DRY LAND APPROVED JURISDICTIONAL DETERMINATION FORM¹ U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): March 12, 2019
- DISTRICT OFFICE, FILE NAME, AND NUMBER: CESAC-RDE; Knight Solar; SAC-2019-00278
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:

		er South Carolina County/parish/borough: Lancaster County City: Lancaster er coordinates of site (lat/long in degree decimal format): Lat. 34.7468°, Long80.6420° Universal Transverse Mercator: 178 532921 3844570		
	Name of nearest waterbody: There are no aquatic resources within the project site. Name of watershed or Hydrologic Unit Code (HUC): 03050103-03 (Cane Creek)			
	V	Check if map/diagram of review area is available upon request.		
		Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a differen JD form.		
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):			
	V	Office (Desk) Determination. Date: March 4, 2019		
		Field Determination. Date(s):		

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

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SECTIO	N III: DATA SOURCES.
A. SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and
•	ested, appropriately reference sources below):
✓	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Maps and data sheet submitted by Pilot Environmental, Inc. Map titled: "Wetland Map / Knight Solar / Approximate 40 Acre Tract / Lancaster County, SC / Pilot Project 4402", dated: February 12, 2019.
~	Data sheets prepared/submitted by or on behalf of the applicant/consultant.
	Office concurs with data sheets/delineation report.
	Office does not concur with data sheets/delineation report.
	Data sheets prepared by the Corps:
~	U.S. Geological Survey Hydrologic Atlas: 03050103-03 (Cane Creek)
	USGS NHD data.
	USGS 8 and 12 digit HUC maps.
⊽	U.S. Geological Survey map(s). Cite scale & quad name: Antioch quadrangle USGS topographic maps depict the site as both forested and non-forested site with no blue line features (aquatic resources) within the project boundaries. Topographically, the site contains two hills of 20-30 feet elevation gain on the southern side of the site, one in the southeast corner and one in the southwest corner. To the north of the hills, the land slopes to a farm field that abuts State Road S-29-40. Between the hills, and slightly to the southwest, is a small off-site valley that drains into an unnamed blue line feature that eventually feeds into Gills Creek ~1.25 river miles downstream. This valley is outside of the project boundaries, but notable due to its location in proximity to a drainage basin and its relatively lower elevation. Additionally, there is one more off-site blue line feature to the east of the northeastern project boundary, this feature also drains into Gills Creek.
~	USDA Natural Resources Conservation Service Soil Survey. Citation: The Lancaster County soil survey depicts five soils within the project site, including: Enon loam (2-6% slopes) (EnB2), Enon loam (6-10% slopes) (EnC2), Henderson silty clay loam (6-10%, severely eroded) (HeC3), Georgeville silt loam (2-6% slopes, eroded) (GeB2), and Nason silty clay loam (10-25% slopes, severely eroded) (NsE3). No on-site soils are listed as hydric for Lancaster County on the 2016 SC hydric soils list.
[7]	National wetlands inventory map(s). Cite name: National wetland inventory maps depict the site in its entirety as a matrix of upland land types, including: mixed upland forest (U43), deciduous upland forest (U41), and cropland/pasture (U21). Additionally, adjacent to the northeastern site border, but completely off-site, is one 0.15 acre palustrine forested wetland. State/Local wetland inventory map(s):
	FEMA/FIRM maps:
	100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
~	Photographs: Aerial (Name & Date): Lancaster 1999 Aerial Index 11201:175: SC DNR 2006: Google Earth 2005-2018:

Other (Name & Date): Site pictures provided by Pilot Environmental, Inc.

¹ This form is for use only in recording approved JDs involving dry land. It extracts the relevant elements of the longer approved JD form in use since 2007 for aquatic areas and adds no new fields.

	Previous determination(s). File no. and date of response letter:
	Applicable/supporting case law:
	Applicable/supporting scientific literature:
~	Other information (please specify): Aerials depict a 40 acre forested and non-forested site, with the majority of the western-northeastern
	portion of the site being an actively managed farm field and the southern portion of the being forested hilly terrain.

LiDAR digital elevation model (DEM) monochrome and colorized curves verify the topography of the site illustrated in the seen on the USGS topographic map, with two hills on the southern border sloping to a farm field on the northern portion of the site.

On January 25, 2019, Pilot Environmental, Inc. conducted a site visit and found no potential aquatic resources within the site boundaries. While on-site one data point was taken in a low area of the northern section of the site within the farm field (34.7472, -80.6423), at this point wetland hydrology was found, but the sample point lacked hydric soil and hydrophytic plants. The consultants also took soil samples and pictures throughout the site and found brightly colored oxidized soil within the forested hilly area in the south.

B. REQUIRED ADDITIONAL COMMENTS TO SUPPORT JD. EXPLAIN RATIONALE FOR DETERMINATION THAT THE REVIEW AREA ONLY INCLUDES DRY LAND:

Data Source Information: Aerials depict a 40 acre forested and non-forested site, with the majority of the western-northeastern portion of the site being an actively managed farm field and the southern portion of the being forested hilly terrain. LiDAR digital elevation model (DEM) monochrome and colorized curves verify the topography of the site illustrated in the seen on the USGS topographic map, with two hills on the southern border sloping to a farm field on the northern portion of the site. On January 25, 2019, Pilot Environmental, Inc. conducted a site visit and found no potential aquatic resources within the site boundaries. While on-site one data point was taken in a low area of the northern section of the site within the farm field (34.7472, -80.6423), at this point wetland hydrology was found, but the sample point lacked hydric soil and hydrophytic plants. The consultants also took soil samples and pictures throughout the site and found brightly colored oxidized soil within the forested hilly area in the south. Antioch quadrangle USGS topographic maps depict the site as both forested and non-forested site with no blue line features (aquatic resources) within the project boundaries. Topographically, the site contains two hills of 20-30 feet elevation gain on the southern side of the site, one in the southeast corner and one in the southwest corner. To the north of the hills, the land slopes to a farm field that abuts State Road S-29-40. Between the hills, and slightly to the southwest, is a small off-site valley that drains into an unnamed blue line feature that eventually feeds into Gills Creek ~1.25 river miles downstream. This valley is outside of the project boundaries, but notable due to its location in proximity to a drainage basin and its relatively lower elevation. Additionally, there is one more off-site blue line feature to the east of the northeastern project boundary, this feature also drains into Gills Creek. The Lancaster County soil survey depicts five soils within the project site, including: Enon loam (2-6% slopes) (EnB2), Enon loam (6-10% slopes) (EnC2), Henderson silty clay loam (6-10%, severely eroded) (HeC3), Georgeville silt loam (2-6% slopes, eroded) (GeB2), and Nason silty clay loam (10-25% slopes, severely eroded) (NsE3). No on-site soils are listed as hydric for Lancaster County on the 2016 SC hydric soils list. National wetland inventory maps depict the site in its entirety as a matrix of upland land types, including: mixed upland forest (U43), deciduous upland forest (U41), and cropland/pasture (U21). Additionally, adjacent to the northeastern site border, but completely off-site, is one 0.15 acre palustrine forested wetland.

After a thorough review of the above data sources and the provided site information from Pilot Environmental, Inc. it has been determined this project site consists of 40 (forty) acres of non-jurisdictional uplands with 0 (zero) acres / linear feet of jurisdictional resources. This site was assessed per the provided site maps and on a single-basis form.