

**Board of
Commissioners Meeting
July 18, 2015**

PRELIMINARY AGENDA

FLORIDA INLAND NAVIGATION DISTRICT Board of Commissioners Meeting

9:00 a.m., Saturday, July 18, 2015

Hampton Inn & Suites
19 S. Second St., Fernandina Beach, 32034-4201
Nassau County, Florida.

Item 1. Call to Order.

Chair Blow will call the meeting to order.

Item 2. Pledge of Allegiance.

Commissioner Williams will lead the Pledge of Allegiance to the United States of America.

Item 3. Roll Call.

Secretary McCabe will call the roll.

Item 4. Consent Agenda.

The consent agenda items are presented for approval. Commissioners may remove any items from this agenda that they have questions on or would like the Board to discuss in depth. Any items removed would then be included in the regular agenda in an order assigned by the Chair.

(Please see back up pages following the **COLOR** page)

RECOMMEND: Approval of the Consent Agenda.

- A) U.S. Coast Guard Auxiliary Sub-Lease of a Portion of MSA 727B (Alsdorf Park) in Pompano Beach (Broward County), FL.
 - B) FIND Interlocal Agreement Extension with Martin County (Project #ICW-MA-14-01 - Boating Traffic Study at the St. Lucie River Railroad Bridge, Martin County, FL.
 - C) Approval of Additional Exotic Vegetation Removal/Mowing at MSA 610 (aka Bluff's Dog Park), in the Town of Jupiter, Palm Beach County, FL.
-

Item 5. Additions or Deletions.

Any additions or deletions to the meeting agenda will be announced.

RECOMMEND: Approval of a final agenda.

Meeting Agenda

July 18, 2015

Page 2

Item 6. Public Comments.

The public is invited to provide comments on issues that are NOT on today's agenda. All comments regarding a specific agenda item will be considered following Board discussion of that agenda item. *Please note: Individuals who have comments concerning a specific agenda item should fill out a speaker card and communicate with staff prior to that agenda item.*

Item 7. Board Meeting Minutes.

The minutes of the June meeting will be presented for review and approval at the Commissioner's August Board meeting.

Item 8. Comments from the U.S. Army Corps of Engineers.

U.S. Army Corps of Engineers (USACE) Intracoastal Waterway Project Manager, Ms. Shelley Trulock is scheduled to present an update on projects and activities.

(Please see back up pages 6-9)

Item 9. Staff Report on Nassau County Area Projects.

Staff will present a report on the District's Nassau County area projects.

(Please see back up pages 10-21)

Item 10. Presentation and Discussion of Sediment Management Options for Dredging in Cut 1 of the Okeechobee Waterway (OWW) in the Vicinity of Crossroads (St. Lucie Inlet), Martin County, FL.

Dr. Michael Kabling of Taylor Engineering is scheduled to provide a presentation on the additional computer modeling analysis for Cut 1 of the Okeechobee Waterway (OWW) dredging area in the vicinity of the St. Lucie Inlet. Currently this area is dredged approximately every three to four years at an average cost of one to two million dollars. The area is one of the top five dredging frequencies within the District.

The District commissioned a study by Taylor Engineering to identify and analyze the existing features, hydrodynamics, and sediment characteristics of the Okeechobee Waterway (OWW) Cut 1 area to determine whether alternatives exist that would reduce sediment inflow into the channel, and (if implemented) would reduce the frequency and costs of maintenance dredging.

The extended simulation period accounted for a reduction in sediment trapping efficiency as OWW Cut 1 shoals and accounts for long-term variation in sediment transport. The Phase 2 long-term evaluations provided better estimations of the likely shoaling rates at OWW Cut 1 for the No-Action and the two most-promising alternatives — Alternatives 7 and 9. The presentation provides a summary of the findings of the study and recommendations for future actions.

Item 10 (cont.).

(Please see back up pages 22-23)

RECOMMEND: *(This item is presented for Board review and discussion only.)*

Item 11. **Proposal and Fee Quote for Additional Professional Engineering Services to Modify and Update the Dredged Material Management Plan (DMMP) for Nassau and Duval Counties, FL.**

The completed hydrographic surveys of the Atlantic Intracoastal Waterway (AIWW) in Nassau County revealed extensive shoaling within an area south of the Fernandina Beach Marina. This area was NOT previously considered part of the AIWW planning area, as it was believed to be included in the Fernandina Harbor authorization.

