### **NASSAU COUNTY - SAISSA** Task Order Memorandum Contract CM1852

To: Olsen Associates, Inc. Date: 04 August 2017 2618 Herschel St. Contract: Coastal Engineering

Jacksonville, FL 32204 Request Made By: SAISSA

> Request Received By: Albert E. Browder, Ph.D., P.E.

Task Order No: CM 1852-TO 26

Task Order: Coastal Engineering Services for FDEP/USACE Permit-Level Design and Application

South Amelia Island Shore Stabilization Project

Amelia Island, Nassau County, FL

Consultant shall perform those subtasks described in Exhibit A to prepare and submit a permit application to seek a FDEP Joint Coastal Permit and USACE Department of the Army Permit for beach renourishment of the South Amelia Island Shore Stabilization Project. Costs associated with this work are eligible for State cost-sharing. Subtasks include:

Subtask I: Alts. Development & Storm Recession Modeling \$ 68,200.00 (Lump Sum) Subtask II: Borrow Area Wave Impact Analyses \$ 42,800.00 (Lump Sum) Permit-Level Design & Permit Application \$ 80,900.00 (Lump Sum) Subtask III: Agency Liaison/RAI Responses (FY 2018) \$ 5,000.00 (hourly, NTE) Subtask IV-1: Subtask IV-2: Agency Liaison/RAI Responses (FY 2019) \$ 25,000.00 (hourly, NTE) Agency Liaison/RAI Responses (FY 2020) \$ 5,000.00 (hourly, NTE) Subtask IV-3:

> **Total Fee:** \$ 226,900.00

Subtask IV-1: 30 Sept. 2018; Requested Completion Date: Subtasks I, II, III: 01 August 2018;

Subtask IV-2: 30 Sept. 2019 Subtask IV-3: 30 Sept. 2020

Olsen Associates, Inc.

**SAISSA** 

Albert E. Browder, Ph.D., P.E.

Date: 04 August 2017

Date:

Board of County Commissioners Nassau C

Daniel B. Attest to Chair

Its: Chairman Signature

Date: August 28, 2017 An Crawford

Approved As To Form and Legal Sufficiency: t's: Ex-Officio Clerk

8-30-15 Date:

Date: August 28, 2017

### SCOPE-OF-WORK: COASTAL ENGINEERING SERVICES

#### **FOR**

# South Amelia Island Shore Stabilization Project Amelia Island, Nassau County, FL

### Permit-Level Design and Permit Application

04 August 2017

The South Amelia Island Shore Stabilization Association, Nassau County, FL, and the Florida Park Service presently maintain 3.6 miles of the Atlantic Ocean shoreline at the southern end of Amelia Island in Nassau County, FL (**Figure 1**). As part of the ongoing comprehensive beach management of the engineered beach project, the project Owners seek to acquire a set of 15-yr, multiple-nourishment permits to maintain the project via periodic dredging and beach nourishment. The proposed first renourishment of the engineered beach under the new permits would occur in the summer of 2020 (at the earliest) and would replace not only the expected average annual erosion losses from the project fill but also sand losses directly associated with Hurricane Matthew, which impacted the project in October 2016. The combined storm impacts and corresponding erosion have necessitated the renourishment of the shoreline to re-establish the full template of the engineered beach.

### General Work Plan

The Scope of Work for this Task Order assumes that the renourishment of the engineered beach at the southern end of Amelia Island will be accomplished via the excavation and placement of sand by ocean-going cutterhead-suction/pipeline dredge from a borrow area developed on the northeast (offshore) edge of the Nassau Sound ebb shoal. This approach has been utilized in the three previous nourishment projects at this location (1994, 2002, 2011, see Figure 2). The development of the borrow area is being performed under separate Task Order. The permit application process will see to acquire permits that will allow for two full-scale maintenance renourishment efforts over a 15-yr period. This assumes the typical 8- to 10-year renourishment interval continues to hold for the engineering beach project. Permits sought for the project will describe beach fill placement to restore the fill template to a level consistent with the performance of previous nourishments, designed upon both past performance and updated storm-recession modeling analyses. Exhibit B summarizes the cost proposal. Exhibit C contains a blank copy of the Joint Coastal Permit application, for reference.

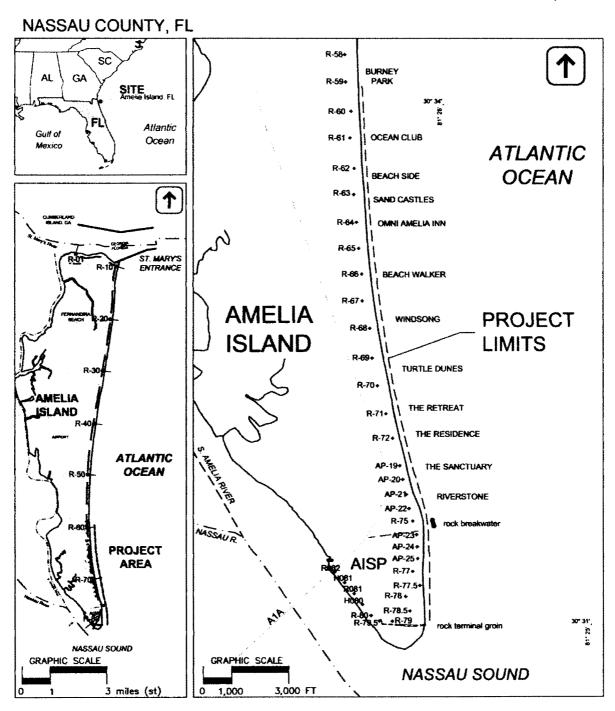


Figure 1 Location Map – South Amelia Shore Stabilization Project, Nassau County, FL.

