Environmental Services, Inc.

ENVIRONMENTAL SITE ASSESSMENT

Prepared For:

Indian River Drive Properties:

401 S. Indian River Drive
411 S. Indian River Drive
426 S. Indian River Drive
500 S. Indian River Drive
507 S. Indian River Drive
509 S. Indian River Drive
519 S. Indian River Drive

Fort Pierce, Florida

Property Tax ID Numbers:

2410-808-0017-000-7
2410-808-0019-000-1
2410-808-0020-010-4
2410-809-0001-000-5
2410-809-0002-000-2
2410-809-0004-000-6
2410-810-0001-000-9

Prepared by:

DLS Environmental Services, Inc.
1901 SW Yellowtail Avenue
Port St. Lucie, Florida 34953
(772)215-3997
Fax: (772)879-4520
Email: danna@dlsenvironmentalservices.com

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ENVIRONMENTAL SITE ASSESSMENT

1.0 LOCATION

An environmental assessment of the 401 S. Indian River Drive, 411 S. Indian River Drive, 426 S. Indian River Drive, 500 S. Indian River Drive, 507 S. Indian River Drive, 509 S. Indian River Drive, and 519 S. Indian River Drive was conducted by DLS Environmental Services, Inc. The project area associated with the seven parcels totals 3.27 acres which are located on the east and west side of South Indian River Drive in Fort Pierce in Section 10, Township 35 South, Range 40 East (***Figure 1 – Location Map***). Field data was collected on April 10, 2015. The following are the methodologies and results of the environmental assessment conducted at the project site.

2.0 SOILS

Project soils were mapped according to the *Soil Survey of St. Lucie County Area, Florida,* March 1981, United States Department of Agriculture, Soil Conservation Service. A copy of the Soil Survey Map depicting the project boundaries and soil type(s) is included as ***Figure 2***. The project site contained two soil mapping units. A general description of the soil types are as follows:

Arents, 0 to 5 percent slopes (4)

This soil consists of soil material dug from several areas that have different kinds of soil. It is used to fill such areas as low sloughs, marshes, shallow depressions, and swamps above their natural ground levels. Depth of fill material ranges from about 20 to 50 inches. Several kinds of mineral soils underlie the fill material. The water table in this Arents soil is between depths of 20 and 50 inches most of the year.

Paola Sand (28)

This nearly level to sloping soil is excessively drained. It is on high dune-like ridges and in undulating areas. Slopes are smooth to convex or concave. Included in this mapping layer of Paola soil are small areas of Astatula, St. Lucie, and Welaka Variant soils. This soil does not have a water table within a depth of 80 inches, and usually it is not within a depth of 120 inches annually and permeability is very rapid. Typical natural vegetative associations include sand pine, scrub live oak, rosemary, and cabbage palms.

3.0 HABITATS

3.1 GOPHER TORTOISE AND OTHER BURROW COMMENSALS

3.1.1 Objective

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

3.1.2 Methodology

Biologist followed the survey protocol as recommended in *Ecology and Habitat Protection Needs of Gopher Tortoise (Gopher 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 (FGFWFG) [now known as FFWCC], Tallahassee, Florida, December 1987.

- Biologist conducted parallel transects 10 meters (32± feet) apart;
- Biologist conducted serpentine search patterns between the parallel transects;
- All gopher tortoise burrows located will be flagged as either active or inactive;
- All gopher tortoise burrows located will be assigned an identification number and recorded;
- Biologist will field locate all gopher tortoise burrows on a 1" = 100' scale aerial.
- Additional data and notes will be collected by biologists for the occurrence of the eastern indigo snake, Florida gopher frog, and the Florida mouse.

3.1.3 Conclusion

No gopher tortoise or other commensal species such as eastern indigo snake, Florida mouse, or Florida gopher frog were observed by the biologist during this environmental assessment.

3.2 PROTECTED SPECIES/WILDLIFE SURVEYS

3.2.1 Objective

Conduct a systematic survey for flora and fauna that may occur on-site and note the presence of any endangered, threatened and species of special concern as identified by Florida Fish and Wildlife Conservation Commission and the Florida Department of Agriculture and Consumer Services.

3.2.2 Methodology

Biologist used the following methodology to conduct wildlife/protected species surveys.

