COMMUNITY DEVELOPMENT

City of Lancaster
Initial Study

1.	**Project title and File Number:**	Lancaster Clean Energy Center Conditional Use Permit No. 23-019
2.	**Lead agency name and address:**	City of Lancaster Community Development Department Planning and Permitting Division 44933 Fern Avenue Lancaster, California 93534
3.	**Contact person and phone number:**	Jocelyn Swain, Senior Planner City of Lancaster Community Development Department (661) 723-6100
4.	**Location:**	±1,338 gross acres generally bounded by Avenue J, Avenue L, 40th Street East and 70th Street East (APNs: 3384-018-001, -002, -003, -004; 3384-017-001, -002; -003; 3384-015-013; 3384-016-013; 014; 3384-017-003; 3170-012-002) (see Figure 1)
5.	**Applicant name and address:**	Element Resources Steven Meheen/Josh Whitacker One Shell Plaza 910 Louisiana Street, Suite 5030 Houston, Texas 77002
6.	**General Plan designation:**	Non-Urban Residential (NU)
7.	**Zoning:**	RR-2.5 (rural residential, minimum lot size 2.5 acres) and RR-2.5 with Eastside Overlay

8. Description of project:

The proposed Lancaster Clean Energy Center (proposed project) is a green hydrogen production facility utilizing photovoltaic (PV) solar for its power supply.

The proposed project will be developed on a total of approximately 1,338 acres divided into two sites: Site 1 (Caruso Property) and Site 2 (Bolthouse Property). Site 1 consists of approximately 442 acres of land (APN 3170-012-002) and is generally bound by Avenue K, Avenue L, 40th

Street East and 50th Street East. This site will be developed with solar facilities; no hydrogen production will occur on this parcel. Site 2 consists of approximately 896 acres (APNs 3384-018-001, -002, -003, -004; 3384-017-001, -002, -003; 3384-015-013; 3384-016-013, -014) and is generally bound by Avenue J, Avenue K, 50th Street East and 70th Street East. Most of this property would be developed with solar facilities with the hydrogen production component of the project located along 70th Street East just north of Avenue K. Figure 1, shows the boundaries of the project site. The area encompasses Little Rock Wash plus a 100-foot buffer on both sides is not part of the project and would remain undisturbed. This area is generally outlined in green on Figure 1.

The facility would be a self-sufficient, integrated, off-grid renewable energy facility comprised of the following:

- A 650-megawatt (MW) ground-mounted PV solar generating facility;
- 330 megawatt-hour (MWh) battery long duration energy storage (LDES) system;
- A green hydrogen production plant incorporating 400 MWe of electrolyzers, liquefied hydrogen storage and gaseous hydrogen storage;
- Up to two horizontal cylindrical tanks with a capacity of 30 metric tons each;
- Up to three spherical liquified hydrogen tanks with a capacity of 100 metric tons each;
- Onsite gaseous hydrogen storage of 30 metric tons in a linear surface pipe storage arrangement;
- Facilities for filling liquid and gaseous hydrogen transport trailers for shipping;
- Facilities for fueling zero emission trucks/vehicles with gaseous hydrogen;
- 2 control and office buildings and 2 warehouse/service buildings;
- Cooling towers; and
- Employee parking

These facilities are described in greater detail below. In addition to these facilities, the project site would surrounded by a tubular steel and/or chain link fence and 10’ of landscaping would be provided between the edge of the public roadways and the fence to provide additional screening. This screening would occur on Avenue K, 40th Street East, 50th Street East and 70th Street East along the project frontage. Additional locations may be identified dependent on the proximity to sensitive uses. Landscaping would also be provided within the employee parking area of the site but would not occur around the hydrogen production or fueling areas for safety reasons. Figure 2 provides the overall site plan and Figure 3 provides a detailed site plan of the hydrogen production portion of the project site.

Access to the hydrogen production portion of the project site would be from two driveways on 70th Street East, just north of Avenue K. Access to the solar fields would occur from driveways along Avenue K with additional driveways likely from 40th Street East and 50th Street East. At full buildout, it is anticipated that there would be 102 vehicle trips per day (70 trips from tankers and 32 trips from employees).

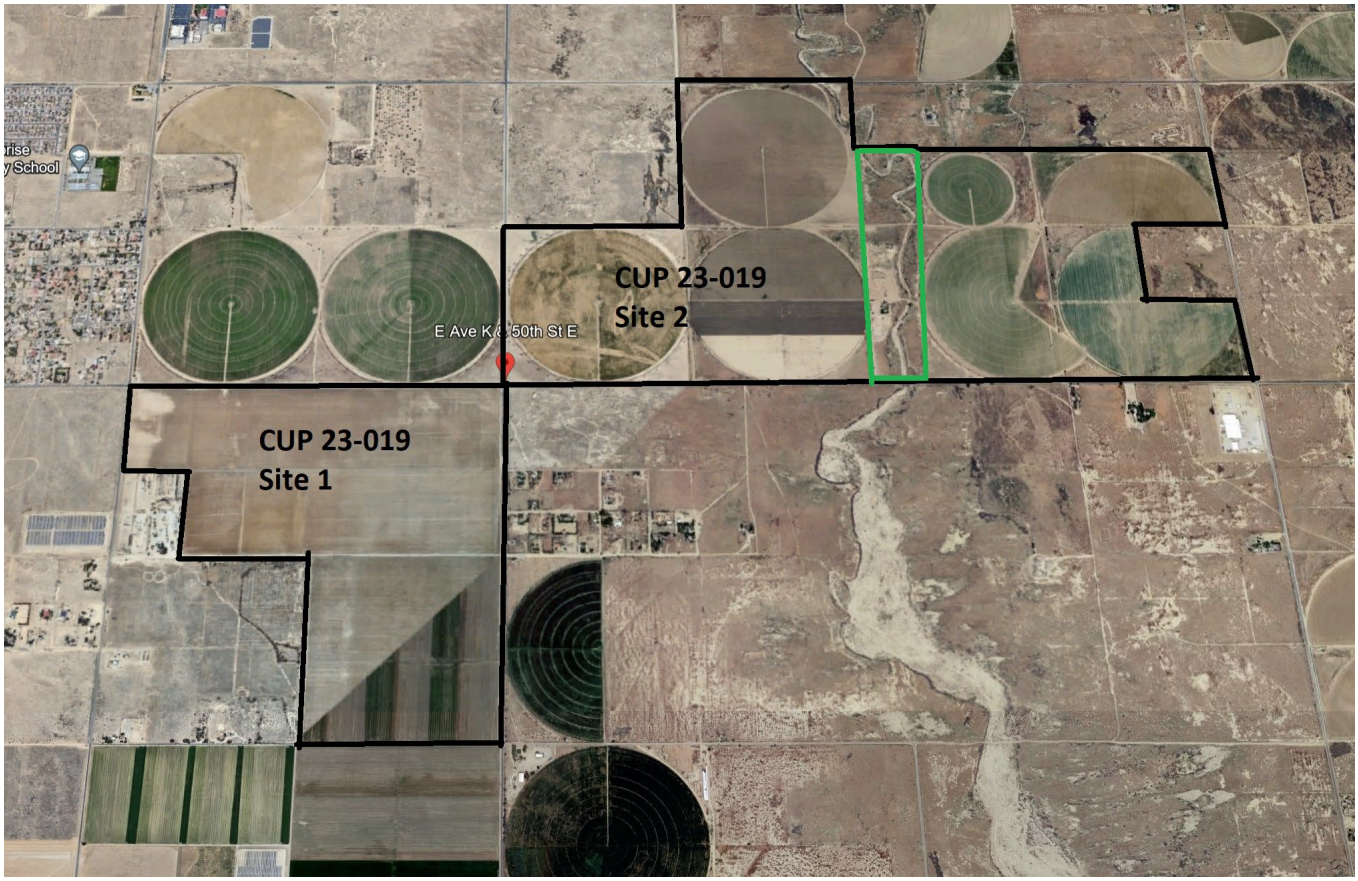

Figure 1, Project Location Map

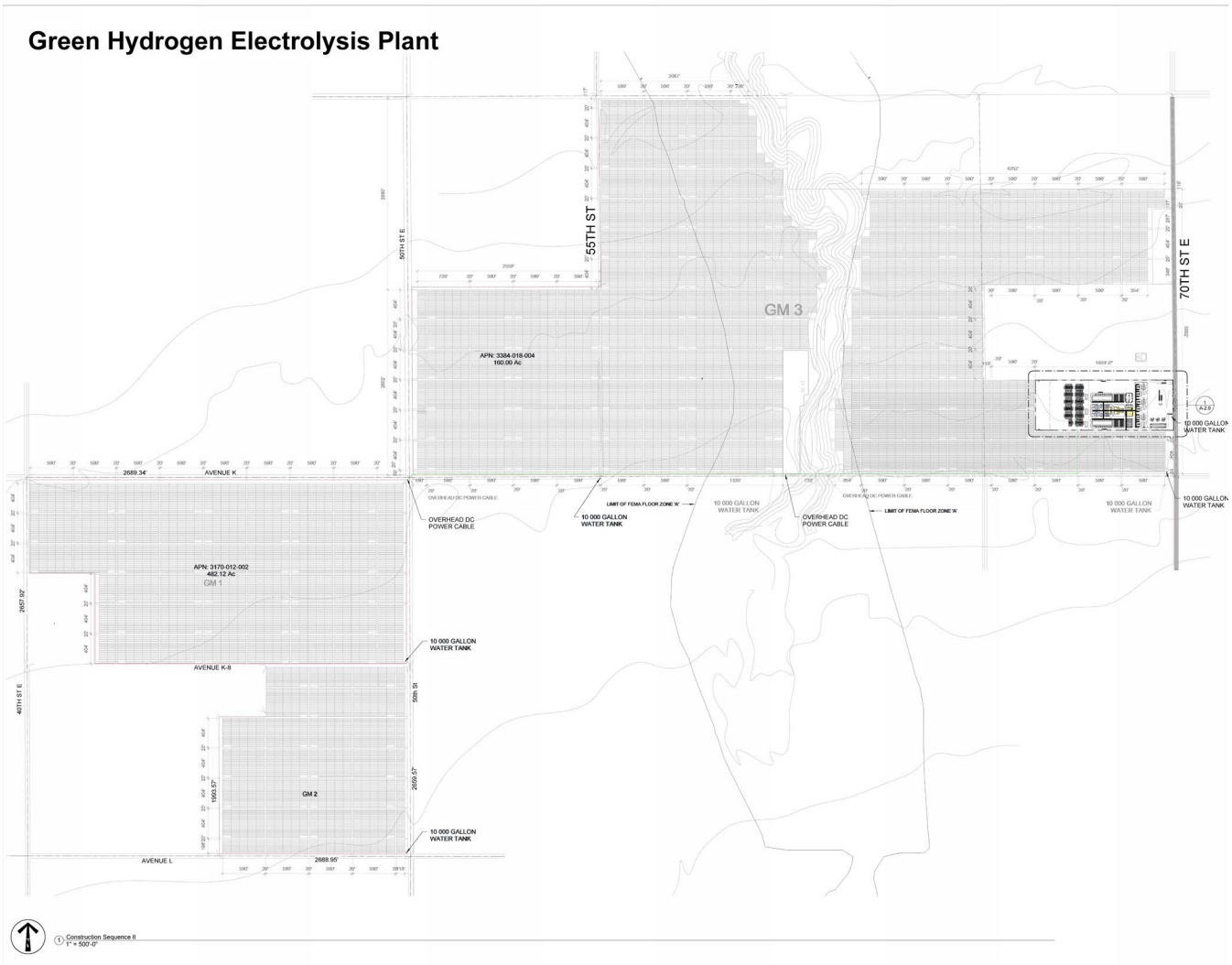

Figure 2, Conceptual Site Plan

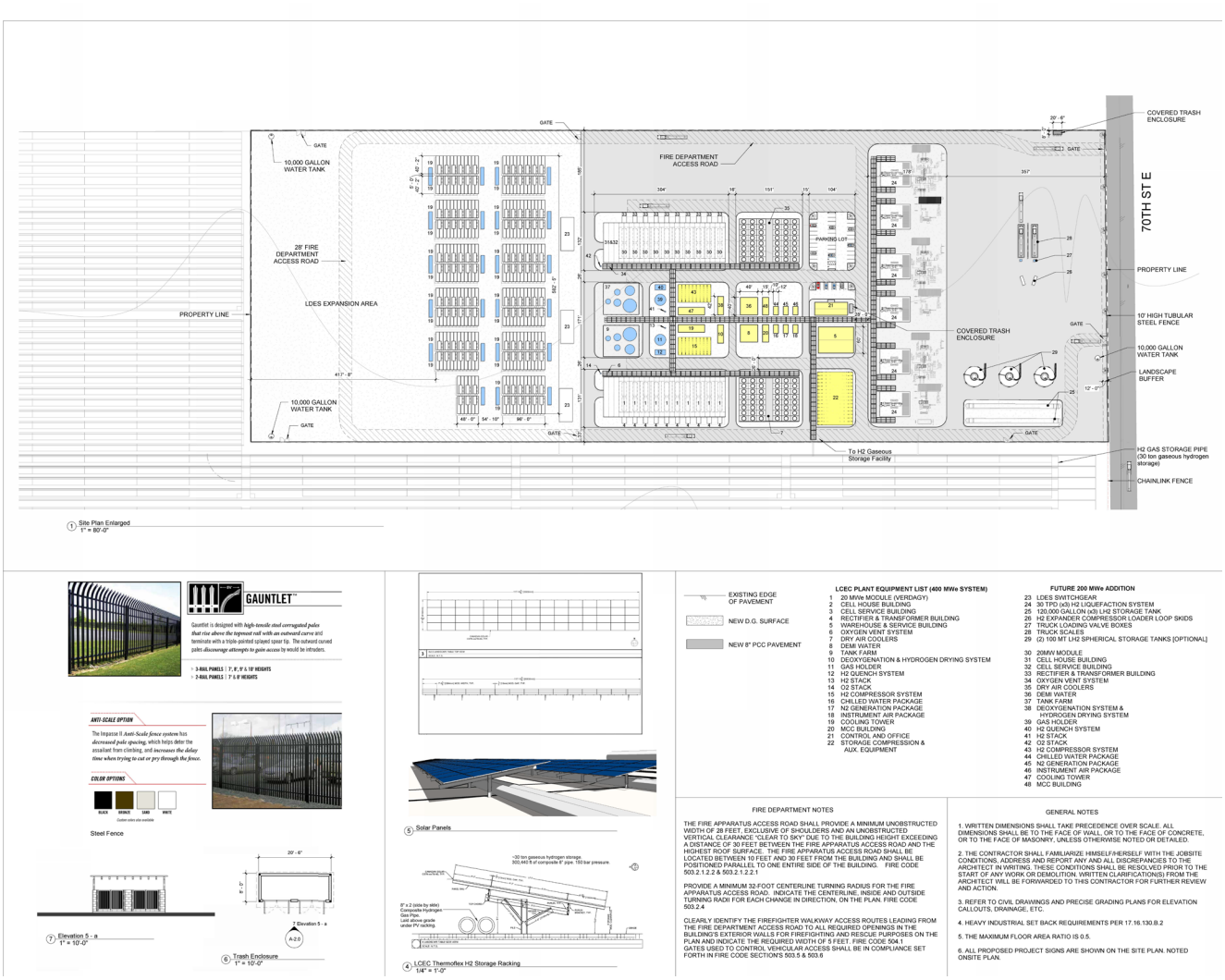

Figure 3, Hydrogen Production Detail

Solar Ground Mounted PV System

The PV solar arrays will consist of a south facing configuration for the mounting of the PV modules. The specific PV modules will be determined prior to final design and construction. The solar panels are expected to be crystalline silicon and have an approximate output of 670 to 700 watts per module.

