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/

DATE: February 28, 2024

TO: See Attached Mailing List



PLANNING AND NATURAL RESOURCES DEPARTMENT

Planning Community Development Administrative Operations

FROM: Kern County Planning and Natural

Resources Department Attn: Jamal Ferguson 2700 "M" Street, Suite 100 Bakersfield, CA 93301 (661)862-5017; Fergusonj@kerncounty.com

SUBJECT: NOTICE OF PREPARATION (NOP) OF A DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE ELK HILLS BLUE HYDROGEN PROJECT BY LONE CYPRESS ENERGY SERVICES

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 Initial Study/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 Friday, March 29, 2024 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 Fergusonj@kerncounty.com. A Scoping meeting will be held on Wednesday, March 20, 2024 at 1:30 p.m. at the address listed above.

PROJECT TITLE: Elk Hills Blue Hydrogen by Lone Cypress Energy Services (PP24403); GPA No. 4, Map 119; ZCC No. 6, Map 119; PD Plan No. 1, Map 119

DOCUMENT AVAILABILITY: The Notice of Preparation for the above referenced project are 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/elk-hills-blue-hydrogen-project/

PROJECT LOCATION: The proposed project is located in an unincorporated area of western Kern County, within the administrative boundary of Elk Hills Oil Field, approximately one quarter mile southwest of the intersection of Elk Hills Road and Skyline Road and, 8.5 miles north of the City of Taft. The project site is located in Section 35 of Township 30 South, Range 23 East in the Mount Diablo Base and Meridian (MDB&M).

PROJECT DESCRIPTION: The Elk Hills Blue Hydrogen Project would include the construction and operation of a hydrogen processing plant that will produce 65 Metric Tonnes (MT) per day of liquid hydrogen to be used as a low-carbon fuel alternative.

Implementation of the project as proposed includes the following requests:

- a) General Plan Amendment No. 4, Map 119 to amend the Land Use Element of Kern County General Plan from a map code designation of Mineral Petroleum (8.4) to Heavy Industrial (7.3) on approximately 32 acres.
- b) Zoning Classification Change No. 6, Map 119 to change the existing Zone Classification from Exclusive Agriculture (A) to Heavy Industrial, Precise Development Combining District (M-3 PD) on approximately 32 acres.
- c) Precise Development Plan No. 1, Map 119 to allow for the development and operation of a hydrogen facility (A.40.020.E) on the approximate 32-acre project site in an M-3 PD zone district.
- d) Parcel Map Waiver No. 4-23 proposing the division of a 1,286.52-acre parcel of record into three separate parcels consisting of a: (1) 43.89-acre parcel; (2) 40.00-acre gross parcel; and (3) 1,202.63-acre gross parcel. The 32-acre project site will be located on the 40.-acre gross parcel.

Signature:

Name: Jamal Ferguson, Planner I

I:\Planning\WORKGRPS\WP\LABELS\El k Hills Blue Hydrogen NOP.docx **Elk Hills Blue Hydrogen NOP** cc 11/28/2023

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

> Bakersfield City Planning Dept 1715 Chester Avenue Bakersfield, CA 93301

P.O. Box 3010
Delano, CA 93216

City of Ridgecrest 100 West California Avenue Ridgecrest, CA 93555

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

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

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

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

North West Kern Resource Cons Dist 5080 California Avenue, Suite 150 Bakersfield, CA 93309 PG&E Steven Ng, Manager Renewal Dev, T&D Intercon 77 Beal Street, Room 5361 San Francisco, CA 94105

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

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

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

City of Shafter 336 Pacific Avenue Shafter, CA 93263

City of Wasco 764 E Street Wasco, CA 93280

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

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

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

Environmental Protection Agency Region IX Office 75 Hawthorn Street San Francisco, CA 94105 Wayne Mayes Iberdrola Renewables Dir Tech Serv 1125 NW Couch St, Ste 700, 7th Fl Portland, OR 97209

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

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

City of McFarland 401 West Kern Avenue McFarland, CA 93250

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

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

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

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

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

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

So. San Joaquin Valley Arch Info Ctr Caltrans/Dist 6 West Side Mosquito California State University of Bkfd Planning/Land Bank Bldg. Abatement Dist. 9001 Stockdale Highway P.O. Box 12616 P.O. Box 205 Bakersfield, CA 93311 Fresno, CA 93778 Taft, CA 93268 State Dept of Conservation State Dept of Conservation California State University Director's Office Geologic Energy Management Division Bakersfield - Library 801 "K" Street, MS 24-01 11000 River Run Boulevard 9001 Stockdale Highway Bakersfield, CA 93309 Sacramento, CA 95814-3528 Bakersfield, CA 93311 California Regional Water Quality State Dept of Toxic Substance Control California Fish & Wildlife Environmental Protection Agency Control Board/Central Valley Region 1234 East Shaw Avenue 1685 E Street 1515 Tollhouse Road Fresno, CA 93710 Fresno, CA 93706-2020 Clovis, CA 93612 Cal Environmental Protection Agency/ Dept of Toxic Substances Control, Reg 1 Kern County Public Works Department/ Kern County Public Works Department/ Attn: Dave Kereazis, Permit Div - CEOA Building & Development/Floodplain Building & Development/Survey 8800 Cal Center Drive, 2nd Floor Sacramento, CA 95826 Kern County Fire Dept (Put in FIRE BOX) Kern County Regina Arriaga Kern County Library/Beale Env Health Services Department Roxanne Routh Local History Room Jim Killam Kern County Public Works Department/ Kern County Library/Beale Kern County Sheriff's Dept Building & Development/Development Andie Sullivan Administration Review County Public Kern Works Shafter High School Dist Taft Union High School Dist Department/Operations & 701 - 7th Street 526 Mannel Avenue Maintenance/Regulatory Monitoring & Shafter, CA 93263 Taft, CA 93268 Reporting Buttonwillow Union School Dist Elk Hills School Dist West Side Rec & Parks Dist 42600 Highway 58 P.O. Box 129 500 Cascade Place, Building C Buttonwillow, CA 93206 Tupman, CA 93276 Taft, CA 93268 Kern County Superintendent of Schools Kern High School Dist Buttonwillow Rec & Parks Dist Attention School District Facility Services 5801 Sundale Avenue P.O. Box 434 1300 - 17th Street Bakersfield, CA 93309 Buttonwillow, CA 93206-9320 Bakersfield, CA 93301

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

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

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

Southern California Gas Co Transportation Dept P.O. Box 513249 Los Angeles, CA 90051

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

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

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

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

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

Aron Narderoslan P. O. Box 988 Weldon, CA 93283 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

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

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

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

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

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

Structure Cast Larry Turpin, Precast Sales Manager 8261 McCutchen Road Bakersfield, CA 93311 Center on Race, Poverty & the Environment 5901 Christie Avenue, Suit 208 Emeryville, CA 94608

Verizon California, Inc.

