

NOTICE OF PREPARATION
ANTELOPE NORTH SOLAR PROJECT (CUP 17-10)

DATE: JUNE 27, 2017

TO: STATE CLEARINGHOUSE AND INTERESTED PARTIES

FROM: CITY OF LANCASTER DEVELOPMENT SERVICES DEPARTMENT,
COMMUNITY DEVELOPMENT DIVISION, PLANNING

SUBJECT: NOTICE OF PREPARATON (NOP) OF A DRAFT ENVIRONMENTAL IMPACT
REPORT FOR THE ANTELOPE NORTH SOLAR PROJECT

The City of Lancaster is the Lead Agency in charge of environmental review of the Antelope North Solar Project as proposed by the applicant in their submittal for Conditional Use Permit No. 17-10. The City has determined that a project level Environmental Impact Report (EIR) will be prepared. The City is soliciting comments from reviewing agencies and the public regarding the scope and content of the environmental document. For reviewing agencies, the City requests comments with respect to your agency's statutory responsibility as related to the proposed project. Your agency may need to use the EIR when considering relevant permits or other approvals for the project. The City is also seeking the views of residents, property owners, and concerned citizens regarding issues that should be addressed in the EIR.

Comment Period: Comments may be sent anytime during the 30-day NOP comment period. The NOP review and comment period begins on **June 30, 2017** and ends on **July 31, 2017**. All comments must be received during the comment period and no later than 6 p.m. on July 31, 2017. Please include the name of a contact period for your agency, if applicable. All comments should be directed to:

City of Lancaster
Attn: Jocelyn Swain, Principal Planner – Environmental
44933 Fern Avenue
Lancaster, CA 93534

Comments may also be emailed to jswain@cityoflancasterca.org or faxed to (661) 723-6182.

Scoping Meeting: Oral comments may be provided at the Scoping Meeting to be held on Thursday, July 27, 2017 from 6:30 p.m. to 8 p.m. in the Council Chambers located at Lancaster City Hall. Lancaster City Hall is located at 44933 Fern Avenue, Lancaster, CA 93534.

Antelope North Solar Project Description

Project Location

The proposed project is located in the Antelope Valley in the northwestern portion of Los Angeles County, completely within the City of Lancaster. The project site consists of approximately 430 acres and is generally bound by Avenue D-8, Avenue G, 100th Street West and 110th Street West. The proposed project encompasses the following Assessor's Parcel Numbers (APNs): 3264-002-016, 3264-015-017, 3264-019-002, 3264-022-001, 3264-022-044, 3264-022-045, 3264-022-068, 3264-022-069, 3264-022-070, 3264-022-071, 3264-022-072, 3265-003-005, 3265-003-010, 3265-003-011, and 3265-003-012.

Project Description

The proposed project will be constructed in phases and operated for a period of at least 35 years. The project will consist of the following elements:

- Photovoltaic modules;
- Module mounting system;
- Balance of system and electrical boxes (e.g., combiner boxes, electrical disconnects);
- Electrical inverters and transformers;
- Energy Storage Solutions;
- Electrical AC collection system, including switchgear;
- Data monitoring equipment;
- Transmission and generation-tie lines; and
- Access roads and security fencing.

The proposed project will not require the construction of an on-site operations and maintenance facility. The proposed project consists of a 72 megawatt (MW) solar PV generating facility and gen-tie line connecting the project's electrical output to a collector substation located on Avenue J. The proposed project will utilize PV technology on either fixed-tilt or tracker mounting supports. The major components of the proposed project are described below.

Solar PV Generating Facility

The proposed project will be designed for optimum performance and ease of maintenance. A series of PV module arrays will be mounted on racking systems supported by a pile-driven foundation design. The module mounting system or racking system will be a fixed-tilt or tracker PV array configuration oriented to maximize the amount of incident solar radiation absorbed over the course of the year. Electrical connections from a series of PV arrays will be channeled to combiner boxes located throughout the solar field. Electrical current will be collected and combined prior to feeding the inverters. The solar field will be laid out in a common PV block design to allow adequate clearance or access roads and adequate access for maintenance.