Long Duration Energy Storage System (LDES)

After completion of construction, the site will include a vanadium redox flow 330 MWh LDES system, time shifting the electrical energy produced so a portion of the electrolyzer can operate in low solar output conditions. Vanadium redox flow battery technology are proven, commercially available and widely utilized. The electrolyte is non-toxic, non-flammable and does not decay or degrade.

Hydrogen Production

The hydrogen production facility would utilize alkaline electrolysis to generate mobility/fuel cell purity hydrogen (99.999% pure) suitable for all fuel cell uses from vehicles, heavy equipment, and aviation to the use in the manufacture of specialty metals and films. Electrolysis is the electro-chemical process by which an electrical current separates hydrogen from oxygen in the water molecule (H_2O), which yields gaseous hydrogen and oxygen. Pure gaseous hydrogen is segregated and used for fuel or a feedstock. The oxygen produced during this process at the project site will be captured. The purified oxygen will be sold to end users such as medical/healthcare or in compressed/liquified form as a specialty industrial gas for end users such as aerospace firms, water treatment, etc.

The hydrogen facility would consist of electrolyzer stacks totaling 400 MWe. Each electrolyzer is made up of an inverter unit, rectifier, electrolysis stack, gas purifier, and other equipment. Together, this equipment arrangement is commonly referred to as an “electrolyzer train.” Each train circulates a small volume of potassium hydroxide (KOH) in a closed loop. The purifier removes trace water and KOH from the hydrogen gas to meet fuel cell purity standards. The KOH is then recycled. All equipment is modularized, prefabricated, transported to the site and installed on concrete sleepers, slabs, or foundations. The modularized plant facilitates expansion and future upgrades and reduces construction noise, dust, and emissions.

At full load, the facility will consume approximately 393 gallons per minute (gpm) of water. Electrolysis requires demineralized water and about 35% of the water is determined to be unsuitable during the reverse osmosis purification process. This water has a slightly elevated salinity, but generally can either be re-circulated, or used for surface irrigation purposes. It is anticipated that the project would utilize approximately 300-acre feet of water per year and has obtained a 400 acre-feet per year water lease for the project.

After purification, the hydrogen is discharged from the production facility at a pressure of 20 bar (290 psig) and delivered to a storage compressor skid, where the pressure is increased to a maximum of 200 BAR or directed to hydrogen liquefaction section. Once the hydrogen is liquified, it is sent to either the liquid hydrogen storage or the transportation/storage vessels for distribution.

Hydrogen Storage

The green hydrogen produced would be stored on site in both gaseous and liquified forms. The gaseous storage system would be comprised of an above ground 8-inch composite pipe laid beneath the PV arrays on the southeastern portion of the project site. This piping system will store approximately 30,000 kgs of green gaseous hydrogen.

Liquified hydrogen will be stored in two 120,000 gallon above ground cylindrical horizontal tanks, or within the 3 spherical liquid hydrogen storage tanks. The hydrogen loading system will have the capacity to discharge 60 tons per day over a 14-hour period, in both liquid and gaseous form.

Hydrogen Liquefaction

Also co-located within the hydrogen production facility are three, 30 tons per day hydrogen liquefaction trains. Each 30 tons per day system consists of hydrogen compressors, nitrogen compressors, turbo expanders, heat exchangers, cold boxes, and a liquefier process control system.

Water Use

The proposed project has lease rights to 400-acre feet of agricultural ground water per year which exceeds the estimated need of approximately 300 acre feet per year. This water would be drawn from an existing well on the southeastern corner of the project site (70th Street East and Avenue K – general location)

Water use will be limited to:

- Electrolysis consumption: 394 gallons per minute (gpm) per 400 MWe is estimated over seasonal runtimes during the year to consume – 300 acre-feet per year.
- Periodic washing/cleaning of the solar panels will be performed every 180 days with an estimated usage of 4-acre feet per year. Where possible solar panel wash-down and cooling water will be recovered, filtered, and reused.
- 4-25 gpm taps will be available for sanitation and maintenance facilities. Annual use for ancillary activities is estimated to be less than 1.25-acre feet per year.
- Cooling water may be required for electrolysis stacks and rectifiers. The water volume required for this purpose is technology dependent; however, is anticipated to be a closed loop air cooled system.

Regulatory Requirements

Construction and operation of the proposed facility would be conducted in accordance with all applicable local, State, and federal regulations including OSHA, National Fire Protection Agency (NFPA), ASME, and Department of Energy to ensure safe operation. A partial list of these regulations is provided below.

California Codes

- California Fire Code (International Fire Code and Uniform Fire Code)
- California Electric Code
- California Building Code (International Building Code)
- California Mechanical Code (International Mechanical Code)
- California Unified Program Agency (Cal/EPA Certified CUPA)
- International Fuel Gas Code

National Hydrogen Specific Codes

- NFPA 1 Fire Code
- NFPA 2 Hydrogen Technologies Code
- NFPA 30A Motor Fuel-Dispensing Facilities and Repair Garages
- NFPA 55 Compressed Gases and Cryogenic Fluids Code

Federal Regulation

- OSHA Regulations 29 CFR 1920 Subpart H
- DOT Regulations including 40 CFR Part 68 Risk Management Plan (as applicable)

Component Design Standards

- ASME Boiler and Pressure Vessel 92
- ASME B31.12-Hydrogen Piping and Pipelines
- ASME B31.1-Power Piping
- ASME B31.8-Gas Transmission and Distribution Piping Systems
- ASME B31.8S – Managing System Integrity of Gas Pipelines
- ASME B31.3 – Process Piping
- CGA S Series – 1.1-3 Pressure Relief Device Standards
- CGA-G-5.5 Hydrogen Vent Systems – CGHA H Series of Standards
- SAE J2600 – Compressed Hydrogen Surface Vehicle Fueling Connection Devices
- UL 2075 Standard for Gas and Vapor Detectors and Sensors
- NFPA 77/API RP 2003: Guidance on Grounding and Static Electricity (also API RP 2003)

Hydrogen Fuel Station Developer Standards

- ISO 17268, Gaseous Hydrogen Land Vehicle Refueling Connection Devices
- SAE J2600 Compressed Hydrogen Surface Vehicle Fueling Connection Devices
- SAE J2601, Fueling Protocols for Light Duty Gaseous Hydrogen Surface Vehicles
- SAE J2601-2, Fueling Protocol for Gaseous Hydrogen Powered Heavy Duty Vehicles
- SAE J2799, Hydrogen Surface Vehicle to Station Communications Hardware and Software
- SAE J2719, Hydrogen Fuel Quality for Fuel Cell Vehicles
- HGV CSA Series Standards (currently being updated)
- SAE/ISO/GTR, Heavy Duty Fuel Cell Truck Fueling Protocols (under development)

Environmental Review

The City of Lancaster adopted the Eastside Overlay in September 2023. This area covers an area bounded by 60th Street East, 110th Street East, Avenue J and Avenue L. As part of this Overlay, the City certified a Final Program Environmental Impact Report (EIR), Lancaster East Side Project (June 2023) (SCH#2022100641). The programmatic EIR covered a larger area than what was ultimately adopted under the Overlay and extends west to 40th Street East. The entire project area is covered by the programmatic EIR.

In addition to the technical studies prepared for this project, this Initial Study tiers off the analysis contained with the programmatic EIR and is incorporated in this document by reference. As appropriate, the analysis is summarized in the respective resource area and applicable mitigation measures are listed.

9. Surrounding land uses and setting:

The project site is located in the eastern portion of the in an area that is predominantly rural and undeveloped. A majority of this area is undeveloped or under agricultural production, typically carrots, onions or alfalfa. There are also single family residences scattered throughout the area. The following describes the land uses surrounding both Site 1 and Site 2 separately for clarity. Tables 1 and 2 also describe the zoning and land uses immediately adjacent to both sites, respectively.

Site 1 is the westernmost of the two sites associated with the proposed project. The property to the north of the site is under active agricultural production. The property to the west (west of 40th St East), is partially developed with a small solar facility and the remainder of the property is vacant. The property to the south of the site (south of Avenue K-8 and west of 45th St East) consists of fallow/former agricultural fields a couple of single family residences scattered through the property and along Avenue L. The property to the south of the project site (between 45th St E and 50th St E) is agricultural fields. The property to the east of the project site (east side of 50th St E) consists of active agricultural uses, vacant desert, and single family residences. Immediately to the northwest of the project site, is a single family residential subdivision. A little over a mile north of the project site is the Lancaster Baptist Church and West Coast Bible College. Enterprise Elementary School and Eastside High School are both located approximately 0.5 miles northwest of the project site. The Lancaster Soccer Center and Skytower Park are both located approximately 0.5 miles west of the project site.

Site 2 is the easternmost of the two sites associated with the proposed project. The property to the north of the site is active agricultural uses and vacant undeveloped desert. The property to the east of the site is vacant desert along with fallow agricultural uses. The property to the south is predominantly vacant with a cannabis cultivation facility located at the southwest corner of 70th Street East and Avenue K and two single family residences on the south side of Avenue K at approximately 65th Street East. The property to the west is active agricultural uses and vacant desert. One and a half miles north of the project site is the Roosevelt Community Church and Air Force Plant 42 is located a little over 2 miles south/southwest of the project site. The Little Rock Wash runs through the middle of the site and would remain undeveloped and not part of the project.

Table 1
Zoning/Land Use Information – Site 1

Direction	Zoning		Land Use
	City	County	
North	RR-2.5	N/A	Active agricultural production
East	RR-2.5	A-2-2	Active agricultural production, single family residences, and vacant desert
South	RR-2.5	A-2-2, Palmdale	Single family residences, active agricultural production and fallow agricultural fields
West	RR-2.5, SRR, R-15,000	A-2-2	Solar facility, vacant

Table 2
Zoning/Land Use Information – Site 2

Direction	Zoning		Land Use
	City	County	
North	N/A	A-2-5	Active agricultural and vacant desert
East	RR-2.5 with Overlay	N/A	Vacant desert with fallow agricultural uses
South	RR-2.5, RR-2.5 with Overlay, Light Industrial	A-2-2	Vacant desert, single family residences and cannabis cultivation facility
West	RR-2.5	N/A	Active agricultural and vacant desert

10. Other public agencies whose approval is required (e.g. permits, financing approval, or participation agreement.)

Approvals from other public agencies for the proposed project include, but are not limited to, the following:

- California Department of Fish and Wildlife (CDFW)
- Lahontan Regional Water Quality Control District (RWQCB)
- Antelope Valley Air Quality Management District (AVAQMD)
- Los Angeles County Fire Department/CUPA
- California Energy Commission

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

In accordance with Assembly Bill (AB) 52, consultation letters for the proposed project were sent to three individuals associated with three tribes which have requested to be included. These

letters were mailed via certified return receipt mail and included copies of the site plans, cultural report, and the applicant's written project description. Table 3 identifies the tribes, the person to whom the letter was directed and the date the letter was received.

Table 3
Tribal Notification

Tribe	Person/Title	Date Received
Gabrieleno Band of Mission Indians – Kizh Nation	Andrew Salas / Chairman	January 19, 2024
Yuhaaviatam of San Manuel Nation (YSMN)	Alexandra McCleary / CRM Senior Manager	January 19, 2024
Fernandeño Tataviam Band of Mission Indians (FTBMI)	Sarah Brunzell, Manager	January 19, 2024

A response has been received from both the YSMN and the FTBMI in response to offer to consult letter that was sent out. The YSMN requested a detailed Phase I Report to be prepared for the project site. The City of Lancaster is not requiring the applicant to prepare a detailed Phase I as a majority of the project site is under active agricultural production or is developed with uses supporting agricultural operations. Staff has responded detailing the City's position and that they are willing to address any specific concerns that the tribe has and include appropriate mitigation measures. Standard mitigation measures that the YSMN routinely asks for with respect to the proper handling of previously unknown cultural resources have been added to the cultural resources section.

The FTBMI determined that the project site was located within an area that they deemed as having a medium sensitivity and a government-to-government meeting was held. All requested measures will be included in the conditions of approval for this project and could include tribal monitoring for specific areas, worker education, and standard procedures for the handling of previous unidentified cultural resources.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION: 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 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only 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.

Jocelyn Swain
Jocelyn Swain, Senior Planner

February 7, 2024
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis.

