U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 17-AUG-2020
ORM Number: SPA-2018-00316
Associated JDs: SPA-2018-00316
Review Area Location[1]:
State/Territory: TX City: N/A County/Parish/Borough: Crane County
Center Coordinates of Review Area: Latitude 31.247811 Longitude -102.319683

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- ☒ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: The Project site is comprised entirely of Dry land.
- ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in section II.B).
- ☐ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in section II.C).
- ☐ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)[2]

§ 10 Name	§ 10 Size	§ 10 Criteria	Rationale for § 10 Determination
N/A	N/A	N/A	N/A

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters)[3]

(a)(1) Name	(a)(1) Size	(a)(1) Criteria	Rationale for (a)(1) Determination
N/A	N/A	N/A	N/A

Tributaries ((a)(2) waters):

(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
N/A	N/A	N/A	N/A

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):

(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination
N/A	N/A	N/A	N/A

Adjacent wetlands ((a)(4) waters):

(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination

[1] Map(s)/Figure(s) are attached to the AJD provided to the requestor.
[2] If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.
[3] A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where independent upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD form.
[4] Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps Districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.
[5] Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.

N/A	N/A	N/A	N/A

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12))[4]:

Exclusion Name	Exclusion Size	Exclusion[5]	Rationale for Exclusion Determination
N/A	N/A	N/A	N/A

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

_X_ Information submitted by, or on behalf of, the applicant/consultant: *Historic aerial Imagery, U.S. Geological Survey Topographic Quadrangle Maps (June 2020), U.S. Fish and Wildlife service national wetlands Inventory (NWI) Maps (June 2020), the National Hydrography Data Set (NHD) (June 2020)*
This information *is* sufficient for purposes of this AJD.
Rationale: *N/A*

___ Data sheets prepared by the Corps: *Title(s) and/or date(s).*

_X_ Photographs: *Aerial Imagery (Albuquerque District Regulatory Viewer using USGS; NWI, NHD & Google Earth-Pro historical imagery).*

___ Corps Site visit(s) conducted on: *Date(s).*

_X_ Previous Jurisdictional Determinations (AJDs or PJDs): *AJD:* SPA-2018-00316, November 2, 2018. The previous AJD determined that the 1,973-acre review area was comprised entirely of uplands as the single drainage area identified in the review area did not exhibit a bed, bank, or ordinary highwater mark (OHWM). The current AJD was requested by the same applicant in response to their extending the footprint of the proposed project area. As such, this AJD covers the additional 428-acre review area, but under the same ORM Action Number.

___ Antecedent Precipitation Tool: *provide detailed discussion in Section III.B.*

_X_ USDA NRCS Soil Survey: *Albuquerque District Regulatory Viewer.*

_X_ USFWS NWI maps: *Albuquerque District Regulatory Viewer.*

_X_ USGS topographic maps: *Albuquerque District Regulatory Viewer.*

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA Sources	Land Resource Regions and Major Land Resource Areas of the United States, the Caribbean, and the Pacific Basin (USDA Handbook 296, issued 2006).
NOAA Sources	N/A.
USACE Sources	Albuquerque District Regulatory Viewer
State/Local/Tribal Sources	N/A.
Other Sources	N/A.

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B. Typical year assessment(s): N/A

C. Additional comments to support AJD:

The review area is located approximately 9 miles Northwest of McCamey, Texas. The project site is located within the Southern Desertic Basins, Plains, and Mountains Land Resource Region as defined by the U.S. Department of Agriculture (USDA). More specifically, it falls within the MLRA #42 Region D (USDA/NRCS; Handbook 296, issued 2006). The average annual precipitation for the region is between 8 to 14 inches of rainfall per year. Most of this precipitation occurs as high-intensity, short duration events resulting from convective thunderstorms from mid-spring to mid-autumn.

The review area contains one small drainage area along its northwest portion. Based on the most resent aerial imagery and the data collected to support the previous AJD, the identified drainage area lacks a bed, bank, and/or OHWM. As a result, it has been determined that the review area is comprised entirely of dryland.

