FILE NUMBER\_\_\_\_\_

### SPECIAL EXCEPTION APPLICATION

### APPLICATION CHECKLIST

Please use the checklist to ensure that all items required by your application have been included.

### **INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED**

Should you have any questions, please call the Zoning office at 229-263-5184

Completed	Description
√ - Attached	Letter of Intent (See page 3, item 7b of the application)
√ - LOI - Figure 1, Table 2	Map and parcel number of subject property
√ - A-G Zone, LOI page 1	Current Zoning District of subject property
√ - LOI, Attachment A	If the applicant is different from the owner, a notarized
	letter of authorization from the property owner stating that
	the applicant may act on their behalf
√ - LOI, Attachment B	List of adjacent property owners obtained from the Tax
	Assessor's office (See page 3, item 7a of the application)
√ - LOI, Attachment C	Conceptual site plan (See page 3, item 7c of the application)
V - See below, and Special	Signature of the Applicant
Exception Application Form,	
and LOI	
V - See below, and Special	Date
Exception Application Form,	
and LOI	
√ - Enclosed	\$120.00 Application Fee
√ - Enclosed \$154 total for	\$7.00 Fee per adjacent property owners for notification
notification to 22 adjacent	
property owners as listed in	
LOI Attachment A	
v - Enclosed	\$100.00 Advertising Fee

I certify that the above items have been completed.

Signature of Applicant

7-27-2018

Date

FILE NUMBER\_\_\_\_\_

### SPECIAL EXCEPTION APPLICATION OFFICIAL USE ONLY

SUBMITTAL DEADLINE:

### PUBLIC HEARING DATES

PLANNING COMMISSION	COMMISSION GOVERNING BODY	
· · · · · · · · · · · · · · · · · · ·		
Date Received:	Received By:	
Property Posted:	Letters Mailed:	

This is an application for Special Exception. This completed application, together with all required attachments and fees must be returned to the Planning and Zoning Administrator by one of the established monthly deadlines in order to initiate review and consideration of the request. The applicant is responsible for the completeness, accuracy, and timely submittal of this application including all of its attachments and fees. Unless otherwise stated, please type or neatly print the responses to each of the following:

1) Applicant Information: (Contact person authorized to receive communication regarding this application):

Name: Quitman Solar, LLC - Stephen Land, Project Manager, NextEra Energy Resources, LLC

Complete Address: 700 Universe Boulevard Juno Beach, FL 33408 Phone: 513-649-4240
Has the applicant made any campaign contributions over \$250.00 to any local government official of the local government considering the application? YES NO (Circle One)
2) Property Information: Map Number See All br/Part (Circle One) of Parcel Number See Attachment A for Attachment A Attachment A
General Location Description: Adjacent to the southbound lane of Barwick Road, approximately 8.6 miles southeast of Pavo and 4.6 miles northwest of Quitman.
Existing Use of Property: Agriculture - Crops Proposed Use: Solar Power Facility
Acreage (use square footage if less than 1 acre) 1,099 acres Current Zoning District AG
Has this property been denied a zoning change during the past 12 months? YES NO_X
Has any public hearing been held regarding this property during the past 3 years ? YES NO_X (If yes, please describe)

How will the property receive water and sewer service? Public NA private NA community NA septic NA

3) **Owner Information:** If the applicant listed above is not the current owner of the property, please list the name and address of all current owners of record of the subject property.

If the applicant is not the current owner or is one of multiple owners, a notarized Letter of Authorization shall be signed and submitted by the owner(s) authorizing the Applicant to submit and be responsible for this application.

Map/Parcel Number	Owner of Record	Mailing Address	
See Letter of Intent, Attachment A for notarized Letters of Authorization and mailing addresses.			
×			

4) Special Exception Request Construct and operate a solar facility that produces electricity using

photovoltaic panels. Solar facility will connect to the electical grid via an onsite transmission line.

5) Approximate cost of work involved: <u>\$180,000,000</u>

6) Please explain why the Special Exception should be granted: Applicant has signed Option to Lease agreements

with landowners to construct and operate a solar energy facility. Solar facilities are compatible with agricultural and rural

#### land uses. Applicant has designed the Project to minimize impacts to natural resources.

Special Exceptions granted by the appropriate governing body shall be executed within a period of twelve (12) months from date of approval. Special Exceptions not executed within this time period shall become null and void and are subject to procedures for resubmission as established herein. Special Exceptions are not transferable except upon written approval of the appropriate governing body.

7) Attachments: The following items must be submitted in full prior to acceptance of this application.

A) Adjacent Property Owners (See page 5) A complete list, on provided form, of all current owners of record for properties located immediately adjacent to, or directly across the street or railroad right-of-way from the subject property. This information may be obtained from the Brooks County Tax Assessor's Office. (The accuracy and completeness of this information shall be the responsibility of the applicant)

B) Letter of Intent: stating the request, why the request is being made, and any other specific information pertaining to the request.

#### C) Proposed conceptual site plan: Plan shall include:

- 1) Applicant name, date of drawing and revision dates if applicable.
- 2) The size and location of the lot.
- 3) The dimensions and location of the existing building or structure(s) on the lot in question.
- 4) The dimensions and location of the proposed building, structure, or additions(s) on the lot.
- 5) If applicable, the location of any existing buildings on adjacent lots and their property line distance
- 6) Any additional information necessary to allow understanding of the proposed use and development

**Special Exception Process:** The Brooks County Planning Commission shall review the application for a Special Exception at a public hearing and shall make a **recommendation only** to the Brooks County Commissioners. At a second public hearing, the Brooks County Commissioners shall hear and decide all requests for Special Exceptions. In making this decision the governing body will consider the following:

- A) Is the type of street providing access to the use adequate to serve the proposed Special Exception use?
- B) Is access into and out of the property adequate to provide for traffic and pedestrian safety, the anticipated volume traffic flow, and to allow access by emergency vehicles?
- C) Are public facilities such as schools, water, sewer, or other public utilities and police and fire protection adequate to serve the proposed Special Exception use?
- D) Are refuse, service parking, and loading areas on the property located or screened to protect other properties in the area from such adverse effects as noise, light glare, and other negative . impacts?
- E) Will the hours and manner of operation of the Special Exception use have no adverse impacts on other properties in the area?
- F) Will the height, size, and location of the buildings or other structures on the property be compatible with the height, size, and location of buildings or other structures on neighboring properties?

The County Commission may impose or require such additional restrictions and standards as may be necessary to protect the health and safety of workers and residents in the community, and to protect the value and use of property in the general neighborhood; and provided that wherever the County Commission shall find in the case of any permit granted pursuant to the provisions of these regulations that any term, condition, or restrictions upon which such permit was granted are not being complied with, said County Commission shall rescind and revoke such permit after giving due notice to the parties concerned and granting full opportunity for a public hearing.

#### PLEASE READ THE ABOVE AND THEN SIGN BELOW

I do hereby certify that to the best of my knowledge, the above information and attachments are true and correct. I authorize the staff of the Planning and Zoning Office or their designee to enter and inspect the premises, which are the subject of this application.

Date 7-27-2018

Signature of Applicant

July 31, 2018

Billy Ingram Brooks County Inspections and Zoning Office 610 South Highland Street Quitman, GA 31643 <u>w.billyingram@windstream.net</u>

## Subject: Letter of Intent for Special Exception Application for the Quitman Solar Site, Brooks County, Georgia

Dear Mr. Ingram:

Quitman Solar, LLC (Quitman Solar or Applicant) is pleased to submit this Letter of Intent (LOI) for the proposed Quitman Solar Energy Project (Project) to the Brooks County Planning & Zoning Commission and the Brooks County Commission for review and consideration. Quitman Solar is proposing to construct and operate the Project, a 150-megawatt (MW) solar photovoltaic (PV) generating facility in unincorporated Brooks County. The Project Site (Site or Project Area) is located approximately six miles northwest of the City of Quitman, west of Barwick Road and north of Dry Lake Road. The Project is located within six tax parcels, in the Agricultural Use (A-G) District, under Option to Lease Agreements with the existing landowners. The Project Area would cover approximately 1,200 acres within these parcels. The exact area needed for the solar facility would be refined through continued coordination with interested agencies and development of the Project's engineering.

Key features of the Project would be:

- Approximately 532,494 solar PV modules and approximately 37 inverter skids to convert the power from DC to AC;
- A Project substation which would include equipment that would step-up the voltage to accommodate an interconnection to the West Valdosta to Thomasville 230kV transmission line;
- 34.5 kV AC collection system;
- Access and maintenance roads throughout the Project Area;
- Single-axis tracking construction with panel heights of approximately eight feet; and
- A seven-foot security fence surrounding the facility.

The Project would be designed to deliver power to Georgia Power Company (Georgia Power) through an interconnection to the Georgia Integrated Transmission System. The Applicant is proposing to construct an onsite substation (Project substation) that would step up the voltage to accommodate an interconnection to the Georgia Transmission Corporation's (GTC's) West Valdosta to Thomasville 230kV transmission line, which crosses the northern portion of the Project Area (Figure 1). Also in support of the Project, Georgia Power would construct and operate a switchyard (Georgia Power switchyard) to facilitate the interconnection. Before the

Commercial Operation Date (COD) planned for December 2019, the land for the Georgia Power switchyard (approximately nine acres) would be deeded to Georgia Power for operation.

The Project Site is located in the A-G Zoning District. According to Brooks County, solar energy generation and utility substations are considered a special exception use<sup>1</sup>, which is defined by Section 2-1 of the Brooks County Zoning Ordinance as follows:

A special exception is a use which within certain districts specified by this ordinance is not permitted as a matter of right but may be permitted within these districts by the Brooks County Commission after the Planning Commission and County Commission have: (1) reviewed the proposed site plans for the use, its location within the county, its arrangement and design, its relationship to neighboring property and other conditions peculiar to the particular proposal which would determine its desirability or undesirability; (2) has found the proposal not to be contrary to the intent of this ordinance; and (3) has approved the use as specified.

This submittal contains the required materials for a Special Exception Application, listed below:

- Special Exception Checklist (preceding pages);
- Special Exception Application Form (preceding pages);
- Letter of Intent (this document) addressing requirement of Special Exception Application Form and the Brooks County Zoning Ordinance as follows:
  - 1.0 Statement of Request;
  - 2.0 Reason for Request;
  - 3.0 Project-Specific Information;
  - 4.0 Standards for Exercise of Zoning Powers;
  - o 5.0 Standards for Special Exception Review;
  - 6.0 Conclusion;
  - Attachment A: Copies of Letters of Authorization from Landowners and Deeds;
  - Attachment B: List of Adjacent Property Owners;
  - Attachment C: Proposed Conceptual Site Plan;
  - Attachment D: Agency Correspondence; and
- Fees in the amount of \$374 (submitted separately).<sup>2</sup>

In addition, requirements for an application for a Special Exception approval listed in Section 13-6.2 of the Brooks County Zoning Ordinance (as amended) are provided as listed in Table 1.

<sup>&</sup>lt;sup>1</sup> Solar energy or energy generation is not explicitly identified in the Schedule of Permitted Uses, but a "utility substation" is considered a Special Exception use for the A-G Zoning District (Brooks County Zoning Ordinance Section 5-1). Per personal communication on February 13, 2018 between Sean Casto (ERM, a consultant to Quitman Solar, LLC) and Billy Ingram (Brooks County Inspections and Zoning Building Inspector), solar would be considered a Special Exception use in the A-G Zoning District.

<sup>&</sup>lt;sup>2</sup> Fee components include \$120.00 Application Fee, \$100 Advertising Fee, and \$7 fee per adjacent property owners for notification (covering mailings for up to 22 adjacent property owners).

Requirement	Location
Section 13-6.2 (A) – The community or area in which is located the land proposed to be reclassified and the street number, if	Table 2 and Figure 1 in this LOI
any, or if none, the location with respect to the nearby public	
roads in common use;	
Section 13-6.2 (B) - A plat of the land in question, and a	Table 2 and Figure 1 in this
description by metes and bounds, bearings, and distances of	LOI
the land, or if the boundaries conform to the lot boundaries	
within a subdivision for which a plat is recorded in the land	
records of the County; then the lot, block, and subdivision	
designations with appropriate plat reference; or the map and	
parcel number according to the current tax mapping system of	
Brooks County;	
Section 13-6.2 (C) - The present Zoning district classification	The present zoning is the A-
and the proposed Special Exception usage proposed for the	G Zoning District. The
subject property;	proposed Special Exception
	use is as a PV solar
	generation facility and a
Continue 12 ( $2$ ( $\mathbf{D}$ ). The memory and address of the surrous of the	Comise of Latters of
Section 15-6.2 (D) - The names and address of the owners of the land, and the names and address of chutting property.	Copies of Letters of
and, and the names and addresses of abutting property	landowners are included in
owners;	Attachmont A. Namos and
	addresses of adjacent
	property owners are
	included in Attachment B
Section 13-6.2 (E) - The area of the land proposed to be	No land is proposed to be
reclassified stated in square feet if less than one (1) acre, and in	reclassified. The proposed
acres if one (1) or more;	Project area includes
	approximately 1,200 acres.
Section 13-6.2 (F) - The application number, date of application,	See preceding Application
and action taken on all prior applications filed for the	Form. Quitman Solar is not
development district reclassification or Special Exception use	aware of any prior
of the whole or part of the land proposed for Special Exception	applications filed for the
use.	proposed Project parcels.

## Table 1: Requirements of Section 13-6.2 of the Brooks County Zoning Ordinance

# 1.0 Statement of Request

The Applicant is respectfully requesting the Brooks County Planning and Zoning Commission's and the Brooks County Board of Commissioners' approval of a Special Exception Application approving the construction and operation of a PV solar energy production facility, proposed to be located in the A-G Zoning District in unincorporated Brooks County, Georgia. A map with parcel numbers proposed for the Project is provided in Figure 1.

## Quitman Solar, LLC



# 2.0 Reason for Request

Quitman Solar, a wholly-owned subsidiary of NextEra Energy Resources (NextEra) is proposing to develop a solar energy project within an unincorporated area of Brooks County. A list of parcels included in the proposal is provided below (Table 2). Copies of notarized letters of authorization from these property owners stating that the Applicant may act on their behalf are provided in Attachment A. A list of adjacent property owners is provided in Attachment B.

## 3.0 Project-Specific Information

Power from the Project would be sold to Georgia Power starting in late 2019 under a 30-year power purchase agreement. The Project would interconnect to the regional electrical system, through the proposed Georgia Power switchyard, to GTC's West Valdosta to Thomasville 230kV transmission line, which crosses the northern portion of the Project Area (Figure 1). The following provides details about the size and location of the Project, proposed Project facilities, the construction process, operational activities, and additional compliance required.

## Size and Location

Quitman Solar selected the Site based on a number of factors, including interest of landowners in entering a solar development lease, availability of a large area of land that has historically been used for farming, and proximity to existing electrical infrastructure. The Site is located in an area of agricultural and low-density rural residential use. The Site encompasses approximately 1,200 acres of privately-owned land in the A-G Zoning District, located west of Barwick Road and north of Dry Lake Road, six miles northwest of the City of Quitman and approximately 10 miles east of the City of Boston. The Site currently has active fields planted with cotton, soybeans and peanuts, interspersed with forested areas, streams, wetlands, and farm ditches. The Project would be located on six parcels as shown in Figure 1, and listed in Table 2.

Parcel	Owner Name	Total Parcel Size
Number		(Acres)
049 00022	Robert D and Kayla B Davison	93
049 0033	Nancy W and Roger T Price	397
050 00085	Robert D and Kayla B Davison	3
050 00086	Robert D and Kayla B Davison	5
050 00087	Robert D and Kayla B Davison	280
050 00088	Robert D and Kayla B Davison	432

## Table 2: Quitman Solar Project Parcels

Source: http://www.qpublic.net/ga/brooks/

This submittal contains a proposed conceptual site plan (Attachment C) that reflects an effort to maximize the energy production of the Project while allowing for applicable setbacks from neighbors, roadways, and sensitive and regulated resources. While the overall layout would remain substantially similar to the proposed conceptual site plan (Attachment C), minor changes may occur as a result of ongoing site evaluation, design optimization, and the final

approval process. Any changes subsequent to this application would not infringe upon indicated setbacks in the current site layout. Setbacks are defined by Section 2-1 of the Brooks County Zoning Ordinance "the shortest distance between the centerline of a street and the principal building for structure on a lot." Section 6-1 of the Brooks County Zoning Ordinance defines the following required setbacks for the A-G zone:

- Minimum Front Yard Setbacks (feet from centerline of right-of-way) (plus 1/2 any amount which the right of way width exceeds 60 feet for residential streets, 80 feet for collector streets, and 100 feet for Major and Secondary Streets)
  - Arterial Roadways 100 feet
  - Collector Roadways 90 feet
  - Residential Streets 80 feet
- Minimum Side Yard Setbacks 20 feet
- Minimum Rear Yard Setbacks 50 feet

Barwick Road is classified as a collector roadway with a right-of-way of approximately 75 feet. Therefore, a setback of 90 feet will be utilized along Barwick Road. Because the remainder of the Project is not adjacent to any other roadway and to be conservative, setbacks of at least 50 feet have been utilized for the rest of the property lines.

Quitman Solar has entered into Option to Lease Agreements with the landowner for each of the parcels within the Project Area (Figure 1, Table 2). As required in the Special Exception Application Form, copies of notarized letters of authorization from property owners to proceed are provided in Attachment A (originals have been provided to the Brooks County Building Inspections & Zoning Office). Prior to the start of construction, the applicable lease options would be exercised and the company would enter into leases for the Project Site. The Project would be sited only on property leased by the Applicant. As indicated on the proposed conceptual site plan (Attachment C), all required setbacks would be observed in accordance with the Brooks County Zoning Ordinance.