- Biologist conducted a survey on April 10, 2015;
- The survey meandered through the property however none of the property appeared to be suitable habitat for most protected species;
- Biologist recorded and noted sightings, tracks, scat, tree markings, nests, cavities, and burrows;

3.2.3 Conclusion

During the pedestrian survey, biologist did not observe any endangered, threatened, or species of special concern as identified by Florida Fish and Wildlife Conservation Commission and the Florida Department of Agriculture and Consumer Services. No tree markings, nests, cavities, or burrows (active or inactive) were observed. No scrub jays or red-cockaded woodpeckers were observed or called on-site. See **Table 1** for wildlife observed during the pedestrian transects. In addition, the habitat on-site was reviewed to determine the likelihood of occurrence for the following federal/state listed species:

Amphibians	
Gopher frog (*Rana capito*)	not likely
Reptiles	
American alligator (*Alligator mississipiensis)*	not likely
Eastern indigo snake (*Drymarchon corais couperi*)	not likely
Gopher tortoise (*Gopherus polyphemus*)	not likely
Birds	
Roseate spoonbill (*Ajaia ajaia)*	not likely
Florida scrub jay (*Aphelocoma coerulescens*)	not likely
Limpkin (*Aramus guarauna)*	not likely
Piping plover (*Charadrius melodus*)	not likely
Least tern (*Sterna antillarum*)	not likely
Little blue heron (*Egretta caerulea*)	not likely
Snowy egret (*Egretta thula*)	not likely
Snowy plover (*Charadrius nivosus*)	not likely
Tri-colored heron (*Egretta tricolor*)	not likely
White ibis (*Eudocimus albus*)	not likely
Peregrine falcon (*Falco peregrines*)	not likely
Southeastern American kestrel (*Falco sparverius paulus*)	not likely
Florida sandhill crane (*Grus Canadensis protensis*)	not likely
Bald eagle (*Haliaeetus leucocephalus*)	not likely
Wood stork (*Mycteria Americana*)	not likely

Osprey *(Pandion haliaetus*)	likely
Roseate tern (*Sterna dougallii dougallii*)	not likely
Snail kite (*Rostrhamus sociabilis plumbeus*)	not likely
Florida burrowing owl (*Athene cunicularia floridana*)	not likely

Mammals

Florida panther (*Felis concolor coryt*)	not likely
Florida mouse (*Podomys floridana*)	not likely
Sherman's fox squirrel (*Sciurus niger shermani*)	not likely

Vascular plants

Sea lavender (*Argusia gnaphalodes*)	not likely
Curtiss' milkweed (*Asclepias curtissii*)	not likely
Four-petal pawpaw (*Asimina tetramera*)	not likely
Sand-dune spurge (*Chamaesyce cumulicola*)	not likely
Hand fern (*Cheiroglossa palmata*)	not likely
Large-flowered rosemary (*Conradina grandiflora*)	not likely
Florida tree fern (*Ctenitis sloanei*)	not likely
Dollar orchid (*Encyclia boothiana var. erthonioides*)	not likely
Night-scented orchid (*Epidendrum nocturnum*)	not likely
Tropical ironwood (*Eugenia confusa*)	not likely
Coastal vervain (*Glandularia maritime*)	not likely
Beach jacquermontia (*Jacquemontio reclinata*)	not likely
Atlantic Coast Florida lantana (*Lantana depressa var floridana*)	not likely
Nodding pinweed (*Lechea cernua*)	not likely
Pine pinweed (*Lechea divaricata*)	not likely
Carter's large-flowered flax (*Linum carteri var sinallii*)	not likely
Burrowing four o'clock (*Okenia hypogaea*)	not likely
Dancing-lady orchid (*Oncidium bahamense*)	not likely
Terrestrial peperomia (*Peperomia humilis*)	not likely
Blunt-leaved peperomia (*Peperomia obstusifolia*)	not likely
Scrub bay (*Persea humilis*)	not likely
Tiny polygala (*Polygala smallii*)	not likely
Wild coco (*Pteroglossaspis ecristata*)	not likely
Green ladies'-tresses (*Spiranthes polyantha*)	not likely
Banded wild-pine (*Tillandsia flexuosa*)	not likely
Scentless vanilla (*Vanilla mexicana*)	not likely
Rain lily (*Zephyranthes simpsonii*)	not likely

Non-Vascular Plants

Perforate reindeer lichen (*Cladonia perforata*)	not likely

Table 1. Wildlife Observed on the Property During the Pedestrian Surveys

A. Birds

COMMON NAME	SCIENTIFIC NAME	PROTECTED SPECIES	
		STATE	FEDERAL
Blue jay	*Cyanocitta cristata*	----	----

B. Mammals – none observed

C. Reptiles – none observed

3.3 VEGETATION SURVEY (FLUCFCS)

3.3.1 Objective

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

3.2.2 Methodology

Biologist used the following methodology to conduct the vegetation survey.

