

DEP CONTRACT No. DC664  
STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

AMENDMENT No. 07

THIS AGREEMENT was entered into on the 27<sup>th</sup> day of June 2006, and amended on the 30<sup>th</sup> day of August 2006 (Amendment 1), the 22<sup>nd</sup> day of August 2007 (Amendment 2), the 30<sup>th</sup> day of June 2008 (Amendment 3), the 26<sup>th</sup> day of January 2009 (Amendment 4), the 1<sup>st</sup> day of June 2009 (Amendment 5) and the 28<sup>th</sup> day of October 2009 (Amendment 6), by and between the Department of Environmental Protection with headquarters at 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, a state agency (hereinafter referred to as the "Department"), the Nassau County Board of County Commissioners as the governing body of the South Amelia Island Shore Stabilization Municipal Service Benefit Unit, a political subdivision of the State of Florida, whose address is 96135 Nassau Place Suite 2, Yulee, Florida 32097 (hereinafter referred to as the "County"), and Olsen Associates, Inc., with headquarters at 4438 Herschel St., Jacksonville, Florida 32210 (hereinafter referred to as the "Consultant").

The Department and County selected the Consultant to provide professional engineering services for the post construction monitoring, mitigation and maintenance of the South Amelia Island Shoreline Stabilization Project, according to the Consultants Competitive Negotiations Act, Chapter 287.055 Florida Statutes. The Request for Statement of Qualifications No. RFSQBDC 07 05/06 and the Consultant's response are included herein by reference.

The Agreement is hereby amended as follows:

1. The Consultant shall continue project Monitoring for 2009/10, and the Permitting and Design process for the first scheduled maintenance renourishment of the South Amelia Island Shoreline Stabilization Project. Additionally in 2010, the U.S. Army Corps of Engineers plans to dredge the Nassau Sound/Sawpit Creek portion of the Atlantic Intercoastal Waterway, which may make beach quality sand available for placement on South Amelia Island. In this case the Consultant shall coordinate with the CORPS, provide a layout for the preferred fill locations at Amelia Is. State Park and provide documentation as necessary to assist in the beach fill placement described on page 6 of 7 in the Consultant's Statement of Work attached hereto as Attachment A.
2. The total contract amount shall be increased by \$429,440.00 from \$973,400.00 to \$1,402,840.00 to compensate the Consultant for the services described in Attachment A. The Department agrees to pay \$60,066.00 and the County agrees to pay the additional \$369,374.00.
3. The County shall maintain the public beach access sites and public parking spaces, as identified in the Funding Eligibility Statement, for beach use throughout the life of the Project. If at any time the County fails to maintain the subject beach access sites and public parking for use by the general public on an equal basis, the County agrees to reimburse the Department all funds provided by the Department associated with any beach access site, or associated public parking space for which maintenance is discontinued. Additionally, the

Department and County agree to maintain public beach access signs that are clearly visible from the highway for the life of the Project. The Department will be responsible for maintaining access, parking and signs at State-owned access points. And the County will maintain access, parking and signs for the Amelia Island Shoreline Association access points.

4. Attachments.

Attachment A included as part of this Amendment.

Statement of Work: 7 pages

IN ALL OTHER RESPECTS, the Agreement of which this is an Amendment, and attachments relative thereto, shall remain in full force and effect.

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IN WITNESS WHEREOF, the parties hereto have duly executed this 26th day of April, 2010, 2009.

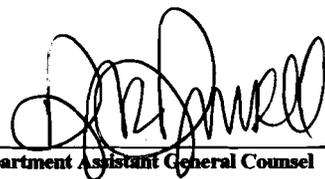
FOR THE CONSULTANT

FOR THE DEPARTMENT

  
\_\_\_\_\_  
Authorized Person  
  
Erik J. Olsen  
\_\_\_\_\_  
Print Name

  
\_\_\_\_\_  
Scott Robinson, Assistant Director DRP  
  
5-11-10  
\_\_\_\_\_  
Date

Pres  
\_\_\_\_\_  
Title

Approved As To Form  
  
\_\_\_\_\_  
Department Assistant General Counsel

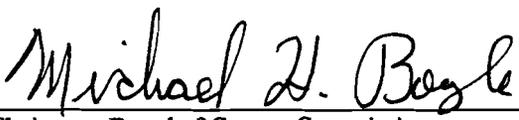
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Date

59-2223174  
\_\_\_\_\_  
FEID Number

\_\_\_\_\_  
Print Name

FOR NASSAU COUNTY FLORIDA  
as governing body of the South Amelia Island  
Shore Stabilization Municipal Service Benefit Unit

ATTEST:

  
\_\_\_\_\_  
Chairman, Board of County Commissioners,  
As Chairman of the South Amelia Island Shore  
Stabilization Municipal Service Benefit Unit

  
\_\_\_\_\_  
Ex-Officio Clerk  
  
eok  
4/24/10

Michael H. Boyle  
\_\_\_\_\_  
Print Name

John A. Crawford  
\_\_\_\_\_  
Print Name

April 26, 2010  
\_\_\_\_\_  
Date

Approved As To Form  
  
\_\_\_\_\_  
Nassau County Attorney

59 186 3042  
\_\_\_\_\_  
FEID Number

David A. Hallman  
\_\_\_\_\_  
Print Name

## Attachment A

### SOUTH AMELIA ISLAND SHORE STABILIZATION PROJECT RENOURISHMENT (2011) 09/10 BUDGET YEAR

**OVERVIEW** – The following three (3) Tasks are required to supplement Project related (ongoing) activities funded in the prior budget year. Most work is intended to lead up to a renourishment project in calendar year 2011. Said scopes are directed toward completion of ongoing design and construction document preparation, monitoring required by Permit and liaison with the USACOE necessary to facilitate a 2010 federal beach disposal project at Amelia Island State Park within the limit of the project.

#### **I. MONITORING**

##### **BB&CS TASK 4.4 MONITORING 09/10 (ISLAND/NASSAU SOUND/STRUX AND REPORT)**

The following scope-of-work is routinely conducted on behalf of the Permittees. The monitoring program described herein includes the three (3) structures addressed by the above Permit and the existing monitoring plan for the beach fill (FDEP JCP 0187721-001 JC) issued February 8, 2002. In this way, overall conditions for the entire South Amelia Island Shore Stabilization Project and surrounding environs are comprehensively monitored and addressed. All work performed shall be consistent with the applicable technical standards for physical monitoring developed by the BB&CS.

#### **A. SHORELINE SURVEYS**

As in the recent past, the following shoreline surveys shall be conducted in or about the month of June, 2010:

- Beach - Topographic and bathymetric profile surveys shall be performed at each of the Department of Environmental Protection's DNR reference monuments from R-55 through R-82 in Nassau County. All profiles shall be measured along the same azimuths previously surveyed by the Department, shall commence at the reference monument or the primary dune, and shall extend seaward to a depth of -30.0 feet (NGVD) up to a maximum of 3,000 feet offshore into the ocean. South of R-73, half stations (500 ft intervals) shall likewise be surveyed for purposes of better defining shoreline changes along the Park property in

proximity to Nassau Sound. Minimum profile lengths extending into the Sound shall be 1,000 ft. unless truncated by an impassible shoal.

- Terminal Structure (S-2) – Both a centerline survey and a minimum of eight (8) sections of the beach at varying distances from and perpendicular to the structure centerline, shall be taken along the length of the structure to characterize sand impoundment and spit formation. The centerline survey shall characterize both top of rock elevation (if emergent) and typical sand grade elevations (between rocks) for purposes of evaluating structure permeability to littoral transport (*i.e.* leakiness). A survey of the approximate MHWL shall be performed on the Nassau Sound side of structure S-2 and shall extend past R-82 to the small tidal creek located westward of the A1A bridge (*i.e.* westward of S-1).
- Breakwater (S-3) – Between R-75 to the north and AP 24 (former R-76) to the south, an additional four (4) wading profiles shall be surveyed for purposes of characterizing shoreline conditions in the lee of the detached breakwater. Two additional profiles should be surveyed adjacent to the structures (N and S). These 6 lines would be in addition to beach profiles at half stations (*i.e.* 500 ft) which are likewise surveyed at that general location.
- Terminal Groin (S-1) (West of A1A) – A detailed topographic survey of the beach between R-82 and the tidal creek lying westward of the small rock groin shall be performed for purposes of evaluating impoundment and shoreline changes at the new structure. The seaward limits of the survey shall be -2 ft MLW.

## B. HYDRO SURVEYS

- Nassau Sound - A bathymetric survey of Nassau Sound and its ebb-shoal complex, including the attachment bars, shall be conducted in June 2008, and thence every other year. The project boundaries shall include Amelia Island to the north and the two Talbot Islands to the south. The 2003 pre-construction survey shall constitute “baseline conditions.” Survey grid lines shall be located to provide sufficient detail for accurate volumetric calculations for each area of interest within the ebb-shoal complex, they shall be spaced a maximum of 500 feet apart, and they shall extend a minimum of 500 ft beyond the northerly and southerly boundaries of the area of interest in the Atlantic Ocean. The western limit of survey shall be the approximate beginning of the AIWW, westward of the bridge(s). Additional hydro lines in the vicinity of S-2 and S-3 shall be acquired as necessary to provide bathymetric detail in the vicinity of the two structures.
- Borrow Site – The Phase I borrow site shall not be resurveyed this period.