## Proposed Components and Energy Conversion Process

The Project would include the following major components, systems and associated facilities, described in detail in the following sections:

- Solar arrays, panels and mounting structures;
- Inverters and electrical collection system;
- A Project substation, which would include a controls enclosure;
- Automated facility control and monitoring system;
- Access and interior roads; and
- Perimeter fencing.

No structures are designed for occupancy on the site. Operations and maintenance support, including warehousing of critical spare parts, would be staged out of a regional office. A small parking area that would accommodate operations and maintenance vehicles would be located adjacent to the Project substation. It is expected the Site would be visited about once a week or less, typically by one to two people, for schedule checks and maintenance and on an as-needed basis.

## Solar Arrays, Panels, and Mounting Structures

The solar array would be composed of a single-axis tracking solar array, in which rows of PV panels track the sun from east to west daily to maximize energy production. PV panels would be approximately eight feet in height. The Project would deliver up to 150 MW of power to the Georgia Power-owned electrical grid through a new Georgia Power switchyard that would connect the Project with the existing West Valdosta to Thomasville 230KV transmission line which is located on the northern portion of parcel 050 00087 (Figure 1).

A simplified diagram of how solar energy is converted to electricity through Project facilities is provided in Figure 2. The Project would convert the sun's energy into direct current (DC) electrical energy within PV modules (panels), which would be mounted on structures and grouped as blocks. Each block of PV modules is configured into arrays with a power conversion unit (PCU) that includes inverters and transformers to convert the DC electricity into alternating current (AC) electricity, with an output of approximately 4.4 MW for each block. The PCU also increases the voltage of the electricity for collection of the energy output across each block for delivery to the Project substation.



Figure 2: General Solar Energy Conversion Diagram

The PV panels are rectangular and are black/dark grey in color. The panels would have an antireflective coating to minimize potential for glare. The PV panels would be mounted onto structures that would "track" or follow the sun as it moves in the sky throughout the day to allow for the most efficient energy production that would align with the power purchase demand profile. The panels would be generally oriented towards the south, but may vary in orientation from 180° depending on final engineering.

The panels and tracking systems would be supported by steel posts spaced approximately ten to twenty feet apart. The Project is expected to utilize pile-driven posts inserted into the ground

to an approximate depth of six to ten feet below grade; however, depth may vary throughout the Site based on soil conditions, local topography, and further geotechnical analysis. Once mounted on a structure, at certain times of the day, the bottom of each solar module would be at between one and two feet above grade, while the top would be at approximately eight feet above grade depending on the variation in terrain. At maximum tracking tilt, the panels would typically be approximately eight feet in height.

## Inverters and Electrical Collection System

PV modules are electrically connected in series (called a string) by wire harnesses that carry DC electricity to combiner boxes. Each combiner box would collect power from several strings of modules and feed a PCU via cables typically placed in covered underground DC trenches, or in an above ground collection system that is strung approximately two feet above the ground between the tractor rows.

Each PCU would consist of a unit containing several power inverter units, which are connected to an adjacent transformer. The PCU units would be approximately eight to ten feet tall and approximately 20-40 feet long depending on the inverter type; the transformer adjacent to the inverters would be approximately six to seven feet tall. The PCU's would be placed either on driven steel piles or on concrete pad foundations that would be designed to specifications necessary to meet the local geotechnical conditions. These foundation designs would be finalized as the design advances. The inverters change the DC output from the combiner boxes to AC electricity. The resulting AC current from each individual PCU would then be transformed to the AC collection voltage at the adjacent pad-mounted transformers. These medium-voltage transformers would be placed on a pre-cast concrete pad or piers and the collection circuits from the output of each transformer would be installed underground. The AC collection voltage would be 34.5 kV. These medium voltage collection circuits would deliver AC electricity from the PCU's to the Project substation. The PCU's are low noise systems with sound levels at under 40 dBA at 50 feet from the unit allowing for very low noise levels at the property line.

## **Project Substation**

The Project would have a Project substation that would combine all the AC power from the collection circuits, and step-up the voltage to 230kV for injection into the electrical grid. The Project substation would be located within the northern portion of the Project Area as shown in Attachment C, south of the West Valdosta to Thomasville 230kV transmission line and the proposed Georgia Power switchyard.

The Project substation would occupy approximately two to three acres within a six-foot-tall fence with additional one-foot of three-strand barbed wire enclosure. The ground coverage would be crushed rock. The Project substation equipment would consist of a 34.5/230 kV main transformer, one 230kV and multiple 34.5kV breakers, motor-operated and manually-operated switches, a controls enclosure, instrument transformers for metering, and galvanized steel support structures. The control enclosure would house the protection and control equipment, metering equipment, and communication equipment. It would resemble a prefabricated house trailer with no windows and would measure approximately 15 by 45 feet.

After the final voltage step-up, the Project would be interconnected to the Georgia Power electrical grid at a voltage of 230kV through the Georgia Power switchyard. Georgia Power would be responsible for constructing an approximately 5-acre switchyard directly adjacent to the GTC West Valdosta to Thomasville 230KV transmission line. The switchyard would consist of electrical equipment covering an area of approximately 300 feet by 300 feet (final dimensions to be determined by Georgia Power). Specific dimensions and specifications for facilities to be constructed and owned by Georgia Power as part of the transmission system would be determined by Georgia Power and GTC.

With the exception of 230 kV lines, typically all on-site electrical runs would be either underground or above ground hung on module racking structures. Overhead230 kV runs would be required inside the Project substation, Georgia Power switchyard, and for interconnections.

The Project substation would contain remote-operated breakers that would isolate the Project from the electrical grid in case of emergency or at the direction of Georgia Power. Code and interconnection agreement requirements dictate the processes and restrict access related to actuation of those breakers. Postings at the Project access gates, Project substation, and Georgia Power switchyard would include emergency contact information for the Operator and Georgia Power that would provide contact numbers to be used for isolation of the Project from the electrical grid. The Project would work with local emergency personnel on response procedures for the Site.

## Automated Facility Control and Monitoring System

The facility control and monitoring system would have two primary components; an on-site Supervisory Control and Data Acquisition ("SCADA") system and the accompanying sensor network. The on-site SCADA system would offer near real-time readings of the monitored devices, as well as control capabilities for the devices where applicable.

NextEra's Renewable Operations Control Center (ROCC), located at a secure location at NextEra's Juno Beach, Florida headquarters, serves as a twenty-four hour by seven day a week control and monitoring center. This center operates or monitors all of NextEra's generating fleet and is responsible for:

- Resetting of remotely capable Project faults as needed;
- Calling out technicians based on projected solar conditions to optimize the delivery capabilities of the Project;
- Communication with the local transmission provider and off-taker as required; and
- Predictive and diagnostic monitoring of Project equipment to optimize delivery capabilities.

## Access and Interior Roads

The primary entrance would be off Barwick Road, approximately one mile northwest of the Talokas Road intersection. The primary entrance and a secondary access point located south of the Barwick Road/Reeves Court intersection are shown in Attachment C. Simple turn-outs or driveways would be constructed to accommodate the entrance of vehicles onto the Project

property. These turn-outs would be designed to accommodate all foreseeable vehicle traffic in accordance with local ordinances.

Access throughout the Site would be via a network of non-improved roads constructed between the arrays (see proposed conceptual site plan in Attachment C). The arrays and PCUs would be accessible via 16-foot wide primary access corridors situated in an east to west direction with the ability to go between rows of panels in a perpendicular direction. These access corridors would consist of unpaved compacted native soils or imported road base (if required based on geotechnical recommendations) and would later be used during operation and maintenance activities.

## Perimeter Fencing

A permanent 7-foot security fence comprised of 6-foot chain-link mesh with an additional 1-foot of three-strand barbed wire would surround the solar facility. The fence would be a total of seven feet in height above grade. Fencing would be secured to posts set three to four feet below grade. The fencing would be installed during the construction phase, and would prevent unauthorized access by the general public to ensure security and prevent injury from construction hazards and contact with high-voltage equipment. The perimeter fence would also help prevent larger wildlife and windblown trash/litter from entering the facility. Primary and secondary gates of similar construction would be located around the Site to provide access to the various sections of the solar arrays. Signs would be posted near each entrance warning of the Project's hazards and providing emergency contact information.

## Construction Activities and Schedule

Table 3 describes the major activities that would occur during the approximately 15-month construction phase, which is anticipated to begin in January 2019 and end in December 2019. Actual timelines may vary based on factors including but not limited to weather, soil conditions, and equipment deliveries. Figure 3 presents a typical sequence of construction, explained further in the sections below. While work for the Georgia Power substation may begin in 2018, construction of the solar array is anticipated to occur between January and December of 2019.

Activity	Timeline
Site Preparation and preliminary work for Georgia Power	TBD, before end of 2018
Switchyard and Interconnection	
Installation of Best Management Practices (BMPs) for	Late 2018, January 2019
erosion and sedimentation control	
Solar Site Preparation and Start of Installation of Posts and	January – March 2019
Foundations	
Installation of Posts and Foundations	February - May 2019
Construction of Support Structures	March – June 2019
Installation of Solar Panels	March - October 2019
Installation of Major Electrical Equipment	April - October 2019
Installation of Wiring and Cable	March – November 2019
Startup and Commissioning	September – December 2019

## Table 3: Construction Activity Timeline (2018 through 2019)



Figure 3: Typical Construction Sequence for Solar Energy Facilities

## Site Preparation SURVEYING AND STAKING

Prior to construction, land surveyors would obtain or calculate benchmark data, grades, and alignment from plan information and provide control staking to establish the alignments, benchmarks, and elevations necessary to facilitate construction of the Project. Surveyors would also stake any existing utilities or other areas that would require avoidance by construction personnel and vehicles.

During construction, the surveyor would re-establish and set additional control points as needed. Additionally, environmentally sensitive resources including wetlands, floodplains, streams and open water ponds identified during the wetland delineation conducted in July and August, 2017,<sup>3</sup> would be identified in the field via flagging, roping, staking, or fencing for avoidance during construction as specified in any applicable local permitting requirements or regulations.

## VEGETATION REMOVAL, GRADING, AND SITE CLEARANCE

Construction areas would be cleared of miscellaneous debris and/or vegetation that would impede vehicle access in order to prepare the site for safe and efficient installation of Project components. Current vegetation within the Project site consists mostly of crops, and vegetation clearing would primarily entail mowing followed by limited grading. Brush clearing would be required throughout the site, and tree clearing would be limited to areas outside exclusion zones. Exclusion zones include jurisdictional wetlands and other waters of the U.S. (WOTUS), floodplains, and stream buffers (as shown in Figure 4 and in Attachment C). Under the current timeline for the Project, on-site activities would begin with construction of the Georgia Power switchyard starting by the end of 2018, and construction of the solar farm starting in January 2019.

The installation of a solar PV facility requires reasonably flat topography. Because the Project Area is fairly flat, minimal grading would be necessary. Grading for the construction of the Project would consist of cutting, filling, and compaction of earth in isolated areas (e.g., Project substation and PCU units) around the Site to meet the final design requirements. For larger areas that require grading to even out slopes, a disc and roll technique may be used. The disc and roll technique is based on conventional farming practices using tractors to till the soil, which helps smooth out any rough areas, and then drum rollers to compact the soil.

Materials suitable for compaction (including engineered fill) would be brought to the Site if needed and off-loaded at the designated road or foundation location for immediate dispersion. Engineered fill is a material that is placed and compacted in accordance with approved design criteria for a specific piece of equipment or intended purpose. Areas that may require engineered fill include inverter, Project substation, and Georgia Power switchyard pad locations, and potentially certain parts of any collection system trenches that may be utilized.

Materials unsuitable for compaction, such as mowed debris, would be removed and loaded immediately for subsequent disposal at a designated off-site location. Contaminated materials

<sup>&</sup>lt;sup>3</sup> Environmental Resources Management (ERM). February 2018. *Wetland Delineation Report, Quitman Solar Site.* Prepared for Quitman Solar, LLC.

are not expected; however, if any such materials are encountered during excavation, they would be disposed of at the nearest appropriate facility in accordance with applicable laws, ordinances, regulations, and standards.

The Project would use water for dust control during construction as necessary.

A small lay-down area, occupying approximately two acres, would be established near the onsite substation. The location of the laydown area is subject to final design and engineering requirements. During the construction timeframe, the lay-down area would provide a storage location for construction materials, and a location for two to four construction trailers. After construction the lay-down area would be returned to its former condition.

## Solar Equipment Installation

During array assembly, multiple crews and various types of vehicles would be working within the Project Area. These vehicles include flatbed trucks for transporting arrays, small all-terrain vehicles, and pick-up trucks used to transport equipment and workers throughout the Project Area.

The tracking system supports would be constructed using steel piles driven into the ground. Driven steel pile foundations are typically galvanized and used where high load bearing capacities are required. The pile is driven using a hydraulic ram, which requires two workers. Soil disturbance would be restricted to the hydraulic ram machinery, about the size of a small tractor, temporarily disturbing soil at each pile insertion location.

Solar PV panels would be shipped to the Site ready for installation and delivered to temporary lay-down areas within the solar field. From the lay-down areas, palletized boxes of panels would be delivered to crews throughout the Project Area, and those crew members would mount and secure each individual panel to the racking structures.

Other crews would be engaged in excavating and constructing foundations for the PCUs and pad mount transformers, and installing the PCU equipment using cranes. Electricians and instrumentation installers would then run the electrical cabling throughout the solar field and electrically connect the components.

## Project Substation and Georgia Power Switchyard

The Project substation would take approximately four months to construct, electrically connect, and test. Construction work within would include site preparation and installation of substructures and electrical equipment. Materials and equipment would be delivered to and stored at the Project substation site. Galvanized steel would support most of the equipment.

Installation of concrete foundations and embedments for equipment would require the use of trenching machines, concrete trucks and pumpers, vibrators, forklifts, boom trucks, and large cranes. Above ground and below ground conduits from this equipment would run to a controls

## Quitman Solar, LLC



Source: Esri - World Topoographic Map; NAD 1983 StatePlane Georgia West FIPS 1002 Feet

enclosure that would house the protection, control, and automation relay panels. Batteries and battery chargers would be installed inside the controls enclosure to provide backup power to the control system. Crushed rock would cover open areas of the site and adequate lighting would be installed for worker safety during construction and operation.

## Construction Equipment and Work Force

Construction equipment that would be used at different times during the construction process would include:

- Flat-bed trucks
- Concrete trucks and pumpers
- All-terrain vehicles
- Pick-up trucks
- Hydraulic ram
- Cranes
- Trenching machines
- Vibrators
- Forklifts
- Boom trucks
- Vehicle-mounted power auger or backhoe
- Disking machines
- Rollers
- Tensioners and/or pullers
- Line trucks
- Wire trailers
- Tractors

The total number of construction workers (consisting of laborers, craftsmen, supervisory personnel, support personnel, and construction management personnel) would be approximately 200 workers on average for the duration of Project construction. During certain portions of the schedule when manpower-intensive tasks take place, the Project would utilize a peak of approximately 300 workers on site. While construction of the Georgia Power switchyard is anticipated to begin before the end of 2018, construction of the solar array is anticipated to occur over about a twelve-month timeframe beginning in January 2019.

## **Construction Traffic**

As the site work progresses, construction equipment and materials would be delivered by truck and would be staged in the order of installation. Delivery of construction equipment and Project components would be coordinated with local agencies to ensure compliance with all applicable State, County, and local requirements. Weight and height restrictions would be verified and any required permits would be obtained by the delivery service. Only the main transformers are expected to require heavy haul (oversize) transport and transportation permits. Transportation of any hazardous materials to the Site would comply with all U.S. Department of Transportation, U.S. Environmental Protection Agency ("EPA"), and all other applicable regulations.

## **Operations and Maintenance Activities**

Various maintenance activities would occur at the Project during operations. It is expected the Site would be visited about once a week or less, typically by one to two people, for scheduled checks and maintenance and on an as-needed basis. Additional workers may be needed occasionally depending on the complexity of maintenance activities or repairs needed. Operations and maintenance activities are further described below.

## Annual Facilities Operations Plan

The facility would be operated in accordance with proven practices utilized by NextEra Energy's Power Generation Division throughout its PV portfolio and across other generating technologies. The following services and maintenance activities would take place in conformity with an annual facility operating plan:

- Perform all scheduled and unscheduled service and required preventative maintenance of all equipment.
- Provide scheduled and unscheduled services to the electrical system from the inverters to the Project substation including the pad mount transformers and collection system.
- Coordinate all warranty work with PV equipment and inverter supplier during the warranty period.
- Employ, hire, train, direct and discharge, per agreed upon guidelines, all employees any contractor hired to support service and maintenance of the on-site equipment.
- Provide qualified supervision of service and maintenance employees.
- Provide any and all technical support required for service and maintenance. Develop, maintain, and implement safety programs for the employees.
- Provide all regulatory required training including, but not limited to hazardous materials and occupational safety and health.
- Provide all materials, tools, supplies, consumables, equipment, vehicles, maintenance equipment, safety equipment, operating equipment, clothing and other supplies, personal property, and assets necessary to conduct scheduled and unscheduled service and preventative maintenance of the equipment per manufacturer's specifications.
- Provide 24-hour remote monitoring and diagnostic analysis of PV site conditions from the ROCC located at NextEra's corporate headquarters.
- Provide regular and ongoing reports concerning the service and maintenance of the Project.
- Develop, implement, and update an Annual Service and Maintenance Plan that delineates major and minor services to be performed each month.
- Respond to emergencies, nonscheduled shutdowns, and outages in an appropriate manner if weather and site conditions permit to attempt to minimize loss of facility revenue, damage to the equipment, or bodily harm to personnel.
- Provide reset and emergency response call-out capability, if weather and site conditions permit.