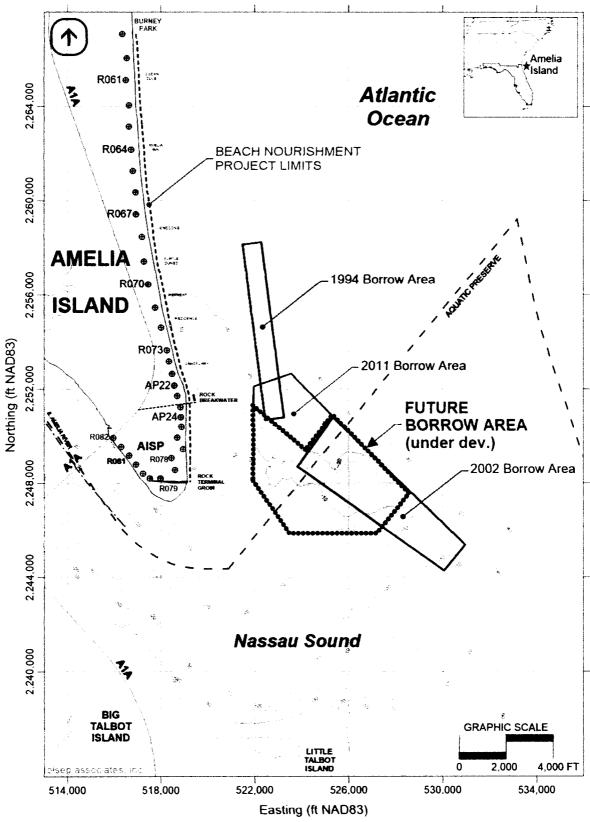


Figure 2 Borrow Area development at Nassau Sound.

At present, work is underway via separate Task Orders to complete numerous permitrelated items, principally those requiring field work (Summer 2017) and subcontractor efforts. These efforts include:

- Nassau Sound Borrow Area Development (Figure 2);
  - o Task Order 17
- Sonar sub-bottom survey of the proposed future borrow area;
  - o Task Order 21
- Hydrographic survey of the proposed future borrow area;
  - o Task Order 21
- Cultural resources survey of the proposed future borrow area;
  - o Task Order 22
- Environmental Investigations
  - Biological Assessment (BA) of the project and borrow area
  - o Benthic habitat survey of borrow area
  - Essential Fish Habitat Assessment
  - o Task Order 23(a, b)

The results of these investigations will be incorporated into the permit application package described herein, and the individual reports included as additional information in the submittal.

### **Proposal Conditions**

The following proposal conditions apply:

- The analyses and permit application shall rely on both previously collected survey data and the data to be collected in Summer 2018 for the proposed Year-7 physical monitoring (to be performed under separate Task Order). No specific physical survey, environmental, or cultural resources data collection is proposed herein.
- The proposed Task Order includes storm recession modeling (using the numerical model SBEACH) and wave impact modeling of the proposed borrow area (using one of the numerical models SWAN or STWAVE). No other numerical modeling efforts are proposed herein.
- An allowance is provided herein for responses to regulatory Requests for Additional Information (RAIs) (e.g., questions received from regulatory agencies after submittal of the permit application package to FDEP/USACE). These responses are limited to providing brief additional analyses, data and clarifying descriptions based upon the information contained in the permit application package and data already collected and in-hand. Potential regulatory requests for any additional surveys, data collection, studies, or numerical modeling efforts are not included in the RAI allowance and shall be negotiated and conducted under separate Task Order(s).

 Permit fees are not included in this proposal, and are the responsibility of the Applicant. The FDEP permit application fee is calculated by FDEP and is a function of the final permit-level design dimensions of the beach fill. State costsharing is applied to a portion of the fee, but the final stated fee itself is not a granteligible item for State cost-sharing.

### Subtask I - Alternatives Development and Storm Recession Modeling

Using the numerical model SBEACH, the Consultant shall prepare an assessment of the level of storm protection afforded by the engineered beach project under a range of modeled storm scenarios and beach fill alternatives. Storm characteristics relevant to the Nassau County, FL, shoreline shall be compiled from the NOAA National Hurricane Center historical database (including those of Hurricane Matthew – Oct. 2016). Storm surge estimates shall be based upon the most recent FEMA flood insurance information. Physical survey data collected in association with Hurricane Matthew shall be utilized to calibrate the model. The Consultant shall generate beach fill alternatives to assess a range of beach conditions along the length of the project -- beach profile shape, elevation, width, etc. This range is expected to encompass the current conditions (March 2017), an assessment of design beach conditions (narrower and more eroded than current, typical of 2011 pre-construction conditions, generally), and multiple post-renourishment options. The assessment shall be based upon the level of erosion predicted to occur along the upper beach relative to the project design baseline and the seaward edge of development (foundations, pool decks, walkways, cart paths, other structures). The results of the assessment shall be incorporated into the design of the beach fill template for the upcoming renourishment(s) -- Subtask III. The results can likewise be used to evaluate the level of storm protection provided by the engineered beach fill to the upland dunes and infrastructure. The results of this assessment support the permit application by partially addressing the effects of the proposed project upon the coastal system (Joint Coastal Permit application item #21).

<u>Deliverables</u> - The Consultant shall prepare a report of findings from the SBEACH storm recession analyses, including descriptions of the suite of storms modeled, the range of beach profile conditions assessed, and the predicted level of storm recession from each scenario. The report shall be provided in hardcopy (2 copies) and electronic \*.pdf format. Copies shall be provided to the FDEP and USACE as part of the supporting information attached to the overall permit application package. If desired a presentation shall be made to the SAISSA Board.