- Biologist used the *Florida Land Use, Cover, and Forms Classification System: A Technical Report (FLUCFCS),* January 1999, State of Florida, Department of Transportation, Survey and Mapping, Geographic Mapping Section;
- Biologist based vegetative community descriptions on field surveys and Soil Conservation Service soil maps.
- Numerical community designations were carried to Level III, according to FLUCFCS.

3.2.3 Conclusion

The FLUCFCS map is depicted as ***Figure 3*** and contained the following community designations:

- ***133 – Multiple dwelling units, low rise***
  This property is currently a 4-unit apartment complex. There is a narrow strip of wetlands adjacent to the shoreline associated with this property which has been assigned a different FLUCFCS number appropriate to that community.

- ***143 – Professional services***
  This property is currently a mixed use with a residence and an attorney's office.

- ***191 – Undeveloped land in urban areas***
  It appears that the majority of the properties involved in this environmental assessment would fall into this category since there are no structures on most of them. The only remaining vegetation on these vacant parcels is mowed ground cover and some cabbage palms.

- ***193 – Urban land in transition***
  This property contains an asphalt parking lot however the future use is unknown.

- ***642 – Saltwater marshes***
  A narrow strip of property adjacent to the shoreline on the northern parcels contained cordgrass (*Spartina alterniflora*), three-square (*Scirpus americanus)*, and salt grass (*Distichlis spicata)*.

- ***540 – Bays and estuaries***
  The properties involved in this site assessment all have frontage on the Indian River. This location of the Indian River does support seagrasses.

3.4 JURISDICTIONAL WETLANDS

The project site was reviewed for potential wetlands based upon the methodologies identified in Chapter 62-340, Florida Administrative Code which consists of reviewing the area for vegetation, soils, and hydrologic indicators. Based upon this review, a strip of wetlands was identified adjacent to the shoreline on the northern parcels identified in this site assessment.

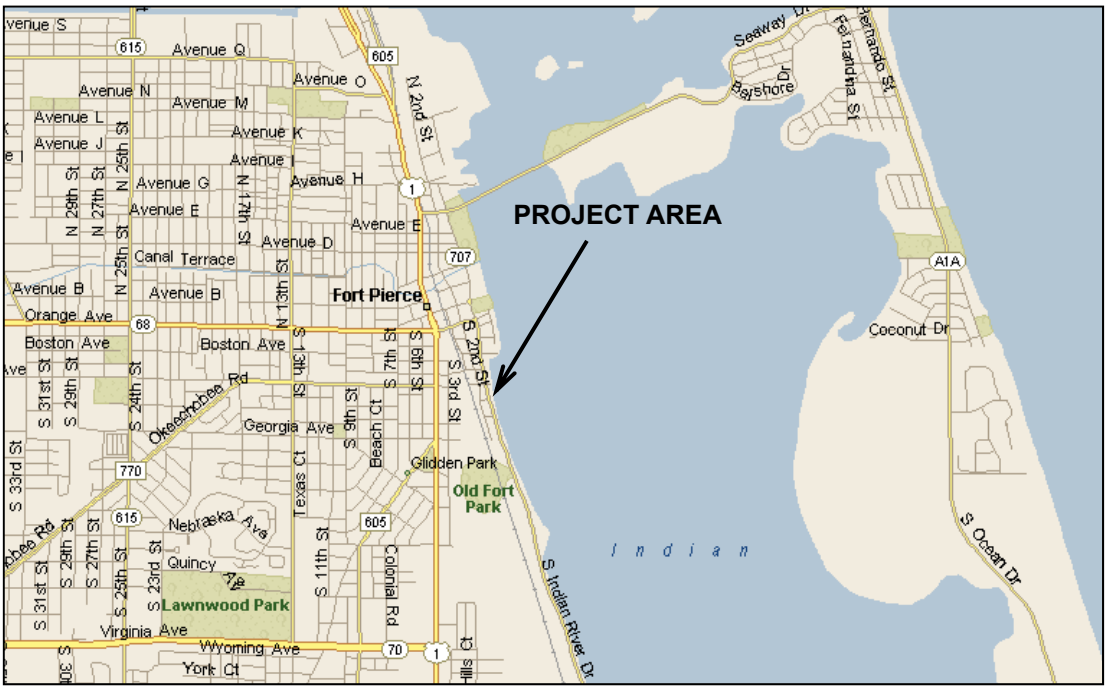
4.0 PREVIOUS IMPACTS

Based upon a review of aerials from 2000, all of the currently vacant properties within the project area had structures at that time. The majority of these structures appear to be residential except for the parcel at the southwest corner of Citrus and Indian River Drive. It appears that these structures were removed between 2007 and 2011 and the properties remain vacant.