- Provide timely telephonic, electronic, and written notice, if required, in the event of any facility malfunction or unusual event at or involving the equipment.
- Monitor component failures and perform root cause analysis in a reasonable time frame:
  - Develop and maintain a database of component failures
  - Perform root cause analysis to identify failure modes
  - Develop and maintain predictive models to forecast future failures
  - Identify counter-measures to mitigate failures and implement those countermeasures determined to be cost effective throughout the equipment
- Maintain the facility in compliance with all applicable federal, state, and local laws/ordinances and regulations, including but not limited to safety, industrial hygiene, and environmental conditions on, under, or about the facility (air, soil, and ground water conditions), endangered species, and hazardous materials.
- Comply with site mandated safety and environmental standards.
- Conduct preventive maintenance inspections of facility equipment. Visual, electrical, and mechanical inspections would include but not be limited to the following detailed activities:
  - Inspect torque of electrical and mechanical connections
  - Inspect condition of finish or corrosion protection
  - Inspect integrity of module mechanical and electrical connections (random)
  - Inspect for discoloration or damage to modules
  - Inspect damage to support structures
  - Verify integrity of installation and support of electrical cable and conduit systems
  - Verify integrity and completeness of the wiring
  - Identify conditions of accelerated corrosion
  - Identify any distortion or other structural damage resulting from excessive wind, rain, or snow, if applicable
  - Identify excessive misalignment or shifting of modules and system components.
  - Check for evidence of wildlife (birds, rodents, bugs, nesting or soiling)
  - Check for broken module glass
  - Identify any bulging or distorted module junction boxes
  - o Identify any discolored wiring, signs of arcing or overheating
  - Check inverter filters and heat sinks for accumulation of debris or dust
  - Check for and remove any plant material that may come in contact with components
  - Regular inspections consisting of checks on modules, electrical connections, combiner boxes, inverters, and switchyard equipment

## Vegetation Management

The Project has been designed to avoid removal of natural vegetation wherever possible, including vegetation within the buffer zones of mapped natural resource areas (shown in Attachment C). Vegetation on the Site would be actively maintained to control growth and prevent overshadowing or shading of the PV panels. Traditional trimming and mowing would

be performed on an interval basis to maintain the vegetation at a height below approximately 24 inches. During operations, selective use of herbicides may also be employed around structures to control invasive or noxious weeds.

The Applicant is proposing to install a vegetative buffer for visual screening for the approximate-0.7 miles where Parcel #049 0033 directly abuts Barwick Road. Consistent with Section 3-18 of the Brooks County Zoning Ordinance, the vegetative buffer will consist of a hedge or comparable natural plantings such that an average height of at least six feet can be expected by normal growth within no later than three years from time of planting. No other areas of installed vegetative buffer are planned.

## Road Maintenance

No paved roads are expected to be required on the Site. If required, standard maintenance practices for the type of road constructed would be employed.

Unpaved roads internal to the fenced Project Area would be maintained regularly to control the flow of water on and around the road, remove obstacles, and maintain a solid surface. Maintenance would be completed by conducting regular surveys to inspect the conditions of the road surfaces, and blading, grading, or compacting the road surfaces to preserve a minimally sloped and smooth planed surface.

## **Project Substation**

During operations, the Project as well as its substation and the Georgia Power switchyard would be unmanned. All Project substation monitoring and control functions would be performed remotely. Unauthorized entry into the Project substation and the Georgia Power switchyard would be prevented by fencing and locked gates. Warning signs would be posted and entry would be restricted to the Project's authorized personnel.

Routine operation may include a single pickup truck visiting the Project substation for switching, as well as larger maintenance trucks for equipment maintenance. Maintenance activities would include equipment testing, equipment monitoring and repair, and emergency and routine procedures for service continuity and preventive maintenance. It is expected the Site would be visited about once a week or less, typically by one to two people, for schedule checks and maintenance and on an as-needed basis.

# 4.0 Standards for Exercise of Zoning Powers

Section 14-2.8 (E) of the Brooks County Code requires the consideration of the following Standards for Exercise of Zoning Powers for any application brought before the Planning Commission or the County Commission for a Zoning decision:

1. Is the proposed Zoning or use suitable in view of the Zoning and development of adjacent and nearby property?

Yes, the proposed Project is suitable in view of the zoning and development of adjacent and nearby property, which were confirmed by Brooks County to be in the A-G Zoning District. Solar facilities are becoming more common in rural areas in the southeastern United States.

During operations, they are generally considered compatible with a wide range of adjacent land uses including low-density rural and agricultural land uses, because of their passive nature. Specifically, PV solar facilities typically:

- Do not require regular or consistent staffing after construction;
- Do not cause excessive noise;
- Do not have nighttime lighting (unless emergency maintenance is required);
- Do not emit air or water pollution during operations;
- Are readily screened from adjacent and nearby property by existing vegetation or planted buffers; and
- Do not cause negative impacts from glare. PV panels are designed to generate energy by absorbing light rather than reflecting light, and have anti-reflective coatings to minimize potential for glare.

The Project will sell power under a power purchase agreement with Georgia Power for the first 30 years of its life. At the end of the useful life, the Site could be restored to its preconstruction condition and return to agricultural use.

2. Does the request represent the possible creation of an isolated district unrelated to adjacent and nearby districts and would the proposed use adversely affect the existing use or usability of adjacent or nearby property?

No, the proposed Project area is surrounded by agricultural uses and would not be redistricted to create an isolated district. No rezoning is proposed, and the proposed Project area would continue to be zoned as the A-G Zoning District, as are the surrounding adjacent and nearby properties. After construction, the proposed Project would be a passive use that is compatible with adjacent land uses and would not restrict potential uses of nearby properties.

3. Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water, sewer, or other public utilities, including police and fire protection?

No, the proposed Project would not cause an excessive or burdensome use of public facilities or services, and is not anticipated to impact streets, schools, water, sewer, public utilities, police and fire protection or other public services as described below:

- Improvement to public roadways is not required. Road closures for construction are not anticipated, though minor and temporary traffic delays on surrounding roads are possible during the construction period.
- The proposed Project would not require installation of public utilities such as water and sewer service.
- During operations, the proposed Project would be staffed remotely and would not impact public schools by causing an influx of workers.
- The proposed Project is not anticipated to impact public safety or police or fire protection services. The Project Area would be surrounded by a 7-foot fence and access gates would be locked to prevent unauthorized access. After construction, operations signs would be posted near each entrance warning of the Project's hazards and

emergency contact information. Seven-foot locking gates would be installed at ingress and egress points to prevent unauthorized access and protect public safety. During the operations phase, maintenance crews would access the Site via keypad or keyed locks. Emergency responders would be able to access the interior of the Site if necessary by the same access points.

4. Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or is the proposed use compatible and consistent with the purpose and intent of the Comprehensive Plan?

The proposed Project is compatible and consistent with the purpose and intent of the Brooks County 2030 Comprehensive Plan, which sets forth a Community Vision that is supported by a number of goals, policies and objectives focused on elements including economic development. The Project supports the Economic and Industrial Development portion of the Vision Statement, which states:

Economic and Industrial Development initiatives will have expanded the economy through innovation and investment in education and supportive infrastructure. The community will have an integrated system of technology, utility and transportation networks that support a vital economy and offer ample employment and business opportunities to all (Brooks County 2030 Comprehensive Plan, page 6).

The comprehensive plan was partially updated in 2017.<sup>4</sup> For the updated version, this Project supports the Economic Development Opportunity A and DCA Quality Community Objectives 1 (Economic Prosperity) and 2 (Resource Management) by developing the solar industry, an expanding industry that is suitable for the community and provides local economic benefits, long-term sustainability, and minimal impacts to the natural resources of the county. This Project represents a new industry that supports local economic growth and energy resource diversification, would not cause the loss of historic features, and minimizes impacts to natural resources. DCA Quality Community Objectives specifically states "Promote the efficient use of natural resources and identify and protect environmentally sensitive areas of the community. This may be achieved by promoting energy efficiency and renewable energy generation..."

Local benefits would include the following:

- Generates safe and low-cost renewable energy that would not emit air or water pollution during operations, and would not use water to generate electricity;
- Support to the local economy through purchase of regional goods and services;
- Provides approximately 300 construction jobs during peak construction. The Applicant's construction contractor would attempt to hire as many local workers as possible. Typically, the ratio of travelers vs. non-travelers would be approximately 30% vs. 70%; and

<sup>&</sup>lt;sup>4</sup> Southern Georgia Regional Commission. June 5, 2017. 2017 Joint Comprehensive Plan Update – Brooks County & The Cities of Barwick, Morven, Pavo, and Quitman. Available: https://dca.ga.gov/cites/default/files/brooks\_co\_barwick\_ci\_morven\_ci\_pavo\_ci\_quitman\_ci\_plan\_update\_2017.

https://dca.ga.gov/sites/default/files/brooks\_co\_barwick\_ci\_morven\_ci\_pavo\_ci\_quitman\_ci\_plan\_update\_2017. pdf. Accessed July 20, 2018.

• Provides valuable tax revenue with little impact on resources.

The *Brooks County 2030 Comprehensive Plan* designated the majority of the subject property as Agricultural Area in Brooks County Future Development Map. The Project area does not occur within the Rural Conservation overlay or Historic Areas. While the Agricultural Area Character Area description does not mention utilities or solar developments, solar farms are generally accepted to be compatible uses in rural and agricultural areas across the Southeast because of their passive nature as described in the discussion of Standards for Exercise of Zoning Powers, Standard #1.

Areas of the subject property that are located within 0.5 mile of Barwick Road are located in the Scenic Corridor Character Area, described as "developed or undeveloped land paralleling the route of a major thoroughfare that has significant natural, historic, or cultural features, and scenic or pastoral views" (Brooks County 2030 Comprehensive Plan, page 33). The Applicant is proposing to install a vegetative buffer for 0.7 mile where Parcel #049 0033 directly abuts Barwick Road. Consistent with Section 3-18 of the Brooks County Zoning Ordinance, the vegetative buffer will consist of a hedge or comparable natural plantings such that an average height of at least six feet can be expected by normal growth within no later than three years from time of planting. The vegetative buffer would serve to visually screen the Project from viewers along Barwick Road. Views of the Project would still occur for travelers on Barwick Road, but operation of the Project is not anticipated to detract from the overall value of the Barwick Road, and views of trees and agricultural areas would still occur on the north and east side of the road.

5. Will the proposed change adversely influence existing conditions in the neighborhood or the city or county at large and are there substantial reasons why the property cannot or should not be used as currently districted?

The proposed Project is not anticipated to adversely influence existing conditions in the area, nor are there reasons why the property cannot or should not be used as currently districted. The Applicant selected the Site based on a number of factors, including interest of landowners in entering a solar development lease, availability of a large area of land that has historically been used for farming, and proximity to existing electrical infrastructure. No change in Zoning District is proposed because solar energy is considered a compatible use in agricultural and low-density rural residential areas. After construction, the proposed Project Area would be utilized as a largely passive use of land and is not anticipated to adversely influence the surrounding area as described in Standards for Exercise of Zoning Powers, Standard #1. The proposed Project is based on lease agreements with the landowners, and has an approximate 30-year lifespan. After the Project is properly decommissioned, the land could return to agricultural use.

6. Are there potential adverse impacts on the environment, including but not limited to drainage, soil erosion and sedimentation, flooding, air quality, and water quality and quantity?

Current design of the Site avoids and minimizes potential impacts to sensitive environmental resources to the greatest extent practicable. Quitman Solar has conducted desktop studies, a field environmental site assessment, and coordinated with state and federal agencies to identify the presence of sensitive natural and cultural resources, including the U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), and the Georgia Department of Natural Resources (DNR). These communications, due diligence efforts, and any additional required compliance are summarized as follows:

- The Project would generate renewable energy that would not emit water pollution during operations, and would not use water to generate electricity.
- The Project intends to avoid both state waters and USACE jurisdictional features (wetlands and water resources). Approximately 30 acres of potentially regulated wetland and water resources were identified on the Site (Figure 4). As noted in the proposed conceptual site plan (Attachment C), the Project would employ setbacks where appropriate and where not possible would seek appropriate permits. Quitman Solar has been in coordination with the USACE and Georgia DNR-Environmental Protection Division (EPD) to validate the Project layout and satisfy requirements associated with environmental features. We are in the process of obtaining an Approved Jurisdictional Determination from the USACE and the Georgia DNR-EPD to identify the features that are under jurisdiction of the Clean Water Act (wetland and water resources).
- The Project is not anticipated to affect protected species. Quitman Solar has sent letters to the USFWS and the Georgia DNR-Wildlife Resources Division (WRD) to inquire about records of threatened or endangered species, or high-priority species or habitats that may occur within the Project Site. The Georgia DNR-WRD response indicated that federally and state-listed species had been documented within three miles of the Project, and that surveys should be conducted prior to construction (Attachment D). The USFWS response indicated that based on the information provided, the proposed action is not expected to significantly impact fish and wildlife resources under the USFWS jurisdiction (Attachment D). A survey for gopher tortoise was conducted in August 2017 by the Applicant's consultant Environmental Resources Management (ERM). No evidence of the state-listed gopher tortoise or other threatened or endangered species was identified during the species survey and other surveys at the proposed Quitman Solar Site in Brooks County. The Site does not possess optimal open canopy habitat and sandy soils for the state-listed gopher tortoise.<sup>5</sup> The Applicant would conduct preconstruction clearance surveys for wood storks, report any sightings to Georgia DNR-WRD and USFWS, and employ proper avoidance measures if any protected species are observed during construction.
- Quitman Solar conducted a review of Georgia's Natural, Archaeological and Historic Resources Geographic Information System (GNAHRGIS) database and the National Register of Historic Places (NRHP). The results did not identify any historic structures or

<sup>&</sup>lt;sup>5</sup> Environmental Resources Management. *Technical Memorandum: Gopher Tortoise Survey at the Quitman Solar Site in Brooks County, Georgia.* April 2, 2018.

properties that are listed on the National Register of Historic Places (NRHP) within two miles of the Site.

- The Georgia DNR-EPD would provide coverage under the National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit for Standalone Construction Projects GAR100001. The Applicant would conform to minimum standards provided by the Brooks County Code Section 18-45 and provide best management practices for all land-disturbing activities. According to the Georgia Soil and Water Conservation Commission, Brooks County is not a Local Issuing Authority.<sup>6</sup>
- Quitman Solar would prepare a Spill Prevention, Control, and Countermeasure (SPCC) Plan because transformer oil would be utilized onsite. An SPCC Plan is required by the U.S. Environmental Protection Agency (EPA) (Region 4) if a facility would store over 1,320 gallons of oil or related products onsite. The SPCC Plan would address the facility operating procedures to prevent oil spills, the control measures that would be installed to prevent oil from entering navigable water or adjoining shoreline, and countermeasures to contain, cleanup, and mitigate the impacts of an oil spill on navigable waters or adjoining shorelines.
- Quitman Solar would comply with Brooks County Code Section 22.18 22-61, Flood Damage Prevention. No Project facilities are proposed in flood hazard areas as shown in Figure 4.
- Quitman Solar would use water trucks to mitigate dust emissions during construction. The Project would generate renewable energy and would not emit air pollution during operations.
- 7. Are the costs required of the public in providing, improving, increasing or maintaining public utilities, schools, streets and public safety necessities reasonable when considering the proposed changes?

No costs are anticipated to be required of the public for providing, improving, increasing, or maintaining public utilities, schools, streets and public safety necessities. As such, this Project is a reasonable use of this property. As provided in discussion of criterion 3, the Project is not anticipated to impact public utilities, schools, streets, or public safety in any way.

8. Will the proposed change be detrimental to the value or improvement of development of adjacent or nearby property in accordance with existing requirements and development standards?

The use of the Project area as a solar facility during the time specified by the Option to Lease agreements with the landowners is not anticipated to be detrimental to the value and would not impact potential improvements or developments on adjacent or nearby property. As described in Standard for Exercise of Zoning Powers, Standard #1, during operations the solar facility would be utilized as a largely passive use of land and is not anticipated to adversely influence the surrounding area. While the impacts of a solar farm on neighboring property values have

<sup>&</sup>lt;sup>6</sup> Georgia Soil and Water Conservation Commission. Local Issuing Authority List (updated December 2017). Online: <u>https://gaswcc.georgia.gov/sites/gaswcc.georgia.gov/files/imported/SWCC/Files/Local\_Issuing\_Authorities\_Updated\_List%20-%20December-2017.pdf</u>. Accessed 6/20/18.

not been studied in-depth, numerous studies found the impact of wind energy generation on neighboring property values to be negligible. As solar farms do not have the same impacts as wind farms, the impacts on property values caused by solar farms are anticipated to be less than the impacts of wind farms.

9. Is the proposed change out of scale with the needs of the neighborhood or Brooks County or does the request reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?

The proposed Project reflects a reasonable balance between general welfare and the right to unrestricted use of property. The landowners have entered into Option to Lease agreements for a solar energy facility, which is a passive use of land that would produce low-cost renewable energy, is not anticipated to have detrimental environmental or public health impacts, would not consume water to generate electricity, is not anticipated to emit air and water pollution during operations, and would benefit the local economy as discussed in Section 4.0 Standards for Exercise of Zoning Power, Standard #3.

**10.** Will the proposed change constitute a grant of special privilege to the individual owner as contrasted with the adjacent or nearby neighborhood or with the general public?

The proposed Project would not constitute a grant of special privilege to the landowners of the parcels. Solar farms are a special exception use within the A-G zoning category, and any owner of A-G zoned land is able to apply for such a special exception use. The Applicant selected the Site based on a number of factors, including interest of landowners in entering a solar development lease and objective criteria such as the absence of sensitive environmental resources, the availability of a large area of land that has historically been used for farming, and proximity to existing electrical infrastructure. After the Project's useful life, the Project owners would assess whether to enter into a new power purchase agreement and new lease agreements, or to decommission the Site. This assessment would be based largely on economic factors and the landowner's desire to extend the lease agreement. The existing Option to Lease agreements and any future lease agreements are not anticipated to prevent adjacent landowners from exercising their rights to utilize their property as desired.