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Use. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages w3here the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a. The significance criteria or threshold, if any, used to evaluated each question; and

   b. The mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings with a state scenic highway?				X
c) In non-urbanized areas, substantially degrade the existing visual character or quality or public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views of the area?			X	

a. The City of Lancaster General Plan identifies five scenic areas in the City and immediately surrounding area (LMEA Figure 12.0-1): Foothills Area, Little Buttes, Quartz Hill, Piute Ponds, and Little Rock Wash. Views of the scenic areas, with the exception of Little Rock Wash, are not generally visible from the project site or the immediately surrounding roadways. However, views of the open desert and the mountains surrounding the Antelope Valley are available from the project site and nearby roadways including Avenue K, 70th Street East, 50th Street East, and 40th Street East. The proposed project consists of the construction and operation of a green hydrogen production facility powered solely through the use of PV solar. A majority of the project site would be developed with solar arrays, with the hydrogen production portion of the project site located along 70th Street East. The PV solar arrays would be similar in appearance to other solar facilities located through the City and would not prevent the views of the open desert and mountain ranges surrounding the Antelope Valley. Additionally, the solar facilities would be fenced and have a landscaping buffer to help screen the views of the site from the public roadways. This would be a change from the current views of the agricultural production on the project site; however, it would not result in a significant aesthetic impact as the currently available views would continue to be available from the surrounding roadways and project site. Therefore, impacts would be less than significant.

The project site is currently predominantly RR-2.5, which allows for rural residential uses and a portion of the project site is located within the overlay zone (east of 60th St E). The overlay zone allows for light industrial uses, including alternative energy and hydrogen production. Although the hydrogen production portion of the project would be would be different than what has been previously developed in the area; PV solar has been permitted with a CUP since 2010. The overlay zone allows for a maximum height of 50 feet; however, increases in height can be permitted with the CUP and the maximum height of the three spherical hydrogen storage units would be 55 feet and would have appropriate setbacks and screening to buffer the site from 70th Street East. Therefore, impacts would be less than significant.

Little Rock Wash is an officially designated scenic resource within the City of Lancaster and runs through the middle of Site 2 at approximately 60th Street East. No development would occur within Little Rock Wash or the 100 foot buffer on both sides of the wash as this is not within the lease area. Development outside of this buffer area would be PV solar panels with the hydrogen production elements occurring further to the east. Views of the Little Rock Wash corridor would still be available to the public from Avenue K. As such, impacts to the view corridor would be less than significant.

b. The project site is not located along or near any designated State Scenic Highways. There are no State designated scenic routes or highways within the City of Lancaster. The City's Master Environmental Assessment identifies scenic roadways within the City limits and these include: Avenue K (110th St W to 90th St W), 90th St W (between Avenue K to Avenue A), 60th Street West (Ave M to Ave K), Avenue M (60th St W to 10th St W), and the Antelope Valley Freeway. These roadways are not located in close proximity to the project site. Additionally, there are there are minimal trees and no rock outcroppings. Therefore, no impacts would occur.

c. The proposed project is consistent with the zoning code as it pertains to this use and zone (RR-2.5 and the Overlay zone). Development of the PV solar fields would meet the required setbacks with respect to fencing, landscaping and fire department perimeter access roads. The development of the hydrogen production component would comply with the development standards identified in the adopted Overlay zone. Therefore, impacts would be less than significant.

d. The ambient lighting in the vicinity of the project site is low due to the relatively rural and developed nature of the project area in the eastern portion of the City of Lancaster. Primary sources of lighting are due to the occasional street lights, vehicle headlights and the scattering of residential uses. Some security lighting is generated from the cannabis cultivation facility at 70th Street East and Avenue K.

Additional sources of light and glare would be generated by the proposed project. Specifically, additional lighting would be generated from the hydrogen production portion of the proposed project from security lighting, building lighting, and vehicle headlights. All lighting on the project site would be shielded and focused downward. Additionally, the proposed project may generate additional sources of glare from the PV panels and some of the equipment on the site. However, PV panels are designed to absorb as much sunlight as possible while reflecting minimal amounts. Additionally, the buildings/structures on the hydrogen component of the project site would be constructed with non-reflective materials to the extent feasible and painted

so that shiny surfaces are not present. As such, impacts associated with light and glare would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?		X		
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

a. The California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program (FMMP) tracks and categorizes land with respect to agricultural resources. Land is designated as one of the following and each has a specific definition: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-Up Land and Other Land.

The maps for each county are updated every two years. The latest available maps for Los Angeles County are from 2018. According to the 2018 maps, most of the project site is designated as Prime Farmland with some of the site designated as grazing land. Prime Farmland is defined as "lands with the combination of physical and chemical features best able to sustain long-term production of agricultural crops. The land must be supported by a developed irrigation water supply that is dependable and of adequate quality during the growing season. It also must have been used for production of irrigated crops at some time during the four years before mapping data was collected." Grazing lands are "lands in which the existing vegetation is suited to the grazing of livestock.

The portions of the project site that are designated as Prime Farmland (see Figure 4) are currently under agricultural production. With the construction of the proposed project, this land would be converted to either photovoltaic solar fields or the hydrogen production facility along 70th Street East. Minimal grading would occur on the portions of the project site that will be developed with the solar panels; however, the proposed project would result in the permanent loss of prime agricultural farmland. As such, this would be a significant environmental impact. However, a mitigation measure was identified in the programmatic EIR and has been incorporated below. This mitigation measure shall be based on the 2018 Farmland Maps unless the 2020 Farmland Maps for Los Angeles County are released prior to the issuance of any construction related permits. With implementation of the below listed mitigation measure, impacts related to the conversion of farmland would be less than significant.

Figure 4, Farmland Map

Mitigation Measures

1. The applicant shall mitigate the project's impacts to Prime Farmland through the permanent preservation of off-site agricultural land within the County of Los Angeles of equal or better agricultural, at a ratio of 1:1 for net acreage before conversion, through one of the following methods:

   a. Funding and purchase of agricultural conservation easements (to be managed and maintained by an appropriate entity);

   b. Purchase of credits from an established agricultural farmland mitigation bank;

   c. Contribution of agricultural land or equivalent funding to an organization that provides for the preservation of farmland;

   d. Participation in any agricultural land mitigation program that provides equal or more effective mitigation than the measures listed above; or

   e. Evidence that all of the foregoing measures are infeasible.

   Prior to issuance of a grading or building permit, the project applicant shall provide to the City of Lancaster Community Development Department within evidence of the completion of the implemented off-site permanent preservation method(s) or that such preservation is infeasible.

b. The project site is zoned a mix of RR-2.5 (Rural Residential, minimum lot size 2.5 acres) and RR-2.5 with the Eastside Overlay. These zonings allow for some types of light agricultural uses. The areas surrounding the project site that are located within the County are also zoned for agricultural uses. Most of the project site, and some of the surrounding area, are also utilized for agricultural production. However, the conversion of the project site would not prevent surrounding areas from continuing agricultural production and none of the properties are subject to a Williamson Act contract. Therefore, no impacts would occur.

c-d. According to the City of Lancaster's General Plan, there are no forests or timberlands located within the City of Lancaster. Therefore, the proposed project would not result in the rezoning of forest or timberland and would not cause the loss of forest land or the conversion of forest land to non-forest land. Therefore, no impacts would occur.

e. See responses to Items IIa-d.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		X		
c) Expose sensitive receptors to substantial pollutant concentrations?		X		
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

a. Development proposed under the City's Genera Plan would not create air emissions that exceed the Air Quality Management Plan (GPEIR pgs. 5.5-21 to 5.5-22). The proposed project is consistent with the General Plan, Zoning Code, and development standards of the Overlay zone. Additionally, air emissions generated by the proposed project would be less than the established thresholds (see III.b) and the proposed project would comply with all Antelope Valley Air Quality Management District (AVAQMD) Rules and Regulations. Therefore, the proposed project would not conflict with or obstruct implementation of the Air Quality Management Plan and no impacts would occur.

b. An air quality study was prepared for the proposed project by MS Hatch Consulting and documented in a report entitled "Air Quality Study – 70th Street East, Lancaster Clean Energy Site – Lancaster, CA" and dated September 20, 2023.

The emissions associated with the proposed project consist of construction and operational emissions from the development. Construction emissions are temporary and include emissions of criteria pollutants and greenhouse gases from construction activities during site preparation, grading, building construction, paving and architectural coatings. Operational emission consists of area sources (architectural coatings, consumer products, landscaping equipment), energy use (electricity and natural gas), mobile sources (commuting), solid waste disposal and water and wastewater use.

Construction emissions were calculated using the California Emissions Estimator Model (CalEEMod) Version 2020.4.0 with inputs based on the model's defaults and information provided by the engineer. Table 3 provides the anticipated schedule for construction. Based on input from the engineer, the project will not require the import or export of soil and as such, these trips were not included in the emissions calculations. Additionally, the construction of the proposed project would comply with all AVAQMD Rules and Regulations regarding dust control and VOC content in architectural coatings. All other input information can be found in the appendix to the air quality report.

Operational emissions consist of area sources, energy use, mobile sources, solid waste disposal, and water/wastewater use as discussed above. Displaced emissions from the onsite electricity production were modeled based on an estimated electricity generation of 1,300 gigawatt hours (GWh) annually. For mobile sources, it was assumed that there would be 70 heavy duty truck and 36 employee trips per day. All trucks will be zero-emission Class 8 trucks. However, the default emission factors in CalEEMod were utilized to provide a conservative emissions estimate for the project. Table 4 and Table 5 provide the annual and daily construction and operations emissions summaries for the proposed project. As can be seen in these tables, the emissions associated with the construction and operation of the proposed project are substantially below the AVAQMD's established thresholds and impacts would be less than significant.

Additionally, the Programmatic EIR for the Eastside Overlay requires two mitigation measures be included for all projects within the Overlay zone to ensure that any construction equipment on the project site is maintained in good working order and a traffic control plan is implemented to ensure that any potential traffic congestion is minimized during construction. These measures are identified below. With implementation of the identified measures, emissions would be further reduced and impacts would be less than significant.

Table 3
Construction Schedule

Construction Phase	Start Date	End Date	Days/Week	Total Days
Demolition	N/A	N/A	N/A	N/A
Site Preparation	1/1/24	2/1/24	5	24
Grading	2/2/24	3/15/24	5	31
Building Construction	3/16/24	11/26/24	5	182
Architectural Coating	6/6/24	1/1/25	5	150
Paving	11/27/24	1/1/25	5	26

Table 4
Annual Construction and Operational Emissions Summary

Emissions Source	Total Emissions (tons per year)						
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$	CO_2e (MT/yr)
Construction Emissions							
Year 1 (2024) Construction Emissions	1.50	2.95	3.93	0.01	0.71	0.29	948
Year 2 (2025) Construction Emissions	0.01	<0.01	0.01	<0.01	<0.01	<0.01	1
Operational Emissions							
Area Sources	1.74	<0.01	<0.01	0.00	<0.01	<0.01	<0.01
Energy	0.04	0.36	0.3	<0.01	0.03	0.03	-231,345
Mobile	0.05	0.89	0.58	<0.01	0.19	0.05	407
Waste	N/A	N/A	N/A	N/A	0.00	0.00	255
Water	N/A	N/A	N/A	N/A	0.00	0.00	364
Total Operational Emissions	1.83	1.25	0.89	0.01	0.21	0.08	-230,319
Significance Threshold	25	25	100	25	15	12	100,000

Table 5
Daily Construction and Operational Emissions Summary

Emissions Source	Total Emissions (pounds per day)						
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$	CO_2e (MT/yr)
Construction Emissions							
Year 1 (2024) Construction Emissions	18.49	32.42	36.78	0.10	9.04	5.11	10,070
Year 2 (2025) Construction Emissions	16.37	9.91	19.36	0.03	1.28	0.65	3,245
Operational Emissions							
Area Sources	9.56	<0.01	0.05	0.00	<0.01	<0.01	<0.01
Energy	0.22	1.97	1.65	0.01	0.15	0.15	2,378
Mobile	0.30	4.64	3.29	0.02	1.03	0.30	2,487
Waste	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Water	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Operational Emissions	10.08	6.61	4.99	0.03	1.18	0.45	4,864
Significance Threshold	137	137	548	137	82	65	548,000

Mitigation Measures

2. The City of Lancaster Community Development Department shall confirm that the grading plan, building plans, and specifications require the ozone precursor emissions from construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications.

3. The applicant shall submit a Construction Management Plan to the City of Lancaster Public Works Director prior to the issuance of a grading permit. To reduce traffic congestion during temporary construction activities, a traffic control plan shall include, as deemed necessary by the Public Works Director, the following: temporary traffic controls such as a flag person during all phases of construction to maintain smooth traffic flow, dedicated turn lanes for movement of construction trucks and equipment on- and off-site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours, consolidating truck deliveries, and rerouting of construction trucks away from congested streets or sensitive receptors. Traffic control devices included in the Traffic Control Plan shall be developed in compliance with the requirements of the most current standards. The Construction Management Plan shall also include construction phasing, personnel parking, and material storage areas that will all contribute to reducing traffic congestion.

c. The proposed project would not expose sensitive receptors to substantial pollutant concentrations. The AVAQMD CEQA Guidelines detail that sensitive receptor land uses consist of residences, schools, daycare centers, playgrounds and medical facilities. While there are sensitive receptors located in the immediate vicinity of portions of the project site, they are located near the photovoltaic solar arrays which do not generate emissions.

Localized concentrations of carbon monoxide are typically associated with idling vehicles, particularly in highly congested areas. The areas of primary concern are congested roadway intersections that experience high levels of vehicle traffic with degraded levels of service; signalized intersections that operate at an unacceptable level of service E of F are of particular concern. The project site is located in an area with minimal amounts of traffic and no signalized intersections. As such, impacts associated with localized concentrations of carbon monoxide would not occur.

Additionally, the AVAQMD CEQA Guidelines identifies types of uses and specified distances from the use to the receptor in which it must be evaluated to determine if it exposes sensitive receptors to substantial pollutant concentrations. These uses include industrial projects, distribution centers, major transportation project, dry cleaners using perchloroethylene and gasoline dispensing facilities. The proposed project does not fall into any of these categories and therefore, the project was not analyzed for potential health risks to sensitive receptors.

However, since the construction of the proposed project would result in the disturbance of the soil, it is possible individuals could be exposed to Valley Fever. Valley Fever or coccidioidomycosis, is primarily a disease of the lungs caused by the spores of the *Coccidioides immitis* fungus. The spores are found in soils, become airborne when the soil is disturbed, and are subsequently inhaled into the lungs. After the fungal spores have settled in the lungs, they change into a multicelluar structure called a spherule. Fungal growth in the lungs occurs as the spherule grows and bursts, releasing endospores, which then develop into more spherules.