This area in discussion is no longer maintained through the original authorization. Discussions with our engineers and staff of the U.S. Army Corps of Engineers (USACE) has led to the conclusion that this area of the waterway is currently not being actively managed and is exhibiting water depths as shallow as -5 Mean Low Water.

In order to consider this project for maintenance dredging, the area will need to be included in the District's Dredged Material Management Plan (DMMP) for Nassau and Duval Counties. Taylor Engineering has provide a fee quote and proposal of \$17,772.00 to complete the necessary update to this plan and evaluate the long-range management of this area.

Staff has reviewed the proposal and found it to be accurate and reasonable to complete this work.

(Please see back up pages 24-26)

RECOMMEND: Approval of a proposal and fee quote from Taylor Engineering in the amount of \$17,772.00 to update the Dredged Material Management Plan for Nassau and Duval Counties, FL, to include the area near Fernandina Harbor.

Item 12. **Scope of Services and Fee Proposal for Permitting and Engineering Services for the Dredging Area of Nassau Reach 1, Nassau County, FL.**

Nassau County's Dredging Reach 1 area is experiencing significant shoaling. Those Commissioners that were on the Atlantic Intracoastal Waterway (AIWW) portion of the recent Waterway Inspection trip will recall several areas of concern for grounding with the U.S. Army Corps of Engineers (USACE) survey vessel Florida (-5' draft) as well as a sail boat grounded in the middle of the AIWW channel south of Fernandina Beach.

Analysis of the recently completed AIWW Centerline Survey supports the need for dredging in this area, with minimum depths of -5' Mean Low Water. The initiation of this project has been awaiting the completion and settling of Dredged Material Management Area NA-1.

Item 12 (cont.).

The DMMA site should be available for use next year, concurrent with the completion of the design, engineering and permitting of Dredging Reach 1 in Nassau County. This proposal is consistent in scope and costs to similar projects previously conducted by the Navigation District.

(Please see back up pages 27-42)

RECOMMEND: Approval of a scope of services & fee quote in the amount of \$171,189.12 from Taylor Engineering for the design, engineering and permitting of Dredging Reach 1, Nassau County, FL.

Item 13. **FY 2015-2016 Cooperative Assistance Program Application Rating and Evaluation.**

Staff has compiled the Commissioner's Rating and Evaluation Scores for the Cooperative Assistance Program (CAP) applications. Each CAP application received more than the required 35 points for further funding consideration, pursuant to the program rules. The three construction projects are expecting to obtain the required environmental permits prior to the District's deadline. The Florida Department of Environmental Protection's (FDEP) requests are ongoing, successful programs.

(Please see back up page 43)

RECOMMEND: Approval of the final listing of FY 2015-2016 Cooperative Assistance Program applications for funding consideration at the final TRIM hearing

Item 14. **FY 2015-2016 Waterways Assistance Program Application Rating and Evaluation.**

Staff has compiled the Commissioner's Rating and Evaluation Scores for each Waterways Assistance Program (WAP) Application. Each WAP application received more than the required 35 points for further funding consideration, pursuant to the program rules.

(Please see back up pages 44-47)

RECOMMEND: Approval of the final listing of FY 2015-2016 Waterways Assistance Program applications for funding consideration at the final TRIM hearing

Item 15. Assistance Program Process.

Staff would like to receive feedback from the Commissioners concerning this year's assistance program process. The back-up material contains staff's summary list of topics that may need further review. At the August meeting staff will present any specific proposed changes to the program rules that are warranted.

(Please see back up page 48)

Item 16. City of Daytona Beach Waterways Assistance Program (WAP) Project #VO-DB-14-101 (WAP) Major Cost Modification Request - Halifax River Greenway Trail and Pedestrian Underpass.

The City of Daytona Beach has submitted a request for a major project cost modification to Project #VO-DB-14-101, Greenway Trail and Pedestrian Underpass. Due to limitations of matching grant sources, the City wishes to reallocate FIND funding from the upland waterfront trail to the wooden boardwalk portion of the project. The overall project being constructed does not change and the project costs remain the same.

(Please see back up pages 49-51)

RECOMMEND Approval of a major project cost estimate modification request to WAP Project Agreement # VO-DB-14-101, Halifax River Greenway Trail and Pedestrian Underpass.

Item 17. Finance and Budget Committee Report.

