Lorelei H. Oviatt, AICP, Director
2700 "M" Street, Suite 100
Bakersfield, CA 93301-2323
Phone: (661) 862-8600
Fax: (661) 862-8601 **TTY Relay 1-800-735-2929**
Email: planning@kerncounty.com
Web Address: http://kernplanning.com/

PLANNING AND NATURAL RESOURCES DEPARTMENT

Planning
Community Development
Administrative Operations

DATE: June 27, 2025

TO: See Attached Mailing List

FROM: Kern County Planning and Natural Resources Department
Attn: Jack Foster
2700 "M" Street, Suite 100
Bakersfield, CA 93301
(661)862-5010; FosterJa@kerncounty.com

SUBJECT: NOTICE OF PREPARATION (NOP) OF A DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE CHEVRON LOST HILLS SOLAR TO HYDROGEN PROJECT BY CHEVRON NEW ENERGIES, A DIVISION OF CHEVRON U.S.A. INC.

The Kern County Planning and Natural Resources Department as Lead Agency (per CEQA Guidelines Section 15062) has determined that preparation of an Environmental Impact Report (per CEQA Guidelines 15161) is necessary for the proposed project identified below. The Planning and Natural Resources Department solicits the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR prepared by our agency when considering your permit or other approval of the project.

You are invited to view the NOP and submit written comments regarding the scope and content of the environmental information in connection with the proposed project should you wish to do so. Due to the limits mandated by State law, your response must be received by **Monday, July 28, 2025, at 5:00 p.m**. Comments can be submitted to the Kern County Planning and Natural Resources Department at the address shown above or to FosterJa@kerncounty.com. A Scoping meeting will be held on **Thursday, July 17, 2025, at 1:30 p.m**. at the address listed above.

PROJECT TITLE: Chevron Lost Hills Solar to Hydrogen Project by Chevron New Energies, a division of Chevron USA Inc. (PP24409); SPA 2, Map 52-3; ZCC 4, Map 52-3; PD Plan 1, Map 52-3; Exclusion from Agricultural Preserve No. 5; Tentative Parcel Map 12552

DOCUMENT AVAILABILITY: The Notice of Preparation for the above referenced project is available for public review at the Planning and Natural Resources Department, which is located at 2700 "M" Street, Suite 100, Bakersfield, CA 93301, or it can be accessed on the Kern County Planning and Natural Resources Department website at: https://kernplanning.com/environmental-doc/chevron-lost-hills-solar-to-hydrogen-project/

PROJECT LOCATION: The proposed project is located in the valley region of unincorporated Kern County, approximately one (1) mile southwest of the community of Lost Hills, approximately one (1) mile south of Highway 46, and approximately 3.5 miles west of Interstate 5. The project site is located in Section 3, Township 27 South, Range 21 East in the Mount Diablo Base and Meridian (MDB&M).

PROJECT DESCRIPTION: The proposed Chevron Lost Hills Solar to Hydrogen Project is a hydrogen (H2) production facility with associated infrastructure necessary to generate approximately 2.2 tons per day (TPD) of gaseous H2. The proposed project is situated on an approximately 8.93-acre portion of a greater 80-acre parcel of privately owned land.

Implementation of the project as proposed includes the following requests:

a. Specific Plan Amendment No. 2, Map 52-3 to the Lost Hills Specific Plan to change the Land Use designation from Map Code “Agriculture” to “Industrial” on approximately 8.93 acres;

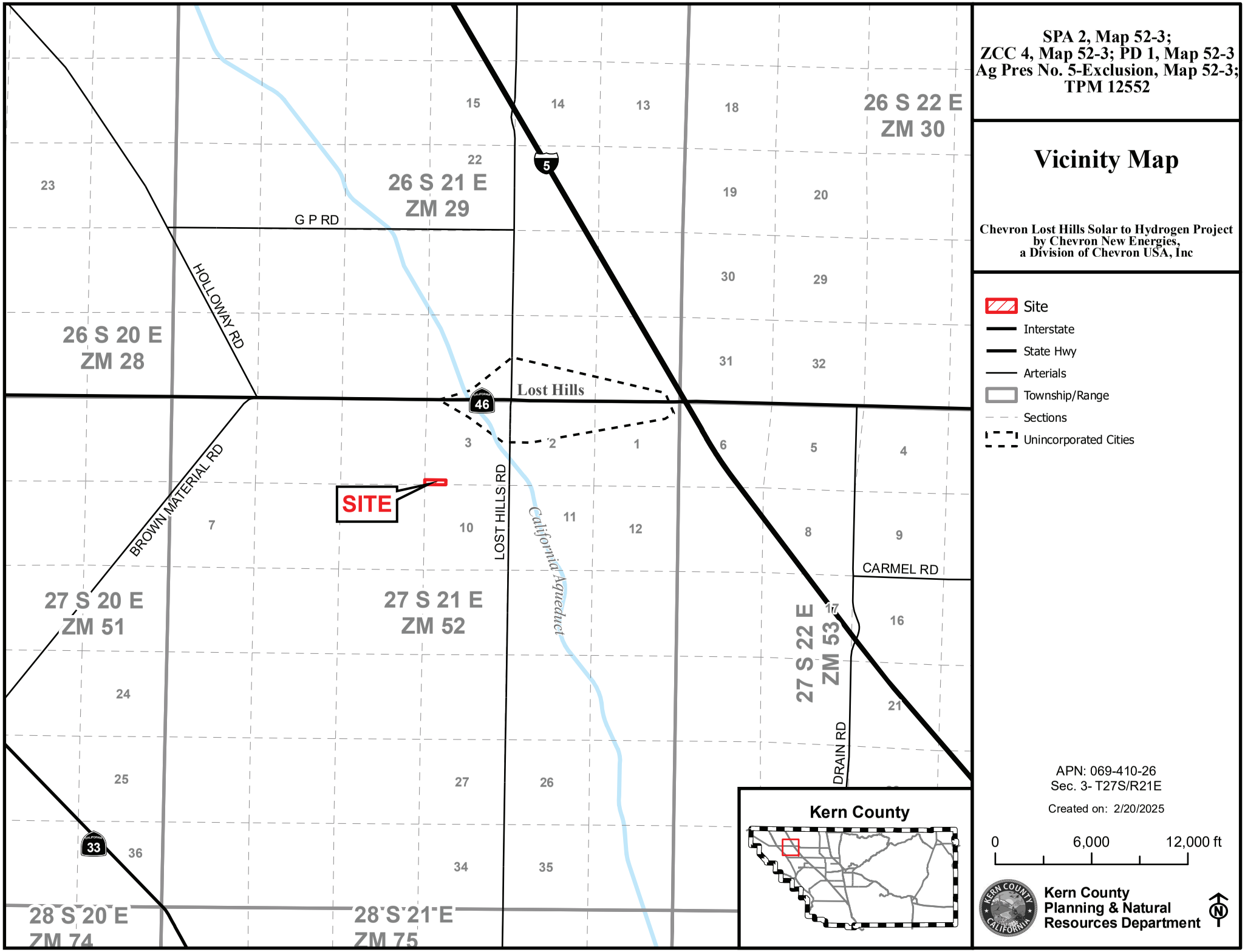
b. Zone Classification Change No. 4, Map 52-3 from the (A) Exclusive Agriculture zone district to (M-3 PD) Heavy Industrial, Precise Development Combing , or a more restrictive zone district, on approximately 8.93 acres;

c. Precise Development Plan No. 1, Map 52-3 to allow for the development and operation of a hydrogen facility (19.40.020.E) on an approximately 5.74-acres in an M-3 PD zone district;

d. Exclusion of approximately 8.93 acres from the boundaries of Agricultural Preserve No. 5; and

e. Tentative Parcel Map No. 12552 to divide an 80 acre site (APN 069-410-26) into an 8.93-acre (gross) parcel and a 71.33 acre (gross) Designated Remainder to facilitate the proposed zone change area for the proposed hydrogen production facility.

Signature: 
Name: Jack Foster, Planner II


SPA 2, Map 52-3;
ZCC 4, Map 52-3; PD 1, Map 52-3
Ag Pres No. 5-Exclusion, Map 52-3;
TPM 12552
Vicinity Map
Chevron Lost Hills Solar to Hydrogen Project
by Chevron New Energies,
a Division of Chevron USA, Inc
Site
Interstate
State Hwy
Arterials
Township/Range
Sections
Unincorporated Cities
SITE
26 S 22 E
ZM 30
26 S 21 E
ZM 29
26 S 20 E
ZM 28
27 S 20 E
ZM 51
27 S 21 E
ZM 52
27 S 22 E
ZM 53
28 S 20 E
ZM 74
28 S 21 E
ZM 75
G P RD
HOLLOWAY RD
BROWN MATERIAL RD
LOST HILLS RD
Lost Hills
CARMEL RD
DRAIN RD
California Aqueduct
46
5
33
Kern County
APN: 069-410-26
Sec. 3- T27S/R21E
Created on: 2/20/2025
0
6,000
12,000 ft
Kern County
Planning & Natural
Resources Department

Chevron Lost Hills Solar to Hydrogen Project (PP24409) NOP

069 011 37 00 9
CHEVRON USA INC
P O BOX 1392
BAKERSFIELD CA 93302-1392

U.S. Bureau of Land Management
Caliente/Bakersfield
35126 McMurtrey Avenue
Bakersfield, CA 93308

U. S. Fish & Wildlife Service
Division of Ecological Services
2800 Cottage Way #W-2605
Sacramento, CA 95825-1846

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

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

State Air Resources Board
Stationary Resource Division
P.O. Box 2815
Sacramento, CA 95812

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

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

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

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

California Regional Water Quality
Control Board/Central Valley Region
1685 E Street
Fresno, CA 93706-2020

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

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 (Put in FIRE BOX)
Regina Arriaga
Roxanne Routh
Jim Killam

Kern County Fire Dept
Aaron Duncan

Kern County Library/Beale
Local History Room

Kern County Library/Beale
Andie Sullivan

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

Wasco Union High School Dist
P.O. Box 250
Wasco, CA 93280

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

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

Belridge Water Storage Dist
5555 California Ave. Suite 209
Bakersfield, CA 93309

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

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

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

Pacific Gas & Electric Co
Land Projects
650 "O" Street, First Floor
Fresno, CA 93760-0001

Verizon California, Inc.
Attn: Engineering Department
520 South China Lake Boulevard
Ridgecrest, CA 93555

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

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

David Walsh
22941 Banducci Road
Tehachapi, CA 93561

EDP Renewables Company
North America, LLC
53 SW Yamhill Street
Portland, OR 97204

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

San Joaquin Valley
Air Pollution Control District
1990 East Gettysburg Avenue
Fresno, CA 93726

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

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

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

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Ruben Barrios, Chairperson
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Lemoore, CA 93245

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Holding Company
Rupal Patel
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Los Angeles, CA 90036

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Rick Neff
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Charlotte, NC 28273

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

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

West Side Mosquito
Abatement Dist.
P.O. Box 205
Taft, CA 93268

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

Native American Heritage Council
of Kern County
Attn: Gene Albitre
18169 Highway 155
Woody, CA 93287

Southern California Edison
2244 Walnut Grove Ave
Rosemead, CA 91770

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

Tejon Indian Tribe
Octavio Escobedo III, Chairman
P.O. Box 640
Arvin, CA 93203F

Bill Barnes
Dir of Asset Mgmt
AES Midwest Wind Gen
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Palm Springs, CA 92263-2190

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

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Bakersfield, CA 93311

Darren Kelly
Sr. Business Manager
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New York, NY 10036-6797

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

Pacific Gas and Electric Company
Electric Generation Interconnection (EGI) Department
P.O. Box 770000
Mail Code N9H
San Francisco, CA 94177

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Dir Tech Serv
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Portland, OR 97209

Michael Strickler
Iberdrola Renewables, Sr Proj Mgr
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Portland, OR 97209

Recurrent Energy
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San Francisco, CA 94101-1407

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

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

Leadership Counsel for Justice & Accountability
85350 Bagdad Ave.
Coachella, CA 92236

LIUNA
6800 District Boulevard
Bakersfield CA 93313

yak titʸu titʸu yak tithini
Northern Chumash Tribe
Attn: Mona Tucker, Chair
660 Camino Del Rey
Arroyo Grande, CA 93420

Tejon Indian Tribe
Attn: Curtis Alcantar
4941 David Road
Bakersfield, CA 93307

Kern County Library
Buttonwillow Branch
116 Buttonwillow Avenue
Buttonwillow, CA 93206

Kevin Johnston
2476 Buena Vista Avenue
Livermore, CA 94550

Lost Hills Utility District
P.O. Box 246
Lost Hills, CA 93249

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # _____

Project Title: Chevron Lost Hills Solar to Hydrogen Project by Chevron New Energies, a division of Chevron U.S.A. Inc.