Native American Heritage Council
of Kern County

Attn: Gene Albitre
18169 Highway 155

Woody, CA 93287

Southern California Gas Co 35118 McMurtrey Avenue Bakersfield, CA 93308-9477

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

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

Indian Wells Valley Groundwater

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

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

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

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

Kate Kelly Kelly Group P.O. Box 868 Winters, CA 95694 Wind Stream, LLC Albert Davies 1275 - 4th Street, No. 107 Santa Rosa, CA 95404

Sarah K. Friedman Beyond Coal Campaign/Sierra Club 1417 Calumet Avenue Los Angeles, CA 90026 Darren Kelly Sr. Business Manager Terra-Gen Power, LLC 1095 Ave of the Americas – FL 25, Ste A New York, NY 10036-6797

158 090 04 00 9 CALIFORNIA RESOURCES ELK HILLS LLC 27200 TOURNEY RD STE 200 SANTA CLARITA CA 91355-4910 Bill Barnes Dir of Asset Mgmt AES Midwest Wind Gen P.O. Box 2190 Palm Springs, CA 92263-2190 This page intentionally left blank

Notice of Completion & Environmental Document Transmittal

Lat. / Long.: 35° 16' 32.8" North; 119° 28' 10.2" West	, Sacramento, CA 95812-3044 (916) 445-0613 th Street, Sacramento, CA 95814
Lead Agency: Kern County Planning and Natural Resources Department Contact Person: Jamal Ferguson	ne Cypress Energy Services
Mailing Address: 2700 "M" Street Suite 100	
City: Bakersfield Zip: 93301 County: Kern Project Location: County: Kern City/Nearest Community: City of Taft Cross Streets: Elk Hills Road and Skyline Road Zip Code: 9331 Lat. / Long: 35° 16' 32.8" North: 119° 28' 10.2" West Total Acres: 32 Assessor's Parcel No.: 158-090-19 Section: 35 Twp.: 30 S Range: 23 E Base: MDB&M Within 2 Miles: State Hwy #: N/A Waterways: N/A N/A Schools: N/A Document Type: CEQA: NOP	· · · · · · · · · · · · · · · · · · ·
Project Location: County: Kern	
Companie	
Lat. / Long.: 35° 16' 32.8" North; 119° 28' 10.2" West	City/Negrect Community, City of Toft
Assessor's Parcel No.: 158-090-19	Zip Code: 93313
Within 2 Miles: State Hwy #: N/A	Vest Total Acres: 32
Airports: N/A Railways: N/A Schools: N/A	Section: <u>35</u> Twp.: <u>30 S</u> Range: <u>23 E</u> Base: <u>MDB&M</u>
Airports: N/A Railways: N/A Schools: N/A	Waterways: N/A
Document Type: CEQA: NOP Draft EIR NEPA: NOI Other: Joint Document Early Cons Supplement/Subsequent EIR EA Final Document Neg Dec (Prior SCH No.) Draft EIS Other Local Action Type: General Plan Update Specific Plan Master Plan Master Plan Prezone Redevelopment General Plan Element Planned Unit Development Use Permit Community Plan Coastal Permit Coastal Permit Coastal Permit Coastal Permit Coastal Plan Division (Subdivision, etc.) Other: Development Type:	
CEQA: NOP Draft EIR NEPA: NOI Other: Joint Document Early Cons Supplement/Subsequent EIR Early Cons Other Draft EIS Other Neg Dec (Prior SCH No.) Draft EIS Other Hind Neg Dec Other Ponsi General Plan Update Specific Plan Rezone Redevelopment General Plan Amendment Master Plan Prezone Redevelopment Site Plan Site Plan Land Division (Subdivision, etc.) Development 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: Development Type:	ment/Subsequent EIR
	Plan Prezone Redevelopment d Unit Development Use Permit Coastal Permit
Residential: Units	Employees Mining: Mineral Employees Power: Type MW Waste Treatment: Type MGD
Project Issues Discussed in Document:	
Aesthetic/Visual Fiscal Recreation/Parks Water Quality Schools/Universities Water Quality Air Quality Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater Archeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian Wildlife Coastal Zone Noise Solid Waste Growth Inducing Drainage/Absorption Population/Housing Balance Toxic/Hazardous Land Use Cumulative Effects Other GHG, Wildfire, Tribal Cultural Resources, Energy	Flooding Schools/Universities Water Quality Fire Hazard Septic Systems Water Supply/Groundwater Sewer Capacity Wetland/Riparian Wildlife Solid Waste Growth Inducing Housing Balance Toxic/Hazardous Land Use Ces/Facilities Traffic/Circulation Cumulative Effects
Present Land Use/Zoning/General Plan Designation: Agricultural Land/Zoning: A (Exclusive Agriculture)/General Plan: 8.4 (Mineral Petroleum)	

Project Description: The Elk Hills Blue Hydrogen Project would include the construction and operation of a hydrogen processing plant that will produce 65 Metric Tonnes (MT) per day of liquid hydrogen to be used as a low-carbon fuel alternative.

Implementation of the project as proposed includes the following requests:

a) General Plan Amendment No. 4, Map 119 to amend the Land Use Element of Kern County General Plan from a map code designation of Mineral Petroleum (8.4) to Heavy Industrial (7.3) on approximately 32 acres.

