa. The project would supply energy to accommodate and support

existing demand and projected growth statewide, but it would not foster any new growth within the project vicinity. Therefore, any link between the project and growth in Kern County would be speculative.

In *Kerncrest Audubon Society v. Los Angeles Department of Water and Power*, the analysis of growth-inducing effects contained in the EIR for the Pine Tree Wind Development Project was challenged. Plaintiffs argued that the discussion was too cursory to provide adequate information about how additional electricity generated by the project would sustain further growth in the Los Angeles area. The court held that the additional electricity that the project would produce was intended to meet the current forecast of growth in the Los Angeles area. As such, the wind development project would not cause growth, and so it was not reasonable to require a detailed analysis of growth-inducing impacts. In addition, EIRs for similar energy projects have contained similarly detailed analyses of growth-inducing impacts. Their conclusions that increasing the energy supply would not create growth has been upheld, because: (1) the additional energy would be used to ease the burdens of meeting existing energy demands within and beyond the area of the project; (2) the energy would be used to support already-projected growth; or (3) the factors affecting growth are so multifarious that any potential connection between additional energy production and growth would necessarily be too speculative and tenuous to merit extensive analysis. Thus, as has been upheld in the courts, this level of analysis provided in this EIR is adequate to inform the public and decision makers of the growth-inducing impacts of the project.

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Chapter 6
Alternatives

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Chapter 6
Alternatives

6.1 Introduction

The California Environmental Quality Act (CEQA) requires that an environmental impact report (EIR) describe a range of reasonable alternatives to the project or to the location of the project that could feasibly avoid or lessen any significant environmental impacts of the project while attaining most of the project's basic objectives. An EIR also must compare and evaluate the environmental effects and comparative merits of the alternatives. This chapter describes alternatives considered but eliminated from further consideration (including the reasons for elimination) and compares the environmental impacts of several alternatives retained with those of the project.

The following are key provisions of the CEQA *Guidelines* (Section 15126.6):

- The discussion of alternatives shall focus on alternatives to the project or its site that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- The No Project Alternative shall be evaluated, along with its impacts. The no-project analysis shall discuss the existing conditions at the time the notice of preparation was published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- The range of alternatives required in an EIR is governed by a "rule of reason." Therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

The range of feasible alternatives is selected and discussed in a manner that fosters meaningful public participation and informed decision making. Among the factors that may be taken into account when addressing the feasibility of alternatives (as described in CEQA *Guidelines* Section 15126.6(f)(1)) are environmental impacts, site suitability, economic viability, social and political acceptability, technological capacity, availability of infrastructure, General Plan consistency, regulatory limitations, jurisdictional boundaries, and whether the project proponent could reasonably acquire, control, or otherwise have access to an alternative site. If an alternative has effects that cannot be reasonably identified, if its implementation is remote or speculative, and if it would not achieve the basic project objectives, it need not be considered in the EIR.

Significant Impacts of the Project after Mitigation

Implementation of the project has the potential to have significant adverse effects on:

- Aesthetics (project and cumulative)
- Biological resources (project western Joshua tree [WJT] only and cumulative)
- Wildfire (cumulative only)

Even with the mitigation measures described in **Chapter 4**, *Environmental Setting, Impacts, and Mitigation Measures*, of this EIR, impacts in these issue areas would be significant and unavoidable. Therefore, per the CEQA *Guidelines*, this section discusses alternatives that are capable of avoiding or substantially lessening effects on these resources. The significant and unavoidable impacts of the project are discussed below.

Aesthetics

As discussed in **Section 4.1**, *Aesthetics*, implementation of the project would result in potentially significant visual impacts to the existing visual quality or character of the site and surrounding area. The visual simulations demonstrate visual change associated with project development would be somewhat muted when viewed from greater distances. With distance, the effects associated with removal of vegetation from the project site would be masked by dense groupings of solar arrays. Similarly, solar arrays viewed from a distance would begin to appear similar to other dark tones associated with distant terrain in the landscape. However, visual change would be evident from Tehachapi Willow Springs Road and the Pacific Crest Trail (PCT). Even with distance and diminished visibility, visual change associated with introduction of utility-scale solar development and associated infrastructure on currently undeveloped desert terrain would likely attract attention. Native vegetation would be left in place around the project site where feasible, but most is not sufficiently sized to provide for a natural screening of project components. The proposed project would incorporate applicable setback requirements for project features from the project property lines. Further, development of the project would expand existing renewable energy development (i.e., solar and wind developments) present south of State Route (SR) 58 and east and west of SR-14.

Mitigation Measures MM 4.1-1 through **MM 4.1-5** (See **Section 4.1**, *Aesthetics*) would help to reduce visual impacts associated with the proposed project by limiting vegetation removal, planting native vegetation, providing privacy fencing, reducing the visibility of project features, and ensuring that the project site is kept free of debris and trash. Native vegetation would be left in place around the project site where feasible. Additionally, a 50-foot native vegetation screening buffer would be established along the ultimate right-of-way of Tehachapi Willow Springs Road, allowing for natural screening of project components. This 50-foot buffer would also accommodate the relocation of a number of western Joshua trees to further diffuse the visibility of project features from adjacent areas. Nevertheless, even with implementation of **Mitigation Measures MM 4.1-1** through **MM 4.1-5**, project-level impacts to visual character and quality would remain significant and unavoidable. The project would result in less than significant impacts related to light and glare with the implementation of **Mitigation Measures MM 4.1-6** and **MM 4.1-7** (see **Section 4.1**, *Aesthetics*).

Additionally, while other projects in the region would also be required to implement various mitigation measures to reduce impacts, the conversion of approximately 7,700 acres in a presently rural area to solar energy production uses cannot be mitigated to a degree that impacts are no longer significant. Therefore,

even with implementation of **Mitigation Measures MM 4.1-1** through **MM 4.1-7**, the project's contribution to significant impacts associated with visual character in the Antelope Valley would be cumulatively significant and unavoidable. Cumulative impacts related to scenic vistas, scenic resources, and light and glare would be less than significant.

Biological Resources

The project site and the surrounding area provide suitable habitat for a number of special-status species or otherwise protected plant and wildlife species (broadly referred to as special-status species). Implementation of the project, in addition to the other projects under way or proposed within Kern County, has the potential to impact habitat for special-status wildlife species and migratory birds known to occur or with potential to occur on the project site. The project site contains habitat that supports insects, rodents, and small birds that provide a prey base for raptors and terrestrial wildlife. The project would also result in potentially significant impacts on various special-status plant species, particularly western Joshua tree, as well as other natural communities, including allscale scrub and other desert scrub, Joshua tree woodland, as well as potentially jurisdictional water features. Given the number of past, present, and reasonably foreseeable future development projects in the Antelope Valley, the proposed project, when combined with other projects, would result in a significant and unavoidable cumulative loss of foraging and nesting habitat for a number of special-status species. Nonetheless, even with implementation of the project design features and **Mitigation Measures MM 4.4-1** through **MM 4.4-20** (see **Section 4.4**, *Biological Resources*), project impacts to WJT would be significant and unavoidable; however, impacts would be less than significant for all other affected species. Cumulative impacts to biological resources would be significant and unavoidable.

Wildfire

The project site is located within a rural, sparsely developed area with limited population and existing infrastructure, and lacks steep slopes. The area contains low desert vegetation typical of the Mojave Desert. Wildland fires in such desert environments are generally infrequent and of low severity because the fuel loads are incapable of sustaining fire. No recorded wildfires have burned across the project site, and neither the proposed solar field or generation tie (gen-tie) line are located in or near State Responsibility Areas or lands classified as "very high" Fire Hazards Severity Zones, which are the primary indicators for elevated fire risks that require detailed impact analysis according to Appendix G of the CEQA *Guidelines*.

The project would be developed in compliance with Fire Code and Building Code requirements including fire prevention and emergency response training for site personnel. Additionally, as discussed in **Section 4.14**, *Public Services*, of this EIR, the project proponent/operator will develop and implement a Fire Safety Plan that contains notification procedures and emergency fire precautions consistent with the California Fire Code and Kern County Fire Code for use during construction, operation and decommissioning, per implementation of **Mitigation Measure MM 4.14-1**. To ensure the proposed project would not substantially impair an adopted emergency response or evacuation plan, **Mitigation Measure MM 4.15-1** (see **Section 4.15**, *Traffic and Transportation,* for full mitigation measure text) would be implemented during construction which requires the project to obtain the necessary traffic permits and approvals and to follow proper traffic control procedures. Construction and operation of the project would pose minor risks of causing or exacerbating the uncontrolled spread of wildfire and adverse post-fire conditions. The associated impacts would all be less than significant with implementation of **Mitigation Measure MM 4.14-1.**

Although impacts of the proposed project by itself would be less than significant with mitigation, the project would have cumulatively considerable impacts related to wildfire due to the rural nature of the project region and the numerous other projects in the area. The proposed project in conjunction with other current and foreseeable projects would result in significant cumulative impacts related to wildfire, including potential conflicts with an adopted emergency response or evacuation plan; exposing people to pollutant concentrations from a wildfire; and the installation or maintenance of associated infrastructure that may exacerbate fire risk. The cumulative impacts would be significant and unavoidable.

6.2 Applicant Submitted Project Objectives

Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects (CEQA *Guidelines*, Section 15126.6[c]). As described in **Chapter 3**, *Project Description*, of this EIR, the following applicant submitted objectives have been established for the project and will aid decision makers in the review of the project and associated environmental impacts.

- Establish solar photovoltaic (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 the County and the State of California, as well as utilities, with a renewable energy source adjacent to other renewable (wind and solar) 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 that is efficient, recyclable, and 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:
  - Locating generation facilities in areas that receive intense solar radiation;
  - Using existing electrical transmission facilities, rights-of-way, roads, and other existing infrastructure where practical;
  - Minimizing water use; and
  - 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 Kern 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), 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.

6.3 Overview of the Project

The proposed project includes the development a PV solar facility and associated infrastructure necessary to generate 1,400 megawatts (MW) of renewable electric energy with up to 8 gigawatt-hours (GWh) of energy storage capacity (approximately 1,000 MW), on approximately 7,700 acres of privately owned land. Project facilities include the following components, which are described in more detail in **Chapter 3**, *Project Description,* of this EIR:

- Installation of up to 1,400 MW alternating current (AC) of solar PV modules, mounted on a single-axis racking and/or a fixed tilt system. The mounting systems for the modules would be mounted on steel support posts that would be pile-driven into the ground;
- Installation of energy storage facilities and accessory infrastructure that would provide energy storage capacity of up to 8 GWh for the electrical grid (approximately 1,000 MW);
- Up to three collector substations, including circuit breakers, disconnect switches, metering protection equipment, and main step-up transformer(s);
- One 230-kilovolt (kV) switchyard;
- Potential upgrades to, and installation of new circuits, lines, switches, utility poles, and other similar infrastructure at the 230-kV to 500-kV step-up substation located north of the Southern California Edison (SCE) Windhub Substation (constructed as part of the County-approved Enterprise Solar Storage Project);
- Overhead and underground collection systems (the collection systems would be aggregated at multiple circuit breakers or medium-voltage switchgear positions within the project facilities, leading to the collector substations);
- Telecommunication equipment, including underground and overhead fiberoptics, and meteorological data collection systems or supervisory control and data acquisition (SCADA);
- Operations and maintenance (O&M) facility with approximately six permanent, full-time employees;
- Onsite access roads;

- Perimeter security fencing and nighttime directional lighting; and
- Project design features to avoid, preserve, and minimize impacts to WJT and Joshua tree woodland at the project.

6.4 Overview of Alternatives to the Project

Under CEQA, and as indicated in California Public Resources Code (PRC) Section 21002.1(a), the identification and analysis of alternatives to a project is a fundamental aspect of the environmental review process and is required to ensure the consideration of ways to mitigate or avoid the significant environmental effects of a project. Based on the significant environmental impacts of the project, the aforementioned objectives established for the project, and the feasibility of the alternatives considered, this chapter provides the comparative analysis of the alternatives considered, including the No Project Alternative as required by CEQA, which is summarized in **Table 6-1**, *Summary of Development Alternatives*. The Environmentally Superior Alternative, as required by CEQA, is described in Section 6.8, *Environmentally Superior Alternative*, below.

Process Used to Develop/Screen Alternatives

The alternatives to the project analyzed in this EIR were selected through a three-step process. First, the County identified potential alternatives based on the comments it received during the EIR scoping process and through internal deliberations that took into consideration the overall project objectives. Then, the County screened out those alternatives that it determined would not meet most of the project objectives, were infeasible, would not substantially reduce any of the project's significant environmental effects, or were not otherwise reasonable or realistic. Third, the County identified those alternatives that passed the screening criteria and that represent a range of available options to carry forward for analysis in this chapter.

Alternative 1: No Project Alternative

The CEQA *Guidelines* require EIRs to include a No Project Alternative for the purpose of allowing decision makers to compare the effects of approving the project versus a No Project Alternative. Accordingly, Alternative 1, the No Project Alternative, assumes that the development of the 1,400-MW solar PV facility with up to 8 GWh of energy storage on the approximately 7,700-acre site would not occur. The No Project Alternative would not require the requested entitlements, including Conditional Use Permits (CUPs), amendments to the Circulation Element of the Kern County General Plan, Zone Classification Changes, Zone Variances, or Vesting Tentative Parcel Maps. The No Project Alternative would maintain the current zoning, road reservations, parcel acreages, public access easements and existing land uses, which consist of generally undeveloped desert land. No physical changes would be made to the project site.

Alternative 2: General Plan/Specific Plan and Zoning Build-Out Alternative

Alternative 2, the General Plan/Specific Plan and Zoning Build-Out Alternative, assumes the project site would be developed to the maximum intensity allowed under the existing Kern County General Plan and Soledad Mountain Elephant Butte Specific Plan land use and zoning classifications. The existing General and Specific Plan designations are described in **Chapter 3**, *Project Description*, and shown in **Figure 3-6**,

Existing General Plan Map, and listed in **Table 3-1,** *Project Assessor Parcel Numbers, Existing and Proposed Land Use, Zoning, and Acreages*. The existing land uses, map code designations, and zone classifications for the project site are summarized below in **Table 6-1**, *Project Site and Surrounding Land Uses*.

TABLE 6-1: PROJECT SITE AND SURROUNDING LAND USES

Area	Existing Land Use	Existing General/Specific Plan Map Code Designation[1]	Existing Zoning Classification[2]
Project Site	Generally undeveloped/vacant land, various named and unnamed dirt roads, wind turbines and transmission lines, possible grazing.	8.3 8.3/2.5, 8.4, 8.4/2.4, 8.5/2.5, 4.1 (Low Density Residential)	A, A-1, PL, FP, FPS, RS, WE
North	Vacant land, wind and solar power facilities, Windhub Substation, CalPortland Mojave Cement Plant, Union Pacific Railroad	1.1, 7.3, 8.3, 8.4, 4.1 (Low Density Residential)	A, A-1, M-3, PL, R-2, WE, FP
East	Vacant land, residential properties	4.3, 8.3, 4.1 (Low Density Residential)	A, A-1, E, PL
South	Vacant land, Catalina Solar Project, Big Beau Solar Project, Holiday Rock Quarry, residential properties, possible grazing.	1.1, 8.2, 8.3, 8.4	A, A-1, E, FP, FPS, RS, MH, WE
West	Vacant land, residential properties, BLM land, possible grazing.	1.1, 8.2, 8.3, 8.4	A, E, OS, PL, RS, WE

1. Kern County General Plan (KCGP) and Specific Plan (SP) Map Code Designation:
   1.1 (State and Federal Land)
   2.4 (Steep Slope)
   2.5 (Flood Hazard)
   4.1 (Accepted County Plan Areas)
   4.3 (Specific Plan Required)
   7.3 (Heavy Industrial)
   8.2 (Resource Agriculture)
   8.3 (Extensive Agriculture)
   8.4 (Mineral and Petroleum, Min 5 Acre Parcel Size)
   8.5 (Resource Management, Min. 20 Acre Parcel Size)
2. Kern County Zoning District:
   A (Exclusive Agriculture); A-1 (Limited Agriculture); E (Estate); FP (Floodplain Combining); FPS (Floodplain Secondary Combining); M-3 (Heavy Industrial); MH (Mobile Home Combining); OS (Open Space); PL (Platted Lands); R-2 (Medium Density Residential); RS (Residential Suburban Combining); WE (Wind Energy Combining)

Implementation of Alternative 2 would consist of developing the project site under the current land use classifications, of which the majority is currently designated 8.5 (Resource Management) and 8.3 (Extensive Agriculture) by the Kern County General Plan. The 8.5 land use designation applies primarily to open space lands containing important resources, such as wildlife habitat, scenic values, or watershed recharge areas. The land use designation of 8.3 applies to agricultural and uses compatible with agriculture. Typical uses include livestock grazing, farming and ranching, nature preserves, water storage and groundwater recharge areas, irrigated croplands, and open space and recreation. Other land use designations within the project site would allow for residential development of differing densities and mineral and petroleum development.

