



July 30, 2012

Ms. Cindy Mulkey, Program Administrator
Office of Siting Coordination
Department of Environmental Protection
3900 Commonwealth Blvd., MS#48
Tallahassee, FL 32399-3000

Re: Florida Power & Light Company
Cape Canaveral Energy Center
Power Plant Site Certification No. PA 08-53
Post-Certification Amendment
Aquatic Organism Return Pipe/Certified Boundary

Dear Ms. Mulkey,

Florida Power & Light Company (FPL) is requesting a post certification amendment to the Site Certification for FPL's Cape Canaveral Energy Center (CCEC), pursuant to rule 62-17.205 (1)(A) F.A.C. The purpose of this amendment request is twofold; first, to expand the certified boundary to include the Aquatic Organism Return (AOR) pipe and second, to obtain approval to install the AOR pipe in the Indian River Lagoon (Figure 1). The original Site Certification Application was submitted in December 2008. At the time of the application submittal the plant was going to reuse the existing Aquatic Organism Return System (AORS). After further consideration the Plant has elected to construct a new AORS. The AORS at CCEC is required by the Industrial Wastewater (IWW) Facility Permit No. FL0001473. The IWW NPDES permit covers discharges from CCEC to the Indian River Lagoon. Construction of the CCEC will be completed prior to the plant going into operational in June 2013. In order to have the AORS installed prior to the plant becoming operational we would need to obtain approval by September 2012.

FPL is required to construct an AORS for the purpose of returning aquatic organisms that are captured at the intake structures of the plant to their natural habitat. This AORS will be made up of an 18 inch pipe that will follow along the south side of the intake canal and ultimately discharge at a location approximately 300 feet east of the shoreline in the Indian River Lagoon and south of the seawall. An Environmental Resource Permit (ERP) application is included for your review. This ERP application is intended to provide you the information that is typically provide for an individual permit but we are seeking approval of this work through a request for an amendment to the Site Certification (No. PA 08-53). This application describes the details of the construction and design of the AORS. Wetland and seagrass surveys were conducted in June and neither were found in the area where the pipe will be installed. Therefore, there will be no impact to wetland or seagrasses during the installation. The stormwater system will not change as a result of this project. This project will not use fresh water and will not require any changes to consumptive use at the site.

Florida Power & Light Company

700 Universe Blvd

Juno Beach, FL 33408

The AORS will be installed in compliance with General Condition VI.B (1) of the Conditions of Certification. General Condition VI.B (1) references Industrial Wastewater Discharges and states "Any discharges during construction and operation shall be in accordance with all applicable provisions of NPDES Permit No.FL0001473 (attached as Appendix C) and as those provisions may be modified, amended, or renewed in the future by the Department. Such provisions shall be fully enforceable as conditions of this certification. Any violation of such provisions shall be a violation of these Conditions of Certification. [Rule 62-621, F.A.C.]."

Thank you for your attention to and consideration of FPL's request to amend the Site Certification for CCEC. If you have any questions regarding this submittal, please do not hesitate to contact me at 561-691-2808 or Stacy Foster at 561-691-7065.

Sincerely yours,
Florida Power & Light Company



Matthew J. Raffenberg
Director, FPL Licensing and Permitting

Cc: Mike Tammaro, FPL Legal



LEGEND

-  Sovereign Submerged Lands Lease (Certified Boundary)
-  FPL Cape Canaveral Energy Center (Certified Boundary)
-  Aquatic Organism Return System Return Pipe (To be Certified)

REFERENCES

1. Certified Boundary, Aviom & Associates Inc., 2008
2. Sovereign Submerged Lands Lease, FPL CAD Drawing No. CC042096, 1998.
3. Aquatic Organism Return System Return Pipe, Golder Associates Inc., 2012

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REV	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RWW
PROJECT			FPL CAPE CANAVERAL ENERGY CENTER			
TITLE			REVISED CERTIFIED SITE BOUNDARY			
			PROJECT No.	103-89593	FILE No.	103-89593B008
			DESIGN	MEH	7/2/2012	SCALE: AS SHOWN
			GIS	NRL	7/27/2012	REV. 0
			CHECK	MEH	7/3/2012	FIGURE 1
			REVIEW	MEH	7/27/2012	

JOINT APPLICATION FOR
ENVIRONMENTAL RESOURCE PERMIT/

AUTHORIZATION TO USE
SOVEREIGN SUBMERGED LANDS/

FEDERAL DREDGE AND FILL PERMIT

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION/
WATER MANAGEMENT DISTRICTS/
U.S. ARMY CORPS OF ENGINEERS

**INSTRUCTIONS FOR JOINT APPLICATION FOR ENVIRONMENTAL RESOURCE
PERMIT/AUTHORIZATION TO USE STATE OWNED SUBMERGED LANDS/FEDERAL DREDGE AND
FILL PERMIT**

INTRODUCTION

Attached is a joint application for:

- 1) activities regulated under Part IV of Chapter 373, F.S.;
- 2) activities which require authorization to use state owned submerged lands; and
- 3) activities which require federal dredge and fill permit.

Certain activities may qualify for an exemption. If an activity qualifies for an exemption, an application is not required, although the use of this application form is the most expeditious way for the agencies to make the determination that the activity qualifies for an exemption. Attachment 2 lists various regulated activities and the type of permit required for each activity. If you have any questions, please contact the staff of the nearest office of either the Florida Department of Environmental Protection (DEP) or a Water Management District (WMD).

PROCESSING AGENCY/DISTRICT SERVICE CENTERS

The Department of Environmental Protection ("Department" or "DEP") regulates some types of activities, and the Water Management Districts ("WMDs") regulate others. Attachment 1, DEP/WMD Permitting Responsibilities, specifies which activities are regulated by each agency. Environmental Resource Permit Applications shall be made to the appropriate District/Department office serving the area in which the activity is proposed. Attachment 4 designates the appropriate agency office for each geographic area.

COPIES/APPLICATION FEES

Submit an original signed application form plus **four** copies of the form, and **five** complete sets of all the requested drawings and other information to the appropriate DEP or WMD office. Submit the appropriate fee with your application. Application fees are listed in Attachment 3.

DISTRIBUTION TO U.S. ARMY CORPS OF ENGINEERS

When activities are proposed in, on or over wetlands or other surface waters, a portion of the application (Section A and Section C, with the associated drawings) will be forwarded to the Army Corps of Engineers (ACOE) by the reviewing agency. The ACOE will advise you of any additional information that may be required to complete your federal dredge and fill permit application. It is not necessary for the applicant to submit a separate application to the ACOE. The information requested in this application form may be more than required to make a complete application to the ACOE. However, it is useful and may be essential for subsequent evaluation. Reducing unnecessary paperwork and delays is a continuing goal of the ACOE.

DISTRIBUTION TO THE DEP FOR STATE LAND APPROVAL

If the applicant checks the box to request authorization to use sovereign submerged lands, the Department will begin processing the request for sovereign submerged lands approval. Additionally, if at any time during the processing of the application, it appears that the proposed activities may take place on sovereign submerged lands, the Department will initiate a review for the authorization to use such lands. For an explanation of sovereign submerged lands approval see Attachment 5.

NOTE: The information listed in Sections B, D, E, and F of this application package is not intended to be all-inclusive. Additional information may be requested by the reviewing agency in order to complete your application.

TABLE OF CONTENTS FOR ERP APPLICATION FORM PACKAGE

HEADING:	SUBJECT:
Section A	Basic application form
Section B	Information for noticed general environmental resource permits
Section C	Notice of receipt of application
Section D	Information required for standard general and individual environmental resource permit applications related to a single family dwelling unit
Section E	Information requested for standard general, individual and conceptual environmental resource permit applications not related to a single family dwelling unit
Table 1	Project impact summary
Table 2	On-site mitigation summary
Table 3	Off-site mitigation summary
Table 4	Docking facility summary
Table 5	Shoreline stabilization summary
Section F	Information for mitigation banks
Section G	Application for authorization to use sovereign submerged lands
Attachment 1	DEP and WMD permitting responsibilities
Attachment 2	Summary of activities typically authorized by each permit type
Attachment 3	Permit application processing fees
Attachment 4	Mailing instructions for submitting ERP applications to DEP, with map showing the DEP district boundaries and addresses
Attachment 5	Proprietary verses regulatory authorization

“What Sections of the Application Must I Fill Out?”

Section:	Noticed General Permits	Individual Permits		
		Single- Family Residences	Others	Mitigation Banks
Section A	Yes	Yes	Yes	Yes
Section B	Yes			
Section C		Yes	Yes	Yes
Section D		Yes		
Section E			Yes	
Section F				Yes
Section G	As Needed	As Needed	As Needed	As Needed

SECTION A

FOR AGENCY USE ONLY	
ACOE Application #	DEP/WMD Application #
Date Application Received	Date Application Received
Proposed Project Lat.	Fee Received \$
Proposed Project Long.	Fee Receipt #

PART 1:

Are any of the activities described in this application proposed to occur in, on, or over wetlands or other surface waters?

☒ yes ☐ no

Is this application being filed by or on behalf of a government entity or drainage district? ☐ yes ☒ no

PART 2:

A. Type of Environmental Resource Permit Requested (check at least one). See Attachment 2 for thresholds and descriptions.

- ☐ Noticed General - include information requested in Section B.
- ☐ Standard General (Single Family Dwelling) - include information requested in Sections C and D.
- ☒ Standard General (all other Standard General projects) - include information requested in Sections C and E.
- ☐ Individual (Single Family Dwelling) - include information requested in Sections C and D.
- ☐ Individual (all other Individual projects) - include information requested in Sections C and E.
- ☐ Conceptual - include information requested in Sections C and E.
- ☐ Mitigation Bank Permit (construction) - include information requested in Sections C and F. (If the proposed mitigation bank involves the construction of a surface water management system requiring another permit defined above, check the appropriate box and submit the information requested by the applicable section.)
- ☐ Mitigation Bank (conceptual) - include information requested in Sections C and F.

B. Type of activity for which you are applying (check at least one)

- ☐ Construction or operation of a new system, other than a solid waste facility, including dredging or filling in, on or over wetlands and other surface waters.
- ☐ Construction, expansion or modification of a solid waste facility.
- ☐ Alteration or operation of an existing system which was not previously permitted by a WMD or DEP.
- ☒ Modification of a system previously permitted by a WMD or DEP.
- Provide previous permit numbers:
- | | |
|--|--|
| ☒ Alteration of a system | ☐ Extension of permit duration |
| ☐ Abandonment of a system | ☐ Construction of additional phases of a system |
| ☐ Removal of a system | |

C. Are you requesting authorization to use Sovereign Submerged Lands?

☒ yes ☐ no

(See Section G and Attachment 5 for more information before answering this question.)