### Subtask II - Borrow Area Wave Impact Analyses

Using the numerical models SWAN or STWAVE, the Consultant shall prepare an analysis of the potential impacts to the wave field resulting from the excavation of the proposed borrow area. In particular the assessment shall evaluate the potential for the excavation (dredging) to

alter breaking wave conditions -- and hence potentially affect alongshore transport -- along the Amelia Island shoreline. Bathymetric survey data required for model input shall utilize previously collected 2017/2017 data for Nassau Sound and the Amelia Island shoreline, supplemented by older bathymetric data collected by NOAA (dates vary). Wave data required for model input shall be developed from the USACE WIS numerical wave hindcast database, supplemented by site-specific wave data collected from the NOAA National Data Buoy Center (NOAA NDBC) wave gage located off the St. Marys River entrance at Fernandina Beach. The results of this assessment support the permit application in describing the effects of the proposed project upon the coastal system (Joint Coastal Permit application item #21).

<u>Deliverables -</u> The Consultant shall prepare a report of findings from the borrow area wave impacts analyses, including descriptions of the synthesis of the wave climate and the predicted changes in wave energy across the proposed borrow area and landward thereof at Nassau Sound. The report shall be provided in hardcopy (2 copies) and electronic \*.pdf format. Copies shall be provided to the FDEP and USACE as part of the supporting information attached to the overall permit application package. If desired a presentation shall be made to the SAISSA Board.

### Subtask III - Permit-Level Design & Preparation of Coastal Permit Application Document

The Consultant shall develop a Joint Coastal Application package for the multiple renourishment of the South Amelia Island Shore Stabilization Project (SAISSP), following the application format provided in Exhibit C. Consultant shall integrate the results of the numerical modeling, geotechnical, cultural resources, and environmental studies referenced above into the corresponding items of the JCP application. Responses to all items in the permit application document are required (some responses shall be 'not applicable'). Notable associated sub-tasks to be completed shall include, but are not limited to:

- Permit-level design The Consultant shall evaluate the results of the historical monitoring data, the numerical modeling analyses, and the borrow area development data to develop a permit-level design for the beach renourishment project. The Consultant shall prepare permit-level design drawings sufficient to describe the footprint of the beach fill and borrow area operations for the project. These permit drawings shall include plan- and section-view illustrations of the beach fill and the borrow area, and shall describe the maximum anticipated footprint of the SAISSP in order to seek to assure that a sufficiently full range of potential project impacts is captured in the permitting process. These drawings shall be signed and sealed by the project Professional Engineer and included in the application submittal (JCP Item #14).
- Development of project narrative and alternatives discussion Consultant shall prepare the project description and narrative reviewing the alternatives discussion, consistent with the continuing maintenance renourishment of the SAISSP. Discussion shall also

- include preliminary narrative of construction details, and opinion of probable cost to construct.
- Integration of borrow area geotechnical information and creation of project Sediment QA/QC plan Consultant shall summarize the borrow area development report to address the JCP application requirements and shall draft the project sediment QA/QC for FDEP review and approval (JCP Items #16 and #17).
- Water quality certification/turbidity control plan –The project beach fill area lies adjacent to the Nassau River St. Johns River Marshes Aquatic Preserve, and the proposed borrow area lies largely within the preserve along the northeast edge of Nassau Sound. To protect water quality and other natural resources in the preserve it will be necessary to address and minimize temporarily elevated turbidity levels associated with the dredging process. These levels will require daily monitoring, multiple times per day. The Consultant shall prepare a response to the regulatory agencies for this issue (JCP Item #22), based upon the final geometry of the borrow area and beach fill, and on the historical database of turbidity measurements from previous projects in the area. These data shall be evaluated to determine if a Variance from Rule will be required.
- Integration of environmental assessment information (developed under separate Task Order #23). Consultant shall summarize the Biological Assessment and Essential Fish Habitat Assessments to address the JCP application requirements (JCP Items #18 to #21).
- Physical Monitoring Plan Consultant shall prepare and submit a revised physical monitoring plan for the upcoming renourishment project JCP Item #.

<u>Deliverables -</u> The Consultant shall prepare the permit application package, with attachments, and shall submit the package to the appropriate regulatory agencies. The entire package shall be submitted electronically to FDEP via DVD-ROM disc and/or FTP upload, per FDEP requirements, in the appropriate file formats (primarily Adobe \*.PDF, but also EXCEL, ArcGIS \*.shp, and gINT geotechnical database formats where applicable). One hardcopy shall be prepared and submitted to the Jacksonville regulatory office of the USACE, along with the electronic files. One hardcopy will be provided to the Client, along with the electronic files. If desired a presentation shall be made to the SAISSA Board.

### Subtask IV - Agency Liaison /Responses to Permitting RAI's (incl. meeting prep/attendance)

Herein, the Consultant has identified tasks believed to be necessary for the successful acquisition of the required permits. As necessary, Consultant shall attend meetings related to the permit application package to clarify submittal items and permitting issues (during preparation and after submittal). After submittal of the Joint Coastal Permit application package, and as required, Consultant shall respond to Requests for Additional Information (RAIs) from the regulatory agencies in a prompt and professional manner to accomplish receipt of the permits as quickly as possible. Consultant shall review and provide responses and suggested edits to the

draft permit documents and terms and conditions prior to final permit issuance. This Subtask shall be billed on an hourly basis, with an established initial Not-to-Exceed amount.