- b) Zoning Classification Change No. 6, Map 119 to change the existing Zone Classification from Exclusive Agriculture (A) to Heavy Industrial, Precise Development Combining District (M-3 PD) on approximately 32 acres.
- c) Precise Development Plan No. 1, Map 119 to allow for the development and operation of a hydrogen facility (A.40.020.E) on the approximate 32-acre project site in an M-3 PD zone district.
- d) Parcel Map Waiver No. 4-23 proposing the division of a 1,286.52-acre parcel of record into three separate parcels consisting of a: (1) 43.89-acre parcel; (2) 40.00-acre gross parcel; and (3) 1,202.63-acre gross parcel. The 32-acre project site will be located on the 40.-acre gross parcel.

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 S California Highway Patrol Office of Public School Construction CalFire Parks & Recreation Pesticide Regulation, Department of S Caltrans District # 6 Caltrans Division of Aeronautics S Public Utilities Commission Caltrans Planning (Headquarters) S Regional WQCB # Central Valley 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 S State Lands Commission ____ Delta Protection Commission SWRCB: Clean Water Grants Education, Department of SWRCB: Water Quality X Energy Commission SWRCB: Water Rights Tahoe Regional Planning Agency S Fish & Game Region # Fresno Food & Agriculture, Department of Toxic Substances Control, Department of General Services, Department of S Water Resources, Department of ___ Health Services, Department of Other Housing & Community Development X Integrated Waste Management Board Other X Native American Heritage Commission Local Public Review Period (to be filled in by lead agency) Starting Date February 28, 2024 Ending Date March 29, 2024 Lead Agency (Complete if applicable): Consulting Firm: _____ Applicant: _____

Signature of Lead Agency Representative: /s/ Date: 02/28/2024

Jamal Ferguson, Planner I

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

NOTICE OF PREPARATION/INITIAL STUDY CHECKLIST

Elk Hills Blue Hydrogen Project by Lone Cypress Energy Services, LLC

General Plan Amendment No. 4, Map 119 Zone Classification Change No. 6, Map 119 Precise Development Plan No. 1, Map 119 Parcel Map Waiver No. 4-23

> PLN23-00800 (PP24403)

LEAD AGENCY:



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

> Contact: Jamal Ferguson, Planner I (661) 862-5017 Fergusonj@kerncounty.com

> > February 2024

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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 Elk Hills Blue Hydrogen Project in the unincorporated area of western Kern County, California.

1. Project Description

1.1. Project Location

The Elk Hills Blue Hydrogen (proposed project) is a proposal by Lone Cypress Energy Services (project proponent) for the construction and operation of a hydrogen production facility. The proposed project will include the construction of a hydrogen production facility on an approximate 32 acres of a 40 acre parcel, with an associated 190 square feet Security Room. The proposed project located is on an approximately 32-acre portion of an approximate 590 acre privately owned parcel (current Assessor's Parcel Number 158-090-19) at the southwestern end of the San Joaquin Valley in unincorporated Kern County, California as shown in **Figure 1**, *Regional Vicinity Map*. The project site is within the administrative boundary of Elk Hills Oil Field, one quarter mile southwest of the intersection of Elk Hills Road and Skyline Road, shown in **Figure 2**, *Local Vicinity Map*.

The project site is approximately 26 miles west of the City of Bakersfield, 8.5 miles north of the City of Taft, and 8.5 miles Southwest of the unincorporated community of Buttonwillow. The project site is situated approximately 9 miles southeast of Interstate 5 (I-5) and approximately 6.8 miles east of Highway 33 (HWY-33). Regional Access is approximately 16 miles off I-5 to Stockdale Highway exit. Local access to the project site is available from Highway 119 to Elk Hills Road and then approximately 7 miles north to Skyline Road.

The project site is located on the *West Elk Hills, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, Township 30 South, Range 23 East, Section 35 (Latitude 35° 16' 32.8" North; Longitude 119° 28' 10.2" West).

1.2. Environmental Setting

The project site is situated in the southwestern end of the San Joaquin Valley, in unincorporated Kern County. 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 and has a current estimated population of 408,865 residents (California Department of Finance [CDF] 2022). The County's current estimated population is 909,813 residents (CDF 2022).

The project site ranges in elevation from roughly 1,000 to 1,300 feet above mean sea level (AMSL), with elevation sloping gradually upward from north to south. While this area may be generally characterized as "open flats," outside of leveled fields and orchards, it is better described as an uneven plain consisting of extensive alluvial fans, debris flows and over-bank deposits. Vegetation on the valley floor is predominated by modern cultigens and other non-native species, such as Russian thistle (tumbleweed) and grasses, but also includes cheatgrass and doveweed.

Land uses within the region and the area of the site consist of oil fields. Land uses surrounding the site include the following:



North—Oil fields, with Elk Hills Power LLC being directly north of the project site.

South-Oil Fields.

West-Oil Fields.

East-Oil Fields.

The immediate project area has no nearby residences. The nearest residence is approximately 6 miles to the southeast in the community Dustin Acres. **Table 1,** *Project Site and Surrounding Land Uses,* **Figure 3,** *Existing General Plan Map, and* **Figure 5,** *Existing Zone Classifications.* presents the existing land uses, Kern County General Plan designations, and Zoning classification for the project site and surrounding area. The nearest existing schools are in the City of Taft, approximately 8 miles south and in the Town of McKittrick approximately 8 miles northwest.

