

**ROCLA CONCRETE TIES, INC.  
SOUTH 3<sup>RD</sup> STREET  
CITY OF FORT PIERCE, FLORIDA**

Environmental Assessment  
April 2015



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NOTE: This Report, together with the concepts and design presented herein, as an instrument of service, is intended only for the specific purpose and Client for which it was prepared. Reuse of and improper reliance on this Report without written authorization and adaptation by Hobe Sound Environmental Consultants, Inc. shall be without liability to Hobe Sound Environmental Consultants, Inc.

**ENVIRONMENTAL ASSESSMENT REPORT**  
**ROCLA CONCRETE TIES, INC.**

**1.00 INTRODUCTION**

The following Environmental Assessment Report of the Rocla Concrete Ties, Inc. project site has been prepared by Hobe Sound Environmental Consultants, Inc. (HSE). The project site consists of approximately 7.547 acres of land located south of Citrus Avenue, east of South 3<sup>rd</sup> Street, north of Florida Avenue and west of the Florida East Coast Railway tracks (Figures 1, 2 and 3 of 13). The project site is located at Latitude 27°26'30.923" and Longitude -80°19'25.462" in Section 10, Township 35S, Range 40E, City of Fort Pierce, Florida.

The purpose of this report is to provide the methodologies and findings of a scientific environmental assessment of the project site. This report addresses the following environmental issues: protected species, wildlife, vegetative communities, wetlands, soils, and topography. The report is based on field data collected on date(s).

**2.00 AGENCY CONTACTS**

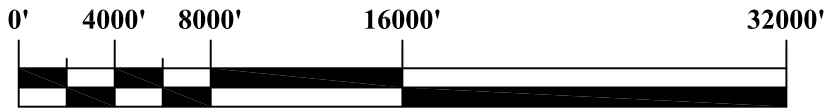
HSE contacted, and is coordinating with, the following state and federal agencies: U.S. Fish and Wildlife Service (FWS), Florida Fish and Wildlife Conservation Commission (FFWCC), Florida Natural Areas Inventory (FNAI), and the State Historic Preservation Officer (SHPO) (Appendix A). An eagle locator map and National Wetlands Inventory (NWI) Map can be found as Figures 4 and 5 of 13.

THIS DRAWING, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DRAWING WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC. SHALL BE WITHOUT LIABILITY TO HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC.

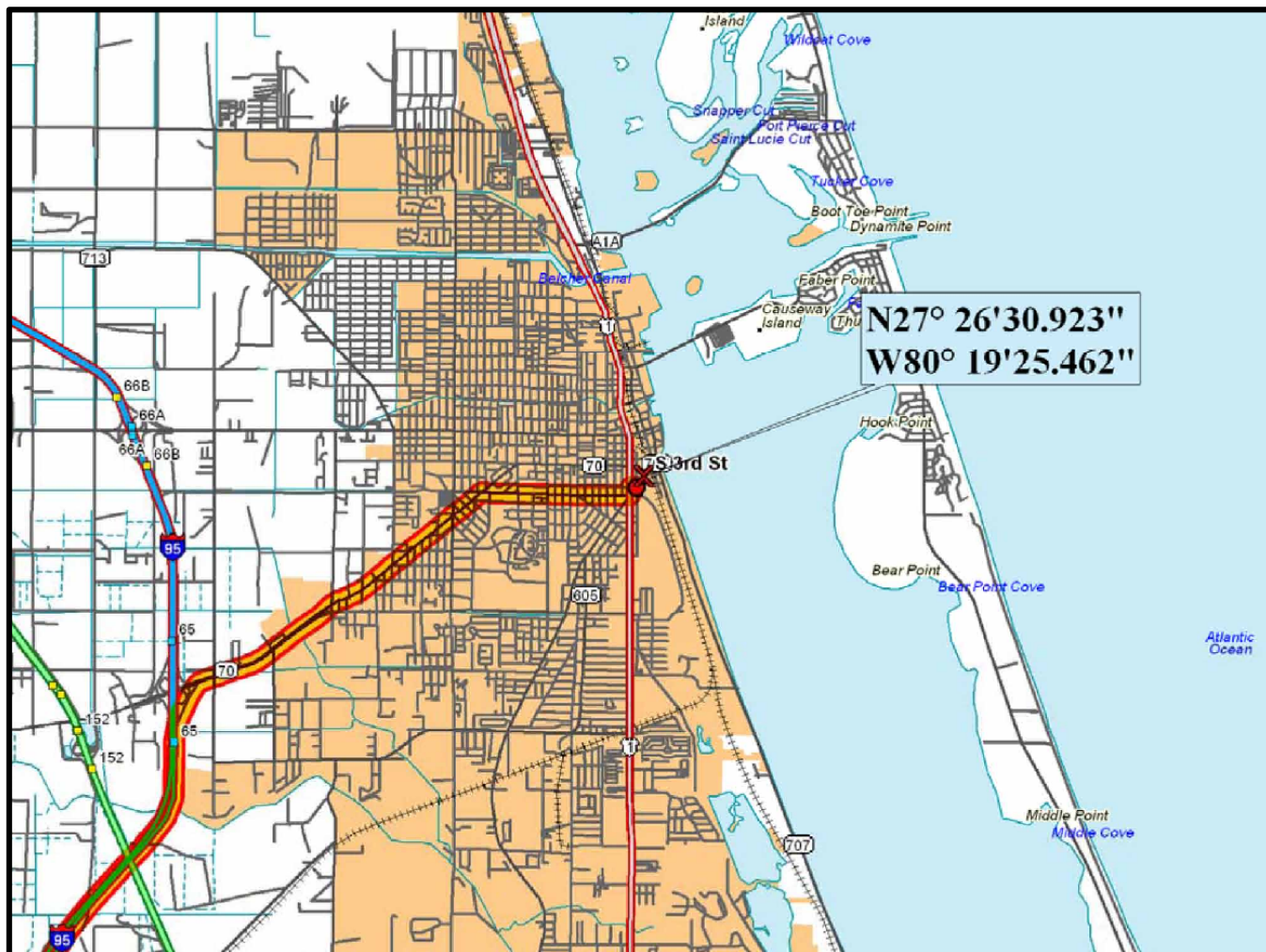
NOT A SURVEY



NORTH



SCALE: 1" = 8000'



**DIRECTIONS:**

	Dist	Turn	Road	Near	Exit	Time	Total Dist
●	in 0.00 mi	Start(N)	I-95 S			0:00:00	0.00 mi
	in 0.10 mi	Bear right(NNE)	on to Okeechobee Rd Ramp			0:00:07	0.10 mi
	in 0.55 mi	Bear right(ENE)	on to Okeechobee Rd			0:01:26	0.65 mi
	in 1.30 mi	Bear right(NE)	on to SR 70 (Okeechobee Rd)			0:04:58	1.94 mi
	in 1.59 mi	Bear right(E)	on to Georgia Ave			0:08:46	3.53 mi
	in 1.24 mi	Turn left(N)	on to US 1 (S US 1 SR 5 S Federal Hwy S 4...			0:10:53	4.77 mi
	in 0.07 mi	Turn right(E)	on to Florida Ave			0:11:03	4.84 mi
●	in 0.08 mi	Finish	at Florida Ave			0:11:22	4.92 mi

Total Time: 0:11:22 Total Distance: 4.92 mi

SOURCE: DELORME STREET ATLAS USA, DELUXE.

PARCEL ID # 2410-805-0005-000-1

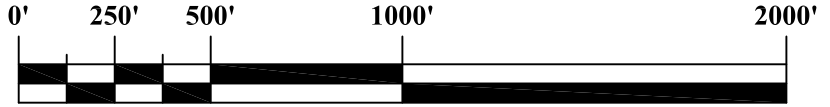
ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	01 - VICINITY MAP	1 APRIL 2015	1 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**VICINITY MAP**

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NOT A SURVEY



SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS USA DELUXE.

PARCEL ID # 2410-805-0005-000-1

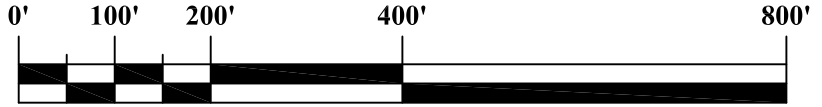
ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 02 - LOCATION MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 2 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**LOCATION MAP**

**HSE** Hobe Sound Environmental Consultants Inc.  
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NOT A SURVEY



SCALE: 1" = 200'



SOURCE: ST. LUCIE COUNTY GIS, ST. LUCIE COUNTY, FLORIDA

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 03 - AERIAL.DWG	DATE: 1 APRIL 2015	FIGURE: 3 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
 SOUTH 3rd STREET FORT PIERCE, FLORIDA  
 ENVIRONMENTAL ASSESSMENT (EA)  
 2014 AERIAL PHOTOGRAPH

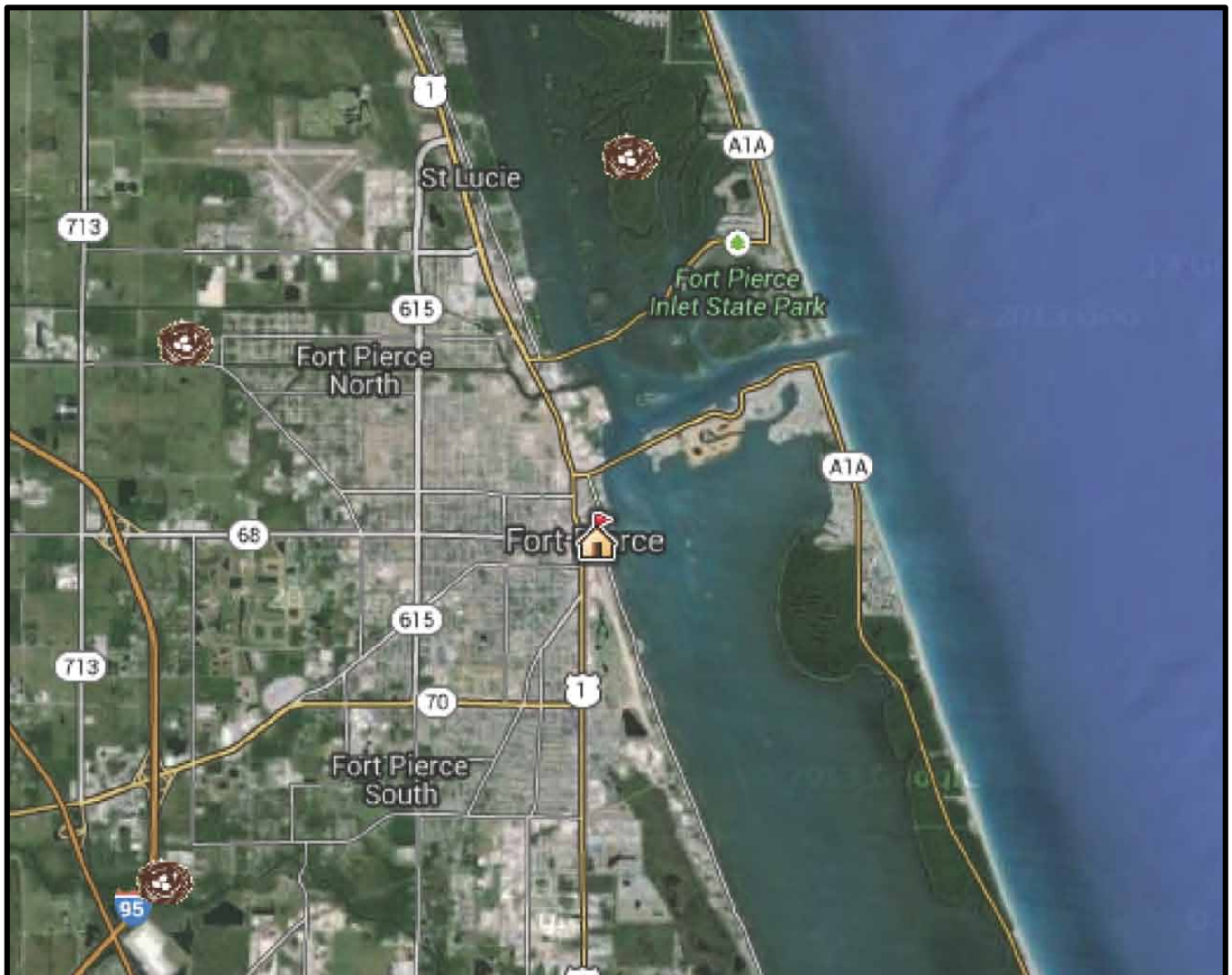
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NOT A SURVEY



SCALE: 1" = N.T.S.



