

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

AMENDMENT No. 03

THIS AGREEMENT was entered into on the 27th day of June 2006, and amended on the 30th day of August 2006 and 22nd day of August 2007, by and between the Department of Environmental Protection with headquarters at 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, a state agency ("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 Post Office Box 1010, Fernandina Beach, Florida 32035 ("County"), and Olsen Associates, Inc., with headquarters at 4438 Herschel St., Jacksonville, Florida 32210 ("Consultant").

WHEREAS THE Department, County and Consultant have entered into this Agreement designated Contract DC664 (formerly DC661), for the purpose of providing coastal engineering services (professional services) for the post construction monitoring, mitigation and maintenance of the South Amelia Island Shoreline Stabilization Project; and

WHEREAS THE original Agreement was intended to be periodically amended to that end.

NOW, THEREFORE, in consideration of the mutual covenants herein contained. The Department, County, and Consultant agree as follows:

1. The Consultant will continue post construction physical monitoring as required by the provisions of DEP Joint Coastal Permit No. 0187721-JC, and all its modifications (mods).
2. Attachment B is revised to include the Consultant's Cost Schedule and Statement of Work for the completion of the annual physical monitoring for the '2007-2008' monitoring year.
3. The parties agree to increase the total contract amount by \$144,570.00 from \$592,860.00, to \$737,430.00 to compensate the Consultant for the services described herein. The Department agrees to pay 32.22% of the new total, or \$46,580.00, and the County agrees to pay 67.78%, or \$97,990.00, the remainder of the sum.
4. The Consultant shall complete the annual monitoring task, and shall make all relevant submittals. All reports shall be filed no later than December 31, 2008.
5. The County will 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.

6. Attachments.

Attachment B included as part of this Amendment.

Page 1:	Monitoring Cost Sheet '07-08'	1 page
Page 2 – 6:	Monitoring Scope of Work	5 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 9th day of

June, 2008.

FOR THE CONSULTANT


Authorized Person

Erik J. O'Leary
Print Name

Pres.
Title

13 MAY 08
Date

59-2223174
FEID Number

FOR THE DEPARTMENT


For the Secretary

Assistant Director
Title

6-30-08
Date

APPROVED AS TO FORM


Department Assistant General Counsel

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


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

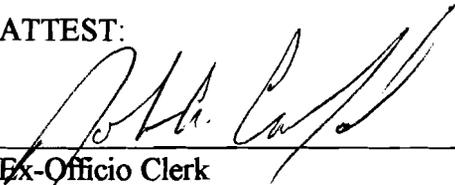
Marianne Marshall
Print Name

Chair, Nassau County Board
of County Commissioners
Title

June 9, 2008
Date

59-1863042
FEID Number

ATTEST:


Ex-Officio Clerk

John A. Crawford
Ex-Officio Clerk

Print Name *EOX 6/9/08*

APPROVED AS TO FORM


Nassau County Attorney

David A. Hallman, County Attorney
Print Name

**SOUTH AMELIA ISLAND
SHORE STABILIZATION PROJECT
PHASE II
COST Schedule & Statement of Work
Monitoring Program – 07/08**

Period – 07/08**Annual Monitoring Program (June 08)**

Rectified Digital Color Photography	\$9,640
Oblique Photography	\$5,500
Survey	
Structures	
MHWL	
Amelia Island Shoreline	
Nassau Sound (Hydro.)	\$54,460
Subcontractor Management	\$5,400
Data Management	\$8,270
Analyses	\$19,300
Reproduction	\$2,200
Report Preparation	\$39,700
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DEP Cost Share @ 32.22%	\$46,580
Nassau County, SAISSA @ 67.78%	\$97,990
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<u>Task Total</u>	<u>\$144,570</u>

NOT ADDRESSED – Remediation surveys or analyses, if determined to be required by Permit Conditions; Permittees; or BB&CS. Such work will be authorized by FDEP or SAISSA, Inc.

olsen associates, inc.
DC664
October 2007

**SOUTH AMELIA ISLAND SHORE STABILIZATION PROJECT
PHASE I & II – STRUCTURAL STABILIZATION
HYDROGRAPHIC MONITORING PROGRAM 07/08
(0187721-002-JC Nassau County)**

The following scope-of-work shall be conducted on behalf of the Permittees and will incorporate and supercede the original monitoring program implemented for Phase I (beach restoration) activities. The monitoring program described below 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 will be 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, 2008:

- 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 quarterly.

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.