The District's Finance and Budget Committee met prior to the Board meeting and will provide their recommendations concerning items on the Committee's agenda.

(Please refer to the Finance and Budget Committee Agenda Package)

RECOMMEND: Approval of the recommendations of the District's Finance and Budget Committee.

Item 18. Washington Report.

The District's federal governmental relations firm has submitted a status report concerning activity on the District's federal issues.

(Please see back up pages 52-53)

Item 19. Additional Staff Comments and Additional Agenda Items.

Item 20. Additional Commissioners Comments.

Item 21. Adjournment.

If a person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.



**US Army Corps
of Engineers** ®
Jacksonville District

IWW STATUS UPDATE
FIND Board of Commissioners Meeting
July 18, 2015



WORK ACTIVITIES IN FY 15:

1. IWW: Indian River Reach 1 (Indian River County)
2. DMMA O-7 (Martin County)
3. IWW: Broward Reach 1 (Broward County)



**US Army Corps
of Engineers** ®
Jacksonville District

**IWW STATUS UPDATE
FIND Board of Commissioners Meeting
July 18, 2015**



AIWW = Atlantic Intracoastal Waterway Norfolk to St. Johns
IWW = Intracoastal Waterway Jacksonville to Miami (12' and 10' projects)
DMMA = Dredge Material Management Area

1. WORK ACTIVITY: IWW Indian River Reach 1 (Indian River County)

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: Development of plans and specifications, procurement and administration of the contract for the O&M dredging of IWW Indian River Reach 1. Material from this reach is non beach quality and will be placed upland in the newly constructed DMMA IR-2. Preliminary estimates for shoaling quantities include 300,000 cy of material within Reach 1.

SCHEDULE:

Submit Exemption Letters to FDEP:	26 Nov 2013A
Contract Advertisement Initiated:	31 July 2014A
Bid Opening:	3 Sept 2014A
Contract Award:	17 Sept 2014A
NTP Issued:	6 Nov 2014A
Preconstruction Conference:	21 Nov 2014A
Mobilization Complete:	1 Jan 2015A
Dredging Complete:	21 June 2015A

FIND WORK ORDER: Work order for developing plans and specifications for Indian River Reach 1 was approved at the May 2013 FIND Board Meeting. A follow on work order was approved to fund dredging of the Indian River Reach 1 of the IWW in May 2014. Total funding for the contract is as follows: \$1,791,440.73 FIND Contributed Funds and \$4,754,734.27 Federal funding.

NAME OF CONTRACTOR: Cavache, Inc., 280 NW 12th Avenue, Pompano Beach, FL 33069 in the amount of \$6,058,675.00. An additional amount of \$487,500 was added to the contract via a modification to address additional quantity and placement of rock along the access road.

STATUS: Dredging began on 2 January 2015 and was completed on 21 June 2015. A survey was performed on 24 June 2015 to verify quantity dredged. 302,739 cy of material was dredged and placed in DMMA IR-2. The Area Office is currently proceeding with closeout of the contract. Excess funding will be provided back to FIND within 90 days.



**US Army Corps
of Engineers** ®
Jacksonville District

**IWW STATUS UPDATE
FIND Board of Commissioners Meeting
July 18, 2015**



2. WORK ACTIVITY: DMMA O-7

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: Finalization of plans and specifications, environmental coordination, procurement and administration of the construction contract for DMMA O-7.

SCHEDULE O-7:

Complete Draft P&S:	18 Nov 2015
Final P&S Ready to Advertise:	27 Feb 2016
Contract Advertisement Initiated:	16 March 2016
Bid Opening:	17 April 2016
Contract Award:	19 May 2016
NTP Issued:	20 June 2016
Mobilization Complete:	21 July 2016
Construction Complete:	TBD

FIND WORK ORDER: Funding for completion of P&S will be funded with 100% federal funding. A work order will be presented to the FIND Board in January 2016 to fund construction of DMMA O-7.

NAME OF CONTRACTOR: TBD

STATUS: P&S for DMMA O-7 kicked off on 4 Dec 2014 with the first investigation being a comparison of a bridge vs. utilization of a series of culverts. It has been determined that culverts will be able to pass the flows associated with the 2 drainage ditches on the property. From an environmental standpoint we will proceed with a supplemental EA to address the different impacts that culverts produce vs. bridges. An updated survey will be obtained of the site and it is anticipated that draft plans and specifications will be completed in November 2015.