Table 1. Project Site and Surrounding Land Uses

	Existing Land Use	Existing Map Code Designation	Existing Zone Classification
Project Site	Oil fields/ Elk Hills Power Substation	8.4 (Mineral Petroleum)	A (Exclusive Agriculture)
North	Oil fields	8.4 (Mineral Petroleum)	A (Exclusive Agriculture) and A-1 (Limited Agriculture)
East	Oil fields	8.4 (Mineral Petroleum)	A (Exclusive Agriculture)
South	Oil fields	8.4 (Mineral Petroleum)	A (Exclusive Agriculture)
West	Oil fields	8.4 (Mineral Petroleum)	A (Exclusive Agriculture) and A-1 (Limited Agriculture)

1.3. Project Description

The Elk Hills Blue Hydrogen Project would include the construction and operation of a hydrogen processing plant that will produce 65 Metric Tonnes (MT) per day of liquid hydrogen using proven technology. The hydrogen will be manufactured by feeding approximately 13 million standard cubic feet per day (MMSCFD) of natural gas and 0.32 acre-feet per day (2,440 barrels per day (bpd)) of water into a Steam Methane Reformer (SMR). In an SMR, water and natural gas react with the help of a catalyzer to produce hydrogen and CO2. A total of 721 MT per day of CO2 will be generated as a byproduct of hydrogen production. From that total, a minimum of 95%, or 686 MT per day, will be captured, compressed to supercritical state, and piped to Carbon TerraVault's EPA Class VI sequestration well. The remaining 5% or 36 MT per day will be released into the atmosphere due to the inherent efficiency of the technology available.

After the hydrogen is produced and separated from the CO2, it will be compressed and liquified to be loaded into cryogenic tanker trucks for distribution throughout California.



The Elk Hills Blue Hydrogen Project will sequester over 200,000 MT of carbon dioxide annually, keeping harmful emissions from impacting the local community all while creating a low-carbon alternative fuel option.

Implementation of the project as proposed includes the following requests:

- General Plan Amendment No. 4, Map 119 to amend the Land Use Element of Kern County General Plan from a map code designation of Mineral Petroleum (8.4) to Heavy Industrial (7.3) on approximately 32 acres.
- Zoning Classification Change No. 6, Map 119 to change the existing Zone Classification from Exclusive Agriculture (A) to Heavy Industrial, Precise Development Combining District (M-3 PD) on approximately 32 acres.
- Precise Development Plan No. 1, Map 119 to allow for the development and operation of a hydrogen facility (A.40.020.E) on the approximate 32-acre project site in an M-3 PD zone district.
- Parcel Map Waiver No. 4-23 proposing the division of a 1,286.52-acre parcel of record into three separate parcels consisting of a: (1) 43.89-acre gross parcel; (2) 40.00-acre gross parcel; and (3) 1,202.63-acre gross parcel, of which the proposed 32-acre project site will be located on the 40.00-acre gross parcel.

The proposed project site is within the administrative boundaries of the Kern County General Plan. **Table 2**, *Project Assessor's Parcel Number, Existing and Proposed Land Uses, and Acreages* identifies the proposed project parcels, existing land uses, and the proposed land uses for the proposed project.

Table 2: Project Assessor's Parcel Number, Existing and Proposed Land Uses, and Acreages

Count	APN	Zone Map	General Plan	Existing Map Code Designation	Proposed Map Code Designation	Existing Zoning	Proposed Zoning	Acres
1.	158-090-19	119	Kern County	8.4	7.3	A	M-3 PD	32

Kern County General Plan (KCGP) Map Code Designation:

8.4 (Resource – Mineral Petroleum); 7.3 (Heavy Industrial)

Kern County Zoning District:

A (Exclusive Agriculture); M-3 PD (Heavy Industrial, Precise Development Combining)

1.4. Project Facilities, Construction Activities, and Operations

Project Facilities

The overall proposed development is a 32-acre facility dedicated to hydrogen manufacturing, liquefaction, hydrogen storage, hydrogen loading, and CO2 removal and compression for sequestration.

The proposed facility has a footprint of approximately 32-acres, including a 190 square feet Security Room to identify and check-in any person(s) entering the plant. This room includes a small office and a bathroom. **Table 3**, *Project Summary* provides a project summary of the proposed project.



Table 3: Project Summary

Acreage	Proposed End Use	Percentage Building Coverage	Maximum Building Height	Handicapped Parking Spaces	Standard Parking Spaces	Automobile Parking Spaces
32 acres	Hydrogen processing plant with approximately 190 square foot building. Used for security of plant.	0.01%	+/-18 feet	1	4	5 Parking Spaces Total

Substation

The proposed substation will be located at the northeast portion of the site and will include circuit breakers, disconnect switches, metering protection equipment, and main step-up transformers. The substation will occupy an area that will be approximately 140 feet by 230 feet in size. The substation will be enclosed by a 6-foot-high chain link fence topped with barbed wire, and gravel will cover the ground surface in accordance with Pacific Gas & Electric (PG&E) Substation requirements. Lighting will be installed in the substation for security and for use at times when nighttime emergency repair work is required.

Vehicular Access and Circulation

Primary access to the project site will be via existing access off Elk Hills Road to be upgraded for the proposed project. Such improvements will meet applicable California Department of Transportation (Caltrans) and Kern County Public Works Department development standards. A secondary access point will be at the southwest corner of the plant which connects to an existing field road.

Construction Activities

Schedule and Workforce

The plant construction will last approximately 18 months. Grading of the proposed project will start in September 2024, and last 60 to 90 days. Construction will be completed in a single phase, beginning in September 2024, and concluding in March 2025. It is anticipated that the proposed project will be operational in 2025. Should commencement of construction be delayed, the commencement date of September 2024 represents a conservative estimate for the purpose of this document.

Construction will primarily occur during daylight hours, Monday through Friday, 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 be coordinated with the appropriate agencies and will conform to the Kern County Noise Ordinance (Chapter 8.36).



The on-site construction workforce will consist of up to 125 individuals; however, the average daily workforce will vary depending upon the stage in construction. The average daily workforce will include construction, supervisory, support, and construction management personnel on-site during construction. It is anticipated that the construction workforce will 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 will be provided on-site. Portable toilets will be used and will be maintained by a private off-site company during the construction period.

Construction Activities and Equipment

Construction activities will consist of civil, structural, mechanical, and electrical construction with heavy equipment will be utilized during construction from the beginning of civil through startup.