The RAI responses described herein are limited to providing brief additional analyses, data and clarifying descriptions based upon the information contained in the permit application package and data already collected and in-hand. Regulatory requests for any additional surveys, data collection, studies, or numerical modeling efforts are not included and shall be negotiated and conducted under separate Task Order(s).

Subtask IV shall be divided across SAISSA Fiscal Years:

Subtask IV-1: FY 2018 Subtask IV-2: FY 2019 Subtask IV-3: FY 2020

<u>Deliverables -</u> Deliverables shall include digital and hardcopies of RAI Response materials consistent with Subtask III deliverables, relevant correspondence to and from the agencies, attendance at meetings (as required), and preparation and delivery of presentations (as required). Where applicable, electronic \*.PDF versions of documents shall be provided.

### SCOPE-OF-WORK: COASTAL ENGINEERING SERVICES

### **FOR**

# South Amelia Island Shore Stabilization Project Amelia Island, Nassau County, FL

### Permit-Level Design and Permitting

04 August 2017

### **COST SUMMARY**

	Permit-Level Design and Permit Application	on
Subtask I	ALTERNATIVES DEVELOPMENT & STORM RECESSION MODELING	\$68,200.00 (Lump Sum)
Subtask II	BORROW AREA WAVE IMPACT ANALYSIS	\$42,800.00 (L.S.)
Subtask III	PERMIT-LEVEL DESIGN & PERMIT APPLICATION	\$80,900.00 (L.S.)
Subtask IV	AGENCY LIAISON & RAI RESPONSES*	\$35,000.00 (hourly, NTE)*
	TOTAL FEE:	\$226,900.00

<sup>\*</sup> IV-1, FY 18 - \$5,000; IV-2, FY 19 - \$25,000; IV-3, FY 20 - \$5,000

South Amelia Island Shore Stabilization Project Task Order #26 Permit-Level Design and Permit Application ESTIMATE OF LABOR AND SUBCONTRACT COSTS TOTAL: \$ 226,900.00

EXHIBIT 8 4-Aug-17

Subtask I	ALTERNAT	IVES DEVELO	PMENT &	STORM RECE	SSION MODE	ELING	Sub	total	\$	68,200.00
			DIR	ECT LABOR					-	
LABOR CATEGORY	PROJECT ADMIN / COORD.	DATA ASSEMBLY	MODEL CAUBR.	ALT. DEV. &	DOC PREP.*	TOTAL HOURS	RJ	<b>NTE</b>		EST. COST
Principal						0	5	233	\$	
Principal II				8	4	12	5	208	\$	2,496.00
Senior Engineer	4	4	8	40	40	96	5	176	\$	16,896.00
Coastal Engineer I		40	40	80	80	240	\$	136	\$	32,640.00
Coastal Engineer II						0	\$	111	\$	-
Coastal Engineer III		24	24	40	40	128	\$	102	\$	13,056.00
Field Inspector						0	\$	85	\$	-
Draftsman/Designer (CADD)				8	16	24	\$	69	\$	1,656.00
Administrative Assistant	8			1	12	20	\$	73	\$	1,460.00
SUBTOTAL DIRECT LABOR									\$	68,204.00

OUTSIDE SVCS/SUB-CC	MITRACTOR	S
SERVICE	cos	Ŧ
	\$	-
	\$	-
	\$	-
	\$	-
	\$	-
	\$	-
	\$	-
	\$	
	\$	-
subtotal	\$	-

<sup>\*</sup>inc. presentation prep/deliver

Subtask II	BORROW A	REA WAVE	MPACT AN	ALYSES			Sub	total	\$ 42,800.00
			DIR	ECT LABOR					
LABOR CATEGORY	PROJECT ADMIN / COORD.	DATA ASSEMBLY	MODEL CALIBR.	IMPACTS ANALYSIS	DOC PREP.	TOTAL HOURS	R/	ATE.	EST. COST
Principal						0	\$	233	\$ _
Principal II				4	4	8	\$	208	\$ 1,664.00
Senior Engineer	4	4	4	16	24	52	5	176	\$ 9,152.00
Coastal Engineer I		8		8	24	40	\$	136	\$ 5,440.0
Coastal Engineer II						0	\$	111	\$ -
Coastal Engineer III		40	16	80	80	216	\$	102	\$ 22,032.0
Field Inspector						0	\$	85	\$ -
Draftsman/Designer (CADD)				16	24	40	\$	69	\$ 2,760.0
Administrative Assistant	16				8	24	\$	73	\$ 1,752.0
SUBTOTAL DIRECT LABOR									\$ 42,800.0

OUTSIDE SVCS/SUB-CO	MTR	ACTORS
SERVICE		COST
	\$	-
	\$	
	\$	~
Land Account of the Control of the C	\$	•
	\$	-
	\$	•
	\$	-
	\$	-
	\$	-
subtotal	\$	-

Subtask III	PRELIMINA	RY DESIGN /	APPLICAT	TON PREPAR	ATION / SUB	MITTAL	Su	btotal	\$	80,900.00
			Dil	ECT LABOR						
LABOR CATEGORY	PROJECT ADMIN / COORD.	PRELIM ENGR. DESIGN	COST EST.	MEETINGS	DOC PREP.	TOTAL HOURS	,	LATE		EST. COST
Principal						0	\$	233	5	-
Principal II			4		4	8	\$	208	\$	1,664.00
Senior Engineer	24	40	8	20	80	172	\$	176	\$	30,272.00
Coastal Engineer I		80			80	160	\$	136	\$	21,760.00
Coastal Engineer II						0	\$	111	\$	-
Coastal Engineer III		80		8	80	168	\$	102	\$	17,136.00
Field Inspector						0	5	85	\$	-
Draftsman/Designer (CADD)		40			24	64	5	69	\$	4,416.00
Administrative Assistant	24			1	40	64	\$	73	5	4,672.00
SUBTOTAL DIRECT LABOR									5	79,920.00