**US Army Corps
of Engineers** ®
Jacksonville District

IWW STATUS UPDATE
FIND Board of Commissioners Meeting
July 18, 2015



3. WORK ACTIVITY: IWW Broward Reach 1 (Broward County)

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: Development of Plans and Specifications for Broward Reach 1. Corps will move forward with initiation of plans and specifications for this reach, with 100% Federal funding in FY 2016. Hydro survey was performed by Morgan and Ecklund and provided to the Corps on 26 June 2014. There is approximately 50k cy of material located within the federal channel down to 10' and 80k cy down to 10'+2'. Given the small quantity, the most cost effective way to pursue the dredging would be utilization of a Corps of Engineers dredge, either the Currituck or Murden, and dispose of in the nearshore.

SCHEDULE: Broward Reach 1 TBD

FIND WORK ORDER: P&S will be funded 100% with Federal funding in 2016. Dredging will likely be funded with FIND Contributed Funds in 2017 or late 2016.

NAME OF CONTRACTOR: TBD, but anticipate dredging will be performed with a Wilmington District dredge.

STATUS: First steps will be FDEP permit and associated NEPA. The nearest approved nearshore or offshore disposal is located at Port Everglades (offshore). In order to utilize this offshore disposal option we would need to obtain an FDEP permit and perform the required NEPA documentation. From a FDEP standpoint, it may be applicable to add the IWW reach to the description of the existing Port Everglades permit, after verification of the composition of the material. The Corps will move out on this action once DMMA 0-7 is well underway.



NASSAU COUNTY PROGRAMS STATUS REPORT

July 2015

Atlantic Intracoastal Waterway Dredged Material Management Plan

The District completed the Phase I Dredged Material Management Plan for the Atlantic Intracoastal Waterway (AIWW) in Northeast Florida in 1986. This plan was updated in 2007 in response to public and legislative concerns and the dredging reach boundaries were slightly altered. Over the next 50 years, 1.3 million cu/yds of material will need to be dredged from the AIWW in Nassau County to maintain its navigability. The Plan designates that dredged material from Dredging Reach I, which is not beach quality, will be managed at Dredge Material Management Area (DMMA) NA-1 on Crane Island. Dredged material from Dredging Reach II, which is beach quality, will continue to be placed on the Amelia Island State Park beach. In addition, the 2014/15 AIWW Centerline Survey identified an area between the authorized AIWW channel and the Fernandina Harbor project that was not be managed or maintained for navigation. This area is proposed to be managed by FIND and updates to the Plan will be necessary. (Please see the attached location maps).

Intracoastal Waterway Dredging

The AIWW in Dredging Reach II was dredged in 2006-2007. The U. S. Army Corps of Engineers (USACE) completed dredging approximately 578,000 cu/yds of beach compatible material in this area that was placed on the Amelia Island State Park beach. Another approximately 13,000 cu/yds of non-beach compatible material was placed in DMMA DU-2. FIND provided \$4.3 million in funding for this project, of which the USACE returned \$1.4 million.

In addition, Dredging Reach I is experiencing shoaling just south of the Shave Bridge and at other locations that will be dredged in 2015 following the settling of the dikes from DMMA NA-1 constructed in 2013. In addition, there is an area of concern south of the Fernandina Beach Marina that should be addressed through the District's efforts. (Please see attached the maps).

Dredged Material Management Area NA-1 Construction

The design, engineering, and permitting of this upland dredged material management site was initiated in 2008 and completed in 2010. The final permits were received in 2012. Construction of the site commenced in 2013 and was completed in early 2014. The unique nature of this site requires the dike material to "settle" before the site is fully operational. The dike settling is progressing as expected and this site should be available when needed in 2016.

Waterways Assistance Program

Since Nassau County joined the District in 2004, the District has received and approved 14 applications from the City of Fernandina Beach and Nassau County resulting in a District investment of \$1.3 M towards \$2.8 M of total waterway improvement projects. The City has made significant improvements to their City marina, the development of a Riverfront Boardwalk and the creation of a managed mooring field. City has again submitted an application for the forthcoming Assistance Program cycle. The County has utilized District funding to rehabilitate a boat ramp. The (Please see the attached list and map).



NASSAU COUNTY PROGRAMS STATUS REPORT

July 2015

Cooperative Assistance Program

The City has successfully participated in the Florida Department of Environmental Protection's (FDEP) Clean Marina Program and the Amelia Island Yacht Basin has participated in the Clean Vessel Program.