Inverters will be consolidated in areas to minimize cable routing, trenching, and minimal electrical losses. The AC output from the inverters will be routed through an AC collection system and consolidated within system switchgear. The final output from the facility will be processed through a transformer to match the interconnection voltage. Electrical safety and protection systems will be provided to meet utility, California Independent System Operator (CAISO), and regulatory codes and standards. The energy will ultimately be delivered to the SCE transmission network at the Antelope Substation.

Photovoltaic Modules

The actual total number of PV modules will depend on the technology selected, optimization evaluation, and detailed design. The market conditions, economic considerations, and environmental factors will be taken into account during the detailed design process. The following PV module technologies may be utilized during construction of the project: PV thin-film technology, PV crystalline silicon technology, stationary fixed-tilt modular configuration and tracking module configuration. The modules will be oriented toward the south and angled at a degree that will optimize solar resource efficiency. For the tracking configuration, the modules will rotate from east to west over the course of the day.

Standard Installation, Array Assembly and Racking

The module mounting system provides the structure that supports the PV module arrays. The foundations are typically steel pipes/piles driven into the soil using pneumatic or similar techniques for pile driving. Once the foundation has been installed, the module racking system will be installed to support the PV modules. For a tracking configuration, motors will be installed to drive the tracking mechanism. The module mounting system will be oriented in rows within a PV design block reflecting a standard and uniform appearance across the facility. The module configuration will typically be uniform in structural height and width although the actual height of the arrays will vary based on ground elevations. Grading activity will be limited to access roads where appropriate to minimize dust generation throughout the construction and operation of the facility.

DC Collection, Inverters, AC Collection, Transformers, and Gen-Tie

Modules will be electrically connected into strings. Each string will be funneled by electrical conduit underground to combiner boxes located throughout the solar field power blocks. The output power cables from the combiner boxes will again be consolidated and feed the DC electricity to inverters which convert the DC to AC. Each inverter will be fully enclosed, pad mounted, and stand approximately 95 inches in height. The AC output of two inverters will be fed via underground cable into the low-voltage side of the inverter step-up transformer, generally within 20 feet of the inverters. Underground electrical cables will be installed using ordinary trenching techniques. Trenching is expected to be relatively shallow.

Energy Storage

Energy storage would include an intelligent battery system onsite. The battery storage technology is a modular and fully enclosed power storage system that uses telecommunication systems and real-time control software to charge and discharge the battery according to power delivery needs. Typical modular energy storage solutions are approximately 102 inches in height and 20 to 40 feet in length. The energy storage would be located near inverter stations or near switchgear.

Switchgear

The potential switchgear area would be excavated for the transformer equipment, control building foundation, and oil containment area. Reinforced concrete is used for foundations. Structural components in the switchgear areas would include:

- Transformers, switchgear, and safety systems; and
- Footings and oil containment system for transformers.

The transformer would be pad mounted and enclosed together with switchgear and a junction box. The high-voltage output of the transformer would be combined in series via underground collector cable to the junction box of the transformer in closest proximity. Distances can range from 60 feet to 700 feet throughout the project site. The collector system cables would be tied at underground junction boxes to the main underground collector cables, composed of a larger gauge wire, to the location of the generator step-up (GSU) transformer. The main collector cables would rise into the low-voltage busbar and protection equipment that is enclosed together with the GSU. The primary switchgear includes the main circuit breaker and utility metering equipment, and would be enclosed separately and pad mounted together with the GSU. Both the GSU and the primary switchgear stand approximately 87 inches in height. The output of the switchgear would be the start of the gen-tie.

Data Collection System

The proposed project will be designed with a comprehensive Supervisory Control and Data Acquisition (SCADA) system for remote monitoring of facility operation and/or remote control of critical components. Within the site, the fiber optic or other cabling required for the monitoring system will be installed leading to a centrally located (or series of appropriately located) SCADA system cabinets. The telecommunications connections to the SCADA system cabinets are either wireless or hard wired. The system will also include a meteorological data collection system.