OUTSIDE SVCS/SUB-CONTRACTORS						
SERVICE		COST				
Legal Survey Mapping	\$	975.00				
	5	_				
	\$	-				
	\$	*				
	\$					
	\$	-				
	\$	+				
	\$					
	\$	-				
subtotal	S	975.00				

Subtask IV	AGENCY LU	AISON / RESPON	ES TO RAIS		Sut	ototal	\$	35,000.00
			DIRECT LABOR					
LABOR CATEGORY	PROJECT ADMIN / COORD.	ENGR. DESIGN	DOC PREP.	TOTAL HOURS		ATE		EST. COST
Principal					s	233	s	-
Principal II	1				\$	208	\$	_
Senior Engineer	1				\$	176	\$	-
Coastal Engineer I	1				\$	136	\$	-
Coastal Engineer II	T.B.D	., sub-task to be b	illed on hourly basis at rates show	n>	\$	111	\$	-
Coastal Engineer III	1				\$	102	\$	-
Field Inspector	1				\$	85	\$	
Draftsman/Designer (CADD)	1				\$	69	\$	
Administrative Assistant	]				\$	73	\$	-
SUBTOTAL DIRECT LABOR	1			Initial A	ot to	Exceed:	S	-

OUTSIDE SVCS/SUB-CO	MIR	ACTORS
SERVICE		COST
FY 18 RAIs allowance	\$	5,000.00
FY 19 RAIs allowance	\$	25,000.00
FY 20 RAIs allowance	5	5,000.00
	\$	-
	\$	-
	\$	-
	\$	•
	\$	-
	\$	
subtotal	\$	35,000.00



## JOINT APPLICATION FOR JOINT COASTAL PERMIT

# AUTHORIZATION TO USE SOVEREIGNTY SUBMERGED LANDS

### FEDERAL DREDGE AND FILL PERMIT

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION U.S. ARMY CORPS OF ENGINEERS



### JOINT APPLICATION FOR JOINT COASTAL PERMIT / AUTHORIZATION TO USE SOVEREIGNTY SUBMERGED LANDS / FEDERAL DREDGE AND FILL PERMIT

### **APPLICATION INSTRUCTIONS**

### ADDRESS:

Beaches, Inlets and Ports Program
Florida Department of Environmental Protection
Division of Water Resource Management
2600 Blair Stone Road, Mail Station 3544
Tallahassee, FL 32399

### PLEASE SUBMIT THIS APPLICATION ELECTRONICALLY TO:

BIPP@dep.state.fl.us

#### INTRODUCTION

Attached is the Joint Coastal Permit application form. This form is required when applying for the following:

- 1) A Joint Coastal Permit for activities that extend onto sovereign submerged lands of Florida seaward of the mean high-water line, and are likely to have a material physical effect on the coastal system or natural beach and inlet processes, pursuant to Sections 161.021, 161.041, and 161.055, F.S., and Rule 62B-49.001, F.A.C.;
- 2) Authorization to use sovereign submerged lands in association with a Joint Coastal Permit pursuant to Chapter 253, F.S., and Rule 18-21, F.A.C.; and
- 3) A federal dredge and fill permit for activities outlined above.

#### APPLICATION SUBMISSION

Submit the completed application form, along with the certified drawings and all the supporting materials requested on the form. Submit the entire application package to the Department by email at BIPP@dep.state.fl.us. Please see the web page at http://www.dep.state.fl.us/beaches/forms.htm#JCP for instructions on submitting items too large for email.

### **APPLICATION FEES**

Refer to the Joint Coastal Permit Fees webpage located at http://www.dep.state.fl.us/beaches/permitting/envpfee.htm for an application fee worksheet. Please submit your fee (payable to the Department of Environmental Protection) online at http://www.fldepportal.com/DepPortal/go/pay-outstanding-balances/. If electronic submittal is not available, please mail your application fee (check or money order) to the address above.

### DISTRIBUTION TO THE U.S. ARMY CORPS OF ENGINEERS

When activities are proposed in, on or over wetlands or other surface waters, the Department shall forward a copy of the application to the United States Army Corps of Engineers (USACE). The USACE will advise you of any additional information that may be required to complete the federal dredge and fill portion of the permit application. The information requested in this application form may be more than required to make a complete application to the USACE. However, it is useful and may be essential for subsequent evaluation. Please provide measurements in both English units and metric equivalents for projects that require a federal permit.

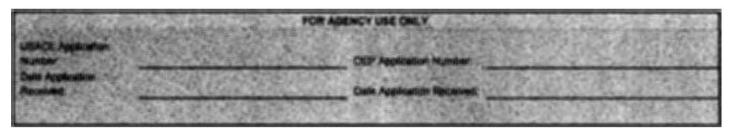
### CONSULTATION

Applicants are encouraged to consult with Department staff prior to submittal of the formal application. If you have any questions, please consult with the staff of the Department's Beaches, Inlets and Ports Program prior to submittal of the formal application. Contact information is located on the Beaches, Inlets and Ports Program webpage located at: http://www.dep.state.fl.us/beaches/programs/envpermt.htm.

NOTE: Additional information may be required by statute or rule, or if found by staff to be necessary for proper evaluation of the application under applicable statutory and rule criteria.