**BALD EAGLE NEST DATA SEARCH ( 5 MILE RADIUS) RESULTS**

	Nest ID	County	Latitude	Longitude	Known Active	Last Survey	Distance
<a href="#">View History</a>	SL006	St. Lucie	27 23.92	80 23.20	2012	2012	4.88
<a href="#">View History</a>	SL011	St. Lucie	27 28.10	80 23.01	2012	2012	4.09
<a href="#">View History</a>	SL014	St. Lucie	27 29.55	80 19.11	2012	2012	3.51

SOURCE: <https://public.myfwc.com/FWRI/EagleNests/nestlocator.aspx>

PARCEL ID # 2410-805-0005-000-1

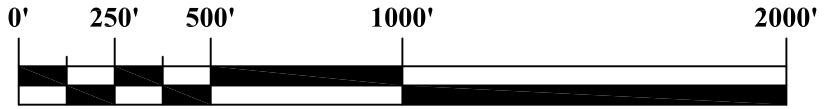
ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 04 - EAGLE NEST.DWG	DATE: 1 APRIL 2015	FIGURE: 4 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**BALD EAGLE (*Haliaeetus leucocephalus*) LOCATIONS**

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NOT A SURVEY



SCALE: 1" = 500'



**Wetlands**



**U.S. Fish and Wildlife Service  
National Wetlands Inventory**

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

SOURCE: <http://www.fws.gov/wetlands/Data/Mapper.html>

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC. 10	TWP. 35S	R. 40E	HSE JOB NO.: 15-009.01	DRAWING NAME: 05 NWI.DWG	DATE: 1 APRIL 2015	FIGURE: 5 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.  
SOUTH 3rd STREET FORT PIERCE, FLORIDA  
ENVIRONMENTAL ASSESSMENT (EA)  
NATIONAL WETLANDS INVENTORY MAP**

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## 3.00 METHODOLOGY

### 3.01 Gopher Tortoise and Other Burrow Commensals

#### 3.01.1 Objective

Conduct a systematic survey to locate gopher tortoises (*Gopherus polyphemus*), Florida mouse (*Podomys floridanus*), eastern indigo snake (*Drymarchon corais couperi*), and Florida gopher frogs (*Rana areolata*) that may be present within the study area.

#### 3.01.2 Methodology

Biologists followed the survey protocol as recommended in Ecology and Habitat Protection Needs of Gopher Tortoise (*Gopherus polyphemus*) Populations Found on Lands Slated for Large-scale Development in Florida; Non-game Wildlife Program, Technical Report #5, Florida Game and Fresh Water Fish Commission (FGFWFC), now known as FFWCC, Tallahassee, Florida, December 1987, and the Gopher Tortoise Permitting Guidelines, FFWCC, Tallahassee, Florida April 2008, revised February 2015.

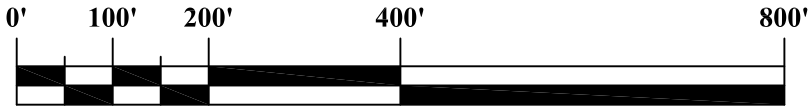
- Biologists conducted parallel transects 10 meters ( $\pm$  32 feet) apart (Figure 6 of 13).
- Biologists conducted serpentine search patterns between the parallel transects.
- All gopher tortoise burrows located were flagged as either potentially occupied or abandoned.
- All gopher tortoise burrows located were assigned an identification number and recorded.

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NOT A SURVEY



NORTH



SCALE: 1" = 200'



SOURCE: 2014 AERIAL PHOTOGRAPH ST. LUCIE COUNTY, FLORIDA AND HSE

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E		06 - PED TRAN.DWG	1 APRIL 2015	6 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**PEDESTRAIN TRANSECT LOCATIONS**

**H S E** Hobe Sound Environmental Consultants Inc.  
 9512 SE Duncan Street  
 Hobe Sound, FL. 33455  
 (772) 545-3676, E-mail: bobhsenv@gmail.com

- Biologists mapped all gopher tortoise burrows on a recent aerial photograph
- Additional data and notes were collected by biologists to determine potential or documented occurrences of the eastern indigo snake, Florida gopher frog, and Florida mouse.

### **3.02 Protected Species/Wildlife Survey**

#### **3.02.1 Objective**

Conduct a systematic survey for flora and fauna that may occur on-site and note the presence of any protected species listed in *Florida's Endangered and Threatened Species*, Updated January 2013, FFWCC.

The state lists of animals are maintained by the FFWCC and categorized as endangered, threatened and species of special concern, in accordance with Rules 68A-27.003 (Endangered and Threatened) and 68A-27.005 (Species of Special Concern), Florida Administrative Code (F.A.C.). The state lists of plants are categorized into endangered, threatened, and commercially exploited, and are maintained by the Florida Department of Agriculture and Consumer Services (DOACS) via Chapter 5B-40, F.A.C. The state plant lists are statutorily designated via the Preservation of Native Flora of Florida Act (Title XXXV, Chapter 581, 581.185-187. Florida Statutes).

The federal agencies that share the authority to list species as Endangered and Threatened are the National Oceanic and Atmospheric Administration-National Marine Fisheries Service (NOAA-NMFS) and the U.S. Fish and Wildlife Service (USFWS). The NOAA-NMFS is responsible for listing most marine species. The federal list of animals and plants is administered by the USFWS, and is published in 50 CFR 17.11 (wildlife) and 50 CFR 17.12 (plants). The lists are categorized into

endangered species (E), threatened species (T), or endangered or threatened for similarity of appearance (E of T (S/A)).

### **3.02.2 Methodology**

Following are the methodologies biologists used to conduct the wildlife/protected species surveys.

#### **3.02.2.1 Pedestrian Transects**

- Biologists conducted pedestrian transects throughout the project site on 31 March 2015 (Figure 6 of 13).
- The transects meandered through areas of suitable habitat.
- Biologists recorded and noted sightings, tracks, scat, tree markings, nests, cavities, and burrows.

### **3.03 Vegetation Survey (FLUCFCS)**

#### **3.03.1 Objective**

To map vegetation on-site according to the *Florida Land Use, Cover and Forms Classification System (FLUCFCS)*.

#### **3.03.2 Methodology**

Biologists used the following methodology to map vegetation found on the project site.

- Biologists used the *Florida Land Use, Cover and Forms Classification System (FLUCFCS)*, September 1985, State of Florida Department of Transportation, State Topographic Bureau, Thematic Mapping Section.

- Biologists based vegetative community descriptions on field surveys, United States Department of Agriculture (USDA) Soil Conservation Service (SCS) soil maps, and aerial photograph interpretations.
- Numerical community designations were carried to Levels II or III, as determined to be appropriate, according to FLUCFCS.

### **3.04 Jurisdictional Wetlands**

#### **3.04.1 Objective**

To identify and locate State of Florida (SFWMD) and Federal (COE) jurisdictional wetlands that may occur on the project site.

#### **3.04.2 Methodology**

Biologists used the following methodologies to locate State of Florida and Federal jurisdictional wetlands on-site.

- Biologists delineated wetlands according to Florida Administrative Code (FAC) 62-340.
- Biologists delineated wetlands according to the COE Wetland Delineation Manual, January 1987, Technical Report Y-87-1.
- Biologists flagged the wetlands with consecutively numbered flagging tape marked "Wetland Delineation".
- Biologists completed COE wetland delineation data sheets.

### **3.05 Soils**

#### **3.05.1 Objective**

To identify project soil types according to the SCS.

#### **3.05.2 Methodology**

Biologists used the following methodology to identify soil types found on the project site.

- Project soils were mapped according to the *Soil Survey of St. Lucie County, Florida*, March 1980, United States Department of Agriculture, Soil Conservation Service (SCS).

### **3.06 Topography**

#### **3.06.1 Objective**

To identify the topography of the project site.

#### **3.06.2 Methodology**

Biologists used the *U.S. Geological Survey (USGS) Topographic Map, Ankona Quadrangle, Florida 7.5 Minute Series* to determine site topography.

## 4.00 RESULTS

### 4.01 Gopher Tortoise and Other Burrow Commensals

One (1) potentially occupied gopher tortoise burrow was located by biologists during the gopher tortoise and commensal species survey (Figure 7 of 13). Biologists recorded the approximate GPS coordinates of the gopher tortoise burrow using a hand-held GPS unit. The gopher tortoise population for the project site was estimated using the following FFWCC formula:

$$\text{Est. \# gopher tortoises} = \text{\# potentially occupied burrows} \times 0.50$$

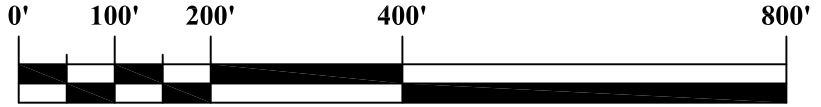
The 0.50 factor in the equation is based on data collected and evaluated by the FFWCC, and is specific for the South Florida area. The estimated gopher tortoise population for the project site is one (1). Gopher tortoises are listed by the state as threatened and may also be listed by the USFWS in the near future as threatened.

Commensal species such as the eastern indigo snake and Florida gopher frog were not observed by biologists, however, they may occur on-site since suitable habitat exists on-site for these species. The Florida mouse was not observed on-site and no suitable habitat for this species exists on-site. The gopher frog is designated as a species of special concern (SSC) by the State of Florida. The eastern indigo snake is designated as threatened (T) by the State of Florida and the U.S. Fish and Wildlife Service. These species are protected under regulations set forth in the Wildlife Code of the State of Florida, Chapter 39 FAC, Rule 39-4.001 and 39-25.002, as well as Chapter 39-27.

Prior to site development, the Applicant must prepare an Eastern Indigo Snake Protection Plan and coordinate same with staff members of the FWS and FFWCC. The Eastern Indigo Snake Determination Key has been utilized in Section 4.02.1.1 below.

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NOT A SURVEY



SCALE: 1" = 200'



ADULT MALE GOPHER TORTOISE (*Gopherus polyphemus*)

**I HEREBY CERTIFY THAT:**  
 A 100% SURVEY FOR GOPHER TORTOISES WAS CONDUCTED ON 31 MARCH 2015, ACCORDING TO FWC GUIDELINES. ONE (1) POTENTIALLY OCCUPIED GOPHER TORTOISE BURROW WAS LOCATED DURING THE SURVEY. THE ESTIMATED GOPHER TORTOISE POPULATION IS ONE (1).  
 ROBERT L. WEIGT, GTA-09-00153B

SOURCE: ST. LUCIE COUNTY 2014 AERIAL PHOTOGRAPH

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E		07 - GT BURROW MAP.DWG	01 APRIL 2015	7 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

**ROCLA CONCRETE TIES, INC.**  
 SOUTH 3rd STREET FORT PIERCE, FLORIDA  
 ENVIRONMENTAL ASSESSMENT (EA)  
**GOPHER TORTOISE BURROW SURVEY**

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Per FFWCC guidelines, construction activities must not occur within a 25-foot radius of the mouth of a potentially occupied gopher tortoise burrow. If impacts are unavoidable, then the tortoises must be relocated to either an on-site or off-site preserve area. Relocation can be accomplished through the issuance of a FFWCC 10 or fewer burrows permit. Under this type of permit, tortoises can be relocated on-site, or off-site to a FFWCC approved gopher tortoise mitigation bank. A mitigation contribution paid directly to FFWCC is applicable at the rate outlined in the table below. Mitigation Bank fees range from \$850.00 to over \$1,000.00 per tortoise. Additional fees include preparation of the relocation permit on-site meeting with FFWCC (if necessary), burrow excavation, preparation and transportation and after action report.