# 5.0 Standards for Special Exception Review

In addition to the Standards for Exercise of Zoning Powers, the following sections provide discussion of the Standards for Special Exception Review listed in Section 14-2.8 (F) of the Brooks County Code, and also listed in the Brooks County Special Exception Application Form (page 4).

*A.* Is the type of street providing access to the use adequate to serve the proposed Special Exception use?

Yes, the type of street providing access to the Project Area is adequate to serve the Project. The Site would be accessed mainly from the primary entrance off Barwick Road, which is a major collector that primarily serves intra-county travel between the cities of Quitman and Pavo. A secondary entrance gate would be constructed along Barwick Road, south of the Barwick

Road/Reeves Street intersection. See the Construction Equipment and Workforce section (Section 3.0) for a detailed list of construction vehicles needed for this Project, which Barwick Road can accommodate. Maximum construction crews would total approximately 300 workers, and construction is anticipated to last approximately 15 months total (12 months for the solar array). Solar facilities are passive facilities that do not require regular or consistent staffing after construction. Once construction is complete, it is expected the Site would be visited about once a week or less, typically by one to two people, for schedule checks and maintenance and on an as-needed basis. This level of access is more than adequately served by Barwick Road. Quitman Solar would also comply with Section 34-61 of the Brooks County Code to obtain a Driveway Permit if required.

*B.* Is access into and out of the property adequate to provide for traffic and pedestrian safety, the anticipated volume traffic flow, and to allow access by emergency vehicles?

Yes, the primary entrance and secondary entrances off Barwick Road would provide adequate access during and after construction for traffic and pedestrian safety, the anticipated light volume of traffic flow, and allow easy access by emergency vehicles. Average annual daily traffic (AADT) data for 2016 indicates 740 daily vehicle trips along Barwick Road near the Project.<sup>7</sup> PV solar farms do not require regular or consistent staffing after construction. Maximum construction crews would total approximately 300 workers, and construction is anticipated to last 15 months (12 months for the solar array). Construction vehicles would most likely be arriving and leaving around dawn and dusk, as construction would typically occur during daylight hours. Minor traffic delays caused by slow-moving construction vehicles may occur on Barwick Road from time to time during construction but are not anticipated to be frequent.

*C.* Are public facilities such as schools, water, sewer, or other public utilities and police and fire protection adequate to serve the proposed Special Exception use?

Yes, public facilities are adequate to serve the Project. As described in Section 4.0, Standards for Exercise of Zoning Powers, Standard #3, the proposed Project is not expected to impact schools, water, sewer, or other public utilities and police and fire service.

D. Are refuse, service parking, and loading areas on the property located or screened to protect other properties in the area from such adverse effects such as noise, light glare, and other negative impacts?

Sufficient onsite receptacles would be provided to contain litter and construction waste until construction activity is complete. Receptacles would be emptied as necessary. No permanent refuse areas are proposed during operations and maintenance because the facility would be staffed remotely. The Site would be kept free of refuse during this time, and refuse discovered during periodic site visits would be removed from the site promptly.

<sup>&</sup>lt;sup>7</sup> Georgia Department of Transportation Traffic Analysis and Data Application. Online: <u>https://gdottrafficdata.drakewell.com/publicmultinodemap.asp</u>. Accessed 6/18/18.

Construction workers would park in designated areas in the interior of the site during the construction timeframe and would not park along streets. Construction vehicles onsite would be limited to workers and deliveries and be temporary in nature. A designated cleared area near the primary construction entrance and within the Project boundaries would be utilized. This area would be reclaimed after construction to be returned to its former grade and condition. The northern entrance to the site is separated from the closest residence by an approximately 200 to 300-foot buffer of mature vegetation which would provide visual screening.

Once construction is complete, it is expected the Site would be visited about once a week or less, typically by one to two people, for schedule checks and maintenance and on an as-needed basis. A parking and loading area would be located adjacent to the Project substation, and would have sufficient space for three to four vehicles to support operations. The parking area would facilitate loading/unloading of parts and equipment for maintenance operations scheduled to take place at the Project. No formal parking bollards would be employed to designate parking locations. This location is located approximately 1,400 feet from the nearest residence, which is further screened by an approximately 200-foot buffer of mature vegetation.

*E.* Will the hours and manner of operation of the Special Exception use have no adverse impacts on other properties in the area?

Because of the passive nature of solar power generation, no adverse impacts to other properties in the area are anticipated during operation of the facility. Minimal adverse impacts to other properties may occur during the construction phase, which is temporary and anticipated to last approximately 15 months (September 2018 – December 2019). During construction, potential adverse impacts to adjacent uses may include noise, dust, stormwater drainage, trash, light, glare, and views of activity at the Site where not obstructed by vegetation. The Applicant would employ the following measures to prevent or mitigate these potentially adverse impacts during the construction and operations/maintenance timeframes:

- The Applicant would adhere to all federal, state, and local regulations pertaining to potential impacts including but not limited to water quality, drainage, air quality, hazardous materials, and noise.
- During construction, the Applicant would abide by the requirements of Brooks County Code Section 26-19, and construction would typically occur between the hours of 7:00 a.m. to 11:00 p.m. on weekdays. However, if night or weekend construction work is necessary, the Applicant would obtain a permit specified by the Brooks County Building Inspector per Section 26-20 of the Brooks County Code. During maintenance, any work that involves disturbing or unnecessary noises would also be typically during the hours between 7:00 a.m. and 11:00 p.m., except in case of urgent necessity in the interest of public health and safety per Section 26-19(5) of the Brooks County Code.
- After construction, it is expected the Site would be visited about once a week or less, typically by one to two people, for schedule checks and maintenance and on an asneeded basis. These activities would typically occur in the daytime, except in the case of emergencies.

- Vehicles and machinery would be maintained in proper condition to prevent excessive noise (i.e., use of mufflers).
- All construction workers would obey posted speed limit signs and other traffic signals.
- Water trucks would be used to prevent dust intrusion into neighboring properties.
- The Georgia DNR-EPD would provide coverage under the NPDES Construction Stormwater Permit for Standalone Construction Projects GAR100001. The Applicant would conform to minimum standards provided by the Brooks County Code Section 18-45 and provide best management practices for all land-disturbing activities.
- The construction site would be maintained free of litter and construction waste, and litter and construction waste would not be allowed to be spilled, discharged, or blown by wind and water. Sufficient onsite receptacles would be provided to contain litter and construction waste until construction activity is complete. Receptacles would be emptied as necessary.
- After construction, the property (including the fence, landscaped areas, and internal site itself) would be maintained in good condition and trash and refuse will be removed promptly upon discovery by Project personnel.
- Any lighting would be minimized, designed to prevent intrusion into neighboring properties, and utilized only during emergencies.
- No hazardous wastes would be stored on site in significant quantities.
- Noise from the facility would be limited. The PCU's are low noise systems with sound levels at under 40 dBA at 50 feet from the unit allowing for very low noise levels at the property line, which is approximately the same level as the hum from a refrigerator.<sup>8</sup>
- The PV panels are designed to generate energy by absorbing light rather than reflecting light, and have anti-reflective coatings to minimize potential for glare. Therefore, glare from PV is not anticipated to cause negative impacts.
- If nighttime construction or maintenance is necessary, lighting would be temporary, minimal and localized at the immediate construction site. Lighting may also be used in the dusk hours to safely finish tasks and for workers to leave. Construction lighting would be removed from the Site upon completion of the construction. Minimal lighting would be employed on the Site during the operational phase. Motion-controlled lights would be installed at the Project substation controls enclosure, but are generally kept in the "off" position unless maintenance personnel are onsite or working at night during emergency repairs or maintenance. During operations, nighttime lights would only be utilized for emergency repairs and would be shielded and directed downwards to minimize light intrusion at adjacent facilities.
- F. Will the height, size, and location of the buildings or other structures on the property be compatible with the height, size, and location of the buildings or other structures on neighboring properties?

Yes, the height, size and location of the buildings and other structures on the property would be compatible with the height, size, and location of the buildings or other structures on

<sup>&</sup>lt;sup>8</sup> U.S. Department of Health and Human Services, Center for Disease Control. *What Noises Cause Hearing Loss?* Online: <u>https://www.cdc.gov/nceh/hearing\_loss/what\_noises\_cause\_hearing\_loss.html</u>. Accessed 6/7/18.

neighboring properties. None of the Project structures exceed the maximum permitted height of 35 feet that applies to A-G zoned property. No buildings designed for occupancy are planned for the Site. Structures planned for the site include the solar panels and accessory equipment, electrical equipment associated with the Project substation and the Georgia Power switchyard, and a controls enclosure within the fence of the onsite substation. Utility facilities including high-voltage transmission towers, communications towers, and distribution lines occur onsite or in the surrounding area. The controls enclosure would resemble a farm shed and would not exceed the maximum building height for the A-G Zoning District of 35 feet (Brooks County Zoning Ordinance, Section 6-1). The proposed PV panels are low-profile and approximately eight feet in height. Existing and proposed vegetative buffers (as described in Section 4.0 Standards for Exercise of Zoning Powers, Standard #4) would serve to obscure the low-profile PV panels from many views.

## 6.0 Conclusion

In conclusion, the Project has minimal environmental impacts and a well-sited location for a solar site. As described in this LOI and supporting materials, the Project meets the requirements set forth by Brooks County regulations, and state and federal regulations. The Project has the potential to have benefits for the community derived from both construction of the Project and operation over its life.

We look forward to working with you on the development of this Project and would be happy to answer any questions you may have. Thank you.

Sincerely,

Stephen Land

Project Manager, NextEra Energy Resources, LLC. 700 Universe Boulevard Juno Beach, FL 33408

PH: 513-649-4240 Stephen.Land@nexteraenergy.com

Quitman Solar, LLC

# **Attachment A: Copies of Letters of Authorization from Landowners and Deeds**

Robert D. Davison and Kayla B. Davison 799 Dry Lake Road Boston, GA 31626 229 558-0272

Billy Ingram Brooks County Inspections and Zoning Office 610 South Highland Street Quitman, Georgia 31643 <u>w.billyingram@windstream.net</u>

Subject: Letter of Authorization for the Quitman Solar Project

Dear Mr. Ingram,

By this letter I verify that I am the owner of the following properties as shown in the records of Brooks County, which are the subject matter of the Special Exception Application for the Quitman Solar Project proposed by Quitman Solar, LLC (Applicant):

- Parcel # 049 00022
- Parcel # 050 00085
- Parcel # 050 00086
- Parcel # 050 00087
- Parcel # 050 00088

I authorize the person named below to act as the Applicant in the pursuit of action for the Quitman Solar Project.

#### Named Applicant:

Quitman Solar, LLC - Stephen Land, Project Manager, NextEra Energy Resources, LLC 700 Universe Boulevard

Juno Beach, FL 33408 513-649-4240

Owner Signature (all owners must sign)

Owner Signature (all owners must sign)

, who has

Notary Publi

RGL . 2022

Nancy W. Price and Roger T. Price 491 Pat's Lane Dixie, GA 31629 229 263-2355

Billy Ingram Brooks County Inspections and Zoning Office 610 South Highland Street Quitman, Georgia 31643 w.billyingram@windstream.net

Subject: Letter of Authorization for the Quitman Solar Project

Dear Mr. Ingram,

By this letter I verify that I am the owner of the following property as shown in the records of Brooks County, which are the subject matter of the Special Exception Application for the Quitman Solar Project proposed by Quitman Solar, LLC (Applicant):

Parcel # 049 0033

I authorize the person named below to act as the Applicant in the pursuit of action for the Quitman Solar Project.

#### **Named Applicant:**

Quitman Solar, LLC - Stephen Land, Project Manager, NextEra Energy Resources, LLC 700 Universe Boulevard Juno Beach, FL 33408 513-649-4240

(\_

Owner Signature (all owners must sign)

Owner Signature (all owners must sign)

ent Personally appeared before me, who has

stated that the information on this letter is true and correct.

**Notary Public** 

2015



00637 00218

### RECORDED IN OFFICE

CLERK OF SUPERIOR COURT BROOKS CO., GA

BK 637PG 218

Record and retarn to:

James H. Smith Alexander & Vann, LLP 411 Gordon Avenue Thomasville, GA 31792 2011 MAR 29 PH 3: 41

594

#### WARRANTY DEED

THIS INDENTURE, made this 21 day of March, 2011, between JOE & DRU'S PLACE, LLC, a Georgia limited liability company, of the first part, and ROBERT B. DAVISON AND KAYLA B. DAVISON, of Brooks County, Georgia, as joint tenants with right of survivorship and not as tenants in common, of the second part.

#### WITNESSETH:

That the Party of the First Part, for and in consideration of the sum of Ten Dollars (\$10,00) and other good and valuable consideration, in hand paid, at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, has granted, bargained, sold, aliened, conveyed and confirmed, and by these presents does grant, bargain, seil, alien, convey and confirm unto the Parties of the Second Part, their heirs and assigns, all the following described property, to-wit:

All that tract or parcel of land situate, lying and being in Land Lot 493 of the 12th Land District of Brooks County, Georgia, containing 8.16 acres and more particularly described on that plat of survey prepared for Bob Davison by Mark DeVane, Georgia Registered Land Surveyor No. 2799, dated March 25, 2011, recorded in Plat Book <u>21</u>, Page <u>40</u> among the deed records of Brooks County, Georgia, reference to which plat is made for a more particular description by metes and bounds and courses and distances as set forth thereon (the "Property").

The Property is conveyed subject to:

 Application for Current Use Assessment of Bona Fide Agricultural Property by Langdon S. Flowers, Jr. dated April 1, 2009, which covenant extends thru December 31, 2018, recorded in Deed Book 595, Page 170 among the deed records of Brooks County, Georgia (Map 50 Parcel 0008.2)

 Application for Current Use Assessment of Bona Fide Agricultural Property by Joe & Dru's Place, LLC dated April 28, 2010, which covenant extends thru December 31, 2017, recorded in Deed Book 619, Page 150 among the deed records of Brooks County, Georgia (Map 50 Parcel 0008A).
### RECORDED IN OFFICE

CLERK OF SUPERIOR COURT BROOKS CO., GA

### 8K637PG219

2011 MAR 29 PM 3: 41

 Application for Current Use Assessment of Bona Fide Agricultural Property by Joe & Dru's Place, LLC dated April 28, 2010, which covenant extends thru December 31, 2018, recorded in Deed Book 619, Page 152 among the deed records of Brooks County, Georgia (Map 50 Parcel 0008.2) (collectively referred to as the "Covenants").

Parties of the Second Part covenant and agree to continue the Covenants and further agree to indemnify and hold Party of the First Part harmless for any breach of the Covenants caused by Parties of the Second Part subsequent to the date of this deed. Party of the First Part covenants and agrees to indemnify and hold Parties of the Second Part harmless for any breach of the Covenants that has occurred prior to and thru the date of this deed.

Taxes for the year 2011 have been equitably prorated between the parties and for Map/Parcels 50-0008.2 and 50-0008A. Taxes for these parcels shall be paid by Party of the First Part when and as due.

TO HAVE AND TO HOLD the said above granted and described property, with all and singular, the rights, members and appurtenances thereunto appertaining to the only proper use, benefit and behoof of the Parties of the Second Part, their heirs and assigns, in Fee Simple; and the Party of the First Part, the said bargained property above described, unto the Parties of the Second Part, their heirs and assigns, against the Party of the First Part, its successors and assigns, and against all and every other person or persons, shall and will does hereby warrant and forever defend, by virtue of these presents.

IN WITNESS WHEREOF, the Party of the First Part has hereunto set its hand and affixed its seal, and delivered these presents the day and year first above written.

JOE & DRU'S PLACE, LLC

By: Langlow S. January (L.S.) Langdon S. Flowers, Jr., Manager



00637 00220

### RECORDED IN OFFICE

CLERK OF SUPERIOR COURT BROOKS CO., GA

BK 637PG 220

Record and return to:

James H. Smith Alexander & Vann, LLP 411 Gordon Avenue Thomasville, GA 31792

#### 2011 MAR 29 PH 3: 43

#### QUIT-CLAIM DEED

#### GEORGIA, THOMAS COUNTY.

THIS INDENTURE is made this the  $2 p^{2}$  day of March, 2011, between COMMERCIAL BANK, a Division of Synovus Bank, of the first part, and MIAMI PLANTATION, LLC, a Georgia limited liability company, of the second part.

WITNESSETH: That the party of first part in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, in hand paid, receipt whereof is hereby acknowledged, has this day sold and quit-claimed to the party of second part, the following described real estate:

All that tract or parcel of land situate, lying and being in Land Lots 491, 492, 493 and 521 of the 12th Land District of Brooks County, Georgia, containing 804.84 acres and more particularly described on that plat of survey prepared for Bob Davison by Mark DeVane, Georgia Registered Land Surveyor No. 2799, dated March 21, 2011, recorded in Plat Book 21. Page 41. among the deed records of Brooks County, Georgia, reference to which plat is made for a more particular description by metes and bounds and courses and distances as set forth thereon (the "Property").

Also included in this conveyance are that 2007 9-Tower Lindsey Zimmatic Center Pivot Irrigation System, having Serial No. L96795 and 200 horse power electric motor, that Lindsey Zimmatic 3-Tower Irrigation System having Serial No. 972404 and that Lockwood 13-Tower Irrigation System and 200 horse power electric motor; together with all related fixtures, equipment, piping, and casing required for their operation. The three pivots are located in Land Lot 492 of the 12th Land District of Brooks County, Georgia.