Lead Agency: Kern County Planning and Natural Resources Department — Contact Person: Jack Foster
Mailing Address: 2700 "M" Street Suite 100 — Phone: (661) 862-5010
City: Bakersfield — Zip: 93301 — County: Kern

Project Location: County: Kern — City/Nearest Community: Lost Hills
Cross Streets: State Route 46 and Lost Hills Road/Woodward Avenue — Zip Code: 93249
Lat. / Long.: 35.60181° N, -119.70526°W — Total Acres: 8.93
Assessor's Parcel No.: 069-410-26 — Section: 3 — Twp.: 27S — Range: 21E — Base: MDB&M
Within 2 Miles: State Hwy #: 46 — Waterways: California Aqueduct
Airports: N/A — Railways: N/A — Schools: Lost Hills Elementary

Document Type:

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

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☒ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☒ Site Plan
☒ Rezone ☐ Prezone ☐ Use Permit ☒ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other Ag Pres. Exclusion

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 _____ MW _____
☐ Waste Treatment: Type _____ MGD _____
☐ Hazardous Waste: Type _____
☒ Other: Hydrogen (2.2 tons per day)

Project Issues Discussed in Document:

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

Present Land Use/Zoning/General Plan Designation:

Oil Processing plant, facilities, and storage yard / *Zoning:* A (Exclusive Agriculture)/ Accepted Community Plan Area – Agriculture

Project Description:

The Chevron Lost Hills Solar to Hydrogen Project is a proposal by Chevron New Energies, a division of Chevron U.S.A. Inc for the construction and operation of a hydrogen (H_2) production facility. The proposed project would include the construction and operation of a hydrogen production facility and associated infrastructure necessary to generate approximately 2.2 tons per day (TPD) of gaseous H_2. The proposed project is located on an 8.93 acre portion of a greater 80-acre parcel (current Assessor's Parcel Number (APN) 069-410-26) within the Chevron Lost Hills Oilfield, approximately one (1) mile southwest of the community of Lost Hills, approximately one (1) mile south of State Route 46, and approximately three (3) miles west of Interstate 5 within the valley region and Lost Hills area of unincorporated Kern County.

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**".

S	Air Resources Board		Office of Emergency Services
	Boating & Waterways, Department of		Office of Historic Preservation
	California Highway Patrol		Office of Public School Construction
	CalFire		Parks & Recreation
S	Caltrans District # 6		Pesticide Regulation, Department of
	Caltrans Division of Aeronautics		Public Utilities Commission
	Caltrans Planning (Headquarters)	S	Regional WQCB # Central
	Central Valley Flood Protection Board		Resources Agency
	Coachella Valley Mountains Conservancy		S.F. Bay Conservation & Development Commission
	Coastal Commission		San Gabriel & Lower L.A. Rivers and Mtns Conservancy
	Colorado River Board		San Joaquin River Conservancy
S	Conservation, Department of		Santa Monica Mountains Conservancy
	Corrections, Department of		State Lands Commission
	Delta Protection Commission		SWRCB: Clean Water Grants
	Education, Department of		SWRCB: Water Quality
	Energy Commission		SWRCB: Water Rights
S	Fish & Game Region # Fresno		Tahoe Regional Planning Agency
	Food & Agriculture, Department of	S	Toxic Substances Control, Department of
	General Services, Department of	S	Water Resources, Department of
	Health Services, Department of		
	Housing & Community Development		Other
	Integrated Waste Management Board		Other
	Native American Heritage Commission		

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

Starting Date June 27, 2025 Ending Date July 28, 2025

Lead Agency (Complete if applicable):

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

Applicant: Chevron New Energies, a division of Chevron U.S.A. Inc.
Address: 9525 Camino Media
City/State/Zip: Bakersfield, CA, 93311
Phone 661-203-0089

Signature of Lead Agency Representative: /s/ **Date:** 06/27/2025

Jack Foster, Planner II

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

NOTICE OF PREPARATION

Chevron Lost Hills Solar to Hydrogen Project
by Chevron New Energies, a division of Chevron U.S.A. Inc.

Specific Plan Amendment No. 2, Map 52-3
Zone Classification Change No. 4, Map 52-3
Precise Development Plan No. 1, Map 52-3
Agricultural Preserve No. 5 - Exclusion
Tentative Parcel Map No. 12552

PLN23-00947
(PP24409)

LEAD AGENCY:

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

Contact: Jack Foster, Planner II
(661) 862-5010
fosterja@kerncounty.com

June 2025

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Introduction

Pursuant to the California Environmental Quality Act (CEQA), the Kern County Planning and Natural Resources Department (County) will initiate the preparation of an Environmental Impact Report (EIR) for the Chevron Lost Hills Solar to Hydrogen Project in unincorporated Kern County.

1. Project Description

1.1. Project Location

The Chevron Lost Hills Solar to Hydrogen Project (proposed project) is a proposal by Chevron New Energies (CNE), a division of Chevron U.S.A. Inc. (project proponent), for the construction and operation of a hydrogen (H_2) production facility and associated infrastructure necessary to generate approximately 2.2 tons per day (TPD) of gaseous H_2. The proposed project consists of an 8.93-acre portion of a greater 80-acre parcel [current Assessor's Parcel Number (APN) 069-410-26] within the valley region and Lost Hills area of unincorporated Kern County, as shown on ***Figure 1,*** *Vicinity Map.*

The project site is located within Chevron's Lost Hills Oil Field, adjacent to the existing Lost Hills Solar Field, approximately one mile southwest of the community of Lost Hills, approximately one mile south of State Route (SR) 46, and approximately three miles west of Interstate 5 (I-5), as shown on ***Figure 2,*** *Aerial Map.* Vehicular access to the site would be from I-5 via the SR 46 exit, to a privately owned road off Lost Hills Road/Woodward Avenue.

According to the U.S. Geological Survey (USGS), the project site is within the Lost Hills USGS 1:24,000 topographic maps (7.5-minute quadrangle). More specifically, the project is located within a portion of the West half of the Southwest quarter of Section 3, Township 27 South, Range 21 East. The project site is within unincorporated Kern County, approximately one mile southwest of the community of Lost Hills, approximately 16 miles west of the City of Wasco, and approximately 13 miles south of the northern border of Kern County.

The proposed project site is currently used as a storage yard. CNE proposes to re-purpose the existing storage yard in the southeastern portion of an approximate 80-acre parcel on which the Cahn 3 Oil Processing Plant is located to accommodate the H_2 production facility on approximately 5.7 acres. Additional infrastructure on the approximately 80 parcel includes an office building, warehouse, and additional storage yards at the north end of the parcel.

As shown on ***Figures 3,*** *Assessor's Parcelization Map*, the proposed project site is located on the southern portion of an 80-acre parcel (current Assessor's Parcel number 069-410-26). Tentative Parcel Map 12552 proposes to divide the approximate 80-acre parcel into an 8.93-acre (gross) parcel and a 71.33-acre Designated Remainder (see ***Figure 4,*** *Proposed Tentative Parcel Map)*. The proposed project site consists of an approximately 5.74-acre portion of the proposed approximate 8.93-acre parcel. The project parcel information is listed in **Table 1**, *Project Assessor Parcel Numbers, Zone Map, Existing Map Code Designations, Existing Zoning, and Acreage* (see ***Figure 5,*** *Specific Plan Map Code Designations*, and ***Figure 6,*** *Zoning Classifications*).

TABLE 1. PROJECT ASSESSOR PARCEL NUMBERS, ZONE MAP, EXISTING MAP CODE DESIGNATIONS, EXISTING ZONING, AND ACREAGE

APN	Zone Map	Existing Map Code Designation	Existing Zoning	Parcel Acreage	Project Facility Acreage
069-410-26	52-3	4.1, Agricultural	A	80*	8.93*

*Tentative Parcel Map 12552 proposes to divide APN 069-410-26 into an 8.93-acre (gross) parcel and a 71.33-acre Designated Remainder. Only the 8.93-acre portion of the current 80-acre parcel would be developed as part of the proposed project.

Map Code Designations: 4.1 - Accepted Community Plan Areas, Agriculture (Lost Hills Specific Plan)

Zoning Classification: A (Exclusive Agriculture)

1.2. Environmental Setting

The project is located within an unincorporated area of Kern County called Lost Hills, in reference to a long, low range of southeast to northwest trending hills to the east of the San Joaquin Valley. Kern County is California's third largest county in land area and encompasses approximately 8,161 square miles. The County's geography includes, among others, mountainous areas, agricultural lands, and deserts. Bakersfield is the largest city in Kern County with a current estimated population of 411,109 residents, and the County's current estimated population is 910,300 residents . Lost Hills is a census-designated place located in Kern County, California, approximately 41 miles northwest of the City of Bakersfield. The total population of Lost Hills is approximately 2,370.

The project site is located at an elevation of approximately 357 feet above mean sea level, where the topography is generally flat. The nearest surface water body is the Governor Edmund G. Brown California Aqueduct, approximately 1 mile to the east.

The project site would receive police protection services from the Kern County Sheriff's Office, fire protection services from the Kern County Fire Department, and emergency medical and rescue services from the Kern County Medical Emergency Service. The nearest Kern County Sheriff's Office substation that would serve the project site is located approximately 19 miles southwest of the project site at 181 East 1st Street in the community of Buttonwillow. The nearest Kern County Fire Department fire station that would serve the proposed project is Fire Station No. 26 located at 14670 Lost Hills Road, approximately 1.2 miles northeast of the project site.

The nearest public airports are the Wasco Airport, located in the city of Wasco, California, approximately 19 miles east of the project site, and the Buttonwillow Airport located in the community of Buttonwillow, California, approximately 20 miles southeast of the project site. The project site is not located within any safety or noise contour zones for these airports or within any designated airport land use plan areas. The closest private airport is the Wonderful Pistachios and Almonds Airport located approximately 11 miles northwest of the project site.

The project site is located approximately 1 mile southwest of the community of Lost Hills. The closest residence to the project is located approximately 4,382 feet (0.83 mile) northeast of the project site. The nearest schools located to the project site are: Thomas Middle School, approximately 4,329 feet (0.82 mile) north of the project site; Lost Hills Elementary, approximately 4,057 feet (0.77 mile) north of the project site; Early Learning Center, approximately 4,670 feet (0.89 mile) north of the project site; Wonderful College Prep Academy-Lost Hills, approximately 1.24 miles northeast of the project site; and Wonderful

Preschool-Lost Hills, approximately 1.24 miles northeast of the project site. An unnamed soccer field is located approximately 4,329 feet (0.82 mile) east of the project site.

The entirety of the project site is located within the Lost Hills Specific Plan area. As shown in ***Figure 5,*** *Specific Plan Map Code Designations,* the project site is designated by the Specific Plan as Agriculture. The project site is zoned A (Exclusive Agriculture) which is consistent with the current underlying land use designation. (***Figure 6,*** *Zoning Classifications*).

The project site is located within flood hazard zone X as mapped by the Federal Emergency Management Agency . Flood hazard zone X indicates areas of minimal flood hazard where the annual risk of flood is less than 0.2 percent. . There are no State-designated Alquist-Priolo Earthquake Fault Zones on the project site. The San Andreas Fault is approximately 19 miles southwest of the project site . The project site is not located in a designated Mineral Resource Zone.

The project site is located within Agricultural Preserve No. 5. The proposed project includes a request to facilitate the exclusion of approximately 8.93 acres from Agricultural Preserve No. 5 (see ***Figure 7,*** *Agricultural Preserve Map)*. The project site is not encumbered by a Williamson Act Contract .

The project site is not located within an area that is designated by the California Department of Conservation as Important Farmland, which consists of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland .

Surrounding Land Uses

Existing land uses surrounding the project site consist largely of agriculturally zoned parcels which are occupied by energy production or resource extraction uses. The primary zoning classification in the 5-mile radius surrounding the project site are Zone A (Exclusive Agriculture) along with smaller areas with Zone M-1 (Light Industrial) and Zone R-1 (Low Density Residential). The majority of the residential buildings are located in the unincorporated community of Lost Hills, approximately one mile northeast of the project site.

Table 2*, Project Site and Surrounding Property's Land Use, Specific Plan and General Plan Map Code Designations, and Zoning*, details the surrounding land uses, including the General/ Specific Plan designations and existing zoning.

TABLE 2. PROJECT SITE AND SURROUNDING PROPERTIES LAND USE, SPECIFIC PLAN AND GENERAL PLAN MAP CODE DESIGNATIONS, AND ZONING

Location	Existing Land Use	Existing General/ Specific Plan Map Code Designations	Existing Zoning
Project Site	Oil processing plant and facilities	*Lost Hills Specific Plan:* 4.1 (Accepted Community Plan Area – Agriculture)	A (Exclusive Agriculture)
North	Solar fields	*Lost Hills Specific Plan:* 4.1 (Accepted Community Plan Area – Agriculture)	A (Exclusive Agriculture)
East	Oilfield storage yard	*Lost Hills Specific Plan:* 4.1 (Accepted Community Plan Area – Agriculture)	A (Exclusive Agriculture)

Location	Existing Land Use	Existing General/ Specific Plan Map Code Designations	Existing Zoning
South	Oil Fields, undeveloped land	*Kern County General Plan* 8.1 (Intensive Agriculture, 8.4 (Mineral and Petroleum)	A (Exclusive Agriculture)
West	Oil Fields, electric facility	*Lost Hills Specific Plan:* 4.1 (Accepted Community Plan Area – Agriculture)	A (Exclusive Agriculture)

1.3. Project Description

Project Overview

The project proponent (Chevron New Energies, a division of Chevron U.S.A. Inc.) proposes to construct and operate a lower carbon intensity hydrogen (or "H_2") production facility at Chevron's Lost Hills Oil Field in Kern County, California. The proposed project site is approximately 8.93 acres, while the H_2 facility footprint would occupy approximately 5.74 acres (1000 feet by 250 feet) within an existing storage yard in the southeastern portion of the parcel on which the Cahn 3 Oil Processing Plant is located. To facilitate the proposed H_2 facility, the current 80-acre parcel (APN 069-410-26) would be subdivided, creating an 8.93-acre parcel containing the proposed project facility.

The proposed layout of the H_2 production facility is informed and determined by the function and operation of the facility, taking into account specifications of plans and equipment, appropriate industry standards, safe vehicle movement, and best practices. A schematic of a typical solar electrolysis H_2 production process is provided in ***Figure 8,*** *Solar Electrolysis Production Process,* and the layout of the proposed H_2 production facility is provided in ***Figure 9,*** *Proposed Precise Development Plan*. The proposed layout is based on equipment for maximum production capacity of 2.2 tons per day (TPD) of gaseous H_2.

H_2 gas would be produced through the process of electrolysis, which uses electricity to split water into H_2 and oxygen (O_2). This reaction takes place in a unit called an electrolyzer and requires electricity and water inputs to produce gaseous H_2 and O_2 outputs. Two 2.5-megawatt (MW) electrolyzers would produce H_2 by using electricity generated from the existing adjacent Lost Hills Solar Field and treated produced water from nearby Chevron oil fields.

The adjacent Lost Hills Solar field has a production capacity of up to 29 MW. The present peak load of Chevron's Lost Hills oil field operations is 8 MW. The new H_2 electrolysis plant would add about 6 MW of load, raising the total behind the meter operational load to 14 MW (at peak operation capacity). Any surplus solar energy generated beyond Chevron's immediate demand would be sent to PG&E in accordance with California's Net Energy Metering (NEM) 2.0 program.

Providing power to the project would require the construction of new on-site distribution facilities. The project includes the siting of a new 12kV overhead power distribution line, extending from an existing on-site substation (owned by Chevron), immediately west of the Cahn 3 Oil facility and approximately 1,056 feet north-northwest of the project parcel (***Figure 10,*** *Proposed 12kV Overhead Powerline Route).* The power line, which would provide all power to the project, would require the installation of approximately 12 wood poles on Chevron-owned land within the oil field, approximately 460 feet west of the access road bounding the western side of the 80-acre parcel. From the southernmost pole, the power line would extend underground into the H_2 facility. The voltage would be stepped down from 12 kV to 480 volts (V) through two medium voltage transformers.

The project would be using non-potable water supplied from Chevron's existing Central Valley operations. Initially, non-potable produced water would be supplied from Chevron's produced water treatment facility at Chevron's Kern River Oil Field and trucked to the project site. The water would be placed in onsite storage tanks prior to being pumped through a water filtration system to remove minerals to meet the electrolyzer inlet water purity requirements. The unsuitable water would be collected in a wastewater tank and trucked off-site for disposal at a permitted facility.

The O_2 that is produced through the electrolysis process would be vented back into the atmosphere. The high purity H_2 that is produced would be compressed and loaded onto tube trailers for distribution by truck to markets within California.

The proposed project consists of the following requests:

1) Specific Plan Amendment No. 2, Map 52-3 to the Lost Hills Specific Plan to change the Land Use designation from Map Code "Agriculture" to "Industrial" on approximately 8.93 acres;

2) Zone Classification Change No. 4, Map 52-3 from the (A) Exclusive Agriculture zone district to (M-3 PD) Heavy Industrial, Precise Development Combing , or a more restrictive zone district, on approximately 8.93 acres;

3) Precise Development Plan No. 1, Map 52-3 to allow for the construction and operation of a hydrogen processing facility (19.40.020.E) on an approximately 5.74-acres in an M-3 PD zone district;

4) Exclusion of approximately 8.93 acres from the boundaries of Agricultural Preserve No. 5; and

5) Tentative Parcel Map No. 12552 to divide an approximate 80-acre site (APN 069-410-26) into an 8.93-acre (gross) parcel and a 71.33-acre (gross) Designated Remainder to facilitate the proposed zone change area for the proposed hydrogen production facility.

1.4. Project Components, Construction, and Operations

Project Components

Electrolyzer

Electrolyzer units would be containerized units located outdoors. The project would use two, 2.5 MW Proton Exchange Membrane (PEM) electrolyzers with a total maximum design capacity of 2.2 TPD H_2 production. The design turndown ratio (the measurable range) of H_2 production using the electrolyzer is 10 to 100 percent (0.11 TPD to 1.1 TPD H_2 production per electrolyzer). PEM electrolyzers have an anode and a cathode separated by a solid specialty plastic membrane through which the H_2 ions pass after being separated from O_2 in the water. The resultant H_2, which is near 100 percent purity, would be discharged from the electrolyzer at 30 bar (435 pounds per square inch gauge [psig]) and then compressed. The hydrogen would be compressed and then loaded into a Department of Transportation (DOT) approved H_2 trailer. The electrolyzer would include a H_2 dryer and dew point meter to maintain water below the 5 parts per million (ppm) specification so that it can be used for fuel cell electric vehicle (FCEV) applications if required. O_2 would be vented to atmosphere.

The produced H_2 would be trucked to multiple end users throughout California. At full operational capacity (2.2 TPD), it is estimated that 4 trucks would leave the site per day (4 round trips per day). Currently it is assumed that 40 percent of the H_2 would be delivered to Bakersfield, 40 percent to Fresno, and 20 percent to the Los Angeles region. The full operational capacity would be dependent on the market demand, meaning the project would not produce more H_2 than is needed by end users. Empty trailers would be brought to site and left during the trailer filling. It is not anticipated that trucks would remain on site during the filling process. The main H_2 storage would be in the H_2 truck trailers.

Water Usage

The electrolyzer units would use non-potable produced water from Chevron's Central Valley operations (Kern River, Midway Sunset, Cymric, or McKittrick oil fields). Upon commissioning, the project would use water trucked from Chevron's Kern River Oil Field located north of Bakersfield, approximately 42 miles southeast of the project site. Route options from Kern River Oil Field to the project site include taking Lerdo Highway or 7th Standard Road to I-5 north and exiting at the Highway 46 exit or taking Lerdo Highway directly to Lost Hills Road. Both the 7th Standard to I-5 north route and the Lerdo Highway to Lost Hills Road route are approximately 50 miles in length.

Non-potable water would be filled into trucks through the existing Kern River Oil Field softened water system (softened from non-potable treated produced water) that is typically used for field steam generation at the Kern River Oil Field.

The project would require up to seven trucks per day of imported water at maximum capacity. At the project site, the imported water would be stored in three, approximately 785-barrel (33,000-gallon) capacity feed water tanks prior to on-site treatment and use in H_2 production. Water unsuitable for H_2 production would be stored in two wastewater storage tanks in compliance with applicable laws, sized at approximately 570 barrels (24,000 gallons) capacity each, and then trucked to a permitted wastewater disposal facility off-site. At maximum capacity, it is estimated that two trucks per day will be needed to transport the wastewater. The truck route from the project site to Clean Harbors Inc. is approximately 18 miles via Lost Hills Road, California SR-33, and Lokern Road where the wastewater facility is located.

Existing available domestic water and septic systems are available at existing buildings. Potable water is available for office use from Chevron's Lost Hills Oil Field, supplied by the Lost Hills Utility District. A sanitary water supply would not be required during construction because onsite restroom facilities would be provided by portable units to be serviced by licensed providers. Permanent restroom facilities in the Cahn 3 Oil Processing Plant would be utilized by staff when the facility is operational. No sewage connections would be made as a part of the Project.

Power Usage

Operational power for the project would be sourced from the adjacent Lost Hills 29 MW solar field, a grid-connected facility, and delivered to the project site via an existing Chevron-owned substation located in the northwest corner of the project site. The adjacent Lost Hills Solar field has a production capacity of up to 29 MW. The present peak load of Chevron's Lost Hills oil field operations is 8 MW. The new H_2 electrolysis plant would add about 6 MW of load, raising the total behind the meter operational load to 14 MW (at peak operation capacity). Any surplus solar energy generated beyond Chevron's immediate demand would be sent to PG&E in accordance with California's Net Energy Metering (NEM) 2.0 program.

A new 12 kV overhead distribution line is planned to extend from the existing substation toward the west of the current Cahn 3 Oil facility. Approximately 12 overhead wood poles would be installed between the substation and the new H_2 plant. Construction activities for pole installation would occur within a 25-foot radius of each pole; vegetation would be cleared within these temporary work areas. Additionally, an approximately 1.4-acre work area would be cleared of vegetation immediately west of the project parcel to facilitate undergrounding of the power line under the road bounding the project parcel and into the H_2 production facility. Equipment used to install the new power line would access the pole locations using existing roads within the oil field extending from the access road associated with the Cahn 3 Oil Processing Plant. A temporary staging area, measuring approximately 175 feet by 175 feet, in a heavily disturbed area devoid of vegetation approximately 100 feet north of the substation and 250 feet west of the office building, would be used during construction of the power line.

Medium voltage transformers would be used to step down the power voltage from 12 kV to 480V prior to use in the electrolyzers. The electrolyzer design power requirement is 2.5 MW for each unit, equating to 5 MW total. Generation of the electric power supplied via the 12 kV distribution line would primarily be from the adjacent Lost Hills Solar Field. It is anticipated that this source of power would need to be periodically supplemented (e.g., during night-time operations), from existing alternative electricity sources, including PG&E. There are no plans for the project to install back-up power supply beyond typical small battery back up in critical control systems that allow for equipment to return to a safe position in the event of a power outage. If power is lost to the facility, the facility would remain in a safe shutdown condition and not operate until power is restored.

Process Automation System

The Process Automation System (PAS) would provide the main control and monitoring of the H_2 facility. The PAS refers to the collective name for the Process Control System and 3rd party packages, operating together and providing an integrated Human Machine Interface (HMI) to the operator. The purpose of the PAS is to provide a means for operations to safely control the facility at its optimum performance, with minimum downtime, and to be able to take required actions to keep the process within safe operating limits. The PAS would provide the means to control, monitor, and shutdown the facility. This would be achieved by disparate elements that are designed for a specific task.