5.0 SUMMARY

Based upon the historic use and the current use of these properties, the proposed change of the future land use from Office Professional (OP) to Central Business District (CBD) would not result in additional environmental impacts. The majority of the properties involved in this request are currently vacant uplands which were previously developed.

Any impacts to the wetland area or any proposed docking facilities would require authorizations from both the Florida Department of Environmental Protection and the U.S. Army Corps of Engineers regardless of the land use assigned to the properties.



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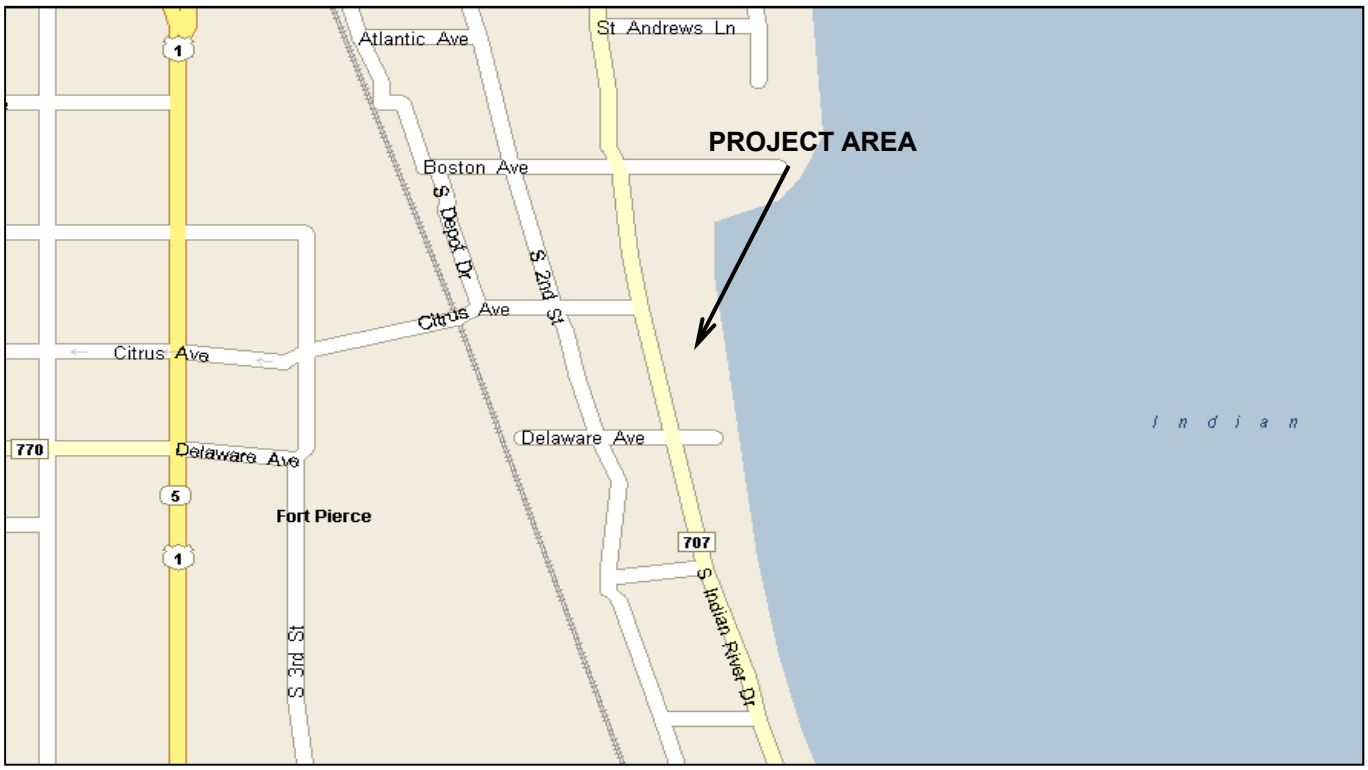
ST. LUCIE COUNTY



SECTION 10, TOWNSHIP 35 SOUTH, RANGE 40 EAST

DLS Environmental Services, Inc.