Interconnection and Gen-Tie Lines

Multiple 34 kV underground gen-tie lines and up to 66 kV underground or overhead gen-tie lines will connect to the Project to a previously approved collector substation located at the southeast corner of 100th Street West and Avenue J.

The Project will connect to a collector substation on Avenue J through the following potential gen-tie corridors:

- West along Avenue E-8, south along 110th Street West, and east along Avenue J;
- Along Avenue G between 110th Street West and 100th Street West;
- East along Avenue F-8; south along 100th Street West; west and southwest along private easements to future Lancaster Boulevard; west along future Lancaster Boulevard; south along 105th Street West and east along Avenue J;
- Along 100th Street West between Avenue F and Avenue G.

It is expected that one main path will be used for the gen-tie corridor, with deviations or a combination of the path(s) above as necessary. Electricity at will be stepped up to 220 kV at the collector substation and will ultimately be delivered to the existing SCE Antelope Substation.

AREAS OF POTENTIAL IMPACT

The City has determined that an EIR is required for this project. Therefore, as allowed under Section 15063(a) of the CEQA Guidelines, the City has not prepared an Initial Study and will instead begin work directly on the EIR, as allowed under CEQA Guidelines Section 15081. The EIR will focus on the potentially significant effects of the project and will document the reasons for concluding that other effects will be less than significant. The topics listed below will be further analyzed in the EIR. However, certain criteria within the topics listed below have been scoped out of further analysis, as detailed in the next section.

- Aesthetics (including light and glare)
- Agriculture and Forestry Resources
- Air Quality and Greenhouse Gases
- Biological Resources
- Cultural Resources, including Tribal Cultural Resources
- Geology/Soils
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Noise
- Public Services
- Transportation/Traffic
- Utilities/Service Systems

Effects Found Not to be Significant

Based on the site or project characteristics, it is not anticipated that impacts will not occur within the following environmental topic areas and therefore, these specific environmental impact criteria will be scoped out and included in the Effects Found Not To Be Significant

section of the EIR. A brief description of why each topic or impact area was found not to be significant, and therefore scoped out, is provided below.

Agriculture and Forestry Resources

- **II.c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?** The project site is not zoned as forest land, timberland, or timberland production and does not meet the requirements of a timberland zone as defined by Public Resources Code Section 4526. Therefore, the project would not result in the rezoning of forest land or timberland and no impacts would occur.
- **Result in the loss of forest land or conversion of forest land to non-forest use?** There are no forests within the City of Lancaster. The project site consists of former agricultural lands or undeveloped desert. Therefore, no potential impacts associated with the loss or conversion of forest land would occur.

Air Quality

- **III.e) Create objectionable odors affecting a substantial number of people?** Solar facilities are not sources of objectionable odors. Construction activities would result in equipment exhaust odors that may be considered objectionable by some; however, there are few sensitive receptors in the immediate vicinity and construction activities would be temporary. Therefore, no potential impacts associated with creating objectionable odors affecting a substantial number of people would occur.

Biological Resources

- **IV.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?** There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans or other approved local, regional, or State Habitat Conservation Plans that are applicable to the project site. Therefore, no potential impacts would occur with respect to the proposed project conflicting with the provisions of adopted plans.

Geology and Soils

- **VI.e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for disposal of waste water?** The proposed project would not generate waste water that would need to be disposed of in a septic or sewer system. During construction and any maintenance operations, portable restroom facilities would be provided for workers.

Therefore, no potential impacts with respect to waste water disposal systems would occur.