Valley Fever is not contagious, and therefore, cannot be passed on from person to person. Most of those who are infected would recover without treatment within six months and would have a life-long immunity to the fungal spores. In severe cases, especially in those patients with rapid and extensive primary illness, those who are at risk for dissemination of disease, and those who have disseminated disease, antifungal drug therapy is used.

Nearby sensitive receptors as well as workers at the project site could be exposed to Valley Fever from fugitive dust generated during construction. There is the potential that cocci spores would be stirred up during excavation, grading, and earth-moving activities, exposing construction workers and nearby sensitive receptors to these spores and thereby to the potential of contracting Valley Fever. However, implementation of Mitigation Measures 19 (see Geology and Soils) which requires the project operator to implement dust control measures in compliance with AVAQMD Rule 403, and implementation of Mitigation Measure 4, below, which would provide personal protective respiratory equipment to construction workers and provide information to all construction personnel and visitors about Valley Fever, the risk of exposure to Valley Fever would be minimized to a less than significant level.

Mitigation Measures

4. Prior to ground disturbance activities, the project operator shall provide evidence to the Community Development Director that the project operator and/or construction manager has developed a "Valley Fever Training Handout", training, and schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, handout(s) and schedule shall be submitted to the Community Development Director within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Community Development Director regarding the "Valley Fever Training Handout" and Session(s) shall include the following:

    - A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session.
    - Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever.
    - Training on methods that may help prevent Valley Fever infection.
    - A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Where respirators are required, the equipment shall be readily available and shall be provided to employees for use during work. Proof that the demonstration is included in the training shall be submitted to the county. This proof can be via printed training materials/agenda, DVD, digital media files, or photographs.

    The project operator also shall consult with the Los Angeles County Public Health to develop a Valley Fever Dust Management Plan that addresses the potential presence of the

Coccidioides spore and mitigates for the potential for Coccidioidomycosis (Valley Fever). Prior to issuance of permits, the project operator shall submit the Plan to the Los Angeles County Public Health for review and comment. The Plan shall include a program to evaluate the potential for exposure to Valley Fever from construction activities and to identify appropriate safety procedures that shall be implemented, as needed, to minimize personnel and public exposure to potential Coccidioides spores. Measures in the Plan shall include the following:

- Provide HEP-filters for heavy equipment equipped with factory enclosed cabs capable of accepting the filters. Cause contractors utilizing applicable heavy equipment to furnish proof of worker training on proper use of applicable heavy equipment cabs, such as turning on air conditioning prior to using the equipment.
- Provide communication methods, such as two-way radios, for use in enclosed cabs.
- Require National Institute for Occupational Safety and Health (NIOSH)-approved half-face respirators equipped with minimum N-95 protection factor for use during worker collocation with surface disturbance activities, as required per the hazard assessment process.
- Cause employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144).
- Provide separate, clean eating areas with hand-washing facilities.
- Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment for excess soil material and clean, as necessary, before equipment is moved off-site.
- Train workers to recognize the symptoms of Valley Fever, and to promptly report suspected symptoms of work-related Valley Fever to a supervisor.
- Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever.
- Work with a medical professional, in consultation with the Los Angeles County Public Health, to develop an educational handout for on-site workers and surrounding residents within three miles of the project site, and include the following information on Valley Fever: what are the potential sources/ causes, what are the common symptoms, what are the options or remedies available should someone be experiencing these symptoms, and where testing for exposure is available. Prior to construction permit issuance, this handout shall have been created by the project operator and reviewed by the project operator and reviewed by the Community Development Director. No less than 30 days prior to any work commencing, this handout shall be mailed to all existing residences within a specified radius of the project boundaries as determined by the Community Development Director. The radius shall not exceed three miles and is dependent upon the location of the project site.
- When possible, position workers upwind or crosswind when digging a trench or performing other soil-disturbing tasks.

- Prohibit smoking at the worksite outside of designated smoking areas; designated smoking areas will be equipped with handwashing facilities.
- Post warnings on-site and consider limiting access to visitors, especially those without adequate training and respiratory protection.
- Audit and enforce compliance with relevant Cal OSHA health and safety standards on the job site.

d. Construction and operation of the proposed project is not anticipated to produce significant objectionable odors. Most objectionable odors come from land uses such as agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project is a green hydrogen production plant powered by PV solar. As such, it does not have any of the uses typically considered odor producing.

Potential sources that may emit odors during construction activities include the application of coatings such as asphalt pavement, paints and solvents, and emissions from diesel equipment. Standard construction requirements that limit the time of day when construction may occur as well as AVAQMD Rule 442 that limits VOC content in solvents would minimize odor impacts from construction. Therefore, odor impacts would be less than significant.

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

a. A habitat assessment and aquatic delineation was conducted for the project site by Tetra Tech and documented in a report entitled "Aquatic Resources Delineation and Habitat Assessment, Lancaster Clean Energy Center, Lancaster, Los Angeles County, California" and dated July 2023. This report focuses on the undeveloped areas of the project site, particularly the area along the Little Rock Wash. The areas which are under active agricultural production were not surveyed and neither was the developed area around the farmhouse (along 60th St E just north of Avenue

K). The area around the farmhouse is not part of the proposed project. Additionally, no work will be occurring within the confines of Little Rock Wash or within a 100-foot buffer on either side.

Prior to conducting the survey, a database review was conducted regarding plant and wildlife species in or near the project site. These databases include the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB) and the California Native Plant Society (CNPS) database. Based on this review, a list of sensitive plant and wildlife species that could potentially occur was compiled.

A delineation of Little Rock Wash within the study area and a habitat assessment was conducted on May 23, 2023. Tables 6 and 7, provide a list of observed plant and wildlife species, respectively.

Table 6
Observed Plant Species

Giant reed (*Arundo donax*)	Groundcherry (*Physalis* sp.)	Barley (*Hordeum vulgare*)
Common Mediterranean grass (*Schismus barbatus*)	Indian rice grass (*Stipa hymenoides*)	Annual burweed (*Ambrosia acanthicarpa*)
Burro bush (*Ambrosia dumosa*)	Cheese brush (*Ambrosia salsola*)	Russian thistle (*Salsola tragus*)
Fiddleneck (*Amsinkia menziesii*)	Dove weed (*Croton setiger*)	Crinkle mat (*Tiquilia plicata*)
Sahara mustard (*Brassica tournefortii*)	Salt heliotrope (*Heliotropium curassavicum*)	Foxtail chess (*Bromus madritensis*)
Lacy phacelia (*Phacelia tanacetifolia*)	Curly leaved dock (*Rumex crispus*)	Fremont cottonwood (*Populus fremontii*)
Jimsonweed (*Datura stramonium*)	Rabbit brush (*Ericameria nauseosus*)	

Table 7
Observed Animal Species

Mourning dove (*Zenaida macroura*)	American raven (*Corvus corax*)	House finch (*Haemorhous mexicanus*)
California quail (*Gallipepia californica*)	Cottontail rabbit (*Sylvilagus audubonii*)	California ground squirrel (*Otospermophilus beecheyi*)
Side blotch lizard (*Uta stansburiana*)	Western whiptail (*aspidoscelis tigris*)	

No sensitive plant species would be expected to occur on the project site. No Joshua trees are present on the project site and as such no impacts would occur. Lancaster milk-vetch (*Astragalusd preussii* var. *laxiflorus*), Alkali mariposa lily (*Calochortus striatus*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), Mohave spineflower (*Chorizanthe spinosa*), and Golden goodmania (*Goodmania luteola*) are all presumed to be absent from the project site due to due to lack of suitable habitat. White pygmy-poppy (*Canbya candida)* and sagebrush loeflingia *(Loeflingia squarrosa* var *artemisiarum*) have a low probability of occurring due to the presence

of some suitable sandy habitat within Little Rock Wash, even though it is highly disturbed. However, the proposed project would not be constructing anything in Little Rock Wash or within a 100-foot buffer on both sides of the wash. Therefore, no impacts to these two species would occur.

Wildlife species observed to the survey are identified in Table 7. In addition to the observed species, sign of kangaroo rat (*Dipodomys* sp.) was observed. No sensitive wildlife species were observed during the survey; however, the project site contains habitat for burrowing owls due to the presence of California ground squirrels and their burrows. These burrows can be utilized by burrowing owls as cover sites and previous observations have been made within two to five miles of the project site. As such, mitigation measures for burrowing owls have been included as identified in the Final Programmatic EIR. With incorporation of the mitigation measures, impacts to this species would be less than significant.

The following special status wildlife species were determined to be absent from the project site due to the lack of suitable habitat for these species: Mohave ground squirrel (*Xerospermophilus mohavensis*), Soledad shoulderband (*Helminthoglypta fontiphila*), Northern California legless lizard (*Anniella pulchra*), and Desert tortoise (*Gopherus agassizii*). Small patches of suitable habitat are present for the Coast horned lizard (*Phrynosoma blainvillii*) along the edges of Little Rock Wash; however, the proposed project would not be developing in Little Rock or within a 100-foot buffer of the wash. Therefore, no impacts would occur.

The project does contain suitable foraging habitat for a variety of bird species including raptors due to the presence of prey in the agricultural fields. While no raptors were observed during the survey, a mitigation measure requiring preconstruction surveys is included below to ensure impacts are less than significant. Additionally, a mitigation measure has been included in the agricultural resources section requiring the conservation of prime agricultural land at a 1:1 ratio which would ensure the continued existence of foraging habitat for these species. With implementation of these measures, impacts would be less than significant.

Mitigation Measures

5. A preconstruction burrowing owl survey shall be conducted in accordance with the survey methods described in the California Department of Fish and Wildlife (CDFW) March 7, 2012, *Staff Report on Burrowing Owl Mitigation* to determine if any owls have moved onto the project site. The habitat assessment/preconstruction survey shall determine whether or not protocol-level surveys are needed for burrowing owls.

   All survey efforts shall be conducted by a qualified biologist. If protocol-level surveys are necessary, survey protocol for breeding season owl surveys require four survey visits: 1) at least one site visit between February 15 and April 15; and, 2) a minimum of three survey visits, at least three weeks apart, between April 15 and July 15, with at least one visit after June 15. If no burrowing owls or occupied burrows are detected, project activities may begin, and no additional avoidance and minimization measures shall be required. If an occupied burrow is found outside, but within 500 feet, of the development footprint, the qualified biologist shall establish a “no disturbance” buffer around the burrow location(s). The size of the “no-disturbance” buffer shall be determined in consultation with CDFW and be based on the species status (i.e., breeding, non-breeding) and proposed level of disturbance. If an

occupied burrow is found within the development footprint and cannot be avoided, a burrowing owl exclusion and mitigation plan shall be prepared and submitted to CDFW for approval prior to initiating project activities.

6. A nesting bird survey shall be conducted by a qualified biologist within 14 days prior to the start of any construction/ground disturbing activities. The qualified biologist shall survey all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. If no active bird nests are detected during the clearance survey, project activities may begin, and no additional avoidance and minimization measures shall be required. If an active bird nest is found, the species shall be identified, and a "no disturbance" buffer shall be established around the active nest. The size of the "no disturbance" buffer shall be increased or decreased based on the judgement of the qualified biologist and level of activity and sensitivity of the species. At a minimum, the buffer shall be at least 500 feet around active raptor nests and 50 feet around nests of migratory bird species. The qualified biologist shall periodically monitor any active bird nests to determine if project-related activities occurring outside the "no-disturbance" buffer disturb the birds and if the buffer shall be increased. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the "no-disturbance" buffer may occur following an additional survey by the qualified biologist to search for any new bird nests in the restricted area.

b. Little Rock Wash runs through the project site between Avenue K and Avenue J at approximately 60th Street East. As discussed above, an aquatic resources delineation was conducted as part of the biological report to document the ordinary high water mark for Little Rock Wash. Little Rock Wash has been subject to past water flow that has caused incision of the channel. The incised areas were observed to be vegetated by the same mixture of native and non-native plants observed in the adjacent areas outside of the agricultural fields. A total of 6.47 acres of riverine habitat potentially subject to regulation as a water of the state was determined to existing within the study area; within the project site boundaries, a total of 5.31 acres was determined to be present.

As previously discussed, the proposed project would not be developing any of the property within Little Rock Wash or a 100-foot buffer on both sides as it is not part of the project's lease. Additionally, development of the solar array portions of the project site would be required to minimize grading and comply with best management practices that would prevent impacts to the Little Rock Wash. As such, impacts to potential waters of the state would not occur. A mitigation measure has been included to ensure that the applicant is aware of instances which would trigger a permit from either, or both, the California Department of Fish or the Regional Water Quality Control Board.

Mitigation Measures

7. If project activities will: 1) divert or obstruct the natural flow of Little Rock Wash; 2) change the bed, channel, or bank of Little Rock Wash; 3) use materials from Little Rock Wash; or 4) deposit or dispose of material into Little Rock Wash, a Streambed Alteration Agreement permit issued by the California Department of Fish and Wildlife and a Waste Discharge Report permit issued by the Regional Water Quality Control Board – Lahontan Region will

be required. This permits details all project impacts to the unnamed drainage plus mitigation for compensating those losses.

c. There are no State or federally protected wetlands on the project site as defined by Section 404 of the Clean Water Act. Therefore, no impacts would occur.

d. As stated in the Programmatic EIR, the main natural corridor in the area is the Little Rock Wash, which runs from south to north, originating in the San Gabriel Mountains as Little Rock Creek. Little Rock Wash is not recognized as a corridor in the City's General Plan or in the *South Coast Missing Linkages: A Wildland Network for the South Coat Ecoregion.* However, Little Rock Wash is recognized by the County as part of the Antelope Valley SEA, which provides dispersal and migration opportunities between the San Gabriel Mountains and the playa lakes on Edwards Air Force Base. Other potential migratory pathways within the project site would generally be opportunistic across open space areas between or through agricultural fields; however, these potential migratory pathways would likely be reduced by the presence of surrounding roadways and existing agricultural, commercial and residential developments…as these developments have fragmented the connection. Elevated noise levels, vehicle roadway/traffic, lighting, and presence of humans and domestic pets are also expected to further decrease the suitability of the project site to be used as a wildlife movement corridor or linkage."