Note – There are portions of the emergent shoal system, most notably to the east of Little Talbot Island within the Ocean, that at times may not be safely surveyed in their entirety.

### C. AERIAL PHOTOGRAPHY

Vertical color aerial photography shall be taken which covers the beach fill, the structures and Nassau Sound and shall be accomplished in the same general time frame as the surveys. The limits of the Amelia Island aerial photography shall include all areas to be surveyed along DNR reference monuments (R-50 – R-82) associated with the project area in Nassau County. The color photography shall be centered on the local shoreline, shall include the entire ebb-shoal complex of Nassau Sound (including any attachment bars) and shall be taken at approximate low water as close to the date of the topographic profile surveys as possible. The photography will include Nassau Sound Inlet Shoreline, Big Talbot Island, Little Talbot Island, Bird Island Shoal Complex and Sawpit Island in the sequence in which annual photographs of South Amelia are taken. Said photographs shall include the portions of islands fronting the Nassau Sound for the life of the permit. The South Amelia Island shoreline photography shall be rectifiable and furnished to a scale of 1" = 500' (1:6000 controlled) on 9" x 9" prints. The photography of Nassau Sound shall be formulated at a scale of 1" = 1000', or greater in order to allow for reasonable overlap of adjoining photo panels which include sufficient land mass necessary for rectification.

Oblique aerial photography shall be performed every four (4) months.

### D. ANALYSIS / REPORTING

The consultant shall submit an engineering report and the monitoring data to the Bureau of Beaches & Coastal Resources within 90 days of completion of the post-construction survey. The survey data shall be submitted on floppy disk in an ASCII format stored according to the Department's standards for file structure and include all survey control information. The annual report shall present and discuss the data (including any potential sources for errors in the data set), identify erosion and accretion patterns within the entire area monitored, compare and discuss the actual project evolution with the anticipated evolution, verifying the analyses that were conducted in the development of the design of the project, and identify any adverse impacts, which could be attributable to the project. Appendices should include plots of survey profiles and graphical presentations of volumetric and shoreline position changes for both the monitoring area and at each profile survey. Results should be analyzed for patterns, trends, or changes between annual surveys and cumulatively since Phase I beach fill project construction in 2002.

Along the South Amelia Island shoreline, issues of significance to be addressed shall include the apparent "leakiness" of the terminal structure at Nassau Sound, tombolo formation behind the breakwater, impoundment volumes and rates updrift or adjacent to all three (3) structures, spit formation on the Sound side of the terminal structure, variations in shoreline stability between R-79 and R-82 (i.e. the E-W Sound Shoreline), marginal flood channel translation and any major bathymetric changes in the vicinity of each of the three structures.

An evaluation of far-field changes in Sound bathymetry, including the Bird Island Shoal Complex, tidal channel location, etc. shall follow each scheduled Nassau Sound survey. Variations of features within the Sound shall be evaluated via comparative survey, as well as, aerial photography. Any short-term changes measured shall be compared to known long-term changes in Sound morphology. Any work by others, such as the disposal of maintenance material from the AIWW by the U.S. Army Corps of Engineers, shall likewise be discussed in the context of observed or documented changes.

Annual monitoring report submittals subsequent to construction of the structures shall report and specifically discuss any field modifications to the terminal structure or the breakwater which were carried out during the monitoring period in accordance with the tenants of the Remediation Plan required by Permit No. 0187721-002-JC Nassau County.

## **II. DESIGN DOCUMENTS/PERMITTING**

### **BB&CS TASK 2.4 DESIGN & PERMITTING (09/10)**

#### **2.4a Legal/Survey**

The CONSULTANT shall utilize the services of a Florida Certified PLS for purposes of formulating all Legal Descriptions required for Easements from the Division of State Lands. All relevant documents will be sealed by the PLS.

#### **2.4b Permit Fees**

The CONSULTANT shall submit and be reimbursed for up to \$30,000 in Permit fees by SAISSA as assessed by regulatory agencies. This is **NOT** however an eligible FDEP reimbursable item.

#### **2.4c Design Documents/Cost Estimating**

The CONSULTANT shall develop all plans, specifications and contract documents sufficient to competitively bid the subject project nationally.

The CONSULTANT shall establish a construction baseline utilizing the FDEP monuments along the project shoreline. Establishment of the construction baseline shall also include the creation of intermediate monuments between the existing FDEP monuments. The CONSULTANT shall perform a final design beach profile survey at each primary and intermediate station along the construction baseline prior to completion of the design plans and specifications. The CONSULTANT shall utilize the results of the final design survey to compare beach conditions with the conditions measured by the preliminary design survey

and determine the differences in required fill quantities and configuration necessary to maintain the permitted beach dimensions.