Interlocal Agreement Projects

Through this program the District entered into an Interlocal Agreement with the City of Fernandina Beach to manage the dredged material from the City marina at a District dredged material management area in Duval County.

Economic Studies

In December 2011, the District completed an update to the *Economic Analysis of the Waterways in Nassau County*. The study determined that the waterways in Nassau County generate approximately \$47.6 million in economic activity each year, about 335 jobs, \$10.8 million in salaries, \$2.5 million in additional taxes, and an increase of \$141 to \$170 million in property values. (Please see the attached summary and map).

Waterway Clean Up Program

The District has successfully partnered with Keep Nassau Beautiful for many years to assist with their annual trash and debris cleanup of Nassau County's waterways.

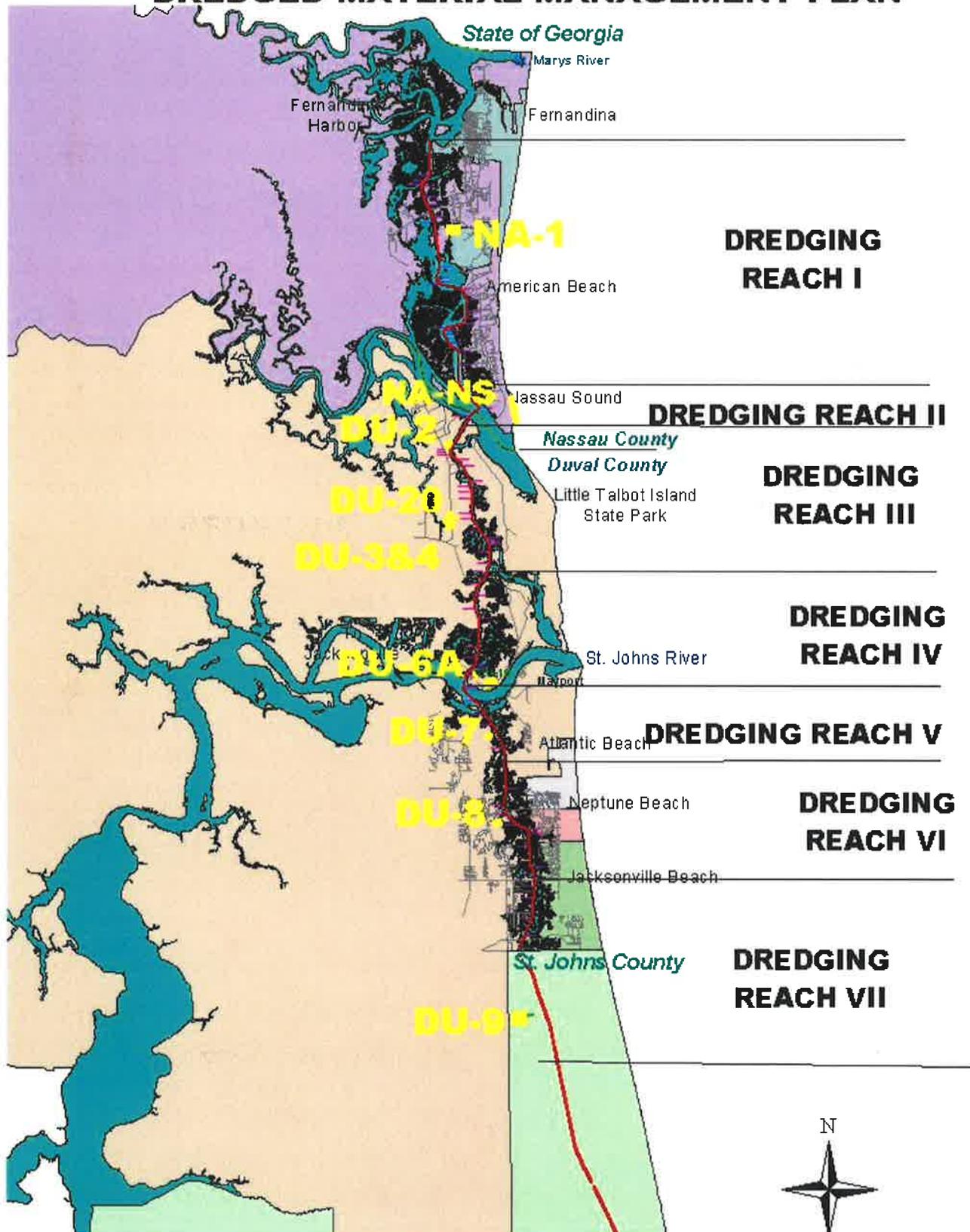
Small-Scale Derelict Vessel Removal Program