No solar or energy storage facilities would be developed under this alternative and, therefore, no zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations,

vacation of easements, or vesting tentative parcel maps for construction and operation would be required for this alternative. The project site would be developed in accordance with the existing land use designations and zone districts while adhering to the applicable General/Specific Plan goals, policies and implementation measures. Implementation of Alternative 2 also assumes any uses developed on site would be limited in scope to the listed "by right" or discretionary uses outlined for the existing zone district, and design features would conform with special development standards and best practices outlined in the Kern County Zoning Ordinance or other local regulatory frameworks.

Alternative 3: Reduced Acreage Alternative

Under Alternative 3, the Reduced Acreage Alternative, approximately 4,800 acres would be developed with a solar power generation and energy storage facility with the capacity to generate up to 800 MW of renewable electric energy with 4.8 GWh of battery energy storage. Under this alternative, approximately 2,900 acres would not be developed for solar energy production and would remain undeveloped. The gen-tie interconnection would remain unchanged. Eliminating development of approximately 2,900 acres from the project would reduce the project's total solar power generation capacity by up to 600 MW (from 1,400 MW to 800 MW), reduce the project's battery storage capacity by up to 3.2 GWh (from 8 GWh to 4.8 GWh) and reduce the developed area from approximately 7,700 acres to approximately 4,800 acres. Similar to the proposed project, this alternative would require proportionally reduced entitlement boundaries for zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, and vesting tentative parcel maps for construction and operation of a utility-scale solar generation and energy storage facility.

Alternative 4: No Ground-Mounted Utility-Solar Development Alternative – Distributed Commercial and Industrial Rooftop Solar Only

Alternative 4, the No Ground-Mounted Utility-Solar Development Alternative, would involve the development of a number of geographically distributed small to medium solar PV systems (100 kilowatt hours to 1 MW) within existing developed areas, typically on the rooftops of commercial and industrial facilities situated throughout western Antelope Valley. Under this alternative, no undeveloped, desert land would be developed or altered. However, depending on the type of solar modules installed and the type of tracking equipment used (if any), a similar or greater amount of acreage (i.e., greater than 7,700 acres of total rooftop area) may be required to attain the project's capacity of up to 1,400 MW of solar PV generating capacity. Because of space or capital cost constraints, many rooftop solar PV systems would be fixed-axis systems or would not include the same type of sun-tracking equipment that would be installed in a freestanding utility-scale solar PV project and, therefore, would not attain the same level of efficiency with respect to solar PV generation. Alternative 4 would generate up to 1,400 MW of electricity, but dispersed across different land uses and development types not likely to exceed onsite demand, and would not include up to 8 GWh of battery storage capacity. This alternative assumes that rooftop development would occur primarily on commercial and industrial structures due to the greater availability of large, relatively flat roof areas necessary for efficient solar installations. Solar panel shade structures constructed over parking lots or landscaped areas within the commercial or industrial development could potentially contribute to the available acreage suitable for solar installations, also noting the County's minimum requirement for landscaping area is 5 percent of the developed area. Similar to the proposed project, this alternative would

be designed to operate year-round using PV panels to convert solar energy directly to electrical power. Power generated by such distributed solar PV systems would typically be consumed onsite by the commercial or industrial facility without requiring the construction of a new electrical substation or transmission facilities. Under this alternative, the proposed project's requested zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, or vesting tentative parcel maps would not necessarily be required, with exception to CUPs for instances the generated solar energy exceeds on-site demands as part of the intended use.

Table 6-2, *Summary of Development Alternatives*, provides a summary of the relative impacts and feasibility of each alternative. A complete discussion of each alternative is also provided below.

TABLE 6-2: SUMMARY OF DEVELOPMENT ALTERNATIVES

Alternative	Description	Basis for Selection and Summary of Analysis
Project	Construction and operation of a solar facility and associated infrastructure necessary to generate up to 1,400 MW of renewable electrical energy and up to 8 GWh of energy storage capacity on approximately 7,700 acres. The power would be delivered via a gen-tie line to a grid interconnection point at the SCE Windhub Substation. Approval of zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, and vesting tentative parcel maps would be required.	N/A
Alternative 1: No Project Alternative	No development would occur on the project site. The project site would remain unchanged.	• Required by CEQA. • Avoids need for CUPs, zone classification changes, General Plan amendments, zone variances, removal of road reservations, vacation of easements, or vesting tentative parcel maps. • Avoids all significant and unavoidable impacts. • Would not offset greenhouse gas (GHG) emissions from existing nonrenewable energy generation, and thus have greater impacts on GHG emissions. • No impact in all remaining environmental issue areas. • Does not meet any of the project objectives.
Alternative 2: General Plan/Specific Plan and Zoning Build-Out Alternative	Project site would be developed to the maximum intensity allowed under existing Kern County General Plan or Soledad Mountain Elephant Butte Specific Plan land use designations and zoning	• Avoids need for the proposed zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, and vesting tentative parcel maps. However, similar

Alternative	Description	Basis for Selection and Summary of Analysis
	classifications and other existing applicable allowances.	entitlements may be required for uses specified in existing zone districts. • Reduces impacts to aesthetics, agriculture and forestry, and wildfire resources. • Similar impacts to air quality, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, and noise. • Greater overall impacts in all remaining environmental issue areas. • Does not meet any of the project objectives.
Alternative 3: Reduced Acreage Alternative	Construction and operation of a solar power generation and energy storage facility on the project site to leave a total of approximately 2,900 acres undeveloped. This alternative is still expected to contain enough land to construct a solar array field capable of generating up to approximately 800 MW, with up to 4.8 GWh of energy storage. The alternative would similarly require zone classification changes, conditional use permits, General Plan amendments, zone variances, removal of road reservations, vacation of easements, and vesting tentative parcel maps.	• Greater GHG emissions impact as benefit of offsetting GHG emissions from nonrenewable energy generation would be minimized. • Greatly reduces the ability to optimize the value and use of existing nearby infrastructure deliverability capacity at Windhub Substation. • Reduces, but similar impacts to hazards and hazardous materials, land use and planning, mineral resources, noise, public services, and wildfires. • Reduces impacts in all remaining environmental issue areas. • Would not eliminate or substantially lessen significant any unavoidable impacts associated with aesthetics (project and cumulative), biological resources (project WJT only and cumulative), or wildfire (cumulative only). • Does not meet all of the project objectives.

Alternative	Description	Basis for Selection and Summary of Analysis
Alternative 4: No Ground-Mounted Utility-Solar Development Alternative – Distributed Commercial and Industrial Rooftop Solar Only	The construction of up to 1,400 MW of PV solar distributed on rooftops throughout western Antelope Valley. Electricity generated would be for onsite use only.	• Avoids need for zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, and vesting tentative parcel maps at the project site, but may require other entitlements (such as a CUP or variance) on other sites. • Avoids significant and unavoidable impacts associated with aesthetics, biological resources, and wildfire. • Greater GHG emissions impact as benefit of offsetting GHG emissions from nonrenewable energy generation would be minimized. • No impacts on land use and planning or mineral resources. • Similar impacts to air quality, energy, and noise. • Reduces impacts in all remaining environmental issue areas. • Does not meet most project objectives nor does this alternative account for the benefits of inclusion of an energy storage component of the project.

6.5 Alternatives Considered and Rejected

Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects (CEQA *Guidelines*, Section 15126.6[c]). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not need to be considered (CEQA *Guidelines*, Section 15126[f][2]). Kern County considered several alternatives to reduce impacts to aesthetics (project and cumulative), air quality (temporary project and cumulative), and biological resources (project WJT only and cumulative), and wildfire (cumulative only). Per CEQA, the lead agency may make an initial determination as to which alternatives are feasible and warrant further consideration, and which are infeasible. The following alternatives were initially considered but were eliminated from further consideration in this EIR because they do not meet project objectives or were infeasible.

- Wind Energy Project Alternative
- Industrial Power Plant Alternative
- Alternative Site Alternative

Wind Energy Project Alternative

The Wind Energy Project Alternative would involve the use of wind energy as an alternative to the development of a solar project. Similar to solar power, energy production from the wind is an alternative to energy production from more commonly implemented coal, oil, or natural gas sources. Wind energy provides the following benefits:

- Wind is a renewable and infinite resource.
- After activation, wind energy generation resulted in a net reduction of emissions, including carbon dioxide and other greenhouse gases (GHG).
- Wind is a free resource after the capital cost of installation (excluding maintenance).
- A Wind Energy Project is compatible with existing wind development surrounding the project site.

In addition, energy production from wind power would not require the significant water usage associated with coal, oil, natural gas, and combined-cycle sources. Turbines used in wind farms for commercial production of electric power are usually three-bladed units that are pointed into the wind by computer-controlled motors. The wind farm would consist of a group of wind turbines placed where electrical power is produced. The individual turbines would be interconnected with a medium-voltage power collection system and a communications network. At a substation, the medium-voltage electrical current would be increased through a transformer before connecting to the high-voltage transmission system. Compared with traditional energy sources, the environmental effects of wind power are relatively minor. However, wind farms would not decrease short-term construction-related air emissions. Wind turbines would also have the potential to affect avian species in the local area. In addition, in order for wind turbines to produce an equivalent 1,400 MW of power that the project would produce, the alternative would require more space than what the project site currently accommodates. Consequently, the project site would need to be expanded to facilitate the number of turbines needed and oriented to maximize exposure to prevailing winds, accounting for tower wake avoidance, to match the output of the proposed project.

As noted above, some of the project's objectives are to assist California in meeting its GHG emission reduction goals through establishing solar PV power-generating facilities to produce reliable electricity in an economically feasible and commercially financeable manner while minimizing environmental impacts and using proven and established PV technology that is efficient, requires low maintenance, and is recyclable. In accordance with the CEQA *Guidelines* (Section 15126.6[c]), alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce significant environmental effects. Therefore, this alternative was eliminated from further consideration because:

- It would substantially increase the significant aesthetic impacts associated with the project because wind turbines would be much taller than solar panels, require Federal Aviation Administration (FAA) lighting, and be more visible from many viewpoints.
- It may result in additional/greater biological resources impacts to avian species than the project.
- It may require greater encroachment into WJT woodlands for optimal spacing and orientation relative to prevailing winds and tower wake.
- It may generate long-term noise impacts to nearby sensitive receptors from rotating turbine blades.

- It would not reduce temporary and cumulatively significant air quality impacts due to similar construction requirements.

Industrial Power Plant Alternative

This alternative would involve the development of a natural gas–fired power plant or plants (equivalent to 1,400 MW) in Kern County, such as the La Paloma Generating Project in McKittrick. Fossil fuel–powered plants are designed on a large scale for continuous operation. However, byproducts of industrial power plant operation need to be considered in both design and operation. When waste heat that results from the finite efficiency of the power cycle is not recovered and used as steam or hot water, it must be released to the atmosphere, and often uses a cooling tower as a cooling medium (especially for condensing steam). The flue gas from combustion of the fossil fuels is discharged to the air and contains carbon dioxide and water vapor as well as other substances, such as nitrogen, nitrogen oxides, and sulfur oxides. Furthermore, unlike the proposed project, fossil fuel–powered plants are major emitters of GHGs. In addition, industrial power plants generally involve the construction of large structures, such as cooling towers and gas stacks, as well as a large number of employees to operate the facility on a 24/7 basis 365 days a year. Accordingly, the development of an industrial power plant would typically result in greater adverse impacts related to: (1) aesthetics and the local visual setting of the project area; (2) air quality and GHG emissions; (3) land use and planning conflicts with the rural development of the surrounding area; (4) noise from the plant operations; (5) traffic from increased employment at the facility; and (6) demand on public utilities, including water and waste disposal.

As noted above, some of the project's objectives are to assist California in meeting its GHG emission reduction goals through establishing solar PV power-generating facilities to produce reliable electricity in an economically feasible and commercially financeable manner while minimizing environmental impacts and using proven and established PV technology that is efficient, requires low maintenance, and is recyclable. In accordance with the CEQA *Guidelines* (Section 15126.6[c]) alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce significant environmental effects. Therefore, this alternative was eliminated from further consideration because:

- It would result in additional/greater impacts than the project including aesthetics, air quality, GHG emissions, land use and planning, noise, transportation, and public utilities, including water use and disposal.
- Depending on siting, it may also result in greater biological resources impacts than the project resulting from emission byproducts (e.g. acid rain).
- It may conflict with the Mojave Air and Space Port, Kern County Airport Land Use Compatibility Plan, and potentially Edwards Air Force Base due to the heights of the cooling towers and smoke stacks, as well as flue gas.
- It would not contribute to the statewide renewable energy and GHG emission reduction objectives as this alternative would use nonrenewable energy to produce electricity.

Alternative Site

This alternative would involve the development of the project on another site located within Kern County, other than constructing rooftop distributed generation systems. Although undetermined at this time, the alternative project site would likely be located in western Antelope Valley, similar to the proposed project.

This alternative is assumed to involve construction of an up to 1,400 MW PV solar facility with up to 8 GWh of energy storage on a site totaling 7,700 acres. CEQA *Guidelines* 15126.6(f)(2(a) states that the key and initial step in considering an alternative site is whether "any of the significant effects of the project would be avoided or substantially lessened" in relocating the project, while remaining consistent with the same basic objectives of the project.

Western Antelope Valley has attracted renewable energy development applications that are being proposed for vacant land or land with a history of agricultural uses. The availability of alternative sites is constrained by the renewable energy market itself. While other sites of similar size, configuration, and use history may exist in western Antelope Valley, alternative project sites in the area are likely to have similar project and cumulatively significant impacts after mitigation, including cumulatively significant impacts to aesthetics, biological resources, and wildfire. This is based on the known general conditions in the area and the magnitude of the project.

In addition, alternative sites for the project are not considered to be "potentially feasible," as there are no suitable sites within the control of the project proponent that would reduce significant project impacts. The potential amount of available similar sites is further reduced because, unlike the project, alternative sites may not be within close proximity to transmission infrastructure. Therefore, this alternative was eliminated because it would not avoid or substantially reduce the significant environmental effects of the project.

6.6 Analysis Format

In accordance with CEQA *Guidelines* Section 15126.6(d), each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less, similar, or greater than the corresponding impacts of the project. Furthermore, each alternative is evaluated to determine whether the Applicant-submitted project objectives identified in **Chapter 3**, *Project Description*, of this EIR, would be mostly attained by the alternative. The project's impacts that form the basis of comparison in the alternatives analysis are those impacts which represent a conservative assessment of project impacts. The evaluation of each of the alternatives follows the process described below.

a) The net environmental impacts of the alternative after implementation of reasonable mitigation measures are determined for each environmental issue area analyzed in this EIR.

b) Post-mitigation significant and less than significant environmental impacts of the alternative and the project are compared for each environmental issue area as follows:

   – Less: Where the impact of the alternative after feasible mitigation would be clearly less adverse than the impact of the project, the comparative impact is said to be "less."

   – Greater: Where the impact of the alternative after feasible mitigation would be clearly more adverse than the impact of the project, the comparative impact is said to be "greater."

   – Similar: Where the impacts of the alternative after feasible mitigation and the project would be roughly equivalent, the comparative impact is said to be "similar."

c) The comparative analysis of the impacts is followed by a general discussion of whether the underlying purpose for the project, as well as the project's basic objectives would be substantially attained by the alternative.

Table 6-3, *Comparison of Alternatives*, provides a summary and side-by-side comparison of the project with the impacts of each of the alternatives analyzed. Please note that in Alternatives 1 through 4 **in Table**

6-3, the references to “less, similar, or greater” refer to the impact of the alternative compared to the proposed project, and the impacts “no impact (NI), less than significant (LTS), or significant and unavoidable (SU)” in the parentheses refer to the significant impact of the specific alternative.