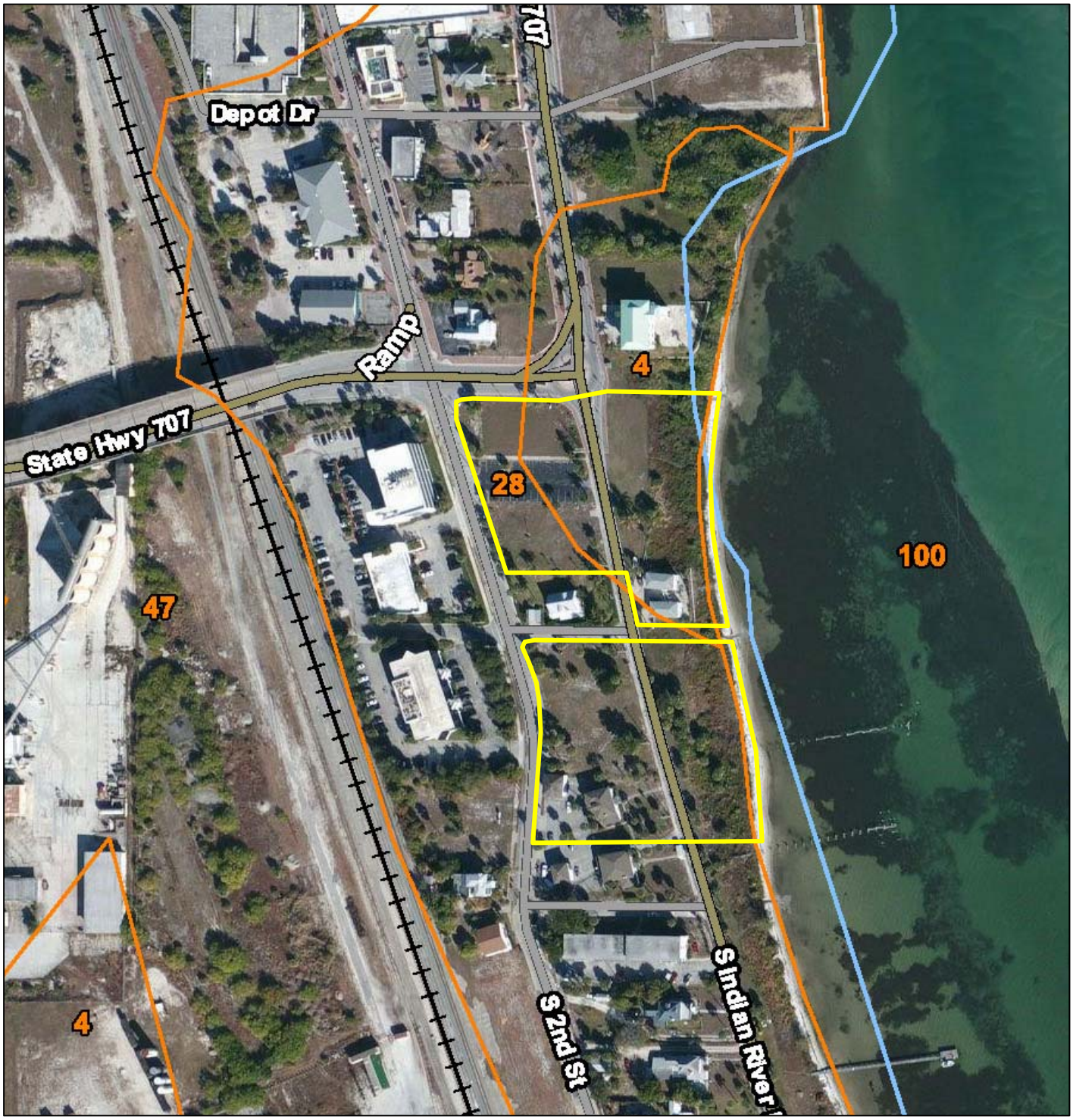
1901 SW Yellowtail Avenue
Port Saint Lucie, FL 34953

Phone: 772-215-3997 Fax: 772-879-4520
www.dlsenvironmentalservices.com

Location Map

Indian River Drive Properties
South Indian River Drive
Fort Pierce, Florida

SCALE: N.T.S.		APRIL 2015	FIGURE 1



Source: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx Viewed on April 12, 2015