PERMIT TYPE	PERMIT DURATION	MITIGATION CONTRIBUTION
10 or fewer burrows <i>Tortoises are relocated on-site or off-site*</i>	1 year	\$203

\* Gopher tortoises relocated off-site under a 10 or fewer burrows permit cannot be relocated to an unprotected recipient site.

#### 4.02 Protected Species/Wildlife Survey

##### 4.02.1 Protected Fauna

Various mammals, reptiles, and birds were observed on-site during the pedestrian transects. Wildlife species observed on-site during the pedestrian transects survey are listed in Table 1. The only protected species observed on-site was the gopher tortoise. Protected Species that potentially occur in St. Lucie County and may occur within the project site are listed in Table 2. Because there is potential habitat for the eastern indigo snake, the determination key has been utilized below

Although the site is within the core foraging area of one (1) wood stork colony (Figure 8 of 13), no wood storks were located on-site and there is no habitat

**Table 1. Wildlife Observed on the Rocla Concrete Ties, Inc. Project Site During the Protected Species Survey.**

**A. Birds**

Common Name	Scientific Name	Protected Species	
		State	Federal
Northern mockingbird	<i>Mimus polyglottos</i>	---	---

**B. Mammals**

Common Name	Scientific Name	Protected Species	
		State	Federal
Eastern cottontail rabbit	<i>Sylvilagus floridanus</i>	---	---
Nine-banded armadillo	<i>Dasypus novemcinctus</i>	---	---
Hispid cotton rat	<i>Sigmodon hispidus</i>	---	---

**C. Reptiles**

Common Name	Scientific Name	Protected Species	
		State	Federal
Brown anole	<i>Anolis sagrei</i>	---	---
Black racer	<i>Coluber constrictor constrictor</i>	---	---
Gopher tortoise	<i>Gopherus polyphemus</i>	SSC	---

**Table 2. Rocla Concrete Ties, Inc. Project Site: Federal/State Listed Fauna and Flora Potentially Found in St. Lucie County, Florida.**

**A. Amphibians**

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Gopher frog	<i>Rana areolata aesopus</i>	N	SSC	Yes	likely	not observed during preliminary pedestrian transects

**B. Fish**

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Mangrove rivulus	<i>Rivulus marmoratus</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects

**C. Reptiles**

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
American alligator	<i>Alligator mississippiensis</i>	T(S/A)	SSC	No	not likely	not observed during preliminary pedestrian transects
Green turtle	<i>Chelonia myda</i>	E	E	No	not likely	not observed during preliminary pedestrian transects
Leatherback turtle	<i>Dermochelys coriacea</i>	E	E	No	not likely	not observed during preliminary pedestrian transects
Eastern indigo snake	<i>Drymarchon corais couperi</i>	T	T	Yes	likely	not observed during preliminary pedestrian transects
Hawksbill	<i>Eretmochelys imbricata</i>	E	E	No	not likely	not observed during preliminary pedestrian transects
Gopher tortoise	<i>Gopherus polyphemus</i>	N	SSC	Yes	observed	One (1) active gopher tortoise burrow located during preliminary pedestrian transects
Kemp's ridley	<i>Lepidochelys kempii</i>	E	E	No	not likely	not observed during preliminary pedestrian transects
Florida pine snake	<i>Pituophis melanoleucus mugitus</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Loggerhead	<i>Caretta caretta</i>	T	T	No	not likely	not observed during preliminary pedestrian transects

**Table 2: Continued.**

**D. Birds**

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Florida scrub jay	<i>Aphelocoma coerulescens coerulescens</i>	T	T	No	not likely	not observed during preliminary pedestrian transects
Little blue heron	<i>Egretta caerulea</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Snowy egret	<i>Egretta thula</i>	T	SSC	No	not likely	not observed during preliminary pedestrian transects
Tri-colored heron	<i>Egretta tricolor</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects
White ibis	<i>Eudocimus albus</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Peregrine falcon	<i>Falco peregrinus</i>	E (S/A)	E	No	not likely	not observed during preliminary pedestrian transects
Bald eagle	<i>Haliaeetus leucocephalus</i>	T	T	No	not likely	not observed during preliminary pedestrian transects
Wood stork	<i>Mycteria americana</i>	E	E	No	not likely	not observed during preliminary pedestrian transect
Osprey	<i>Pandion haliaetus</i>	N	SSC*	No	not likely	not observed during preliminary pedestrian transects
Brown pelican	<i>Pelecanus occidentalis</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Snail kite	<i>Rostrhamus sociabilis plumbeus</i>	E	E	No	not likely	not observed during preliminary pedestrian transects
Black skimmer	<i>Rynchops niger</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Florida burrowing owl	<i>Speotyto cunicularia foridana</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Least tern	<i>Sterna antillarum</i>	N	T	No	not likely	not observed during preliminary pedestrian transects
Roseate spoonbill	<i>Ajaia ajaja</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Limpkin	<i>Aramus guarauna</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Crested caracara	<i>Caracara plancus</i>	T	T	No	not likely	not observed during preliminary pedestrian transects
Piping plover	<i>Charadrius melodus</i>	T	T	No	not likely	not observed during preliminary pedestrian transects
Southern American kestrel	<i>Falco sparverius paulus</i>	N	T	No	not likely	not observed during preliminary pedestrian transects
Florida sandhill crane	<i>Grus canadensis pratensis</i>	N	T	No	not likely	not observed during preliminary pedestrian transects
American oystercatcher	<i>Haematopus palliatus</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects

**Table 2: Continued.****E. Mammals**

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Southeastern beach mouse	<i>Peromyscus polionotus niveiventris</i>	T	T	No	not likely	not observed during preliminary pedestrian transects
Sherman's fox squirrel	<i>Sciurus niger shermani</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects
West Indian manatee	<i>Trichechus manatus</i>	E	E	No	not likely	not observed during preliminary pedestrian transects
Florida mouse	<i>Podomys floridanus</i>	N	SSC	No	not likely	not observed during preliminary pedestrian transects

**F. Vascular Plants**

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Curtiss' milkweed	<i>Asclepias curtissii</i>	N	E	No	not likely	not observed during preliminary pedestrian transects
Sand-dune spurge	<i>Chamaesyce cumulicola</i>	N	E	No	not likely	not observed during preliminary pedestrian transects
Piedmont jointgrass	<i>Coelorachis tuberculosa</i>	N	E	No	not likely	not observed during preliminary pedestrian transects
Large-flowered rosemary (scrub mint)	<i>Conradina grandiflora</i>	N	E	No	not likely	not observed during preliminary pedestrian transects
Lakela's mint	<i>Dicerandra immaculata</i>	E	E	No	not likely	not observed during preliminary pedestrian transects
Johnson's seagrass	<i>Halophila johnsonii</i>	PT	E	No	not likely	not observed during preliminary pedestrian transects
Fragrant prickly apple	<i>Harrisia fragrans</i>	E	N	No	not likely	not observed during preliminary pedestrian transects
Nodding pinweed	<i>Lechea cernua</i>	N	T	No	not likely	not observed during preliminary pedestrian transects
Burrowing four o'clock	<i>Okenia hypogaea</i>	N	E	No	not likely	not observed during preliminary pedestrian transects
Tiny polygala	<i>Polygala smallii</i>	E	E	No	not likely	not observed during preliminary pedestrian transects
Tampa vervain	<i>Glandularia tampensis</i>	N	E	No	not likely	not observed during preliminary pedestrian transects

**Table 2: Continued.**

Florida bear grass	<i>Nolina atopocarpa</i>	N	T	No	not likely	not observed during preliminary pedestrian transects
Terrestrial peperomia	<i>Peperomia humilis</i>	N	E	No	not likely	not observed during preliminary pedestrian transects
Blunt-leaved peperomia	<i>Peperomia obtusifolia</i>	N	E	No	not likely	not observed during preliminary pedestrian transects
Scentless vanilla	<i>Vanilla mexicana</i>	N	E	No	not likely	not observed during preliminary pedestrian transects

+Federal Status: U.S. Fish and Wildlife Service (FWS)

- E - Endangered
- PE - Proposed for Endangered
- T - Threatened
- PT - Proposed for Threatened
- C - Candidate for Endangered and/or Threatened
- E (S/A) - Endangered due to similarity of appearance
- T (S/A) - Threatened due to similarity of appearance
- N - Not currently listed

++State of Florida Status: Florida Fish and Wildlife Conservation Commission (FFWCC)

- |                                  |  |                          |  |
|----------------------------------|--|--------------------------|--|
| <b><u>Animals:</u></b>           |  | <b><u>Plants:</u></b>    |  |
| E - Endangered                   |  | E - Endangered           |  |
| T - Threatened                   |  | T - Threatened           |  |
| SSC - Species of Special Concern |  | N - Not currently listed |  |
| N - Not currently listed         |  |                          |  |
| SSC* - Monroe County only        |  |                          |  |

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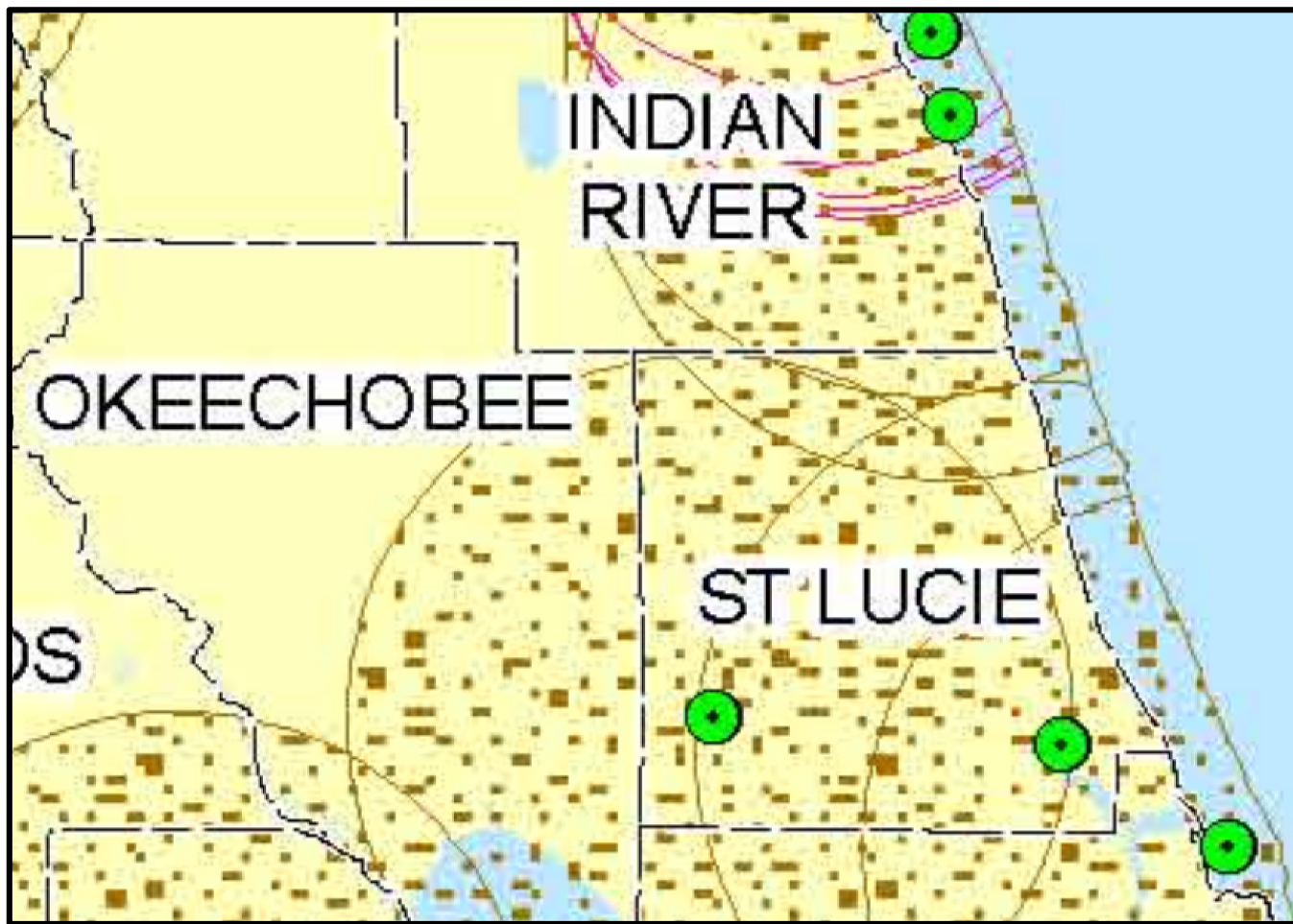
NOT A SURVEY