The proposed project would convert the existing agricultural fields into solar fields with a hydrogen production facility located on 70th Street East, just north of Avenue K. However, Little Rock Wash along with a 100' buffer on both sides would not be developed as part of the proposed project. As such, it would continue to act as a corridor between undeveloped lands to the south and the undeveloped lands north of the City. Additionally, small wildlife would still be able to move through the solar fields similarly to existing agricultural fields. As such, impacts would be less than significant.

e. The proposed project would not conflict with any local policies or ordinances, such as a tree preservation policy, protecting biological resources. The proposed project would be subject to the requirements of Ordinance No. 848, Biological Impact Fee, which requires the payment of $770/acre to offset the cumulative loss of biological resources in the Antelope Valley as a result of development. This fee is required of all projects occurring on previously undeveloped land regardless of the biological resources present and is utilized to enhance biological resources through education programs and the acquisition of property for conservation. Therefore, no impacts would occur.

f. There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or State habitat conservation plans which are applicable to the project site. The West Mojave Coordinated Habitat Conservation Plan only applies to federal land, specifically land owned by the Bureau of Land Management. In conjunction with the Coordinated Management Plan, a Habitat Conservation Plan (HCP) was proposed which would have applied to all private properties within the Plan Area. However, this HCP was never approved by the California Department of Fish and Wildlife nor was it adopted by the local agencies (counties and cities) within the Plan Area. As such, there is no HCP that is applicable to the project site and no impacts would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resources pursuant to §15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?				X

a-c. A cultural resource study was conducted for the project site by Tetra Tech and documented in a report entitled "Cultural Resource Desktop Study Record Search Results for the Lancaster Clean Energy Center Project, Los Angeles County, California" and dated July 27, 2023. This report detailed the results of a cultural resources record search and literature review to determine the potential for impacts to cultural resources. A field survey of the project site was not required by the City or conducted due a majority of the project site being under active agricultural production or developed with agricultural support uses (e.g., farmhouses/equipment yards). These developed areas would not be removed or impacted during project construction.

A records search was conducted at the South-Central Coastal Information Center (SCCIC) at California State University, Fullerton on June 15, 2023. The records search included the database of survey reports and overviews as well as documented cultural resources, cultural landscapes and ethnic resources for the project site as well as a one mile buffer. Additionally, the following resources were also reviewed:

- California Office of Historic Preservation Historic Properties Directory;
- National Register of Historic Places;
- California Office of Historic Preservation Archaeological Determinations of Eligibility;
- California Inventory of Historical Resources/CRHR;
- California Points of Historical Interest; and
- California Historical Landmarks,

The records search for the Caruso property (Site 1) indicated that there were three previously conducted reports/surveys that included at least a portion of the site and 15 surveys have been conducted within a mile. No cultural resources have been previously recorded on Site 1; however, 5 resources were identified within a mile including two historic building remains/refuse

areas (P-19-002953 and P-19-004157); one refuse dump of cans and bottles (P-19-003817); one refuse scatter (P-19-120057); and one prehistoric isolated flake and shell scatter (P-19-120056). The prehistoric site and the refuse scatter are located with the Bolthouse property (Site 2).

Two previously conducted surveys were conducted within the Bolthouse property and nine previous surveys have been conducted within a mile. Two previously recorded cultural resources were found within the Bolthouse property as identified above. These two archaeological sites were not recorded to detail and little information exists regarding the artifact distribution, field condition, or status. Additionally, one of the surveys (Report L-1811) notes three prehistoric isolates (flakes) which were not formally recorded nor are the locations on record with the SCCIC. Additionally, no human remains, including those interred outside of formal cemeteries, were identified on the project site.

The project site has a moderate to high sensitivity for potential precontact and historic era archaeological resources on the surface and within undisturbed native subsurface deposits. Therefore, there is a possibility that buried archaeological deposits may be encountered during project-related construction activities. Therefore, mitigation measures have been identified below to address impacts associated with discovery of previously unknown cultural resources.

Additionally, the area was identified as being moderately sensitive for cultural resources through the AB 52 process with the FTBMI for a variety of confidential reasons. In order to address their concerns, specific mitigation measures have been added below. The YSMN also responded to the AB 52 notification requesting the preparation of a Phase I Cultural Resources Report. The City is not requiring this report to be prepared as a majority of the project site is under active agricultural production. The City will continue to work with the YSMN to address any specific concerns and the routinely requested mitigation measures have been included below. With incorporation of the requested measures, impacts would be less than significant.

Mitigation Measures

8. Prior to the start of any ground-disturbing activities, a cultural resource Worker Environmental Awareness Training shall be conducted for all construction personnel working on the project site by a qualified archaeologist. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified archaeologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of archaeological resources. A sign-in sheet shall be completed, retained by the project construction contractor for the duration of project construction to demonstrate attendance at the awareness training, and provided to the lead agency upon the completion of project construction. If requested, a local tribal representative(s) shall be invited to participate in the environmental training to discuss or provide text from a tribal cultural perspective regarding the cultural resources within the region.

9. A qualified archaeologist shall prepare an Inadvertent Discovery Plan for the project that outlines procedures and contacts for an inadvertent discovery. During project construction, should subsurface archaeological resources be discovered, all activity within 60 feet of a "find" shall stop and the qualified archaeologist shall be contacted to assess the significance of the find. The archaeologist shall have the authority to halt any construction activities that could impact potentially significant resources. If any find is determined to be significant, the archaeologist shall determine, in consultation with the implementing agencies and any local Native American groups expressing interest, appropriate avoidance measures or other appropriate mitigation. Ground-disturbing activities shall not continue within the buffer area until the discovery has been assessed and the appropriate approvals are obtained.

10. The project applicant shall retain a professional Tribal Monitor procured by the Fernandeño Tataviam Band of Mission Indians to observe all ground-disturbing activities including, but not limited to, clearing, grubbing, grading, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, leveling, driving posts, auguring, blasting, stripping topsoil or similar activity. One Tribal Monitor shall be assigned to each simultaneously occurring ground-disturbing activity. Tribal Monitoring Services will continue until confirmation is received from the project applicant, in writing, that all scheduled activities pertaining to Tribal Monitoring are complete. If the Project's scheduled activities require the Tribal Monitor(s) to leave the Project for a period of time and return, confirmation shall be submitted to the Tribe by Client, in writing, upon completion of each set of scheduled activities and 5 days' notice (if possible) shall be submitted to the Tribe by project applicant, in writing, prior to the start of each set of scheduled activities. If cultural resources are encountered, the Tribal Monitor will have the authority to request that ground-disturbing activities cease within 60 feet of discovery and a qualified archaeologist meeting Secretary of Interior standards retained by the project applicant as well as the Tribal Monitor shall assess the find.

11. If cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards retained by the project applicant shall assess the find. Work on the portions of the Projects outside of the buffered area may continue during this assessment period. The Fernandeño Tataviam Band of Mission Indians (FTBMI) shall be contacted about any pre-contact and/or post-contact finds and be provided information after the archaeologist makes their initial assessment of the nature of the find, to provide Tribal input with regards to significance and treatment.

12. The Lead Agency and/or applicant shall, in good faith, consult with the FTBMI on the disposition and treatment of any Tribal Cultural Resource encountered during all ground disturbing activities.

13. If human remains or funerary objects are encountered during any activities associated with the Project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code shall be enforced for the duration of the Project.

    a. Inadvertent discoveries of human remains and/or funerary object(s) are subject to California State Health and Safety Code Section 7050.5, and the subsequent disposition

of those discoveries shall be decided by the Most Likely Descendant (MLD), as determined by the Native American Heritage Commission (NAHC), should those findings be determined as Native American in origin.

14. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

15. If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

16. If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

17. The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

18. Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				X
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficient?				X

a. Project construction would consume energy in two general forms: 1) the fuel energy consumed by construction vehicles and equipment and 2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass. Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, and construction. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest EPA and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption.

Substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than non-recycled materials. The Lancaster Clean Energy Center will minimize the use of cement/concrete and such high carbon intensity construction materials. The project-related incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials.

The proposed project would consume energy for interior and exterior lighting, heating/ventilation and air conditioning (HVAC), refrigeration, electronics systems, appliances, and security systems, among other things. The proposed project would be required to comply with Title 24 Building Energy Efficiency Standards, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards significantly reduces energy usage. Additionally, the entire project would be powered through the construction of a 650 MW PV solar facility. These PV solar arrays would be completely off-grid and would connect to the hydrogen production component of the project through an above-

ground DC gen-tie line running along Avenue K through the project site. As such, the project would be powered by 100% renewable electricity.

The project would adhere to all Federal, State, and local requirements for energy efficiency, including the Title 24 standards, as well as the project's design features and project operational standards, such as zero-emission trucks, and as such the project would not result in the inefficient, wasteful, or unnecessary consumption of energy. Additionally, as a green hydrogen fuel production facility powered by 100% PV solar, the proposed project a clean energy fuel which would reduce air emissions and greenhouse gases from the operation of vehicles and other equipment. This is a positive energy impact.

b. In 1978, the California Energy Commission (CEC) established Title 24, California's energy efficiency standards for residential and non-residential buildings, in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and non-residential buildings. The previous standards went into effect on January 1, 2017 and January 1, 2020 and substantially reduced electricity and natural gas consumption. Additional savings result from the application of the standards on building alterations such as cool roofs, lighting, and air distribution ducts.

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. An updated version of both the California Building Code and the CALGreen Code went into effect on January 1, 2023.

As discussed above, the proposed project is a green hydrogen fuel production facility powered exclusively by off-grid PV solar. This facility would help to provide the fuels necessary to meet the state mandate of no gasoline powered vehicles sold by 2035. This is a positive energy impact.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

a. The project site is not identified as being in or in proximity to the fault rupture zone (LMEA Figure 2-5). According to the Seismic Hazard Evaluation of the Lancaster East and West Quadrangles, the project site may be subject to intense seismic shaking (LMEA pg. 2-16). However, the proposed project would be constructed in accordance with the seismic

requirements of the Uniform Building Code (UBC) adopted by the City, which would render any potential impacts to a less than significant level. The site is generally level and is not subject to landslides (SSHZ).

Liquefaction is a phenomenon in which the strength and stiffness of a soil is reduced by earthquake shaking or other events. This phenomenon occurs in saturated soils that undergo intense seismic shaking typically associated with an earthquake. There are three specific conditions that need to be in place for liquefaction to occur: loose granular soils, shallow groundwater (usually less than 50 feet below ground surface) and intense seismic shaking. In April 2019, the California Geologic Survey updated the Seismic Hazard Zones Map for Lancaster (SSHZ) (https://maps.conservation.ca.gov/cgs/EQZApp/app/.)

Based on these maps, the most of the project site is not located in an area at risk for liquefaction. Specifically, Site 1 is not located in a liquefaction area. Site 2 has small areas that are subject to liquefaction that occur immediately adjacent to Little Rock Wash. The proposed project would not be constructing any facilities within Little Rock Wash or within a 100-foot buffer on either side and is not likely to be designated liquefaction areas. Additionally, a project specific geotechnical study would be required prior to the issuance of grading and/or construction permits and all recommendations contained within the report. Therefore, impacts would be less than significant.

b. The project site is rated as having a low risk for soil erosion (USDA SCS Maps) when cultivated or cleared of vegetation. However, there remains a potential for water and wind erosion during construction and operation. A majority of the site would be developed with solar arrays. Minimal grading would occur with these facilities in accordance with City policy and would limited to access roads and those areas which require pads for equipment such as inverters. The proposed project would be required, under the provisions of the Lancaster Municipal Code (LMC) Chapter 8.16, to adequately wet or seal the soil to prevent wind erosion. Additionally, the mitigation measures listed below are required to control dust/wind erosion. With implementation of the mitigation measures, impacts would be less than significant.

Mitigation Measures

19. The applicant shall submit the required Construction Excavation Fee to the Antelope Valley Air Quality Management District (AVAQMD) prior to the issuance of any grading and/or construction permits. This includes compliance with all prerequisites outlined in District Rule 403, Fugitive Dust, including submission and approval of a Dust Control Plan, installation of signage and the completion of a successful onsite compliance inspection by an AVAQMD field inspector. Proof of compliance shall be submitted to the City.

20. Upon completion of construction, an Active Operation Renewable Energy Dust Control Plan, as outlined in District Rule 302 – Other Fees, shall be required.

c. Subsidence is the sinking of the soil caused by extraction of water, petroleum, etc. Subsidence can result in geologic hazards known as fissures. Fissures are typically associated with faults or groundwater withdrawal, which result in the cracking of the ground surface. According to Figure 2-3 of the City of Lancaster's Master Environmental Assessment, the closest sinkholes and fissures to the project site are located in the vicinity of Lancaster Boulevard and the Antelope

Valley Freeway, approximately 6 miles to the northwest of the eastern project boundary. Additionally, the project site is not known to be within an area subject to sinkholes, subsidence (LMEA Figure 2-3) or any other form of soil instability. The proposed project would be required to have a geotechnical study prepared and all recommendations followed as part of the building permit process. These recommendations would ensure any impacts associated with forms of soil instability would be less than significant. For a discussion of potential impacts regarding liquefaction, please refer to Item VI.a.

d. The soil on the project site is characterized by a low shrink/swell potential (LMEA Figure 2-3), which is not an expansive soil as defined by Table 18-1-B of the Uniform Building Code. A soils report on the soils within the project site shall be submitted to the City by the project developer prior to grading of the property and the recommendations of the report shall be incorporated into the development of the property. Therefore, impacts would be less than significant.

e. The proposed project would not be connected into the sanitary sewer system. A majority of the project site would be developed with 650 MWs of solar PV to support the operation of the green hydrogen production facility. The production facility would be located off of 70th Street East and would contain some office/warehouse/control buildings supporting the operations on the site. These facilities would have the necessary sanitary facilities to support a permanent staff of 32 workers and the project would develop the necessary septic system for wastewater disposal as sanitary sewer is not located in this portion of the City. The development of the septic system would be in accordance with all regulations. Therefore, no impacts would occur.

f. A majority of the project site is currently under active agricultural production. Most of site would be developed with a 650 MW PV solar facility to support the hydrogen production facility and requires minimal grading as the posts for the panels would be pile driven. The hydrogen production facility would be developed on the portion of the site along 70th Street East, just north of Avenue K. While substantially more grading would occur on this portion of the project site, it is not likely that fossils would encountered during the course of construction due to the current uses on the project site. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				X
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

a. The proposed project would generate greenhouse gas emissions during both construction and operation. However, these emissions would be minimal and would not create a significant impact on the environment as shown in Tables 4 and 5 in Section III, Air Quality. The greenhouse gas emissions were calculated using the CalEEMod Version 2020.4.0 and the parameters discussed in the air quality report. As seen in this tables, these emissions are substantially below the AVAQMD thresholds and impacts would be less than significant. Additionally, operations of the green hydrogen facility would result in a net decrease in greenhouse gas emissions from the production of a green fuel that would be utilized to power vehicles and other types of equipment. Therefore, no impact would occur.

b. The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The 2022 Scoping Plan identifies GHG reduction measures necessary for the State to achieve the AB 1279 target of 85 percent below 1990 levels by 2045. These actions and strategies build upon those identified in the first update to the Scoping Plan (2013) and in the second update to the Scoping Plan (2017). Table 8 analyzes the project's consistency with applicable 2022 Scoping Plan policies and actions.