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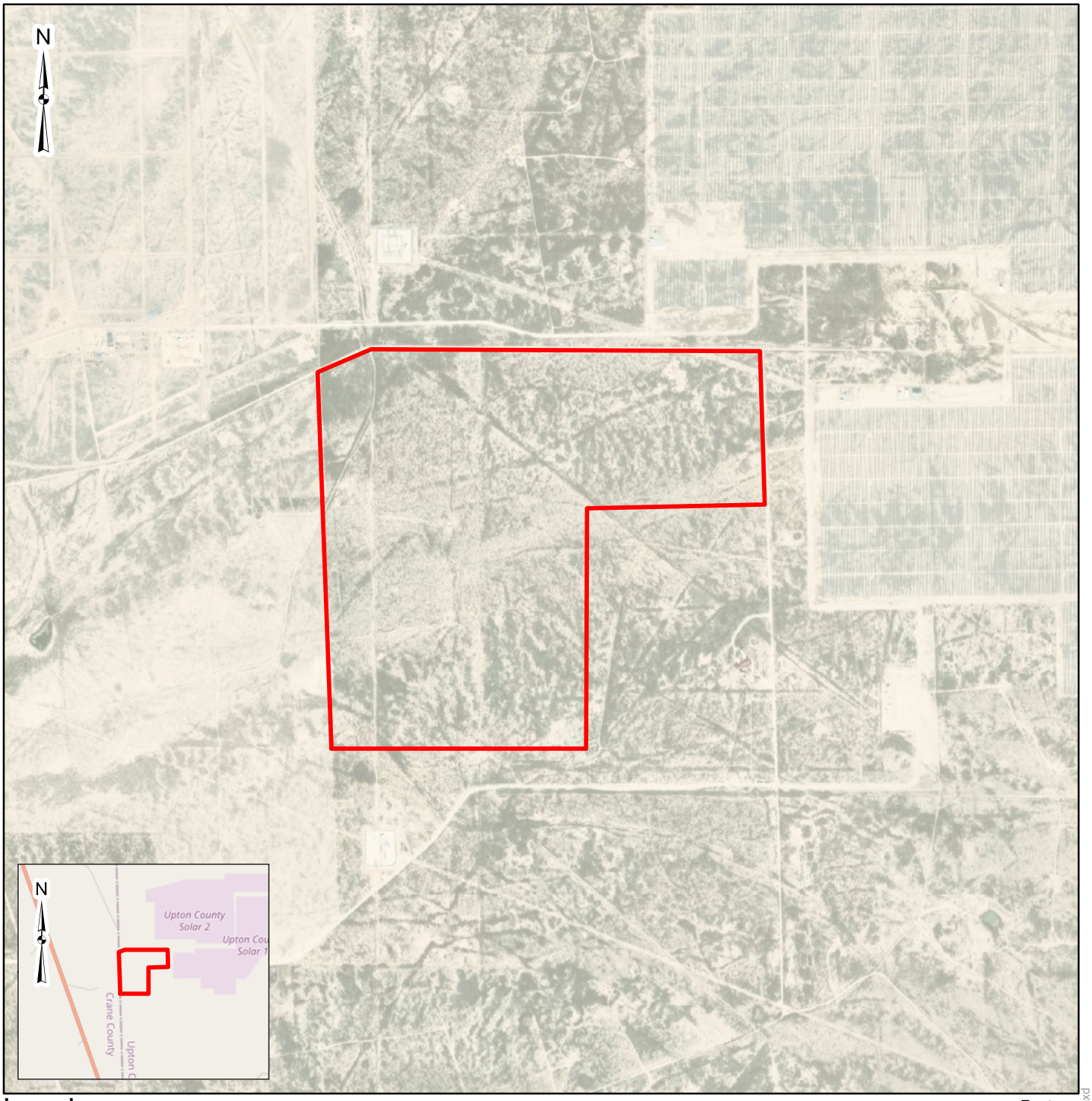