Programmable Logic Controllers (PLC) would collect field data through various instruments and sensors. Local Operator Interface Terminals (OIT) would be located with each PLC to provide data and status information for operators to quickly identify and resolve issues at the local level. The PLCs would be connected to the existing Chevron San Joaquin Valley Business Unit network through a fiber optic connection to the existing Supervisory Control and Data Acquisition (SCADA) system. The SCADA system would provide high-level supervisory control and monitoring of the process at the local Lost Hills field control room as well as a centralized control room for the business unit. In the event of an upset condition, the PAS would safely shutdown equipment and processes.

Hydrogen Storage

Minimal H_2 storage would occur on site at the H_2 facility via pre-load H_2 trailers. Produced H_2 would be loaded onto H_2 trailers. A small amount of H_2 would be stored in buffering storage as a part of the compression process (approximate 300 kilograms). The amount of H_2 stored on-site would be below the 10,000-pound threshold for flammable substances for accidental release prevention established by the United States Environmental Protection Agency, 40 Code of Federal Regulations section 112(r) of the Clean Air Act amendments. The amount of H_2 stored on-site would be below the 10,000- pound threshold for flammable substances for accidental release prevention established by California Environmental Protection Agency, 19 California Code of Regulations 5130.6.

Water Treatment and Storage

Project feedwater (non-potable produced oilfield water) would be delivered to the facility and offloaded into three approximately 33,00-gallon aboveground water storage tanks. The feedwater would undergo additional processing to satisfy the water quality requirements of the electrolyzes. This processing includes a filtration system designed to remove contaminants such as iron and hydrocarbons, followed by a reverse osmosis process. Wastewater, or brine, from the reverse osmosis process would be captured in two approximately 24,000-gallon aboveground tanks and sent offsite for disposal at an approved waste handing facility

The water storage tanks for the proposed H_2 facility (the tallest structures of the proposed project) would be similar in size to the existing nearby Oilfield Facility tanks.

Truck Fueling and Delivery of Hydrogen Fuel

Produced H_2 fuels would be trucked to multiple end users throughout California. At full operational capacity (2.2 TPD), it is estimated that four trucks would be leaving the site per day. Empty trailers would arrive at the project site via existing roads and site access points. The empty trailers would be left at site for filling (approximately five to seven hours) with industry standard equipment. The truck will then pick up a full trailer and leave site, minimizing the amount of time a full hydrogen trailer is on site. It is not anticipated that trucks would remain on site during the filling process. All H_2 storage would be in the H_2 truck trailers.

Road and Vehicular Access

Regional access is off the I-5, SR-46 exit. Local access to the project site is available from SR-46 to Woodward Street/Lost Hills Road. No new roads will be constructed as part of this project. Existing oilfield lease roads from Woodward Street/Lost Hills Road will be used for vehicle access to and from the project facility. Access roads within the Lost Hills Oil Field would be maintained and repaired as necessary to facilitate safe vehicle travel during construction and operations. Road improvements are proposed for the northeast section of the intersection of Chevron Way Road and A Road, located at the southeast edge of the project site. Additionally, Chevron Way Road would be repaved heading west from the intersection with A Road, for the length of the H_2 production facility.

Buildings

The proposed project would utilize the existing Cahn 3 Oil Processing Plant control room and offices when operational. During construction, a temporary modular building may be provided onsite to allow for office space, meetings, storage, etc.

Communications

Communications for the Project would be handled through Chevron's existing communications systems at the Lost Hills Cahn 3 Processing Plant control room, with the ability to be monitored remotely at Chevron's Integrated Operations Control Center (IOCC) located in Chevron's Kern River Oil Field.

Project Site Security, Fencing, and Lighting

The project would operate 24 hours a day, seven days a week. Twenty-foot lighting fixtures would be installed at key locations for enhanced security at the site. All lighting installed would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties as required by Kern County Ordinance (Chapter 19.81) - Outdoor Lighting-Dark Skies requirements.

Public access to the site is limited. The project site would be surrounded by 6-foot chain link security fencing. Chevron's Lost Hills Oil Field is heavily surveilled and operated 24/7 with personnel always on site and monitoring the project site.

Emergency Shutdown Systems

The Emergency Shutdown (ESD) systems are designed to ensure the safety and integrity of the facility in the event of an upset condition. The PAS would provide the main control and monitoring of the project, integrating various elements such as PLC and Local OIT to collect field data and provide status information.

The PAS would be connected to the existing Chevron San Joaquin Valley Business Unit network through a fiber optic connection to the SCADA system, which will offer high-level supervisory control and monitoring both locally and centrally to the IOCC. In the event of an emergency, the PAS would safely shut down equipment and processes to maintain the facility in a safe shutdown condition until power is restored.

Construction Activities

Construction Equipment

Construction equipment required for installation of the project includes, but is not limited to the following:

- Seatrain shipping container
- Loader/ Grader
- Backhoe
- Hydro-cranes
- Craft trucks
- Welding trucks
- Water trucks
- Forklifts
- Electrical line truck and trailer
- Wire trucks
- Pole setting equipment
- Concrete trucks/ tractor trailers
- Portable generators (lighting, welding, etc.)
- Office trailer.

Facility Installation

The proposed H_2 production facility site currently serves as a storage yard. The site contains various oil field equipment and storage structures that would be removed prior to construction. This includes pipe storage racks, storage sheds, shade structures, cargo containers, chain link fencing, light poles and power poles. Miscellaneous debris and rubble piles would also be removed and properly disposed of.

Installation of the H_2 facility would require minor grading within previously disturbed areas of the project site when removing existing structures and establishing a grade for stormwater drainage. The entire approximate 5.74-acre site would then be covered with a combination of concrete, asphalt, and gravel. The H_2 production equipment area would be hardscaped with a concrete foundation. Additional minor grading/site disturbance totaling approximately two acres would occur outside of the H_2 production facility to facilitate running power to the site. South of the H_2 production facility project site, a 1.4-acre area would be temporarily used for construction trailer, staging and worker parking. The project would utilize existing roads and cleared areas wherever possible.

Clean soil would be imported to the site to serve as fill material. Excess spoils would be taken to a designated fill location within the Lost Hills Oil Field. The proposed grading volume (combined cut and fill volumes) is approximately 18,502 cubic yards.

The H_2 production facility is approximately 5.74 acres. The majority of the H_2 production facility equipment would be pre-fabricated offsite and transported to the project site for final assembly. H_2 production facility construction activities would include installing concrete equipment foundations, setting up equipment and fabricated skids, installing piping and fiber optic cable, establishing an electrical ground grid, and installing electrical cables trays, running wire, setting electrical equipment, and automation. Security fencing would

be installed around the perimeter of the facility and the existing access road, Chevron Way Road, would be repaved on the south perimeter. All vessels, tanks, and skid mounted equipment would be installed on concrete foundations. Tanks and vessels would be located inside secondary containment. Valving and instrumentation would be installed between components to aid in monitoring, isolation and maintenance. All H_2 and water pipeline segments would be installed aboveground on non-galvanized structural steel pipe supports. All H_2 piping would be insulated, all other piping would be primed and painted or insulated. All connections would be strength-tested, and welds would be radiographed.

The project would tie in to the existing Chevron electrical substation located immediately west of the existing Field Operations Offices. No new substations would be constructed for this project. A new 12 kV overhead distribution line would extend from the existing substation toward the west of the current Cahn 3 Oil facility to the new H_2 plant. Approximately 14 overhead wood poles with galvanized steel cross arms would be installed between the substation and the new H_2 plant. The poles will be embedded approximately 6 feet deep. Construction activities for pole installation would occur within a 25-foot radius of each pole; vegetation would be cleared within these temporary work areas totaling approximately 0.7 acres. Equipment used to install the new power line would access the pole locations using existing roads within the oil field extending from the access road associated with the Cahn 3 Oil Processing Plant. A temporary staging area, measuring approximately 175 feet by 175 feet, in an existing heavily disturbed area devoid of vegetation approximately 100 feet north of the substation and 250 feet west of the office building, would be used during construction of the power line.

Two road improvements are proposed as part of this project. Approximately 1,100 feet of Chevron Way Road would be repaved. This would consist of the approximate 1,000 feet of the southern perimeter of the H_2 production facility of Chevron Way Road and extending no more than 100 feet east of the intersection of Chevron Way Road and A Road.

Additionally, the existing road shoulder at the northeastern corner of the intersection of Chevron Way Road and A Road would be improved with asphalt to facilitate existing vehicle traffic and H_2 production facility traffic. The existing road shoulder area is heavily disturbed by years of vehicle traffic. The existing road improvement is estimated at 9,600 square feet (0.22 acres) and is broken down as follows:

- 25-foot-wide strip, extending 150 feet heading north on the east side of A Road, heading north from the intersection of A Road and Chevron Way Road
- 25-foot-wide strip, extending 150 feet heading east on the north side of Chevron Way Road, from the intersection of A Road and Chevron Way Road
- 100-foot curve radius connecting the two improvement lengths cited above

Construction Traffic.

Construction equipment deliveries and personnel would use regional and local access roads. Certain trips, including worker vehicles, would pass through the community of Lost Hills via SR-46 and Lost Hills Road/Woodward Street. This intersection and the road segments through the community of Lost Hills have historically served as travel corridors for regional oil field and agricultural operators. These routes would continue to serve as regional travel corridors for the foreseeable future for these industries and for a wide range of commercial and industrial transportation needs.

Schedule and Workforce

The construction process is expected to take approximately seven months to complete. Grading is anticipated to commence once the CEQA process is complete, and permits obtained, and would last approximately one month. Construction would be completed in a single phase and would last approximately six months, with an additional month anticipated for grading activities. It is anticipated that the proposed project would become operational once construction is complete.

Construction would primarily occur Monday through Friday, between 7:00 a.m. and 5:00 p.m., as required to meet the construction schedule. Additional hours/days may be necessary to facilitate the schedule. Any construction work performed outside of the normal work schedule would be coordinated with the appropriate agencies and would conform to the Kern County Noise Ordinance (Chapter 8.36).

The on-site construction workforce would consist of approximately 15 personnel onsite daily during construction; however, the average daily workforce would vary depending upon the stage in construction and may reach a peak workforce of 40 personnel. The average daily workforce would include construction, supervisory, support, and construction management personnel on-site during construction. It is anticipated that the construction workforce would commute to the project site each day from local communities and report to the designated construction staging yards prior to the beginning of each workday. Parking for construction personnel would be provided on-site at the south side of the existing access road at the south end of the project site. This area is approximately 6,000 sq ft and is currently used by oil field contractors for parking. Portable toilets, located at the parking site, would be used and maintained by a private off-site company during the construction period.

Construction Water Use

During construction of the proposed project, water would be required for common construction-related purposes, including but not limited to dust suppression, soil compaction, and grading. Fresh water is available for construction water use from Chevron's Lost Hills Oilfield, supplied by the Belridge Water Storage District. Construction activities are anticipated to require approximately 1.47-acre feet of water. A sanitary water supply would not be required during construction because onsite restroom facilities would be provided by portable units to be serviced by licensed providers.

Construction Power

Temporary electricity may be required to provide power as necessary for lighting and other electrical equipment. Power demand may be met by portable generators or local distribution. Electricity use for construction is anticipated to be minimal. Natural gas is not anticipated to be used as part of this project.

Solid and Non-hazardous Waste Disposal

During construction, the building contractor would arrange to have trash, construction debris, and regular recycling bins delivered to the site in accordance with Kern County Building Code requirements and guidelines. Construction recycling, regular recycling, and non-recyclable trash would be regularly picked up during the construction period.

Hazards and Hazardous Materials Compliance

The hazardous materials used for construction would be typical of most construction projects of this type. Materials would include 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 (HMBP) would be submitted to the California Environmental Reporting System.

The HMBP would include a complete list of all materials that meet HMPB threshold requirements. This information is intended to protect public health, safety, and the environment from a release of a hazardous material. During project construction, safety data sheets for all applicable materials present at the site would be made readily available to on-site personnel.