Additionally, the City of Lancaster's Climate Action Plan was adopted in March 2017. This plan identifies projects that would enhance the City's ability to further reduce GHG emissions. A total of 61 projects across eight sectors were identified which include 1) traffic; 2) energy; 3) municipal operations; 4) water; 5) waste; 6) built environment; 7) community and 8) land use. Forecasts for both community and government operations were prepared for 2020, 2030, 2040, and 2050. Under all scenarios assessed, the City meets the 2020 target and makes substantial progress towards achieving post-2020 reductions.

Table 8
Consistency with the 2022 Scoping Plan

AB 32 GHG Inventory Sector and Scoping Plan Action	Proposed Project Consistency
GHG Emissions Reductions Relative to SB 32 Target: 40% below 1990 levels by 2030.	**No Conflict**: The proposed project includes the construction and operation of an energy storage facility. Therefore, the proposed project would help the State achieve the 40% below 1990 levels by 2030.
Smart Growth/Vehicle Miles Traveled (VMT): VMT per capita reduced 25% below 2019 levels by 2030 and 30% below 2019 levels by 2045.	**Not applicable.** Senate Bill 375 directs each regional MPO (SCAG is MPO for project area) to adopt a SCS/RTP that meet this reduction target. The Connect SoCal was prepared to meet these reduction targets. Additionally, the City has adopted its own VMT mitigation program and the proposed project screens out as having a low VMT (less than 110 trips per day.)
Electricity Generation: Sector GHG target of 38 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) in 2030 and 30 $MMTCO_2e$ in 2035.	**No Conflict.** Senate Bill 100 requires that 100 percent of retail sales of electricity be generated by renewable or zero-carbon source of electricity by December 1, 2045. The proposed project would be powered exclusively from a 650 MW PV off-grid, solar facility developed as part of the project. It would not be connected to the electricity distribution system.

The proposed project would be in compliance with the greenhouse gas emission goals and policies identified in the City of Lancaster's General Plan (pgs. 2-19 to 2-24) and with the City's Climate Action Plan. Specifically, the proposed project would be consistent with the following measures identified in the climate action plan. Therefore, impacts would be less than significant.

Energy

- Measure 4.2.1a: Renewable Energy Purchase Plan – The proposed project would be exclusively powered from an off-grid, 650 MW PV solar facility developed as part of the project and would 100% renewable.

- Measure 4.2.1b: Utility Scale Solar Development – The proposed project would be powered by an off-grid, 650 MW PV solar facility and would not be dependent upon a public utility to provide power.

- Measure 4.2.1c: Battery Storage – Utility Scale – The proposed project would have battery storage as part of its development to allow the hydrogen facility to operate during periods of low or no solar production.

Community

- Measure 4.7.3a: Xeriscaping – The landscaping installed for screening purposes along 70th Street East, Avenue K, 50th Street East, and 40th Street East would be native and drought tolerant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

a-b. Project construction would require typical construction materials to install the PV solar arrays, hydrogen production facilities (electrolyzers, storage tanks, battery storage, fueling areas), office/warehouse/control buildings, gen-tie line, and other associated infrastructure. There are no structures currently on the areas where development activities would occur. The existing farmhouse/buildings along 60th Street East and adjacent to the Site 1 property would not be

demolished. Therefore, the proposed project would not expose individuals or the environment to asbestos containing materials or lead-based paint.

Project operation would require the routine transport, use, and disposal of hazardous materials (liquefied or gaseous hydrogen) as part of the operations of the facility. All equipment installed on the project site (e.g., solar panels, batteries, electrolyzers, etc.) would be replaced as needed in accordance with all applicable regulations. The use of these materials and the routine activities on the project site would be conducted in compliance with all applicable regulations to minimize potential hazards to the public and to the environment.

The facility would also be equipped with any required/necessary safety mechanisms, which include fire suppression systems, dust suppression systems, detectors/alarms, shutdown systems, and temperature monitoring and controls. These safety mechanisms would be determined as part of the engineering design. Additionally, the project would require coordination with, and approval by, the Los Angeles County Fire Department for fire access, life safety equipment, and hazardous materials permitting. These requirements have been identified in the mitigation measures below. With implementation of the mitigation measures, impacts would be less than significant.

Mitigation Measures

21. The use, storage, and transport of hazardous materials associated with the operation of the proposed facility shall be in compliance with all applicable regulations. Any necessary permits shall be obtained from the Los Angeles County Fire Department, Antelope Valley Air Quality Management District, or other applicable agency.

22. Disposal of any hazardous material shall be done in accordance with all applicable regulations and associated with an EPA HazWaste ID number issued for the project site.

23. Throughout the duration of project construction and operation, project contact information shall be posted at the project site in a manner that is readily visible to the public, so that any members of the public can notify the facility manager of a potentially hazardous incident or a nuisance originating at the site.

c. A majority of the property site (all of Site 1 and most of Site 2) would be developed with PV solar panels. Two schools (Endeavor Elementary and Eastside High School are located in close proximity to the western side of Site 1. However, the PV panels would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. The hydrogen production facility would be located along 70th Street East, just north of Avenue K. There are no existing or proposed schools with 3 miles of this portion of the project site. Additionally, while the production facility would handle hazardous materials, these materials would be stored in accordance with all state and federal regulations and permits from the Fire Department. The facility would not release hazardous air emissions. Therefore, no impacts would occur.

d. Two Phase I Environmental Site Assessments were prepared for the proposed project; one for each portion of the site – Site I and Site 2. These reports were prepared by Bruin Geotechnical Services, Inc. The Phase I for Site 1 is documented in a report entitled “Phase I Environmental

Site Assessment Approximately 470 Acres Agricultural Property Uses, Assessor Parcel #3170-012-002, Lancaster, California 93535" and dated August 14, 2023. The Phase I for Site 2 is documented in report entitled "Phase I Environmental Site Assessment Approximately 850 Acres, Agricultural Property Uses, Assessor Parcel #'s 3384-018-001, -002, -003, -004, 3384-017-001, -002, 3384-015-013, 3384-016-014, 3384-017-003 & 3384-016-013, Lancaster, California 93535" and dated August 14, 2023. The results are summarized below and additional information can be found in the technical reports.

Site 1

A survey of the project site was conducted on August 5, 2023. The project site consists of land of low relief which is used as a farm, and contains numerous groundwater wells and pumps used for agricultural purposes and is adjacent to undeveloped, agricultural and scattered residential uses. Residences, equipment and accessory buildings associated with Site 1 are located adjacent to the west of the site but are not part of the project site.

Evidence of hazardous materials, including drums or other containers, was not viewed on the site. No hazardous materials or wastes were observed on the site and no significant surface staining or stressed vegetation was observed onsite. Due to the agricultural nature of the site, it is likely that pesticides have been utilized. Water wells and associated ground-water pumps were observed in various locations; however, no evidence of injection wells, groundwater monitoring, or oil and gas wells were observed. The only other item noted on the site was that polychlorinated biphenyls (PCBs) in electrical equipment such as transformers, fluorescent lamp ballasts, and capacitors manufactured prior to 1978 was comment. The groundwater pumps were developed prior to 1978 and have the potential to contain PCBs and mitigation has been identified below.

In addition to the site survey, a regulatory database search was conducted for the site and surrounding area within specified search distances by EDR. A nearby property has a registered underground storage tank and there was a three gallon mineral oil release into the soil in 2003 which was reportedly contained. This occurrence appears to have occurred on the extreme western portion of the site which is not being developed.

Site 2

A survey of the project site was conducted on August 5, 2023. The project site consists of a working farm, totaling approximately 850 acres excluding the adjacent residences, related structures, fueling and mixing areas and Little Rock Wash as these are not part of the project. The site consists of land of low relief which has groundwater pump houses.

Evidence of hazardous materials, including drums or other containers, was not viewed on the site. No hazardous materials or wastes were observed on the site and no significant surface staining or stressed vegetation was observed onsite. Due to the agricultural nature of the site, it is likely that pesticides have been utilized. Water wells and associated ground-water pumps were observed in various locations; however, no evidence of injection wells, groundwater monitoring, or oil and gas wells were observed. The only other item noted on the site was that polychlorinated biphenyls (PCBs) in electrical equipment such as transformers, fluorescent lamp ballasts, and capacitors manufactured prior to 1978 was comment. The groundwater pumps were

developed prior to 1978 and have the potential to contain PCBs and mitigation has been identified below.

In addition to the site survey, a regulatory database search was conducted for the site and surrounding area within specified search distances by EDR. Site 2 was not identified on any regulatory lists. Nearby Bolthouse Farms property was identified on the CERS and CERS TANKS lists for above ground petroleum storage and chemical storage facilities. No violations at these facilities were found during inspections conducted in 2015, 2016, 2017, 2018, 2019, 2020, 2021 and 2022. No other items were noted in the database search.

Mitigation Measures

24. Prior to the maintenance or demolition of the on-site groundwater pump locations, a PCB survey shall be conducted to ensure that the electrical components are properly disposed.

e. The project site is approximately two miles north of the US Air Force Plant 42/Palmdale Regional Airport. A majority of the project site would be developed with a 650 MW PV solar facility utilized to power the green hydrogen production plant to be constructed on the project site along 70th Street East. Approximately 32 employees would work at the hydrogen facility and the operations at the airport would not cause a safety or excessive noise impact to these individuals. As such, no impact would occur.

f. The proposed project would generate minimal traffic as a result of construction and operational activities. As described in Section III, Air Quality, a traffic control plan would be required during construction to ensure the smooth flow of traffic. During operations, it is anticipated that 70 truck trips per day would be required at full build out. Truck traffic would exit the freeway at Avenue M, head east on Avenue M to 50th Street East, head north on 50th Street East to Avenue K and then head east on Avenue K to 70th Street East. This would ensure that truck traffic is not driving past residential areas. The traffic generated by the proposed project is not expected to block the roadways. Therefore, the proposed project would not impair or physically block any identified evacuation routes and would not interfere with any adopted emergency response plan. Impacts would not occur.

g. Most of the surrounding properties are undeveloped or in agricultural production. Some residences and other uses are scattered throughout the area, primarily near Site 1. Just south of Site 2 is cannabis facility at the southwest corner of 70th Street East and Avenue K. It is possible that the surrounding properties could be subject to grass and/or structure fires. The project site is located within the service boundaries of both Los Angeles County Fire Station No. 117, located at 44851 30th Street East, and Station No. 135, located at 1846 East Avenue K-4, which would serve the project site in the event of a fire. Therefore, potential impacts from wildland fires would be less than significant.

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

a. The Little Rock Wash runs through the center of Site 2, although it only contains water at certain times of the year. The proposed project would not be developing an uses within the wash or within a 100-foot buffer. The proposed project would be required to comply with all applicable provisions of the National Pollutant Discharge Elimination System (NPDES) program. The

NPDES program establishes a comprehensive storm water quality program to manage urban storm water and minimize pollution of the environment to the maximum extent practicable. The reduction of pollutants in urban storm water discharge through the use of structural and nonstructural Best Management Practices (BMPs) is one of the primary objectives of the water quality regulations. BMPs that are typically used to manage runoff water quality including controlling roadway and parking lot contaminants by installing oil and grease separators at storm drain inlets, cleaning parking lots on a regular basis, incorporating peak-flow reduction and infiltration features (grass swales, infiltration trenches and grass filter strips) into landscaping and implementing educational programs. The proposed project would incorporate appropriate BMPs during construction, as determined by the City of Lancaster Public Works Department. Therefore, impacts would be less than significant.

b. Groundwater wells already exist on the property and the project applicant has a ground-water lease for 400-acre feet of water per year; although it is estimated that the project would only need approximately 300-acre feet per year. This is water that is already being pumped and would not result in an increase in pumping activities. Therefore, impacts would be less than significant.

c. Development of the proposed project would increase the amount of surface runoff as a result of impervious surfaces associated the development of the hydrogen production component of the project. Most of the site would be developed with PV solar and the ground would not be paved and would remain pervious. The proposed project would be designed, on the basis of a hydrology study, to accept current flows entering the property and to handle the additional incremental runoff from the developed sites. Therefore, impacts from drainage and runoff would be less than significant.

Site 1 is designated as Flood Zone X-Shaded per the Flood Insurance Rate Map (FIRM) (06037C0450F). Flood Zone X-Shaded is located outside the 100-year flood zone but within the 500-year flood zone. Site 2 is designated as Flood Zone X per the FIRM (06037C0450F and 06037C0422F) which is outside both the 100-year flood zone and the 500-year flood zone. The portion of the site along Little Rock Wash is designated as a Special Flood Hazard zone. However, no structures would be placed in that zone, and no work would occur in the wash or within the 100-foot buffer on either side. Any solar panels near the area would be installed in accordance with all regulations with respect to flood control. Therefore, impacts would be less than significant.

d. The project site is not located within a coastal zone. Therefore, tsunamis are not a potential hazard. The project site is relatively flat and does not contain any enclosed bodies of water and is not located in close proximity to any large bodies of water; the closest potential body of water is the is Little Rock Wash which only has water at certain times of the year. In the event of an earthquake, it is not anticipated that the wash would create a seiche that would impact the project site. Additionally, the project site would not be subject to mudflows. Therefore, no impacts would occur.

e. The proposed project would not conflict with or obstruct the implementation of the applicable water quality control plan or sustainable groundwater management plan. For additional information, see responses X.a through X.c. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

a. The proposed project is for the construction and operation of a green hydrogen production facility on approximately 1,338 gross acres generally bounded by Avenue J, Avenue L, 40th Street East, and 70th Street East. These uses are permitted under the RR-2.5 and RR-2.5 with Eastside Overlay zoning with a conditional use permit. The surrounding properties are predominantly a mix of vacant desert, active agricultural, and scattered residential uses. A cannabis facility also exists on the southwest corner of 70th Street East and Avenue K. The proposed project would not block a public street, trail or other access route or result in a physical barrier that would divide the community. Therefore, no impacts would occur.

b. The proposed project is consistent with the City's General Plan and must be in conformance with the Lancaster Municipal Code. Table 9 provides a consistency analysis of the proposed project with respect to the relevant goals, objectives, and policies of the General Plan. The proposed project will be in compliance with the City-adopted Uniform Building Code (UBC) and erosion control requirements (Section VII). Additionally, as noted in Section IV, the project site is not subject to and would not conflict with a habitat conservation plan or natural communities conservation plan.