TABLE 6-3: COMPARISON OF ALTERNATIVES

Environmental Resource	Project	Alternative 1: No Project Alternative	Alternative 2: General Plan/Specific Plan and Zoning Build-Out Alternative	Alternative 3: Reduced Acreage Alternative	Alternative 4: No Ground-Mounted Utility-Solar Alternative – Distributed Commercial and Industrial Rooftop Solar Only
Aesthetics	Significant and unavoidable (project and cumulative)	Less (NI)	Less (LTS)	Less (SU)	Less (LTS)
Agriculture and Forestry Resources	Less than significant	Less (NI)	Less (LTS)	Less (LTS)	Less (NI)
Air Quality	Less than Significant with Mitigation	Less (NI)	Similar (LTS)	Less (LTS)	Greater (SU)
Biological Resources	Less than Significant with Mitigation (project; except for WJT) Significant and unavoidable (project WJT only and cumulative)	Less (NI)	Greater (SU)	Less (SU)	Less (LTS)
Cultural Resources	Less than significant with mitigation	Less (NI)	Greater (LTS)	Less (LTS)	Less (LTS)
Energy	Less than significant	Less (NI)	Greater (LTS)	Less (LTS)	Similar (LTS)
Geology and Soils	Less than significant with mitigation	Less (NI)	Similar (LTS)	Less (LTS)	Less (LTS)
Greenhouse Gas Emissions	Less than significant	Greater (LTS)	Greater (LTS)	Greater (LTS)	Greater (LTS)
Hazards and Hazardous Materials	Less than significant with mitigation	Less (NI)	Greater (LTS)	Similar (LTS)	Less (LTS)
Hydrology and Water Quality	Less than significant with mitigation	Less (NI)	Greater (LTS)	Less (LTS)	Less (LTS)
Land Use and Planning	Less than significant with mitigation	Less (NI)	Similar (LTS)	Similar (LTS)	Less (NI)
Mineral Resources	Less than significant	Less (NI)	Similar (LTS)	Similar (LTS)	Less (NI)

Environmental Resource	Project	Alternative 1: No Project Alternative	Alternative 2: General Plan/Specific Plan and Zoning Build-Out Alternative	Alternative 3: Reduced Acreage Alternative	Alternative 4: No Ground-Mounted Utility-Solar Alternative – Distributed Commercial and Industrial Rooftop Solar Only
Noise	Less than significant with mitigation	Less (NI)	Greater (LTS)	Similar (LTS)	Similar (LTS)
Public Services	Less than significant with mitigation	Less (NI)	Greater (LTS)	Similar (LTS)	Less (LTS)
Transportation	Less than significant with mitigation	Less (NI)	Greater (LTS)	Less (LTS)	Less (LTS)
Tribal Cultural Resources	Less than significant with mitigation	Less (NI)	Greater (LTS)	Less (LTS)	Less (NI)
Utilities and Service Systems	Less than significant with mitigation	Less (NI)	Greater (LTS)	Less (LTS)	Less (LTS)
Wildfires	Less than significant with mitigation (project)	Less (NI)	Similar (SU)	Similar (LTS)	Less (LTS)
	Significant and unavoidable (cumulative only)	Less (NI)	Similar (SU)	Similar (SU)	Less (LTS)
Meet Project Objectives?	All	None	None	Partially	Partially
Reduce the Project's Significant and Unavoidable Impacts?	N/A	All	Some	None	All

NI = No Impact
LTS = Less Than significant
SU = Significant and Unavoidable

6.7 Impact Analysis

Alternative 1: No Project Alternative

Environmental Impact Analysis

Aesthetics

Under the No Project Alternative, no development would take place on the project site. The project site would remain in its current state as undeveloped land and no change to the scenic vistas or existing visual character of the site would occur. Impacts to scenic resource and daytime and nighttime views in the area would not occur. Therefore, there would be no impact and the No Project Alternative would result in less impact related to aesthetics compared to the proposed project.

Agriculture and Forestry Resources

Under the No Project Alternative, the project site would remain undeveloped and solar panels and an energy storage system would not be installed. The project site would remain in its current state, as largely undeveloped desert land. As such, the No Project Alternative would not involve changes to the existing environment that could result in the conversion of farmland or forest land to nonagricultural or nonforest uses. Therefore, there would be no impact and the No Project Alternative would result in less impact related to agriculture and forestry resources compared to the proposed project.

Air Quality

Under the No Project Alternative, the project site would remain undeveloped and there would be no construction activities or operational activities that would generate air emissions, nor would the No Project Alternative contribute to a cumulative net increase of criteria pollutant in the region. Therefore, there would be no impact and the No Project Alternative would result in less impact related to air quality compared to the proposed project.

Biological Resources

Under the No Project Alternative, the project site would remain undeveloped and existing biological resources on the project site, including habitat for special-status plant and wildlife species, would remain undisturbed since no construction or operation would occur. The project site would remain in its current state, as undeveloped land containing desert vegetation, and would not contribute to a cumulative loss of habitat for wildlife species known to occur or with potential to occur on the project site. Therefore, there would be no impact and the No Project Alternative would result in less impact related to biological resources compared to the proposed project.

Cultural Resources

Under the No Project Alternative, the project site would remain undeveloped and no ground-disturbing activities would occur. Therefore, disturbance to potential historical resources, archeological resources, or human remains located onsite would not occur and this alternative would not require mitigation. Therefore,

there would be no impact and the No Project Alternative would result in less impact related to cultural resources compared to the proposed project.

Energy

Under the No Project Alternative, the project site would remain undeveloped and no energy consumption activities would occur. As such, the No Project Alternative would not result in wasteful, inefficient, or unnecessary consumption of energy resources and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. However, the No Project Alternative would not support the goals of the Renewable Portfolio Standard (RPS). Therefore, there would be no impact and the No Project Alternative would result in less impact related to energy compared to the proposed project.

Geology and Soils

Under the No Project Alternative, the project site would remain undeveloped and no ground disturbance would occur. As such, the No Project Alternative would not directly or indirectly cause potential substantial adverse effects involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, and landslides; result in substantial soil erosion or loss of topsoil; result in onsite or offsite landslides; be located on expansive soil; or directly or indirectly destroy a unique paleontological resource or unique geologic feature. Therefore, there would be no impact and the No Project Alternative would result in less impact related to geology and soils compared to the proposed project.

Greenhouse Gas Emissions

Under the No Project Alternative, emissions associated with construction and operation of a solar energy facility and energy storage system would not occur. Therefore, those emissions that contribute to GHGs would be eliminated, and no impacts would occur related to generating emissions that may have a significant impact on the environment or consistency with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. However, the potential offset of GHG emissions resulting from operation of the solar power generation and energy storage facility would not be realized. Therefore, impacts would be less than significant under this alternative; however, impacts from implementation of this alternative would be greater than those of the project as it would not offset GHG emissions.

Hazards and Hazardous Materials

Under the No Project Alternative, the project site would remain undeveloped and in its current condition, and no construction or operational activities would occur. As such, this alternative would not involve the routine transport, use, or disposal of hazardous materials associated with development of the project site; create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; emit hazardous emissions or handling of hazardous materials within 0.25 mile of an existing or proposed school; create a significant hazard to the public or environment; result in a safety hazard or excessive noise for people residing or working in the project area for a project located within the vicinity of a private airstrip; impair implementation of or interfere with an emergency response plan or emergency evacuation plan; expose people or structures to significant risk of loss, injury, or death involving wildland fires; or generate vectors or have a component that includes agricultural waste. Therefore, there would be no impact and the No

Project Alternative would result in less impact related to hazards and hazardous materials compared to the proposed project.

Hydrology and Water Quality

Under the No Project Alternative, the project site's existing hydrology and water quality would remain unchanged as no development or ground disturbance would occur on the project site. As such, this alternative would not: violate water quality standards or waste discharge requirements; substantially alter the existing drainage patterns of the site or area in a manner that would result in substantial erosion and/or sedimentation onsite or offsite, or result in flooding onsite or offsite; create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage system; impede or redirect flood flows; contribute to inundation by a flood hazards, tsunami, or seiche; or conflict with or obstruct implementation of a water quality control plan or groundwater management plan. Therefore, there would be no impact and the No Project Alternative would result in less impact related to hydrology and water quality compared to the proposed project.

Land Use and Planning

The No Project Alternative would not develop any new uses at the project site and would therefore not require zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, or vesting tentative parcel maps. As such, the No Project Alternative would not cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, there would be no impact and the No Project Alternative would result in less impact related to land use and planning compared to the proposed project.

Mineral Resources

Under the No Project Alternative, the project site would remain undeveloped and no ground disturbance would occur. There are no mineral resources on the project site. As such, the No Project Alternative would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local General Plan, Specific Plan, or other land use plan. Therefore, there would be no impact and the No Project Alternative would result in less impact related to mineral resources compared to the proposed project.

Noise

Under the No Project Alternative, the project site would remain undeveloped. Noise sources from construction, operation, and decommissioning would not be present onsite, and existing noise conditions would remain the same. As such, the No Project Alternative would not result in generation of a substantial temporary or permanent increase in ambient noise levels or generate excessive ground-borne vibration. Therefore, there would be no impact and the No Project Alternative would result in less impact related to noise compared to the proposed project.

Public Services

Under the No Project Alternative, the project site would remain undeveloped and no new demand for fire or police protection services would occur. Further, no new demand for schools, parks, or other government

facilities would occur. As such, the No Project Alternative would not result in the need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection, police protection, schools, parks, or other government facilities. Therefore, there would be no impact and the No Project Alternative would result in less impact related to public services compared to the proposed project.

Transportation

Under the No Project Alternative, the solar panels and energy storage system would not be constructed and would therefore not introduce construction- and operational-related trips. Existing traffic patterns and volumes on nearby roadways would remain unchanged. As such, the No Project Alternative would not conflict with a program, plan, ordinance or policy addressing the circulation system, nor would the No Project Alternative conflict or be inconsistent with CEQA *Guidelines* Section 15064.3, subdivision (b). In addition, the No Project Alternative would not substantially increase hazards due to a geometric design feature or result in inadequate emergency access. Therefore, there would be no impact and the No Project Alternative would result in less impact related to transportation compared to the proposed project.

Tribal Cultural Resources

Under the No Project Alternative, the project site would remain undeveloped and no ground-disturbing activities would occur. According to record searches and tribal resource consultations, no tribal resources are present on the project site. As such, the No Project Alternative would not cause a substantial adverse change in the significance of a tribal cultural resource with cultural value to a California Native American Tribe that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k) or as a resource determined by the lead agency. Therefore, there would be no impact and the No Project Alternative would result in less impact related to tribal cultural resources compared to the proposed project.

Utilities and Service Systems

Under the No Project Alternative, the solar panels and energy storage system would not be constructed and there would be no new demand for utilities and service systems on the project site. As such, the No Project Alternative would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects; generate solid waste in excess of state or local standards; or conflict with federal, State, and local management and reduction statutes and regulations related to solid waste. Therefore, there would be no impact and the No Project Alternative would result in less impact related to utilities and service systems compared to the proposed project.

Wildfires

Under the No Project Alternative, the solar panels and energy storage system would not be constructed. As such, the No Project Alternative would not expose occupants to pollutant concentrations from a wildfire; require the installation or maintenance of associated infrastructure; or expose people or structures to significant risks. Therefore, there would be no impact and the No Project Alternative would result in less impact related to wildfires compared to the proposed project.

Comparison of Impacts

The No Project Alternative would avoid the significant and unavoidable impacts associated with the project. This alternative would result in less impact to all environmental resource areas with the exception of GHGs; since this alternative would not offset GHGs through the operation of a solar power generation and energy storage facility, impacts to GHGs would be greater under this alternative.

Relationship to Applicant-Submitted Project Objectives

The No Project Alternative would not achieve any of the project objectives listed above in Section 6.2 ("Applicant-Submitted Project Objectives"), including assisting California in meeting its GHG emissions reduction goals. Although this alternative would create less environmental impacts overall, the objectives that shape the project would not be realized under this alternative.

Alternative 2: General Plan/Specific Plan and Zoning Build-Out Alternative

Environmental Impact Analysis

Aesthetics

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. The project site includes existing Map Code designations for resource management, agricultural, residential, parks and recreation, governmental, and other uses that are defined in the Kern County General Plan (refer to **Section 4.1**, *Aesthetics*, for additional details).

The General Plan/Specific Plan and Zoning Build-Out Alternative would develop the project site into various uses allowable for agricultural, residential, and other development. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site. Under this alternative, there would be no zone classification changes, and development of the project site under existing land use and zoning classifications would be visually similar to the types of uses that are within the project area and, thus, potential impacts to visual character would be reduced under this alternative. Therefore, impacts would be less than significant under the General Plan/Specific Plan and Zoning Build-Out Alternative and this alternative would result in less aesthetic impacts compared to the proposed project.

Agriculture and Forestry Resources

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site. As noted in **Section 4.2**, *Agriculture and Forestry Resources*, the project site is not under a Williamson Contract and, therefore, development under this alternative would not conflict with a Williamson Act contract. Furthermore, development under this alternative would be consistent with the existing zoning and the portions of the project site designated as A

(Exclusive Agriculture) would remain. Therefore, impacts would be less than significant under the General Plan/Specific Plan and Zoning Build-Out Alternative and this alternative would result in less agricultural resource impacts compared to the proposed project.

Air Quality

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

Both the project and the General Plan/Specific Plan and Zoning Build-Out Alternative would result in short-term construction emissions and would require implementation of mitigation measures in order to reduce the severity of construction-related emissions. The conversion of the project site to the maximum intensity allowed under existing land use and zoning classifications would require the use of similar heavy equipment to the project, and nonagricultural uses included in this alternative would implement special development standards and/or conditions of approval similar to **Mitigation Measures MM 4.3-1** through **MM 4.3-5** (see **Section 4.3**, *Air Quality*) in order to reduce the severity of construction-related emissions. Although the overall area of disturbance would be reduced, the grading and earthwork needed to create foundations for residential development would be greater than that needed to install solar panels and an energy storage system. Impacts would be greater than the project for temporary project-level and cumulative construction impacts. Operational emissions associated with the maximum intensity allowed under existing land use and zoning classifications under the General Plan/Specific Plan and Zoning Build-Out Alternative would be greater due to routine emissions associated with residential uses, agricultural vehicles, ongoing ground disturbance, and livestock emissions, etc. Given this increase, this alternative would result in greater operational air quality impacts in the air basin than the project, but they would likely remain less than significant. As it relates to impacts on implementation of the applicable air quality plan, since temporary project-level and cumulative construction impacts would be greater than the project, the General Plan/Specific Plan and Zoning Build-Out Alternative could result in construction emissions of a magnitude that would obstruct the air quality planning goals set forth by the Eastern Kern Air Pollution Control District. Therefore, impacts would be greater than the proposed project.

Implementation of this alternative would expose sensitive receptors to substantial pollutant concentrations. In particular, during construction of this alternative, it is possible that onsite workers could be exposed to Valley Fever as fugitive dust is generated during construction. However, dust-minimizing techniques, as implemented through special development standards and/or conditions of approval similar to **Mitigation Measures MM 4.3-2** and **MM 4.3-6** (see **Section 4.3**, *Air Quality*), would reduce these impacts to less than significant. As with the project, the General Plan/Specific Plan and Zoning Build-Out Alternative would result in less-than-significant impacts related to toxic air contaminants, localized pollutant concentrations, and asbestos.

Overall, even with implementation of mitigation measures similar to those required for the proposed project, temporary and operational impacts to air quality under the General Plan/Specific Plan and Zoning Build-Out Alternative would likely result in greater impacts to air quality than the project due to the greater operational emissions associated with the agricultural uses and increased vehicle travel associated with residential development.

Biological Resources

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

Conversion of the undeveloped site to the maximum intensity allowed under existing land use and zoning classifications would affect biological resources on the project site as this alternative would replace native vegetation with residential uses and agricultural crops or grazing areas. Residential and agricultural uses would also result in increased human presence as opposed to a solar power generation and energy storage facility with limited staff required for operations and maintenance and occasional panel washing. Ground-disturbing activities would increase in intensity to facilitate clearing of land and grading when compared to the proposed project's minimized approach to conventional grading through a less-intensive mow-and-roll vegetation clearance strategy. Thus, impacts from this alternative would be greater than the proposed project.

As it relates to impacts on candidate, sensitive, or a special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife (CDFW) or the U.S. Fish and Wildlife Service (USFWS), as with the project, the General Plan and Zoning Build-Out Alternative would have the potential to impact special-status plant and wildlife species and habitat regulated by CDFW. As with the project, implementation of development standards/conditions of approval similar to **Mitigation Measures MM 4.4-1** through **MM 4.4-18** (see **Section 4.4**, *Biological Resources*) would reduce impacts to less than significant, with exception to impacts on WJT, which are considered significant and unavoidable on a project level. With regard to impacts on any riparian habitat or other sensitive natural community, or jurisdictional waters, identified in local or regional plans, policies, or regulations or by the CDFW or USFWS, construction activities could result in significant impacts related to approximately 2.1 acres of CDFW and Regional Water Quality Control Board (RWQCB) jurisdictional areas present on the project site; no USFWS jurisdictional waters are present. However, as with the project, implementation of development standards/conditions of approval similar to **Mitigation Measures MM 4.4-1** through **MM 4.4-20** (see **Section 4.4**, *Biological Resources*) would reduce impacts to less than significant under the General Plan/Specific Plan and Zoning Build-Out Alternative.