Construction Water Use and Wastewater

During construction of the proposed project, water will be required for common construction-related purposes, including but not limited to dust suppression, soil compaction, grading, and general site cleanup. Dust-control water may be used for ingress and egress of on-site construction vehicle equipment traffic and for the construction of the warehouse infrastructure. A sanitary water supply will not be required during construction because restroom facilities will be provided by portable units to be serviced by licensed providers.

Operations

The proposed facility will operate 24 hours a day, 365 days a year and typically consist of both day and night shifts. The facility will employ 1 to 5 employees per shift. Approximately 10 operational employees will work remotely.

Vehicular access and circulation operations for the proposed project will generate approximately 16 to 20 daily truck trips.

Ingress to the plant will be off Elk Hills Road and requiring check-in at the Security Room. Employee parking will be located immediately after the entrance, directly to the east of the Security Room. After loading, the cryogenic tanker trucks will egress through the same access point.

1.5. 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 the applicant objectives for the proposed project:

- Construct and operate a low-carbon hydrogen plant.
- Provide the California Market with clean transportation fuel.
- Support California's Carbon neutrality goals by 2045.
- Site and design the project in an environmentally responsible manner consistent with current Kern County guidelines.
- Promote economic development and bring living-wage jobs to the region throughout the life of the proposed project.



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 Elk Hills Blue Hydrogen owned by Lone Cypress Energy Services, LLC. To implement this project, the project proponent may need to obtain the following discretionary and ministerial permits/approvals, but not be limited to:

Federal

- U.S. Fish and Wildlife Service (USFWS) Section 10 Incidental Take Permit and Habitat Conservation Plan (if required).
- o United States Army Corps of Engineers Section 404 Permit (if required)

State

- California Department of Fish and Wildlife (CDFW)
 - Section 2081 Permit (State-listed endangered species) (if required)
- o Central Valley Regional Water Quality Control Board (RWQCB)
 - Regional Water Quality Certification (401 Permit) (if required)
 - Waste Discharge Requirements
 - National Pollution Discharge Elimination System (NPDES) Construction General Permit
 - General Construction Stormwater Permit (Preparation of a SWPPP)
- o California Department of Transportation (Caltrans)
 - Right-of-Way Encroachment Permit (if required)
 - Permit for Transport of Oversized Loads (if required)

Local

- Kern County
 - Certification of Final Environmental Impact Report
 - Adoption of 15091 Findings of Fact and 15093 Statement of Overriding Considerations
 - Adoption of Mitigation Monitoring and Reporting Program
 - Approval of Amendment to the Land Use Element of the Kern County General
 - Approval of Change in Zone Classification
 - Approval of Precise Development Plan
 - Approval and recordation of Parcel Map

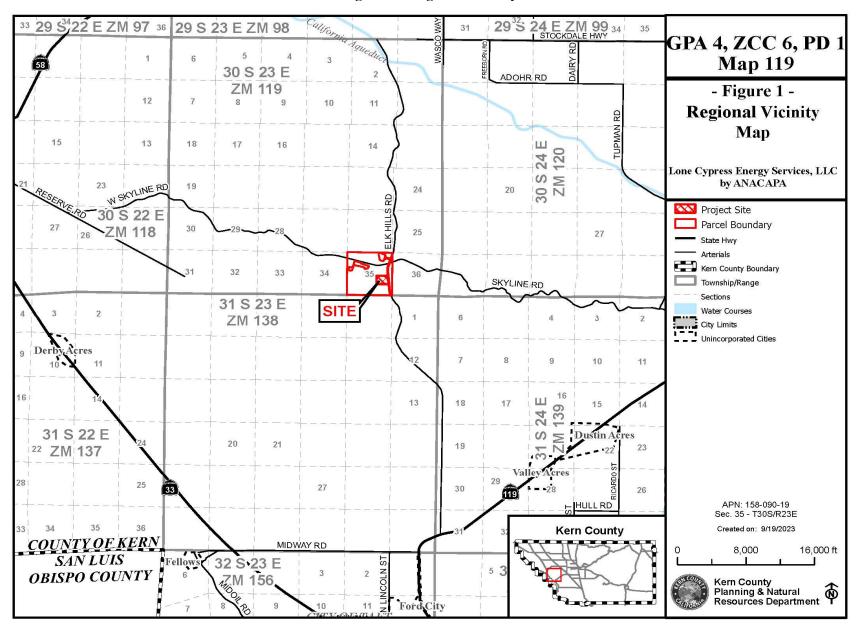


- Approval of Kern County Grading and Building Permits
- Approval of Kern County Encroachment Permits
- Approval of Fire Safety Plan
- San Joaquin Valley Air Pollution Control District
 - Authority to Construct (ATC)
 - Construction Fugitive Dust Control Plan
 - Permit to Operate (PTO)
 - Indirect Source Rule and Voluntary Emission Reduction Agreement
 - Other permits as required

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 be required for the proposed project.