NORTH



SCALE: 1" = 50000'



**Wood Stork Nesting Colonies and  
Core Foraging Areas  
Active Within 2004-2013 in Florida**

- Foraging area active 2004-2013 (NFESO 6/8/2014):
- North buffer 13 miles
  - Central buffer 15 miles
  - South buffer 18.6 miles

WOOD STORK (*Mycteria americana*)

SOURCE: [http://www.fws.gov/northflorida/woodstorks/Documents/20131211\\_Wood\\_stork\\_FL\\_nesting\\_colonies\\_map\\_update\\_2013.pdf](http://www.fws.gov/northflorida/woodstorks/Documents/20131211_Wood_stork_FL_nesting_colonies_map_update_2013.pdf)

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC. 10	TWP. 35S	R. 40E	HSE JOB NO.: 15-009.01	DRAWING NAME: 08 - WOOD STORK ROOKERIES.DWG	DATE: 1 APRIL 2015	FIGURE: 8 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
SOUTH 3rd STREET FORT PIERCE, FLORIDA  
ENVIRONMENTAL ASSESSMENT (EA)  
WOOD STORK NESTING COLONIES & CORE FORAGING AREAS

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on-site for this species. Additionally, although the site is within approximately 1.25 miles of Florida scrub-jay territory (Figure 9 of 13) there is no habitat on-site for this species.

#### 4.02.1.1 Eastern Indigo Snake Programmatic Effect Determination

##### Key

A. Project is not located in open water or salt marsh.....**go to B**

Project is located solely in open water or salt marsh..... “no effect”

B. Permit will be conditioned for use of the Service’s *Standard Protection Measures For The Eastern Indigo Snake* during site preparation and project construction.....**go to C**

Permit will not be conditioned as above for the eastern indigo snake, or it is not known whether an applicant intends to use these measures and consultation with the Service is requested<sup>2</sup> .....“may affect”

C. There are gopher tortoise burrows, holes, cavities or other refugia where a snake could be buried or trapped and injured during project activities.....**go to D**

There are no gopher tortoise burrows, holes, cavities, or other refugia where a snake could be buried or trapped and injured during project activities..... “NLAA”

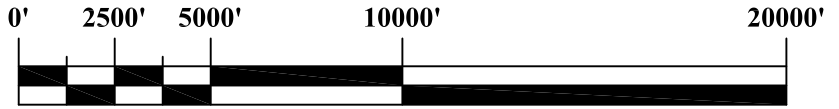
D. The project will impact less than 25 acres of xeric habitat supporting less than 25 active and inactive gopher tortoise burrows.....**Go to E**

The project will impact more than 25 acres of xeric habitat or more than 25 active and inactive gopher tortoise burrows and consultation with the Service is requested<sup>2</sup> .....“may affect”

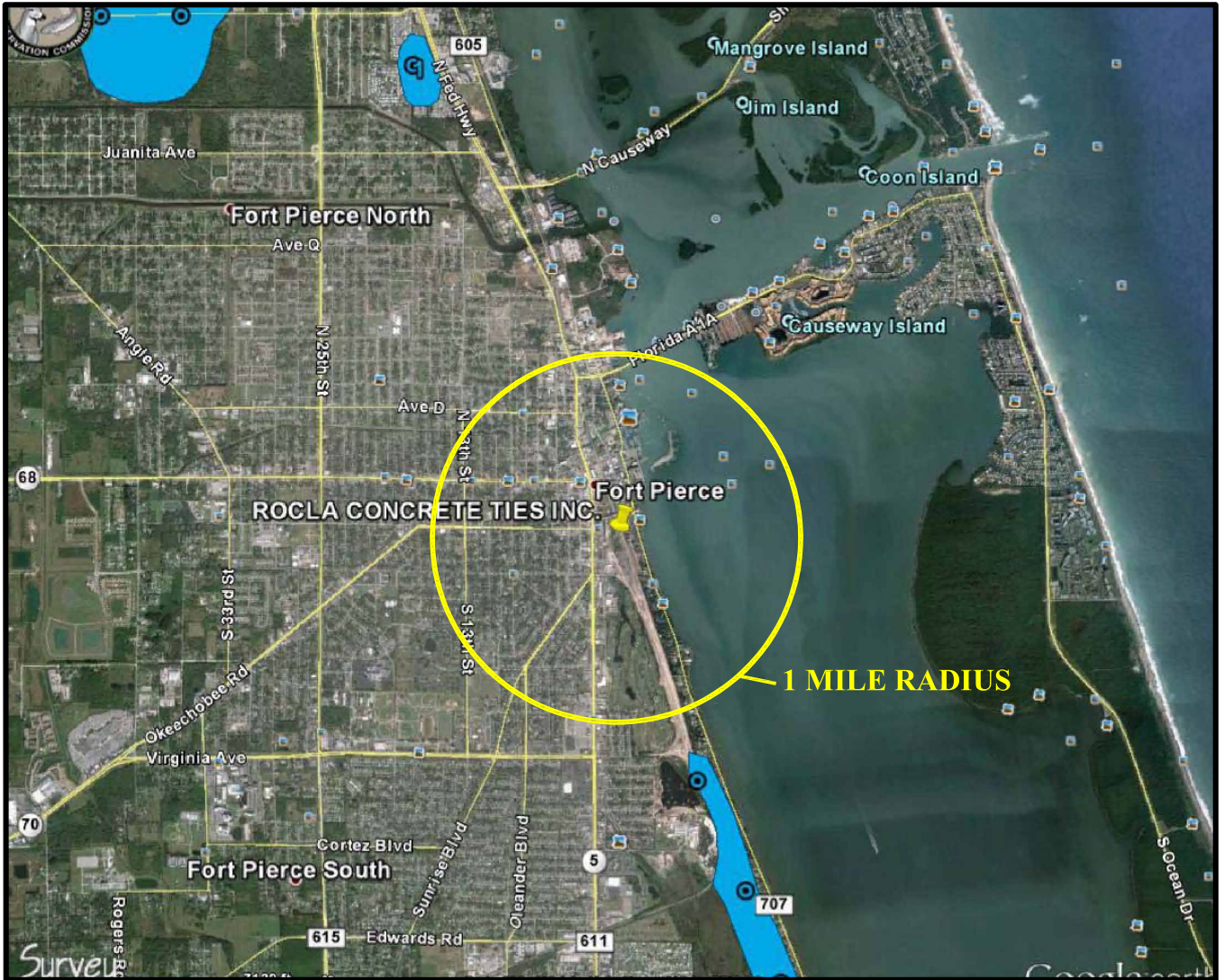
E. Any permit will be conditioned such that all gopher tortoise burrows, active or inactive, will be evacuated prior to site manipulation in the vicinity of the burrow<sup>3</sup>. If an indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity. Any permit will also be conditioned such that holes, cavities, and snake refugia other than gopher tortoise burrows will be inspected

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NOT A SURVEY



SCALE: 1" = 5000'



FLORIDA SCRUB-JAY (*Aphelocoma coerulescens*)

NO FLORIDA SCRUB-JAY HABITAT EXISTS ON-SITE.

SOURCE: [http://atoll.floridamarine.org/Quickmaps/KMZ\\_download-habitats.htm](http://atoll.floridamarine.org/Quickmaps/KMZ_download-habitats.htm)

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC. 10	TWP. 35S	R. 40E	HSE JOB NO.: 15-009.01	DRAWING NAME: 09 - SCRUB JAY.DWG	DATE: 1 APRIL 2015	FIGURE: 9 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**FLORIDA SCRUB-JAY LOCATIONS**

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 Hobe Sound, FL. 33455  
 (772) 545-3676, E-mail: bobhsenv@gmail.com

each morning before planned site manipulation of a particular area, and, if occupied by an indigo snake, no work will commence until the snake has vacated the vicinity of proposed work..... **NLAA**

Permit will not be conditioned as outlined above and consultation with the Service is requested<sup>2</sup>.....”*may affect*”

<sup>1</sup>With an outcome of “no effect” of “NLAA” as outlined in this key, the requirements of section 7 of the Act are fulfilled for the eastern indigo snake and no further action is required.

<sup>2</sup>Consultation may be concluded informally or formally depending on project impacts.

<sup>3</sup> If excavating potentially occupied burrows, active or inactive, individuals must first obtain state authorization via a FWC Authorized Gopher Tortoise Agent permit. The excavation method selected should also minimize the potential for injury of an indigo snake. Applicants should follow the excavation guidance provided within the most current Gopher Tortoise Permitting Guidelines found at <http://myfwc.com/gophertortoise>.

The project, as proposed is not likely to adversely affect (NLAA) the eastern indigo snake. Prior to construction, eastern indigo snake and gopher tortoise protection/education signs will be posted at the each construction entrance to the site (Figure 10 of 13). Additionally, pamphlets for both of these species will be handed out prior to onset of construction to further familiarize the contractors with what to do if they spot an eastern indigo snake or a gopher tortoise after initiation of construction activities.

#### **4.02.2 Protected Flora**

During the pedestrian transects survey, biologists did not observe any species of plants listed by the Florida Department of Agriculture (FDA) or the FFWCC. State and Federally listed flora that potentially exist in St. Lucie County and their likelihood of occurrence within the project site boundaries are listed in Table 2.



#### **4.03 Vegetation (FLUCFCS)**

Vegetation cover types within the project site boundaries include upland and disturbed categories. Vegetation associations present on-site were mapped using Level II and Level III of FLUCFCS. The classifications used represent the closest facsimile possible to the natural community present. The FLUCFCS map is depicted in Figure 11 of 13. Photographs of the project site are provided in Appendix B.

##### **4.03.1 Vegetation Associations**

###### **4.03.1.1 150 - Industrial (+/-7.547 acres)**

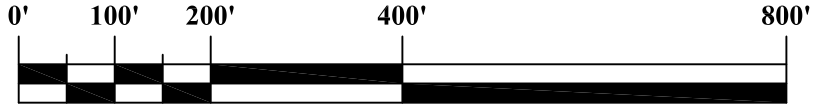
This designation covers the entire site, part of which has been developed and part of which has been previously cleared and contains a great deal of debris from adjacent industrial sites. Vegetation includes occasional cabbage palm (*Sabal palmetto*), Brazilian pepper (*Schinus terebinthifolius*), tough bumelia (*Sideroxylon tenax*), grapevine (*Vitis rotundifolia*), bamboo vine (*Smilax* spp.), periwinkle (*Catharanthus roseus*), Virginia creeper (*Parthenocissus quinquefolia*), cogongrass (*Imperata cylindrica*), dog fennel (*Eupatorium capillifolium*), annual ragweed (*Ambrosia artemisiifolia*), prickly pear cactus (*Opuntia* sp.), chalky bluestem (*Andropogon capillipes*), wiregrass (*Aristida stricta*), tickseed (*Coreopsis* sp.), rosary pea (*Abrus precatorius*), senna (*Cassia* sp.) and raspberry (*Rubus* sp.).