Hazards and Hazardous Materials

- **VIII.c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?** Solar facilities do not emit hazardous emissions; however, construction activities would include the use of hazardous materials such as gasoline, diesel, and solvents. The closest school to the project site is Del Sur Elementary, located at the northwest corner of Avenue H and 90th Street West. This school is approximately one mile southeast of the eastern portion of the project site. As such, the project is not located within one-quarter mile of an existing or proposed school. Therefore, no potential impacts associated with emission of hazardous materials or substances within one-quarter mile of an existing or proposed school would occur.
- **VIII.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 for people residing or working in the project area?** The project site is not located within two miles of an airport. The nearest airport is the William J Fox Airfield, located approximately 5 miles east of the project site. Therefore, no potential impacts associated with aviation safety hazards at the project site would occur.
- **VIII.f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?** The project site is not located within two miles of a public or private airport or airstrip. The nearest airport is the William J Fox Airfield, located approximately 5 miles east of the project site. Therefore, no potential impacts associated with aviation safety hazards at the project site would occur.

Hydrology and Water Quality

- **IX.g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?** The proposed project does not involve the construction of any habitable structures, including housing. Therefore, no potential impacts with respect to placing housing within a 100-year flood hazard area would occur.

Land Use and Planning

- **X.c) Conflict with any applicable habitat conservation plan or natural community conservation plan?** There are no Habitat Conservation Plans or Natural Community Conservation Plans that are applicable to the project site. Therefore, no potential impacts would occur with respect to the proposed project conflicting with the provisions of these plans.

Mineral Resources

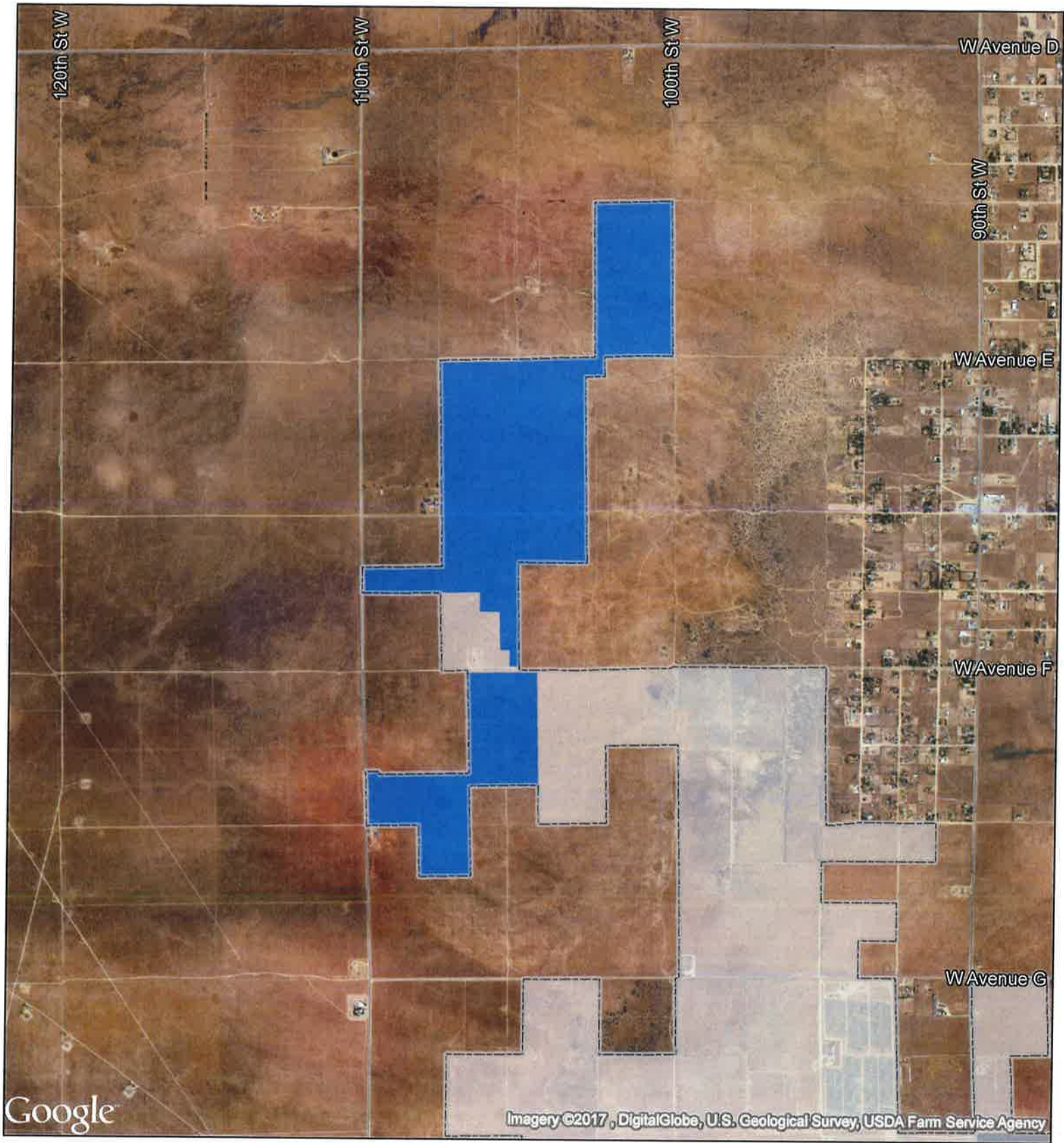
- **XI.a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State? Or XI.b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?** The project site does not contain any known mineral deposits or active mineral extraction operations. The City of Lancaster, and the project site, are not considered likely to have large, valuable mineral and aggregate deposits according to the City of Lancaster 2030 General Plan Master Environmental Assessment (April 2009). Furthermore, the proposed solar facility would be decommissioned at the end of its operational life, thereby allowing future access to any minerals should they be determined to be onsite. This condition precludes the possibility of the loss of important mineral resources as a result of project construction and operation.