D. For activities in, on, or over wetlands or other surface waters, check type of federal dredge and fill permit requested:

- | | | |
|--|---|----------------------------------|
| ☐ Individual | ☐ Programmatic General | ☐ General |
| ☒ Nationwide | ☐ Not Applicable | |

E. Are you claiming to qualify for an exemption? ☐ yes ☒ no

If yes, provide rule number if known.

PART 3:	
A. OWNER(S) OF LAND	B. ENTITY TO RECEIVE PERMIT (IF OTHER THAN OWNER)
Name Florida Power & Light Company (FPL)	Name Randall R. LaBauve
Title and Company FPL	Title and Company Vice President, Florida Power & Light Company
Address 700 Universe Blvd.	Address 700 Universe Blvd.
City, State, Zip Juno Beach, FL 33408	City, State, Zip Juno Beach, FL 33408
Telephone and Fax (phone) (561) 691-7063 (fax)	Telephone and Fax (561) 691-7063
C. AGENT AUTHORIZED TO SECURE PERMIT	D. CONSULTANT (IF DIFFERENT FROM AGENT)
Name	Name Michael Harrington
Title and Company	Title and Company Senior Ecologist, Golder Associates Inc.
Address	Address 6026 NW 1st Place
City, State, Zip	City, State, Zip Gainesville, FL 32607
Telephone and Fax	Telephone and Fax (352)336-5600

PART 4: (Please provide metric equivalent for federally funded projects):

A. Name of Project, including phase if applicable: **FPL Cape Canaveral Energy Center Aquatic Organism Return System**

B. Is this application for part of a multi-phase project?
☐yes ☒no

C. Total applicant-owned area contiguous to the project?
41.4 ac.; 16.75 ha.

D. Total area served by the system: ac.; 0 ha.

E. Impervious area for which a permit is sought: 0 ac.; ha.

F. Volume of water that the system is capable of impounding:
0 ac. ft.; m

G. What is the total area of work in, on, or over wetlands or other surface waters?
0.02 ac.; ha. 1000 sq. ft.; sq. m.

H. Total volume of material to be dredged: 0 cu yd; 0 cu m

I. Number of new boat slips proposed: 0 wet slips; 0 dry slips

PART 5:

Project location (use additional sheets if needed):

County(ies) Brevard County

Section: 19

Township: 23S

Range: 36E

Land Grant name, if applicable:

Tax Parcel Identification Number:

Street Address Road or other location: _____

City, Zip Code, if applicable: _____

PART 6: Describe in general terms the proposed project, system, or activity.

As part of the Cape Canaveral Energy Center's Industrial Wastewater Facility Permit FL0001473-012, FPL is required to develop and install an organism return system to return live fish, shellfish, and other aquatic organisms collected or trapped on the intake screens to their natural habitat. FPL proposes to install modified Ristroph-type through-flow traveling screens with 3/8-inch smooth mesh and an aquatic organism handling and return system that discharges to a conduit that returns organisms to the Indian River Lagoon. Aquatic organisms that are collected in the organism return trough system will be routed through an 18-inch pipe that is partially filled with water to a depth of approximately 6 to 7 inches. The organisms will be sluiced to the end of the pipe at a safe rate of movement, where they will be discharged into the Indian River Lagoon at a depth of approximately 3.5 feet. The discharge pipe will be located approximately 5 feet south of the existing sheet pile seawall on the southern edge of the cooling water intake canal. The pipe will extend approximately 310 feet east of the shoreline, suspended approximately 6" above the substrate, and will be held in place by concrete anchors spaced at approximately 15 foot intervals.

PART 7:

A. If there have been any pre-application meetings, including on-site meetings, with regulatory staff, please list the date(s), location(s), and names of key staff and project representatives.

Telephone consultation, Stacy Foster (FPL) and Tamy Dabu (USACE).

B. Please identify by number any MSSW/Wetland Resource/ERP/ACOE Permits pending, issued or denied for projects at the location, and any related enforcement actions.

Agency	Date	No./Type of Application	Action Taken
ACOE	3/30/2012	SAJ-2009-01004 (NW-TSD)	Issued
_____	_____	_____	_____

C. Note: The following information is required for projects proposed to occur in, on or over wetlands that need a federal dredge and fill permit or an authorization to use state owned submerged lands. Please provide the names, addresses and zip codes of property owners whose property directly adjoins the project (excluding application) and/or (for proprietary authorizations) is located within a 500 ft. radius of the applicant's land. Please attach a plan view showing the owner's names and adjoining property lines. Attach additional sheets if necessary.

- | | |
|--------|----|
| 1. N/A | 2. |
| 3. | 4. |

PART 8:

A. By signing this application form, I am applying, or I am applying on behalf of the applicant, for the permit and any proprietary authorizations identified above, according to the supporting data and other incidental information filed with this application. I am familiar with the information contained in this application and represent that such information is true, complete and accurate. I understand this is an application and not a permit, and that work prior to approval is a violation. I understand that this application and any permit issued or proprietary authorization issued pursuant thereto, does not relive me of any obligation for obtaining any other required federal, state, water management district or local permit prior to commencement of construction. I agree, or I agree on behalf of the applicant, to operate and maintain the permitted system unless the permitting agency authorizes transfer of the permit to a responsible operation entity. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

Randall R. LaBauve

Typed/Printed Name of Applicant (If no Agent is used) or Agent (If one is so authorized below)

Signature of Applicant/Agent

Date

Vice President

(Corporate Title if applicable)

AN AGENT MAY SIGN ABOVE ONLY IF THE APPLICANT COMPLETES THE FOLLOWING:

B. I hereby designate and authorize the agent listed above to act on my behalf, or on behalf of my corporation, as the agent in the processing of this application for the permit and/or proprietary authorization indicated above; and to furnish, on request, supplemental information in support of the application. In addition, I authorize the above-listed agent to bind me, or my corporation, to perform any requirements which may be necessary to procure the permit or authorization indicated above. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

Typed/Printed Name of Applicant

Signature of Applicant

Date

(Corporate Title if applicable)

Please note: The applicant's original signature (not a copy) is required above.

PERSON AUTHORIZING ACCESS TO THE PROPERTY MUST COMPLETE THE FOLLOWING:

C. I either own the property described in this application or I have legal authority to allow access to the property, and I consent, after receiving prior notification, to any site visit on the property by agents or personnel from the Department of Environmental Protection, the Water Management District and the U.S. Army Corps of Engineers necessary for the review and inspection of the proposed project specified in this application. I authorize these agents or personnel to enter the property as many times as may be necessary to make such review and inspection. Further, I agree to provide entry to the project site for such agents or personnel to monitor permitted work if a permit is granted.

Randall R. LaBauve

Typed/Printed Name of Applicant

Signature of Applicant

Date

Vice President, FPL

(Corporate Title if applicable)

SECTION C

Environmental Resource Permit Notice of Receipt of Application

Note: this form does not need to be submitted for noticed general permits.

This information is required in addition to that required in other sections of the application. Please submit five copies of this notice of receipt of application and all attachments with the other required information. Please submit all information on 8 1/2" x 11" paper.

Project Name **FPL Cape Canaveral Energy Center Aquatic Organism Return System**
County **Brevard County**
Owner **Florida Power & Light**
Applicant: **Florida Power & Light**
Applicant's Address: **6000 U.S. 1, Cocoa, FL 32927**

1. Indicate the project boundaries on a USGS quadrangle map. Attach a location map showing the boundary of the proposed activity. The map should also contain a north arrow and a graphic scale; show Section(s), Township(s), and Range(s); and must be of sufficient detail to allow a person unfamiliar with the site to find it.

See Attachment A, Figure 1 – Location Map

2. Provide the names of all wetlands, or other surface waters that would be dredged, filled, impounded, diverted, drained, or would receive discharge (either directly or indirectly), or would otherwise be impacted by the proposed activity, and specify if they are in an Outstanding Florida Water or Aquatic Preserve:

An approximately 310-foot section of 18-inch diameter pipe will be placed in the Indian River Lagoon with 24" X 30" concrete anchor supports placed at 15 foot intervals. The pipe will be suspended approximately 6" above the substrate. The anchors will occupy approximately 105 ft² (0.002 acre) of substrate. The Indian River Lagoon in the area of the project is not an Outstanding Florida Water or Aquatic Preserve.

3. Attach a depiction (plan and section views), which clearly shows the works or other facilities proposed to be constructed. Use multiple sheets, if necessary. Use a scale sufficient to show the location and type of works.

See Attachment A – Construction Plans, Figures 2 – 4

4. Briefly describe the proposed project (such as "construct dock with boat shelter", "replace two existing culverts", "construct surface water management system to serve 150 acre residential development"):

Installation of an organism return system to return live fish, shellfish, and other aquatic organisms collected or trapped on the cooling water intake screens to their natural habitat.

5. Specify the acreage of wetlands or other surface waters, if any, that are proposed to be filled, excavated, or otherwise disturbed or impacted by the proposed activity:

0.002 filled ac.; **0** excavated ac.; other impacts **0.02 (pipe suspended above the substrate)**

6. Provide a brief statement describing any proposed mitigation for impacts to wetlands and other surface waters (attach additional sheets if necessary):

N/A; the pipe will be placed upon an area of bare substrate. No areas of seagrass or hardbottom communities will be impacted.

FOR AGENCY USE ONLY

Application Name:

Application Number:

Office where the application can be inspected:

Note to Notice recipient: The information in this notice has been submitted by the applicant, and has not been verified by the agency. It may be incorrect, incomplete or may be subject to change.

SECTION E

INFORMATION REQUESTED FOR STANDARD GENERAL, INDIVIDUAL AND CONCEPTUAL ENVIRONMENTAL RESOURCE PERMIT APPLICATIONS NOT RELATED TO A SINGLE FAMILY DWELLING UNIT

Please provide the information requested below if the proposed project requires either a standard general, individual, or conceptual approval environmental resource permit and is not related to an individual, single family dwelling unit, duplex or quadruplex. The information listed below represents the level of information that is usually required to evaluate an application. The level of information required for a specific project will vary depending on the nature and location of the site and the activity proposed. Conceptual approvals generally do not require the same level of detail as a construction permit. However, providing a greater level of detail will reduce the need to submit additional information at a later date. If an item does not apply to your project, proceed to the next item. Please submit all information that is required by the Department on either 8 1/2 in. X 11 in. paper or 11 in. X 17 in. paper. Larger drawings may be submitted to supplement but not replace these smaller drawings.

I. Site Information

- A. Provide a map(s) of the project area and vicinity delineating USDA/SCS soil types.

N/A

- B. Provide recent aerials, legible for photo interpretation with a scale of 1" = 400 ft, or more detailed, with project boundaries delineated on the aerial.

See Attachment A, Figure 5-- Aerial Photograph

- C. Identify the seasonal high water or mean high tide elevation and normal pool or mean low tide elevation for each on site wetland or surface water, including receiving waters into which runoff will be discharged. Include dates, datum, and methods used to determine these elevations.