CONSULTANT shall incorporate the most current information from the final design survey in order to formulate a final design for the renourishment project. Such information will include, as appropriate, the latest aerials and surveys, agencies comments, permit conditions, and the latest available modeling results. The final design shall be developed consistent with SPONSOR direction, and shall reflect the most current Federal and State requirements with respect to the GRR, the NEPA documents, and the applicable project permits.

CONSULTANT shall prepare construction plans for the project which incorporates any applicable requirements of the USACE and the FDEP. Construction plans shall include, but not be limited to, the project aerials, bathymetric and sand isopach charts, borrow areas, boring logs, grain size distribution curves, profile cross-sections, beach fill construction templates, magnetometer and other information required for complete plan description of the intended work.

If necessary, the CONSULTANT shall develop a dredge plan to provide the most efficient utilization of the entire volume of borrow area sediment. A dredge plan specifies the sequence of excavation areas within the borrow area such that any remaining material can be efficiently and economically excavated during subsequent events.

The CONSULTANT shall prepare all elements of the Project Manual/Specifications that include, but may not be limited to, the Bid Schedule, Supplemental General Conditions, Technical Provisions, and Environmental Protection Requirements for the project as they relate to the beach fill and the CONSULTANT shall provide multiple revisions of the plans and specifications that may be required by County, State and USACE reviews sand borrow areas located offshore of South Amelia Island. The document appendices will likewise include all Permits (as issued) digital copies of related reports, PDF(s) of plan sheets, and other information typically required for contractor estimating.

Appropriate cost estimating techniques by the CONSULTANT will include direct liaison with prospective national dredge contractors, research into existing work loads or pending bid schedules of others, fuel pricing effects, as well as both proprietary and other available programs/methodologies for the estimation of hydraulic dredging construction costs.

Estimates will be made throughout the design phase so as to make the co-sponsors aware of prospective budgeting requirements. Certifications will be issued (if required) to lending institutions, bonding companies, etc. A formal engineering estimate can also be provided if an owner-group referendum is required for the SAISSA constituency.

### **III. SOUTH AMELIA ISLAND STATE PARK – BEACH DISPOSAL FROM AIWW**

In calendar year 2010, the USACOE will initiate maintenance dredging of the Nassau Sound/Sawpit Creek portion of the AIWW. As in the past, the CONSULTANT will represent the FPS in the strategic placement of the associated sand volume (usually 300 - 400,000 cy) so as to benefit the Park and the South Amelia Island Shore Stabilization project. The CONSULTANT shall lay out a preferred fill location and assist the Jacksonville District in securing a pipeline corridor which is least impactful to both Park resources and operations. The CONSULTANT shall provide the Jacksonville District with all available photography and survey information suitable for their formulation of design and permit documents.

The sand acquired from the AIWW will be placed at no cost to the State or local interests. It will in all probability be placed with the south extremity of the authorized S. Amelia Island Shore Stabilization Project at a location immediately southward of the existing rock breakwater.

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**STATEMENT OF WORK  
COSTING SUMMARY**

**SOUTH AMELIA ISLAND  
SHORE STABILIZATION PROJECT  
RENOURISHMENT (2011)  
09/10 BUDGET YEAR**

<b>I. MONITORING – (Island/Nassau Sound/Structures)</b>		
<b>(BB&amp;CS Task 4.4)</b>		
A. Surveys (Shoreline and bathymetry of Nassau Sound)	\$62,940	<sup>1</sup>
<i>State will pay:</i>	\$60,066	
<i>County will pay:</i>	\$2,874	
 B. Oblique Aerials (Quarterly)	 \$5,650	 <sup>1</sup>
C. Controlled Aerial Photography	\$11,050	<sup>1</sup>
D. Analyses, data management, report-of-findings, subcontractor management, etc.	 <u>\$82,800</u>	
	<b>\$162,440</b>	
<b>II. DESIGN DOCUMENTS/PERMITTING</b>		
<b>(BB&amp;CS Task 2.4)</b>		
A. Legal/Survey	\$5,000	<sup>1</sup>
B. Permit Fees (Reimbursable Item)	TBD	
C. Design Documents/Cost Estimating (Plans and Specifications suitable for bid)	 <u>\$240,000</u>	
	<b>\$245,000</b>	
<b>III. AISP – Beach Disposal from AIWW</b>		
A. Design Liaison w/Jax COE Easement Coordination w/FPS	 <u>\$22,000</u>	
	<b>\$22,000</b>	
<b>TOTAL</b>	<b>\$429,440</b>	

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<sup>1</sup> Subcontractor