SOILS:
ARENTS, 0 TO 5 PERCENT SLOPES (4)
PAOLA SAND (28)

DLS Environmental Services, Inc.
1901 SW Yellowtail Avenue
Port Saint Lucie, FL 34953
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Soils Map

Indian River Drive Properties
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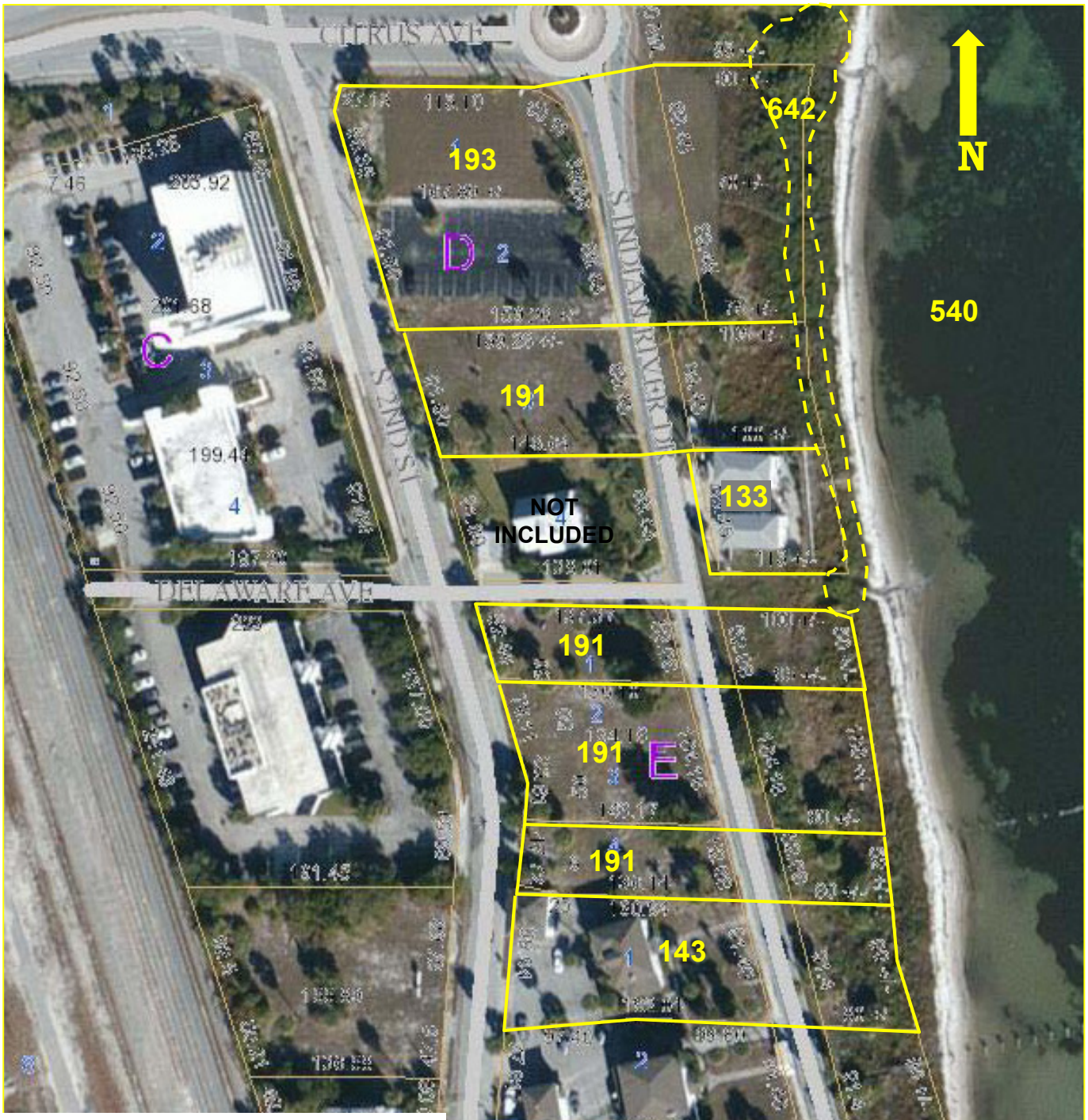
Fort Pierce, Florida

SCALE: N.T.S.		APRIL 2015	FIGURE 2



FLUCFCS CODES:

MULTIPLE DWELLING UNITS, LOW RISE (133)
PROFESSIONAL SERVICES (143)
UNDEVELOPED LAND IN URBAN AREAS (191)
URBAN LAND IN TRANSITION (193)
SALTWATER MARSHES (642)
BAYS AND ESTUARIES (540)

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FLUCFCS Map

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Fort Pierce, Florida

SCALE:			
N.T.S.		APRIL 2015	FIGURE 3

APPENDIX A
SITE PHOTOGRAPHS

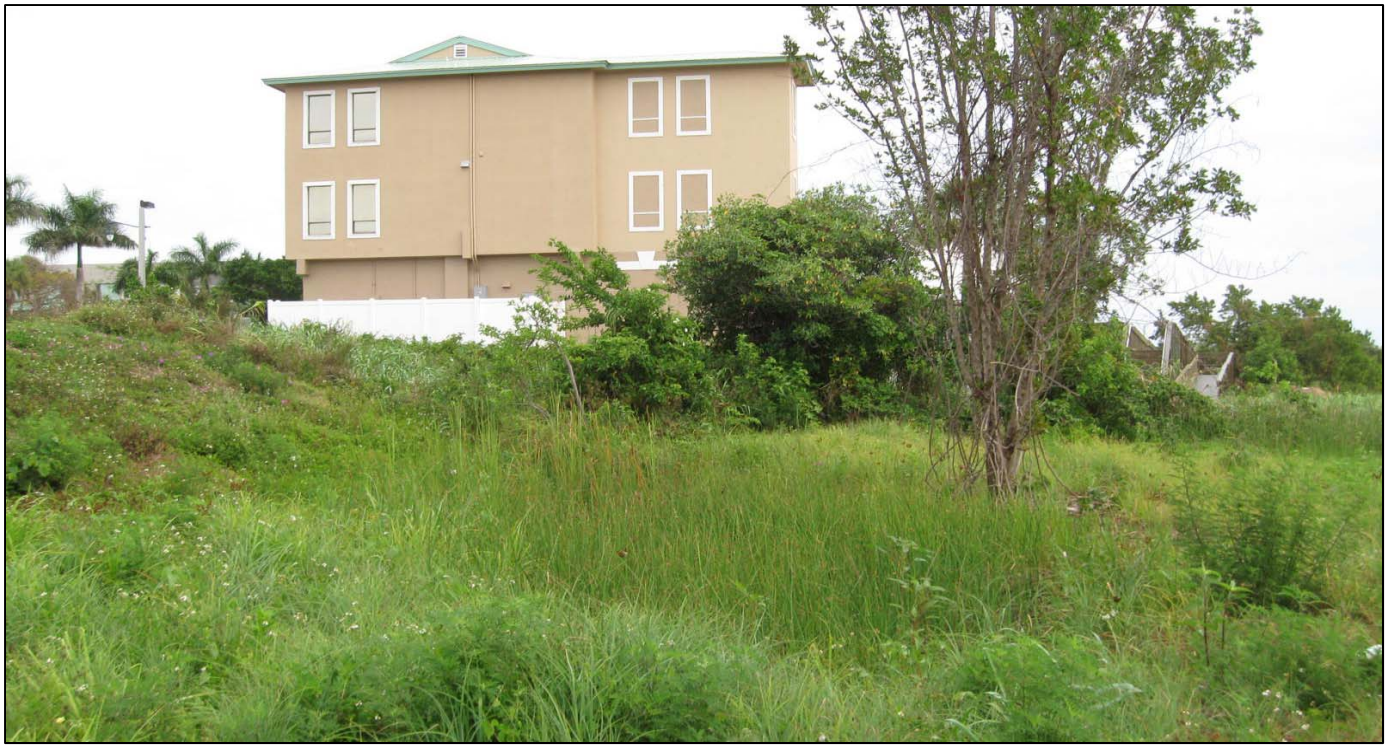

Photo looking north at wetland area in the northeast corner of 401 S. Indian River Drive.
Mangroves in the background are off-site.

Photo looking south at strip of wetlands along shoreline of 401, 411, and 426 S. Indian River Drive.

DLS Environmental Services, Inc.
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Port Saint Lucie, FL 34953

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Photos of Site

Indian River Drive Properties
South Indian River Drive
Fort Pierce, Florida

SCALE:		APRIL 2015	

Photo looking south along area on east side of Indian River Drive for 500, 507, 509, and 519 S. Indian River Drive.