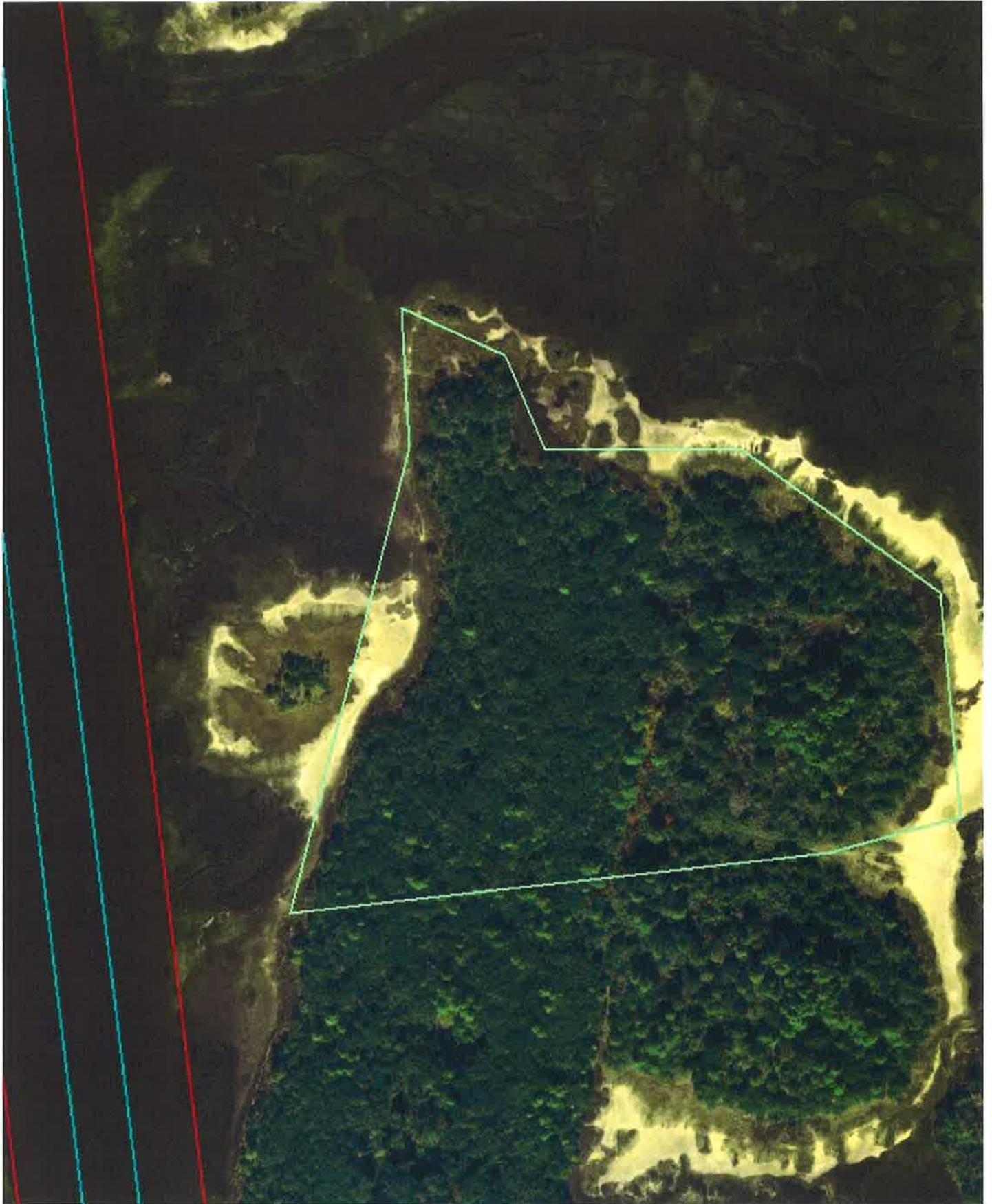
No vessels have been removed yet in Nassau County under this program.

Small-Scale Spoil Island Enhancement and Restoration Program

To date, no projects have been funded in Nassau County.