Implementation of the above referenced mitigation measures would also reduce potential impacts to state waters, the movement of resident or migratory wildlife species or with established resident or migratory wildlife corridors, and consistency with local policies and ordinances protecting biological resources. The General Plan/Specific Plan and Zoning Build-Out Alternative, as with the project, would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

Project-level impacts under the General Plan/Specific Plan and Zoning Build-Out Alternative would be significant and unavoidable due to the absence of a clear mitigation measure, reporting, and monitoring plan, with impacts being greater to those required for the proposed project. Cumulatively, this alternative would still result in significant and unavoidable impacts to biological resources; regardless of the type of development, biological resources would be impacted throughout the Antelope Valley. Therefore, the General Plan/Specific Plan and Zoning Build-Out Alternative would result in greater impacts related to biological resources as the proposed project.

Cultural Resources

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

To develop the project site to the maximum intensity allowed under existing land use and zoning classifications, this alternative would involve greater ground disturbance as opposed to the project that would have some no build areas. Ground-disturbing activities associated with the project have the potential to encounter undocumented archaeological resources that could qualify as historical resources. Similar to the proposed project, nonagricultural uses in the General Plan/Specific Plan and Zoning Build-Out Alternative would implement special development standards and/or conditions of approval similar to **Mitigation Measures MM 4.5-1** through **MM 4.5-6** (see **Section 4.5**, *Cultural Resources*). In addition, there is no indication that any particular location within the project site has been used for purposes of human burial in the recent or distant past. However, in the unlikely event that human remains are inadvertently discovered during project construction activities, implementation of development standards/conditions of approval similar to **Mitigation Measure MM 4.5-6** would ensure that any human remains encountered are appropriately addressed and impacts would be less than significant.

Although both the project and this alternative would result in less-than-significant impacts with mitigation as related to historical resources, archaeological resources, and human remains, the General Plan/Specific Plan and Zoning Build-Out Alternative would result in greater potential for impacts to undocumented subsurface cultural resources compared to the proposed project due to increased ground disturbance required for construction.

Energy

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed, and solar energy would not be generated on the site.

Development of the project site to the maximum intensity allowed under existing land use designations and zoning classifications would require similar heavy duty construction equipment and more intensive operational activities related to the consumption of natural gas and transportation-related energy (petroleum-based fuels) for residential development and agricultural activities.

Similar to the proposed project, nonagricultural projects included in the General Plan/Specific Plan and Zoning Build-Out Alternative would be required to comply with the California Air Resources Board's (CARB) Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. In addition, the fuel efficiency of the vehicles being used by the employees and vendors under this alternative is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation would decrease over time. As such, the wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant under this alternative.

Furthermore, similar to the proposed project, the General Plan and Zoning Build-Out Alternative would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Based on the above, impacts under the General Plan/Specific Plan and Zoning Build-Out Alternative related to energy would be less than significant, but greater than those of the project as the project site would not generate renewable energy, and would, therefore, not assist the state in meeting its renewable energy generation goals to the fullest extent as compared to the proposed project.

Geology and Soils

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

Construction of the General Plan/Specific Plan and Zoning Build-Out Alternative would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08). Kern County has adopted the California Building Code (CBC) 2022 Edition (California Code of Regulations [CCR] Title 24). Adherence to all applicable regulations would mitigate any potential fault rupture-related impacts associated with this alternative. In addition, similar to the proposed project, development of nonagricultural uses included in the General Plan/Specific Plan and Zoning Build-Out Alternative would implement special development standards and/or conditions of approval similar to **Mitigation Measures MM 4.7-1** and **MM 4.7-2** (see **Section 4.7**, *Geology and Soils*), which require that a site-specific geotechnical study to evaluate soil conditions and geologic hazards on the project site and that a California registered and licensed geotechnical engineer design applicable structures to withstand probable seismically induced ground shaking at the site. Furthermore, the General Plan/Specific Plan and Zoning Build-Out Alternative would implement development standards/conditions of approval similar to **Mitigation Measures MM 4.10-1** and **MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*) in order to address potential soil erosion and loss of topsoil. As it relates to unique paleontological resources on site or unique geologic features, similar to the proposed project, under the General Plan/Specific Plan and Zoning Build-Out Alternative any ground disturbance within the project site could result in a potentially significant impact to paleontological resources. As such, the General Plan/Specific Plan and Zoning Build-Out Alternative would implement development standards/conditions of approval similar to **Mitigation Measures MM 4.7-3** through **MM 4.7-6** (see **Section 4.7**, *Geology and Soils*) for nonagricultural uses to reduce impacts to paleontological resources.

Therefore, with implementation of development standards/conditions of approval similar to mitigation measures similar required for the proposed project, impacts to geology and soils would likely be less than significant and the General Plan/Specific Plan and Zoning Build-Out Alternative would result in similar impacts related to geology and soils as the proposed project.

Greenhouse Gas Emissions

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte

Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed, and solar energy would not be generated on the site.

As portions of the General Plan/Specific Plan and Zoning Build-Out Alternative would develop land uses that would emit GHG emissions throughout the life of the project (from increased water usage, traffic, operation of agricultural equipment, and livestock emissions), this would result in a net increase of GHG emissions within California. Unlike the proposed project, the General Plan/Specific Plan and Zoning Build-Out Alternative would not assist an off-taker in reducing its GHG emissions as consistent with the California Global Warming Solutions Act. Therefore, although both this alternative and the project would result in less than significant GHG emissions impacts through implementation of emissions-reductions strategies for construction, impacts from the General Plan/Specific Plan and Zoning Build-Out Alternative related to GHG emissions would be greater when compared to the proposed project since the beneficial reduction in GHG emissions would not occur as with the project.

Hazards and Hazardous Materials

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

There are no known hazardous materials in the soil that would be disturbed during construction of the project site to the maximum intensity allowed under existing land use and zoning classifications. As with the project, standard best management practices (BMPs) for nonagricultural uses would ensure that exposure to potentially hazardous materials used or found onsite would be reduced or minimized. Similar to the proposed project, the General Plan/Specific Plan and Zoning Build-Out Alternative would implement special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.9-1** (see **Section 4.9**, *Hazards and Hazardous Materials*) for nonagricultural uses in order to reduce significant hazards to the public or environment and avoid spills and minimize impacts in the event of a spill. Agricultural use of herbicides would not be mitigated under this alternative since **Mitigation Measure MM 4.9-2** would not be implemented, increasing the likelihood of herbicide use.

Similar to the proposed project, the General Plan/Specific Plan and Zoning Build-Out Alternative would be located within the military flyover area and the Joint Service Restricted R-2508 Complex of the Edwards Air Force Base. The project site overlaps with the military review area for all structures over 500 feet. However, as it is unlikely residential or agricultural structures would exceed 500 feet in height, such military review would not be required. Should any residential or agricultural structures exceed 200 feet in height, FAA notification would be required through development standards/conditions of approval similar to those described in **Mitigation Measure MM 4.9-3**.

As it relates to wildland fires, the project site is not located within a very high fire hazard severity zone; however, portions of the northwestern section of the project site are located within a high fire severity zone. However, similar to the proposed project, the General Plan/Specific Plan and Zoning Build-Out Alternative would implement development standards/conditions of approval similar to **Mitigation Measure MM 4.14-1** (see **Section 4.14**, *Public Services*), which includes the development and implementation of a fire safety plan for construction and operation of nonagricultural uses in the event of a fire on the project site.

Impacts under the General Plan/Specific Plan and Zoning Build-Out Alternative would result in less than significant impacts after implementation of development standards/conditions of approval similar to the proposed project's mitigation measures; however, due to the allowed use of herbicides for agricultural operations, impacts related to hazards and hazardous materials would be greater than for the proposed project.

Hydrology and Water Quality

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

The conversion of the project site to the maximum intensity allowed under existing land use and zoning classifications would result in similar or greater ground disturbance and erosion potential. However, for those parcels zoned and designated for agricultural uses, agricultural operations under this alternative would likely involve continued ground disturbance from activities such as grazing and plowing, whereas the project's operation would not, thereby posing a greater threat to water quality. Operation of agricultural uses could also affect groundwater quality through the application of pesticides or herbicides. Once operational, agricultural uses would result in greater water demand under the General Plan/Specific Plan and Zoning Build-out AlternAative than under the project.

Similar to the proposed project, for nonagricultural development, the General Plan/Specific Plan and Zoning Build-Out Alternative would include implementation of BMPs to prevent the occurrence of soil erosion and discharge as required under development standards/conditions of approval similar to **Mitigation Measure MM 4.10-1** (see **Section 4.10**, *Hydrology and Water Quality*) as well as **Mitigation Measure MM 4.9-1**, which would require the project proponent to provide a Hazardous Materials Business Plan. During operation of this alternative, as with the project, **Mitigation Measure MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*), which requires each non-agricultural project prepare a Final Drainage Plan, would be implemented.

As it relates to groundwater supplies, overall construction and operation–related water requirements under the General Plan/Specific Plan and Zoning Build-Out Alternative would be greater as compared to the proposed project because agricultural and residential uses included in the alternative are more water intensive uses than the construction and operation of a renewable energy facility. Similar to the proposed project, water demands would likely be met by constructing onsite groundwater wells and would draw from the Fremont Valley Groundwater Basin (FVGB). As described in **Section 4.10**, *Hydrology and Water Quality*, the amount of water stored in the FVGB is relatively large compared to the proposed demand associated with the project. Although water demand would be higher under this alternative, it is assumed that water demand under the General Plan/Specific Plan and Zoning Build-Out Alternative would also be sufficiently supplied by either the water stored in the FVGB or supplemental water may be sourced from RMR Water Trucks and Rental Equipment, Inc. (RMR) and Mojave Public Utilities District (MPUD). Therefore, this alternative would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. Furthermore, this alternative would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan as the General Plan/Specific Plan and Zoning Build-Out Alternative would require BMPs and drainage control requirements that would be consistent with the Basin Plan.

With regard to existing drainage patterns, buildout to the maximum intensity under existing land use designations and zoning under the General Plan/Specific Plan and Zoning Build-Out Alternative would alter existing onsite drainage patterns and flowpaths to some degree, and could alter the way that stormwater from upgradient flows across the project site during major events. Similar to the proposed project, the nonagricultural uses included in the General Plan and Zoning Build-Out Alternative would implement a Stormwater Pollution Prevention Plan (SWPPP) as part of required development standards or conditions of approval, similar to what is described in **Mitigation Measure MM 4.10-1** (see **Section 4.10**, *Hydrology and Water Quality*) and would also implement development standards/conditions of approval similar to **Mitigation Measure MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*), which requires the completion of a Final Drainage Plan prior to the issuance of grading permits.

Overall, although both the project and this alternative would result in less-than-significant impacts with the implementation of mitigation measures, the General Plan/Specific Plan and Zoning Build-Out Alternative would result in greater impacts related to hydrology and water quality compared to the proposed project as operation of agricultural and residential uses proposed under this alternative would likely involve continued ground disturbance from activities such as grazing and plowing and also would require greater operational water use.

Land Use and Planning

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

Unlike the project, the General Plan/Specific Plan and Zoning Build-Out Alternative would be developed under the current General Plan land use designations and zoning classifications. This alternative would be consistent with current zoning as well as existing land use plans, policies, and regulations. Therefore, there would be a less-than-significant impact and the General Plan/Specific Plan and Zoning Build-Out Alternative would result in similar impacts related to land use and planning compared to the proposed project.

Mineral Resources

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

The conversion of the project site to the maximum intensity allowed under existing land use and zoning classifications would have a similar potential as the project to impact the future extraction of mineral resources on adjacent lands. There are no identified mineral resources on the project site, and both this alternative and the project would result in less-than-significant impacts to mineral resources; therefore, the General Plan/Specific Plan and Zoning Build-Out Alternative would result in similar impacts related to mineral resources compared to the proposed project.

Noise

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

During construction, impacts under this alternative would be similar to the impacts of the project, as the conversion of the project site to the maximum intensity allowed under existing land use and zoning classifications would require the use of similar heavy equipment as required for the construction of the project. During operation, with regard to the proposed agricultural uses, this alternative would generate greater noise than the project associated with the daily operation of agricultural equipment and worker vehicles.

Under this alternative, similar to the proposed project, construction activities have the potential to result in the generation of a temporary increase in ambient noise levels in the vicinity of the project in excess of standards and, thus, impacts would be potentially significant. Implementation of special development standards and/or conditions of approval similar to **Mitigation Measures MM 4.13-1** through **MM 4.13-3** (see **Section 4.13**, *Noise*) would reduce impacts to the extent feasible during construction activities such that impacts would be less than significant with mitigation. As with the project, operational activities under the General Plan/Specific Plan and Zoning Build-Out Alternative would not result in the generation of a significant temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards. Impacts would be less than significant.

Both the project and this alternative would result in less-than-significant construction impacts with mitigation; however, this alternative would result in greater operational impacts due to residential and agricultural uses that involve increased ongoing human activity and traffic during operation of the alternative. Therefore, the General Plan/Specific Plan and Zoning Build-Out Alternative would result in greater impacts related to noise than the proposed project.

Public Services

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

Similar to the proposed project, construction of the General Plan/Specific Plan and Zoning Build-Out Alternative would result in a similar number of construction workers on the project site and increased fire service demands would occur during construction of this alternative. However, nonagricultural uses included in the General Plan/Specific Plan and Zoning Build-Out Alternative would implement special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.14-1** (see **Section 4.14**, *Public Services*), which would require the implementation of a fire safety plan. Impacts related to fire protection would be less than significant with mitigation. During operation, agricultural and residential land uses would result in an increase in long-term population, which would increase demand for fire services as compared to the proposed project. Similar to the proposed project, nonagricultural uses

under the General Plan/Specific Plan and Zoning Build-Out Alternative would pay applicable Kern County fees and taxes, similar to the requirements under **Mitigation Measures MM 4.14-2** and **MM 4.14-3** (see **Section 4.14**, *Public Services*), and impacts related to maintaining acceptable fire protection would be less than significant with mitigation.

With regard to police protection, while the project site is located in an area that is surrounded by undeveloped and rural communities and is unlikely to attract attention, construction activities related to installation of new structures would increase traffic volumes along SR-58 and SR-14 and local roads, similar to the proposed project. The increase in traffic related to development of agricultural and residential uses during construction would be temporary and, thus, would not have a significant adverse effect on the Kern County Sheriff's Office (KCSO) protective service provision or California Highway Patrol's (CHP) ability to patrol the highways. During operation of this alternative, residential and agricultural uses of the project site would increase traffic and demand for police services due to the increase in residents and employees. However, the increase is not likely to have a significant adverse effect on the KCSO protective service provision or CHP's ability to patrol the highways. Impacts would be less than significant.

With regard to schools, parks, and other government facilities, similar to the proposed project, under the General Plan/Specific Plan and Zoning Build-Out Alternative construction workers would likely come from an existing local and/or regional construction labor force and would not likely relocate their households to work at the project site. Therefore, the short-term increased employment of construction workers on the project site would not result in a notable increase in the residential population of the area surrounding the project site. Accordingly, there would not be a corresponding demand for use of the local schools, parks, or public facilities. During operations under the General Plan/Specific Plan and Zoning Build-Out Alternative, agricultural and residential uses would establish a larger permanent local population than under the proposed project. However, similar to the proposed project, agricultural staff would likely come from an existing local and/or regional labor force and would not likely relocate their households to work at the project site. While the increase of onsite agricultural workers at the project site would not likely result in a notable increase in the residential population of the area surrounding the project site under the General Plan/Specific Plan and Zoning Build-Out Alternative, the development of residential units would be expected to result in an increased demand for or use of the local schools, parks, and public facilities.

Although both this alternative and the project would result in less-than-significant impacts with implementation of special development standards and/or conditions of approval similar to mitigation described for the proposed project, the General Plan/Specific Plan Build-Out Alternative would result in greater impacts related to public services compared to the proposed project due to an increase in population during operation as compared to the proposed project.

Transportation

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

With conversion of the project site to the maximum intensity allowed under existing land use and zoning classifications, there would be similar construction-related traffic. Similar to the proposed project, during construction of the General Plan/Specific Plan and Zoning Build-Out Alternative, roadways and

intersections would be expected to remain free-flowing. Construction impacts would be temporary and less than significant. Once operational, the General Plan/Specific Plan and Zoning Build Out Alternative would involve more routine vehicle trips associated with residential and agricultural uses; however, due to the sparse allowable development, the alternative would not be anticipated to exceed roadway or intersection capacities. Operation of this alternative would also have a less-than-significant impact on area roadways, but greater than the project.