The purpose of this Quit-Claim Deed is to release the Property from the force and effect of all liens and encumbrances and security interests of COMMERCIAL BANK, a Division of Synovus Bank including, but not limited to, that Deed to Secure Debt and Security Agreement from Miami Plantation, LLC to Commercial Bank dated January 4, 2010, recorded in Deed Book 610, Page 121, that Assignment of Leases and Rents from Miami Plantation, LLC to Commercial Bank dated January 4, 1020, recorded in Deed Book 610, Page 154 among the deed records of

595

#### CLERK OF SUPERIOR COURT BROOKS CO., GA

## RECORDED IN OFFICE BK 637PG 221

#### 2011 MAR 29 PH 3: 43

Brooks County, Georgia and the following UCC Financing Statements to Commercial Bank:

- Recorded in Deed Book 606, Page 232 as amended in Deed Book 610, Page 190 among the deed records of Brooks County, Georgia.
- Recorded in Deed Book 606, Page 240 as amended in Deed Book 610, Page 188 among the deed records of Brooks County, Georgia.
- c. Recorded in Deed Book 606, Page 246 as amended in Deed Book 610, Page 186 among the deed records of Brooks County, Georgia.
- Instrument No.: 014-2009-387 with the Georgia State Clerk's Cooperative Authority
- e. Instrument No.: 014-2009-388 with the Georgia State Clerk's Cooperative Authority as amended by Instrument No.: 014-2010-003
- f. Instrument No.: 014-2009-389 with the Georgia State Clerk's Cooperative Authority.

This deed is not intended to release nor does it release any UCC Financing Statement, which are crop liens, from Robert D. Davison to Commercial Bank.

IN WITNESS WHEREOF, the party of first part has hereunto set its hand and affixed its seal, and delivered these presents the day and year first above written.

#### COMMERCIAL BANK, A DIVISION OF SYNOVUS BANK By: Indiad & Juff (b.S.)

Title: PETIDENT Attest: Just 8 1 (L.S.) Title: V-P

(AFFIX CORPORATE SEAL)

Signed, sealed and delivered in the prosence of: LDP-SS Miams Jeana d

Notary Public, State of Georgia (AFFIX, NOLAR) 96 AL) GEORGE JULY 5, 2011

MAS CO

00637 00222

### RECORDED IN OFFICE

BK 637PG 222

E BROOKS CO.. GA 2011 MAR 29 PM 3: 44

CLERK OF SUPERIOR COURT

596

Record and return to:

James H. Smith Alexatider & Vann, LLP 411 Gordon Avenue Thomasville, GA 31792

PT-61014-2011-000186
BROOKS COUNTY, GEORGIA
REAL ESTATE TRANSFER TAX
PAID \$
DATE 3-29-H
Mandie Lake
CLERK OF SUPERIOR COURT

#### QUIT-CLAIM DEED

#### GEORGIA, THOMAS COUNTY.

THIS INDENTURE is made this the <u>28</u><sup>th</sup> day of March, 2011, between MIAMI PLANTATION, LLC, a Georgia limited liability company, of the first part, and, ROBERT D. DAVISON and KAYLA B. DAVISON, as joint tenants with the right of survivorship under the provisions of Official Code of Georgia Annotated Section 44-6-190 and not as tenants in common, of the second part.

WITNESSETH: That the party of first part in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, in hand paid, receipt whereof is hereby acknowledged, has this day sold and quit-claimed to the party of second part, the following described real estate:

All that tract or parcel of land situate, lying and being in Land Lot 491, of the 12th Land District of Brooks County, Georgia, more particularly described AS FOLLOWS:

Commence at the northeast corner of Land Lot 491 and run thence south 02 degrees, 41 minutes, 00 seconds west along the east land lot line of Land Lot 491 a distance of 1064.08 feet to an iron pin; continue thence south 02 degrees 41 minutes 00 seconds west along the east land lot line of Land Lot 491 a distance of 937.31 feet to an iron pin; run thence north 85 degrees 57 minutes 23 seconds west a distance of 2277.00 feet to an iron pin; run thence north 10 degrees 45 minutes 31 seconds east a distance of 357.00 feet to an iron pin; run thence north 83 degrees 33 minutes 15 seconds west a distance of 357.00 feet to a fence post; run thence north 05 degrees 23 minutes 02 seconds west a distance of 570.00 feet to an iron pin; run thence due North to a point on the North land lot line of Land Lot 491; run thence East along the North land lot line of Land Lot 491 to the northeast corner of Land Lot 491and the Point of Beginning.



11/23/2016 00657 00121 GSCCCA.org - Image Index

CLERK OF SUPERIOR COURT BROOKS CO., GA

BK657PG121

**RECORDED IN OFFICE** 

2012 FEB 16 AM 11: 47

336

Return to:

Howell + Parrott Law Firm Post Office Box 933 Quitman, Georgia 31643

WARRANTY DEED

PT-61014-2012-000098
BROOKS COUNTY, GEORGIA REAL ESTATE TRANSFER TAX
PAID \$435.00
DATE2-12-12
Mandi Larke
Dep CLERK OF SUPERIOR COURT

#### GEORGIA, BROOKS COUNTY

This indenture, made this 15<sup>th</sup> day of February, 2012, between

*Miami Plantation, LLC,* A Georgia Limited Liability Company

of the first part, and

Nancy W. Price and Roger T. Price, Brooks County, Georgia,

of the second part,

WITNESSETH: that the said party of the first part, for and in consideration of Ten Dollars and other good and valuable consideration, in hand paid, at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, has granted, bargained, sold, aliened, conveyed and confirmed, and by these presents does grant, bargain, sell, alien, convey and confirm unto the said parties of the second part, their heirs, executors, successors and assigns, all the following described property, to-wit:

All that tract or parcel of land situate, lying and being located in Land Lots 446 and 475 of the 12<sup>th</sup> Land District, Brooks County, Georgia, containing 396.906 acres and being more particularly described as follows: For a POINT OF BEGINNING begin at a concrete monument located at the south east corner of Land Lot 446 and proceed north 88 degrees 25 minutes 12 seconds west along the south line of Land Lot 446 for a distance of 2,042.61 feet to an iron pin; thence north 88 degrees 10 minutes 01 seconds west for a distance of 2,736.90 feet to an iron pin located at the south west corner of Land Lot 475; thence north 02 degrees 24 minutes 26 seconds east for a distance of 2,355.79 feet to an iron pin; thence north 82 degrees 59 minutes 03 seconds east for a distance of 4,188.63 feet to an iron pin located on the west right-of-way margin of

11/23/2016 00657 00122 GSCCCA.org - Image Index

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BROOKS CO., GA 2012 FEB 16 AM 11: 47

CLERK OF SUPERIOR COURT

Tallokas Road a.k.a. Quitman-Barwick Road (80' r/w); thence along the arc of a curve to the left for a length of 731.33 feet (said curve having a radius of 1,472.70 feet, a chord bearing of south 47 degrees 04 minutes 45 seconds east for a distance of 723.84 feet) to a point; thence south 61 degrees 18 minutes 20 seconds east for a distance of 1,026.56 feet to a point; thence south 61 degrees 11 minutes 23 seconds east for a distance of 1,823.73 feet to a concrete monument; thence south 02 degrees 52 minutes 40 seconds west for a distance of 1,206.14 feet to the POINT OF BEGINNING. The survey for the above described property is attached hereto as Exhibit "A". Together with all grantors rights pursuant to the Irrigation Easement recorded in Deed Book 555 Page 42.

TO HAVE AND TO HOLD the said above granted and described property, with all and singular, the rights, members and appurtenances thereunto appertaining to the only proper use, benefit and behoof of the said parties of the second part, their heirs, executors, successors and assigns, in Fee Simple; and the said party of the first part, the said bargained property above described, unto the said parties of the second part, their heirs, executors, successors and assigns, against the said party of the first part, its heirs, executors, administrators, successors and assigns and against all and every other person or persons, shall and will and does hereby warrant and forever defend, by virtue of these presents.

IN WITNESS WHEREOF, the said party of the first part has hereunto set its hand and seal and delivered these presents the day and year first above written.

"MIAMI PLANTATION, LLC"

uy \_\_\_\_(Seal) BY: Langdon S. Flowers, Jr., Manager

Signed, Sealed and Delivered in the presence of: Notary Public BROO "initian

GSCCCA org - Image Index

**RECORDED IN OFFICE** 

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2012 FEB 16 AH 11: 47

CLERK OF SUPERIOR COURT BROOKS CO., GA







# **Attachment B: List of Adjacent Property Owners**

### ADJACENT PROPERTY OWNERS

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<u>Map &amp;</u>	Parcel Number:	Name and Mailing Address:
1.	<u>036 0021</u>	Booth, Larry as Trustee of The Larry Booth DGT Family Trust Under Trust Agreement (June 25, 2013) 179 Dewey Cooper Road Nashville, GA 31639
2.	<u>049 00021</u>	Dazan Etal Brown C/O Shirley Thompkins Collins <u>4 Chestnut Street</u> Plymouth Meeting, PA 19462
3.	<u>049 00023</u>	John H Jr. Thompkins 306 Cativo Road SW Atlanta, GA 30311
4.	<u>049 0003</u>	<u>Russell Q. Butler</u> 5490 Dixie Road Dixie, GA 31629
5.	<u>049 0006</u>	Johnnie Mae Marable 214 Marable Lane Dixie, GA 31629
6.	<u>049 00071</u>	<u>Price Family Farms I, LLLP 491 Pat's Lane Dixie, GA 31629</u>
7.	<u>049 00033A</u>	<u>Joan Antionette Reaves</u> 749 Crosbytown Road Quitman, GA 31643
8.	<u>050 0005</u>	Branco Farms, LLC P.O. Box 1929 Inverness, FL 34451
9.	050 0007	<u>Walter H New</u> <u>P.O. Box 111</u> Quitman, GA 31643
10	. <u>050 0008</u>	<u>Booth, Larry as Trustee of The Larry Booth DGT</u> <u>Family Trust Under Trust Agreement (June 25, 2013)</u> <u>179 Dewey Cooper Road</u> <u>Nashville, GA 31639</u>
11	. <u>050 00082</u>	<u>Joe &amp; Dru's Place, LLC P.O. Box 997</u> Thomasville, GA 31792

12. <u>050 00083</u>	<u>Joe &amp; Dru's Place, LLC</u> <u>P.O. Box 997</u> Thomasville, GA 31792
13. <u>050 0008A</u>	<u>Joe &amp; Dru's Place, LLC</u> <u>P.O. Box 997</u> <u>Thomasville, GA 31792</u>
14. <u>050 0009</u>	<u>D &amp; BJ Fletcher Properties, LLLP 5799 Barwick Road</u> Quitman, GA 31643
15. <u>050 0011</u>	<u>Drucilla W Lewis</u> <u>5300 Barwick Road</u> Quitman, GA 31643
16. <u>050 0016</u>	<u>Branco Farms, LLC</u> <u>P.O. Box 1929</u> Inverness, FL 34451
17. <u>050 0016A</u>	<u>Kenneth E Jr. Price</u> <u>430 Simpson Road</u> <u>Dixie, GA 31629</u>
18. <u>050 00081</u>	<u>Booth, Larry as Trustee of The Larry Booth DGT</u> <u>Family Trust Under Trust Agreement (June 25, 2013)</u> <u>179 Dewey Cooper Rd</u> <u>Nashville, GA 31639</u>
19. <u>049 0007</u>	Price Family Farms I, LLLP 491 Pat's Lane Dixie, GA 31629

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Signature of Applicant

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Date

17-29-2018

Attachment C: Proposed Conceptual Site Plan



OVERALL SITE LAYOUT 1" = 600' - 0" 0' 300' 600' 1200'

























ROAD

- OTH - OTH - OTH - OVERHEAD ELECTRICAL













----- SETBACK















- 1. LOCATIONS SHOWN ARE FOR GENERAL GUIDANCE ONLY. SLOPES OF THE SITE ARE NOT DEPICTED AND LOCATIONS MUST BE VERIFIED ON SITE BEFORE INSTALLATION.
- 2. SITE LAYOUT ASSUMES 50 FT TREE HEIGHT.

- 3. 90FT SETBACK FROM PROPERTY LINE TO MODULES ALONG
- BARWICK ROAD 4. 50FT SETBACK FROM PROPERTY LINE TO MODULES ALONG ALL OTHER BOUNDARIES

San Francisco, CA 9410 www.revamp-eng.com
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FROM REVAMP ENGINEERING
ENGINEER'S STAMP

REVAMP

ENGINEERING, INC.





## LEGEND

PROPERTY BOUNDARY

PARCEL LINES ADJACENT PARCEL LINES - OVERHEAD ELECTRICAL TRANSMISSION STRUCTURE



**Attachment D: Agency Correspondence** 

## Agency Correspondence Summary<sup>1</sup>

Agency	Date/Type	Summary	
U.S. Fish and Wildlife Service (USFWS)	July 28, 2017 Information Consultation Letter	On behalf of Quitman Solar, ERM performed an environmental review of the proposed Project site for habitat suitable for federally protected species. On July 28, 2017, via letter request, ERM consulted with the USFWS requesting the evaluation of findings and any comment or recommendations regarding potential effects to federally threatened, endangered, and candidate species that may occur in the proposed Project location.	
	August 31, 2017 Response	The USFWS responded via a stamped letter on August 31, 2017 indicating that based on the review of the Project information, the USFWS believes that the proposed Project is not expected to significantly impact fish and wildlife resources under USFWS jurisdiction.	
Georgia Department of Natural Resources – Wildlife Resources Division	July 28, 2017 Environmental Project Review Letter	On behalf of Quitman Solar, ERM performed an environmental review of the proposed Project site for suitable habitat for state and federally protected species. On July 28, 2017 via letter request, ERM consulted with the GDNR-WRD requesting a review and evaluation of the Site and provision of any information, comments or recommendations about the proposed Project.	
(GDNR- WRD)	August 31, 2017 Response	<ul> <li>A response from the GDNR-WRD received on August 31, 2017 identified several elements listed in the Natural Heritage Database within a three-mile radius of the Project Site including known occurrences of plants and animals of highest priority conservation status. There are no records of high-priority species or habitat within the project area. Two federally-listed species have been documented within three miles of the Project area. The GDNR-WRD recommended the following:</li> <li>Consultation with the USFWS</li> <li>Surveys for species of conservation concern should prior to commencement of construction.</li> </ul>	

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<sup>&</sup>lt;sup>1</sup> Parcel #049 0007 was included in agency correspondence, but was removed from the Project in July 2018.

U.S. Army	June 4, 2018	ERM submitted an Approved Jurisdictional
Corps of	Request for	Determination request to the USACE on June 4, 2018.
Engineers	Jurisdictional	This request determines the jurisdictional boundaries of
(USACE)	Determination	the Waters of the U.S. on the Project.
	June 20, 2018	ERM and USACE conducted a joint site visit at the
	USACE and ERM	Quitman Site to verify the extent of regulated
	Site Visit	boundaries at the Site. The USACE agreed with those
		that ERM have asserted jurisdiction over, with slight
		changes to one wetland. The results of the USACE site
		visit are depicted in Figure 4 of the LOI. A formal
		response letter from the USACE has not yet been
		received.

July 28, 2017

Ms. Janice Wilcox U.S. Fish & Wildlife Service Georgia Ecological Services Field Office 4890 Wildlife Drive NE Westpark Center Suite D Townsend, GA 31331 *Via email:* Janice\_wilcox@fws.gov

Subject: Informal Consultation Proposed Solar Development Quitman Solar Site Barwick Road and Dry Lake Road Quitman, Brooks County, Georgia 30° 50′ 48.37″ N, 83° 38'22.42″ W

#### Environmental Resources Management

200 Wingo Way Suite 101 Mt. Pleasant, SC 29464 (843) 416-5132 (888) 866-4860 (fax)



Dear Mr. Imm:

Environmental Resources Management (ERM), on behalf of NextEra Energy Resources (NEER), is performing an environmental review of the subject property (Site) to establish compliance with the applicable state and federal environmental regulations. ERM recognizes that the U.S. Fish and Wildlife Service (USFWS) and other designated natural resource agencies such as the Georgia Department of Natural Resources (DNR) have responsibility for the protection of various natural resources and is pleased to provide the information contained in this submittal for your evaluation and use in providing comments on potential impacts to protected species and critical habitat.

The Site location is indicated on the attached U.S. Geological Survey (USGS) 7.5-Minute Site Topographic Map. The proposed project will involve the construction of a new ground-mounted photovoltaic solar development. The Site is approximately 1,254 acres and is currently used for agricultural purposes. Approximately 130 acres of the Site are forested. The site contains approximately 73 acres of Waters of the U.S. (WOUS), including freshwater emergent wetlands, forested wetland, and several intermittent or ephemeral streams. The areas adjacent to the proposed Site consist of agricultural areas, and residential development. Site access is via bordering roads on existing Barwick Road, Dry Lake Road, and County Road 63. Site photographs are attached for your review (Attachment 2).

Existing federal species information and Site habitat observations were reviewed via the USFWS Information for Planning and Consultation (IPaC) report to determine the likely occurrence of federally protected (threatened, endangered, and candidate for listing) species at the proposed Site (Attachment 3). According to the IPaC report, a total of six (6) federally protected or candidate species are listed and have the potential to occur on

Environmental Resources Management

Site. These species include the wood stork (*Mycteria americana*), red-cockaded woodpecker (*Picoides borealis*), Eastern indigo snake (*Drymarchon corais couperi*), gopher tortoise (*Gopherus Polyphemus*), frosted flatwoods salamander (*Ambystoma cingulatum*), and suwannee moccasinshell (*Medionidus walker*). No designated critical habitat occurs on Site.

ERM also reviewed the Georgia Department of Natural Resources (GDNR) information on State-listed wildlife species that have the potential to occur in Brooks County. Based on this information, there are 16 elements with Georgia protection status that may occur in the County (Attachment 3).