N/A

- D. Identify the wet season high water tables at the locations representative of the entire project site. Include dates, datum, and methods used to determine these elevations.

N/A --Project is over surface waters.

II. Environmental Considerations

- A. Provide results of any wildlife surveys that have been conducted on the site, and provide any comments pertaining to the project from the Florida Game and Fresh Water Fish Commission and the U.S. Fish and Wildlife Service.

Specific wildlife surveys have not been conducted within the Project Area; however, manatees are known to congregate in the vicinity of the Cape Canaveral Plant during the colder winter months. Since manatees are known to congregate in this area, all work will be performed in accordance with the Standard Manatee Conditions for In-Water Work (FWC, 2012). Please see Attachment B for this document. A seagrass survey was performed in the project area in June 2012, and the results are found in Attachment C. There is no seagrass in the proposed discharge pipe location 5 ft south of the existing sheet pile wall.

- B. Provide a description of how water quantity, quality, hydroperiod, and habitat will be maintained in on-site wetlands and other surface waters that will be preserved or will remain undisturbed.

N/A

C. Provide a narrative description of any proposed mitigation plans, including purpose, maintenance, monitoring, and construction sequence and techniques, and estimated costs.

N/A

D. Describe how boundaries of wetlands or other surface waters were determined. If there has ever been a jurisdictional declaratory statement, a formal wetland determination, a formal determination, a validated informal determination, or a revalidated jurisdictional determination, provide the identifying number.

The edge of the seawall and MHWL were considered the boundary of the surface waters.

E. Impact Summary Tables:

1. For all projects, complete Tables 1, 2 and 3 as applicable.

See Table 1 below.

2. For docking facilities or other structures constructed over wetlands or other surface waters, provide the information requested in Table 4.

N/A

3. For shoreline stabilization projects, provide the information requested in Table 5.

N/A

III. Plans

Provide clear, detailed plans for the system including specifications, plan (overhead) views, cross sections (with the locations of the cross sections shown on the corresponding plan view), and profile (longitudinal) views of the proposed project. The plans must be signed and sealed by an appropriate registered professional as required by law. Plans must include a scale and a north arrow. These plans should show the following:

A. Project area boundary and total land area, including distances and orientation from roads or other land marks;

Please see Attachment A -- Construction Plans, Figures 2 -- 4

B. Existing land use and land cover (acreage and percentages), and on-site natural communities, including wetlands and other surface waters, aquatic communities, and uplands. Use the Florida Land Use Cover & Classification System (FLUCCS)(Level 3) for projects proposed in the South Florida Water Management District, the St. Johns River Water Management District, and the Suwannee River Water Management District and use the National Wetlands Inventory (NWI) for projects proposed in the Southwest Florida Water Management District. Also identify each community with a unique identification number which must be consistent in all exhibits.

Project is located within Indian River Lagoon, FLUCFCS 541 (Embayments opening directly into Atlantic Ocean)

C. The existing topography extending at least 100 feet off the project area, and including adjacent wetlands and other surface waters. All topography shall include the location and a description of known benchmarks, referenced to NGVD. For systems waterward of the mean high water (MHW) or seasonal high water lines, show water depths, referenced to mean low water (MLW) in tidal areas or seasonal low water in non-tidal areas, and list the range between MHW and MLW. For docking facilities, indicate the distance to, location of, and depths of the nearest navigational channel and access routes to the channel.

Please see Attachment A-- Construction Plans, Figures 2 -- 4

D. If the project is in the known flood plain of a stream or other water course, identify the following: 1) the flood plain boundary and approximate flooding elevations; and 2) the 100-year flood elevation and floodplain boundary of any lake, stream or other watercourse located on or adjacent to the site;

N/A

E. The boundaries of wetlands and other surface waters within the project area. Distinguish those wetlands and other surface waters that have been delineated by any binding jurisdictional determination;

The edge of the seawall and MHWL were considered the boundary of the surface waters.

F. Proposed land use, land cover and natural communities (acreage and percentages), including wetlands and other surface waters, undisturbed uplands, aquatic communities, impervious surfaces, and water management areas. Use the same classification system and community identification number used in III (B) above.

Land use and land cover will not change as a result of the project.

G. Proposed impacts to wetlands and other surface waters, and any proposed connections/outfalls to other surface waters or wetlands;

Impacts to wetlands and surface waters will be limited to 105 sq ft of permanent fill placement in the form of concrete anchor pads, and the pipe will total 464 sq ft suspended approximately 6 inches above the substrate. See Attachment A – Construction Plans, Figures 2 – 4 for details of the pipe and anchor pads.

H. Proposed buffer zones;

N/A

I. Pre- and post-development drainage patterns and basin boundaries showing the direction of flows, including any off-site runoff being routed through or around the system; and connections between wetlands and other surface waters;

N/A

J. Location of all water management areas with details of size, side slopes, and designed water depths;

N/A

K. Location and details of all water control structures, control elevations, any seasonal water level regulation schedules; and the location and description of benchmarks (minimum of one benchmark per structure);

N/A

L. Location, dimensions and elevations of all proposed structures, including docks, seawalls, utility lines, roads, and buildings;

See Attachment A – Construction Plans, Figures 2 – 4

M. Location, size, and design capacity of the internal water management facilities;

N/A

N. Rights-of-way and easements for the system, including all on-site and off-site areas to be reserved for water management purposes, and rights-of-way and easements for the existing drainage system, if any;

N/A

O. Receiving waters or surface water management systems into which runoff from the developed site will be discharged;
N/A

P. Location and details of the erosion, sediment and turbidity control measures to be implemented during each phase of construction and all permanent control measures to be implemented in post-development conditions;

The area of pipe installation will be isolated from adjacent surface waters through installation of a floating turbidity barrier from the shoreline to the eastern end of the project, connecting to the existing sheet pile wall.

Q. Location, grading, design water levels, and planting details of all mitigation areas;
N/A

R. Site grading details, including perimeter site grading;
N/A

S. Disposal site for any excavated material, including temporary and permanent disposal sites;
N/A

T. Dewatering plan details;
N/A

U. For marina facilities, locations of any sewage pumpout facilities, fueling facilities, boat repair and maintenance facilities, and fish cleaning stations;
N/A

V. Location and description of any nearby existing offsite features which might be affected by the proposed construction or development such as stormwater management ponds, buildings or other structures, wetlands or other surface waters.
N/A

W. For phased projects, provide a master development plan.
N/A

IV. Construction Schedule and Techniques

Provide a construction schedule, and a description of construction techniques, sequencing and equipment. This information should specifically include the following:

In order to fulfill the requirement of the Industrial Wastewater Facility Permit FL0001473-012 to have the system installed and operational by June 1, 2013, construction is anticipated to commence by October 1, 2012. The in-water portion of the system will be installed by floating the discharge pipe (with anchors attached) into position, approximately 5 feet south of the existing sheet pile wall, and lowering the pipe into place. This process will likely be completed by plugging the open end of the pipe and allowing the air within the pipe to provide the buoyancy require to float the pipe into position. The plug will then be removed and the pipe will descend to the substrate as it fills with water.

A. Method for installing any pilings or seawall slabs;

N/A

- B. Schedule of implementation of temporary or permanent erosion and turbidity control measures;

Prior to pipe installation, a floating turbidity barrier will be placed from the shoreline to the eastern end of the project and connect to the existing sheet pile wall to isolate the area during pipe installation. The turbidity barrier will remain in place until completion of pipe installation.

- C. For projects that involve dredging or excavation in wetlands or other surface waters, describe the method of excavation, and the type of material to be excavated;

N/A

- D. For projects that involve fill in wetlands or other surface waters, describe the source and type of fill material to be used. For shoreline stabilization projects that involve the installation of riprap, state how these materials are to be placed, (i.e., individually or with heavy equipment) and whether the rocks will be underlain with filter cloth;

Fill is limited to the concrete anchors, comprising approximately 105 ft² (0.002 ac.)

- E. If dewatering is required, detail the dewatering proposal including the methods that are proposed to contain the discharge, methods of isolating dewatering areas, and indicate the period dewatering structures will be in place (Note: a consumptive use or water use permit may be required);

N/A

- F. Methods for transporting equipment and materials to and from the work site. If barges are required for access, provide the low water depths and draft of the fully loaded barge;

A shallow draft barge may be deployed during installation of the discharge pipe. The minimum low water depth in the area to be accessed by a barge is approximately 3 feet.

- G. Demolition plan for any existing structures to be removed; and

N/A

- H. Identify the schedule and party responsible for completing monitoring, record drawings, and as-built certifications for the project when completed.

FPL will remain the party responsible for monitoring and recording drawings and as-built certifications for the project.

V. Drainage Information

N/A

- A. Provide pre-development and post-development drainage calculations, signed and sealed by an appropriate registered professional, as follows:

1. Runoff characteristics, including area, runoff curve number or runoff coefficient, and time of concentration for each drainage basin;
2. Water table elevations (normal and seasonal high) including areal extent and magnitude of any proposed water table draw down;
3. Receiving water elevations (normal, wet season, design storm);
4. Design storms used including rainfall depth, duration, frequency, and distribution;

5. Runoff hydrograph(s) for each drainage basin, for all required design storm event(s);
 6. Stage-storage computations for any area such as a reservoir, close basin, detention area, or channel, used in storage routing;
 7. Stage-discharge computations for any storage areas at a selected control point, such as control structure or natural restriction;
 8. Flood routings through on-site conveyance and storage areas;
 9. Water surface profiles in the primary drainage system for each required design storm event(s);
 10. Runoff peak rates and volumes discharged from the system for each required design storm event(s);
 11. Tail water history and justification (time and elevation); and
 12. Pump specifications and operating curves for range of possible operating conditions (if used in system).
- B. Provide the results of any percolation tests, where appropriate, and soil borings that are representative of the actual site conditions;
- C. Provide the acreage, and percentages of the total project, of the following:
1. Impervious surfaces, excluding wetlands;
 2. Pervious surfaces (green areas, not including wetlands);
 3. Lakes, canals, retention areas, other open water areas; and
 4. Wetlands.
- D. Provide an engineering analysis of floodplain storage and conveyance (if applicable), including: The approved flood compensation design and drawing is included in Appendix A.
1. Hydraulic calculations for all proposed traversing works;
 2. Backwater water surface profiles showing upstream impact of traversing works;
 3. Location and volume of encroachment within regulated floodplain(s); and
 4. Plan for compensating floodplain storage, if necessary, and calculations required for determining minimum building and road flood elevations.
- E. Provide an analysis of the water quality treatment system including:
1. A description of the proposed stormwater treatment methodology that addresses the type of treatment, pollution abatement volumes, and recovery analysis; and
 2. Construction plans and calculations that address stage-storage and design elevations, which demonstrate compliance with the appropriate water quality treatment criteria.
- F. Provide a description of the engineering methodology, assumptions and references for the parameters listed above, and a copy of all such computations, engineering plans, and specifications used to analyze the system. If a computer program is used for the analysis, provide the name of the program, a description of the program, input and output data, two diskette copies, if available, and justification for model selection.