To ensure minimum exposure of construction workers to hazardous materials (e.g., construction related fuels and paints) and other hazardous materials, construction activities would comply with applicable worker protection laws and regulations, including the Occupational Safety and Health Act (OSHA), Title 9 of the Code of Federal Regulations, and Title 8 of the California Code of Regulations. The construction contractor selected for the project would be responsible for ensuring that construction workers are trained in accordance with local, state, and federal requirements for handling hazardous materials

Project Operation and Maintenance Activities

Schedule and Workforce

The proposed facility would operate 24 hours a day, 365 days a year and typically consist of both day and night shifts. The on-site workforce during project operation would consist of two to four personnel. The H_2 production facility would be monitored 24 hours a day but would not be continuously manned; the project would be connected into the wider Lost Hills control room located north of the production facility and Chevron centralized Operating Control Center for management, process monitoring, and control. Post startup of facility, Chevron Operations would be responsible for operations and maintenance. Maintenance of the facility would be completed as per Chevron standards based on manufacturer and/or Chevron recommendations. All maintenance activities would follow existing safe work practices and regulatory requirements.

Approximately four tube trailer trucks per day would be used to transport the gaseous H_2 to market. The trucks would enter the project site through the main entrance on Lost Hills Road, approximately 0.6-mile south of the community of Lost Hills. Compression and loading racks would be used for gaseous H_2 tube trailer offtake. High pressure H_2 would be loaded into tube trailers up to the 517 bar (7500 psig) operating pressure in compliance with Department of Transportation regulations.

Nitrogen would be stored on-site for periodic purging of equipment. Maintenance of storage tanks and filters would be required approximately every 10 years.

Monitoring Systems

The PAS would provide the main control and monitoring for the project, integrating PLC and Local OIT to collect field data and provide status information. Connected to the existing Chevron San Joaquin Valley Business Unit network via a fiber optic connection to the SCADA system, the PAS would offer high-level supervisory control and monitoring both locally and centrally to the IOCC. In the event of an emergency, the PAS would safely shut down equipment and processes to maintain the facility in a safe shutdown condition until power is restored.

Operational Water Usage

The electrolyzer units would use non-potable produced water trucked from Chevron's Kern River Oil Field located north of Bakersfield, approximately 42 miles southeast of the project site. Route options from Kern River Oil Field to the project site include taking Lerdo Highway or 7th Standard Road to I-5 north and

exiting at the Highway 46 exit or taking Lerdo Highway directly to Lost Hills Road. Both the 7th Standard to I-5 north route and the Lerdo Highway to Lost Hills Road route are approximately 50 miles in length.

Non-potable water would be filled into trucks through the existing Kern River Oil Field softened water system (softened from non-potable treated produced water) that is typically used for field steam generation at the Kern River Oil Field.

The project would require up to seven trucks per day of imported water at maximum capacity. At the project site, the imported water would be stored in three, approximately 785-barrel (33,000-gallon) capacity feed water tanks prior to on-site treatment and use in H_2 production. Water unsuitable for H_2 production would be stored in 2 wastewater storage tanks in compliance with applicable laws, sized at approximately 570 barrels (24,000 gallons) capacity each, and then trucked to a permitted wastewater disposal facility off-site, currently assumed to be the Clean Harbors Inc. facility south of the project site in Buttonwillow, CA. At maximum capacity, it is estimated that two trucks per day will be needed to transport the wastewater. The truck route from the project site to the Clean Harbors Inc. is approximately 18 miles via Lost Hills Road, California SR-33, and Lokern Road where the wastewater facility is located. Offsite wastewater disposal is anticipated to consist of two 4,620-gallon capacity truck round trips per day.

Potable water is supplied by the Lost Hills Utility District to Chevron's Cahn 3 Oil Processing Plant. Potable water demand for the proposed project is anticipated to be negligible, as potable water would be solely used for office use. The on-site workforce during project operation would consist of two to four personnel and may include operators that are already commuting to the Lost Hills Oil Field. Water utilized by the project would be non-potable treated produced water from Chevron's Central Valley operations. At full capacity, the project would utilize 33,120 gallons of non-potable water per day.

Vehicular Access and Circulation

Vehicular access to the project site is off the I-5, SR-46 exit. Local access to the project site is available from SR-46 to Woodward Street/Lost Hills Road. Existing oilfield lease roads from Woodward Street/Lost Hills Road will be used for vehicle access to and from the project facility. The produced H_2 would be trucked to multiple end users throughout California. At full operational capacity (2.2 TPD), it is estimated that 4 trucks would leave the site per day (four round trips per day). The full operational capacity would depend on the market demand, meaning the project would not produce more H_2 than is needed by end users. At maximum capacity, the project would also require up to seven trucks per day of imported water (seven round trips per day) and one to two trucks per day (one to two round trips per day) of wastewater disposal.

Solid and Non-hazardous Waste Disposal

The proposed project would produce a small amount of waste associated with maintenance activities, which could include typical refuse generated by office and warehouse uses. Most of these materials would be collected and delivered back to the manufacturer or 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. The closest Class III municipal landfill is the Shafter-Wasco Landfill.

Hazards and Hazardous Materials Compliance

Minimal H_2 would be stored onsite as produced H_2 would be loaded directly into a tube trailer and trucked offsite within 24 hours. A small amount of H_2 would be stored in buffering storage as a part of the process. The amount of H_2 stored on-site would be below the 10,000-pound threshold for flammable gases established by the United States Department of Labor Occupational Safety and Health Administration, 29

Code of Federal Regulations 1910.119.

Additionally, the proposed project would produce a small amount of hazardous waste associated with maintenance activities, which could include paint, solvents, cleaners, and waste oil. Workers would be trained to properly identify and handle all hazardous wastes. Any other hazardous materials used in operations would be subject to the San Joaquin Valley Business Unit Consolidated Spill Plan (addressing releases, emergency management, etc.).

Hazardous waste would be either recycled or disposed of at a permitted and licensed treatment and/or disposal facility. All hazardous waste shipped off-site for recycling or disposal would be transported by a licensed and permitted hazardous waste hauler and disposed of at Clean Harbors Inc. Buttonwillow facility or Waste Management's Kettleman facility.

Decommissioning

The project has an estimated lifespan of twenty years. Once Chevron determines the H_2 production facility has ended, Chevron would either divest the project or decommission the project site facilities in accordance with applicable law. Appropriate permits would be secured prior to any decommissioning activities commencing. Any surface facility removal activities would be limited to removal or demolition of existing equipment and performed in accordance with applicable law.

Decommissioning activities would begin after all applicable permits and notifications are completed. Typically, decommissioning tasks would include the following:

• Shut-down and bleed down of facilities and pipelines;

• Removal of residual fluids from tanks, pipelines, and vessels;

• Isolation and removal of utility systems (water, electrical service);

• Demolition and removal of intra-facility pipelines, tanks, vessels, and other equipment;

• Demolition and removal of concrete foundations and slabs; and

• Re-grading of facility and infrastructure areas.

All waste would be sent to approved disposal facilities and material recycled for scrap as appropriate. Hazardous waste would be either recycled or disposed of at a permitted and licensed treatment and/or disposal facility. All hazardous waste shipped off-site for recycling or disposal would be transported by a licensed and permitted hazardous waste hauler. Nonrecyclable waste would be placed in covered dumpsters and removed by a certified waste-handling contractor for disposal at a Class III landfill.

1.5. Applicant Provided Project Objectives

The 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 objectives for the proposed project:

- **Contribute to reducing the carbon impact of the transportation sector** by producing gaseous H_2 to be sold as transportation fuel to power fuel cell vehicles.

- **Minimize ground disturbance** and associated impacts by co-locating new facilities with other Chevron infrastructure.
- **Beneficially reuse non-potable water** produced by Chevron's oil field operations in Kern County in a cost-effective manner.

1.6. Proposed Discretionary Actions/Required Approvals

The Kern County Planning and Natural Resources Department as the CEQA Lead Agency (per CEQA Guidelines Section 15052) has discretionary responsibility for the Chevron Lost Hills Solar to Hydrogen Project, by Chevron New Energies, a division of Chevron U.S.A. Inc. To implement this project, the project proponent may need to obtain the following discretionary and ministerial permits/approvals, but not be limited to:

FEDERAL

- ***None Identified***

STATE

California Department of Fish and Wildlife

- Section 1600 et seq. permits
- Section 2081 Permit

California Department of Transportation

- Right-of-Way Encroachment Permit (if required)
- Permit for Transport of Oversized Loads (if required)

Central Valley Regional Water Quality Control Board (RWQCB)

- National Pollution Discharge Elimination System (NPDES) Construction General Permit
- General Construction Stormwater Permit (Preparation of a SWPPP)

LOCAL

County of Kern

- Certification of Final Environmental Impact Report
- Adoption of 15091 Findings of Fact and 15093 Statement of Overriding Considerations
- Adoption of the proposed Mitigation Monitoring and Reporting Program
- Approval of Amendments to the Lost Hills Specific Plan
- Approval of Changes in Zoning Classification
- Approval and recordation of Parcel Map

- Approval of Agricultural Preserve Exclusion
- Approval of Kern County Grading and Building Permits
- Approval of Kern County Encroachment Permits
- Approval of Kern County Fire Safety Plan

San Joaquin Valley Air Pollution Control District

- Authority to Construct (ATC)
- Construction Fugitive Dust Control Plan
- Permit to Operate (PTO)
- Indirect Source Review and Voluntary Emission Reduction Agreement