Based on the review of the state and federal species lists and their known occurrences at the proposed Site, as well as preliminary habitat assessments completed during an initial reconnaissance survey, there is a low potential for federally or state listed rare, threatened or endangered species to occur on Site. There is also no designated critical habitat present at the Site. Appropriate site-specific surveys and clearance protocols will be conducted prior to the construction in accordance with applicable state and federal regulations. In addition, compliance with the Migratory Bird Treaty Act will be achieved using pre-construction clearance protocols.

ERM respectfully requests your evaluation of our findings and any comments or recommendations for the proposed project. If new or additional data is available for the Site area, ERM welcomes the opportunity to review that information and incorporate it into our environmental review. If you have questions concerning this submittal, please contact Sean Casto at 843-416-5132 or sean.casto@erm.com.

Sincerely

Sean Casto, CWB, PWS Wildlife Biologist

Enclosures

Appendix A - Figures Appendix B - Photographic Log Appendix C - IPaC Report Appendix A USGS Topographic Map

**Environmental Resources Management** 

200 Wingo Way, Suite 101 Mt. Pleasant, South Carolina 29464



Source: Esri - World Topoographic Map; NAD 1983 StatePlane Georgia West FIPS 1002 Feet

Appendix B Photographic Log

**Environmental Resources Management** 

200 Wingo Way, Suite 101 Mt. Pleasant, South Carolina 29464



Project Name: Quitman Solar Site		Location: Brooks County, Georgia	Project Number: 0141572
Photo Number: 001	<b>Date:</b> 3/28/2017		Constanting of the second
Direction Photo Taken: East			
<b>Description:</b> This photo is representative of farmed area .	of the upland		

Project Name: Quitman Solar Site		Location: Brooks County, Georgia	Project Number: 0141572
Photo Number: 002	<b>Date:</b> 3/28/2017	a section of the	the second
Direction Photo Taken: North			
<b>Description:</b> This is a representative phot wetlands located in the farm	o of the drained ed field.		



Project Name:		Location:	Project Number:
Quitman Solar Site	Quitman Solar Site		0141572
Photo Number: 003	<b>Date:</b> 3/28/2017		
<b>Direction Photo Taken:</b> South			
<b>Description:</b> This is a representative photo PEM1Ch wetlands located ne the Site.	o of the two ar the center of		

Project Name: Quitman Solar Site		Location: Brooks County, Georgia	Project Number: 0141572
Photo Number: 004	<b>Date:</b> 3/28/2017		a Charles
<b>Direction Photo Taken:</b> South			
<b>Description:</b> This photo is an overview of and bordering PEM1A wetlar the PEM1Ch wetlands.	the drainage ditch Id located south of		



Project Name: Quitman Solar Site		Location: Brooks County, Georgia	Project Number: 0141572
Photo Number: 005	<b>Date:</b> 3/28/2017	and the second sec	
Direction Photo Taken: East			
<b>Description:</b> This photo is an overview of the drainage ditch and bordering PEM1A wetland located in the southwest portion of the site.			

Project Name: Quitman Solar Site		Location: Brooks County, Georgia	Project Number: 0141572
Photo Number: 006	<b>Date:</b> 3/28/2017		
Direction Photo Taken: South			
<b>Description:</b> This photo is representative of the non- jurisdictional drainage ditches on Site.			



Project Name:		Location:	Project Number:
Quitman Solar Site		Brooks County, Georgia	0141572
Photo Number: 007	<b>Date:</b> 3/28/2017		
Direction Photo Taker	n:		
South		and the second secon	
Description:			A CARLES OF THE ASSA
This photo is an overview of a PEM1A wetland located in the northwest portion of the Site.		Contraction of the second	and the second second
			the second second
		A CARLES AND A CARLES	A WAR BOOK
		Con Contract	
			The Man and a state of the
			25 1 1 1 1 1 2 2 2 1

Project Name: Quitman Solar Site		Location: Brooks County, Georgia	Project Number: 0141572
Photo Number: 008	<b>Date:</b> 3/28/2017		
Direction Photo Taken: Southwest			
Description: This photo is an overview of t located in the eastern portion	he PUBHx wetland		



Project Name: Quitman Solar Site		Location: Brooks County, Georgia	Project Number: 0141572
Photo Number: 009	<b>Date:</b> 3/28/2017		
Direction Photo Taken: East			
<b>Description:</b> This photo is an overview of t transmission line the bisects t portion of the Site.	he existing the northern		

Project Name: Quitman Solar Site		Location: Brooks County, Georgia	Project Number: 0141572
Photo Number: 010	<b>Date:</b> 3/28/2017		
Direction Photo Taken: West			
<b>Description:</b> This photo is an overview of transmission line the bisects portion of the Site.	the existing the northern		



Project Name: Quitman Solar Site		Location: Brooks County, Georgia	Project Number: 0141572
Photo Number: 011	<b>Date:</b> 3/28/2017	15	
Direction Photo Taken: North			-
<b>Description:</b> This photo is an overview of the storage sheds, silos, and farm equipment and machinery located in the northeast portion of the Site.			

# Appendix C IPaC Report GA DNR Report

**Environmental Resources Management** 200 Wingo Way, Suite 101 Mt. Pleasant, South Carolina 29464



# United States Department of the Interior

FISH AND WILDLIFE SERVICE Georgia Ecological Services Field Office 105 Westpark Drive Westpark Center Suite D Athens, GA 30606-3175 Phone: (706) 613-9493 Fax: (706) 613-6059



In Reply Refer To: Consultation Code: 04EG1000-2017-SLI-2362 Event Code: 04EG1000-2017-E-03440 Project Name: Quitman Solar Site July 28, 2017

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

This list identifies threatened, endangered, proposed and candidate species, as well as critical habitat, that may be affected by your proposed project. This list may change before your project is completed. Under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation.

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.). Projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle\_guidance.html).

Wind energy projects should follow the wind energy guidelines http://www.fws.gov/windenergy/ for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts of communcation towers on migratory birds can be found under the "Bird Hazards" tab at: <u>www.fws.gov/migratorybirds</u>.

Attachment(s):

Official Species List

# **Official Species List**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Georgia Ecological Services Field Office** 105 Westpark Drive

Westpark Center Suite D Athens, GA 30606-3175 (706) 613-9493

## **Project Summary**

Consultation Code:	04EG1000-2017-SLI-2362
Event Code:	04EG1000-2017-E-03440
Project Name:	Quitman Solar Site
Project Type:	POWER GENERATION
Project Description:	Proposed Solar Site Development

### Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/30.84907957410457N83.64368115695801W



Counties:

Brooks, GA

## **Endangered Species Act Species**

There is a total of 6 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

### **Birds**

NAME	STATUS
Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/7614</u>	Endangered
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/8477</u>	Threatened
Reptiles	
NAME	STATUS
Eastern Indigo Snake Drymarchon corais couperi No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/646</u>	Threatened
Gopher Tortoise Gopherus polyphemus Population: eastern No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/6994</u>	Candidate
Amphibians	
NAME	STATUS
Frosted Flatwoods Salamander <i>Ambystoma cingulatum</i> There is a <b>final</b> <u>critical habitat</u> designated for this species. Your location is outside the designated critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/4981</u>	Threatened

## Clams

NAME

STATUS

Threatened

Suwannee Moccasinshell *Medionidus walkeri* No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/533</u>

## **Critical habitats**

There are no critical habitats within your project area under this office's jurisdiction.







# **Brooks County**

# All Tracked Natural Elements With Georgia Protection Status

### 16 element records in list

### ANIMALS

- Alosa alabamae (Alabama Shad), Rank: G2G3/S1, GA: T, US: none, SWAP: Yes, EOs: 6, Habitat: Saltwater; coastal rivers in moderate current; migrates into Gulf coastal waters to reproduce RANGE MAP R EXPLORER
- Ambystoma cingulatum (Frosted Flatwoods Salamander), Rank: G2/S1, GA: T, US: LT, SWAP: Yes, EOs: 51, Habitat: Pine flatwoods; moist savannas; isolated cypress/gum ponds RANGE MAP EXPLORER
- Ameiurus serracanthus (Spotted Bullhead), Rank: G3/S3, GA: R, US: none, SWAP: Yes, EOs: 25, Habitat: Large streams and rivers with moderate current and rock-sand substrate RANGE MAP (B) EXPLORER (C)
- Elanoides forficatus (Swallow-tailed Kite), Rank: G5/S2, GA: R, US: none, SWAP: Yes, EOs: 32, Habitat: River swamps; marshes, open pine and bottomland forest with super canopy pines. RANGE MAP () EXPLORENCE
- Geomys pinetis (Southeastern Pocket Gopher), Rank: G5/S3S4, GA: T, US: none, SWAP: Yes, EOs: 52, Habitat: Sandy well-drained soils in open pine woodlands with grassy or herbaceous groundcover; fields and grassy roadsides RANGE MAP R EXPLORENCE
- Gopherus polyphemus (Gopher Tortoise), Rank: G3/S3, GA: T, US: C, SWAP: Yes, EOs: 302, Habitat: Sandhills; dry hammocks; longleaf pine-turkey oak woods; old fields RANGE MAP R EXPLORER
- Haliaeetus leucocephalus (Bald Eagle), Rank: G5/S3, GA: T, US: none, SWAP: Yes, EOs: 233, Habitat: Edges of lakes and large rivers; seacoasts RANGE MAP (S) EXPLORENCE
- Macrochelys suwanniensis (Suwanee Alligator Snapping Turtle), Rank: G1G2/S2, GA: T, US: none, SWAP: No, EOs: 15, Habitat: Georgia habitat information not available RANGE MAP EXPLORER
- Micropterus notius (Suwannee Bass), Rank: G3/S2, GA: R, US: none, SWAP: Yes, EOs: 7, Habitat: Flowing water over rocky shoals or large springs and spring runs Range Map R ExpLORER 
   Mycteria americana (Wood Stork), Rank: G4/S3, GA: E, US: LT, SWAP: Yes, EOs: 41, Habitat: Cypress/gum ponds; impounded wetlands with islands or emergent cypress; marshes; river

swamps; bays RANGE MAP (Construction) EXPLORER (Construction) Notophthalmus perstriatus (Striped Newt), Rank: G2G3/S2, GA: T, US: C, SWAP: Yes, EOs: 41, Habitat: Pine flatwoods, sandhills; isolated wetlands RANGE MAP (Construction) Peucaea aestivalis (Bachman's Sparrow), Rank: G3/S2, GA: R, US: none, SWAP: Yes, EOs: 333, Habitat: Open pine or oak woods; old fields; brushy areas, young large grassy pine regeneration areas RANGE MAP (Construction) EXPLORER (Construction)

**Picoides borealis** (Red-cockaded Woodpecker), **Rank:** G3/S2, **GA:** E, **US:** LE, **SWAP:** Yes, **EOs:** 418, **Habitat:** Open pine woods; pine savannas Range Map (R) EXPLORER (S)

#### PLANTS

- Epidendrum magnoliae (Greenfly Orchid), Rank: G4/S3, GA: U, US: none, SWAP: No, EOS: 80, Habitat: Epiphytic on limbs of evergreen hardwoods; also in crevices of Altamaha Grit outcrops RANGE MAP () EXPLORER ()
- Sarracenia flava (Yellow Flytrap), Rank: G5?/S3S4, GA: U, US: none, SWAP: No, EOs: 145, Habitat: Wet savannas, pitcherplant bogs Range Map ( Explorer ()

Sarracenia minor var. minor (Hooded Pitcherplant), Rank: G4T4/S4, GA: U, US: none, SWAP: No, EOs: 207, Habitat: Wet savannas, pitcherplant bogs RANGE MAP ( EXPLORER ()

Exported from Biotics conservation database on June 16, 2017
2017-918

Environmental Resources Management

200 Wingo Way Suite 101 Mt. Pleasant, SC 29464 (843) 416-5132 (888) 866-4860 (fax)





U. S. Fish and Wildlife Service 105 Westpark Drive, Suite D Athens, GA 30606 706-613-9493 Fax 706-613-6059

FWS Log No. 2017-0918

Based on the information provided, the proposed action is not expected to significantly impact fish and wildlife resources under the jurisdiction of the U.S. Fish & Wildlife Service.

FOR Donald W. Imm, Ph.D., Field Supervisor

provide the information contained in this submittar for your evaluation and use in Date providing comments on potential impacts to protected species and critical habitat.

July 28, 2017

Subject:

Dear Mr. Imm:

Mrs. Robin Goodloe

105 Westpark Drive Westpark Center Suite D Athens, GA 30606-3175

U.S. Fish & Wildlife Service

Georgia Ecological Services Field Office

Informal Consultation

Quitman Solar Site

Environmental Resources Management (

(NEER), is performing an environmental

establish compliance with the applicable

ERM recognizes that the U.S. Fish and W

natural resource agencies such as the Ge have responsibility for the protection of

Proposed Solar Development

Barwick Road and Dry Lake Road Quitman, Brooks County, Georgia

Via email: robin\_goodloe@fws.gov

The Site location is indicated on the attached U.S. Geological Survey (USGS) 7.5-Minute Site Topographic Map. The proposed project will involve the construction of a new ground-mounted photovoltaic solar development. The Site is approximately 1,254 acres and is currently used for agricultural purposes. Approximately 130 acres of the Site are forested. The site contains approximately 73 acres of Waters of the U.S. (WOUS), including freshwater emergent wetlands, forested wetland, and several intermittent or ephemeral streams. The areas adjacent to the proposed Site consist of agricultural areas, and residential development. Site access is via bordering roads on existing Barwick Road, Dry Lake Road, and County Road 63. Site photographs are attached for your review (Attachment 2).

Existing federal species information and Site habitat observations were reviewed via the USFWS Information for Planning and Consultation (IPaC) report to determine the likely occurrence of federally protected (threatened, endangered, and candidate for listing) species at the proposed Site (Attachment 3). According to the IPaC report, a total of six (6) federally protected or candidate species are listed and have the potential to occur on



8-31-17

July 28, 2017

Georgia Department of Natural Resources Anna Yellin or Laci Coleman Georgia Department of Natural Resources Wildlife Resources Conservation Center 2065 US Hwy 278 SE Social Circle, GA 30025-4743 *Via Email:* nongame.review@dnr.ga.gov

Subject: Environmental Project Review Proposed Solar Development Quitman Solar Site Barwick Road and Dry Lake Road Quitman, Brooks County, Georgia 30° 50' 48.37" N, 83° 38'22.42" W

### Environmental Resources Management

200 Wingo Way Suite 101 Mt. Pleasant, SC 29464 (843) 416-5132 (888) 866-4860 (fax)



Dear Ms. Yellin or Ms. Coleman

Environmental Resources Management (ERM), on behalf of NextEra Energy Resources (NEER), is performing an environmental review of the subject project proposal (Site) to establish compliance with the applicable state and federal environmental regulations. ERM recognizes that the U.S. Fish and Wildlife Service (USFWS) and other designated natural resource agencies such as the Georgia Department of Natural Resources (DNR) have responsibility for the protection of various natural resources and is pleased to provide the information contained in this submittal for your evaluation and use in providing comments on potential impacts to protected species and critical habitat.

The Site location is indicated on the attached U.S. Geological Survey (USGS) 7.5-Minute Site Topographic Map. The proposed project will involve the construction of a new ground-mounted photovoltaic solar development. The Site is approximately 1,254 acres and is currently used for agricultural purposes. Approximately 130 acres of the Site is forested. The site contains approximately 73 acres of Waters of the U.S. (WOUS), including freshwater emergent wetlands, forested wetland, and several intermittent or ephemeral streams. The areas adjacent to the proposed Site consist of agricultural areas, and residential development. Site access is via bordering roads on existing Barwick Road, Dry Lake Road, and County Road 63. Site photographs are attached for your review (Attachment 2).

Existing federal species information and Site habitat observations were reviewed via the USFWS Information for Planning and Consultation (IPaC) report to determine the likely occurrence of federally protected (threatened, endangered, and candidate for listing) species at the proposed Site (Attachment 3). According to the IPaC report, a total of six (6) federally protected or candidate species are listed and have the potential to occur on

Environmental Resources Management

Site. These species include the wood stork (*Mycteria americana*), red-cockaded woodpecker (*Picoides borealis*), Eastern indigo snake (*Drymarchon corais couperi*), gopher tortoise (*Gopherus Polyphemus*), frosted flatwoods salamander (*Ambystoma cingulatum*), and suwannee moccasinshell (*Medionidus walker*). No designated critical habitat occurs on Site.

ERM also reviewed the Georgia Department of Natural Resources (GDNR) information on State-listed wildlife species that have the potential to occur in Brooks County. Based on this information, there are 16 elements with Georgia protection status that may occur in the County (Attachment 3).

Based on the review of the state and federal species lists and their known occurrences at the proposed Site, as well as preliminary habitat assessments completed during an initial reconnaissance survey, there is a low potential for federally or state listed rare, threatened or endangered species to occur on Site. There is also no designated critical habitat present at the Site. Appropriate site-specific surveys and clearance protocols will be conducted prior to the construction in accordance with applicable state and federal regulations. In addition, compliance with the Migratory Bird Treaty Act will be achieved using pre-construction clearance protocols.

ERM respectfully requests your evaluation of our provided information and any comments or recommendations for the proposed project. If new or additional data is available for the Site area, ERM welcomes the opportunity to review that information and incorporate it into our environmental review. If you have questions concerning this submittal, please contact Sean Casto at 843-416-5132 or sean.casto@erm.com.