Photo showing bank and existing vegetation associated with 507, 509, and 519 S. Indian River Drive.

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Photos of Site

Indian River Drive Properties
South Indian River Drive
Fort Pierce, Florida

SCALE:		APRIL 2015	

Photo looking north along east side of Indian River Drive.

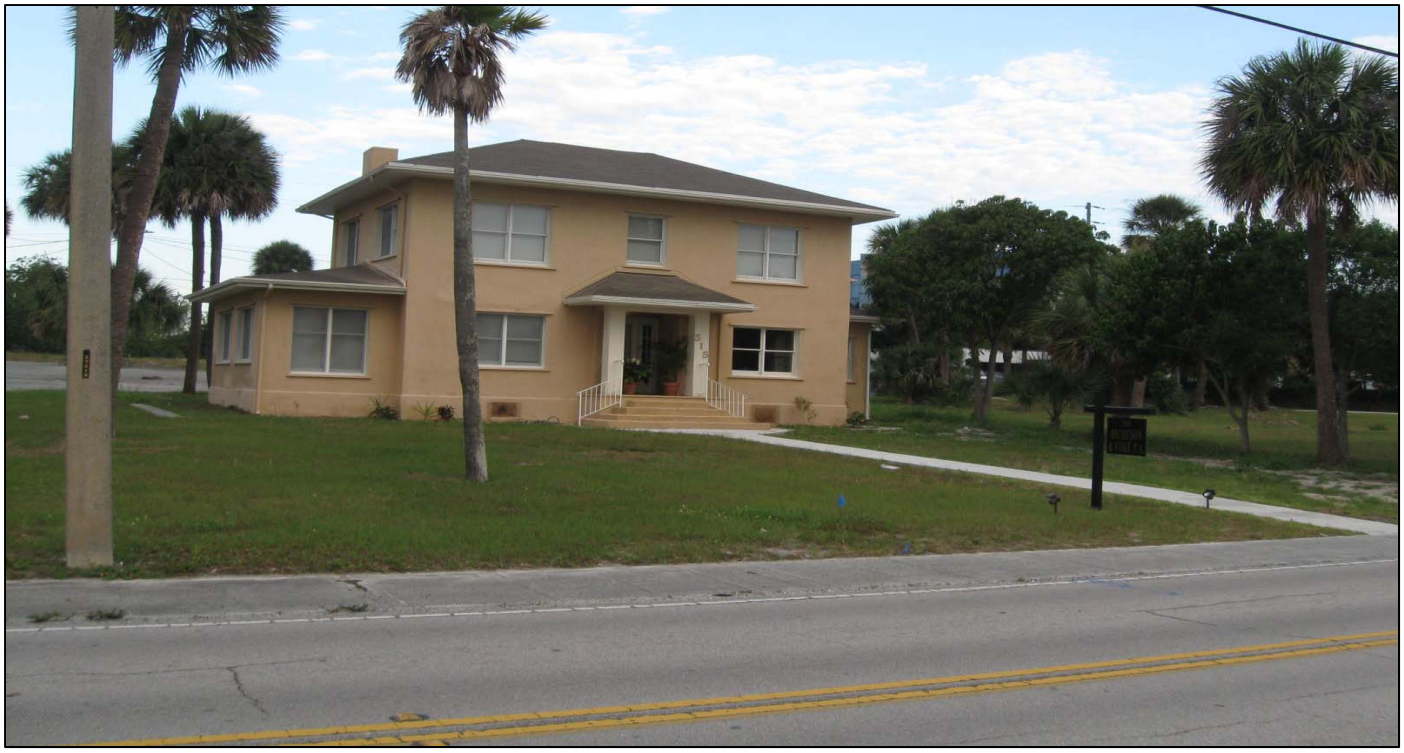

Photo of 519 S. Indian River Drive – law office and possibly residence.

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Port Saint Lucie, FL 34953

Phone: 772-215-3997 Fax: 772-879-4520
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Photos of Site

Indian River Drive Properties
South Indian River Drive
Fort Pierce, Florida

SCALE:		APRIL 2015	

Photo looking at vacant parcels 500, 507, and 509 S. Indian River Drive.

Photo looking at vacant parcel with parking area at 401 S. Indian River Drive.

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Port Saint Lucie, FL 34953

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Photos of Site

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Fort Pierce, Florida

SCALE:		APRIL 2015	