VI. Operation and Maintenance and Legal Documentation

- A. Describe the overall maintenance and operation schedule for the proposed system.

The Aquatic Organism Return System will be operated according to the requirements of the IWW permit for CCEC, and the discharge pipe will remain in place as long as the system is in operation. Routine maintenance on the in-water portion of the system will include removal of fouling organisms in the immediate vicinity of the pipe openings, and may involve temporary removal of the eight-foot end section of pipe in order to remove fouling organisms.

- B. Identify the entity that will be responsible for operating and maintaining the system in perpetuity if different than the permittee, a draft document enumerating the enforceable affirmative obligations on the entity to properly operate and maintain the system for its expected life, and documentation of the entity's financial responsibility for long-term maintenance. If the proposed operation and maintenance entity is not a property owner's association, provide proof of the existence of an entity, or the future acceptance of the system by an entity which will operate and maintain the system. If a property owner's association is the proposed operation and maintenance entity, provide copies of the articles of incorporation for the association and copies of the declaration, restrictive covenants, deed restrictions, or other operational documents that assign responsibility for the operation and maintenance of the system. Provide information ensuring the continued adequate access to the system for maintenance purposes. Before transfer of the system to the operating entity will be approved, the permittee must document that the transferee will be bound by all terms and conditions of the permit.

FPL will be the party responsible for operating and maintain the system.

- C. Provide copies of all proposed conservation easements, storm water management system easements, property owner's association documents, and plats for the property containing the proposed system.

N/A

- D. Provide indication of how water and waste water service will be supplied. Letters of commitment from off-site suppliers must be included.

N/A

- E. Provide a copy of the boundary survey and/or legal description and acreage of the total land area of contiguous property owned/controlled by the applicant.

N/A

VII. Water Use

N/A

- A. Will the surface water system be used for water supply, including landscape irrigation, or recreation.
- B. If a Consumptive Use or Water Use permit has been issued for the project, state the permit number.
- C. If no Consumptive Use or Water Use permit has been issued for the project, indicate if such a permit will be required and when the application for a permit will be submitted.
- D. Indicate how any existing wells located within the project site will be utilized or abandoned.

TABLE 1
Project Impact Summary

[illegible]

W1 = Wetland; **SW** = Surface water; **ID** = Identification number, letter, etc.

WL = Wetland; SW = Surface water; ID = Identification number, letter, etc.

Wetland Type: Use an established wetland classification system and, in the comments section below, indicate which classification system is being used.

Impact Code (Type): D = dredge; F = fill; H = change hydrology; S = shading; C = clearing; O = other. Indicate the final impact if more than one impact type is proposed in a given area. For example, show F only for an area that will first be dewatered and then backfilled.

Comments: * The pipe will total approximately 464 ft² (0.01 ac.) suspended approximately 6 inches above the substrate. Fill is limited to concrete anchor pads spaced 15 ft apart, comprising 105 ft² (0.002 ac.) of substrate.

SECTION G

Application for Authorization to Use Sovereign Submerged Lands

Part 1: Sovereign Submerged Lands title information (see Attachment 5 for an explanation). Please read and answer the applicable questions listed below:

A. I have a sovereign submerged lands title determination from the Division of State Lands which indicates that the proposed project is NOT ON sovereign submerged lands (Please attach a copy of the title determination to the application). Yes ☐ No ☒

- If you answered Yes to Question A and you have attached a copy of the Division of State Lands Title Determination to this application, you do not have to answer any other questions under Part I or II of Section G.

B. I have a sovereign submerged lands title determination from the Division of State Lands which indicates that the proposed project is ON sovereign submerged lands (Please attach a copy of the title determination to the application). Yes ☐ No ☒ **See Comment Below:**

In lieu of a sovereign lands title determination from the Division of State Lands, Attachment D includes the authorization to construct the existing sheet pile seawall adjacent to the proposed discharge pipe location.

- If you answered yes to question B please provide the information requested in Part II. Your application will be deemed incomplete until the requested information is submitted.

C. I am not sure if the proposed project is on sovereign submerged lands (please check here). ☐

- If you have checked this box department staff will request that the Division of State Lands conduct a title determination. If the title determination indicates that the proposed project or portions of the project are located on sovereign submerged lands you will be required to submit the information requested in Part II of this application. The application will be deemed incomplete until the requested information is submitted.

D. I am not sure if the proposed project is on sovereign submerged lands and I DO NOT WISH to contest the Department's findings (please check here). ☒

- If you have checked this box refer to Part II of this application and provide the requested information. The application will be deemed incomplete until the requested information is submitted.

E. It is my position that the proposed project is NOT on sovereign submerged lands (please check here) ☐

- If you have evidence that indicates that the proposed project is not on sovereign submerged lands please attach the documentation to the application. If the Division of State Lands title determination indicates that your proposed project or portion of your proposed project are on sovereign submerged lands you will be required to provide the information requested in Part II of this application.

F. If you wish to contest the findings of the title determination conducted by the Division of State Lands please contact the Department of Environmental Protection's Office of General Counsel. Your proposed project will be deemed incomplete until either the information requested in Part II is submitted or a legal ruling indicates that the proposed project is not on sovereign submerged lands.

Part II: If you were referred to this section by Part I, please provide this additional information. Please note that if your proposed project is on sovereign submerged lands and the below requested information is not provided, your application will be considered incomplete.

A. Provide evidence of title to the subject riparian upland property in the form of a recorded deed, title insurance, legal opinion of title, or a long-term lease which specifically includes riparian rights. Evidence submitted must demonstrate that the application has sufficient title interest in the riparian upland property.

N/A

B. Provide a detailed statement describing the existing and proposed upland uses and activities. For commercial uses, indicate the specific type of activity, such as marina, ship repair, dry storage (including the number of storage spaces), commercial fishing/seafood processing, fish camp, hotel, motel resort restaurant, office complex, manufacturing operation, etc.

The upland use will remain as a power plant, and a modernized facility named Cape Canaveral Energy Center is currently under construction. As part of Industrial Wastewater Facility Permit FL0001473-012, FPL is required to develop and install an organism return system to return live fish, shellfish, and other aquatic organisms collected or trapped on the intake screens to their natural habitat. FPL proposes to install modified Ristroph-type through-flow traveling screens with 3/8-inch smooth mesh and an aquatic organism handling and return system that discharges to an organism return conduit that returns organisms to the Indian River Lagoon.

For rental operations, such as trailer or recreational vehicle parks and apartment complexes, indicate the number of wet slip units/spaces available for rent or lease and describe operational details (e.g., are spaces rented on a month-to-month basis or through annual leases).

For multi-family residential developments, such as condominiums, townhomes, or subdivisions, provide the number of living units/lots and indicate whether or not the common property (including the riparian upland property) is or will be under the control of a homeowners association.

For projects sponsored by a local government, indicate whether or not the facilities will be open to the general public. Provide a breakdown of any fees that will be assessed, and indicate whether or not such fees will generate revenue or will simply cover costs associated with maintaining the facilities.

C. Provide a detailed statement describing the existing and proposed activities located on or over the sovereign submerged lands at the project site. This statement must include a description of docks and piers, types of vessels (e.g., commercial fishing, liveaboards, cruise ships, tour boats), length and draft of vessels, sewage pumped facilities, fueling facilities, boat hoists, boat ramps, travel lifts, railways, and any other structure or activities existing or proposed to be located waterward of the mean/ordinary high water line.

If slips are existing and/or proposed, please indicate the number of powerboat slips and sailboat slips and the percentage of those slips available to the general public on a "first come, first served" basis. This statement must include a description of channels, borrow sites, bridges, groins, jetties, pipelines, or other utility crossings, and any other structures or activities existing or proposed to be located waterward of the mean/ordinary high water line. For shoreline stabilization activities, this statement must include a description of seawalls, bulkheads, riprap, filling activities, and any other structure or activities existing or proposed to be located along the shoreline.

As part of the Cape Canaveral Energy Center's Industrial Wastewater Facility Permit FL0001473-012, FPL is required to develop and install an organism return system to return live fish, shellfish, and other aquatic organisms collected or trapped on the intake screens to their natural habitat.

Aquatic organisms that are collected in the organism return trough system will be routed through an 18-inch pipe that is partially filled with water to a depth of approximately 6 to 7 inches. The organisms will be sluiced to the end of the pipe at a safe rate of movement, where they will be discharged into the Indian River Lagoon at a depth of approximately 3.5 feet. The discharge pipe will be located approximately 5 feet south of the existing sheet pile seawall on the southern edge of the cooling water intake canal. The pipe will extend

approximately 300 feet east of the shoreline and will be held in place by concrete anchors spaced at approximately 15 foot intervals.

D. Provide the linear footage of shoreline at the mean/ordinary high water line owned by the application which borders sovereign submerged lands.

N/A

E. Provide a recent aerial photo of the area. A scale of 1"=200' is preferred. Photos are generally available at minimal cost from your local government property appraiser's office or from district Department of Transportation offices. Indicate on the photo the specific location of your property/project site.