Legend

Study Area

0 1,000 2,000 4,000 Feet

DATA SOURCES: CED Crane Solar LLC
Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Project No.:	AR207102
Date:	Jun 2020
Drawn By:	JAM
Reviewed By:	JTP

Terracon
5847 50th Street
Lubbock, Texas 79424
PH. (806) 300-0140 terracon.com

Vicinity Map

Proposed Solar Farm - 428 Acres
Between U.S. Highway 385 and U.S Highway 67
Upton County, Texas

Exhibit

1.0

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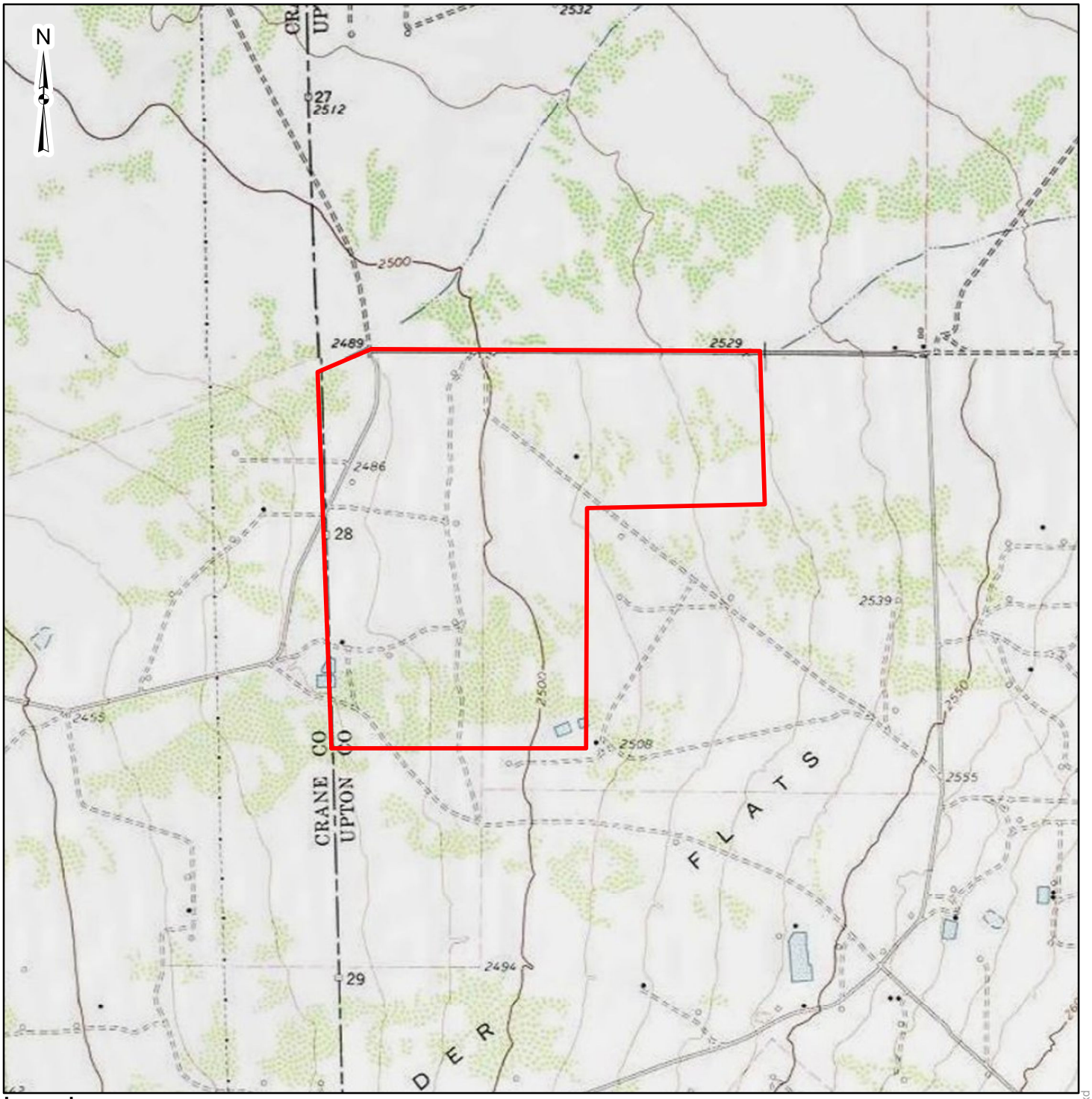