Noise

- **XII.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 expose people residing or working in the project area to excessive noise levels?** The project site is not located within two miles of an airport. The nearest airport is the William J Fox Airfield, located approximately 5 miles east of the project site. Therefore, no potential impacts associated with aviation noise at the project site would occur.
- **XII.f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?** The project site is not located within the vicinity of a private airstrip. The nearest airport is the William J Fox Airfield, located approximately 5 miles east of the project site. Therefore, no potential impacts associated with aviation noise at the project site would occur.

Population and Housing

- **XIII.b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? Or XIII.c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?** The project site does not contain any residential uses and no residential uses are included as part of the proposed project. Therefore, the proposed project would not have the potential to displace people or housing and would not require the construction of housing elsewhere.



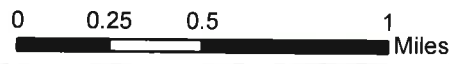
Los Angeles County, CA



Map Details



- Project Site
- City of Lancaster



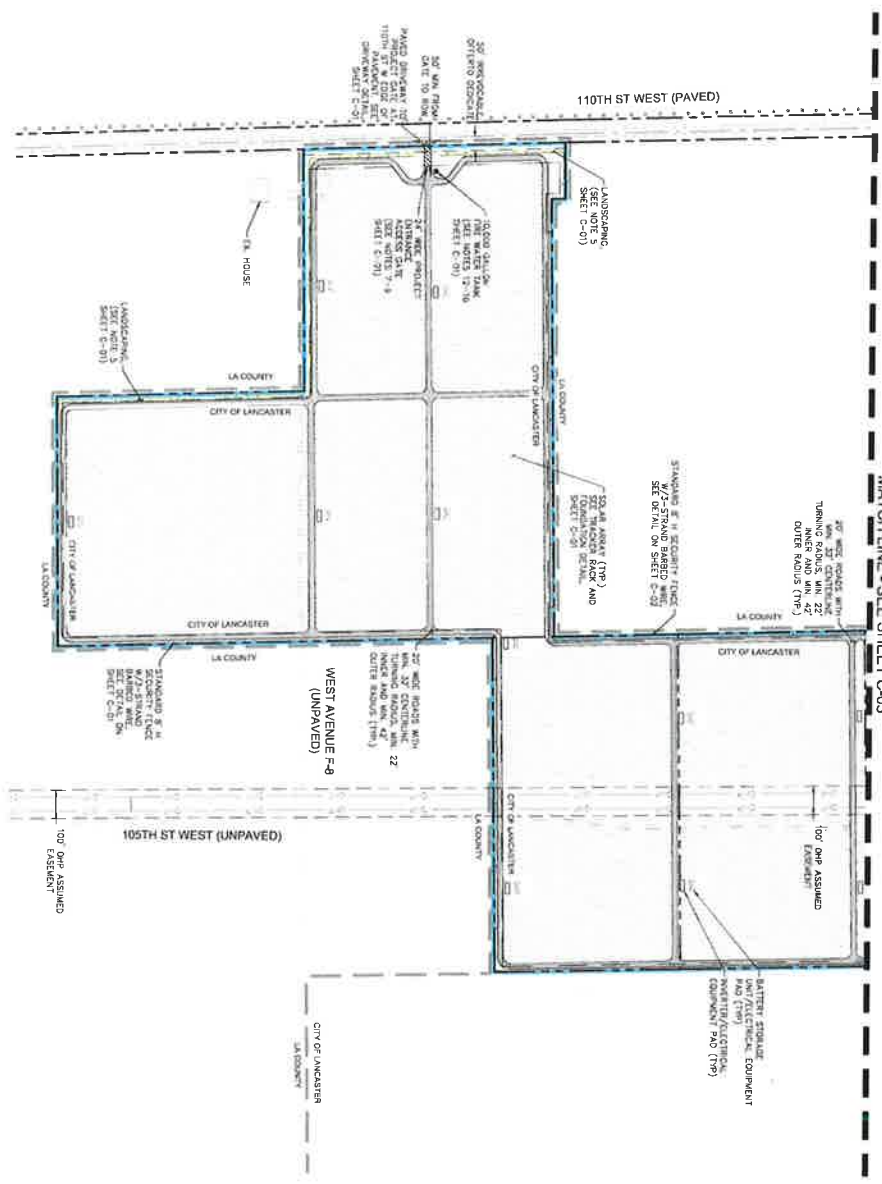
Map Description

Antelope North
Figure 2

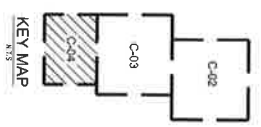
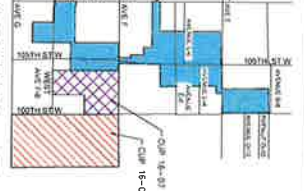
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MATCH LINE - SEE SHEET C-03

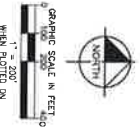


BATTERY STORAGE AND ELECTRICAL EQUIPMENT (COMPONENT PAD) (TYP)



LEGEND

- PROJECT BOUNDARY
- CITY LIMIT
- ROAD CENTERLINE
- RIGHT OF WAY DEDICATION
- BASINENT
- PAVED ROAD RIGHT OF WAY
- EXISTING DIRT ROAD
- EXISTING OVERHEAD POWER LINE
- EXISTING OVERHEAD POWER LINE
- PROPOSED ACCESS ROAD
- PROPOSED ACCESS ROAD
- DISTING POWER POLE
- INVERTER
- 10,000 GALLON FIRE WATER TANK (SEE NOTES ON SHEET C-01)
- BATTERY STORAGE UNIT
- PROPOSED CLASS III INK ROUTE & EXISTING LA COUNTY / ELECTION TANK
- CUP #427
- CUP #428
- CUP #429



NOT ISSUED FOR CONSTRUCTION



ANTELOPE NORTH SINGLE-AXIS TRACKER PHOTOVOLTAIC ARRAYS 72 MW 430 ACRES

CUP SITE PLAN - OVERALL
72 MW SOLAR PHOTOVOLTAIC GENERATION FACILITY EAST OF 110TH ST WEST AND SOUTH OF AVE D-8 LANCASTER, LOS ANGELES COUNTY, CA

S POWER
5000 EAST SPRING ST. SUITE 130
LONG BEACH, CA 90803

Kimley-Horn
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755 THE CANYON, SUITE 2000
SHAKEL, CA 92888
(714) 952-1000

NO.	REV.	DATE	BY	CHKD
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C-04