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

Figure 1 Vicinity Map

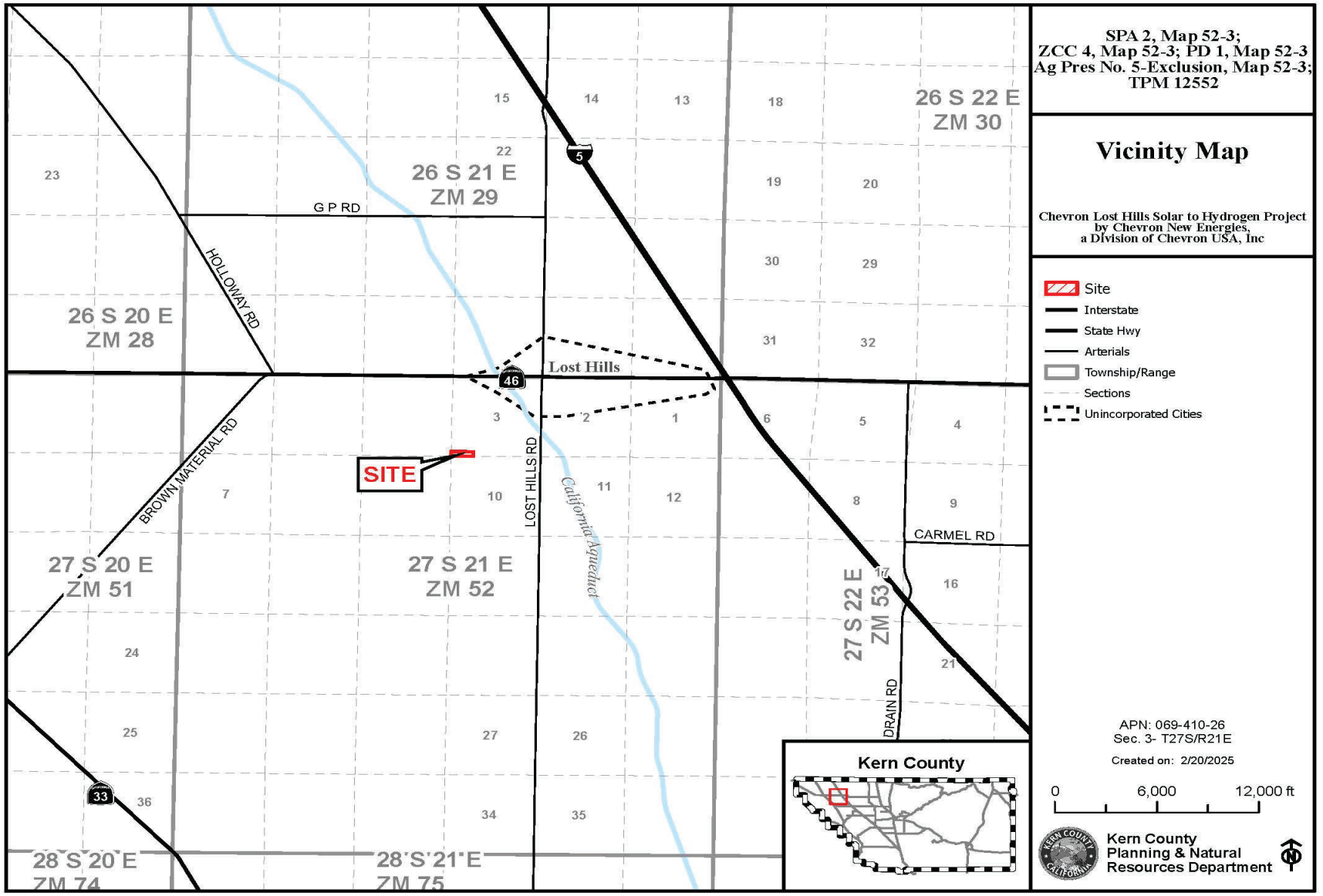


Figure 2 Aerial Map

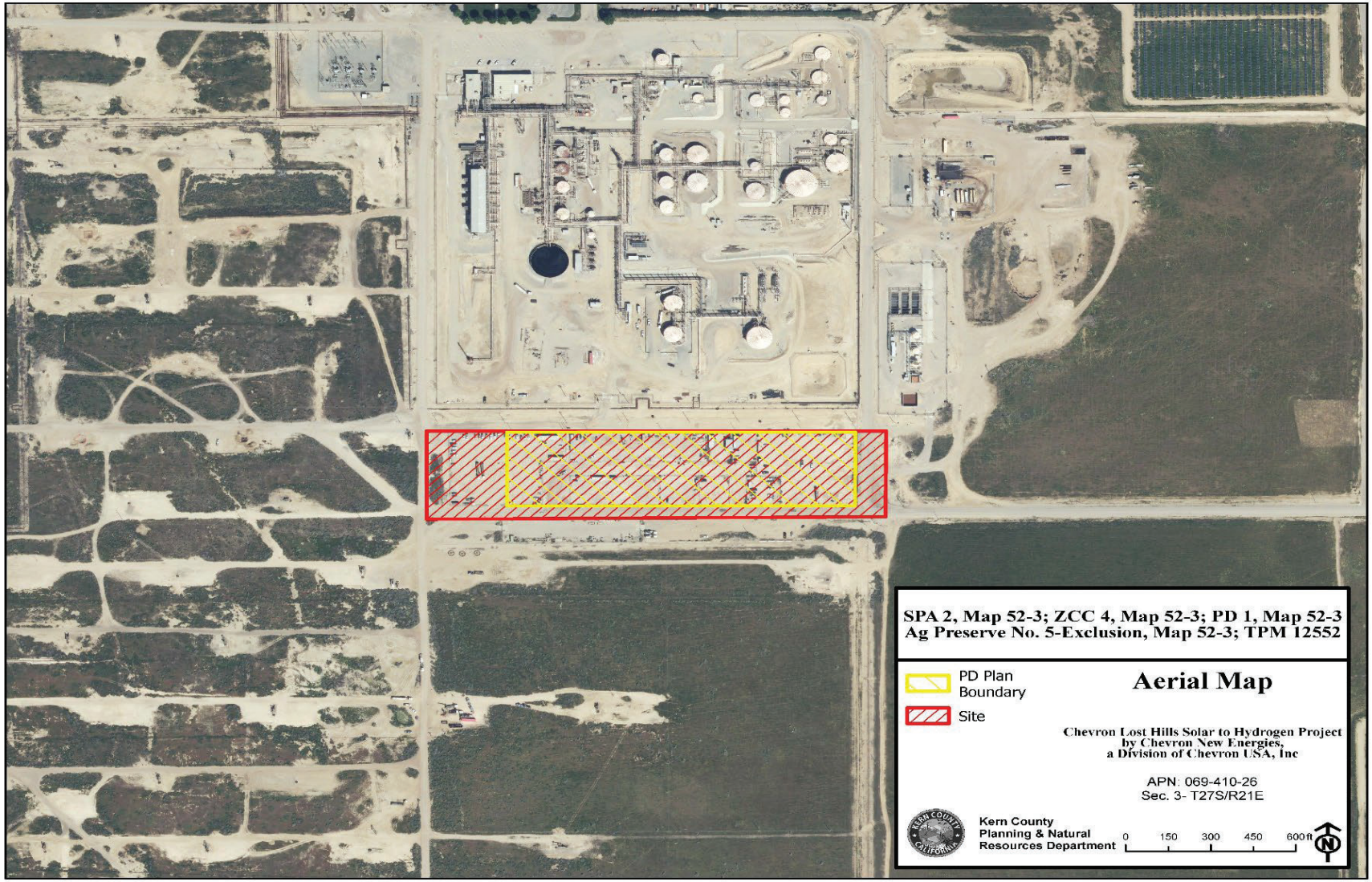


Figure 3 Assessor's Parcelization Map

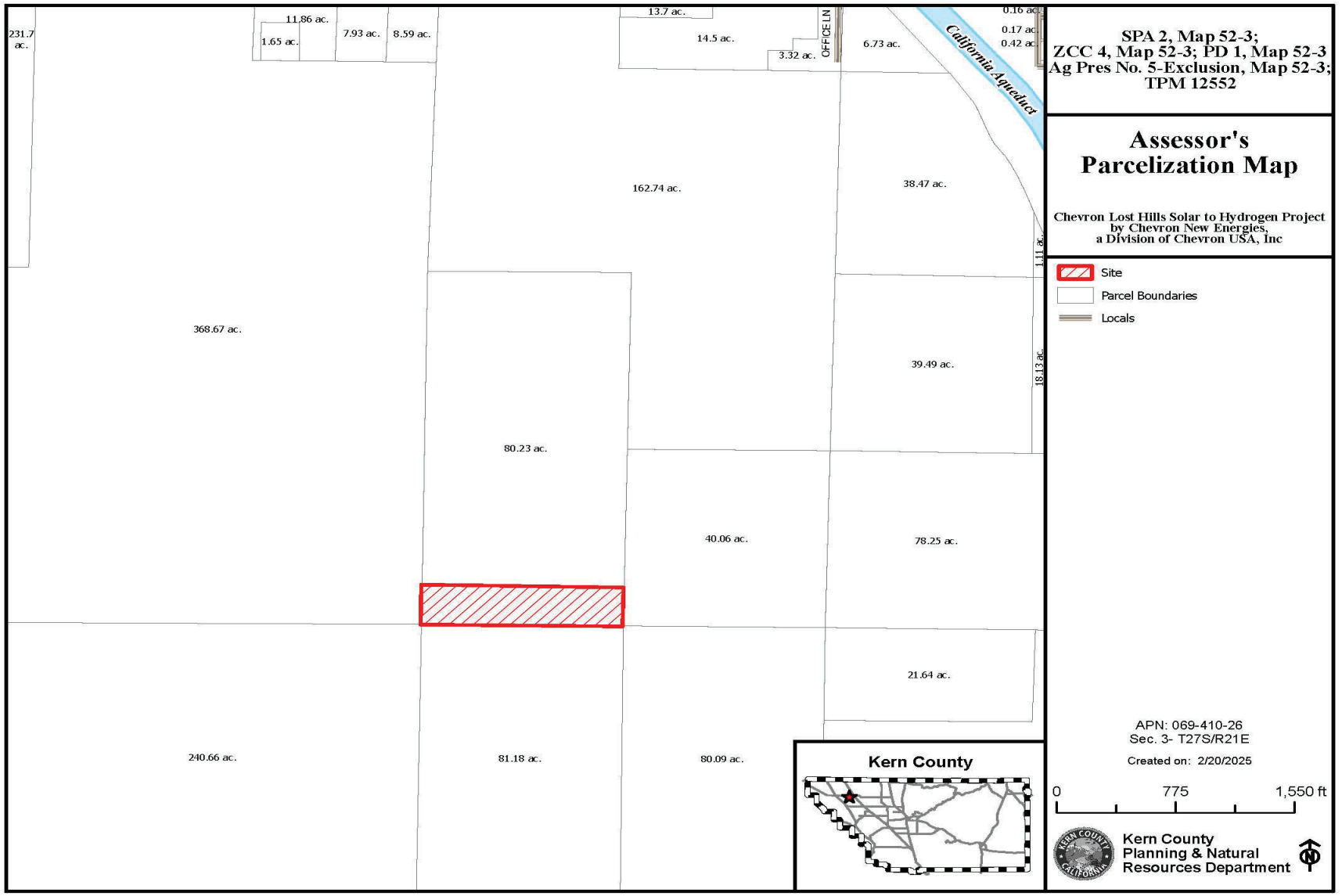


Figure 4 Proposed Tentative Parcel Map

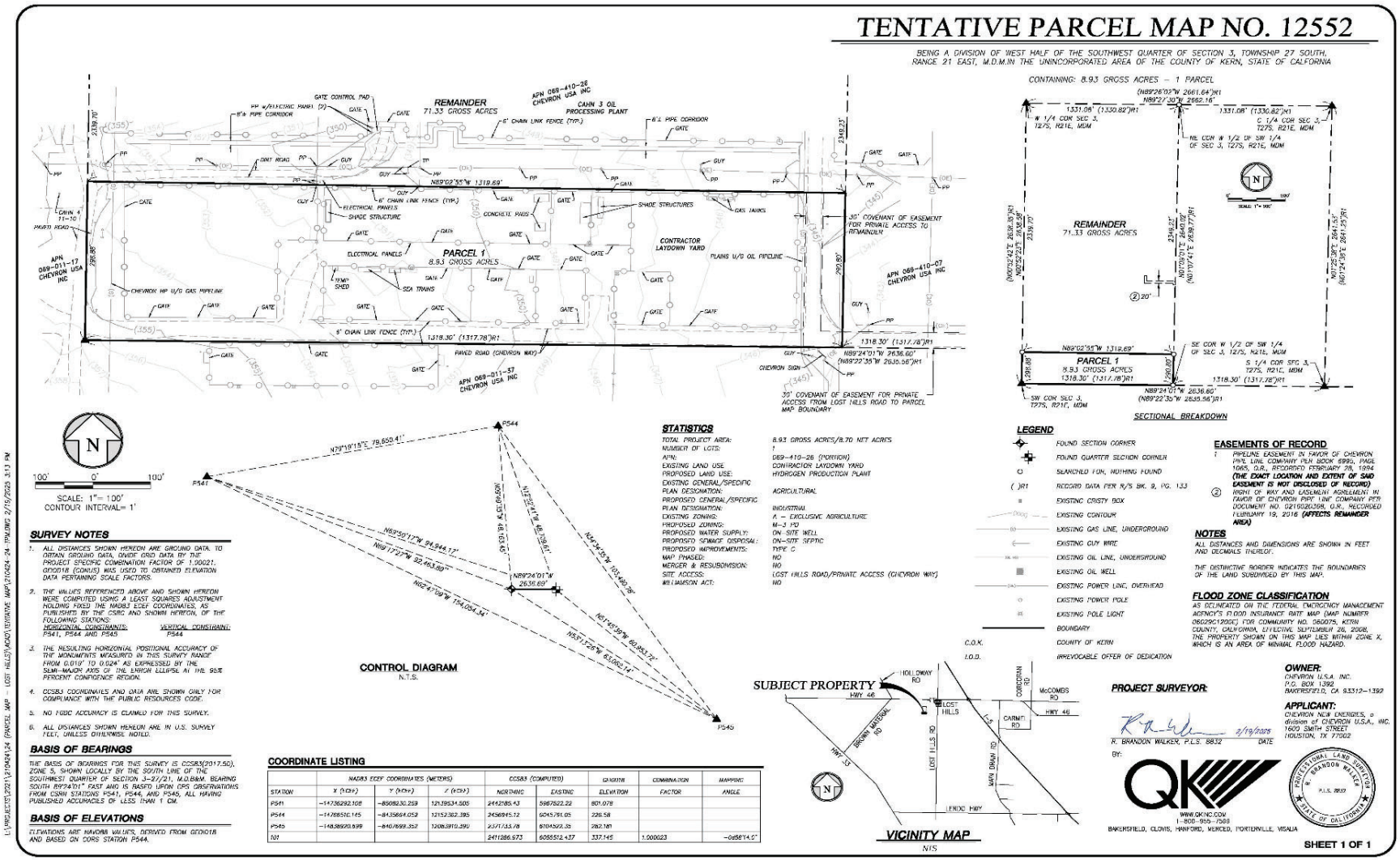


Figure 5 Specific Plan Map Code Designations

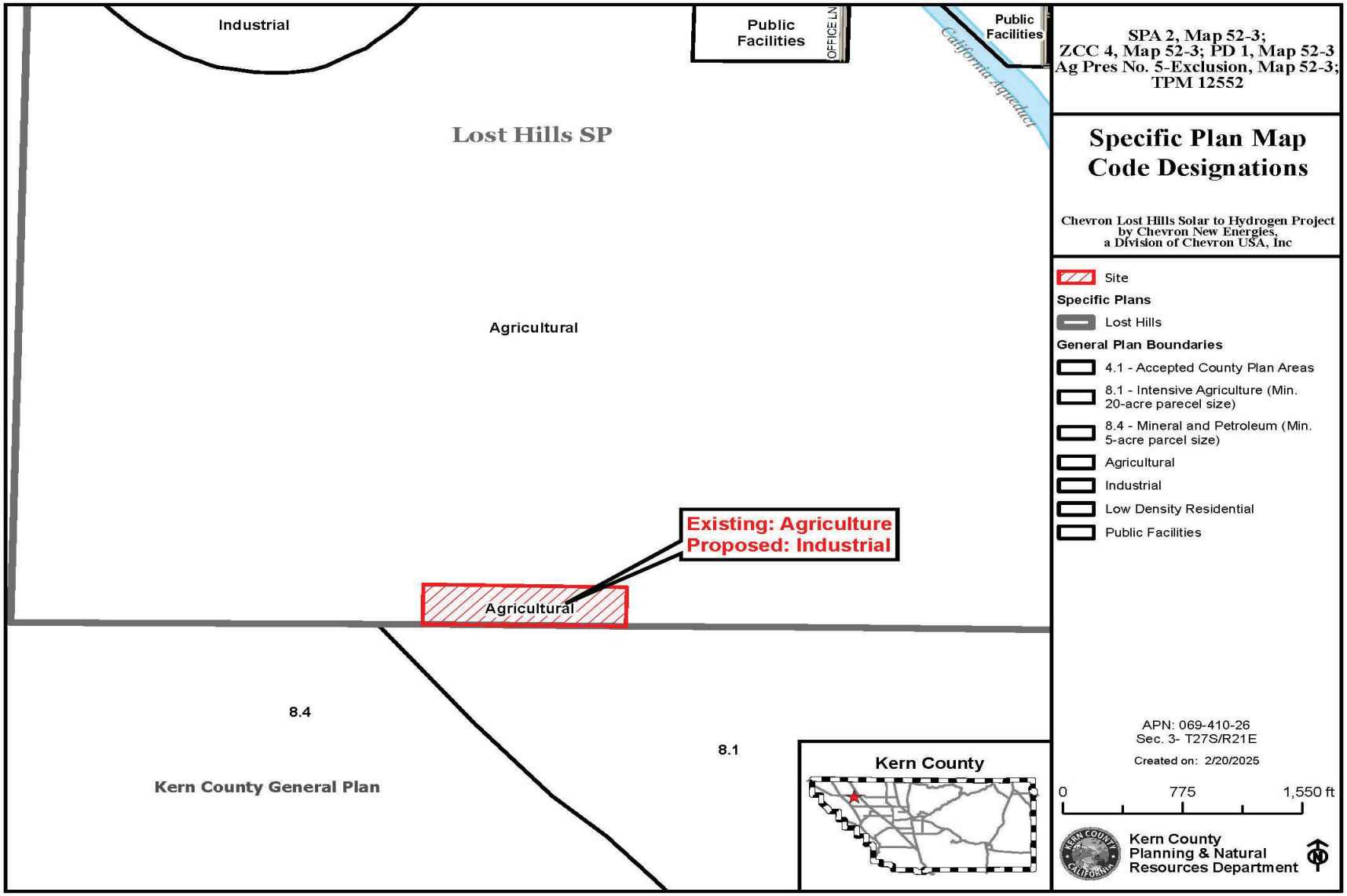


Figure 6 Zoning Classifications

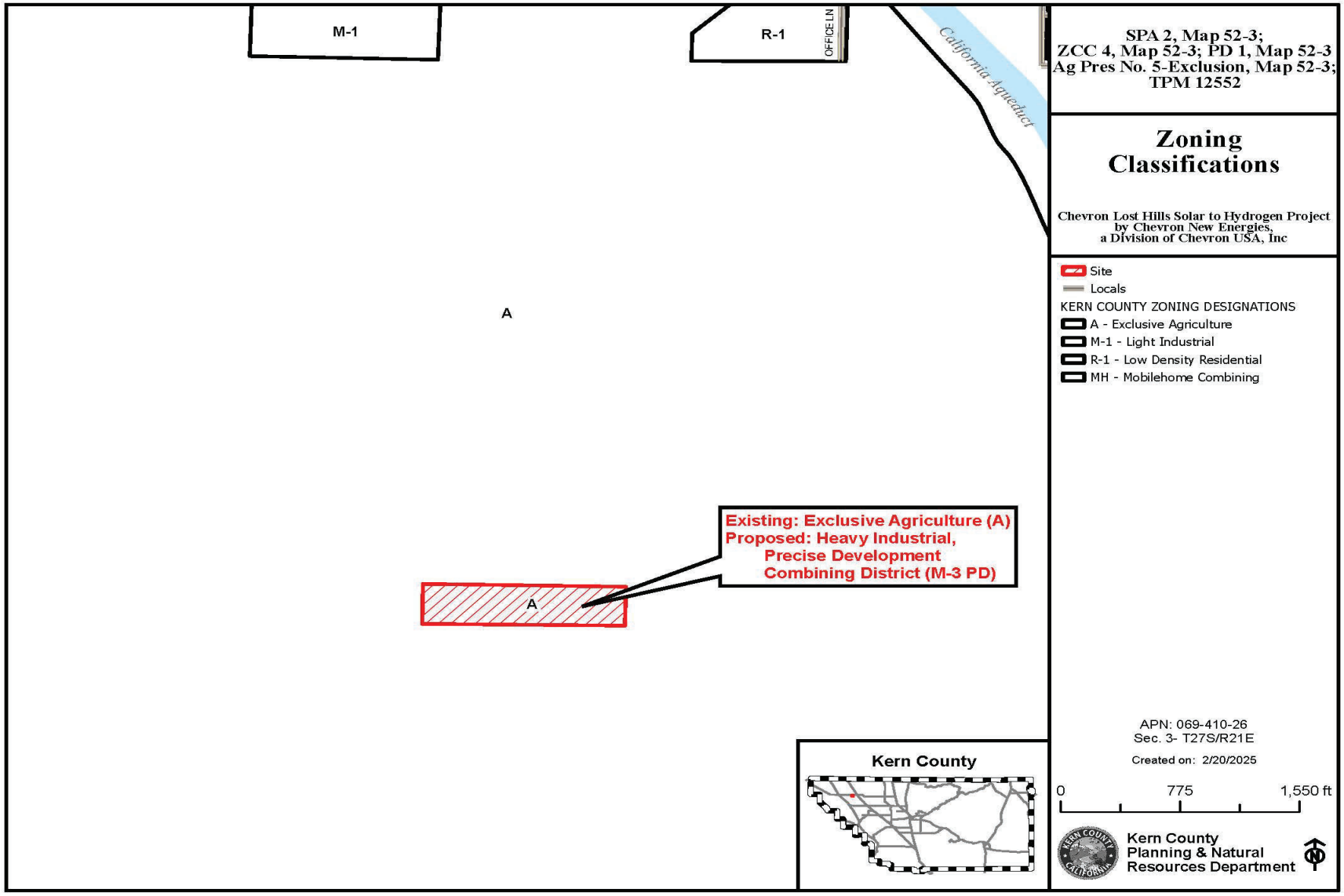


Figure 7 Agricultural Preserve Map

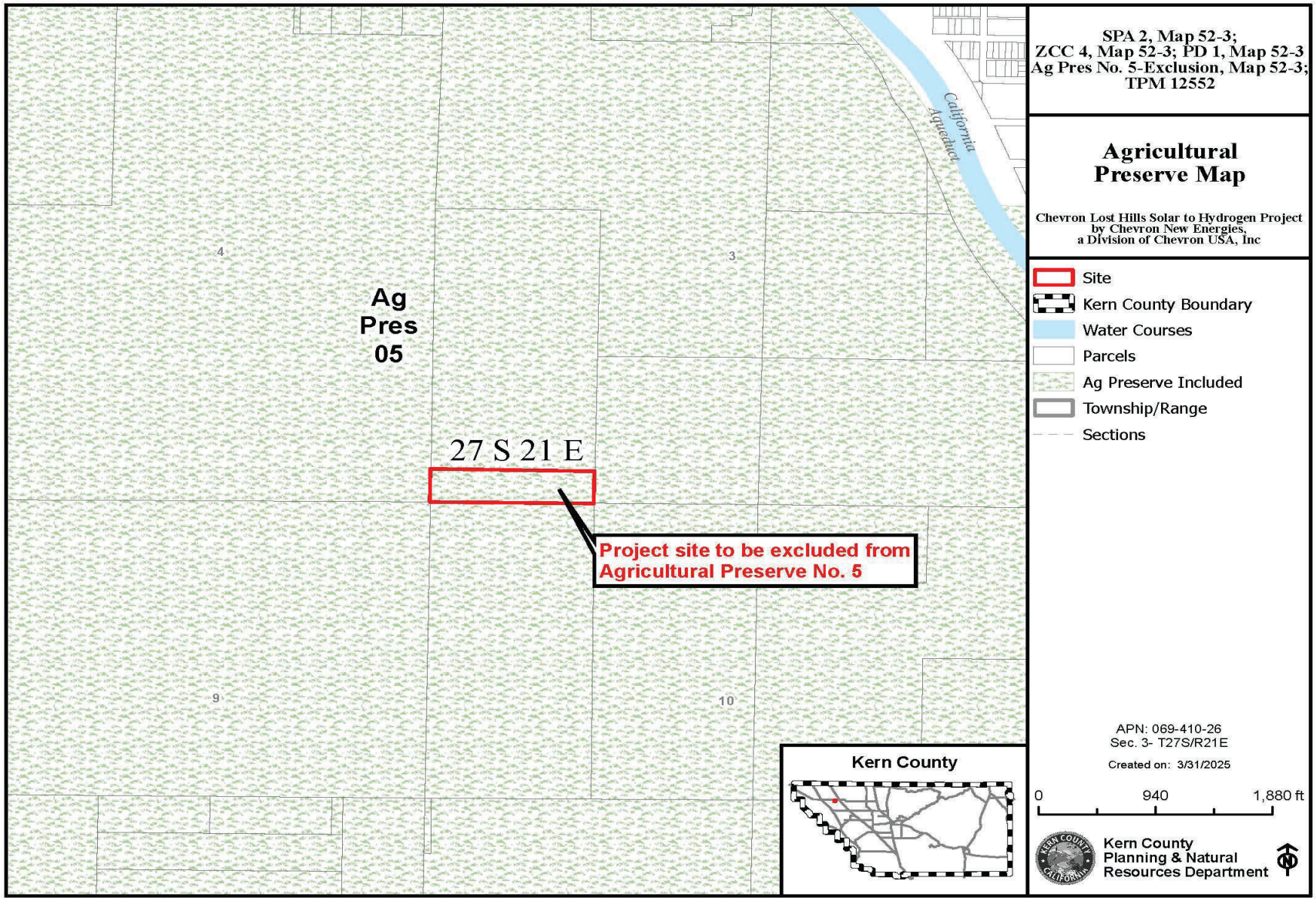


Figure 8 Solar Electrolysis Production Process

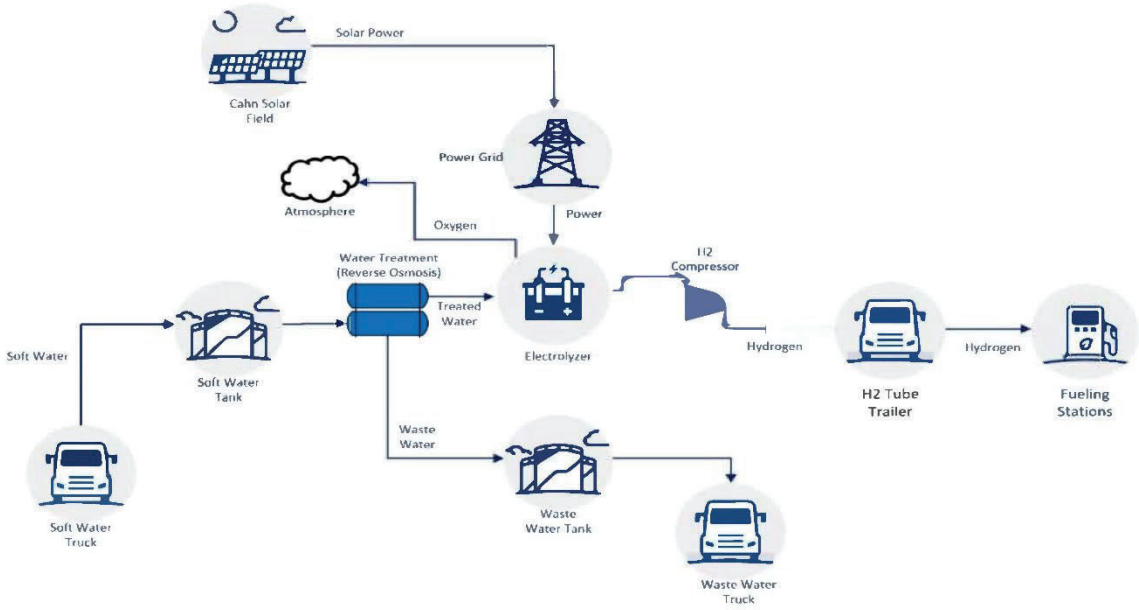


Figure 9 Proposed Precise Development Plan

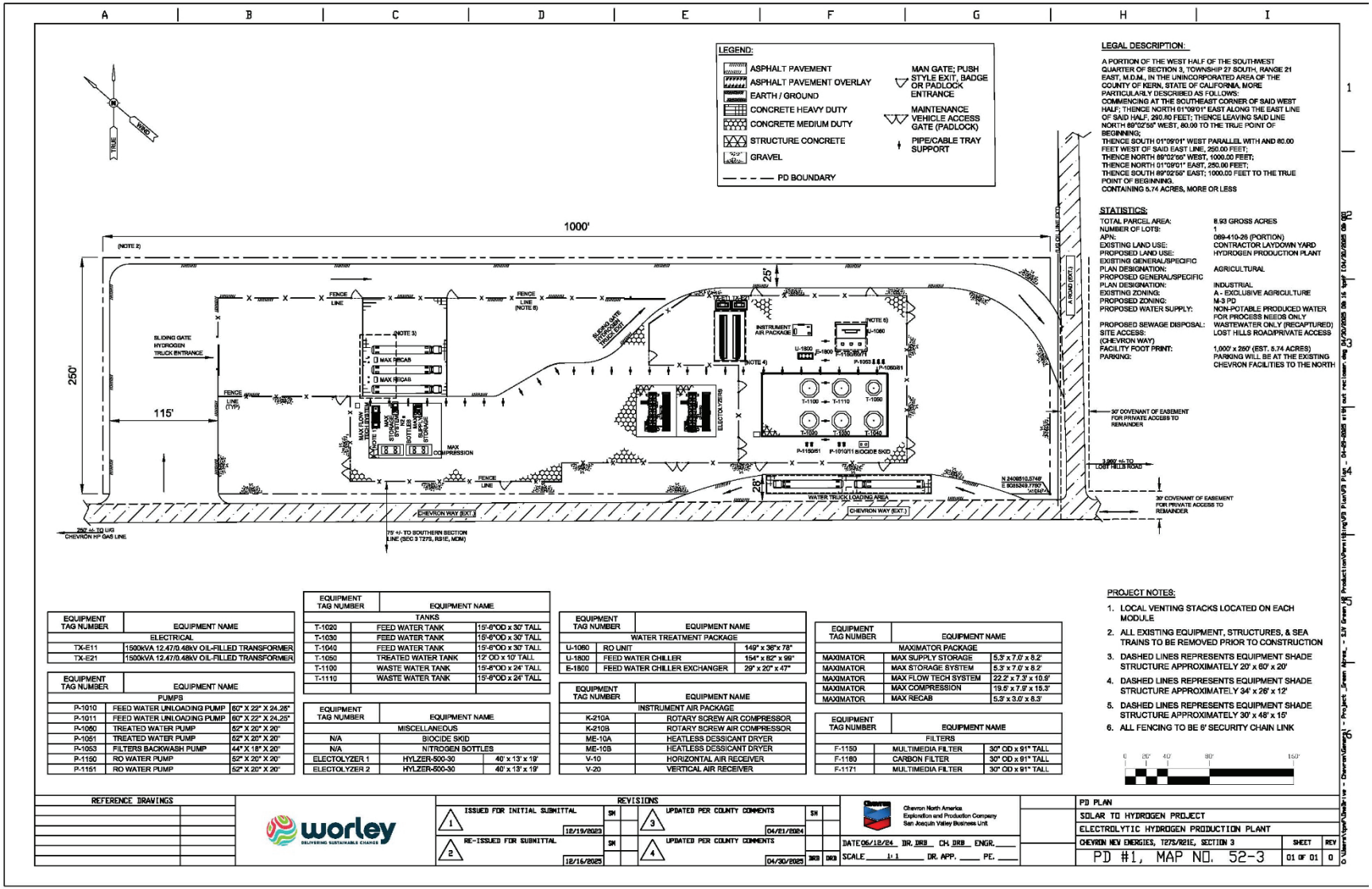
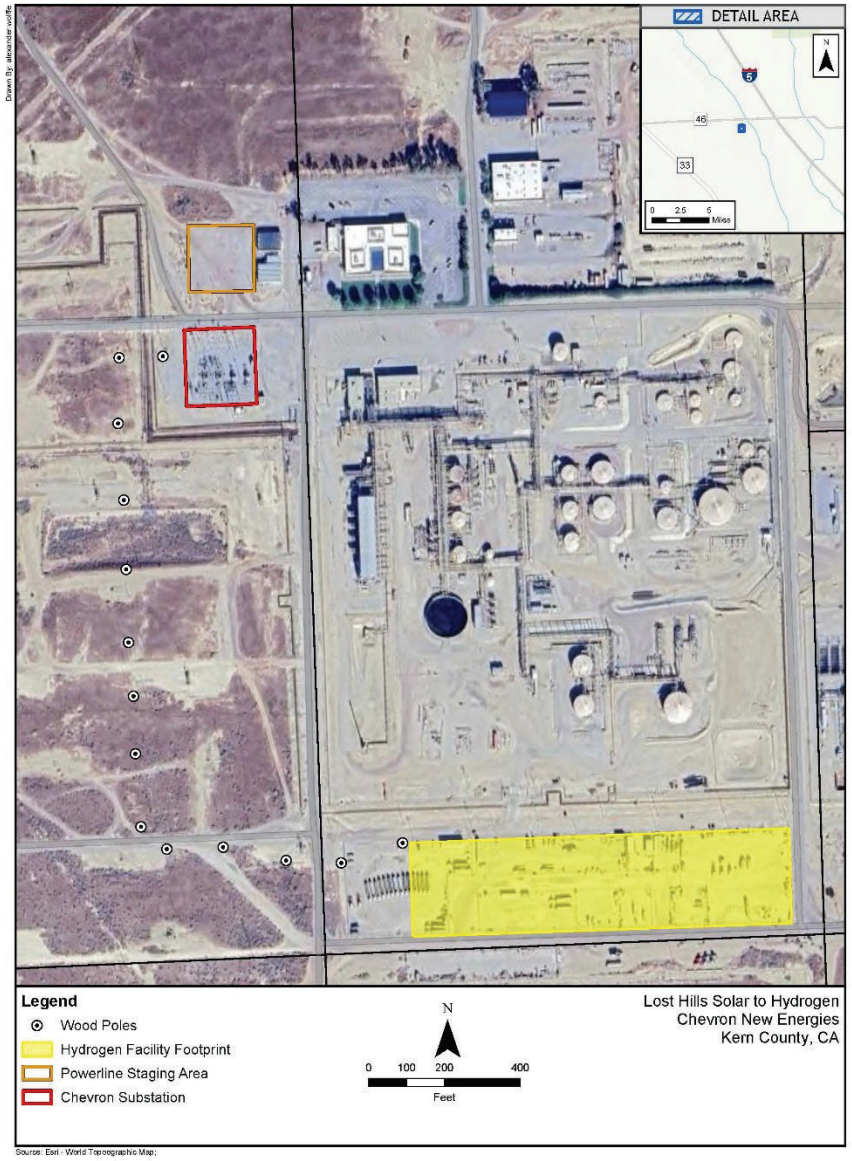


Figure 10 Proposed 12kV Overhead Powerline Route



2. Kern County Environmental Checklist Form

2.1. Environmental Factors Potentially Affected

In accordance with CEQA Guidelines, the County intends to prepare an Environmental Impact Report (EIR) to evaluate potential environmental effects of the project and to propose mitigation measures to reduce any significant effects identified.

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "potentially significant impact" as indicated by the Kern County Environmental Checklist. As such, the analysis contained within the EIR will focus on these issue areas.

☒ Aesthetics	☒ Agricultural and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Energy
☒ Geology and Soils	☒ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials
☒ Hydrology and Water Quality	☒ Land Use and Planning	☐ Mineral Resources
☒ Noise	☐ Population and Housing	☒ Public Services
☐ Recreation	☒ Transportation and Traffic	☒ Tribal Cultural Resources
☒ Utilities/Service Systems	☒ Wildfire	☒ Mandatory Findings of Significance