##### **4.03.2 Tree Protection**

The City of Fort Pierce Code of Ordinances (CFPCOO), Chapter 22, Article XII, Division 3, Section 22-192 states that no person shall, directly or indirectly, cut down, substantially alter, destroy, remove, relocate, damage or authorize any such act involving a protected tree situated on land within the city, without first obtaining a tree removal permit. Protected vegetation includes all native vegetation. Section 22-194 states that all native trees, 14" or greater diameter at breast height (DBH), except for palms which have a minimum clear trunk of ten (10) feet shall be preserved and protected in accordance with this article. Mitigation is required for the

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NOT A SURVEY



SCALE: 1" = 200'



**LEGEND**

150 - INDUSTRIAL (7.54± ACRES)

SOURCE: LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM, HANDBOOK 1999 DEPARTMENT OF TRANSPORTATION.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC. 10	TWP. 35S	R. 40E	HSE JOB NO.: 15-009.01	DRAWING NAME: 11 - FLUCFCS MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 11 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**FLUCFCS (VEGETATION) MAP**

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 Hobe Sound, FL. 33455  
 (772) 545-3676, E-mail: bobhsenv@gmail.com

loss of any native trees, 14" or greater diameter at breast height (DBH), except for palms which have a minimum clear trunk of ten (10) feet. It is HSE's opinion that protected trees, comprising cabbage palm trees with over 10' clear trunk may occur on-site. Mitigation will be required for impacts to these cabbage palms.

#### **4.04 Jurisdictional Wetlands**

It is HSE's opinion that there are no (0) State (SFWMD) or Federal (USACE) jurisdictional wetlands on the project site.

#### **4.05 Soils**

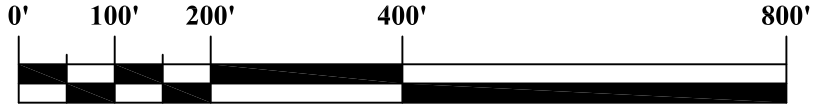
The United States Department of Agriculture, SCS, has mapped the surficial soil types within the project site. The resulting soil delineations were published in the *Soil Survey of St. Lucie County Area, Florida*, March 1980. SCS soil types are mapped on Figure 12 of 13.

Detailed and complete descriptions of each of these soil communities are presented in the St. Lucie County Soil Survey, and therefore, are not included herein. However, a general description of the soils is included in Table 3. This table also represents estimated area of soil by types, physical properties, and degree of limitation of various soil types mapped, as excerpted from the SCS published data.

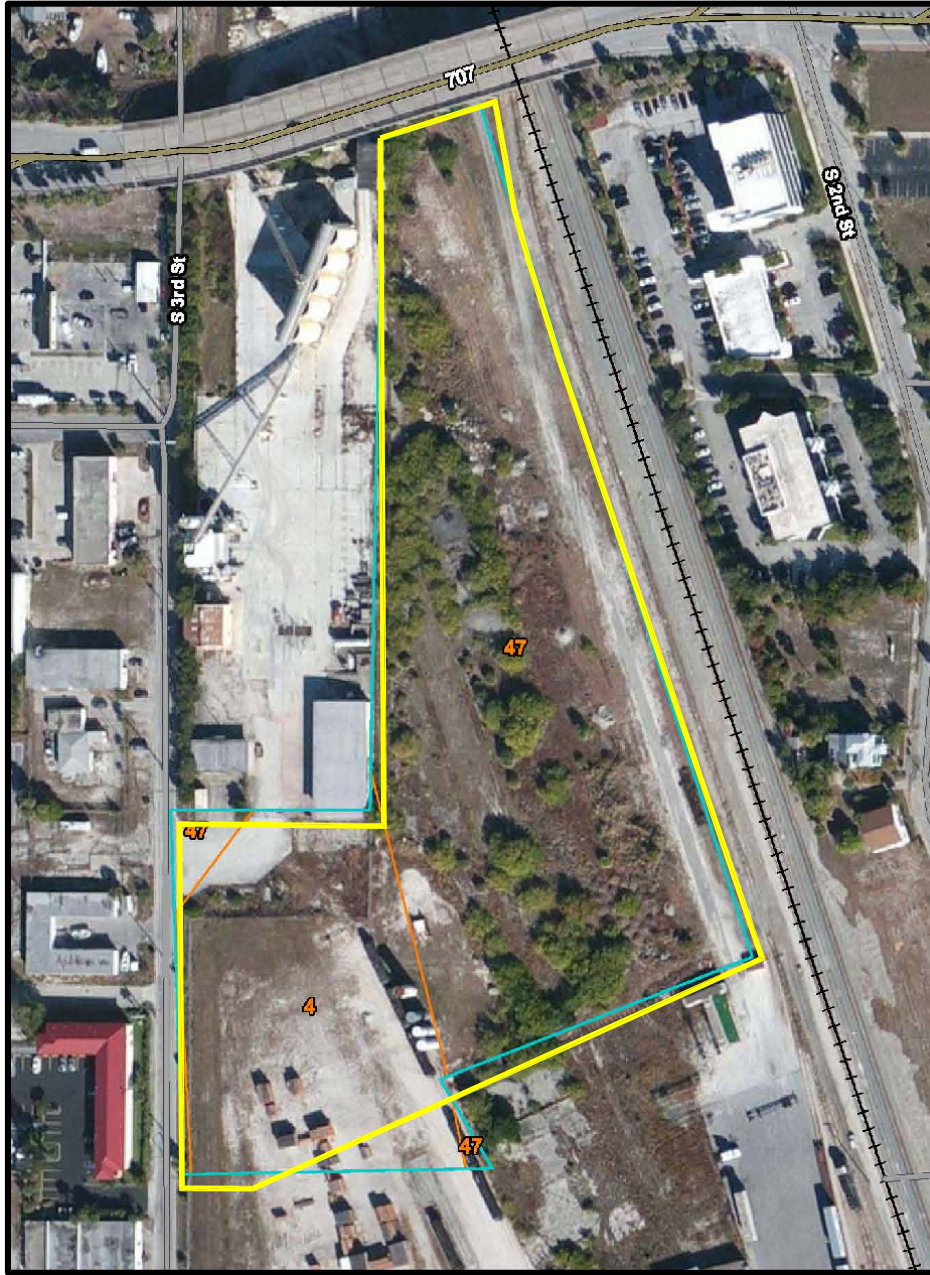
Soil types mapped by the SCS are generally limited to the upper 60 to 72 inches of the soil profile and are distinguished by several factors. These factors include soil drainage, topography, presence or absence of restrictive or clayey hardpan type soils, and the depth and range in fluctuation of the groundwater table associated with each soil type. SCS soil classifications are considered good early indicators and a reasonable database for a preliminary evaluation of the suitability of lands for certain uses.

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NOT A SURVEY



SCALE: 1" = 200'



**LEGEND**

- 4 - ARENTS, 0 TO 5 PERCENT SLOPES
- 47 - URBAN LAND

SOURCE: <http://websoilsurvey.sc.egov.usda/App/WebSoilSurvey.aspx>

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 12 - SCS SOIL MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 12 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
 SOUTH 3rd STREET FORT PIERCE, FLORIDA  
 ENVIRONMENTAL ASSESSMENT (EA)  
 SCS SOIL MAP

**H S E** Hobe Sound Environmental Consultants Inc.  
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**Table 3. Soil Descriptions\*.**

Soil Name and Map Number	Brief Soil Description	Seasonal High Water Table		Permeability Rate		Degree and Kind of Limitation		Hydrologic Group
		Depth (ft.)	Duration (mos.)	Depth (in.)	Rate (in/hr)	Dwelling w/o basement	Aquifer fed excavated Ponds (water mgmt)	
Arents, 0-5% slopes (4)	This soil consists of soil material dug from several areas that have different kinds of soil.	---	---	---	---	---	---	---
Urban Land (47)	Urban land consists of areas that are more than 70% covered by airports, shopping centers, parking lots, large buildings, streets and sidewalks. The surface of these soils, to a depth of about 12 inches, has been covered with fill material consisting of sandy and loamy materials which contain limestone and shell fragments in places. Urban land is not placed in a capability subclass.	---	---	---	---	---	---	---

\*Source: U.S. Department of Agriculture, Soil Conservation Service, *Soil Survey of St. Lucie County Area, Florida*; March 1980.

#### **4.06 Topography**

According to the USGS Topographic Map, *Ankona Quadrangle, 7.5 Minute Series*, site elevation runs from approximately 20-25' NGVD. Figure 13 of 13 depicts the USGS Topographic Map for the project site.

#### **4.07 Archaeological/Historical Review**

HSE contacted the State Historical Preservation Officer (SHPO) to request that they review their files for any known historical and/or archaeological sites that may occur within the boundaries of the project site (Appendix A).

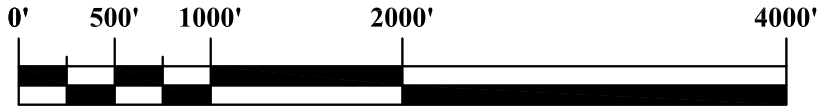
The Applicant has no knowledge of any historical and/or archaeological sites located within the project boundaries. During construction, if any historical and/or archaeological artifacts are recovered, work will cease and desist immediately, and the site will be coordinated with SHPO.

### **5.00 CONCLUSIONS**

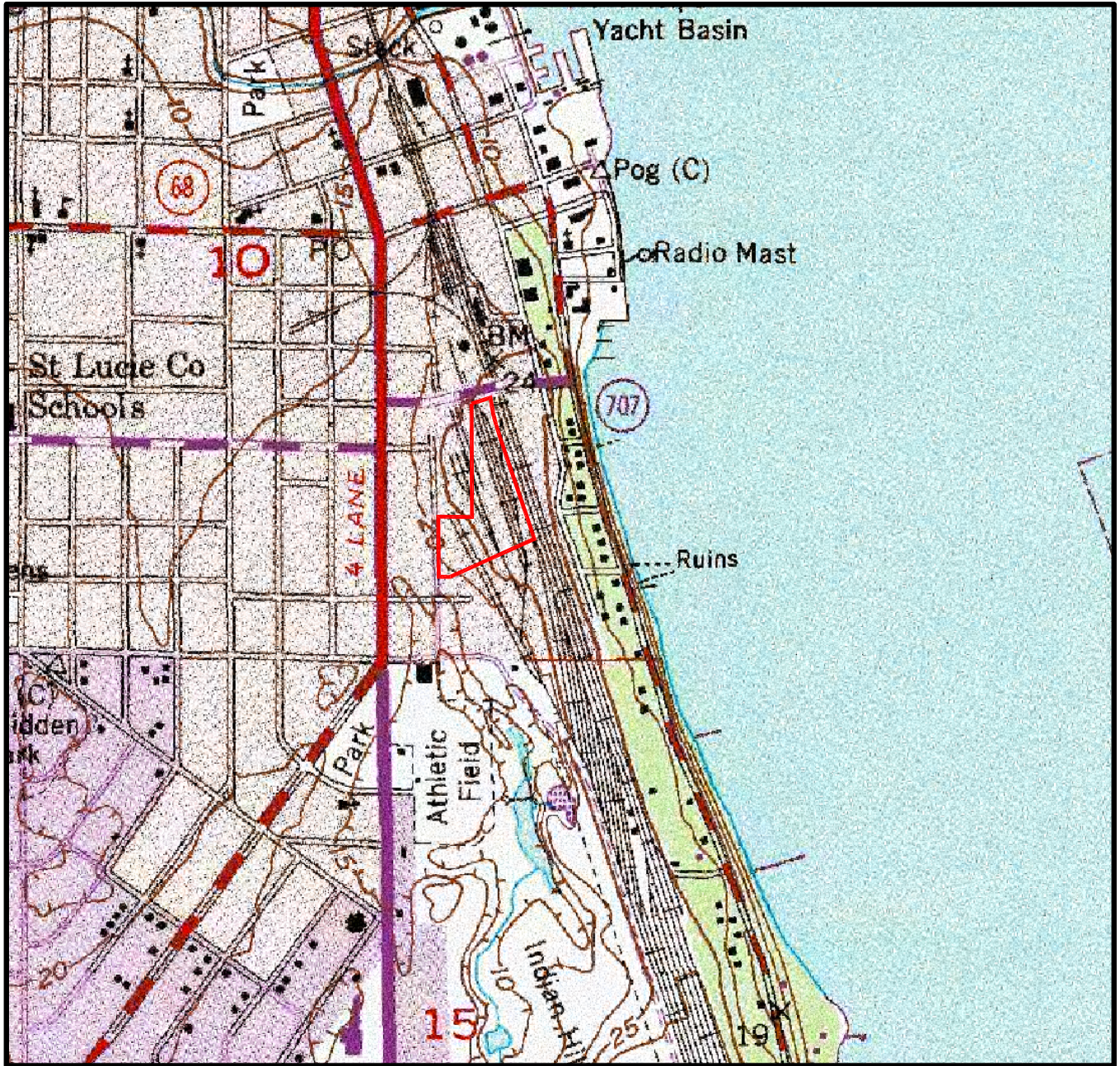
- One (1) potentially occupied gopher tortoise burrows was located on-site.
- The estimated gopher tortoise population for the project site is one (1).
- A relocation permit may be obtained from the FFWCC to relocate the gopher tortoise to an off-site preserve.
- The Florida mouse was not observed on-site during this survey, and suitable habitat does not exist on-site.
- The eastern indigo snake and Florida gopher frog were not observed on-site during this environmental survey; however, habitat for these species does exist on-site.