Sincerely,

Sean Casto, CWB, PWS Wildlife Biologist

Enclosures

Appendix A - Figures Appendix B - Photographic Log Appendix C - IPaC Report



WILDLIFE RESOURCES DIVISION

MARK WILLIAMS COMMISSIONER RUSTY GARRISON DIRECTOR

August 31, 2017

Sean Casto Principal Consultant ERM 200 Wingo Way Suite 101 Mt. Pleasant, SC 29464

## Subject: Known occurrences of natural communities, plants and animals of highest priority conservation status on or near Quitman Solar Site Project, Brooks County, Georgia

Dear Mr. Casto:

This is in response to your request of August 2, 2017. Per our records, within a three-mile radius of the project site, there are the following Natural Heritage Database occurrences:

## (Site Center: -83.642946, 30.849904, WGS84)

*Agalinis aphylla* (Scale-leaf Purple Foxglove) approx. 1.6 mi NW of site *Agalinis divaricata* (Sprawling Purple Foxglove) approx. 1.4 mi W of site

US Ambystoma cingulatum (Frosted Flatwoods Salamander) [HISTORIC] approx. 1.8 mi S of site

*Crotalus adamanteus* (Eastern Diamond-backed Rattlesnake) approx. 1.9 mi N of site *Drosera tracyi* (Tracy's Dew-threads) approx. 1.4 mi NW of site

- GA Epidendrum magnoliae (Greenfly Orchid) approx. 0.8 mi NE of site
- US *Mycteria americana* (Wood Stork) approx. 2.7 mi NW of site *Platanthera integra* (Yellow Fringeless Orchid) approx. 1.7 mi NW of site *Quercus austrina* (Bluff White Oak) approx. 0.1 mi NE of site
- GA Sarracenia flava (Yellow Flytrap) approx. 2.9 mi SE of site
- GA Sarracenia flava (Yellow Flytrap) approx. 1.4 mi NW of site
- GA Sarracenia minor var. minor (Hooded Pitcherplant) approx. 1.7 mi SE of site
- GA Sarracenia minor var. minor (Hooded Pitcherplant) approx. 1.7 mi NE of site
- GA Sarracenia minor var. minor (Hooded Pitcherplant) approx. 1.3 mi W of site Sporobolus teretifolius (Wire-leaf Dropseed) approx. 1.8 mi W of site Ursus americanus floridanus (Florida Black Bear) in an uncertain location near the project site

*Wading Bird Colony* (Wading Bird Colony) approx. 2.4 mi NW of site *Wading Bird Colony* (Wading Bird Colony) approx. 2.7 mi NW of site 014-002 [Department of Transportation] approx. 2.7 mi S of site

### 2009005 [Georgia Land Trust] on site

Bowens Millpond [Corps of Engineers] approx. 2.7 mi S of site

### **Recommendations:**

Federally listed species have been documented within three miles of the proposed project. To minimize potential impacts to federally listed species, we recommend consultation with the United States Fish and Wildlife Service. For southeast Georgia, please contact the Coastal Georgia Office at (912) 832-8739.

Please be aware that state protected species have been documented within three miles of the proposed project. For information about these species, including survey recommendations, please visit our webpage at http://georgiawildlife.com/conservation/species-of-concern#rare-locations. Surveys for species of conservation concern should be conducted prior to commencement of construction.

Commercial solar energy facilities require that the landscape is converted to a form that cannot support the habitat needs of many species. Large solar farms lead to fragmentation of natural landscapes. Solar energy also creates a potentially significant impact on migratory birds that mistake the reflection of solar panels for water sources. Some of the species affected by solar farms are protected under the Endangered Species Act, Bald and Golden Eagle Act, Migratory Bird Treaty Act, and Georgia Endangered Wildlife Act. The U.S. Fish and Wildlife Service is working on guidelines for siting and constructing solar energy generating facilities to reduce their effects on wildlife.

### Disclaimer:

Please keep in mind the limitations of our database. The data collected by the Nongame Conservation Section comes from a variety of sources, including museum and herbarium records, literature, and reports from individuals and organizations, as well as field surveys by our staff biologists. In most cases the information is not the result of a recent on-site survey by our staff. Many areas of Georgia have never been surveyed thoroughly. Therefore, the Nongame Conservation Section can only occasionally provide definitive information on the presence or absence of rare species on a given site. Our files are updated constantly as new information is received. Thus, information provided by our program represents the existing data in our files at the time of the request and should not be considered a final statement on the species or area under consideration.

If you know of populations of highest priority species that are not in our database, please fill out the appropriate data collection form and send it to our office. Forms can be obtained through our web site (<u>http://georgiawildlife.com/conservation/species-of-concern#rare-locations</u>) or by contacting our office. If I can be of further assistance, please let me know.

Sincerely,

L Colum

Laci Coleman Environmental Review Biologist

### Data Available on the Nongame Conservation Section Website

- Georgia protected plant and animal profiles are available on our website. These accounts cover basics like descriptions and life history, as well as threats, management recommendations and conservation status. Visit <a href="http://georgiawildlife.com/conservation/species-of-concern#rare-locations">http://georgiawildlife.com/conservation/species-of-concern#rare-locations</a>.
  - Rare species and natural community information can be viewed by Quarter Quad, County and HUC8 Watershed. To access this information, please visit our GA Rare Species and Natural Community Information page at: <u>http://gakrakow.github.io/natels/home.html</u>.
- Downloadable files of rare species and natural community data by quarter quad and county are also available. They can be downloaded from: <u>http://gakrakow.github.io/natels/natural-element-locations.html</u>.

June 4, 2018

US Army Corps of Engineers, Savannah District Regulatory Department Albany Field Office ATTN: Terry Kobs 1104 North Westover Blvd, Unit 9 Albany, GA 31707-6626

RE: Quitman Solar Site Quitman Solar LLC Brooks County, Georgia

### Environmental Resources Management

200 Wingo Way Suite 101 Mt. Pleasant, SC 29464 (843) 416-5132 (888) 866-4860 (fax)



Dear Mr. Kobs:

Environmental Resources Management (ERM) on behalf of Quitman Solar LLC, is requesting an Approved Jurisdictional Determination (AJD) at the proposed Quitman Solar Site (Site). The Site is located along Barwick Road in the Town of Barwick (30.847726° N, 83.640200° W) of Brooks County, Georgia (Figure 1). According to the Brooks County Tax Assessor, the Site includes tax parcel numbers 049 0007, 049 00022, 049 0033, 050 00085, 050 00086, 050 00087, and 050 00088. ERM recognizes that the U.S. Army Corps of Engineers (USACE) has jurisdiction over Waters of the United States, including wetlands, in accordance with the Clean Water Act, Section 404/401 and other related environmental regulations.

For your review, this submittal contains the appropriate completed and signed Jurisdictional Request Forms (Attachment A), Approved Jurisdictional Determination Forms (Attachment B), and Wetland Delineation Report depicting the properties of each wetland and water feature identified on the Site (Attachment C).

The formal wetland delineation following USACE protocols identified (7) palustrine forested wetlands, eight (8) palustrine emergent wetlands, two (2) palustrine unconsolidated bottom ponds, seven (7) intermittent streams, and one (1) ephemeral stream feature within the Site (Figure 2). Of the 25 features observed on the Site, 1 open water feature (OW-3) and five (5) wetlands (Wet-2, Wet-7, Wet-8, Wet-9, and Wet-15) are, based on ERM's best professional judgment, isolated and non-jurisdictional due to their lack of significant nexus to Waters of the US, relatively permanent waters (RPW), and traditionally navigable waters (TNW) on Site in accordance with current regulatory guidance. Our findings are presented in Table 1 and are described in the sections below, including feature type, and vegetation.

Feature (ID)	Cowardin Class	Hydrological Regime	Area (ac)	Width (ft)	Description
Wetlands		8	()	()	
Wetland 1 (Wet-1)	PFO1C	Seasonally Flooded	0.08	N/A	Forested wetland within a topographical low area. Vegetation was dominated by sweetbay magnolia ( <i>Magnolia</i> <i>virginiana</i> ), red maple, and smallspike false nettle ( <i>Boehmeria</i> <i>cylindrical</i> ). Soils consisted of loam. At the time of the Site visit, this area was not saturated.
Wetland 2 (Wet-2)	PEM1C	Seasonally Flooded	1.84	N/A	Emergent wetland within a topographical low area. Vegetation was dominated by planted cotton. Soils consisted of loam. At the time of the Site visit, this area was not saturated. Wetland is topographically isolated and is not contiguous with a RPW or TNW. A ditch created wholly in the upland was observed but maintains no flow.
Wetland 3 (Wet-3)	PEM1C	Seasonally Flooded	2.38	N/A	Emergent wetland within an impounded topographical low area and contiguous with a PFO wetland offsite. Vegetation was dominated by Pennsylvania smartweed ( <i>Polygonum</i> <i>pensylvanicum</i> ). Adjacent PFO offsite contained black willow ( <i>Salix nigra</i> ), eastern baccharis ( <i>Baccharis halimifolia</i> ), dogfennel ( <i>Eupatorium capillifolium</i> ), bushy bluestem, and Canada goldenrod ( <i>Solidago canadensis</i> ). Soils consisted of clay loam. At the time of the Site visit, this area was not saturated.

## Table 1. Wetland and Waters features identified within the Quitman Solar Site

Feature	Cowardin	Hydrological	Area	Width	Description
Wetland 4 (Wet-4)	PEM1C	Seasonally Flooded	0.64	N/A	Emergent wetland within an impounded topographical low area. Vegetation was dominated by Pennsylvania smartweed. Soils consisted of clay loam. At the time of the Site visit, this area was not saturated.
Wetland 5 (Wet-5)	PEM1C	Seasonally Flooded	1.59	N/A	Emergent wetland within a linear ditched topographical low area. Vegetation was dominated by common rush (Juncus effuses), common reed (Phragmites australis), and three-way sedge (Dulichium arundinaceum). Soils consisted of clay. At the time of the Site visit, this area was saturated.
Wetland 6 (Wet-6)	PFO1C	Seasonally Flooded	1.61	N/A	Forested wetland within a topographical low area. Vegetation was dominated by bald cypress, loblolly pine, blackgum, red maple, and muscadine ( <i>Vitis rotundifolia</i> ). Soils consisted of loam. At the time of the Site visit, this area was not saturated.
Wetland 7 (Wet-7)	PFO1C	Seasonally Flooded	5.87	N/A	Forested wetland within a topographical low area. Vegetation was dominated by bald cypress, loblolly pine, and rice cutgrass ( <i>Leersia oryzoides</i> ). Soils consisted of clay loam. At the time of the Site visit, this area was not saturated. This wetland is not adjacent to, or contiguous with, any TNW, RPW, or any other Water of the U.S.
Wetland 8 (Wet-8)	PEM1C	Seasonally Flooded	0.12	N/A	Emergent wetland within a topographical low area. Vegetation was dominated by seedbox ( <i>Ludwigia alternigolia</i> ),

Feature (ID)	Cowardin Class	Hydrological Regime	Area (ac)	Width (ft)	Description
					common rush, and Pennsylvania smartweed. Soils consisted of loam. At the time of Site visit, this area was saturated. This wetland was isolated and not adjacent, to or contiguous with, any TNW, RPW, or any other Water of the U.S.
Wetland 9 (Wet-9)	PFO1C	Seasonally Flooded	8.24	N/A	Forested wetland within a topographical low area. Vegetation was dominated by Acer rubrum, bald cypress, loblolly pine, netted chain fern <i>(Woodwardia areolate)</i> , and Virginia chain fern <i>(Woodwardia virginica)</i> . Soils consisted of loam. At the time of the Site visit, this area was not saturated. This wetland was isolated and not adjacent, to or contiguous with, any TNW, RPW, or any other Water of the U.S.
Wetland 10 (Wet-10)	PFO1C	Seasonally Flooded	18.75	N/A	Forested wetland within a topographical low area. Vegetation was dominated by red maple, water oak ( <i>Quercus nigra</i> ), wax myrtle ( <i>Morella cerifera</i> ), sweetbay magnolia, and netted chain fern. Soils consisted of sandy loam. At the time of the Site visit, this area was not saturated.
Wetland 11 (Wet–11)	PEM1C	Seasonally Flooded	0.55	N/A	Emergent wetland within a topographical low area. Vegetation was dominated by bushy bluestem, cotton, and three- way sedge. Soils consisted of loam. At the time of the Site visit, this area was saturated.
Wetland 12 (Wet-12)	PEM1C	Seasonally Flooded	0.12	N/A	Emergent wetland within a topographical low area. Vegetation was dominated by

Feature (ID)	Cowardin Class	Hydrological Regime	Area (ac)	Width (ft)	Description
					bushy bluestem. Soils consisted of loam. At the time of the Site visit, this area was saturated.
Wetland 13 (Wet-13)	PEM1C	Seasonally Flooded	1.09	N/A	Emergent wetland within a topographical low area. Vegetation was dominated by bushy bluestem, woolgrass ( <i>Scirpus cyperinus</i> ), and soybeans. Soils consisted of loam. At the time of the Site visit, this area was saturated.
Wetland 14 (Wet-14)	PFO1C	Seasonally Flooded	1.87	N/A	Forested wetland within a topographical low area. Vegetation was dominated by black willow, giant cane ( <i>Arundinaria gigantean</i> ), wool grass, southern waxy sedge ( <i>Carex</i> <i>glaucescens</i> ), and broadleaf cattail ( <i>Typha latifolia</i> ). Soils consisted of loam. At the time of the Site visit, this area was not saturated.
Wetland 15 (Wet-15)	PFO1C	Seasonally Flooded	0.39	N/A	Forested wetland within a topographical low area. Vegetation was dominated by loblolly pine, live oak ( <i>Quercus</i> <i>virginiana</i> ), sweetgum ( <i>Liquidambar styraciflua</i> ), and dixie grapefern ( <i>Botrychium jenmanii</i> ). Soils consisted of clay loam. At the time of the Site visit, this area was not saturated. This wetland was isolated and not adjacent, to or contiguous with, any TNW, RPW, or any other Water of the U.S.
Waters					
Ephemeral Stream – 1 (ES-1)	N/A	Ephemeral	N/A	510	Man-made ephemeral stream which flows north to south and connects Open Water 1 and Wetland 3.

Feature (ID)	Cowardin Class	Hydrological Regime	Area (ac)	Width (ft)	Description
Intermittent Stream – 3 (IS-3)	R4SB4	Intermittent	N/A	165	Intermittent stream that begins at a spring head within Wetland 10. This feature flows south until it exits the Site boundary.
Intermittent Stream - 4 (IS-4)	R4SB4	Intermittent	N/A	517	Intermittent stream that begins at a headcut within Wetland 10. This feature flows south until it exits the Site boundary.
Intermittent Stream – 5 (IS-5)	R4SB4	Intermittent	N/A	669	Intermittent stream that is man- made and begins at a headcut downgradient of Wetland 11. This feature flows south until it exits the Site boundary.
Intermittent Stream – 6 (IS-6)	R4SB4	Intermittent	N/A	1,639	Intermittent stream that is man- made and begins at a headcut downgradient of Wetland 12. This feature flows south until it exits the Site boundary.
Intermittent Stream – 7 (IS-7)	R4SB4	Intermittent	N/A	89	Intermittent stream that is man- made and begins within an agriculture field. This feature flows south until it exits the Site boundary.
Intermittent Stream – 8 (IS-8)	R4SB4	Intermittent	N/A	1,277	Intermittent stream that begins at a headcut downgradient of Wetland 12. This feature flows south until it exits the Site boundary.
Intermittent Stream – 9 (IS-9)	R4SB4	Intermittent	N/A	207	Intermittent stream that begins at a headcut within Wetland 14. This feature flows east until the channel loses a clear bed and bank.
Open Water 1 (OW-1)	PUBHx	Permanently Flooded	0.33	N/A	Small unconsolidated bottom man-made pond that takes on hydrological contribution from Wetland 4. This feature flows south into Ephemeral Stream 1.
Open Water 3 (OW-3)	PUBHx	Permanently Flooded	2.58	N/A	Small unconsolidated bottom open water man-made non- jurisdictional pond which lies

Feature	Cowardin	Hydrological	Area	Width	Description
(1D)	Class	Regime	(ac)	(11)	
					near the eastern boundary of the
					Site. This feature has no
					connection to other water features
					in or adjacent to the proposed Site.
					OW-3 was likely created from an
					upland area and used as a farm
					pond. The water does not have an
					inlet.

ERM respectfully requests your evaluation of our findings for the proposed project. If new or additional data is available for the Site area, ERM welcomes the opportunity to review that information and incorporate it into our environmental review. If you have questions concerning this submittal, please contact Sean Casto at 843-416-5132 or sean.casto@erm.com.

Sincerely

Senlat

Sean Casto, PWS, CWB Project Manager

Attachments (3)

Attachment A Jurisdictional Request Forms

## **SECTION 1**

Parcel Number of Property: 049 00033				
Lat. 30.852800	Long 83.645086	(in decimal degrees)		
Parcel Address: Barwick Road				
Parcel City : Quitman	Parcel County: GA	Zip: 31643		
Size of Review Area: 1,252	Acre(s)	Linear feet		

## **SECTION 2**

LANDOWNER NAM	ЛЕ	AUTHORIZED AGEN	T'S NAME		
First: Nancy and Roger		First: John			
Last: Price		Last: Crosby			
Company:	Company:		Company: ERM		
Email Address:		Email Address: john.crosby@erm.com			
Address: 491 Pars L	ane	Address: 200 Wingo Way, Suite 101			
City: Dixie		City: Mount Pleasant			
State: GA	Zip: 31629	State: SC	Zip: 29464		
Phone:		Phone: 404-275-8898			

# PROPERTY ACCESS PERMISSION, AKNOWLEDGEMENT OF 18 U.S.C. SECTION 10001 AND STATEMENT OF AGENT AUTHORIZATION

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the delineation and/or JD. Your signature shall be an affirmation that you possess the requisite property rights to request a delineation and/or JD on the subject property.

Further, I, the undersigned, do authorize the agency/consultant listed above to act in my behalf in the processing of this request and to furnish supplemental information in support of this request.