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Study Area

0 1,000 2,000 4,000 Feet

DATA SOURCES: CED Crane Solar LLC
Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

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USGS Topographic Map

Proposed Solar Farm - 428 Acres
Between U.S. Highway 385 and U.S. Highway 67
Upton County, Texas

Exhibit

2.

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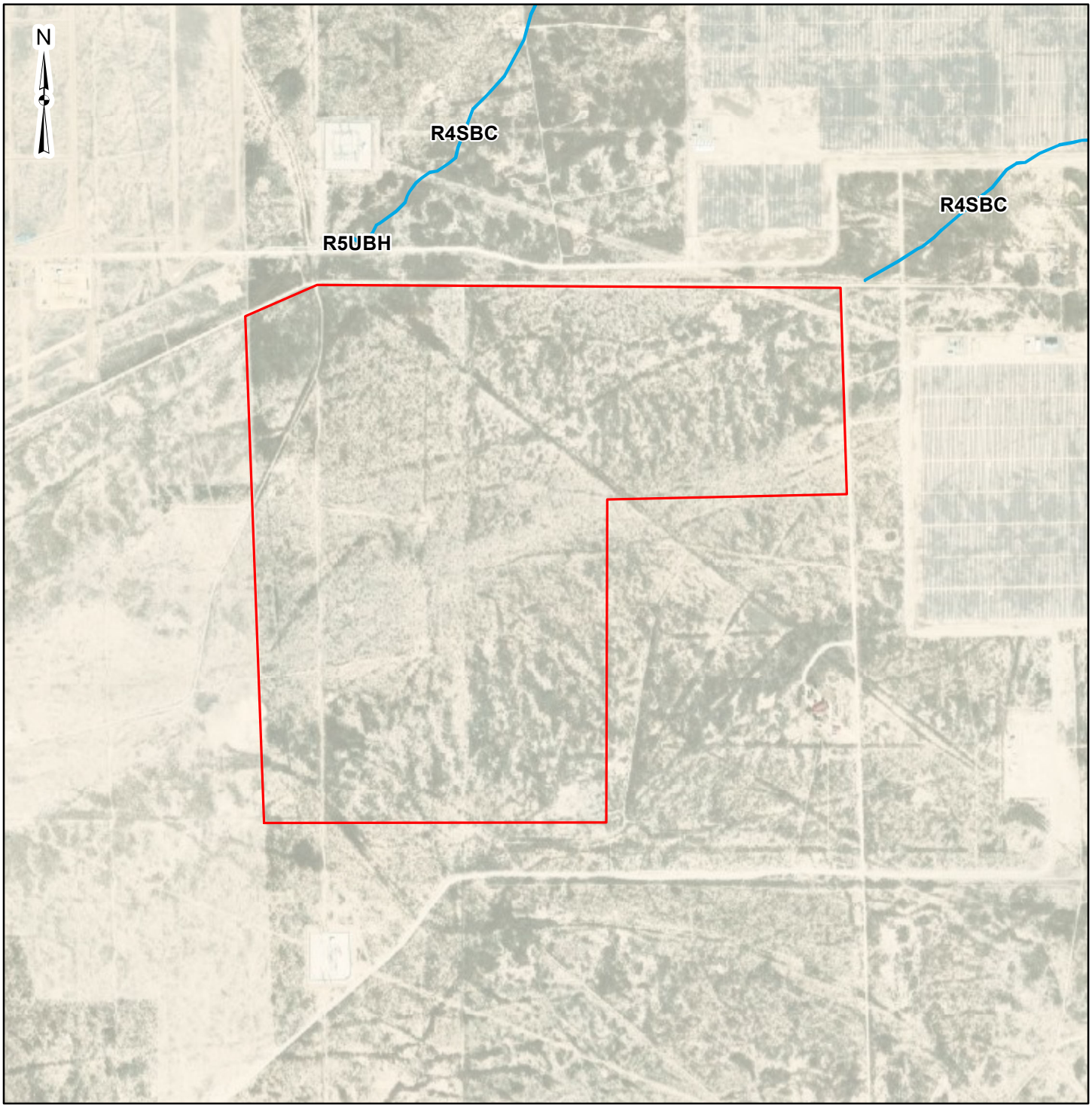