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NOT A SURVEY



SCALE: 1" = 1000'



SOURCE: USGS TOPOGRAPHIC MAP FORT PIERCE, FLORIDA QUADRANGLE, 7.5 MINUTE SERIES 27080-D3-TF-024.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	13 - TOPO MAP.DWG	1 APRIL 2015	13 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**USGS TOPOGRAPHIC MAP**

**H S E** Hobe Sound Environmental Consultants Inc.  
 9512 SE Duncan Street  
 Hobe Sound, FL. 33455  
 (772) 545-3676, E-mail: bobhsenv@gmail.com

- An eastern indigo snake protection plan should be implemented and coordinated with the Florida Fish and Wildlife Conservation Commission (FFWCC) prior to site clearing and development.
- The eastern indigo snake programmatic effect determination key was utilized for the project site and it was determined that the project, as proposed, would not likely adversely affect the eastern indigo snake.
- Prior to construction, eastern indigo snake and gopher tortoise protection/education posters shall be installed at all construction entrances to the site and pamphlets for each species will be handed out to personnel on-site.
- There is no habitat on-site for either the Florida scrub-jay or the wood stork.
- According to the City of Fort Pierce, all native trees having a DBH of 14" or more or cabbage palms having a minimum clear trunk of 10' must be located by a professional surveyor. Cabbage palms with a minimum clear trunk of 10' may occur on-site. According to CFPCOO Chapter 22, Article XII, Division 3, Section 22-194, removal of these trees will require a vegetation removal permit and mitigation to consist of compensatory tree planting.
- It is HSE's opinion that protected and/or specimen trees (cabbage palms) may occur on the project site.
- It is HSE's opinion that no (0) State (SFWMD) or Federal (USACE) jurisdictional wetlands occur on-site.

# **APPENDIX A**

## **Agency Contacts**

**HOBE SOUND**  
**ENVIRONMENTAL CONSULTANTS, INC.**  
**9512 S.E. DUNCAN STREET**  
**HOBE SOUND, FLORIDA 33455**  
**PHONE: (772) 545-3676 CELL (772) 260-0857**  
**E-MAIL: [bobhsenv@gmail.com](mailto:bobhsenv@gmail.com)**

1 April 2015

Ms. Janice Stearns  
Florida Fish and Wildlife Conservation Commission  
Office of Environmental Services  
620 S. Meridian Street  
Tallahassee, FL. 32399-1600

Via: E-mail: [gisrequest@fwc.com](mailto:gisrequest@fwc.com)

Re: Rocla Concrete Ties, Inc, ±7.547 acres of land located south of Citrus Avenue, east of South 3<sup>rd</sup> Street, north of Florida Avenue and west of the Florida East Coast Railway tracks. The project site is located in Section 10, Township 35S, Range 40E, City of Fort Pierce, Florida.

Latitude: 27°26'30.923"  
Longitude: W80°19'25.462"

Dear Ms. Stearns:

Hobe Sound Environmental Consultants, Inc. (HSE) has been retained to conduct an endangered species survey on the above-referenced project site. Please review your files for records of any listed species that may occur on this site. The protected species survey was conducted according to Florida Fish and Wildlife Conservation Commission (FFWCC) guidelines. I have attached a location map and aerial photograph of the project site for your convenience.

Your immediate attention and cooperation regarding this matter is appreciated. Please feel free to contact me if you have any questions or require any additional information. **Please reference our project #15--009.01 when responding to this request.**

Sincerely,

*Freda R. Posin*

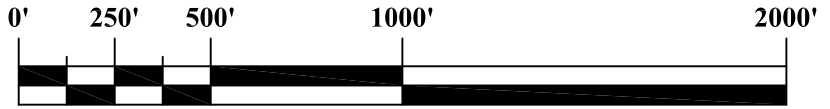
Freda R. Posin  
Senior Environmental Specialist

Attachment

cc: File #15-009.01

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NOT A SURVEY



SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS USA DELUXE.

PARCEL ID # 2410-805-0005-000-1

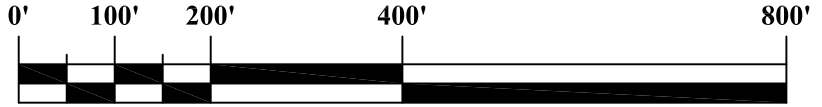
ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 02 - LOCATION MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 2 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**LOCATION MAP**

**HSE** Hobe Sound Environmental Consultants Inc.  
 9512 SE Duncan Street  
 Hobe Sound, FL. 33455  
 (772) 545-3676, E-mail: bobhsenv@gmail.com

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NOT A SURVEY



SCALE: 1" = 200'



SOURCE: ST. LUCIE COUNTY GIS, ST. LUCIE COUNTY, FLORIDA

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 03 - AERIAL.DWG	DATE: 1 APRIL 2015	FIGURE: 3 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
 SOUTH 3rd STREET FORT PIERCE, FLORIDA  
 ENVIRONMENTAL ASSESSMENT (EA)  
 2014 AERIAL PHOTOGRAPH

**H S E** Hobe Sound Environmental Consultants Inc.  
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**HOBE SOUND**  
**ENVIRONMENTAL CONSULTANTS, INC.**  
**9512 S.E. DUNCAN STREET**  
**HOBE SOUND, FLORIDA 33455**  
**PHONE: (772) 545-3676 CELL (772) 260-0857**  
**E-MAIL: [bobhsenv@gmail.com](mailto:bobhsenv@gmail.com)**

25 March 2015

Mr. Frederick Gaske, Director  
Florida State Historic Preservation Program  
Bureau of Historic Preservation  
Division of Historical Resources  
R.A. Gray Building  
500 South Bronough Street, 4th Floor  
Tallahassee, Florida 32399-0250

Re: Rocla Concrete Ties, Inc, ±7.547 acres of land located south of Citrus Avenue, east of South 3<sup>rd</sup> Street, north of Florida Avenue and west of the Florida East Coast Railway tracks. The project site is located in Section 10, Township 35S, Range 40E, City of Fort Pierce, Florida.

Latitude: 27°26'30.923"  
Longitude: W80°19'25.462"

Dear Mr. Gaske:

The Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (COE) have requested that the Applicant contact your office and request a review of the above referenced project site. Please consider this letter as a formal request for your office to review the above referenced project site for the presence of any historical or archaeological properties within the project area.

The project site encompasses approximately 27.52 acres of land. Approximately half of the site was previously in citrus. Following is a brief description of the vegetation associations noted on-site.

**150 - Industrial** (±7.54 acres)

This designation covers the entire site, part of which has been developed and part of which has been previously cleared and contains a great deal of debris from adjacent industrial sites. Vegetation includes occasional cabbage palm (*Sabal palmetto*), Brazilian pepper (*Schinus terebinthifolius*), tough bumelia (*Sideroxylon tenax*), grapevine (*Vitis rotundifolia*), bamboo vine (*Smilax* spp.), periwinkle (*Catharanthus roseus*), Virginia creeper (*Parthenocissus quinquefolia*), cogongrass (*Imperata cylindrica*), dog fennel (*Eupatorium capillifolium*), annual ragweed (*Ambrosia artemisiifolia*), prickly pear cactus (*Opuntia* sp.), chalky bluestem

(*Andropogon capillipes*), wiregrass (*Aristida stricta*), tickseed (*Coreopsis* sp.), rosary pea (*Abrus precatorius*), senna (*Cassia* sp.) and raspberry (*Rubus* sp.).

I am attaching a Vicinity Map, Location Map, Aerial Photograph, FLUCFCS Map, Soils Map, Topographic Map and photographs of the project site for your use and files. Your cooperation regarding this matter is appreciated. Please contact my office if you have any questions or comments regarding this matter. *Please respond to our project #15-009.01 when responding to this request.*

Sincerely,

*Freda R. Posin*

Freda R. Posin

Sr. Environmental Scientist

Attachments

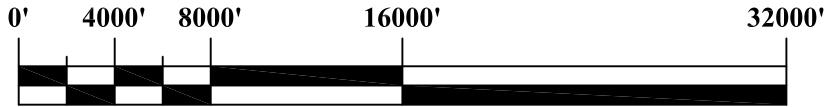
cc: File #15-009.01

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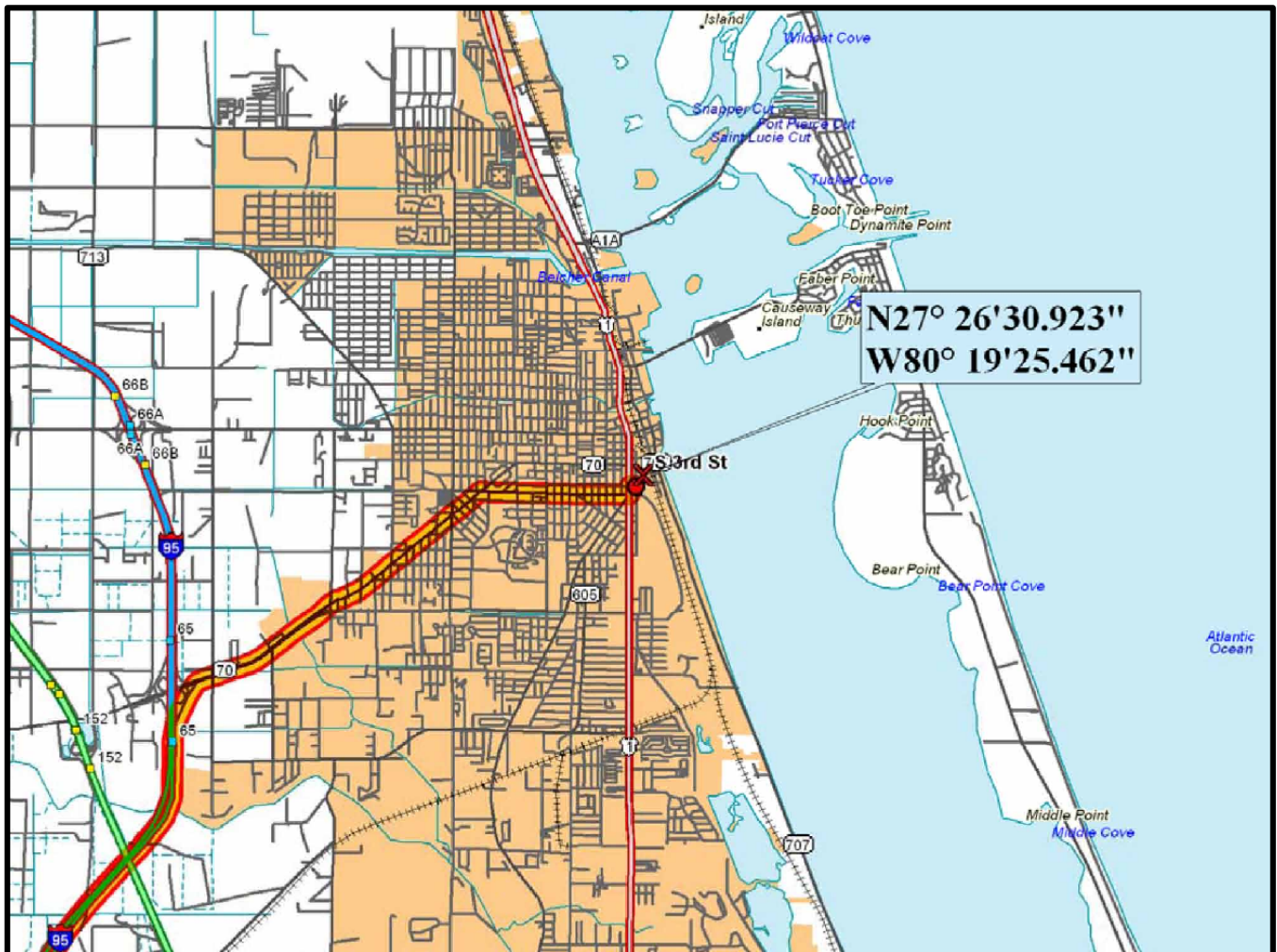
NOT A SURVEY