Con	7.	Que	5-15-2018
	*Signatu	re of Landowner	Date

\*Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

SECTION I		
Parcel Number of Property: 049 0007		
Lat. 30.842147	Long 83.612596	(in decimal degrees)
Parcel Address: 4225 Barwick Road		
Parcel City : Quitman	Parcel County: GA	Zip: 31643
Size of Review Area: 1,228	Acre(s)	Linear feet

## **SECTION 2**

SECTION 1

LANDOWNER NAM	Æ	AUTHORIZED AGEN	T'S NAME	
First: Price Family F	arms I, LLLP	First: John		
Last:		Last: Crosby		
Company:		Company: ERM		
Email Address:		Email Address: john.crosby@erm.com		
Address: 491 Pats Lane		Address: 200 Wingo Way, Suite 101		
City: Dixie		City: Mount Pleasant		
State: GA	Zip: 31629	State: SC	Zip: 29464	
Phone:		Phone: 404-275-8898		

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The 5-15-2018 \*Signature of Landowner

<sup>\*</sup>Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

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## **SECTION 1**

Parcel Number of Property: 049 00022				
Lat. 30.852800	Long 83.645086	(in decimal degrees)		
Parcel Address: Dewberry Road				
Parcel City : Quitman	Parcel County: GA	Zip: 31643		
Size of Review Area: 1,228	Acre(s)	Linear feet		

## **SECTION 2**

LANDOWNER NAME		AUTHORIZED AGENT'S NAME		
First: Robert and Kayla		First: John		
Last: Davison		Last: Crosby		
Company:		Company: ERM		
Email Address:		Email Address: john.crosby@erm.com		
Address: 799 Dry La	ke Road	Address: 200 Wingo Way, Suite 101		
City: Boston		City: Mount Pleasant		
State: GA	Zip: 31626	State: SC	Zip: 29464	
Phone:		Phone: 404-275-8898		

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\*Signature of Landowner

5-30-1

\*Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

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## **SECTION 1**

Parcel Number of Property: 050 0008	5	
Lat. 30.862274	Long 83.862274	(in decimal degrees)
Parcel Address: Barwick Road		
Parcel City : Quitman	Parcel County: GA	Zip: <b>31643</b>
Size of Review Area: 1,228	Acre(s)	Linear feet

## **SECTION 2**

LANDOWNER NAME		AUTHORIZED AGENT'S NAME			
First: Robert and Kayla		First: John			
Last: Davison		Last: Crosby			
Company:		Company: ERM	Company: ERM		
Email Address:		Email Address: john.crosby@erm.com			
700 Dryl ako Road		Address. 200 Wingo Way, Suite 101			
Address: 100 Dry La		Address: 200 thingo thay, band tot			
City: Boston		City: Mount Pleasant			
State: GA	Zip: 31626	State: SC	Zip: 29464		
Phone: Pho		Phone: 404-275-8898			

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\*Signature of Landowner

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## **SECTION 1**

Parcel Number of Property: 050 00086		
Lat. 30.861798	Long 83.643381	(in decimal degrees)
Parcel Address: Barwick Road		
Parcel City : Quitman	Parcel County: GA	Zip: 31643
Size of Review Area: 1,228	Acre(s)	Linear feet

## **SECTION 2**

LANDOWNER NAME		AUTHORIZED AGENT'S NAME		
First: Robert and Kayla		First: John		
Last: Davison		Last: Crosby		
Company:		Company: ERM		
Email Address:		Email Address: john.crosby@erm.com		
Adduise, 799 Dry Lake Road		Address: 200 Wingo Way, Suite 101		
City: Boston		City: Mount Pleasant		
State GA	Zip: 31626	State SC	Zin: 29464	
Phone:		Phone: 404-275-8898		
1 1101101				

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5-30-18 \*Signature of Eandowner

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## **SECTION 1**

Parcel Number of Property: 050 00087		
Lat. 30.852800	Long 83.645086	(in decimal degrees)
Parcel Address: Dewberry Road		
Parcel City : Quitman	Parcel County: GA	Zip: 31643
Size of Review Area: 1,228	Acre(s)	Linear feet

## **SECTION 2**

LANDOWNER NAME		AUTHORIZED AGENT'S NAME		
First: Robert and Kayla		First: John		
Last: Davison		Last: Crosby		
Company:		Company: ERM		
Email Address:		Email Address: john.crosby@erm.com		
Address: 799 Dry La	ke Road	Address: 200 Wingo Way, Suite 101		
City: Boston		City: Mount Pleasant		
State: GA	Zip: 31626	State: SC	Zip: 29464	
Phone:	Phone: 404-275-8898			

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\*Signature\_of/Landowner

5-30-18

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## **SECTION 1**

Parcel Number of Property: 050 00088					
Lat. 30.850476 Long 83.641687 (in decimal degrees)					
Parcel Address: Barwick Road					
Parcel City : Quitman	Parcel County: GA	Zip: 31643			
Size of Review Area: 1,228	Acre(s)	Linear feet			

## **SECTION 2**

LANDOWNER NAME	AUTHORIZED AGENT'S NAME		
First: Robert and Kayla	First: John		
Last: Davison	Last: Crosby		
Company:	Company: ERM		
Email Address:	Email Address: john.crosby@erm.com		
Address: 799 Dry Lake Road	Address: 200 Wingo Way, Suite 101		
City: Boston	City: Mount Pleasant		
State: GA Zip: 31626	State: SC Zip: 29464		
Phone:	Phone: 404-275-8898		

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\*Signature of Landowner

May 30-16

\*Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

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Attachment B Approved Jurisdictional Determination Form

#### APPROVED JURISDICTIONAL DETERMINATION FORM 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):

#### B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Savannah District, Albany Field Office, Georgia

#### C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: GeorgiaCounty/parish/borough: BrooksCity: BarwickCenter coordinates of site (lat/long in degree decimal format):Lat. 30.847726° N, Long. 83.640200° W.Universal Transverse Mercator:3415716.01m N, 2471518.55m E Zone 17N

Name of nearest waterbody: Pride Branch

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Withlacoochee River Name of watershed or Hydrologic Unit Code (HUC): 031102030702/031102030601/031102030603/031102030703

Check if map/diagram of review area and/or potential jurisdictional areas is/are 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 different JD form.

#### D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date:

Field Determination. Date(s): July 31<sup>st</sup> - August 2<sup>nd</sup>, 2017

#### **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. [*Required*]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

#### B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

#### 1. Waters of the U.S.

 $\overline{\bowtie}$ 

- a. Indicate presence of waters of U.S. in review area (check all that apply): <sup>1</sup>
  - TNWs, including territorial seas
  - Wetlands adjacent to TNWs
  - Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs
  - Non-RPWs that flow directly or indirectly into TNWs
  - Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
  - Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
  - Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
  - Impoundments of jurisdictional waters
  - Isolated (interstate or intrastate) waters, including isolated wetlands
- **b.** Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: 10 linear feet: 5,073 width (ft) and/or 2.91 acres. Wetlands: 45.14 acres.
- **c. Limits (boundaries) of jurisdiction** based on: **1987 Delineation Manual** Elevation of established OHWM (if known):
- 2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>
  - Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Features labeled as Wet-2, Wet-7, Wet-8, Wet-9, Wet-15, and OW-3 are isolated features that may not be under the jurisdiction of the USACE. These features (16.46 acres in size) do not have any connection/significant nexus with Waters of the US on or adjacent to the Site.

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>&</sup>lt;sup>3</sup> Supporting documentation is presented in Section III.F.

#### SECTION III: CWA ANALYSIS

#### A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

#### 1. TNW

Identify TNW: None on Site.

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

#### B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

#### 1. Characteristics of non-TNWs that flow directly or indirectly into TNW

 (i) General Area Conditions: Watershed size: 38487/32789/30038/41213acres Drainage area: 1252 acres Average annual rainfall: 53.07 inches Average annual snowfall: N/A inches

#### (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 □ Tributary flows directly into TNW.
 □ Tributary flows through 3 tributaries before entering TNW.

Project waters are proj

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW<sup>5</sup>: According to USGS Topographic mapping ES - 4, IS - 5, Wet-10, and Wet-11 flow offsite into an unammed tributary. This then flows east until entering Colemans Creek. Colemens Creek later flows into the Little Satilla River. The Little Satilla River then flows south until it turns into the Satilla River. Tributary stream order, if known: .

(b)	General Tributary	Characteristics (check all that apply	<u>y):</u>	
	Tributary is:	Natural		
		$\boxtimes$ Artificial (man-made). Explan $\boxtimes$ Manipulated (man-altered). I	ın: Ep Explai	in: Intermittent streams were dug for drainages.
agricultural pr	actices.		•	
	Tributary propert Average widt Average dept Average side	ties with respect to top of bank (esti th: 6.60 feet th: 2.15 feet slopes: <b>2:1.</b>	imate)	):
	Primary tributary s Silts Cobbles Bedrock Other. Ex	substrate composition (check all tha Sands Gravel Vegetation. Type/%	at appl % cove	ly): Concrete Muck er:
highly eroding	Tributary condition	n/stability [e.g., highly eroding, slo	ughin	g banks]. Explain: All tributaries within agiculture fields were
complexes we	Presence of run/rif re absent in all Tributary geometr Tributary gradient	ffle/pool complexes. Explain: All tr y: <b>Relatively straight</b> (approximate average slope): 20 %	ributa 6	ries were flowing slow or none at all. Riffle/run/pool
(c) months out of were very sha	Flow: Tributary provides Estimate average r Describe flow the year. ES-1 req Other information llow and had moder	s for: <b>Intermittent but not seasona</b> number of flow events in review are v regime: Intermittent streams on si uires rain events and does not flow on duration and volume: ES-1 does rate to slow flow.	<b>d flow</b> ea/yea ite beg throug s not f	r: <b>20 (or greater)</b> gin at spring heads and are thought to flow for at least three ghout most of the year. flow unless influenced by rain. Intermittent streams on site
	Surface flow is: <b>D</b>	iscrete and confined. Characterist	tics:	
	Subsurface flow: Dye (or of	<b>Yes</b> . Explain findings: Intermittent ther) test performed:	featur	res are thought to have connection with water table.
	Tributary has (che Bed and b OHWM <sup>6</sup> clear, chang shelv: veget leaf li sedim water other Discontin	ck all that apply): banks (check all indicators that apply): natural line impressed on the bank ges in the character of soil ing ation matted down, bent, or absent itter disturbed or washed away hent deposition staining (list): uous OHWM. <sup>7</sup> Explain:		the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting scour multiple observed or predicted flow events abrupt change in plant community
	If factors other tha High Tic oil or fine s physi	an the OHWM were used to determine the Line indicated by:	ine lat Mea s f f v	eral extent of CWA jurisdiction (check all that apply): In High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW. <sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.



#### (iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Water color was tubid and dark within IS-3, and IS-4. The intermittent streams within the agriculture fields had clear water. ES-1 had no water during the time of the survey and appeared as if it were dry for some time. Site visits during other time of year, outside of the delineation, confirmed that no water was in ES-1.

Identify specific pollutants, if known: None.

#### (iv) Biological Characteristics. Channel supports (check all that apply):

Riparian corridor. Characteristics (type, average width): IS-3, and IS4 had a riparian area of over 100 ft. All other streams were identified within active agriculture fields and did not display a riparian corridor.

- Wetland fringe. Characteristics: Wetland 10 surrounds IS-3, and IS-4.
- Habitat for:
  - Federally Listed species. Explain findings: .
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings:

#### 2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

#### (i) Physical Characteristics:

- (a) General Wetland Characteristics:
  - Properties:
    - Wetland size: 28.67 acres

Wetland type. Explain: The majority of wetlands on site are PEM; however, Wet-1, Wet-3, Wet-6, Wet-10 and Wet14 are PFO. Each of these wetlands are adjacent to non-TNW streams with flow, and ultimately flow into a TNW downstream.

Wetland quality. Explain: These wetlands are considered Class 4 wetlands due to agricultural practices being conducted within the wetlands boundaries.

Project wetlands cross or serve as state boundaries. Explain: N/A.

(b) <u>General Flow Relationship with Non-TNW:</u>

Flow is: Ephemeral flow. Explain: Wetlands flow into intermittent stream during rain events.

Surface flow is: Not present Characteristics:

Subsurface flow: **Unknown**. Explain findings: Dye (or other) test performed:

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
    - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:

#### (d) Proximity (Relationship) to TNW

Project wetlands are **15-20** river miles from TNW. Project waters are **10-15** aerial (straight) miles from TNW. Flow is from: **Wetland to navigable waters**. Estimate approximate location of wetland as within the **500-year or greater** floodplain.

#### (ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Water was turbid and dark due to lack of flow. Identify specific pollutants, if known: N/A.

#### (iii) Biological Characteristics. Wetland supports (check all that apply):

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain: See Appendix C.
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings:

#### 3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 15-20

Approximately (50.04) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts	s? (Y/N)	Size (in acres)	Directly abuts	<u>? (Y/N)</u>	Size (in acres)
Wetland 1	N	0.08	Wetland 9	Ν	8.24
Wetland 2	Ν	1.84	Wetland 10	Y	18.75
Wetland 3	Y	2.38	Wetland 11	Y	0.55
Wetland 4	Y	0.64	Wetland 12	Y	0.12
Wetland 5	Y	1.59	Wetland 13	Y	1.09
Wetland 6	Y	1.61	Wetland 14	Y	1.87
Wetland 7	Ν	5.87	Wetland 15	Ν	0.39
Wetland 8	Ν	0.12			

Summarize overall biological, chemical and physical functions being performed: Wetlands 2, 7, 8, 9, and 15 are isolated from and have no significant nexus with other Waters of the US, TNW, or RPWs. These wetlands are concave and do not contribute hydrology to any other Waters of the US on or adjacent to the Site. Wetland 1 drains north and its connection with other Waters of the US is unknown. Wetland 3 revieves water from OW-1 via ES-1 and connections west of the Site's boundaries. Wet-4 is a man-made concave area that is filled with water during waterfowl season. The landowner floods this area with his irrigation system during hunting season and drains it during the growing season. Currently the area is planted with corn. Wet-5 is a man-made concave area designed to drain storm water into IS-1. Wetland 10 contributes water to Intermittent Streams 2, 3, and 4 during rain events and continues off the Site's southern boundary. Wetlands 11, 12, and 13 exist entirely within an active soybean field and flow directly into IS-5 and IS-6. Wetland 14 flows into IS-9 during rain events and continues north of the Site's boundaries. See Appendix C.

With the exception of Wetalnds 2, 7,8,9 and 15, all other wetlands listed as directly abutting are known to directly abut RPW's not TNW's.

#### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

## Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

## Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Wetlands 2, 7, 8, 9, 15, and OW-3 do not have a significant nexus with any other wetlands on or adjacent to the Site, nor do they contribute or are contiguous with RPWs. These wetlands are concave and receive storm water runoff from adjacent areas. All other adjacent or abutting wetlands are thought to be jurisdictional and have a significant nexus to an RPW on or off site.

#### D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: TNWs: linear feet width (ft), Or, acres. Wetlands adjacent to TNWs: acres

#### 2. RPWs that flow directly or indirectly into TNWs.

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
- Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are  $\square$ jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: OW-1, OW-2, and all intermittent streams on site area considered RPW's (Appendix C; Figure 6).
  - Provide estimates for jurisdictional waters in the review area (check all that apply):
  - Tributary waters: **4563** linear feet **6.60** width (ft).

  - Identify type(s) of waters: **Open Water 1**.

#### 3. Non-RPWs<sup>8</sup> that flow directly or indirectly into TNWs.

Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

acres.

- Tributary waters: **509.7** linear feet **6** width (ft).
  - Other non-wetland waters:
    - Identify type(s) of waters:

#### Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. 4.

Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
- Ketlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: See Figure 6 within Appendix C.

Provide acreage estimates for jurisdictional wetlands in the review area: 28.67 acres.

- Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. 5.
  - Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres

#### Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. 6.

Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

- 7. Impoundments of jurisdictional waters.9
  - As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
  - Demonstrate that impoundment was created from "waters of the U.S.," or

<sup>8</sup>See Footnote # 3.

<sup>&</sup>lt;sup>9</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

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Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).

#### E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):<sup>10</sup>

which are or could be used by interstate or foreign travelers for recreational or other purposes.

from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

which are or could be used for industrial purposes by industries in interstate commerce.

Interstate isolated waters. Explain:

Other factors. Explain:

#### Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

Tributary waters: 5073 linear feet 6.6 width (ft).

Other non-wetland waters: 0.33 acres.

Identify type(s) of waters: Open Water.

Wetlands: 28.67 acres.

#### F. <u>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</u>

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based <u>solely</u> on the "Migratory Bird Rule" (MBR).

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Wetlands 2, 7, 8, 9, 15, and Open Water 3 do not have any connection to other Waters of the US on or adjacent to the Site. These areas are concave areas within an agriculture field that collect storm water runoff. Open Water 3 are dug completely within an upland area and collect only rain water. This pond may have been dug to collect irrigation water for surrounding farmland.

Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

Non-wetland waters (i.e., rivers, streams): linear feet width (ft).

Lakes/ponds: acres.

Other non-wetland waters: acres. List type of aquatic resource:

Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

Non-wetland waters (i.e., rivers, streams):linear feet,width (ft).Lakes/ponds: 2.57 acres.

Other non-wetland waters: acres. List type of aquatic resource:

Wetlands: 16.46 acres.

#### SECTION IV: DATA SOURCES.

 $\square$ 

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
- 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:

<sup>&</sup>lt;sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:USA Topographic Map; ESRI; Figure 2. USDA Natural Resources Conservation Service Soil Survey. Citation: SSURGO Soils Data for Appling County; Figure 3. National wetlands inventory map(s). Cite name: Figure 4. State/Local wetland inventory map(s): FEMA/FIRM maps: Figure 5. 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: ⊠ Aerial (Name & Date):Figures 1, 3, 4, 5, and 6 (2016). or ⊠ Other (Name & Date):Photographs 1-8; July 31<sup>st</sup> - August 2<sup>nd</sup>, 2017. Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature:  $\Box$ Other information (please specify):

#### **B. ADDITIONAL COMMENTS TO SUPPORT JD:**