With regard to consistency with CEQA *Guidelines* Section 15064.3, subdivision (b), vehicle miles traveled related to construction for the General Plan/Specific Plan and Zoning Build-Out Alternative would be temporary and localized, such that construction is not anticipated to result in long-term, permanent changes to the surrounding vehicle transportation system. The increased residential and agricultural uses associated with the General Plan/Specific Plan and Zoning Build-Out Alternative would be expected to generate more vehicle trips per day than the project during operations; however, due to the low density of allowable development, vehicle miles traveled for any one project associated with this alternative would not generate sufficient vehicle miles traveled to exceed County standards, such that impacts would be less than significant, but greater than the project.

As they relate to increasing hazards due to a geometric design feature or incompatible use, impacts from the project and the General Plan/Specific Plan and Zoning Build-Out Alternative would be similar and require implementation of special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.15-1** (see **Section 4.15**, *Transportation*). **Mitigation Measure MM 4.15-1** requires the preparation of a Construction Traffic Control Plan for nonagricultural projects. In addition to the Construction Traffic Control Plan, **Mitigation Measure MM 4.15-2** would implement measures to reduce construction worker vehicle trips during the AM and PM peak hours through carpool incentives, worker shift schedules that minimize trips during peak periods to the extent feasible, and staggered shifts to distribute trips over a broader timeframe.

With regard to emergency access, due to the low density of allowable development, this alternative would likely not cause a significant increase in congestion or significantly worsen the existing service levels at intersection roadways, the General Plan/Specific Plan and Zoning Build-Out Alternative would have a less-than-significant impact on emergency access during construction and operation, similar to the proposed project.

Therefore, although both this alternative and the project would result in less-than-significant impacts, impacts related to transportation from the General Plan/Specific Plan and Zoning Build-Out Alternative would be greater when compared to the proposed project as operational uses would increase the number of trips to the project site as compared to the proposed project.

Tribal Cultural Resources

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

To develop the project site to the maximum intensity allowed under existing land use and zoning classifications, this alternative would involve greater ground disturbance than the proposed project. Ground-disturbing activities associated with the project have the potential to encounter undocumented

resources that could qualify as tribal cultural resources. Similar to the proposed project, nonagricultural uses in the General Plan/Specific Plan and Zoning Build-Out Alternative would implement special development standards and/or conditions of approval similar to **Mitigation Measures MM 4.5-1** through **MM 4.5-6** (see **Section 4.5**, *Cultural Resources*). In addition, there is no indication that any particular location within the project site has been used for purposes of human burial in the recent or distant past. However, in the unlikely event that human remains are inadvertently discovered during project construction activities, implementation of development standards/conditions of approval similar to **Mitigation Measure MM 4.5-6** (see **Section 4.5**, *Cultural Resources*) would ensure that any human remains encountered are appropriately addressed and impacts would be less than significant.

Although both the project and this alternative would result in less than significant impacts with mitigation as it relates to tribal cultural resources, the General Plan/Specific Plan and Zoning Build-Out Alternative has the potential to result in greater impacts to undocumented subsurface tribal cultural resource compared to the proposed project due to increased ground disturbance required for construction.

Utilities and Service Systems

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

As with the project, conversion of the project site to residential and agricultural uses would require water usage for dust suppression as well as minimal generation of wastewater, usage of electrical power, natural gas, and telecommunications. In addition, construction of the General Plan/Specific Plan and Zoning Build-Out Alternative would alter stormwater drainage. With regard to operation, the residential and agricultural uses would substantially increase water demand as compared to the proposed project. Wastewater and solid waste generation associated with this alternative would also increase compared to the proposed project due to the increase in the number of residents and employees under maximum intensity use of the project site. Similar to the proposed project, the General Plan/Specific Plan and Zoning Build-Out Alternative would implement special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*) for nonagricultural uses, which requires preparation of Final Drainage Plans to reduce potential increases in stormwater runoff onsite and would detail any necessary physical structures required to control stormwater.

Although both the project and this alternative would result in less-than-significant impacts, the General Plan/Specific and Zoning Build-Out Alternative would result in greater impacts related to utilities and service systems compared to the proposed project as residential and agricultural uses would have an increased demand on the water supply and local landfills.

Wildfires

Under the General Plan/Specific Plan and Zoning Build-Out Alternative, the project site would be developed to the maximum extent possible in accordance with the applicable, existing General Plan/Specific Plan (Kern County General Plan and Zoning Ordinance or Soledad Mountain Elephant Butte Specific Plan) in which the project is located. Solar panels and an energy storage system would not be installed and solar energy would not be generated on the site.

Residential and agricultural uses may introduce additional sources of ignition sources and vegetation, which may exacerbate wildfire risks. Additionally, use of the project site for residential and agriculture would result in an increase of residents and employees on the project site, which would further increase potential impacts from wildfire risks.

As with the project, this alternative is not located within a very high fire hazard severity zone; however, portions of the northwestern section of the project site are located within a high fire severity zone. The site is located in a rural, sparsely developed areas with limited population. The project site is not located along an identified emergency evacuation route and is not identified in any adopted emergency evacuation plan. Therefore, the General Plan/Specific Plan and Zoning Build-Out Alternative would not substantially impair an adopted emergency response plan or emergency evacuation plan.

Similar to the proposed project, the General Plan/Specific Plan and Zoning Build-Out Alternative would implement special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.14-1** (see **Section 4.14**, *Public Services*) for nonagricultural uses, which would require the development and implementation of a Fire Safety Plan for use during construction and operation, which would further reduce fire risks onsite. As such, impacts under this alternative related to exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be less than significant with mitigation.

Similar to the proposed project, conversion of the project site to the maximum intensity allowed under existing land use and zoning classifications could alter the existing drainage patterns and flowpaths compared to existing conditions. This alternative would implement special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*), which requires preparation of Final Drainage Plans for nonagricultural uses. This mitigation measure would minimize potential increases in runoff and ensure that the retention basins and other stormwater management features are implemented to minimize erosion and sedimentation to less than significant. As such, similar to the proposed project, the General Plan/Specific Plan and Zoning Build-Out Alternative would not include significant risks related to downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes.

With implementation of mitigation measures similar to those required for the project, wildfire impacts would remain less than significant and cumulative impacts related to wildfires would be significant and unavoidable under this alternative, similar to the project.

Comparison of Impacts

The General Plan/Specific Plan and Zoning Build-Out Alternative would result in less impact to aesthetics, agriculture and forestry resources, and wildfire than the proposed project. The alternative would result in similar impacts to geology and soils, hazards and hazardous materials, land use and planning, mineral resources, and noise. This alternative would result in greater impacts in all remaining environmental resource areas. Greater impacts to air quality would result from routine emissions associated with residential uses, agricultural vehicles, ongoing ground disturbance, and livestock emissions, etc. Greater impacts to biological resources would occur due to this alternative's need to implement more intensive ground clearing and grading strategies, thereby irreversibly altering the existing landscape. Greater impacts to noise would be anticipated during operations of ongoing residential and agricultural uses. Given the ground disturbance required, greater impacts could occur to potentially undiscovered cultural and tribal cultural resources. This alternative would result in greater energy impacts as the project site would not generate renewable energy

as compared to the proposed project and would therefore not assist the state in meeting its renewable energy generation goals. Greater impacts to hydrology and water quality would result from greater initial soil disturbance during construction. This alternative would result in greater GHG emission impacts than the project because the potential offset or displacement of GHG emissions from operation of the solar power generation and energy storage facility would not be realized. The increase in human population onsite during operation would also result in greater impacts to public services, transportation, utilities and service systems, and wildfire. This alternative would not eliminate significant and unavoidable impacts associated with biological resources (project WJT only and cumulative) and wildfire (cumulative only).

Relationship to Project Objectives

The General Plan/Specific Plan and Zoning Build-Out Alternative would not achieve any of the project objectives listed above in **Section 6.2**, including the project objective related to assisting California in meeting its GHG emissions reduction goals by 2030 and 2045 as required by the California Global Warming Solutions Act (Assembly Bill 32), as amended by Senate Bill 32 and Senate Bill 100.

Alternative 3: Reduced Acreage Alternative

Environmental Impact Analysis

Aesthetics

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

While this alternative would avoid development south of the aqueduct, this alternative does include the installation of solar panels, BESS, and other associated facilities. Similar to the proposed project, the Reduced Acreage Alternative would implement **Mitigation Measures MM 4.1-1** through **MM 4.1-5** (see **Section 4.1**, *Aesthetics*), which would be incorporated to reduce potential visual impacts that would occur from the collection of debris along the site boundary and to reduce views of the project by strategically installing view-screening materials in fencing. In addition, the color treatment of buildings would help these components to better blend in with the natural landscape. The view from key observation point (KOP) 4 would not be altered, eliminating the significant impact associated with this KOP. However, similar to the proposed project, because there are no feasible mitigation measures that can be implemented to maintain the existing open and undeveloped desert landscape character of the project site, impacts to visual resources would remain significant and unavoidable, though less than the proposed project.

In addition, in combination with other projects, the Reduced Acreage Alternative would contribute to added modifications to the visual landscape. While **Mitigation Measures MM 4.1-1** through **MM 4.1-5** would be implemented to reduce aesthetics impacts, and other projects in the region would be required to implement similar mitigation measures to reduce impacts, the cumulative conversion of thousands of acres of a low density rural area to a solar power generation and energy storage facility cannot be mitigated to a degree that impacts are no longer significant. As such, similar to the proposed project, cumulative impacts from the change to the visual character of the site would remain significant and unavoidable for the Reduced Acreage Alternative.

As the Reduced Acreage Alternative includes the development of a solar power generation and energy storage facility, as with the proposed project, the potential for light and glare impacts would be similar to

the proposed project during construction and operation of the Reduced Acreage Alternative. As such, this alternative would implement **Mitigation Measures MM 4.1-6** and **MM 4.1-7** (see **Section 4.1**, *Aesthetics*). Impacts related to light and glare under the Reduced Acreage Alternative site would be less than significant.

The Reduced Acreage Alternative would have less overall impact to aesthetics compared to the proposed project due to the reduction in project site size under this alternative; however, impacts related to aesthetics would remain significant and unavoidable.

Agriculture and Forestry Resources

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

The project and the Reduced Acreage Alternative would be developed with solar and BESS facilities and associated infrastructure and, thus, would create changes in the existing environment, and would convert land zoned for agriculture to nonagricultural use. Similar to the proposed project, this alternative would not directly or indirectly impact farmland, as there is no designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the project site. In addition, according to available data, none of the parcels included as part of the project or any property in the vicinity of the project are subject to a Williamson Act land use contract or would result in the cancellation of an open space contract.

Impacts related to agriculture and forestry resources would be less than significant. As the Reduced Acreage Alternative would include a smaller footprint, the Reduced Acreage Alternative would result in less impacts related to agriculture and forestry resources than the proposed project.

Air Quality

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and the project's footprint would be reduced from approximately 7,700 acres to approximately 4,800 acres, thereby reducing the extent of construction-related impacts to air quality. The use of construction vehicles, heavy equipment operation, and worker carpool trips would be similar to the proposed project, but grading and other construction activities would not occur south of the aqueduct. Similar to the proposed project, this alternative would require implementation of **Mitigation Measures MM 4.3-1** through **MM 4.3-5** (see **Section 4.3**, *Air Quality*) to reduce construction-related emissions and reduce impacts to less than significant for the project and cumulatively. Operational emissions would likely be reduced under this alternative as fewer maintenance trips would be required with the reduced project scale. As such, operational impacts would be less than significant.

During construction of both the proposed project and the Reduced Acreage Alternative, it is possible that onsite workers could be exposed to Valley Fever as fugitive dust is generated during construction. However, dust-minimizing techniques, as implemented through **Mitigation Measures MM 4.3-3** through **MM 4.3-5** (see **Section 4.3**, *Air Quality*), would reduce these impacts to less than significant. As with the project, the Reduced Acreage Alternative would result in less than significant impacts related to toxic air contaminants, localized pollutant concentrations, asbestos, carbon monoxide hotspots, and Valley Fever.

Overall, with implementation of mitigation measures similar to those required for the proposed project, temporary impacts to air quality under this alternative would be less than significant and less than the proposed project based on reduction in emissions due to reduced ground disturbance footprint as well as

fewer equipment and haul truck trips. The Reduced Acreage Alternative would result in less overall impacts related to air quality than the proposed project.

Biological Resources

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

As it relates to impacts on candidate, sensitive, or a special-status species in local or regional plans, policies, or regulations or by the CDFW or USFWS, the Reduced Acreage Alternative would result in similar but decreased impacts than the proposed project on CDFW special-status plant and wildlife species (refer to **Section 4.4**, *Biological Resources* for details). Areas occupied by or that provide suitable habitat for special-status species are spread out across the project site. The Reduced Acreage Alternative would avoid disturbing approximately 2,900 acres of land south of the aqueduct, which would reduce potential direct and indirect impacts on special-status species at the project site. As with the proposed project, **Mitigation Measures MM 4.4-1** through **MM 4.4-20** (see **Section 4.4**, *Biological Resources*), would be implemented to proportionally reduce project-level impacts, but impacts would remain significant and unavoidable for WJT.

With regard to impacts on sensitive natural community and jurisdictional water features, the Reduced Acreage Alternative would result in similar but lesser impacts than the proposed project. The same types of vegetation communities and jurisdiction features would be impacted by construction of project facilities located in the reduced footprint. The same permitting requirements and implementation of mitigation measures would be required to ensure impacts would be less than significant, including **Mitigation Measures MM 4.4-1** through **MM 4.4-20** (see **Section 4.4**, *Biological Resources*). The Reduced Acreage Alternative, as with the proposed project, would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

Project-level impacts under the Reduced Acreage Alternative would be less than significant with implementation of mitigation and less than those of the proposed project due to a reduced footprint. Cumulatively, this alternative would still result in significant and unavoidable impacts on biological resources because, regardless of the type of development, biological resources would be impacted throughout the Antelope Valley. However, as this alternative would avoid disturbing approximately 2,900 fewer acres of land than the proposed project, the Reduced Acreage Alternative would result in less cumulatively considerable impacts related to biological resources when compared to the proposed project. All other impacts related to biological resources would remain similar to the proposed project, where the development footprints are the same.

Cultural Resources

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

Ground-disturbing activities associated with the Reduced Acreage Alternative have the potential to encounter undocumented archaeological resources that could qualify as historical resources. Similar to the proposed project, the Reduced Acreage Alternative would implement **Mitigation Measures MM 4.5-1** through **MM 4.5-5** (see **Section 4.5**, *Cultural Resources*). In addition, there is no indication that any

particular location within the project site has been used for purposes of human burial in the recent or distant past. However, in the unlikely event that human remains are inadvertently discovered during construction activities, implementation of **Mitigation Measure MM 4.5-5** would ensure that any human remains encountered are appropriately addressed and impacts would be less than significant.

With implementation of mitigation measures similar those required for the proposed project potential impacts to cultural resources under this alternative would be less than significant. However, the Reduced Acreage Alternative would result in less overall potential impacts related to cultural resources compared to the proposed project due to the reduction in ground disturbance.

Energy

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

Eliminating approximately 2,900 acres from project development would result in reduced energy use, as the Reduced Acreage Alternative would construct and operate a smaller facility than the proposed project. Therefore, all construction and operational methods, workforce, and timing for the Reduced Acreage Alternative would be reduced as compared with the project, due to the proportional reduction in project size. Similar to the proposed project, the Reduced Acreage Alternative would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. The fuel efficiency of the vehicles being used by the employees under this alternative would be similar to the proposed project; however, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation would decrease over time. Similar to the proposed project, this alternative would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, impacts would be less than significant and the Reduced Acreage Alternative would result in less energy impact compared to the proposed project.

Eliminating approximately 2,900 acres from project development would reduce the project's clean and renewable energy generation capacity by approximately 40 percent from 1,400 MW to approximately 800 MW, reduce energy storage capacity from up to 8 GWh to approximately 4.8 GWh, and would therefore, not assist the state in meeting its renewable energy generation goals to the fullest extent as compared to the proposed project.