NORTH



SCALE: 1" = 8000'



**DIRECTIONS:**

	Dist	Turn	Road	Near	Exit	Time	Total Dist
●	in 0.00 mi	Start(N)	I-95 S			0:00:00	0.00 mi
	in 0.10 mi	Bear right(NNE)	on to Okeechobee Rd Ramp			0:00:07	0.10 mi
	in 0.55 mi	Bear right(ENE)	on to Okeechobee Rd			0:01:26	0.65 mi
	in 1.30 mi	Bear right(NE)	on to SR 70 (Okeechobee Rd)			0:04:58	1.94 mi
	in 1.59 mi	Bear right(E)	on to Georgia Ave			0:08:46	3.53 mi
	in 1.24 mi	Turn left(N)	on to US 1 (S US 1 SR 5 S Federal Hwy S 4...			0:10:53	4.77 mi
	in 0.07 mi	Turn right(E)	on to Florida Ave			0:11:03	4.84 mi
●	in 0.08 mi	Finish	at Florida Ave			0:11:22	4.92 mi

Total Time: 0:11:22 Total Distance: 4.92 mi

SOURCE: DELORME STREET ATLAS USA, DELUXE.

PARCEL ID # 2410-805-0005-000-1

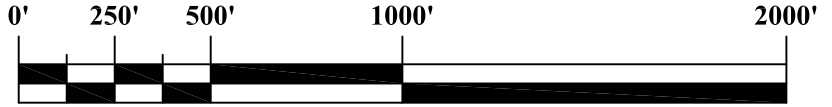
ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	01 - VICINITY MAP	1 APRIL 2015	1 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**VICINITY MAP**

**H S E** Hobe Sound Environmental Consultants Inc.  
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SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS USA DELUXE.

PARCEL ID # 2410-805-0005-000-1

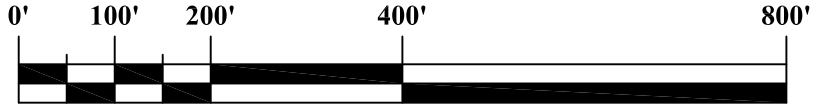
ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 02 - LOCATION MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 2 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**LOCATION MAP**

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NOT A SURVEY



SCALE: 1" = 200'



SOURCE: ST. LUCIE COUNTY GIS, ST. LUCIE COUNTY, FLORIDA

PARCEL ID # 2410-805-0005-000-1

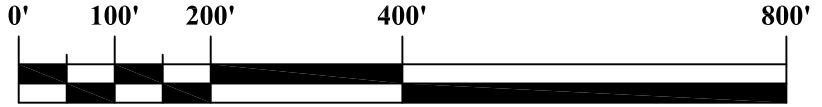
ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 03 - AERIAL.DWG	DATE: 1 APRIL 2015	FIGURE: 3 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
 SOUTH 3rd STREET FORT PIERCE, FLORIDA  
 ENVIRONMENTAL ASSESSMENT (EA)  
 2014 AERIAL PHOTOGRAPH

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NOT A SURVEY



SCALE: 1" = 200'



**LEGEND**

150 - INDUSTRIAL (7.54± ACRES)

SOURCE: LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM, HANDBOOK 1999 DEPARTMENT OF TRANSPORTATION.

PARCEL ID # 2410-805-0005-000-1

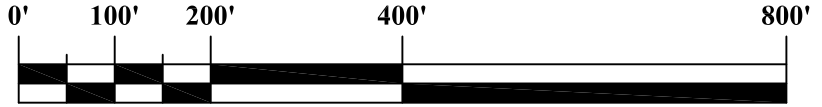
ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 11 - FLUCFCS MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 11 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**FLUCFCS (VEGETATION) MAP**

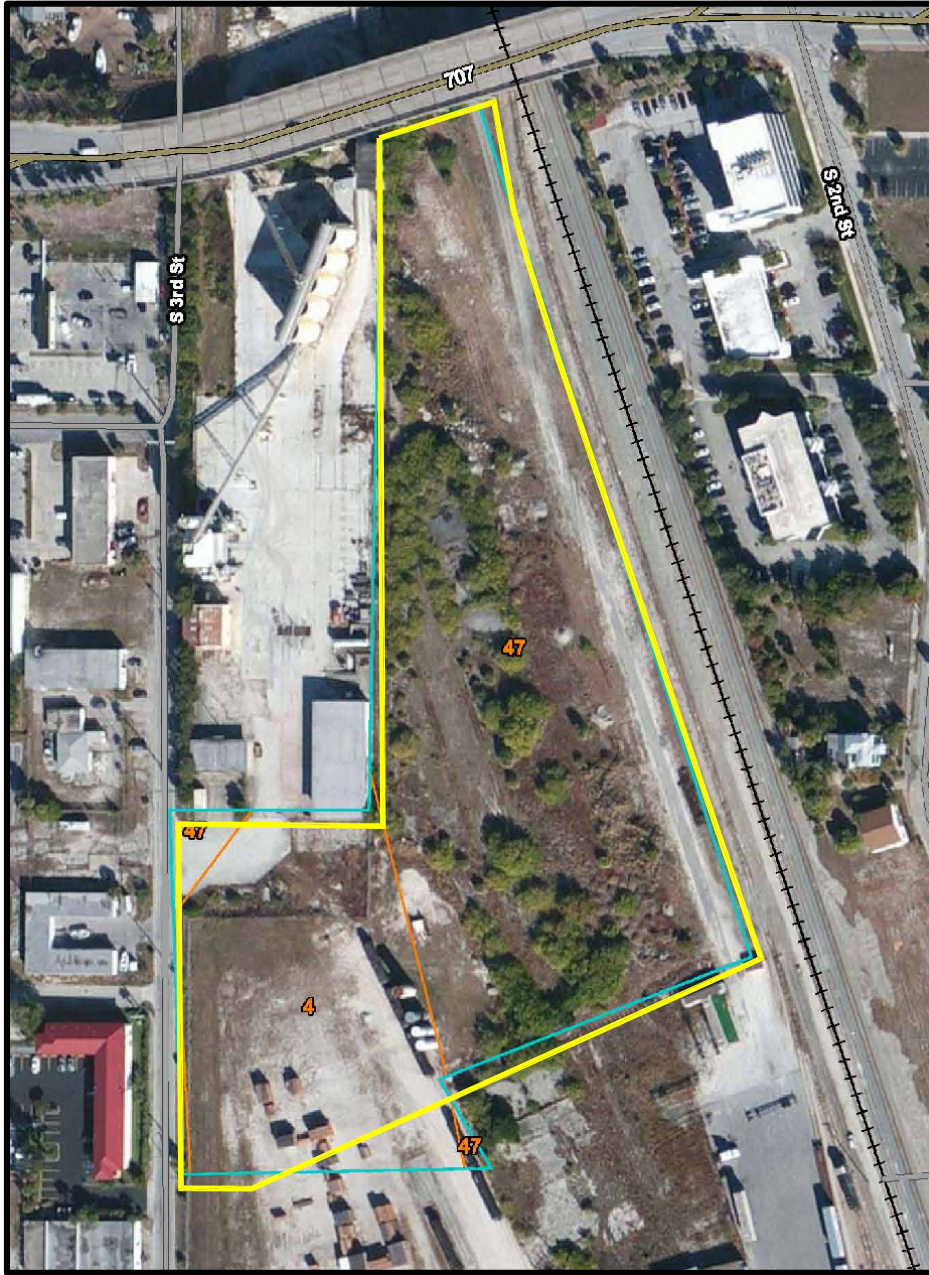
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NOT A SURVEY



SCALE: 1" = 200'



**LEGEND**

- 4 - ARENTS, 0 TO 5 PERCENT SLOPES
- 47 - URBAN LAND

SOURCE: <http://websoilsurvey.sc.egov.usda/App/WebSoilSurvey.aspx>

PARCEL ID # 2410-805-0005-000-1

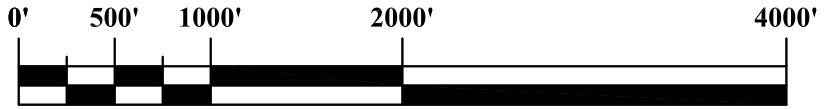
ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 12 - SCS SOIL MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 12 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
 SOUTH 3rd STREET FORT PIERCE, FLORIDA  
 ENVIRONMENTAL ASSESSMENT (EA)  
 SCS SOIL MAP

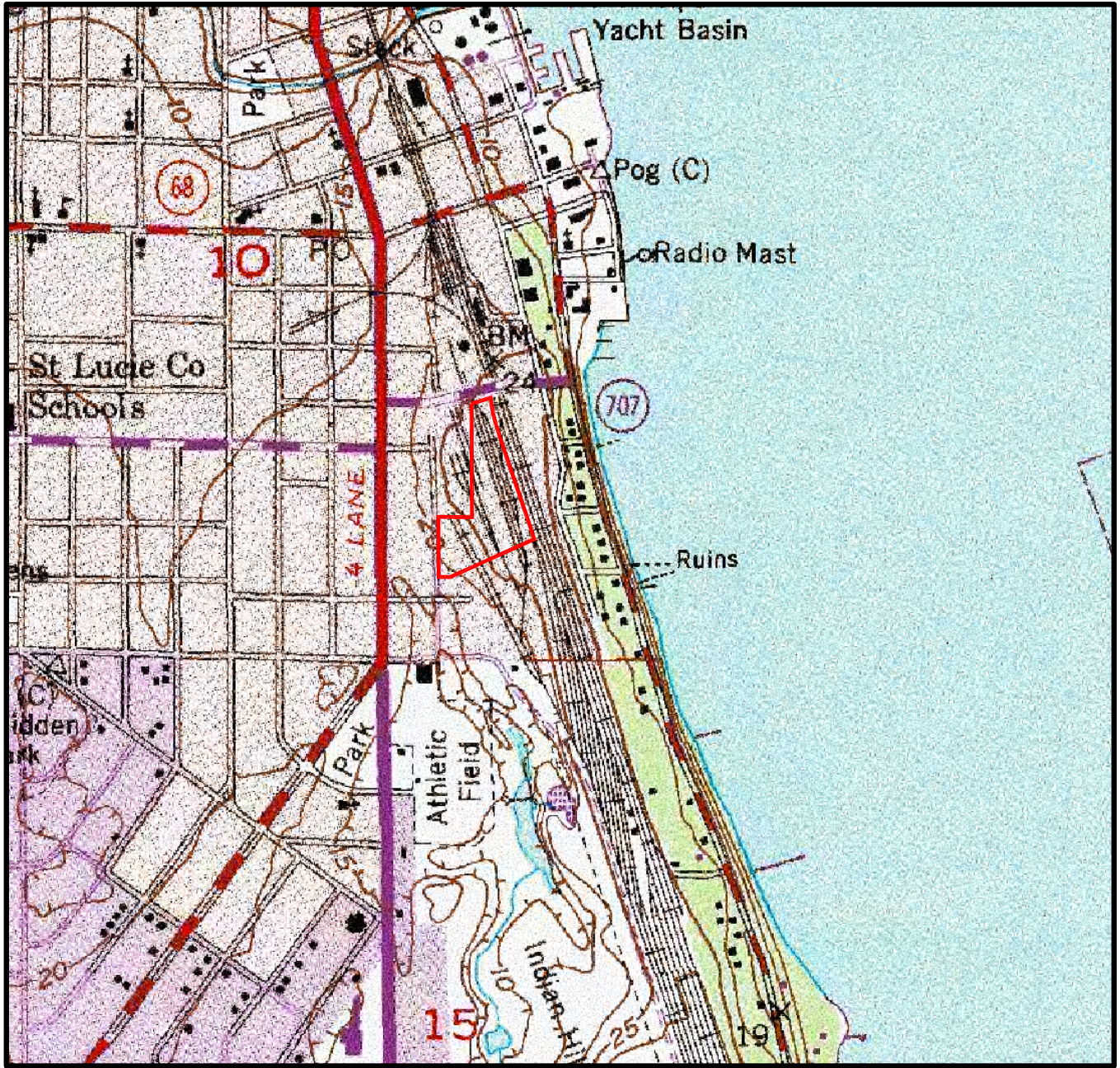
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NOT A SURVEY