The zoning on the project site, RR-2.5 or RR-2.5 with the Eastside Overlay, allows for one single family residence on a minimum lot size of 2.5 acres. This would allow for the project site to be developed with a maximum of 535 single family residences. The proposed project would replace the existing agricultural uses with a green hydrogen production facility powered by PV solar instead of residential uses. While these units would not be built, the City's Housing Element does not rely on these parcels in order to meet the needs of its residents or to account for its Regional Housing Needs Assessment numbers. Therefore, impacts would be less than significant.

Table 9
General Plan Consistency Analysis

Goals, Objectives, and Policies	Consistency Analysis
Policy 3.1.1: Ensure that development does not adversely affect the groundwater basin.	The proposed project would utilized approximately 300-acre feet per year for its operational needs and the applicant has a 400-acre foot water lease. This water would come from existing well on the southeastern portion of the Bolthouse property and is already being is already being pumped and utilized. The project would not require the pumping of groundwater beyond what is currently allowed for the property.
Policy 3.2.1: Promote the use of water conservation measures in the landscape plans of new developments.	All landscaping for the proposed project would be native and/or drought tolerant in accordance with Chapter 8.50 of the Lancaster Municipal Code. This landscaping would be located within the parking areas and around the perimeter of the project site.
Policy 3.2.2: Consider the potential impact of new development projects on the existing water supply.	The proposed project has a 400-acre foot per year water lease for its operation and is expected to utilize 300-acre feet per year. This is reduction in the amount of water required from the current agricultural operations on project site.
Policy 3.3.1: Minimize the amount of vehicular miles traveled.	The proposed project would screen out of a VMT analysis due to the project generating less than 110 trips per day. Additionally, it would provide well paying jobs which would allow employees to work locally instead of community to the LA Basin.
Policy 3.3.3: Minimize air pollutant emissions by new and existing development.	An air quality analysis was prepared for the proposed project and documented that the air emissions associated with the construction and operation of the proposed project would be substantially less than the thresholds established by the AVAQMD. Additionally, the project would produce a green hydrogen fuel which could be utilized to powered vehicles and other equipment without producing criteria pollutants.
Policy 3.3.4: Protect sensitive uses such as homes, schools, and medical facilities from the impacts of air pollution.	The proposed is a green hydrogen production facility which will be powered exclusively by PV solar. The proposed development is located in an area of the City with few sensitive

	receptors and no sensitive receptors near the hydrogen production component of the site.
Policy 3.4.2: Preserve significant desert wash areas to protect sensitive species that utilize these habitat areas.	Little Rock Wash runs through the center of the project site. The proposed project would not develop within the wash or within a 100-foot buffer on both sides of the wash as these are not included as part of the project site. Additionally, this area of the wash is highly disturbed.
Policy 3.4.4: Ensure that development proposals, including City sponsored projects, are analyzed for short- and long-term impacts to biological resources and that appropriate mitigation measures are implemented.	A biological resources report was prepared for the portion of the project site that was not under agricultural production. Mitigation measures for species that could occur on the project site, including those species that may be present in or rely upon the active agricultural uses.
Policy 3.5.1: Minimize erosion problems resulting from development activities.	The portions of the project site that would be developed with the solar arrays would have minimal of grading. The only grading would occur for the perimeter/access roads to fire department standards and areas that may require inverters/transformers. The green hydrogen production portion of the project site would be graded and paved and the project, as a whole, would comply with appropriate best management practices to prevent erosion.
Policy 3.5.2: Since certain soils in the Lancaster study area have exhibited shrink-swell behavior and a potential for fissuring and subsidence may exist in other areas, minimize the potential for damage resulting from the occurrence of soils movement.	The soils on the project site have a low shrink swell potential. Additionally, fissuring and subsidence are not an issue in the vicinity of the project site. The closest instances of fissuring are located approximately 6 miles northwest of the westernmost portion of the project site. Additionally, the project would be constructed based on the recommendations of a project specific geotechnical report.
Policy 3.5.3: Protect lands currently in agricultural production from the negative impacts created when urban and rural land uses exist in close proximity, while recognizing the possibility of their long-term conversion to urban or rural uses.	Most of the project site is in active agricultural production and the development of the proposed project would convert the agricultural uses to a green hydrogen production facility powered solely by PV solar. While these agricultural lands would be removed from production, mitigation has been identified to place agricultural lands under an agricultural conservation easement to ensure continued agricultural lands in LA County.
Policy 3.6.1: Reduce energy consumption by	The proposed project produced a green

establishing land use patterns which would decrease automobile travel and increase the use of energy efficient modes of transportation.	hydrogen that would allow consumers to choose a more energy efficient and environmentally friendly mode of transportation.
Policy 3.6.3: Encourage the incorporation of energy conservation measures in existing and new structures.	The proposed hydrogen production plant would be powered exclusively through an on-site, off-grid 650 MW PV solar plant. All structures on the site would be constructed in accordance with all applicable Title 24 requirements.
Policy 3.6.4: Support state and federal legislation that would eliminate wasteful energy consumption in an appropriate manner.	The proposed facility would produce green hydrogen fuel that could be utilized in vehicles and other equipment, helping to support the State's goal of no new gasoline powered vehicles by 2035.
Policy 3.6.6: Consider and promote the use of alternative energy such as wind energy and solar energy. (Note Policy 15.2.1 considers the use of waste to energy cogeneration systems as an energy source)	The proposed hydrogen production facility would be powered exclusively by 650-megawatts of solar power. This solar facility is completely off-grid.
Policy 3.8.1: Preserve views of surrounding ridgelines, slope areas, and hilltops, as well as other scenic vistas.	The proposed project would not impact any ridgelines, slope areas and hilltops and would not prevent views of other scenic areas identified in the City's General Plan.
Policy 4.1.1: Manage potential seismic hazards result from fault rupture and strong ground motion to facilitate rapid physical and economic recovery following an earthquake through the identification and recognition of potentially hazardous conditions and implementation of effective standards for seismic design of structures.	The project site is not located in the vicinity of a fault rupture zone.
Policy 4.3.1: Ensure that noise-sensitive land uses and noise generators are located and designed in such a manner that City noise objectives will be achieved.	As discussed in the noise section of this document, the solar portion of the project site does not generate noise which would be audible off site. The hydrogen portion of the project would generate noise; however, it would not exceed the noise standards established in the General Plan and there are no sensitive receptors in the vicinity of this portion of the project site. Additionally, best management practices have been identified to reduce noise impacts during construction.
Policy 4.5.1: Ensure that activities within the City of Lancaster transport, use, store, and dispose of hazardous materials in a responsible	All hazardous materials utilized, stored, or transported would be in compliance with all applicable local, state and federal regulations.

manner which protects the public health and safety.	
Policy 12.1.1: Preserve features and sites of significant historical and cultural value consistent with their intrinsic and scientific values.	Mitigation measures have been identified to address the inadvertent discovery of any cultural resources during construction or operation.
Policy 15.1.4: Ensure that mitigation is provided for all development in recognized flood prone areas. Any mitigation of flood hazard in one area shall not exacerbate flooding problems in other areas.	A majority of the project site is located outside of a flood zone. Little Rock Wash is located within a special flood hazard area; however, no development would occur within the wash or the 100-foot buffer area.
Policy 15.1.5: Ensure sufficient infrastructure is built and maintenance to handled and treat wastewater discharge.	The proposed structures on the project site would be connected to an appropriate septic system to handle sanitary sewer requirements.
Policy 15.2.2: Minimize the generation of solid wastes as required by State law (AB-939) through an integrated program of public education, source reduction and recycling.	The proposed development would have the appropriate trash enclosures to accommodate recycling, organics, and waste disposal.
Policy 15.3.1: Direct growth to areas with adequate existing facilities and services, areas which have adequate facilities and services committed, or areas where public services and facilities can be economically extended.	The proposed project would be completely self sufficient with respect to power, water, and wastewater. All other public services can be adequately provided.
Goal 16: To promote economic self-sufficiency and a fiscally solvent and financially stable community.	The proposed development would provide additional high quality, well paying jobs in an new employment sector which would help promote economic self-sufficiency.
Policy 18.1.2: Encourage development that is compatible with the City's designated rural and non-urban areas.	The proposed development is comprised predominantly of PV solar with the hydrogen production component placed along 70th Street East away from most residential uses.
Policy 19.2.6: Minimize the visual impacts of utility corridors and their associated equipment.	The proposed project would comply with the development standards associated with the RR-2.5 and the Eastside Overlay.

In addition to the City's General Plan, the Southern California Association of Governments (SCAG) adopts a Regional Transportation Plan / Sustainable Conservation Strategy (RTP/SCS) every five years. On May 7, 2020 SCAG adopted the 2020-2045 RTP/SCS, known as Connect SoCal, for federal transportation conformity purposes only. On September 3, 2020 SCAG adopted Connect SoCal for all other purposes. The RTP/SCS identifies ten regional goals; these goals are identified in Table 10 along with the project's consistency with these goals.

Table 10
Connect SoCal Consistency Analysis

Goals	Consistency
Goal 1: Encourage regional economic prosperity and global competitiveness.	The proposed project would help support regional economic prosperity by providing more local, high paying jobs and a clean fuel to power vehicles and other forms of equipment.
Goal 2: Improve mobility, accessibility, reliability and travel safety for people and goods.	This goal is not applicable to the proposed project.
Goal 3: Enhance the preservation, security, and resilience of the regional transportation system.	The proposed project would create a clean fuel (green hydrogen) to power vehicles and other types of equipment. This would ensure the resilience of the regional transportation system.
Goal 4: Increase person and goods movement and travel choices within the transportation system.	The proposed project would provide the public with additional choices for types of vehicles utilized.
Goal 5: Reduce greenhouse gas emissions and improve air quality.	The proposed project is a green hydrogen fuel production facility powered exclusively through PV solar. This would substantially reduce greenhouse gas emissions associated with the operation of vehicles and other equipment. Additionally, the trucks utilized at the facility would be zero emissions. This would assist in improving the air quality in the Antelope Valley.
Goal 6: Support health and equitable communities.	This goal is not applicable to the proposed project.
Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.	While the proposed project would not develop a new transportation network, it would provide green hydrogen fuel which would reduce the emissions produced during transportation.
Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	This goal is not applicable to the proposed project.
Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.	There is no housing associated with the proposed project. This goal is not applicable to the proposed project.
Goal 10: Promote conservation of natural and agricultural lands and restoration of habitats.	The project site is predominantly located on properties with active agricultural production. This would result in the loss of agricultural uses; however, the proposed project would not be developing in the Little Rock Wash in with the buffer area on both sides of the wash.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

a-b. The project site does not contain any current mining or recovery operations for mineral resources and no such activities have occurred on the project site in the past. According to the LMEA (Figure 2-4 and page 2-8), the project site is designed as Mineral Reserve Zone 3 (contains potential but presently unproven resources.) However, it is considered unlikely that the Lancaster area has large valuable mineral and aggregate deposits. Therefore, no impacts to mineral resources would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIII. NOISE. Would the project:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

a-b. A noise study was prepared by Christopher Jean & Associates, Inc., Acoustical Consulting Services and documented in a report entitled "Acoustical Analysis, Lancaster Clean Energy Center and Green Hydrogen Electrolysis Plant, City of Lancaster, and dated August 29, 2023.

Construction activities associated with earth moving equipment and other construction machinery would temporarily increase noise levels in the vicinity of the project site. The closest noise sensitive receptors to the project site are the residences located near Site 1 and south of Site 2 at approximately 65th Street East. The current noise levels in these areas range from 47 dBA to 59 dBA. The City's General Plan identifies the maximum exterior noise level for residential uses as 65 dBA.

The construction phase of the project would produce noise levels that could potentially impact the nearby residential uses around the perimeter of the project site. As previously described, most of these residential uses are in the vicinity of Site 1 which would be developed solely with PV panels and grading would be minimized. However, grading operations could produce noise levels as high as 84 dBA and piling driving associated with the solar panels would produce a hammering sound. Both of these types of activities would be noticeable to the surrounding residences; however, the activities would be short term. Site 2 would have both PV panel installation and activities associated with the construction of the hydrogen production plant. The hydrogen plant construction activities involve more types of activities which would generate noise; however, only a handful of residential uses are located near this portion of the project site and are located further away which would reduce the noise levels. Additional mitigation

measures have been included to reduce construction noise levels to the maximum extent practicable. With incorporation of these measures, impacts would be less than significant.

Operation of the project would introduce mechanical noise sources that could potentially impact the residential uses near the boundaries of the project site. The project mechanical equipment could potentially impact the nearest residential uses. Most of the project would be large fields of solar panels. The primary noise source associated with solar facilities are the inverters that convert the direct current (DC) electrical power produced by the photovoltaic panels to alternating current (AC) electrical power and back. Inverters may or may not be part of the solar fields as the gen-tie line to the hydrogen production facility would be DC since the project is not connecting into the grid. Information from other solar facilities provided in the Appendix to the Noise Report indicates that have a noise output ranging from 53.7 dBA to 65.7 dBA at 3 feet depending on the number of inverters clustered together. This would result in the inverters be inaudible at the neighboring residential uses.

The Green Hydrogen Electrolysis Plant could install equipment that could create more noise than the solar panel inverters. As the project is designed to use electrolysis to produce the liquid hydrogen, it is unlikely that any of the proposed equipment will produce noise levels exceeding 74 dBA. However, the specific equipment for this project has not been identified and would be identified during the design process. To ensure that operation of the proposed hydrogen facility does not exceed the standards established in the City's General Plan, mitigation has been identified below requiring an operational noise study. With incorporation of the identified mitigation measures, impacts would be less than significant.