See Attachment A, Figure 5— Overall Plan View Aerial

PROPRIETARY PROJECT DESCRIPTIONS

Please check the most applicable activity which applies to your project(s):

Leases

- ☐ Commercial marinas (renting wet slips) including condos, etc., if 50% or more of their wet slips are available to the general public
- ☐ Public/Local governments
- ☐ Yacht Clubs/Country Clubs (when a membership is required)
- ☐ Condominiums (requires upland ownership)
- ☐ Commercial Uplands Activity (temporary docking and/or fishing pier associated with upland revenue generating activities, i.e., restaurants, hotels, motels) for use of the customer at not charge
- ☐ Miscellaneous Commercial Upland Enterprises where there is a charge associated with the use of overwater structure (Charter Boats, Tour Boats, Fishing Piers)
- ☐ Ship Building/Boat Repair Service Facilities
- ☐ Commercial Fishing Related (Offloading, Seafood Processing)
- ☐ Private Single-family Residential Docking Facilities; Townhome Docking Facilities; Subdivision Docking Facilities (upland lots privately owned)

Public Easements and Use Agreements

- ☐ Miscellaneous Public Easements and Use Agreements
- ☐ Bridge Right-of-way (DOT, local government)
- ☐ Breakwater of groin
- ☐ Subaqueous Utility Cable (TV, telephone, electrical)
- ☒ Subaqueous Outfall or Intake
- ☐ Subaqueous Utility Water/Sewer
- ☐ Overhead Utility w/Support Structure on Sovereign Submerged Lands
- ☐ Disposal Site for Dredged Material
- ☐ Pipeline (gas)
- ☐ Borrow Site

Private Easements

- ☐ Miscellaneous Private Easements
- ☐ Bridge Right-of-way
- ☐ Breakwater Groin
- ☐ Subaqueous Utility Cable (TV, telephone, electrical)
- ☐ Subaqueous Outfall or Intake
- ☐ Subaqueous Utility Water/Sewer
- ☐ Overhead Utility Crossing
- ☐ Disposal Site for Dredged Material
- ☐ Pipeline (gas)

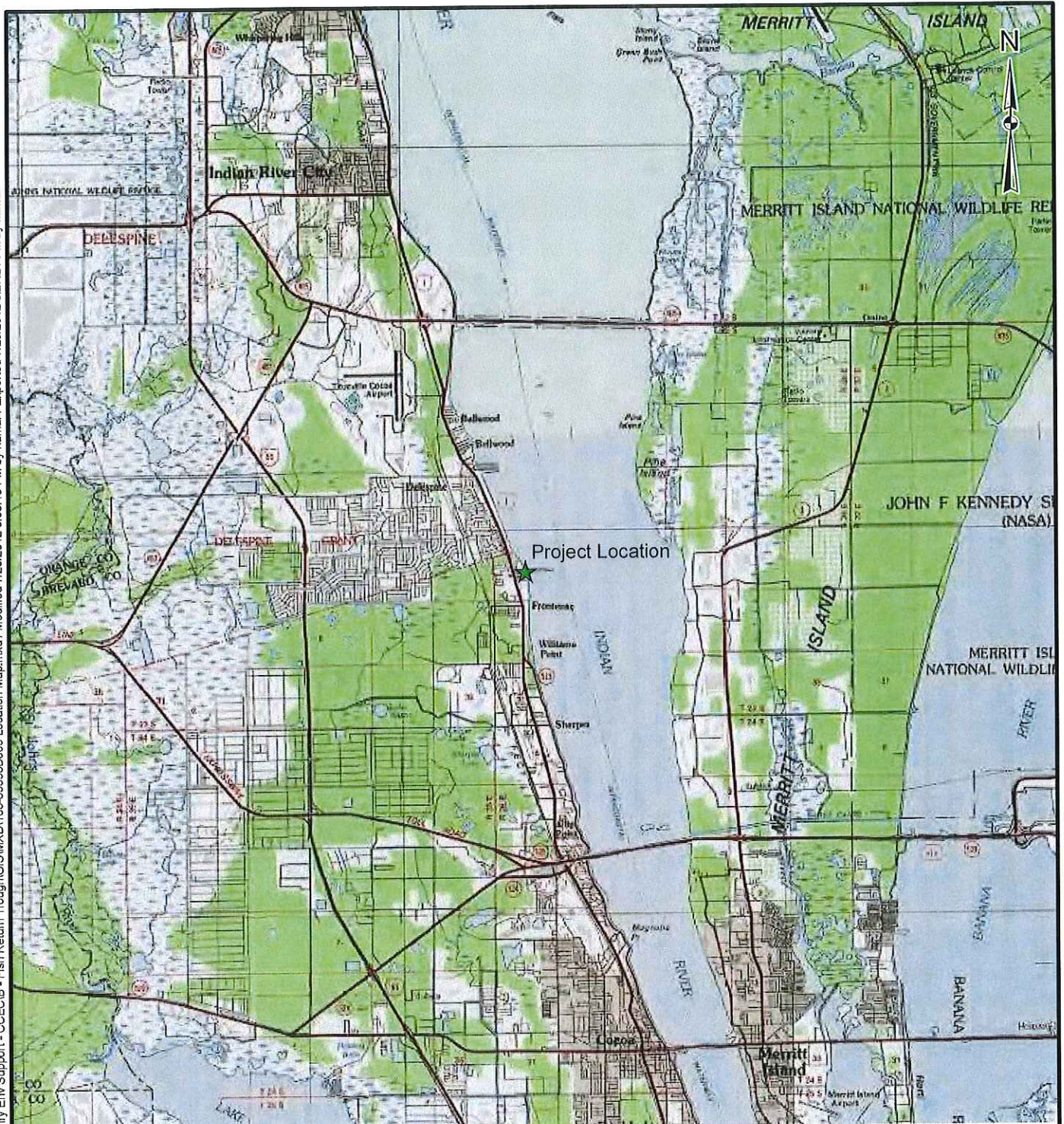
Consents of Use

- ☐ Aerial Utility Crossing w/no support structures on sovereign submerged lands
- ☐ Private Dock
- ☐ Public Dock
- ☐ Multi-family Dock
- ☐ Fishing Pier (private or Multi-family)
- ☐ Private Boat Ramp
- ☐ Sea Wall
- ☐ Dredge
- ☐ Maintenance Dredge
- ☐ Navigation Aids/Markers
- ☐ Artificial Reef
- ☐ Riprap
- ☐ Public Boat Ramp
- ☐ Public Fishing Pier
- ☐ Repair/Replace Existing Public Fishing Pier
- ☐ Repair/Replace Existing Private Dock
- ☐ Repair/Replace Existing Public Dock
- ☐ Repair/Replace Existing Multi-family Dock
- ☐ Repair/Replace Existing Fishing Pier (Private or Multi-family)
- ☐ Repair/Replace Existing Private Boat Ramp
- ☐ Repair/Replace Existing Sea Wall, Revetments, or Bulkheads
- ☐ Repair/Replace/Modify structures/activities within an existing lease, easement, management agreement or use agreement area or repair/replace existing grandfathered structures
- ☐ Repair/Replace Existing Public Boat Ramp

Miscellaneous

- ☐ Biscayne Bay Letters of Consistency/Inconsistency w/258.397, F.S.
- ☐ Management Agreements - Submerged Lands
- ☐ Reclamation
- ☐ Purchase of Filled, Formerly Submerged Lands
- ☐ Purchase of Reclaimed Lake Bottom
- ☐ Treasure Salvage
- ☐ Insect Control Structures/Swales
- ☐ Miscellaneous projects which do not fall within the activity codes listed above

ATTACHMENT A
FIGURES



LEGEND

- ★ Project Location



12,000 0 12,000 Feet

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RWW
------	------	-----	----------------------	-----	-----	-----

PROJECT FPL CAPE CANAVERAL
ENERGY CENTER AQUATIC
ORGANISM RETURN SYSTEM

TITLE
PROJECT LOCATION MAP

REFERENCES

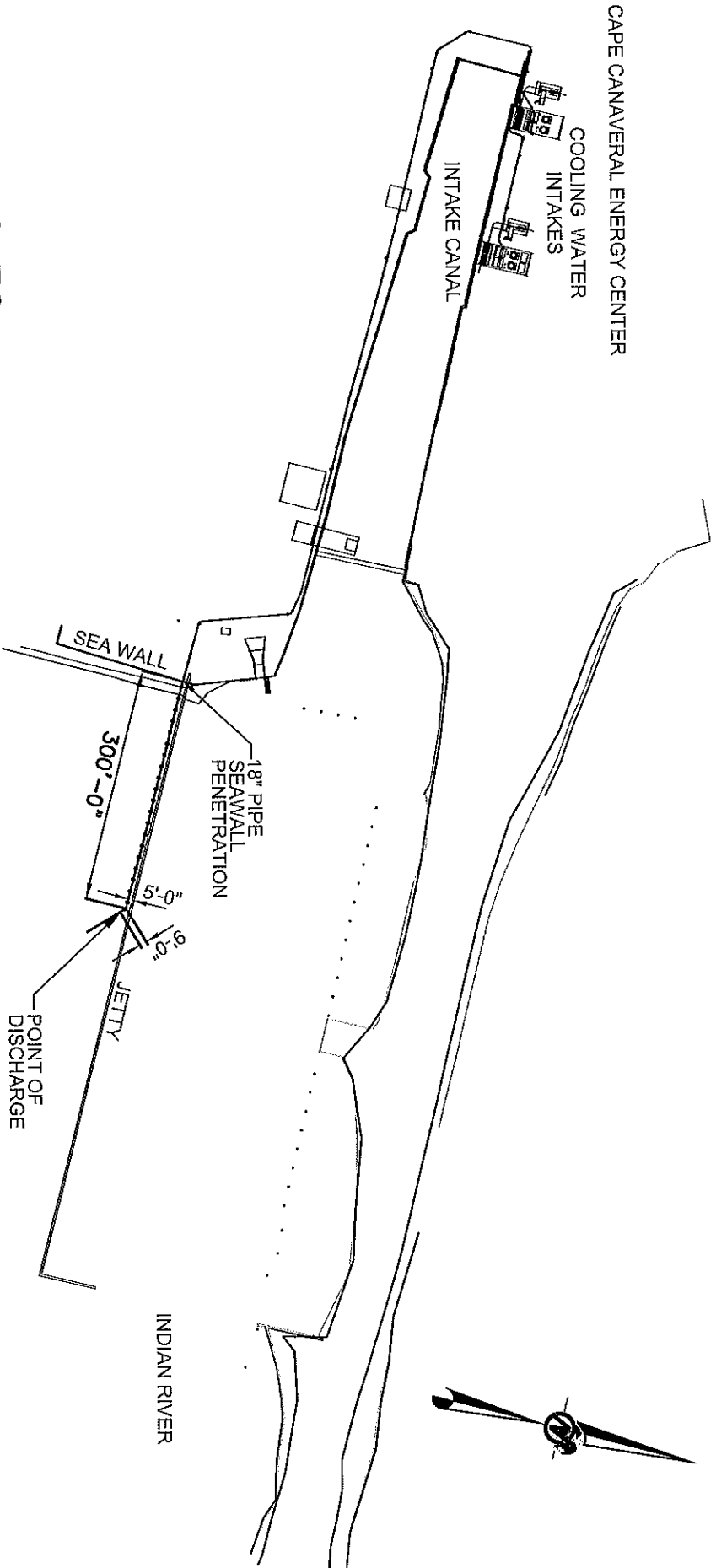
1. Project Location, Golder Associates Inc., 2012

Topo Map Supplied by ©2011 National Geographic Society, i-cubed Licensed Under ESRI Inc. and its Data Suppliers. Accessed 7/25/2012



PROJECT No.	103-89593	FILE No.	103-89593B009
DESIGN	MH	7/2/2012	SCALE: AS SHOWN
GIS	NRL	7/25/2012	REV. 0
CHECK	MH	7/25/2012	
REVIEW	KAB	7/25/2012	

FIGURE 1



GENERAL NOTES

1. 18" SDR-17 HDPE
2. PIPE CLAMPED TO CONCRETE ANCHORS WITH STAINLESS STEEL CLAMPS, WEIGHT PER ANCHOR = 400 LBS. DRYSLLOT WILL BE CUT IN SEAWALL DOWN TO ELEVATION -0.04'