Geology and Soils

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

Construction of the Reduced Acreage Alternative would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08). Kern County has adopted the CBC 2022 Edition (CCR Title 24). Adherence to all applicable regulations would mitigate any potential fault rupture–related impacts associated with this alternative. In addition, similar to the proposed project, the Reduced Acreage Alternative would implement **Mitigation Measure MM 4.7-1** (see **Section 4.7**, *Geology and Soils*), which requires that a site-specific final geotechnical study to confirm soil conditions and geologic hazards on the project site as well as implementation of **Mitigation Measure MM 4.7-2** (see **Section 4.7**, *Geology and Soils*), which would require that all infrastructure proposed under this alternative adhere to the specifications, procedures, and site conditions contained in the final design plans. Implementation of these

mitigation measures, as with the proposed project, would serve to reduce impacts related to strong seismic ground shaking, unstable geologic unit, and expansive soils. In addition, with regard to soil erosion and loss of topsoil, the Reduced Acreage Alternative would implement **Mitigation Measures MM 4.10-1** and **MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*) to prepare a SWPPP and Final Drainage Plan. Similar to the proposed project, a septic tank may be used for sanitary purposes under this alternative. As it relates to unique paleontological resources onsite or unique geologic features, under the Reduced Acreage Alternative, similar to the proposed project, any ground disturbance within the project site could result in a potentially significant impact to paleontological resources. As such, the Reduced Acreage Alternative would implement **Mitigation Measures MM 4.7-3** through **MM 4.7-6** (see **Section 4.7**, *Geology and Soils*) to reduce impacts to paleontological resources. Therefore, impacts would be less than significant.

With implementation of mitigation measures similar to those required for the proposed project, potential impacts related to geology and soils and paleontological resources would be less than significant. However, potential impacts from the Reduced Acreage Alternative would result in less impacts related to geology and soils and paleontological resources compared to the proposed project due to reduction in ground disturbance.

Greenhouse Gas Emissions

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres. Construction and operational GHG emissions with the Reduced Acreage Alternative would be lower based on the smaller footprint; however, the smaller footprint would also reduce the solar energy generation of the facility.

Eliminating approximately 2,900 acres from project development would reduce the project's clean and renewable energy generation capacity by approximately 40 percent from 1,400 MW to approximately 800 MW and reduce energy storage capacity from up to 8 GWh to approximately 4.8 GWh. Reducing the project's renewable energy contribution would offset less GHG emissions and increase the need for other projects in the region to meet demand. As such, impacts related to GHG emissions would be less than significant but greater under this alternative compared to the proposed project, due to the lower output of renewable energy produced under this alternative.

Hazards and Hazardous Materials

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

As with the proposed project, construction, operation, and decommissioning of the Reduced Acreage Alternative would involve the use of the same types of hazardous materials (i.e., fuels, lubricants, pesticides, etc.). As with the proposed project, **Mitigation Measures MM 4.9-1** and **MM 4.9-2** (see **Section 4.9**, *Hazards and Hazardous Materials*) would be implemented to ensure all hazardous materials used or found on site are transported, handled, stored, and disposed of appropriately. **Mitigation Measure MM 4.16-1** (see **Section 4.16**, *Utilities and Service Systems*) would also be required to ensure appropriate debris and waste management during construction, operation, and decommissioning. As with the proposed project, impacts would be less than significant after mitigation.

As it relates to wildland fires, the project site is not within an area of very high fire hazard. Consistent with the proposed project, **Mitigation Measure MM 4.14-1** (see **Section 4.14**, *Public Services*) would be

implemented, which includes the development and implementation of a fire safety plan for construction and operation of the project in the event of a fire on the project site.

Consistent with the proposed project, the Reduced Acreage Alternative is expected to result in cumulative impacts associated with wildland fires. **Mitigation Measure MM 4.14-1** would be implemented to minimize cumulative impacts; however, due to the number of projects occurring in Antelope Valley and the potential for the dispersed cumulative project components to exacerbate fire risk, cumulative impacts associated with an increase fire risk would remain, as with the project. **Mitigation Measure MM 4.15-1** (see **Section 4.15**, *Transportation*), which would require the preparation of a Construction Traffic Control Plan that considers access for emergency vehicles to the project site, would also be implemented.

For both the Reduced Acreage Alternative and the proposed project, impacts related to hazards and hazardous resources would be less than significant after mitigation. The Reduced Acreage Alternative would result in somewhat less, but overall similar, impacts related to hazards and hazardous materials when compared to the proposed project due to the reduced project size.

Hydrology and Water Quality

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

The Reduced Acreage Alternative would result in reduced but similar impacts on hydrology and water quality as the proposed project, including impacts involving water quality standards and discharge requirements; groundwater supplies; alteration of the existing drainage pattern; risk of the release of pollutants due to project inundation; and conflicts with water quality control plans or sustainable groundwater management plans. By reducing the footprint of the project site by approximately 2,900 acres, impacts on hydrology and water quality would be lower than the proposed project based on a reduction of ground disturbance, area occupied by project facilities, stormwater collection area and runoff volume, and water demand and use. Similar to the proposed project, water demands would be met by developing onsite groundwater wells and would draw from the FVGB and supplemental water would be obtained from RMR and MPUD. As described in **Section 4.10**, *Hydrology and Water Quality*, the amount of water stored in the FVGB is relatively large compared to the proposed demand associated with the project and sufficient water supplies exist to support the project. Because the Reduced Acreage Alternative would disturb less acreage and would have less water demand than the proposed project, it is assumed that water demand under the Reduced Acreage Alternative would also be sufficiently supplied by either the water stored in the FVGB or imported from RMR and MPUD.

Similar to the proposed project, the Reduced Acreage Alternative would implement **Mitigation Measure MM 4.10-1** (see **Section 4.10**, *Hydrology and Water Quality*), incorporating BMPs consistent with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit Program for all construction projects that would not retain all stormwater onsite and the Kern County Grading Code. The project proponent would prepare a SWPPP. This alternative would also implement **Mitigation Measure MM 4.9-1** (see **Section 4.9**, *Hazards and Hazardous Materials*), which would require the provision of a Hazardous Materials Business Plan. Furthermore, to prevent hazardous materials from contacting stormwater and degrading water quality, this alternative, as with the project, would implement **Mitigation Measure MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*), which requires preparation of a Final Drainage Plan. Implementation of these mitigation measures would serve to reduce impacts related to violating water quality standards or waste discharge requirements; substantially altering drainage

patterns; and creating or contributing runoff water that would exceed the capacity of existing for planned stormwater drainage systems.

The project site is located well inland and far from the ocean or any enclosed or semi-enclosed water body such that there would be no potential threat from tsunami or seiche hazards and impacts would be less than significant.

Overall, impacts related to hydrology and water quality would be less than significant with implementation of mitigation measures similar to those required for the proposed project. However, the Reduced Acreage Alternative would have less impacts related to hydrology and water quality compared to the proposed project due to the reduced footprint, which would result in reduced grading activities, the amount of impervious surfaces, and water use.

Land Use and Planning

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

Development of the Reduced Acreage Alternative would require zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, or vesting tentative parcel maps to construct and operate a solar power generation and energy storage facility on the project site. Impacts would be less than significant under this alternative. Land use and planning related impacts would be similar under the Reduced Acreage Alternative when compared to the proposed project.

Mineral Resources

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres. There are no identified mineral resources on the project site and this alternative would result in less than significant impacts to mineral resources; therefore, the Reduced Acreage Alternative would result in similar impacts to mineral resources compared to the proposed project.

Noise

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

Under the Reduced Acreage Alternative, overall construction and operational methods, workforce, and timing would be reduced when compared with the proposed project. As the number of onsite construction equipment is assumed to be similar under this alternative on a daily basis, as with the project, construction and decommissioning activities would not subject residential or other noise-sensitive land uses to exterior noise levels in excess of 65 A-weighted decibels (dBA) day-night sound level or increase the ambient noise levels at a noise-sensitive land use by 5 dBA or more. The Reduced Acreage Alternative would implement similar mitigation measures as those required for the proposed project and impacts would be less than significant with mitigation. As with the proposed project, operational activities under the Reduced Acreage Alternative would not result in the generation of a significant temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards. Impacts would be less than significant. Operation of the Reduced Acreage Alternative would generally involve regular maintenance trucks accessing the project site and panel washing activities, similar to the proposed project, that would be a

sufficient distance from sensitive receptors (i.e., over 100 feet away from sensitive receptors). As such, potential vibration impacts would be minimal and are not expected to have any measurable effect on the adjacent offsite sensitive receptors.

This alternative is expected to result in less than significant noise impacts during construction, operation and decommissioning activities. The Reduced Acreage Alternative would result in somewhat less, but overall similar, impacts related to noise when compared to the proposed project due to the reduced project size associated with temporary noise impacts.

Public Services

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

Similar to the proposed project, construction of the Reduced Acreage Alternative would result in a number of construction workers on the project site and increased fire service demands would occur during construction of this alternative. However, the Reduced Acreage Alternative would implement **Mitigation Measure MM 4.14-1** (see **Section 4.14**, *Public Services*), which would require the implementation of a fire safety plan and reduce impacts to less than significant. Similar to the proposed project, the Reduced Acreage Alternative would implement **Mitigation Measures MM 4.14-2** through **MM 4.14-4** (see **Section 4.14**, *Public Services*); which require the project to pay applicable fees and taxes to reduce significant impacts to fire or police protection services resulting from the project. With payment of applicable fees and taxes, any additional fire or police protection services, facilities or personnel required as a result of the project would be appropriately funded, and impacts would be less than significant.

With regard to police protection, while the project site is located in an area that is unlikely to attract attention, construction activities would increase traffic volumes along local roads and SR-58 and SR-14, similar to the proposed project. The increase in traffic would be temporary and thus would not have a significant adverse effect on the KCSO protective service provision or CHP's ability to patrol the highways. In addition, fences would be installed around the perimeter of the project site, substation, and other areas requiring controlled access, for safety and security purposes. During operation of this alternative, the additional volume of vehicles associated with workers commuting to the project site during routine maintenance would be minor and is not expected to adversely affect traffic. Therefore, the increase is not likely to have a significant adverse effect on the KCSO protective service provision or CHP's ability to patrol the highways. Impacts associated with this alternative would be less than significant.

Similar to the proposed project, it is not expected that a substantial temporary increase in population would occur that would adversely affect local school populations, park facilities, or local public facilities, such as post offices, courthouses, and library services. As a result, no significant impacts to schools, parks, or other public services are anticipated to occur as a result of project construction or operation.

Potential impacts to public services would be less than significant under this alternative following implementation of mitigation measures similar to those required for the proposed project. Both the proposed project and Reduced Acreage Alternative would result in less-than-significant impacts.

Transportation

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

Under the Reduced Acreage Alternative, all construction and operational methods, workforce, and timing would be reduced when compared with the project. Construction of the Reduced Acreage Alternative would require fewer construction trips for installation of project facilities, and the volume of vehicle miles traveled would be less, due to the reduced amount of materials and equipment that would be used to construct the project. Similar to the proposed project, construction of the Reduced Acreage Alternative would be consistent with the Kern County General Plan and Soledad Mountain Elephant Butte Specific Plans; as well as countywide, State, and regional transportation plans. Nonetheless, the Reduced Acreage Alternative would include **Mitigation Measure MM 4.15-1** (see **Section 4.15**, *Transportation*), requiring the development of a Construction Traffic Control Plan, which would further reduce impacts. In addition to the Construction Traffic Control Plan, **Mitigation Measure MM 4.15-2** would implement measures to reduce construction worker vehicle trips during the AM and PM peak hours through carpool incentives, worker shift schedules that minimize trips during peak periods to the extent feasible, and staggered shifts to distribute trips over a broader timeframe. During operation of this alternative, day-to-day operations and maintenance trips would be reduced in comparison with those of the project. Similar to the project, the total number of daily trips and distances traveled for operations and maintenance of the solar panels would be less than during construction. Both the proposed project and Reduced Acreage Alternative would result in less-than-significant impacts regarding conflicts with a program, plan, ordinance or policy establishing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; and conflicts or inconsistencies with CEQA *Guidelines* Section 15064.3, subdivision (b). Both the proposed project and Reduced Acreage Alternative would result in less-than-significant impacts.

As it relates to increasing hazards due to a geometric design feature or incompatible use, similar to the proposed project, the Reduced Acreage Alternative would also require the use of oversized vehicles during construction which could create a hazard to the public by limiting motorist views and by the obstruction of space. As with the proposed project, this alternative would also implement **Mitigation Measures MM 4.15-1 and MM 4.15-2**, which would reduce impacts from oversized construction vehicles and would also provide further assurances for emergency access, to reduce impacts during construction to less than significant.

Given the reduction in total construction and operational vehicle trips under this alternative as compared to the proposed project, the Reduced Acreage Alternative impacts related to transportation would be less compared to the proposed project.

Tribal Cultural Resources

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

No tribal cultural resources were identified as part of the Sacred Land Files search or Kern County's notification and consultation efforts with interested Native American groups conducted pursuant to Assembly Bill 52 and Senate Bill 18; however, there is a potential to encounter and disturb unknown resources during site clearing and grading activities, which would require implementation of avoidance measures specified in **Mitigation Measures MM 4.5-1** through **MM 4.5-5** (see **Section 4.5**, *Cultural Resources*). The Reduced Acreage Alternative would have less than significant impacts on tribal cultural resources after mitigation and, due to the reduced amount of ground disturbance, the Reduced Acreage Alternative impacts related to tribal cultural resources would be less compared to the proposed project.

Utilities and Service Systems

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

Eliminating approximately 2,900 acres from project development would result in reduced demand for utilities and service systems, as the Reduced Acreage Alternative would generate approximately 800 MW, a reduction from 1,400 MW, and would reduce energy storage capacity from up to 8 GWh to approximately 4.8 GWh. These reductions would decrease construction and operational methods, workforce, and timing in comparison with the proposed project.

As with the project, installation of solar panels and energy storage system would require water usage for dust suppression as well as minimal generation of wastewater, usage of electrical power, natural gas, and telecommunications. In addition, construction of the Reduced Acreage Alternative would not substantially alter stormwater drainage. With regard to operation, the solar panels installed under the Reduced Acreage Alternative would require a reduced water demand for panel washing in comparison with the project. Wastewater and solid waste generation associated with this alternative would also be reduced compared to the proposed project due to the fewer number of employees required for maintenance of the solar panels. As the Reduced Acreage Alternative would develop the project site, impervious surfaces would be minimized as much as possible, as with the project. Similar to the proposed project, the Reduced Acreage Alternative would implement **Mitigation Measures MM 4.10-1** and **MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*), which requires preparation of a SWPPP and Final Drainage Plan to reduce potential increases in stormwater runoff onsite and would detail any necessary physical structures required to control stormwater.

This alternative is expected to result in less-than-significant impacts to utilities and service systems, and the Reduced Acreage Alternative impacts related to utilities and service systems would be less compared to the proposed project due to the reduced development area and reduced water demand required for solar panel washing.

Wildfires

Under the Reduced Acreage Alternative, the project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres.

The project site has low topographic relief and is relatively flat. As with the proposed project, this alternative is not located in an area classified as a State Responsible Area very high fire hazard severity zone (FHSZ); however, portions of the northwestern section of the alternative site are located within a high FHSZ. Development of the alternative would not be anticipated to physically impede the existing emergency response plans, emergency vehicle access, or personnel access to the site. The site is located in a rural, generally undeveloped area with limited population. The Reduced Acreage Alternative site is not located along an identified emergency evacuation route and is not identified in any adopted emergency evacuation plan. Therefore, the Reduced Acreage Alternative would not substantially impair an adopted emergency response plan or emergency evacuation plan. Nonetheless, **Mitigation Measure MM 4.15-1** (see **Section 4.15**, *Traffic and Transportation*) would be implemented to ensure the project would not impede emergency access conditions during construction.

While the portion of the project site south of the aqueduct is within a Local Responsibility Area Moderate zone, which is considered wildland areas with low fire frequency and relatively modest fire behavior, none

of the project site under this alternative is located within a Local Responsibility Area. Similar to the project, the Reduced Acreage Alternative would implement **Mitigation Measure MM 4.14-1** (see **Section 4.14**, *Public Services*), which would require the development and implementation of a Fire Safety Plan for use during construction, operation, and decommissioning of the project. As such, impacts under this alternative related to exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be less than significant.

With regard to the installation or maintenance of associated infrastructure, this alternative includes installation of a gen-tie line, similar to the proposed project. The installation of the gen-tie line would not be placed within a very high FHSZ and vegetation would be continuously managed to minimize fire risk and thus would not result in increased fire risks that could result in temporary or ongoing impacts to the environment.

Similar to the proposed project, the development proposed under the Reduced Acreage Alternative could alter the existing drainage patterns and flowpaths compared to existing conditions as well as increase impervious surfaces. As with the project, the Reduced Acreage Alternative would implement **Mitigation Measure MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*), which requires preparation of a Final Drainage Plan. This mitigation measure would minimize potential increases in runoff and ensure that the retention basins and other stormwater management features are implemented to minimize erosion and sedimentation to less than significant. As such, similar to the proposed project, the Reduced Acreage Alternative would not include significant risks related to downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. With implementation of mitigation measures similar to those required for the proposed project, this alternative is expected to result in less than significant project-level impacts to wildfires and significant and unavoidable cumulative wildfire impacts; overall, the Reduced Acreage Alternative impacts related to wildfires would be similar to the proposed project.