Mitigation Measures

25. Construction operations shall not occur between 8 p.m. and 7 a.m. on weekdays or Saturday or at any time on Sunday. The hours of any construction-related activities shall be restricted to periods and days permitted by local ordinance.

26. The on-site construction supervisor shall have the responsibility and authority to receive and resolve noise complaints. A clear appeal process to the owner shall be established prior to construction commencement that will allow for resolution of noise problems that cannot be immediately solved by the site supervisor.

27. Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.

28. Material stockpiles and mobile equipment staging, parking and maintenance areas shall be located as far away as practicable from noise-sensitive receptors.

29. The use of noise producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only.

30. No project-related public address or music system shall be audible at any adjacent receptor.

31. All noise producing construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds,

shields, or other noise-reducing features in good operating condition that meet or exceed original factor specifications. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors, etc.) shall be equipped with shrouds and noise control features that are readily available for the type of equipment.

32. Upon identification of the specific equipment to be utilized at the green hydrogen production facility, an operational noise study shall be conducted to ensure that noise levels at the property line do not exceed 65 dBA. Any recommendations identified to ensure that the project meets the established noise standards shall be followed.

c. The project site is approximately two miles north of the US Air Force Plant 42/Palmdale Regional Airport. A majority of the project site would be developed with a 650 MW PV solar facility utilized to power the green hydrogen production plant to be constructed on the project site along 70th Street East. Approximately 32 employees would work at the hydrogen facility and the operations at the airport would not cause a safety or excessive noise impact to these individuals. As such, no impact would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

a. The proposed project would not generate substantial population growth as the project is a green hydrogen production facility powered solely through electricity generated from PV solar. A majority of the project site would be unmanned PV solar arrays with occasion maintenance needs. Most of the employees for the proposed project would be required for the hydrogen production component of the project. The proposed project would employ a total of 32 full time employees of which nine would not require advanced degrees. These jobs would be prevailing wage. It is possible that individuals employed by the proposed project could relocate to the Antelope Valley to work at the Lancaster Clean Energy Center. However, it is much more likely that individuals currently living in the Antelope Valley would be hired to work at the facility. Regardless of whether the employees are already residing in the Antelope Valley or would relocate to the area, the increase in population associated with 32 full time jobs is well within the population projections for the City of Lancaster contained in both the City's General Plan and the SCAG's population projects.

Additionally, the project site is located in an area which allows these types of uses (in the locations in which they are proposed) with a conditional use permit. The proposed project would not require the extension of roadways that do not already exist nor would it require the expansion of other public infrastructure beyond what already exists. The proposed project would be completely off-grid and powered self-contained PV solar arrays and battery storage. The project would also receive its water from an existing well on the project site and would utilize a septic system for waste water disposal associated with the buildings/employees on the project site. Therefore, impacts would be less than significant.

b. The proposed project is either vacant, undeveloped desert or consists of active agricultural fields. There is a farmhouse/residential use located at approximately 60th Street East, just north of Avenue K. These use would remain and is not part of the proposed project development. No other residential uses are located on the project site. As such no housing or people would be displaced necessitating the construction of replacement housing elsewhere. Therefore, no impacts would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES.				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?			X	
Police Protection?			X	
Schools?			X	
Parks?			X	
Other Public Facilities?			X	

a. The proposed project would increase the need for fire and police services; however, the project site is within the current service area of both of these agencies and the additional time and cost to service the site is minimal. The project site is within the service area of both Fire Station 117, located at 44851 30th Street East, and Fire Station 135, located at 1846 East Avenue K-4. Both of these stations would be able to serve the project site in the event of a fire or medical emergency. Additionally, the solar facility component of the project site (majority of the site) would have perimeter access roads and 10,000 gallon water tanks by the entrance to support any fire suppression needs. The hydrogen production component of the project site would be developed along 70th Street East and would comply with all Fire Department requirements and local, state, and federal safety and hazardous materials management regulations as described in the project description. Therefore, impacts would be less than significant.

The proposed project would not induce substantial population growth, and therefore, would not substantially increase the demand on parks, schools, or other public facilities such as libraries and museums. Additionally, this growth has been accounted for in the City's General Plan and within SCAG's population forecasts. Impacts to these services would be less than significant.

Construction of the proposed project may result in an incremental increase in population and may increase the number of students in the Eastside School District and the Antelope Valley Union High School District. Proposition 1A, which governs the way in which school funding is carried

out, predetermines by statute that payment of developer fees is adequate mitigation for school impacts. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVI. RECREATION. Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

a-b. The proposed project may generate additional population growth through the creation of the 32 full time jobs and may contribute on an incremental basis to the use of the existing park and recreational facilities. The proposed project does not involve the construction of any parks or recreational amenities as it is a green hydrogen production facility powered through the use of off-grid PV solar. However, the applicant would be required to pay applicable park fees which would offset any impacts to the existing parks. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?			X	

a. The proposed project would not conflict with any programs, plans, ordinance or policies with respect to transportation systems including, bicycle and pedestrian facilities. The project site is approximately 1,338 acres generally bounded by Avenue J, Avenue L, 40th Street East and 70th Street East. The roadways necessary to access the project site are already developed and no new roadways would be required to be constructed although some improvements to the existing roadways may be required. Therefore, impacts would be less than significant.

b. In July 2020, the City of Lancaster adopted standards and thresholds for analyzing projects with respect to vehicle miles traveled (VMT). A series of screening criteria were adopted and if a project meets one of these criteria, a VMT analysis is not required. These criteria are: 1) project site – generates fewer than 110 trips per day; 2) locally serving retail – commercial developments of 50,000 square feet or smaller; 3) project located in a low VMT area – 15% below baseline; 4) transit proximity; 5) affordable housing; and 6) transportation facilities.

The proposed project screens out of a VMT analysis as it would generate less than 110 vehicle trips per day. The project estimates that approximately 70 truck trips would be required at full buildout plus the trips from the 32 employees. This totals 102 trips per day which is less than the threshold. Therefore, impacts associated with VMT would be less than significant.

c. The proposed project would be accessed from driveways located on 70th Street East, Avenue K, and potentially 40th Street East and 50th Street East, depending upon fire department requirements. These roadways already exist and no new roadways would be constructed as part of the project. Interior to the project site, 90% compacted, all weather or fully paved roadways would be installed for fire department access, depending upon the portion of the site. These

improvements would not increase hazards in the vicinity of the project nor create dangerous design situations. Therefore, no impacts would occur.

d. The hydrogen production component of the project site would would be accessed from two driveways on 70th Street East, while the solar fields would be accessed from driveways on Avenue K and potentially 40th Street East and 50th Street East depending upon the requirements of the Los Angeles County Fire Department. Drive aisles/roadways within the project site would be designed to the standards required by the Los Angeles County Fire Department, either paved or 90% compacted all weather access, ensuring adequate emergency access. Therefore, no impacts would occur.

Truck access to the hydrogen component of the project site would be from the Antelope Valley Freeway via Avenue M to 50th Street East. The trucks would then head east on Avenue K towards 70th Street East, and north along 70th Street East to the project site. This would provide adequate emergency access to the project site while reducing the amount trucks driving past residential uses. Therefore, no impacts would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES. Would the project:				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or				X
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set for in subdivision (c) of Public Resources Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				X

a. No significant archaeological or historic cultural resources were identified on the project site during the records searches. and site survey. Letters were sent out to three tribes during the AB 52 process and the City received a response from the YSMN and FTBMI. As previously discussed, the YSMN have requested a Phase I Report be prepared; however, the City is not requiring a Phase I as most of the site is under active agricultural production. The City will continue to work YSMN to address any specific issues that they may have and the routinely requested mitigation measures have been included in this document. The FTBMI also responded and consider this area to have medium sensitivity. The requested measures from the tribe will be included in the project approval. Therefore, no impacts to tribal cultural resources would occur.

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

a. The proposed project would be self-sufficient with respect to power (generated by 650 MW PV solar field onsite, off-site), water (existing water well and 400-acre per year water lease) and wastewater (septic system on site). No other public utilities would be required. As such, impacts would be less than significant.

b. The proposed project has an water lease for 400 acre feet per year from an existing water well located on the project site. This well is already producing water for the existing agricultural fields and the proposed project would reduce the amount of water required from the current agricultural production. There would not be an increase in the amount of water pumped. Therefore, impacts would be less than significant.

c. The proposed project would utilize a septic system or other alternative form wastewater disposal. The proposed project would not be connected to the sanitation system. The proposed project

would not require the expansion of existing facilities or the construction of new facilities. Therefore, impacts would be less than significant.

d. Solid waste generated within the City limits is generally disposed of at the Lancaster Landfill located at 600 East Avenue F. This landfill is a Class III landfill which accepts agricultural, non-friable asbestos, construction/demolition waste, contaminated soil, green materials, industrial, inert, mixed municipal, sludge, and waste tires. It does not accept hazardous materials. Assembly Bill (AB) 939 was adopted in 1989 and required a 25% division of solid waste from landfills by 1995 and a 50% diversion by 2005. In 2011, AB 341 was passed which required the State to achieve a 75% reduction in solid waste by 2030. The City of Lancaster also requires all developments to have trash collection services in accordance with City contracts with waste haulers over the life of the proposed project. These collection services would also collect recyclable materials and organics. The trash haulers are required to be in compliance with applicable regulations on solid waste transport and disposal, including waste stream reduction mandated under AB 341.

The proposed project would generate minimal amounts of solid waste during construction and operation which would contribute to an overall impact on landfill services (GPEIR pgs. 5.13-25 to 5.13-28 and 5.13-31); although the project's contribution would be minimal. However, the existing landfill has capacity to handle the waste generated by the proposed project. Additionally, the proposed project would be in compliance with all State and local regulations regarding solid waste disposal. Therefore, impacts would be less than significant.

e. See Item XIX.d.

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

a. See Item IX.f.

b-d. The project site is not located in or near State responsibility areas or lands classified as very high fire hazard severity zones. The project site is located within the service boundaries of Fire Station No. 117 and Fire Station No. 135 which would provide service in the event of a fire. Additionally, the proposed project would be constructed in accordance with all existing and applicable building and fire codes and would have fire suppression and safety systems. Therefore, no impacts would occur as a result of wildfire.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulative considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

a. The proposed project consists of the construction and operation of a green hydrogen fuel production facility powered by an on-site, off-grid 650 MW solar facility on 1,338 acres. The proposed project would be in compliance with the City's General Plan and zoning code for property zoned RR-2.5 and RR-2.5 with the Eastside Overlay. Other projects have been approved or are under review within approximately one mile of the project site including those identified in Table 4. Most of these projects are located west of the western boundary of the Site 1 portion of the project and their environmental impacts are not likely to combine with the project to create cumulative impacts due to type of project and timing. One related project which is located at 70th Street East and Avenue J, which is for hydrogen production on a smaller scale, could combine to create cumulative impacts. These projects are also required to be in accordance with the City's zoning code and General Plan.

Cumulative impacts are the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable projects.

The proposed project would not create any impacts with respect to: Energy Resources, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Tribal Cultural Resources, and Wildfire. The project would create impacts to other resource areas and mitigation measures have been identified for Agricultural Resources, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazardous/Hazardous Materials, and Noise. Impacts associates with these issues are less than significant with the incorporation of the identified mitigation measures. Many of the impacts generated by projects are site specific and generally do not influence the impacts on another site. All projects undergo environmental review and have required mitigation measures to reduce impacts when warranted. These mitigation measures reduce environmental impacts to less than significant levels whenever possible. Therefore, the project's contribution to cumulative impacts would be less than significant.

Table 11
Related Projects List

Case No.	Location	Acres	Description	Status
TTM 60367	NWC Lancaster Blvd & 40th St E	25	117 single family lot residential subdivision	Approved
TTM 83572	NEC 35th St E & Lancaster Blvd	28.9	118 single family lot residential subdivision	Approved
TTM 63137	NWC 40th St E & Ave J	20	53 single family lot residential subdivision	Under Review
CUP 23-017	SEC Ave J & 70th St E	116	Green hydrogen production facility	Under Review

List of Referenced Documents and Available Locations*:

AIR:	Air Quality Study – 70th Street East, Lancaster Clean Energy Site – Lancaster, CA, MS Hatch Consulting, September 20, 2023	CDD
BRR:	Aquatic Resources Delineation and Habitat Assessment, Lancaster Clean Energy Center, Lancaster, Los Angeles County, California, Tetra Tech, July 2023	CDD
CRS:	Cultural Resources Desktop Study Record Search Results for the Lancaster Clean Energy Center Project, Los Angeles County, California, Tetra Tech, July 27, 2023	CDD
EAST:	Final Program Environmental Impact Report, Lancaster East Side Project (SCH#2022100641), Michael Baker International, June 2023	CDD
ESA1:	Phase I Environmental Site Assessment, Approximately 850 Acres, Agricultural Property Uses, Assessor Parcel #s 3384-018-001, -002, -003, -004, 3384-017-001, -002, 3384-015-013, 3384-016-014, 3384-017-003, & 3384-016-013, Lancaster, California 93535, Bruin Geotechnical Services, Inc., August 14, 2023	CDD
ESA2:	Phase I Environmental Site Assessment, Approximately 470 Acres Agricultural Property Uses, Assessor Parcel #3170-012-002, Lancaster, California 93535, Bruin Geotechnical Services, Inc., August 14, 2023	CDD
FIRM:	Flood Insurance Rate Map	CDD
GPEIR:	Lancaster General Plan Environmental Impact Report	CDD
LGP:	Lancaster General Plan	CDD
LMC:	Lancaster Municipal Code	CDD
LMEA:	Lancaster Master Environmental Assessment	CDD
NOI:	Acoustical Analysis Lancaster Clean Energy Center and Green Hydrogen Electrolysis Plan, City of Lancaster, Christopher Jean & Associates, Inc. Acoustical Consulting Services, August 29, 2023	CDD
SSHZ:	State Seismic Hazard Zone Maps	CDD
USGS:	United States Geological Survey Maps	CDD
USDA SCS:	United States Department of Agriculture Soil Conservation Service Maps	CDD
VMT:	Vehicle Miles Traveled Waiver Form	CDD

* CDD: Community Development Department
Planning and Permitting Division
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