FIGURE 2

PROJECT No. 103-89593	FILE No. 10389593B010	REV. 0	SCALE AS SHOWN	DESIGN	MEH	07/03/12	CADD	JCB	07/05/12	CHECK	MEH	07/25/12	REVIEW	KAB	07/25/12
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TITLE

OVERALL PLAN VIEW

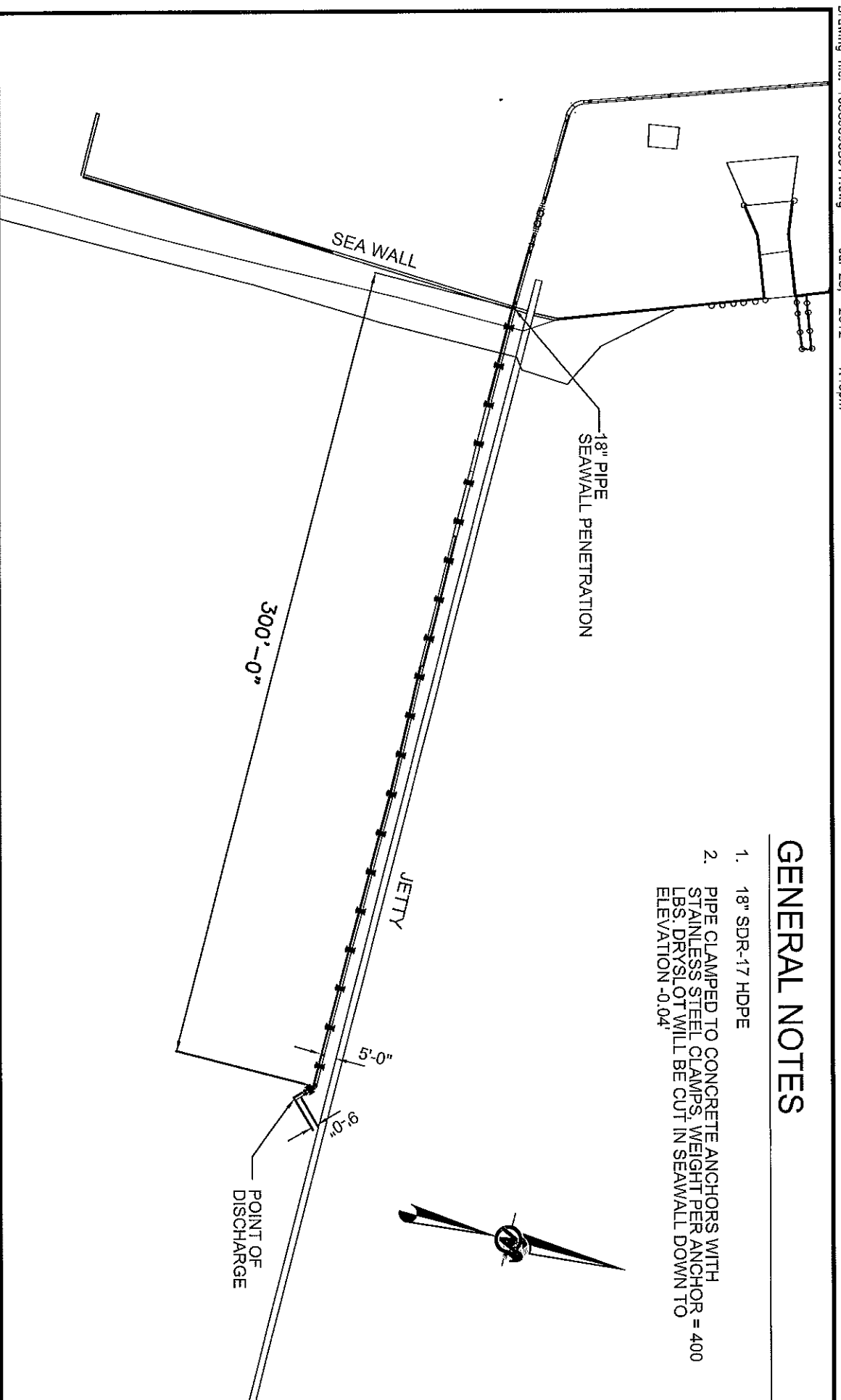
PROJECT

FPL CAPE CANAVERAL
ENERGY CENTER AQUATIC
ORGANISM RETURN SYSTEM



GENERAL NOTES

1. 18" SDR-17 HDPE
2. PIPE CLAMPED TO CONCRETE ANCHORS WITH STAINLESS STEEL CLAMPS. WEIGHT PER ANCHOR = 400 LBS. DRY SLOT WILL BE CUT IN SEAWALL DOWN TO ELEVATION -0.04'



DETAILED PLAN VIEW

TITLE

PROJECT

FPL CAPE CANAVERAL
ENERGY CENTER AQUATIC
ORGANISM RETURN SYSTEM



PROJECT No. 103-89593	FILE No. 10389593B010	REV. 0	SCALE AS SHOWN	DESIGN	MEH	07/03/12	CADD	JCB	07/05/12	CHECK	MEH	07/25/12	REVIEW	KAB	07/25/12
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FIGURE 3

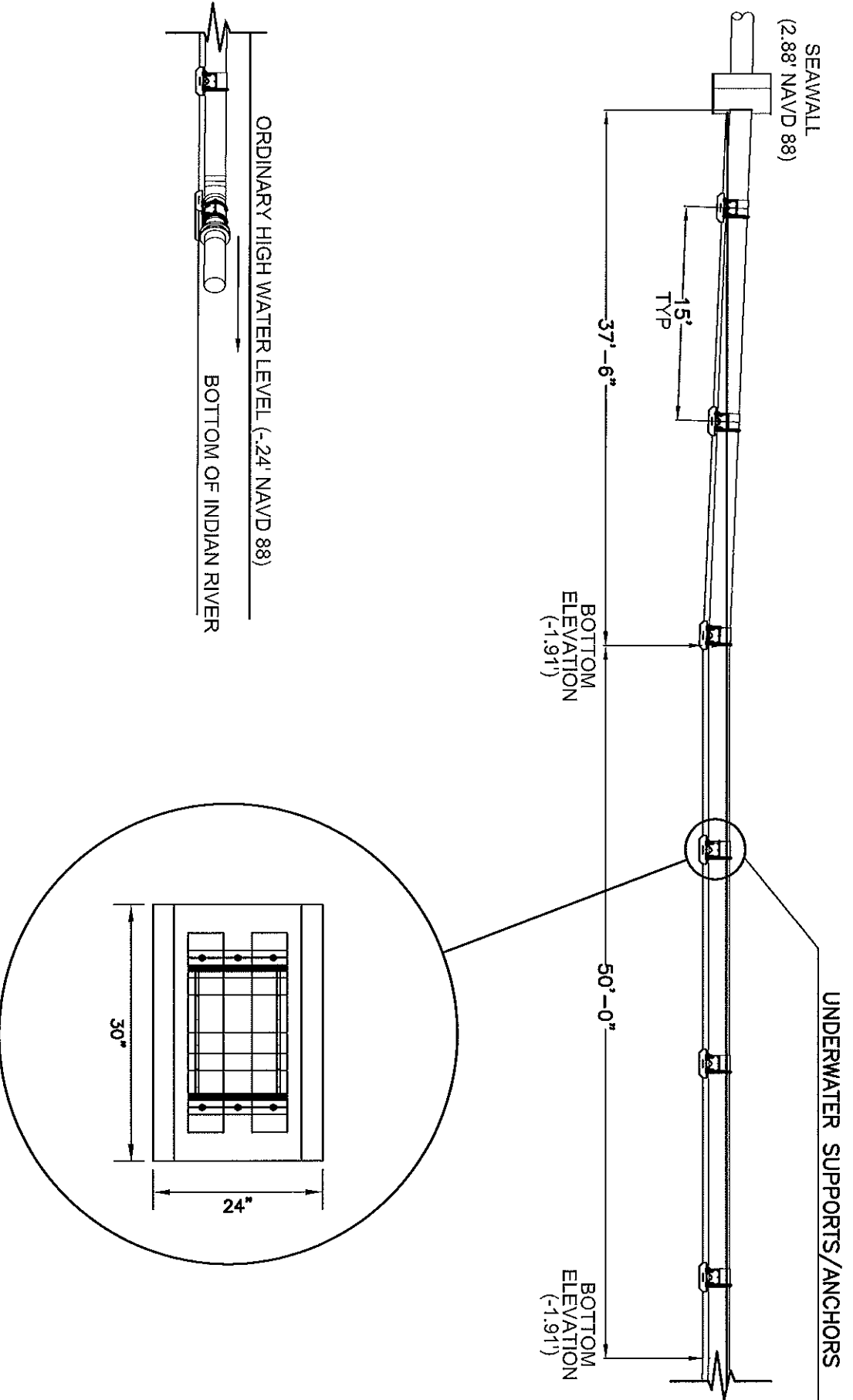


FIGURE 4

PROJECT No. 103-89593	FILE No. 10389593B010	REV. 0	SCALE AS SHOWN	DESIGN	MEH	07/03/12	CADD	JCB	07/05/12	CHECK	MEH	07/25/12	REVIEW	KAB	07/25/12
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TITLE

DETAILED PROFILE VIEW

PROJECT

FPL CAPE CANAVERAL
ENERGY CENTER AQUATIC
ORGANISM RETURN SYSTEM

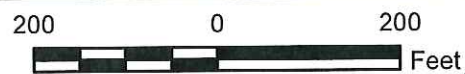


- LEGEND**
- Aquatic Organism Return System Return Pipeline
 - Cooling Water Intakes
 - Seawall

REFERENCES

1. AOR System Return Pipeline, Equipment, Jetty Seawall, Zachary Engineering, 2012
2. Bing Imagery Supplied by Microsoft® Virtual Earth Bing Map™ License Under ESRI Inc. ©2010 Microsoft Corporation and its Data Suppliers. Accessed 7/25/2012

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet
Projection: Transverse Mercator
Datum: North American 1983



REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RWW
PROJECT: FPL CAPE CANAVERAL ENERGY CENTER AQUATIC ORGANISM RETURN SYSTEM						
TITLE: OVERALL PLAN VIEW (AERIAL)						
PROJECT No. 103-89593		FILE No. 10389593_B013		SCALE: AS SHOWN REV. 0		
DESIGN	MEH	7/3/2012	FIGURE 5			
GIS	NRL	7/25/2012				
CHECK	MEH	7/8/2012				
REVIEW	MEH	7/8/2012				