Other Environmental Issues:
The County conducted a preliminary review of the proposed Project and has determined it is not likely to result in significant environmental effects to the following resources. Therefore, further analysis is not warranted in the EIR.

Population and Housing: The proposed project would have temporary workers traveling to the project site during construction. It is estimated that up to 40 workers per day (during peak construction periods) would be required during construction of the proposed project. Construction workers are expected to travel to the site from various local communities and locations throughout Southern California, and few, if any workers 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, RV parks, homes for rent or sale) would be available in the nearby cities and communities of Bakersfield, Lost Hills Buttonwillow, Shafter, and Wasco. Therefore, the project is not anticipated to directly or indirectly induce the development of any new housing or businesses within the local communities. It is expected that the proposed project would require an operational staff of up to four full-time employees. Due to the small number of full-time employees, it is anticipated that the local housing stock would be adequate to accommodate operations personnel should they relocate to the area, without requiring the need for the construction of new housing. The project would not directly or indirectly induce substantial unplanned population growth, and further analysis in the EIR is not warranted.

Implementation of the proposed project would not displace any existing people or housing. Therefore, no impacts would occur. No further analysis in the EIR would be required.

Recreation: It is estimated that up to 40 workers per day (during peak construction periods) would be required on site during construction of the proposed project. These workers are not likely to visit any local parks or recreation facilities during the workday. Further, few workers are expected to relocate to this area temporarily while the construction is underway, and there would be little or no impact on local recreational resources after work hours. Operation of the project would require approximately four employees, that would likely be drawn from the local labor force and would commute from their existing permanent residences to the project site during those times. However, even if the employees were hired from out of the area and relocated to the San Joaquin Valley region of 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. Therefore, no deterioration of any such facilities would occur with project implementation. The proposed project does not include or require the construction of new recreational facilities or expansion of existing recreational facilities, and there are no recreational facilities on the project site that would be affected. No impact would result, and no further analysis in the EIR is warranted.

Mineral Resources: The project site is to be located on an existing storage yard within the administrative boundaries of Chevron's Lost Hills Oil Field, however the project site is not a designated mineral resource zone. It would not result in loss of known mineral resource that would be of value to the region and residents of the state. It would not result in loss of a mineral resource recovery site delineated on a land use plan. The site is not located within a Mineral and Petroleum Land Use Designation area nor the County's NR (Natural Resources) or PE (Petroleum Extraction) Zone Districts.

2.2. Determination

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENT IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

/s/	6/27/2025
Signature	Date
Jack Foster	Planner II
Printed Name	Title