SCALE: 1" = 1000'



SOURCE: USGS TOPOGRAPHIC MAP FORT PIERCE, FLORIDA QUADRANGLE, 7.5 MINUTE SERIES 27080-D3-TF-024.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	13 - TOPO MAP.DWG	1 APRIL 2015	13 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**USGS TOPOGRAPHIC MAP**

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SOURCE: PHOTOGRAPHS BY HSE



PHOTOGRAPH #01: AT ROAD ALONG EASTERN SITE BOUNDARY, LOOKING NORTHWEST TOWARD CITRUS AVE.



PHOTOGRAPH #02: LOOKING NORTHEAST TOWARD CITRUS AVE. FROM SOUTH END OF PROPERTY ADJACENT TO FEC RR TRACKS



PHOTOGRAPH #03: PRICKLY PEAR CACTUS IN WEST CENTRAL PORTION OF SITE



PHOTOGRAPH #04: CONCRETE RUBBLE LEFT ON-SITE



PHOTOGRAPH #05: LOOKING NORTHEAST FROM SOUTHWEST PORTION OF SITE



PHOTOGRAPH #06: GOPHER TORTOISE AT HIS BURROW NEAR FEC RR TRACKS

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: APP B PHOTOS.DWG	DATE: 1 APRIL 2015	APPENDIX B FIGURE: 1 OF 1
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**SITE PHOTOGRAPHS**

**HSE** Hobe Sound Environmental Consultants Inc.  
 9512 SE Duncan Street  
 Hobe Sound, FL 33455  
 (772)545-3676, E-mail: bobhsenv@gmail.com

**HOBE SOUND**  
**ENVIRONMENTAL CONSULTANTS, INC.**  
**9512 S.E. DUNCAN STREET**  
**HOBE SOUND, FLORIDA 33455**  
**PHONE: (772) 545-3676 CELL (772) 260-0857**  
**E-MAIL: [bobhsenv@gmail.com](mailto:bobhsenv@gmail.com)**

1 April 2015

Ms Dana Hartley  
U.S. Fish and Wildlife Service  
P.O. Box 2676  
Vero Beach, Florida 32960-2676

Re: Rocla Concrete Ties, Inc., City of Fort Pierce, St. Lucie County, Florida, Section 10,  
Township 35S, Range 40E.

Latitude: 27°26'30.923"  
Longitude: W80°19'25.462"

Via E-mail: [dana\\_hartley@fws.gov](mailto:dana_hartley@fws.gov)

Dear Ms. Hartley:

Hobe Sound Environmental Consultants, Inc. (HSE) has been retained to conduct an endangered species survey on the above referenced project site. Please review your files for records of any listed species that may occur on this site. The protected species survey will be conducted according to Florida Fish and Wildlife Conservation Commission (FFWCC) guidelines. I have attached a location map of the project area for your convenience.

Your immediate attention and cooperation regarding this matter are appreciated. Please feel free to contact me if you have any questions or require additional information concerning this matter. Please reference our file #15-009.01 when responding to this letter.

Sincerely,

*Freda R. Posin*

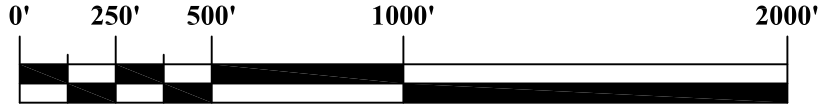
Freda R. Posin  
Senior Environmental Scientist

/frp  
Attachment

cc: File #15-009.01

THIS DRAWING, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DRAWING WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC. SHALL BE WITHOUT LIABILITY TO HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC.

NOT A SURVEY



SCALE: 1" = 500'



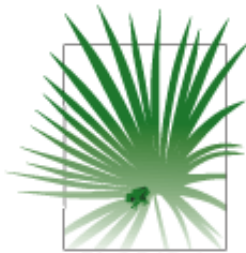
SOURCE: DELORME STREET ATLAS USA DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 02 - LOCATION MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 2 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**LOCATION MAP**

**HSE** Hobe Sound Environmental Consultants Inc.  
 9512 SE Duncan Street  
 Hobe Sound, FL. 33455  
 (772) 545-3676, E-mail: bobhsenv@gmail.com



1018 Thomasville Road  
 Suite 200-C  
 Tallahassee, FL 32303  
 850-224-8207  
 850-681-9364 fax  
 www.fnai.org

FLORIDA  
**Natural Areas**  
 INVENTORY

## Florida Natural Areas Inventory

### Biodiversity Matrix Query Results

UNOFFICIAL REPORT

Created 4/2/2015

(Contact the FNAI Data Services Coordinator at 850.224.8207 for information on an official Standard Data Report)

NOTE: The Biodiversity Matrix includes only rare species and natural communities tracked by FNAI.

#### Report for 1 Matrix Unit: 66568

	<p><b>Descriptions</b></p> <p><b>DOCUMENTED</b> - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit.</p> <p><b>DOCUMENTED-HISTORIC</b> - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit; however the occurrence has not been observed/reported within the last twenty years.</p> <p><b>LIKELY</b> - The species or community is <i>known</i> to occur in this vicinity, and is considered likely within this Matrix Unit because:</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <ol style="list-style-type: none"> <li>1. documented occurrence overlaps this and adjacent Matrix Units, but the documentation isn't precise enough to indicate which of those Units the species or community is actually located in; <i>or</i></li> <li>2. there is a documented occurrence in the vicinity and there is suitable habitat for that species or community within this Matrix Unit.</li> </ol> </div> <p><b>POTENTIAL</b> - This Matrix Unit lies within the known or predicted range of the species or community based on expert knowledge and environmental variables such as climate, soils, topography, and landcover.</p>
--	---

**Matrix Unit ID: 66568**

0 **Documented** Elements Found

0 **Documented-Historic** Elements Found

1 **Likely** Element Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<a href="#">Trichechus manatus</a> Manatee	G2	S2	LE	FE

**Matrix Unit ID: 66568****20 Potential Elements for Matrix Unit 66568**

<b>Scientific and Common Names</b>	<b>Global Rank</b>	<b>State Rank</b>	<b>Federal Status</b>	<b>State Listing</b>
<i>Acipenser oxyrinchus oxyrinchus</i> Atlantic Sturgeon	G3T3	S1	PS:LE,LT	SSC
<a href="#"><u><i>Athene cunicularia floridana</i></u></a> Florida Burrowing Owl	G4T3	S3	N	SSC
<i>Coelorachis tuberculosa</i> Piedmont Jointgrass	G3	S3	N	LT
<i>Conradina grandiflora</i> Large-flowered Rosemary	G3	S3	N	LT
<i>Ctenogobius stigmaturus</i> Spottail Goby	G2	S2	N	N
<a href="#"><u><i>Drymarchon couperi</i></u></a> Eastern Indigo Snake	G3	S3	LT	FT
<a href="#"><u><i>Eretmochelys imbricata</i></u></a> Hawksbill Sea Turtle	G3	S1	LE	FE
<i>Forestiera segregata</i> var. <i>pinetorum</i> Florida Pinewood Privet	G4T2	S2	N	N
<a href="#"><u><i>Glandularia maritima</i></u></a> Coastal Vervain	G3	S3	N	LE
<a href="#"><u><i>Gopherus polyphemus</i></u></a> Gopher Tortoise	G3	S3	C	ST
<a href="#"><u><i>Halophila johnsonii</i></u></a> Johnson's Seagrass	G2	S2	LT	N
<i>Lechea cernua</i> Nodding Pinweed	G3	S3	N	LT
<a href="#"><u><i>Linum carteri</i> var. <i>smallii</i></u></a> Small's Flax	G2T2	S2	N	LE
<a href="#"><u><i>Pituophis melanoleucus mugitus</i></u></a> Florida Pine Snake	G4T3	S3	N	SSC
<a href="#"><u><i>Pteroglossaspis ecristata</i></u></a> Giant Orchid	G2G3	S2	N	LT
<i>Rivulus marmoratus</i> Mangrove Rivulus	G4G5	S3	SC	SSC
<a href="#"><u><i>Rostrhamus sociabilis plumbeus</i></u></a> Snail Kite	G4G5T2	S2	LE	FE
<a href="#"><u><i>Sceloporus woodi</i></u></a> Florida Scrub Lizard	G2G3	S2S3	N	N
<a href="#"><u><i>Sciurus niger shermani</i></u></a> Sherman's Fox Squirrel	G5T3	S3	N	SSC
<i>Setophaga discolor paludicola</i> Florida Prairie Warbler	G5T3	S3	N	N

**Disclaimer**

The data maintained by the Florida Natural Areas Inventory represent the single most comprehensive source of information available on the locations of rare species and other significant ecological resources statewide. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. FNAI shall not be held liable for the accuracy and completeness of these data, or opinions or conclusions drawn from these data. FNAI is not inviting reliance on these data. Inventory data are designed for the purposes of conservation planning and scientific research and are not intended for use as the primary criteria for regulatory decisions.

**Unofficial Report**

These results are considered unofficial. FNAI offers a [Standard Data Request](#) option for those needing certifiable data.

# **APPENDIX B**

## **Project Site Photographs**

THIS DRAWING, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DRAWING WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC. SHALL BE WITHOUT LIABILITY TO HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC.

SOURCE: PHOTOGRAPHS BY HSE



PHOTOGRAPH #01: AT ROAD ALONG EASTERN SITE BOUNDARY, LOOKING NORTHWEST TOWARD CITRUS AVE.



PHOTOGRAPH #02: LOOKING NORTHEAST TOWARD CITRUS AVE. FROM SOUTH END OF PROPERTY ADJACENT TO FEC RR TRACKS



PHOTOGRAPH #03: PRICKLY PEAR CACTUS IN WEST CENTRAL PORTION OF SITE



PHOTOGRAPH #04: CONCRETE RUBBLE LEFT ON-SITE



PHOTOGRAPH #05: LOOKING NORTHEAST FROM SOUTHWEST PORTION OF SITE



PHOTOGRAPH #06: GOPHER TORTOISE AT HIS BURROW NEAR FEC RR TRACKS

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: APP B PHOTOS.DWG	DATE: 1 APRIL 2015	APPENDIX B FIGURE: 1 OF 1
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

**ROCLA CONCRETE TIES, INC.**  
**SOUTH 3rd STREET FORT PIERCE, FLORIDA**  
**ENVIRONMENTAL ASSESSMENT (EA)**  
**SITE PHOTOGRAPHS**

**HSE** Hobe Sound Environmental Consultants Inc.  
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 Hobe Sound, FL 33455  
 (772)545-3676, E-mail: bobhsenv@gmail.com