**Golder Associates**

ATTACHMENT B
2012 MANATEE CONDITIONS

STANDARD MANATEE AND MARINE TURTLE CONSTRUCTION CONDITIONS FOR IN-WATER WORK

March 2012

The permittee shall comply with the following conditions intended to protect manatees and marine turtles from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of marine turtles, manatees and manatee speed zones, and the need to avoid collisions with (and injury to) these protected marine species. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees and marine turtles cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee or marine turtle movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of marine turtles and manatee(s). All in-water operations, including vessels, must be shutdown if a marine turtle or manatee comes within 50 feet of the operation. Activities will not resume until the animal(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the animal(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a marine turtle or manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922, and to FWC at ImperiledSpecies@myFWC.com. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service (for north Florida, Jacksonville 1-904-731-3336 or for south Florida Vero Beach 1-772-562-3909).
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.
- g. Lighting on offshore or onshore equipment including dredge, crew boats, and all ancillary vessels shall be minimized through reduction, shielding, lowering, and appropriate placement to avoid excessive illumination of the water's surface and visibility from adjacent marine turtle nesting beaches while meeting all Coast Guard, EM 385-1-1, and OSHA requirements. Light intensity of all fixtures on the vessels shall be reduced to the minimum standard required by OSHA for General Construction areas, in order not to misdirect marine turtles. Lights used to survey nearshore or inlet waters for manatees and sea turtles shall be mounted as low as possible and aimed to minimize visibility from adjacent nesting beaches. Shields shall be affixed to the light housing and be large enough to block light from all lamps from being transmitted outside the construction area.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:



Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC

ATTACHMENT C
SEAGRASS SURVEY



AORS SEAGRASS SURVEY

AQUATIC ORGANISM RETURN SYSTEM SEAGRASS SURVEY

FPL Cape Canaveral Energy Center

Submitted To: Florida Power & Light Company
Cape Canaveral Energy Center
6000 North US Highway 1
Cocoa, FL 32927-6081

Submitted By: Golder Associates Inc.
5100 W. Lemon Street, Suite 208
Tampa, FL 33609 USA

July 2012

103-89593

**A world of
capabilities
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1.0 INTRODUCTION

Golder Associates Inc. (Golder) performed a seagrass assessment at the Cape Canaveral Energy Center (CCEC) in support of the Aquatic Organism Return System (AORS) design efforts. Golder is pleased to present you with this report, which summarizes the seagrass transect surveys that occurred on June 19, 2012. The objective of the seagrass assessment was to field verify the presence of seagrass in the vicinity of the proposed AORS discharge pipe location. The information from the seagrass assessment will be used in determining the final location of the AORS pipe terminus and will help determine the permitting requirements for the chosen option.

2.0 ASSESSMENT METHODOLOGY

Prior to conducting the field assessment, five transects were established using GIS and coordinates transferred to a Trimble handheld GPS. The transects were spaced 20 meters (m) apart with the exception of Transect 1 which was located 3 m south of the existing sheet pile jetty (Figure 1). Sample points were established every 10 m along each transect. At each sampling point, a 1-m² PVC quadrat was placed upon the substrate for a total of 65 unique sampling quadrats. The data collected at each quadrat included seagrass presence/absence, species identification, and species abundance in accordance with the Braun-Blanquet ranking:

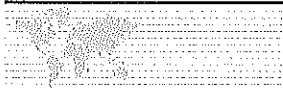
■ + = few	■ 3 = 26-50%
■ 1 = <5%	■ 4 = 51-75%
■ 2 = 6-25%	■ 5 = 76-100%

In addition, the approximate water depth was measured to the nearest 0.1 m at each sampling point.

3.0 TRANSECT RESULTS

One species of seagrass, shoal grass (*Halodule wrightii*), was observed within the survey area, occurring in 25 of 65 (39 percent) quadrats surveyed. Seagrass abundance was sparse, ranging from a few individuals to 25% coverage. Seagrass distribution throughout the survey area was patchy, with no seagrass occurring at the majority of the sampling points (Figure 1). In 4 of the 5 transects, seagrass was observed in multiple sampling points, but it occurred at only one location along Transect 1, closest to the existing sheet pile jetty. The single observation on Transect 1 was located approximately 90 meters from the shoreline (Figure 1), and did not extend to the jetty.





Based on the results of the survey, specifically Transect 1, there is a 10-foot wide corridor immediately south of the existing sheet pile jetty extending approximately 350 feet (ft) from shore within which there is no seagrass. The depth of water at the eastern end of Transect 1 was approximately 4 ft at the time of the survey.

If you have any questions or comments about the seagrass survey or this report, please contact us at (352) 336-5600.

Sincerely,

GOLDER ASSOCIATES INC.

Michael Harrington, Ph.D.
Ecology Group Director

Brandon Johnson
Project Scientist

cc: Andy Flajole (electronic)

Attachments
MEH/bj/shm

Map Document: TB-PS-A.mxd / Modified 3/15/2010 5:11:02 PM / Plotted 3/16/2010 3:12:54 PM by flamar



LEGEND

1.2 Depth (m)

→ Transects

Survey Areas

Seagrass Observed Abundance

- No
- Yes

Species

Halodule wrightii

FWC Seagrass Segments

- Continuous
- Discontinuous

- + = few
- 1 = < 5% cover
- 2 = 5 - 25% cover
- 3 = 26 - 50% cover
- 4 = 51 - 75% cover
- 5 = 76 - 100% cover

REFERENCES

1. Transects, Survey Areas, Seagrass Observations, Golder Associates Inc., 2012
2. Seagrass Segments, FWC, 2010
3. Bing Imagery Supplied by Microsoft® Virtual Earth Bing Map™ License Under ESRI Inc. ©2010 Microsoft Corporation and its Data Suppliers. Accessed 7/10/2012

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RWW
PROJECT						
FPL CAPE CANAVERAL ENERGY CENTER						
TITLE						
AQUATIC ORGANISM RETURN SEAGRASS ASSESSMENT						
PROJECT No. 103-89593 FILE No. 10389593_C002						
DESIGN	MH	6/20/2012	SCALE: AS SHOWN	REV. 0	FIGURE 1	
GIS	NRL	7/6/2012				
CHECK	BSJ	7/6/2012				
REVIEW	MH	7/6/2012				



At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

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North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

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5100 W. Lemon Street, Suite 208
Tampa, FL 33609 USA
Tel: (813) 287-1717
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ATTACHMENT D
SEAWALL AUTHORIZATION

000010

NOT MICROFILM QUALITY

May 30, 1972

Mr. W. T. Carlton, Chief
Bureau of Beaches & Shores
State of Florida
Department of Natural Resources
107 W. Gaines Street
Tallahassee, Florida 32304

Dear Mr. Carlton:

Re: Proposed Seawall Along Barge Canal
Indian River at Jones Point
Cape Kennedy Plant, Brevard County, Fla.
FPL File No. PCK-E-6

Florida Power & Light Company hereby makes application to construct a seawall along the barge canal in Indian River at Jones Point, Brevard County, Florida at the Cape Kennedy Power Plant on Florida Power & Light Company property. Attached are five copies of FPL Drawing No. A-60699 showing location and details of the proposed construction.

Enclosed is Florida Power & Light Company Check No. 1388 in the amount of \$100.00 payable to the Department of Natural Resources to cover the cost of processing this application.

Your attention to this application is very much appreciated.

Sincerely,

W. J. Barrow
Department of Environmental Affairs

WJB:jjo
Enc.

cc: Mr. B. N. Goode, Corps of Engineers
Mr. W. E. Linne, Department of Pollution Control

bcc: W. C. Spain
R. W. Jones - Tallahassee

NOT MICROFILM QUALITY

000011

Mr. E. C. Jones
PCC Plant Manager

W. J. Barrow, Jr./Judy Oyler

PERMITS AUTHORIZING CONSTRUCTION
OF THE PROPOSED SEAWALL AT THE
CAPE CANAVERAL PLANT

Environmental Dept.
Room 900, Ponce Bldg.
Miami, Florida
June 25, 1974

T. R. Moffatt, Jr.
W. H. Rogers, Jr.
A. L. Schmidt/L. E. Cooke
Wayne Skow - Gen. Eng.
Doc Files (W/Orig.)

Attached are the following permits authorizing the construction of a seawall at the Cape Canaveral Plant:

1. Letter from Brevard County dated April 18, 1974 approving the project.
2. Telegram from the State of Florida Board of Trustees of the Internal Improvement Trust Fund dated May 24, 1974, granting emergency authorization to proceed with the construction of the seawall.
3. Florida Department of Pollution Control letter dated June 10, 1974 waiving the requirement for water quality certification, but with two stipulations. Please see the letter for details of the stipulations.
4. Corps of Engineers Permit No. 74C-0458 issued on June 18, 1974 authorizing the construction of the seawall. Please note the requirements that the Corps be advised of the date of the start of construction, the dates of any suspension and resumption of work, and the date of the final completion of the work. Please see that this information is supplied to our office and we will notify the Corps of Engineers.

If you have any questions, please call Judy Oyler on Ext. 373 in the Ponce Building.

Judy Oyler

Enc.

ACCOUNT

APPLICATION BY
FLORIDA POWER & LIGHT COMPANY
DATE: APRIL 26, 1972 SCALE: SHOWN
A-60698

POSTED 10-1-98

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State of Florida



000015

DEPARTMENT OF NATURAL RESOURCES

RANDOLPH HODGES
Executive Director

LARSON BUILDING / TALLAHASSEE 32304 / TELEPHONE 224-7141

REUBEN OT. ASKEW
Governor
RICHARD (DICK) STONE
Secretary of State
ROBERT L. SHEVIN
Attorney General
FRED O. MCKINSON, JR.
Comptroller
THOMAS P. O'MALLEY
Treasurer
DOYLE CONNER
Commissioner of Agriculture
FLOYD T. CHRISTIAN
Commissioner of Education

PUBLIC NOTICE

June 21, 1972

TO WHOM IT MAY CONCERN:

The Bureau of Beaches and Shores has received an application for a Coastal Construction Permit as described below:

APPLICANT: Florida Power and Light Company

LOCATION: Jones Point in the Indian River along a Barge Canal at the Cape Kennedy Power Plant in Brevard County

WORK: Construct a Concrete Sheet Pile Breakwater 800 feet long

This public notice is being distributed in order to assist in developing facts on which decision by the Bureau of Beaches and Shores can be based. For accuracy and completeness of the record, all data in support of, or in opposition to, the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition. The decision as to whether a permit will be issued will be based on an evaluation of the impact on the public interest of the proposed work. Comments on this impact will be accepted and made part of the record and will be considered in determining whether it would be in the best interest to grant a permit. Plans of the proposed work may be seen at the office of the Bureau of Beaches and Shores at the above address.

If the Bureau of Beaches and Shores does not receive a reply from you by July 5, 1972, it will be assumed that you have no objections to this project.