Comparison of Impacts

The Reduced Acreage Alternative would be reduced in size compared to the proposed project and would develop up to 800 MW of solar energy generation with up to 4.8 GWh of energy storage capacity, due to the proportional reduction in project size; therefore, all construction and operational methods, workforce, and timing for the Reduced Acreage Alternative would be reduced in comparison with the project. Due to the reduced footprint, the Reduced Acreage Alternative would result in less or similar impacts for the majority of environmental issue areas. This alternative would result in greater impacts to GHG emissions given its reduced solar energy output. In addition, this alternative would not eliminate or substantially lessen significant and unavoidable impacts associated with aesthetics (project and cumulative), biological resources (project WJT only and cumulative), or wildfire (cumulative only).

Relationship to Project Objectives

The project would not develop south of the aqueduct and would reduce the project's footprint from approximately 7,700 acres to approximately 4,800 acres, reducing energy-generating capacity from 1,400 MW to 800 MW and energy storage capacity from up to 8 GWh to approximately 4.8 GWh. The Reduced Acreage Alternative would meet most of the project objectives listed above in **Section 6.2**, although to a lesser degree. This alternative would meet the objective of developing the solar power generation and energy storage facility in proximity to an available connection to the existing electrical distribution

infrastructure and customer loads; minimizing environmental impacts by using existing electrical distribution facilities; minimizing impacts on threatened and/or endangered species; minimizing water use; reducing GHG emissions; and using technology that is available, proven, efficient, and easily maintained, recyclable, and environmentally sound. The Reduced Acreage Alternative would be reduced in size compared to the proposed project and would generate approximately 800 MW and 4.8 GWh of energy storage capacity due to the proportional reduction in project size and, therefore, would not assist the State in achieving or exceeding its RPS or GHG emissions reduction objectives and would not assist the State in achieving or exceeding its energy storage mandate to the same extent as the proposed project. Due to the reduction in size, this alternative also would not achieve the project objective of producing and transmitting electricity at a competitive cost to the same extent as the proposed project.

Alternative 4: No Ground-Mounted Utility-Solar Development Alternative – Distributed Commercial and Industrial Rooftop Solar Only

Environmental Impact Analysis

Aesthetics

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of commercial and industrial facilities.

The installation of small to medium solar PV systems on large commercial and industrial rooftops would be visually unobtrusive or unnoticeable from receptors at ground level. However, from other vantage points, the installation of rooftop small to medium solar PV systems may be visible but would not likely affect the visual character or quality of an area, because the character or quality of an area has already been altered as a result of the existing building's construction. The exceptions may be if rooftop solar were proposed on historic buildings, which could affect the historic character and integrity of the buildings. Implementation of this alternative would require historic surveys and investigations to evaluate the eligibility of potentially historic structures that are over 50 years old, and either avoidance of such buildings, or incorporation of design measures to minimize impacts on historic integrity of historically significant structures.

The No Ground-Mounted Utility-Solar Development Alternative would have less than significant impacts after mitigation as well as less impacts related to aesthetics compared to the proposed project.

Agriculture and Forestry Resources

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of existing commercial and industrial facilities. Since the solar PV systems proposed for this alternative would be constructed on existing structures, this alternative would not create any changes in the existing environment that would convert land that is designated Farmland or forest land to nonagricultural or nonforest uses. As such, no impacts to agriculture or forestry resources would occur. Therefore, the No Ground-Mounted Utility-Solar Development Alternative would result in less impacts related to agriculture and forestry resources compared to the proposed project, as this alternative would not require ground disturbance.

Air Quality

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of existing commercial and industrial facilities. Under this alternative, no construction activities associated with ground disturbance would occur, reducing some temporary construction-related air quality impacts. However, depending on the availability and location of rooftops, this alternative may require a significant number of truck trips to transport solar panels, racking systems, and associated electrical equipment to dispersed locations, potentially resulting in additional unnecessary emissions that would otherwise be avoided at a singular, concentrated project site. Thus, this alternative may result in significant and unavoidable temporary project-level and cumulative construction impacts related to regional air quality emissions and implementation of applicable air quality plans. Special development standards and/or conditions of approval similar to mitigation measures would be implemented as necessary to ensure that impacts are reduced as they relate to regional and localized construction emissions and Valley Fever exposure. Implementation of development standards/conditions of approval similar to **Mitigation Measure MM 4.3-6** (see **Section 4.3**, *Air Quality*) would not be required. During operation, this alternative would have similar impacts on air quality as the project related to occasional vehicular visits for maintenance. As such, operational impacts would be less than significant. Overall, this alternative would result in greater temporary construction-related project and cumulative impacts related to air quality compared to the proposed project, due to the increased number of trips required for geographically distributed locations.

Biological Resources

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of commercial and industrial facilities situated throughout the Antelope Valley. The project site would remain undeveloped and only developed areas, typically on the rooftops of commercial and industrial facilities, in the Antelope Valley would be modified. Given that rooftops of existing commercial and industrial facilities would be used for solar PV system installation, these areas would be unlikely to provide habitat for special-status species. Development of this alternative would not disturb any land or remove habitat for special-status plants and wildlife or have a substantial adverse effect on any riparian habitat. As such, special development standards and/or conditions of approval similar to **Mitigation Measures MM 4.4-1** through **MM 4.4-20** (see **Section 4.4**, *Biological Resources*) would not be required. The No Ground-Mounted Utility-Solar Development Alternative would result in less-than-significant impacts with mitigation for biological resources, with reduced impacts compared to the proposed project as this alternative would not require ground disturbance. The No Ground-Mounted Utility-Solar Development Alternative would not contribute to a cumulative loss of biological resources. As such, significant and unavoidable cumulative impacts would be eliminated.

Cultural Resources

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of commercial and industrial facilities situated throughout the Antelope Valley. Given that development would occur primarily on the rooftops of existing structures, there would be no potential for disturbance or damage to buried archaeological resources and human remains. If rooftop solar systems were proposed on historic buildings, this alternative could affect the historic character and integrity of these buildings, as well as the

character and views of adjacent historical resources. However, historic surveys and investigations would be conducted prior to project construction to identify known eligible historical resources and to evaluate the eligibility of potentially historic structures that are 50 years or older; historic structures would be either avoided or the alternative would be required to incorporate mitigation and design measures to minimize the impact on these structures. In the case of eligible historical resources, design measures must be in accordance with the Secretary of the Interior standards and the impact must not affect the eligibility of such resources or adjacent resources. Therefore, unanticipated impacts to unknown or known cultural resources would not occur under this alternative. Impacts would be less than significant. With the appropriate mitigation measures in place to reduce impacts to historical resources, the potential to disturb or discover unknown cultural resources within the project area would be less than significant. However, given the avoidance of archaeological resources under this alternative, the No Ground-Mounted Utility-Solar Development Alternative would result in fewer impacts related to cultural resources compared to the proposed project as this alternative would not require ground disturbance.

Energy

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of commercial and industrial facilities situated throughout the Antelope Valley. Construction of this alternative may require a significant number of trucks trips to transport and install the solar panels on the rooftops of existing buildings in dispersed locations, although it would not require off-road construction equipment. Therefore, the No Ground-Mounted Utility-Solar Development Alternative likely would have a less than significant impact related to wasteful, inefficient, or unnecessary consumption of energy resources and this alternative likely would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Impacts would be similar compared to the proposed project.

Geology and Soils

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of commercial and industrial facilities situated throughout the Antelope Valley. Given that only developed areas would be modified, there would be no potential for the No Ground-Mounted Utility-Solar Development Alternative to directly or indirectly cause potential substantial adverse effects involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, and landslides; result in substantial soil erosion or loss of topsoil; result in onsite or offsite landslides; be located on expansive soil; or directly or indirectly destroy a unique paleontological resource or unique geologic feature. The No Ground-Mounted Utility-Solar Development Alternative would not require implementation of special development standards and/or conditions of approval similar to **Mitigation Measures MM 4.7-1** through **MM 4.7-6** (see **Section 4.7**, *Geology and Soils*). Development of rooftop solar would require adherence to all requirements of the Kern County Building Ordinance. Therefore, impacts would be less than significant. The No Ground-Mounted Utility-Solar Development Alternative would result in less impacts related to geology and soils compared to the proposed project as this alternative would not require ground disturbance.

Greenhouse Gas Emissions

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of existing

commercial and industrial facilities. This alternative would not generate GHG emissions from off-road equipment, but a significant number of truck trips may be required to transport solar panels to dispersed rooftop locations. Additionally, the distributed systems on rooftops would lack tracking systems and be less efficient, and generate less energy per panel, than those that would be installed as part of the proposed project. Further, this alternative would have less or no energy storage, whereas the project would provide up to 8 GWh of storage to maintain energy-generating capacity when sunlight is not available. As such, this alternative's overall GHG emission offset potential would be smaller than the proposed project. Therefore, the No Ground-Mounted Utility-Solar Development Alternative likely would have less than significant impacts related to generating GHG emissions that may have a significant impact on the environment or consistency with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. However, impacts related to GHG emissions would be greater under this alternative compared to the proposed project due to the lower efficiency of the distributed systems, which would not include solar tracking technology and limited/no energy storage.

Hazards and Hazardous Materials

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of existing commercial and industrial facilities situated throughout the Antelope Valley. The installation of rooftop solar equipment on existing structures would involve fewer hazardous materials (such as chemicals and fuels) than the project construction on the undeveloped project site. Similar to the proposed project, the No Ground-Mounted Utility-Solar Development Alternative would implement special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.9-1** (see **Section 4.9**, *Hazards and Hazardous Materials*) to avoid spills and minimize impacts in the event of a spill; regulate the use of hazardous materials during construction and operation; and ensure that wastes requiring special disposal are handled according to state and county regulations that are in effect at the time of disposal, respectively. Herbicides are not anticipated to be required, such that development standards/conditions of approval similar to **Mitigation Measure MM 4.9-2** would not be required. Implementation of mitigation would reduce impacts related to the routine transport, use, or disposal of hazardous materials associated with the project site; or creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

While it is unknown where the distributed solar PV systems would be located within the Antelope Valley, the No Ground-Mounted Utility-Solar Development Alternative, similar to the proposed project, would adhere to any applicable notification requirements related to the Airport Land Use Compatibility Plan.

As it relates to wildland fires, as the small to medium solar PV systems would be developed typically on the rooftops of existing commercial and industrial facilities situated throughout the Antelope Valley, it is expected that these areas where the solar PV systems would be installed would be in more urbanized areas that would not require a utility-scale battery storage component. However, due to the numerous power lines that would be required to harness the distributed solar panel energy, this alternative could exacerbate fire risks. As such, similar to the proposed project, special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.14-1** (see **Section 4.14**, *Public Services*) would be implemented, as needed, to reduce wildfire risks under this alternative.

Impacts under this alternative would be less than significant. The No Ground-Mounted Utility-Solar Development Alternative would result in less impacts related to hazards and hazardous materials compared to the proposed project, as this alternative would require use of smaller quantities of hazardous materials.

Hydrology and Water Quality

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of existing commercial and industrial facilities situated throughout the Antelope Valley. No ground disturbance related to construction would be required under this alternative.

Compliance with the NPDES Construction General Permit, including development and implementation of a SWPPP, would not be required under the No Ground-Mounted Utility-Solar Development Alternative, thus eliminating implementation of special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.10-1** (see **Section 4.10**, *Hydrology and Water Quality*). Similar to the proposed project, this alternative would require implementation of a development standard/condition of approval similar to **Mitigation Measure MM 4.9-1** (see **Section 4.9**, *Hazards and Hazardous Materials*), which, as described above, 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. Implementation of this mitigation measure would reduce potential impacts related to violating water quality standards or degradation of surface or groundwater quality during construction and operation of the No Ground-Mounted Utility-Solar Development Alternative.

With regard to existing drainage patterns, as small to medium solar PV systems would be developed on the rooftops of existing commercial and industrial facilities situated throughout the Antelope Valley, drainage patterns and flow paths would not be altered. As such, impacts related to drainage patterns would be less than significant. Implementation of special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*) would not be required as this alternative would not disturb soils or alter drainage patterns.

The Antelope Valley is located well inland and far from the ocean or any enclosed or semi-enclosed water body such that there would be no potential threat from tsunami or seiche hazards and impacts would be less than significant. In addition, water for construction and operation phases under the No Ground-Mounted Utility-Solar Development Alternative would either be drawn from the FVGB or be obtained from MPUD. Data provided for the project confirm the ability of the underlying aquifer to support development of the project without adverse effects, and the No Ground-Mounted Utility-Solar Development Alternative is anticipated to require less water during construction than the project. Therefore, the project would not conflict with the groundwater management of the area and the potential impacts would be less than significant.

Overall, impacts related to hydrology and water quality would be less than significant. The No Ground-Mounted Utility-Solar Development Alternative would result in less overall impact related to hydrology and water quality materials compared to the proposed project as this alternative would not require ground disturbance, which could potentially introduce more pollutants to stormwater, and water requirements during construction and operation of this alternative would be reduced.

Land Use and Planning

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of existing commercial and industrial facilities situated throughout the Antelope Valley. Under this alternative, there would be no zone classification changes, CUPs, General Plan amendments, zone variances, removal of road reservations, vacation of easements, or vesting tentative parcel maps required. Installation of rooftop solar would be consistent with current zoning as well as existing land use plans, policies, and regulations. The No Ground-Mounted Utility-Solar Development Alternative would also achieve the County's goals and policies relative to accommodating renewable energy facilities. To allow such development, the project proponent would be required to comply with the specific entitlements needed to construct solar PV systems consistent with this alternative. Therefore, there would be no impact to land use and planning. Impacts to land use and planning under the No Ground-Mounted Utility-Solar Development Alternative would be less compared to the proposed project.

Mineral Resources

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of commercial and industrial facilities situated throughout the Antelope Valley. Since this alternative would not disturb any ground surfaces, there would be no impact to mineral resources. The No Ground-Mounted Utility-Solar Development Alternative would result in less impacts related to mineral resources compared to the proposed project as no ground disturbance would occur.

Noise

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of existing commercial and industrial facilities. Rooftops of existing commercial and industrial buildings that would be developed under this alternative would be in developed areas. Due to the centralized location of construction activities, a reduced quantity of construction equipment, as well as less impactful equipment, would be needed. However, construction activities have the potential to result in the generation of a temporary increase in ambient noise levels in the vicinity of the project in excess of standards and, thus, impacts would be potentially significant. Implementation of special development standards and/or conditions of approval similar to **Mitigation Measures MM 4.13-1** through **MM 4.13-3** (see **Section 4.13**, *Noise*) would reduce impacts to the extent feasible during construction activities such that impacts would be less than significant.

The operational noise generated from these solar PV systems would be less than that of the project due to the absence of noise-generating facilities such as substations and utility-scale BESS. In addition, no noise-producing equipment would be located closer to sensitive receptors compared to the proposed project. Due to these factors and that no equipment that is louder than the proposed project's equipment would be used, operational noise would result in less-than-significant impacts.

With regard to vibration, construction of the No Ground-Mounted Utility-Solar Development Alternative would not require the use of construction equipment with high groundborne vibration levels such as pile drivers, vibratory rollers, jackhammers, or bulldozers. Since it follows that the main source of high groundborne vibration levels is construction equipment that produces such levels, it is likely that

construction vibration would have a less-than-significant construction vibration impact. Whether rooftop solar systems are proposed on historic buildings, which are more susceptible to vibration damage, or other types of newer buildings, this level of vibration would not exceed vibration thresholds and, as such, would result in less-than-significant impacts.

As discussed above, construction and operational vibration impacts and operational noise impacts would be less than significant. Therefore, the No Ground-Mounted Utility-Solar Development Alternative would result in similar impacts related to noise as the proposed project during construction and less impacts during operation.

Public Services

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of existing commercial and industrial facilities situated throughout the Antelope Valley and the project site would remain undeveloped. The No Ground-Mounted Utility-Solar Development Alternative would not introduce structures into a currently undeveloped area and is not expected to temporarily or permanently increase the concentration of people in an area.