Figure 1 – Regional Vicinity





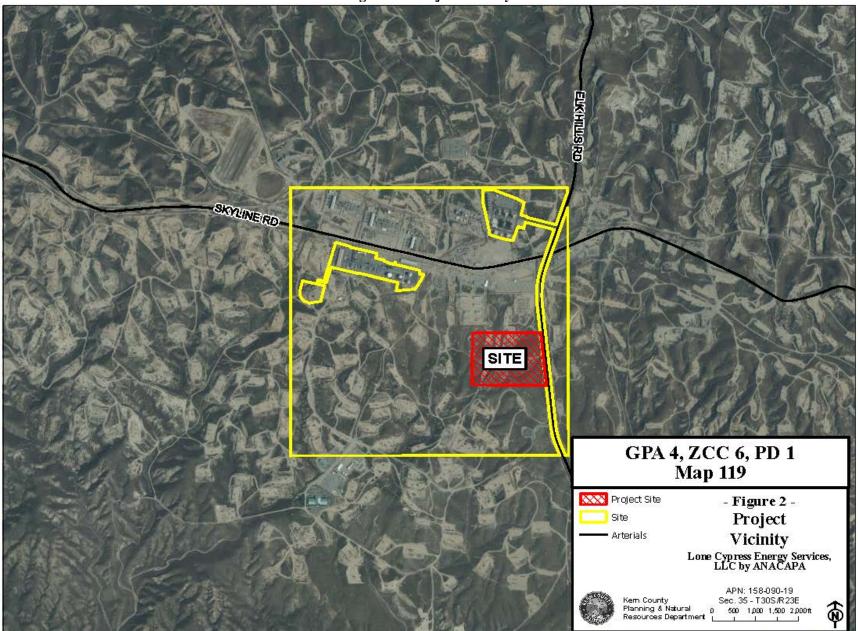


Figure 2 – Project Vicinity



Figure 3 – Existing General Plan Map

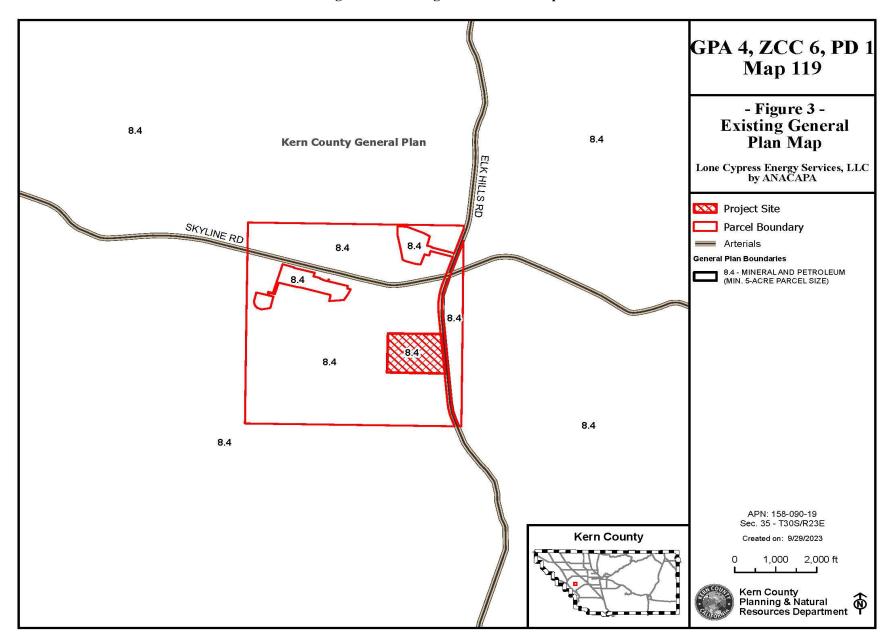




Figure 4 – Proposed General Plan Map

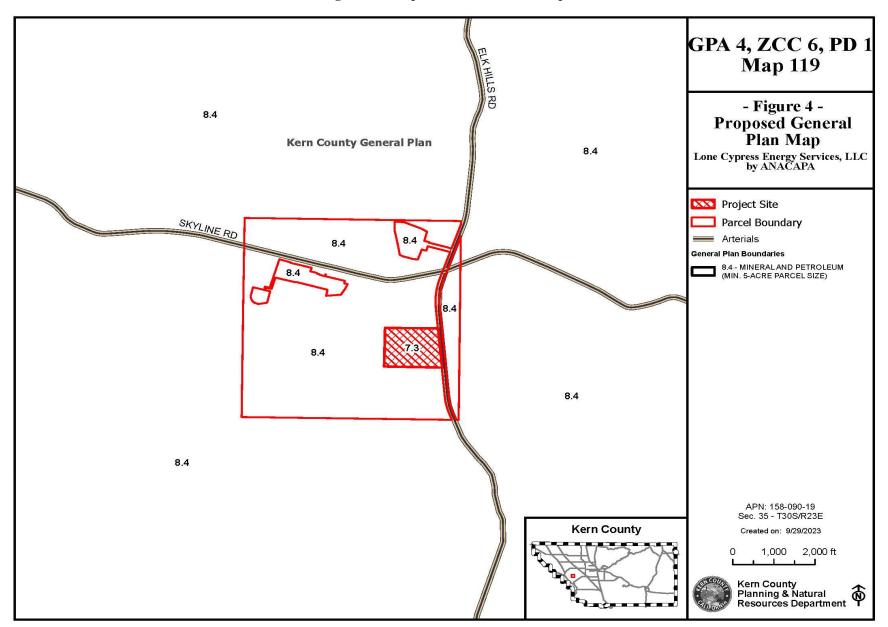




Figure 5 – Existing Zoning Classifications

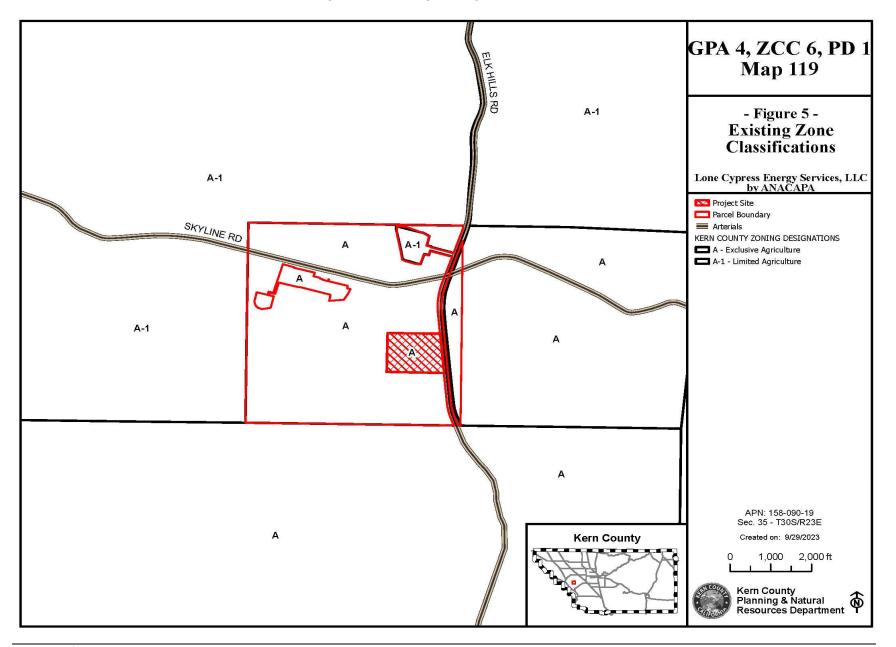
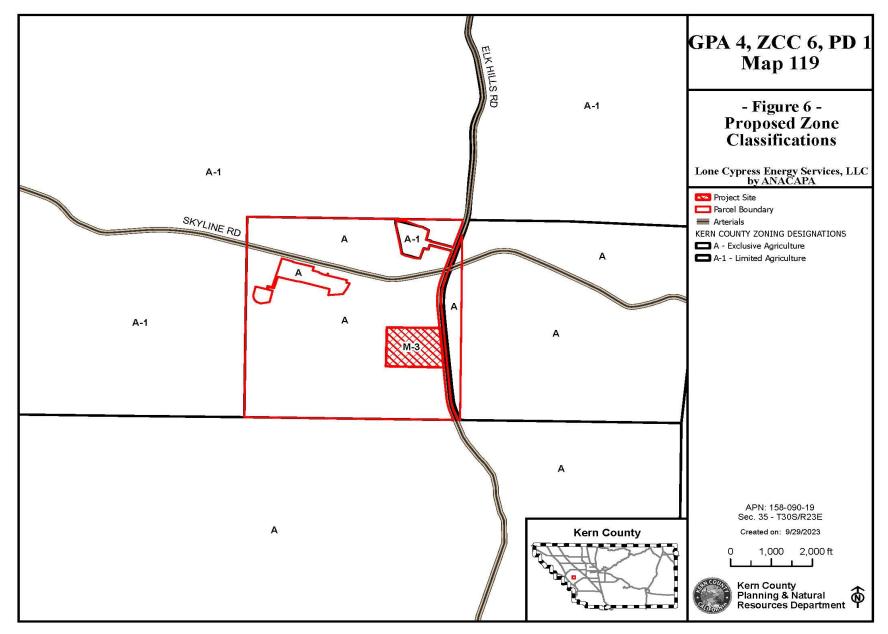