H. P. Carlton
H. P. Carlton, Chief
Bureau of Beaches and Shores

RECEIVED

JUN 23 1972

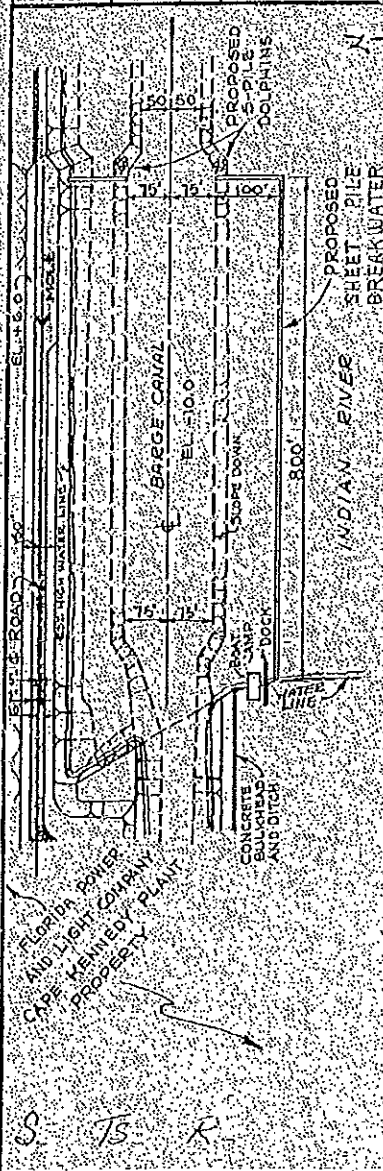
Env 1, Plann. #2

DRAWN BY KCU
 CHECKED JH
 CORRECT JH

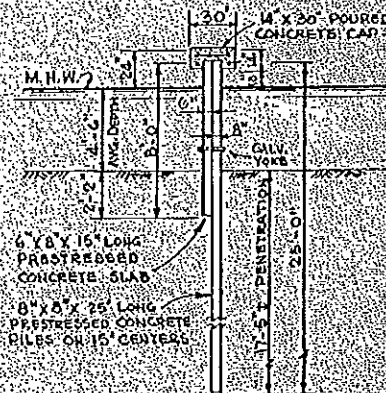
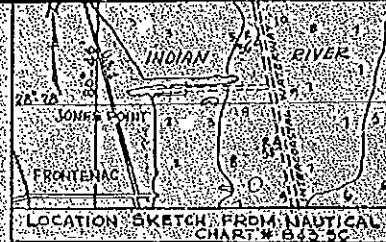
000016
 NOT MICROFILM QUALITY

APPROVED
Admiral
 Supt. of Generating Station

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PLAN
 0 100 200 300
 SCALE IN FEET



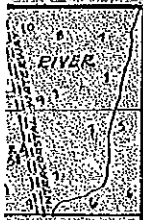
NOTE
 ELEVATION 0.0 IS M.L.W. IN THE
 INTRACOASTAL WATERWAY BETWEEN
 COCA AND TITUSVILLE WHICH IS
 0.1 FEET BELOW MEAN SEA LEVEL.

CAPE KENNEDY PLANT
 PROPOSED SEAWALL
 ALONG BARGE CANAL
 IN INDIAN RIVER AT JONES POINT
 BREVARD COUNTY, FLORIDA

APPLICATION BY
 FLORIDA POWER & LIGHT COMPANY
 DATE APRIL 26, 1972 SCALE SHOWN
 A-60690

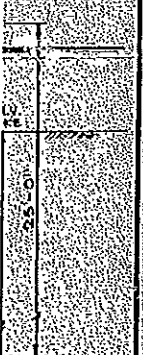
ED:

CRATING STATIONS



NAUTICAL
845 50

POURED
CONCRETE CAP



ION
WALL

THE
BETWEEN
H-15
LEVEL

PLANT
VALL
ANAL
JONES POINT
Y FLORIDA

F COMPANY
WALL SHOWN
A-60698

NOT MICROFILM QUALITY

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STATE OF FLORIDA

DEPARTMENT OF NATURAL RESOURCES

COASTAL CONSTRUCTION PERMIT AND AGREEMENT

No. DES 72-28

THIS PERMIT AND AGREEMENT, made and entered into this 1st day of August, 1972, between the DEPARTMENT OF NATURAL RESOURCES OF THE STATE OF FLORIDA, herein after called the Department, party of the first part, and Florida Power and Light Company

hereinafter called the Permittee, party of the second part.

WITNESSETH: That for and in consideration of the payment of \$100.00 and other good and valuable consideration, the Department does hereby grant the Permittee, under the provisions of Sections 161.041 and 161.051, Florida Statutes, and subject to the specific terms and conditions hereinafter set forth, the right to perform the work or activity described as follows:

To construct a concrete sheetpile breakwater 800 feet long,

upon the sovereignty lands of the State of Florida, below the mean high water line, at the following described location in Indian River County, Florida, to-wit:

Approximately 7 miles north of Cocoa at Jones Point in the Indian River along a barrier canal at Cape Kennedy Power Plant.

The right to perform such work or activity is granted subject to the applicable provisions of law and the following terms and conditions:

(1) The Permittee shall comply with any specific requirements imposed in this case by the Bureau of Beaches and Shores of the Department, attached hereto and made a part of this permit and agreement.

(2) The Permittee shall in no way obstruct or impair the use of the beach by the public in the area below the mean high water line, except to a minimum extent determined by the Bureau of Beaches and Shores to be unavoidable.

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(3) The rights granted by this permit and agreement shall not be construed as a conveyance of title to or a waiver of rights in the sovereignty lands held by the Board of Trustees of the Internal Improvement Trust Fund and the State of Florida.

(4) The Permittee hereby agrees to hold and save the Department, the Trustees of the Internal Improvement Trust Fund and the State of Florida harmless from any damage to persons or property which might result from the work or activity permitted hereunder.

(5) The Permittee agrees to adjust, alter or remove any structure or other physical evidence of the work or activity permitted hereunder, as directed by the Bureau of Beaches and Shores of the Department, if in the opinion of the Department the structure, work or activity in question results in damage to surrounding property or otherwise proves to be undesirable or becomes unnecessary. Adjustment, alteration or removal required under this provision shall be accomplished by the Permittee at no cost to the State of Florida. The decision of the Department as to whether adjustment, alteration or removal is required shall be final, and the Department shall set reasonable time limits within which adjustment, alteration or removal shall be accomplished.

(6) In the event the Permittee does not adjust, alter or remove the structures or other physical evidence of the work or activity permitted hereunder, at the Permittee's expense, after written notice by the Bureau of Beaches and Shores and an opportunity for the Permittee to be heard (request for such hearing must be filed by the Permittee with the Department within 20 days after such notice), adjustment, alteration or removal may be accomplished by the Department at its own expense, and the cost thereof shall become a lien upon the upland property of the Permittee.

(7) The Permittee agrees to provide the Department with an acceptable surety bond in the amount of _____ Dollars (\$ _____), for such period or periods of time as may be required, to guarantee full compliance by the Permittee with provisions, terms and conditions of this permit and agreement. Requirement for such bond may be waived, discontinued at anytime, renewed for successive terms or kept in force perpetually, at the discretion of the Bureau of Beaches and Shores of the Department.

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3-000019

(8) When the project is completed the Permittee agrees to furnish certification by a professional engineer, registered in the State of Florida, that the project has been completed and is acceptable and satisfactory in accordance with the plans and specifications approved hereby.

(9) It is expressly understood that this permit and agreement does not relieve the Permittee of responsibility for compliance with permit requirements of the U. S. Army Corps of Engineers and any applicable local laws and regulations.

IN WITNESS WHEREOF, the Executive Director of the Department of Natural Resources of the State of Florida and Florida Power and Light Company have set their hands and have caused these presents to be duly executed on the date first above written.

ATTEST:

[Signature] (SEAL)
EXECUTIVE DIRECTOR

EXECUTIVE SECRETARY

WITNESSES:

[Signature] (SEAL)
PERMITTEE
ACTING DIRECTOR OF
ENVIRONMENTAL AFFAIRS

[Signature]

[Signature]

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000020

FLORIDA DEPARTMENT OF NATURAL RESOURCES
Bureau Of Beaches And Shores

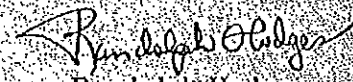
COASTAL CONSTRUCTION PERMIT

No. BBS 72-28 Date Issued August 1 19 72

FOR TO CONSTRUCT A CONCRETE SHEETPILE BREAKWATER 800 FEET LONG

LOCATION APPROXIMATELY 7 MILES NORTH OF COCOA AT JONES POINT IN THE INDIAN RIVER ALONG A BARGE CANAL AT CAPE KENNEDY POWER PLANT

PERMITTEE FLORIDA POWER AND LIGHT COMPANY


Randolph Hodges
Executive Director

MUST BE POSTED ON CONSTRUCTION SITE

NOT MICROFILM QUALITY

State of Florida



000021

DEPARTMENT OF NATURAL RESOURCES

RANDOLPH HODGES
Executive Director

LARSON BUILDING / TALLAHASSEE 32304 / TELEPHONE 224-7141

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RICHARD (DICK) STONE
Secretary of State
ROBERT T. SIEVIN
At-Large Council
FRED O. DICKINSON, JR.
Comptroller
THOMAS D. O'MALLEY
Treasurer
DOYLE CONNER
Commissioner of Agriculture
FLOYD T. CHRISTIAN
Commissioner of Education

August 1, 1972

Mr. W. J. Barrow
Department of Environmental Affairs
Florida Power and Light Company
Post Office Box 3100
Miami, Florida 33101

Dear Mr. Barrow:

RE: Your application for a coastal
construction permit, File
Number 72-28

Your request for a Coastal Construction Permit to construct a concrete sheetpile breakwater 800 feet long at Jones Point in the Indian River approximately seven miles north of Cocoa along a barge canal at the Cape Kennedy Power Plant in Brevard County, Florida, was approved August 1, 1972, in accordance with plans and specifications submitted with application, by the Head of the Department of Natural Resources (Governor and Cabinet) and assigned permit number BHS 72-28.

Your formal permit, executed by the Executive Director of this Department, is enclosed. I am also enclosing a poster which should be prominently displayed on the construction site during the entire time of construction.

It is requested that your Engineer complete the Certificate of Engineer (enclosed) and return it to this office upon completion of construction, so we may finalize our file on your permit.

Sincerely,

Ira W. Brown
Bureau of Beaches and Shores

IWB:sp

Enclosures

cc: John Dubose, T.I.T.F., with enclosure of permit
Corps of Engineers, Jacksonville District, w/permit
Florida Marine Patrol, Area 6, w/permit
R. J. Strickland
Robert Routh, Survey and Management
David Weaver, Brevard County Engineer, w/permit

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MARINE RESOURCES • RECREATION AND PARKS