### JOINT APPLICATION FOR JOINT COASTAL PERMIT / AUTHORIZATION TO USE SOVEREIGNTY SUBMERGED LANDS / FEDERAL DREDGE AND FILL PERMIT



Name of authorized a	gent for permit application (if applicable)	Mailing Address	
City	State	Zip Code	Telephone
Email		Fax	
2. Name of applicant		Mailing Address	
City	State	Zip Code	Telephone
Email		Fax	

|--|--|

County(ies)	ing dredging, filling and construction site	or (and additional shoots, it flooded).
Section(s)		Range
DNR reference monumer	t(s)	
Street address, road or of	her location	
City, Zip Code if applicable	е	

- 5. Describe in general terms the proposed activity including any phased activities. Please include the following details:
  - Type of project (e.g., restoration, nourishment, bypassing, groins, maintenance dredging, jetty rehabilitation);
  - Number of events requested (once or as-needed);
  - Fill template (lengths, dune crest and berm widths, slopes, and corresponding elevations in North American Vertical Datum (NAVD) down to toe of fill);
  - Dredge/equipment type and/or construction method;
  - Borrow Areas (indicate if it is an offshore site, an ebb shoal or a flood shoal; specify maximum allowable dredge depths; indicate the vertical datum NAVD, MLW, MLLW, etc.; and maximum depth);
  - · Approximate volume to be dredged/filled during single event;
  - Upland, nearshore or offshore disposal sites;
  - Staging areas, stock piling, access corridors;
  - Type/number/dimensions/elevations of structures;
  - Acreage of direct and secondary impacts for each impacted community type; and
  - · Acreage of mitigation for each type of community.

P	ase provide measurements for projects that require a federal permit in both English units and metric equivalents.
CH	ck here if information is continued on an attached sheet
de Se	scribe the purpose and need of the proposed activity including any public benefits. Include a detailed statement cribing the existing and proposed upland uses and activities. Please consider the public interest test outlined in stion 373.414 (1), F.S., with the understanding the project in Outstanding Florida Waters (OFW) must be EARLY in the public interest, whereas other projects must NOT BE CONTRARY to the public interest.
1. 2.	Whether the activity will adversely affect the public health, safety, or welfare or the property of others; Whether the activity will adversely affect the conservation of fish and wildlife, including endangered or threatene species, or their habitats;
3. 4.	Whether the activity will adversely affect navigation or the flow of water or cause harmful erosion or shoaling; Whether the activity will adversely affect the fishing or recreational values or marine productivity in the vicinity of the activity;
5. 6.	Whether the activity will be of a temporary or permanent nature; Whether the activity will adversely affect or will enhance significant historical and archaeological resources under the provisions of Section 267.061, F.S.; and The current condition and relative value of functions being performed by areas affected by the proposed activity
mean. of a populands served If a his	nally, consider the proprietary public interest test, as defined in Subsection 18-21.003(51), F.A.C.: Public interest demonstrable environmental, social, and economic benefits which would accrue to the public at large as a result posed action, and which would clearly exceed all demonstrable environmental, social, and economic costs of the od action. In determining the public interest in a request for use, sale, lease, or transfer of interest in sovereignty is severance of materials from sovereignty lands, the board shall consider the ultimate project and purpose to be by said use, sale, lease, or transfer of lands or materials being a lease, or transfer of lands or materials being a lease, or transfer of lands or materials being a lease provide a copy of the report. Otherwise, the Department will conduct a historic resource of the project on your behalf.
	k here if information is continued on an attached sheet.
	ate the requested duration of your permit
	years 3 years (experimental project) Other requested duration (<15 years)
1 1	rears (construction phase and perpetual operation and maintenance phase, for sand transfer plants and mitigation erosion from erosion control structures that require long term operation and maintenance)
	ase identify by number any JCP / DBS / Wetland Resource / ERP / USACE Permits pending, issued or denied for ects at the location, and any related enforcement actions.
A	ency Date No. / Type of Application Action Taken
	ck here is information is continued on an attached sheet.

	9. Has an Erosion Control Line (ECL) been established pursuant to Sections 161.141 - 161.21	1, F.S	.? □Y	ES□I	10	
If yes, please provide evidence that the ECL has been recorded and show the location of the established ECL of appropriate drawings.						
	INFORMATION FOR ASSESSMENT OF SOVEREIGNTY SUBMERGED LANDS APPLICATION:			_		
	SUBMIT THE FOLLOWING ITEMS AS ATTACHMENTS:		ded	lueste	ble	
	<b>Note:</b> A justification or explanation is required when requesting a waiver of any of the items below. Waiver is defined as relinquishing the requirements for the cited information.	Attached	To be Provided	Waiver Requested	Not Applicable	
•	10. If the applicant is not a government entity: Satisfactory evidence demonstrating that the applicant has sufficient control and interest in the riparian upland property, as described in Subsection 18-21.004(3)(b), F.A.C. If the applicant is not the property owner, then authorization from the property owner for such use must be provided.					
	11. The information in this item is only required if you are applying for a sovereignty submerged lands easement or lease: A list of the names and addresses of owners of all riparian property within 1,000 feet (and within a 500 feet radius) of the proposed sovereignty submerged lands easement or lease site from the latest county tax roll. If the property is under cooperative or condominium ownership, the name and mailing address of the cooperative or condominium association will be adequate. This would not apply to off-shore leases or easements that are not located within 1,000 feet of the shoreline.					
	12. The information in this item is only required if you are applying for a sovereignty submerged lands easement or lease: A legal property description and acreage of any sovereign submerged land that would be encompassed by the requested lease or easement, plus a survey prepared, signed and sealed by a person properly licensed by the Florida State Board of Land Surveyors.					