Figure 6 – Proposed General Plan Map



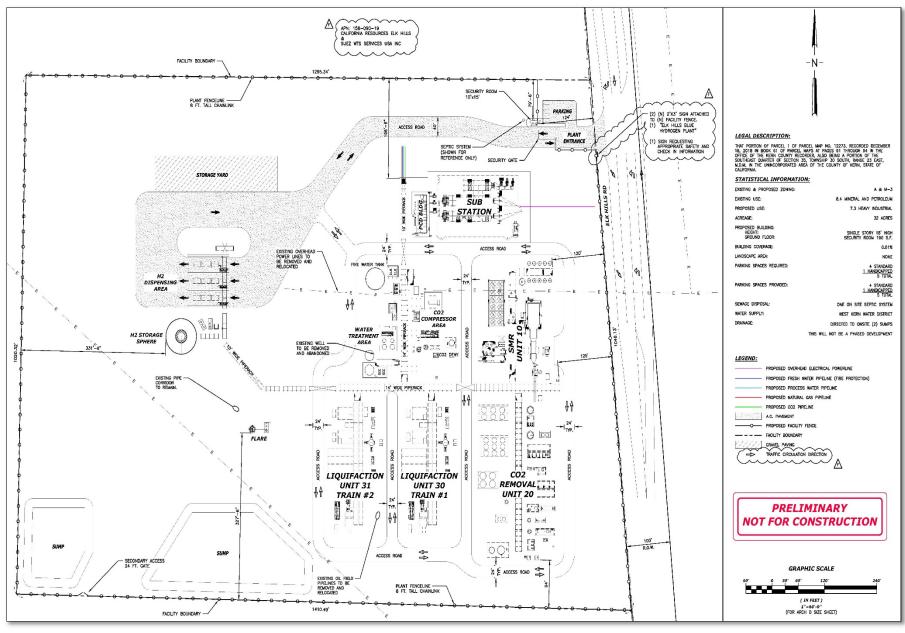


Figure 7a – Proposed PD Plan – Overall Site Plan

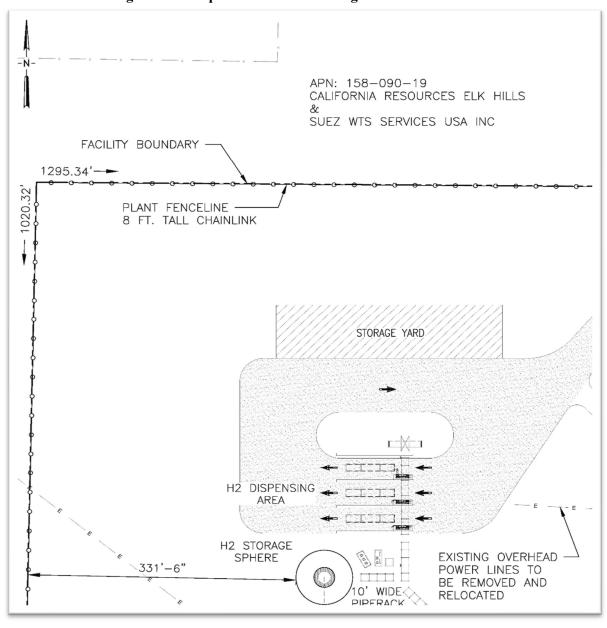


Figure 7b - Proposed PD Plan - Enlarged Northwest Site Plan

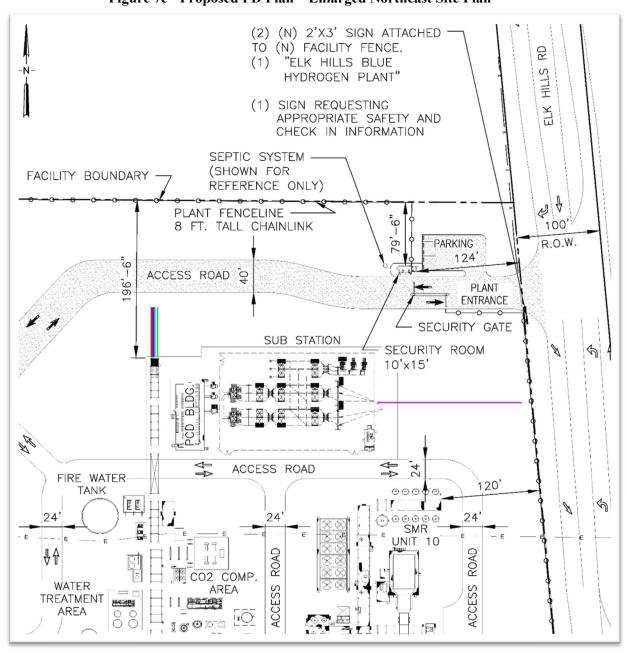
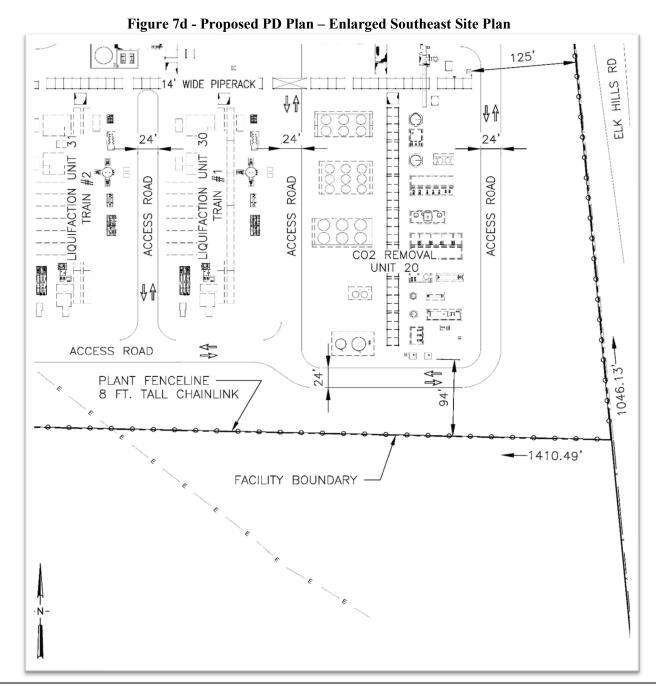


Figure 7c - Proposed PD Plan - Enlarged Northeast Site Plan



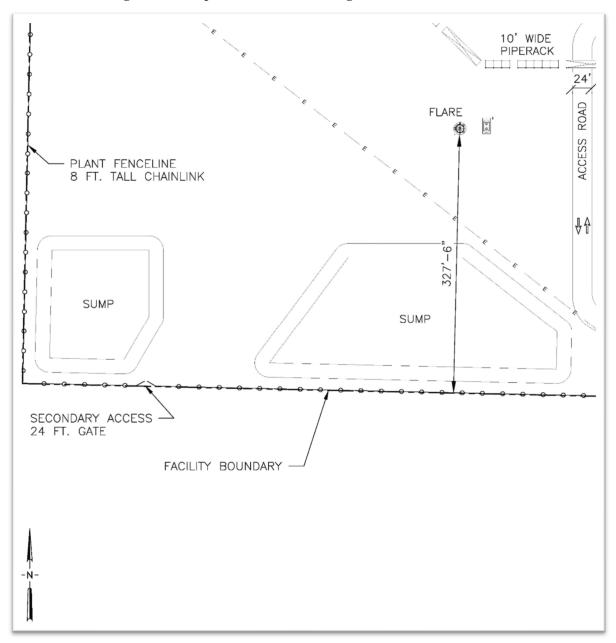


Figure 7e - Proposed PD Plan - Enlarged Southwest Site Plan



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 will 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.

\boxtimes	Aesthetics	\boxtimes	Agricultural and Forestry Resources	\boxtimes	Air Quality
	Biological Resources	\boxtimes	Cultural Resources		Energy
	Geology and Soils		Greenhouse Gas Emissions		Hazards and Hazardous Materials
\boxtimes	Hydrology and Water Quality	\boxtimes	Land Use and Planning	\boxtimes	Mineral Resources
\boxtimes	Noise		Population and Housing		Public Services
	Recreation	\boxtimes	Transportation and Traffic	\boxtimes	Tribal Cultural Resources
	Utilities/Service Systems	\boxtimes	Wildfire	\boxtimes	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 / **Housing:** The proposed Project will not induce substantial unplanned population growth through the construction of new homes, roads, or other infrastructure nor displace any housing units or people.

Although the proposed project would provide new employment consistent with the adopted Kern County General Plan goals, plan, and policies, long-term employment opportunities would be minimal. The proposed project would require approximately 10 operational employees working remotely per day. Full-time onsite employees will vary from 1 to 5 employees per shift with 3 shifts per 24 hours.

The on-site construction workforce will consist of up to 125 individuals; however, the average daily workforce will vary depending upon the stage in construction. The entire construction process is anticipated to take 18 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. 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 communities of Taft City, or Bakersfield. Therefore, the project is not anticipated to directly or indirectly induce the development of any new housing or businesses within the local communities.

The proposed project is located in the administrative boundary of Elk Hills Oil Field which consists of oil fields which has no existing housing.



Recreation: The Kern County General Plan does not identify any existing or proposed recreational facilities near the project area.

The proposed 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 will consist of up to 125 individuals; however, the average daily workforce will vary depending upon the stage in construction. 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 proposed project would require from 1 to 5 full-time onsite 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 western 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.

2.2. Determination

(To be completed by the Lead Agency)

Based	on 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 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 ENVIRONMENTA IMPACT REPORT is required.						
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unles mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlie document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based of 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 potentially significant effects (a) have been analyzed adequately in DECLARATION pursuant to applicable standards, and (b) have been avo earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation the proposed project, nothing further is required.	an earlier EIR or NEGATIVE ided or mitigated pursuant to that					
Sig	mature:	Date: 02/28/2024					
Pri	nted Name:	Title:					
Jaı	mal Ferguson	Planner I					