With regard to fire protection, it is expected that solar PV systems would be installed in more urbanized areas. However, due to the numerous power lines that would be required to harness the distributed solar panel energy, this alternative could exacerbate fire risks. As such, similar to the proposed project, special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.14-1** (see **Section 4.14**, *Public Services*) would be implemented to reduce wildfire risks under this alternative. Due to the distributed nature of this alternative, Supplemental Cumulative Charge payments, sales and use taxes from construction, and requirements for contractors to hire local workers would not be applicable, such that development standards/conditions of approval similar to **Mitigation Measures 4.14-2** through **4.14-4** would not be implemented. Impacts related to fire protection would be less than significant with mitigation.

With regard to police protection, as the proposed small to medium solar PV systems would be installed in more urbanized areas on existing buildings, it is unlikely that construction and operation of the No Ground-Mounted Utility-Solar Development Alternative would attract attention. Similar to the proposed project, this alternative would increase traffic with truck trips during construction and routine maintenance during operation of this alternative. However, the additional volume of trips during construction and operation would be minimal and would not likely have a significant and adverse effect on the KCSO protective service provision or CHP's ability to patrol the highways. Impacts would be less than significant.

Impacts are expected to be less than significant. The No Ground-Mounted Utility-Solar Development Alternative would result in less impact related to public services compared to the proposed project as the proposed small to medium solar PV systems would be developed in urbanized areas that already receive fire protection and police protection services.

Transportation

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of existing commercial and industrial facilities situated throughout the Antelope Valley.

Similar to the proposed project, this alternative would require vehicular trips during construction to transport and install the solar panels. However, the trips would be more dispersed than under the project given the location of the existing facilities, thereby reducing impacts on the roadways surrounding the project site. As such, roadway segments within the Antelope Valley are not expected to operate at levels that would trigger a significant transportation impact during construction of this alternative. During operation of this alternative, day-to-day operations and maintenance trips would be similar to those of the project. However, as with construction, these maintenance trips would be more dispersed than for the project given the location of the existing facilities. It is also estimated that the total number of daily trips for maintenance of the solar panels would be less than the number of trips generated during construction. As construction impacts would be less than significant, operation of this alternative would also have a less than significant impact on area roadways.

With regard to consistency with CEQA *Guidelines* Section 15064.3(b), the No Ground-Mounted Utility Solar Development Alternative would not increase vehicle trips or distances for the workforce already occupying the buildings that host the rooftop panels. There would be some increase in vehicle trips, and thus vehicle miles traveled, to perform occasional maintenance activities, unless those were to be performed by already onsite workers. Therefore, impacts related to vehicle miles traveled would be less than significant under the No Ground-Mounted Utility-Solar Development Alternative, as with the proposed project.

Based on the above, impacts would be less than significant. The No Ground-Mounted Utility-Solar Development Alternative would result in less impacts related to transportation compared to the proposed project due to the dispersed nature of the construction and operational trips.

Tribal Cultural Resources

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of commercial and industrial facilities situated throughout the Antelope Valley. It is unlikely that the proposed rooftop solar systems would have an impact on tribal cultural resources directly or indirectly; however, should it be determined the potential exists, this alternative would avoid impacting any such resources through avoidance and re-design. As such, there would be no impact to tribal cultural resources and no applicable development standards/conditions of approval would be required. Furthermore, the No Ground-Mounted Utility-Solar Development Alternative would result in less potential impacts related to tribal cultural resources compared to the proposed project.

Utilities and Service Systems

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of existing commercial and industrial facilities situated throughout the Antelope Valley.

With regard to water demand, the No Ground-Mounted Utility-Solar Development Alternative would likely require minimal water as no dust suppression would be required during construction. This alternative would also require minimal generation of wastewater and usage of electrical power, natural gas, and telecommunications. In addition, construction of the No Ground-Mounted Utility-Solar Development Alternative would not substantially alter stormwater drainage. With regard to operation, solar panel washing is expected to be less frequent, as compared to the proposed project, given the location of panels on top of

buildings throughout the Antelope Valley (rather than directly on sediment). As the No Ground-Mounted Utility-Solar Development Alternative would not develop the project site, this alternative would not result in new impervious surfaces, and implementation of special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.10-1** (see **Section 4.10**, *Hydrology and Water Quality*), which requires implementation of a SWPPP, and **Mitigation Measure MM 4.10-2** (see **Section 4.10**, *Hydrology and Water Quality*), which would require preparation of a Final Drainage Plan to reduce potential increases in stormwater runoff onsite, would not be required. This alternative would implement development standards/conditions of approval similar to **Mitigation Measure MM 4.17-1** (see **Section 4.17**, *Utilities and Service Systems*), which would reduce impacts related to solid waste.

Impacts to utilities and service systems would be less than significant. This alternative would result in less overall impacts related to utilities and service systems than the proposed project.

Wildfires

Under the No Ground-Mounted Utility-Solar Development Alternative, a number of geographically distributed small to medium solar PV systems would be developed, typically on the rooftops of existing commercial and industrial facilities situated throughout the Antelope Valley. Due to the numerous power lines that would be required to harness the distributed solar panel energy, this alternative could exacerbate fire risks above that of the project. As such, similar to the proposed project, the No Ground-Mounted Utility-Solar Development Alternative would implement special development standards and/or conditions of approval similar to **Mitigation Measure MM 4.14-1** (see **Section 4.14**, *Public Services*), which would require the development and implementation of a Fire Safety Plan for use during construction, operation, and decommissioning of the project, which would further reduce the fire risks. With regard to the installation or maintenance of associated infrastructure, solar panels would require the installation of an electrical collector line, similar to the proposed project. The installation of the electrical collector line would not be placed within a high fire hazard zone and thus would not result in increased fire risks that could result in temporary or ongoing impacts to the environment. Development of the No Ground-Mounted Utility-Solar Development Alternative would not require grading and excavation to reduce the overall slope of the project site. As such, the No Ground-Mounted Utility-Solar Development Alternative would not include significant risks related to downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes.

With implementation of a mitigation measure similar to that required for the proposed project, this alternative is expected to result in less-than-significant impacts to wildfires. The No Ground-Mounted Utility-Solar Development Alternative would likely result in less impacts related to wildfires compared to the proposed project as solar panels would be located in more urbanized areas.

Comparison of Impacts

The No Ground-Mounted Utility-Solar Development Alternative would result in less impacts related to aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, public services, transportation, tribal cultural resources, utilities and service systems, and wildfires. However, impacts related to GHG emissions would be greater under this alternative due to the potential for increased truck trips associated with solar panel delivery and the lower efficiency of the distributed systems. Further, this alternative would avoid the significant and unavoidable impacts to aesthetics (project and

cumulative), biological resources (project WJT only and cumulative), and wildfire (cumulative only) that would occur under the project.

Relationship to Project Objectives

This alternative would partially satisfy the project objective of assisting California in meeting its GHG emissions reduction goals. However, up to 8 GWh of energy storage (a component of the proposed project) would not be constructed under this alternative. The alternative would not achieve other project objectives including utilizing existing transmission infrastructure to minimize costs. It is also unlikely that the alternative would have an average insolation value similar to or greater than that of the project site given the reduction of solar insultation closer to the coast (especially in the LA region) as well as the lack of efficiency of rooftop solar compared to solar tracking technology. Additionally, there are some drawbacks to this alternative that include, but are not limited to, those listed below.

- Up to 8 GWh of energy storage would not be included, and the alternative would not provide a new source of energy storage that assists the state in achieving or exceeding its energy storage mandate.
- The system would not likely be built out within a timeframe that would be similar to that of the project.
- Given the distributed nature of such a network of facilities, construction, management, and maintenance would not be as efficient, and total capital costs would likely be higher.
- The project proponent does not have immediate control or access to potential developed sites that could accommodate facilities to generate the solar power.
- A distributed system on the scale of the project would be cost-prohibitive to implement due to reduced cost efficiency of distributed solar.

This alternative theoretically has the potential to generate up to 1,400 MW of electricity, but the electricity would be used on the sites generating the power and would not achieve the project objective of assisting California load-serving entities in meeting their obligations under California's RPS Program. Further, given rooftop suitability and availability as well as space constraints, the extensive area of rooftop solar needed to replace the project (approximately 200,000 homes at 6 kilowatts per household) would be infeasible within any medium-term timeline. Additionally, this alternative does not include up to 8 GWh of energy storage. Given the size of the project, the project objectives, and the need to arrange a suitable assemblage of participating commercial and industrial properties, it is impractical and infeasible to propose a distributed generation project of this type and still proceed within a reasonably similar timeframe.

6.8 Environmentally Superior Alternative

As presented in the comparative analysis above, and as shown in **Table 6-3**, *Comparison of Alternatives*, there are a number of factors in selecting the environmentally superior alternative. An EIR must identify the environmentally superior alternative to the project. Alternative 1, the No Project Alternative, would be environmentally superior to the project on the basis of its minimization or avoidance of physical environmental impacts. However, CEQA *Guidelines* Section 15126.6(e)(2) states:

> *The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time*

> *environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.*

Because the No Project Alternative cannot be the Environmentally Superior Alternative under CEQA, the Environmentally Superior Alternative is considered to be the No Ground-Mounted Utility-Solar Development Alternative. This alternative would avoid significant and unavoidable impacts to aesthetics (project and cumulative), biological resources (project WJT only and cumulative), and wildfire (cumulative only). However, impacts related to GHG emissions would be greater under this alternative due to the potential for significant truck trips associated with solar panel delivery and the lower efficiency of the distributed systems. The alternative also would not include up to 8 GWh of energy storage. The potential for an increased fire risk is considered small as solar is commonly and safely added to structures, and all building codes would be conformed to under this alternative. This alternative would result in less impact to aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, public services, transportation, tribal cultural resources, utilities and service systems, and wildfires. However, impacts related to GHG emissions would be greater under this alternative due to the potential for increased truck trips associated with solar panel delivery and the lower efficiency of the distributed systems. Thus, for most environmental resource areas, this alternative would result in fewer environmental impacts, both short term and long term, when compared to the proposed project.

It is important to note that it is considered to be impracticable and infeasible to construct the No Ground-Mounted Utility-Solar Development Alternative within the same timeframe and/or with the same efficiency as the project because the project proponent lacks control and access to the sites required to develop 1,400 MW of distributed solar generated electricity. Additionally, doing so would be economically infeasible because, given rooftop suitability and availability as well as space constraints, the extensive area of rooftop solar needed to replace the project (approximately 200,000 homes at 6 kilowatts per household) would be infeasible within any medium-term timeline. In addition, this alternative would not achieve the project objective of assisting California load-serving entities in meeting their obligations under California's RPS Program as the rooftop solar technology is primarily designed to not exceed onsite demands. Nonetheless, because this alternative reduces impacts to a greater degree than the General Plan and Zoning Build-Out Alternative and Reduced Acreage Alternative, the No Ground-Mounted Utility-Solar Development Alternative is considered the Environmentally Superior Alternative.

Chapter 7
Response to Comments

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Chapter 7
Response to Comments

This chapter is being reserved for, and will be included with, the Final EIR.

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Chapter 8
Organizations and Persons Consulted

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Chapter 8
Organizations and Persons Consulted

8.1 Federal

China Lake Naval Weapons Center

Edwards Air Force Base

U.S. Air Force

U.S. Army

U.S. Army Corp of Engineers

U.S. Bureau of Land Management

U.S. Department of Agriculture, Natural Resources Conservation Service

U.S. Environmental Protection Agency Region IX

U.S. Marine Corps

U.S. Navy

U.S. Postal Service

8.2 State of California

California Air Resources Board

California Department of Conservation

California Department of Fish & Wildlife, Region 4

California Department of Food and Agriculture

California Department of Parks and Recreation

California Department of Toxic Substances Control

California Department of Water Resources, San Joaquin District

California Energy Commission

California Environmental Protection Agency

California Highway Patrol

California Integrated Waste Management

California Mining and Geology Board

California Office of Historic Preservation

California Public Utilities Commission, Energy Division

California Regional Water Quality Control Board, Lahontan Region

California State Clearinghouse

California State Lands Commission

California State University, Bakersfield

California Water Resources Control Board

California Division of Aeronautics

Caltrans District 6

Caltrans District 9

8.3 Regional and Local

AES Midwest Wind Generation

Adams, Broadwell, Joseph & Cardozo

Antelope Valley-East Kern Water Agency

Kelly Group

Inyo County Planning Department

Joyce LoBasso

Kelly Group

Pacific Gas & Electric

Lozeau Drury, LLP

Mojave Chamber of Commerce

Mojave Town Council

AT&T

Bakersfield City Planning Department

California City Planning Department

California Farm Bureau

California High-Speed Rail Authority

Center on Race, Poverty, & the Environment

City of Arvin

City of Maricopa

City of McFarland

City of Ridgecrest

City of Shafter

City of Taft

City of Tehachapi

City of Wasco

Congentrix Sunshine, LLC

David Laughing Horse Robinson

David Walsh

Defenders of Wildlife

Delano City Planning Department

East Kern Air Pollution Control District

Eastern Kern Resource Conservation District

Eight Bar Ranch

Kern Audubon Society

Kern County Agriculture Department

Kern County Airports Department

Kern County Administrative Officer

Kern County Clerk

Kern County Council of Governments

Kern County Environmental Health Services Department

Kern County Fire Department

Kern County Library

Kern County Museum

Kern County Parks and Recreation

Kern County Public Works Department

Kern County Sheriff's Department

Kern County Superintendent of Schools

Kern County Water Agency

Kern Valley Indian Council

Kevin Johnston

Kings County Planning Agency

Leadership Counsel for Justice and Accountability

Local Agency Formation Commission

LIUNA

Mojave Unified School District

Northcutt and Associates

Pacific Crest Trail Association

Pacific Gas and Electric Company

Recurrent Energy

Renewal Resources Group Holding Company

Robert Burgett

San Bernardino County Planning Department

San Luis Obispo County Planning Department

Santa Barbara County Resource Management Department

Sierra Club

Southern California Edison

Southern San Joaquin Valley Information Center

Structure Cast

Tehachapi Area Association of Realtors

Tehachapi Parks and Recreation District

Tehachapi Unified School District

Tehachapi-Cummings County Water District

Terra-Gen Power, LLC

The Gorman Law Frim

Tulare County Planning and Development Department

Golden Hills Community Service District

EDP Renewables Company North America, LLC

Fotowatio Renewable Ventures

Glenn Baumann

Gorman Law Firm

Iberdrola Renewables

Los Angeles Audubon

Los Angeles County Regional Planning Department

Native American Heritage Council of Kern County

Ventura County RMA Planning Division

Wind Stream, LLC

8.4 Other

Barbareño/Ventureño Band of Mission Indians

Chumash Council of Bakersfield

Coastal Band of the Chumash Nation

Kern Valley Indian Council

Kitanemuk & Yowlumne Tejon Indians

Morongo Band of Mission Indians

Northern Chumash Tribal Council

Quechan Tribe of the Fort Yuma Reservation

San Fernando Band of Mission Indians

Santa Rosa Rancheria Tachi Yokut Tribe

Serrano Nation of Mission Indians

Tejon Indian Tribe

Torres Martinez Desert Cahuilla Indians

Tubatulabals of Kern Valley

Tule River Indian Tribe

Twenty-Nine Palms Band of Mission Indians

Yuhaaviatam of San Manuel Nation

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Chapter 9
List of Preparers

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Chapter 9
List of Preparers

9.1 Lead Agency

Kern County Planning and Natural Resources Department

Craig M. Murphy – Interim-Director

Nicole Menchaca– Supervising Planner

Mark Tolentino – Planner III

9.2 Technical Assistance

Tetra Tech

Jennifer Merrick – Project Manager

Stephanie Owens – Deputy Project Manager and Technical Analyst

Jessie Beckman – Deputy Project Manager and Technical Analyst

Lisa Diamond – Project Coordinator

Paula Fell—Senior Visual Analyst, Agricultural Resources Analyst

Michael Tynan—Visualization Specialist

Chris Williams – Senior Air Quality Analyst

Liz Hendrick—Senior Air Quality Analyst

Sucharitha Sridharan – Air Quality Analyst

Michelle Bates – Senior Biological Resources Analyst

Jack Gordon – Biological Resources Analyst

Lauren Jennings-- Biological Resources Analyst

Patty Jaramillo – Biological Resources Analyst

Jenna Farrell – Senior Archaeologist

Berenika Byszewski – Cultural Analyst

Daniel Spivak – Geologist, Hydrologist

Derrick Coleman – Geomorphologist

Chris Hulik – Noise Analyst

Rob Woodland—Senior Transportation Technical Consultant

Courtney Sudak—Transportation Project Manager

James Vorosmarti—Transportation Engineer

Hannah Marquez – Technical Analyst

Elizabeth Bradley – Technical Analyst

Kari Metcalf – Senior GIS Analyst

David Gravender – Technical Editor

Dawn Nelson – Word Processor and Graphics Editor

Chapter 10
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Chapter 10
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