		ATION FOR ASSESSMENT OF IMPACTS TO THE COASTAL SYSTEM		ded	luested	ıble
	SUBMIT	THE FOLLOWING ITEMS AS ATTACHMENTS:	þ	rovi	Req	plica
		ification or explanation is required when requesting a waiver of any of the items below. Waiver is elinquishing the requirements for the cited information.	Attached	To be Provided	Waiver Requested	Not Applicable
-	profiles accorda minimu duly re	aphic and bathymetric survey drawings of the proposed project site(s), including and a contour map that reflect conditions within the past six (6) months, in ance with Subsection 62B-41.008(1)(e), F.A.C. Drawings shall meet the State's m technical standards and shall be signed and sealed by the professional surveyor, gistered pursuant to Chapter 472, F.S., who performed the survey. This item may be d in item 14 (permit drawings).				
	Chapte backgre informa	ete sets of permit drawings, certified by an engineer duly registered pursuant to r 471, F.S. These drawings shall be submitted utilizing aerial photography bunds. Each drawing shall include an accurate scale or dimensions, and all ation shown on the drawing shall be clearly legible. The plans shall clearly distinguish n existing and proposed structures and grades, and shall include the following:				
	a.	Plan view of the proposed activity depicting the mean high-water line, any easement boundary and the ECL (if applicable) within the area of influence of the proposed activity. Identify the boundaries of significant geographical features (e.g., channels, shoals) and natural communities (e.g., submerged grass beds, hardbottom or mangroves) and special aquatic or terrestrial sites (parks, sanctuaries, refuges, OFW, aquatic preserves, etc.) within the area of influence of the activity. Include a north arrow and a scale bar on each drawing.				
	b.	Cross-section views of the proposed activity depicting the slopes, the mean high-water line, any easement boundary and the ECL (if applicable) within the area of influence of the proposed activity sufficient to depict the geographical extent of the project, and the potential effects on the coastal system and environmental resources. Identify the boundaries of significant geographical features and natural communities in the area of influence of the proposed activity. Elevations indicated on the cross-sections shall be referenced to the NAVD.				
	C.	Details of construction, including materials and general construction procedures and equipment to be used (e.g., construction access, staging areas (both on land and in water), dredging method, dredged material containment, pipeline location).				
	d.	Details of any existing structures on the site that may be directly or indirectly affected by, or that may directly or indirectly affect, the proposed activity. This shall typically include shore protection structures such as groins, utility or stormwater outfalls, including subgrade structures, and any derelict structures such as remnant walls or pilings.				
	15. A prop	osed construction schedule.				

				Attached	Fo be Provided	Waiver Requested	Vot Applicable
-	16.		applications for excavation or fill activities shall include the following detailed ation concerning the material to be excavated and the existing material at the beach :				<u>F</u>
		a.	Site plans showing the location of all core borings and the boundaries of the area to be excavated.				
		b.	Core boring logs of all cores taken throughout the area to be excavated and surrounding area. Logs should extend at least two feet below the proposed bottom elevation. The depth of each visible horizon in the log should be reported relative to NAVD (88) and the material in each stratum classified according to grain size.				
		C.	Particle size and color analysis of the sediment. Gradation curves, frequency distribution curves and data analysis sheets should be produced from sieve analysis of each stratum in the core. Grain size distribution must be determined down to the standard unit 230 sieve size. Color analysis of moist sediment should use Munsell system of hue, value and chroma.				
		d.	Carbonate content and percent organics by dry weight from representative stratum in each core. Chemical analyses shall be required if there is reason to suspect that the sediments are contaminated.				
		e.	Representative physical samples and particle size, color and carbonate content of the existing material at the beach fill site.				
		f.	A sediment Quality Assurance/Quality Control (QA/QC) plan that will ensure that the sediment to be used for beach restoration or nourishment will meet the standards set forth in Rule 62B-41.007, F.A.C.				
			Submit all geotechnical information in electronic file format suitable for input to the Department's Regional Offshore Sand Source Inventory (ROSSI) database. The data may be submitted in Excel, Access, and/or gINT® files. The MS Access Front End Loader and gINT® files are available on the ROSSI website http://rossi.urs-tally.com/Downloads.aspx.				
			Submit electronic spatial data of borrow area boundaries, core boring locations, and seismic track lines with time stamps and shot points, and .pdf files of seismic images with time stamp annotations. Spatial data are to be submitted in a georeferenced format, which may the following: MicroStation (.dgn), AutoCAD (.dwg, .dxf), GIS (.shp, coverages, geodatabase, kmz, etc.). All electronic data should be submitted via the ROSSI website using the upload link on the home page (http://rossi.urs-tally.com).				
	17.	placem supering of the factoring	is of the compatibility of the fill material with respect to the existing sediment at the nent site. The analysis should include all relevant computations, the overfill ratios, and imposed graphs of the cumulative grain-size distribution and the frequency distribution fill material over the data for the existing sediment at the placement site. Provide tations of borrow area volume and composite fill material characteristics (mean grain and sorting, percent carbonate content) in an electronic spreadsheet.				