Legend

Study

Riverine

0 750 1,500 3,000 Feet

DATA SOURCES: CED Crane Solar LLC; USFWS NWI Digital Data
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

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Date:	Jun 2020
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NWI Map

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Upton County, Texas

Exhibit

3.0

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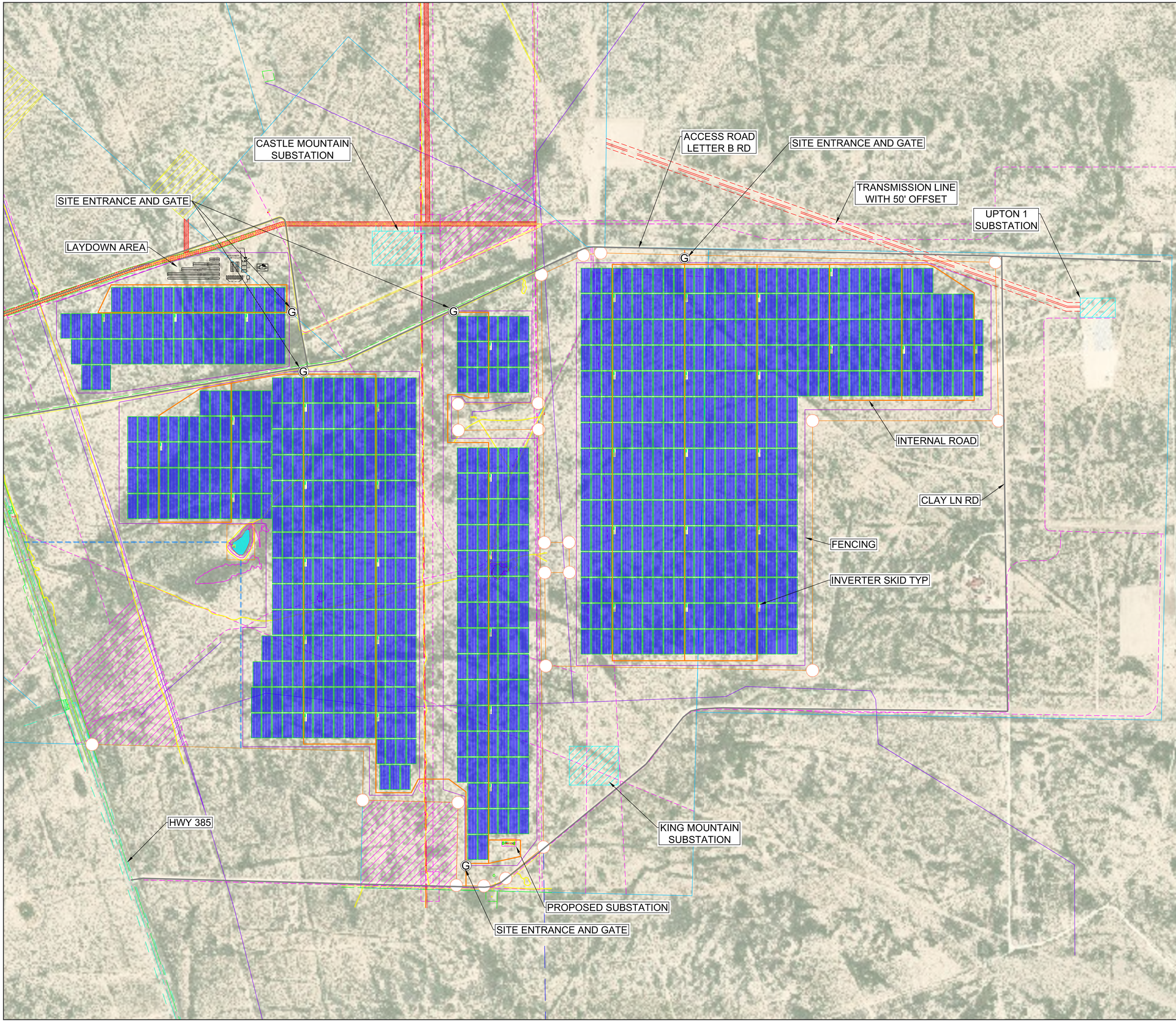