		Attached	To be Provi	Waiver Rec	Vot Applic
18.	Using an established natural community classification system, describe each natural community within the area of influence of the proposed activity. This includes wetlands, mangroves, seagrasses, hardbottom or any other coastal resource, within a minimum of 1,000 feet in both shore parallel directions of the project boundary. Include an aerial map of these communities outlined, as well as:	*	<u> </u>		
	a. Acreage.				
	b. Identification of the flora and fauna to the lowest taxon practicable.				
	<ul> <li>Characterization of dominant and important flora and fauna and estimates of percent biotic cover.</li> </ul>				
19.	Provide detailed information on season of occurrence, density, and location of threatened or endangered species whose range occurs within the proposed activity. Include any results of available wildlife surveys that have been conducted on the site.				
20.	Discuss any proposed methods to reduce potential impacts to threatened and endangered species, including lighting ordinances (outline procedures), avoidance (e.g., working outside of season), and minimization measures.				
21.	Provide an analysis of the expected effect of the proposed activity on the coastal system including but not limited to:				
	a. Analysis of the expected physical effect of the proposed activity on the existing coastal conditions and natural shore and inlet processes. The analysis should include a quantitative description of the existing coastal system, the performance objectives of the proposed activity, the design parameters and assumptions, relevant computations, validation of the results and the data used in the analysis.				
	b. Demonstration of consistency with the Department's Strategic Beach Management Plan or an inlet management plan in accordance with Rule 62B-41.005, F.A.C. (If the proposed project is not included in an inlet management plan the applicant will provide the information specified in Rule 62B-41.008, F.A.C.).				
	c. Reasonable assurances that a regulated activity will not cause unacceptable cumulative impacts pursuant to Rule 62-330, F.A.C., and defined in Rule 62B- 41.002, F.A.C.				
22.	Identify any areas within any proposed mixing zone(s) that contain significant submerged resources, such as hardbottom, seagrasses or mangroves. Explain why the size of the proposed mixing zone is the minimum necessary to meet water quality standards and provide justification for that size. If the project is in or adjacent to an OFW and an antidegradation variance is proposed, please provide the proposed NTU variability above background, as well as the justification (measurements of natural background variability measured within a tidal cycle). Describe the location and details of the erosion, sediment and turbidity control measures to be implemented during each phase of construction and all other measures used to minimize adverse effects to water quality. If a mixing zone variance is proposed, please provide a narrative description and graphic representation of the mixing zone.				

	Attached	To be Provided	Waiver Requested	Not Applicable
<ol> <li>Provide a written statement providing the necessity and justification for the poter to the coastal ecosystem that may be caused by the proposed coastal constructi a physical monitoring plan, pursuant to Rule 62B-41.005, F.A.C.</li> </ol>				
24. Provide proposed biological monitoring plans that will provide reasonable assuration the predicted level of direct and secondary impact to adjacent biological resource hardbottom and / or seagrasses was correct. Additionally, if impacts to natural reanticipated, a narrative description of any proposed biological mitigation plans, p Rule 62-345, F.A.C., including purpose, a comparison between the functions of t site to the mitigation site, maintenance, monitoring, estimated cost, construction and techniques. For proposed artificial reefs, indicate the water depth, depth of soverlying bedrock, and proposed relief and materials (type, size and shape).	es, such as besources are bursuant to the impact sequence			
<ol> <li>Provide an analysis of available alternatives to the proposed coastal construction to Subsection 62B-41.005(1)(e), F.A.C. that would minimize adverse impacts to system. Discuss any related effects on the coastal system.</li> </ol>				
26. Provide the required permit fee, as set forth in Rule 62B-49.006, F.A.C. In order the fee, please provide the following: the acreage of proposed filling seaward of line; the acreage of proposed dredging; the cubic yardage of fill to be placed on a (above and below the MHW line); the cubic yardage of material to be dredged from and then placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of rigid control of the placed either in an upland or offshore disposal site; the length of the placed either in an upland or offshore disposal site; the length of the placed either in an upland or offshore disposal site; the length of the placed either in an upland either in an upland or offshore disposal site; the length of the placed either in an upland either in an upland either in an u	the MHW the beach om an inlet oastal			

**Note**: Additional information may be required by statute or rule, or if found by staff to be reasonably necessary for proper evaluation of the application under applicable statutory and rule criteria.

### 27. SIGNATURE(S)

agree, or I agree on behalf of my corporation, 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.	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, that work prior to approval is a violation, and any permit issued or proprietary authorization issued pursuant thereto, does not relieve me of any obligation for obtaining any other required federal, state, water management district or local permit prior to commencement of construction. I
		authorizes transfer of the permit to a responsible operation entity. I understand that knowingly making any false

Typed / Printed Name of Applicant (If no Agent is used) or Agent (If one is so authorized below)			
Signature of Applicant / Agent	Date		
Name of political subdivision, municipality, or business	s entity and title of person signing on its behalf, if applicable		
AN AGENT MAY SIGN ABOVE ONLY IF THE APPLIC	CANT COMPLETES THE FOLLOWING:		
in the processing of this application for the permit ar request, supplemental information in support of the me, or my corporation, to perform any requirement	ove to act on my behalf, or on behalf of my corporation, as the agent and / or proprietary authorization indicated above; and to furnish, on application. In addition, I authorize the above-listed agent to bind which may be necessary to procure the permit or authorization g any false statement or representation in this application is a section 1001.		

Nassau County Board of County Commissioners

Name of political subdivision, municipality, or business entity and title of person signing on its behalf, if applicable

Please Note: The Applicant's original signature (not a copy) is required.

REQUIRED BY PERMIT PRIOR TO CONSTRUCTION: The following items are not completeness items, but will be required as a specific condition to be provided prior to project construction, as Notice to Proceed items.

- 1. A current Biological Opinion from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, when the Florida Wildlife Conservation Commission has determined that the proposed project will result in a take of marine turtles, which could not be authorized without an incidental take determination under federal law.
- 2. Complete sets of construction plans and specification for the proposed activity, which are consistent with the project description in the permit and the permit drawings, and are certified by an engineer duly registered pursuant to Chapter 471, Florida Statutes.

Daniel B. Leeper

Typed / Printed Name of Applicant