Preliminary Project Information

Project Name:	Crane 2 Solar Project - 150 MWAC
Project location:	Crane County, Texas
Preliminary Design Parameters:	2017 ASHRAE Table for ODESSA-SCHLEMEYER Field ,TX
Extreme Max Temp / 20 Years:	Extreme Temperature over 20 year period = 43.0°C
Extreme Annual Minimum Mean Dry Bulb Temp (°C)	-9°C
Windspeed (3 sec peak gust in mph):	ASC7-10 Risk Category II=105 mph min.
Seismic criteria:	SS = 0.109g, S1 = 0.035g; SDS = 0.058g, SD1 = 0.018g
ASCE 7* Ground Snow Load:	Ground Snow Load is 5 psf
Preliminary Project Size MVAac @ 43.0°C:	161.130
Preliminary Project Size MWac @ 43.0°C w/ .95 PF :	153.074
Preliminary Project Size w/2.0% line losses MWAC @ 43.0°C.	150.012
Preliminary Project Size MWdc:	199.924
ILR (Inverter Loading Ratio):	1.3061
Proposed Inverter:	TMEIC_PVU-L0840GR x5 pack
Assumed Power Factor:	0.95
Inverter skid Output (MVAac) w/ @ 43.0°C	3.9300
Inverter Output Skid (MWac) w/ 0 .95 PF @ 43.0°C	3.7335
Number of inverters skids (5 Inv. /skid. @ 0.747 Mwac each) :	41
String Size:	27 modules in a string
Trackers:	81 module trackers (3*27) 54 module trackers (2*27)
Quantity of Trackers - 81 mod.	5822
Quantity of Trackers - 54 mod.	82
Total Quantity of Modules 420 w :	476010
Typical Block configuration with 420 watt modules.	41
81 mod trackers:	142
54 mod trackers:	2
Module Make & Size:	Jinko JKM420m-72HL-V
GCR:	0.3875
Tracker Row Spacing:	17' Tracker Spacing

LEGEND:

- INVERTER SKID
- TRACKER ROWS
- INTERNAL ROADS (12FT WIDE W/ 2FT SHOULDERS)
- ACCESS ROADS
- OVERHEAD TRANSMISSION LINE
- EXISTING SUBSTATIONS
- PROPOSED CRANE 2 SUBSTATION
- OIL/GAS DRILLING
- EASEMENT
- PROJECT BOUNDARY
- FENCING
- G GATE/SITE ENTRANCE

0' 300' 600' 1200'

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PRELIMINARY - NOT FOR CONSTRUCTION

ENGINEER'S STAMP

REVISIONS

REV	DATE	DESCRIPTION	DRW	CHK
A	03.27.19	PRELIMINARY DESIGN	KM	
B	07.15.19	ADDED 30MWAC	KM	
C	02.17.20	ADDED 150MWAC	BAP	

DATE: 03/27/2019
SCALE: NTS
DRAWN BY: BAP
CHECKED BY:
APPROVED BY:
REV NO.
PROJECT #:

PROJECT LOCATION: CRANE 2
31.4655N, 102.5298W

TITLE: **SITE PLAN**

SHEET **G.200**

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