NASSAU/DUVAL COUNTIES DREDGED MATERIAL MANAGEMENT PLAN





-  FIND Owned
-  ICW Right-of-Way
-  Channel

DMMA NA-1



DMMA NA-1

Legend

NA-1

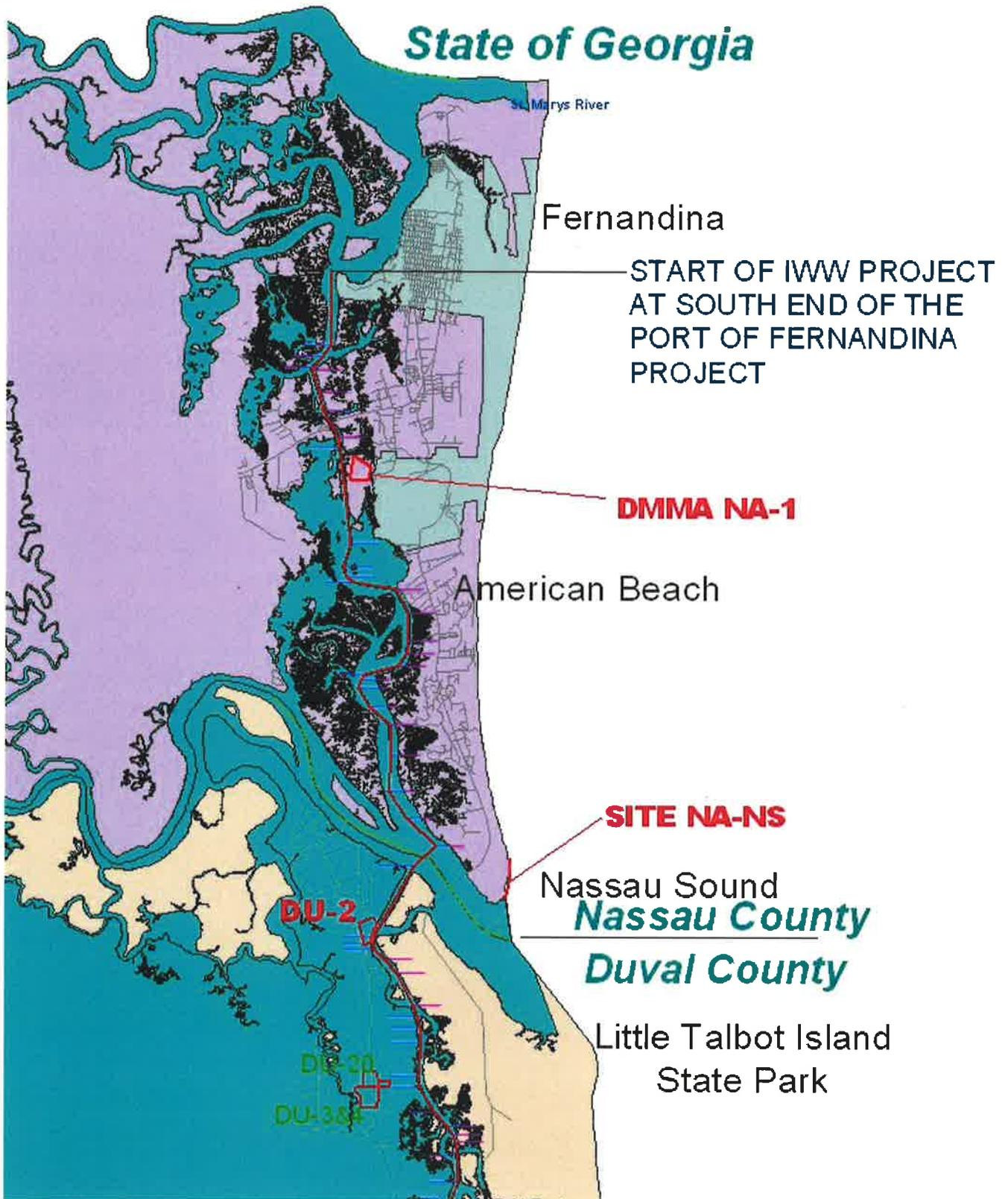


1000 ft



Google earth

© 2015 Google



AIWW MAINTENANCE DREDGING PROJECT VICINITY OF NASSAU SOUND, FLORIDA



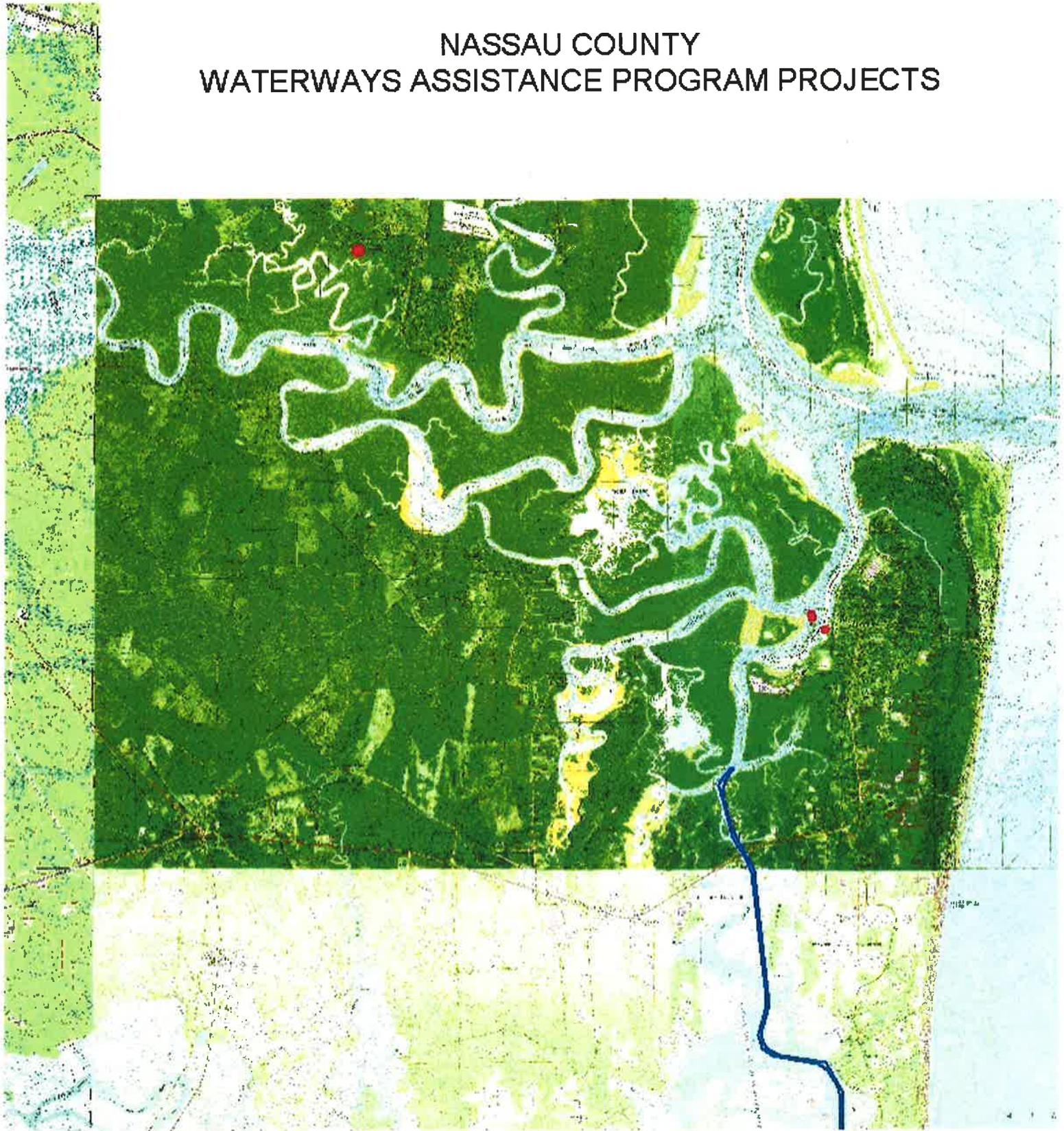
-  Findown
-  Channel
-  Channel

**DREDGED MATERIAL
MANAGEMENT AREAS**



LOCATION MAP

NASSAU COUNTY WATERWAYS ASSISTANCE PROGRAM PROJECTS



● WAP Info
Channel

**FLORIDA INLAND NAVIGATION DISTRICT
WATERWAYS ASSISTANCE PROGRAM PROJECTS
IN NASSAU COUNTY**

Project Name	Project Number	Project Sponsor	Grant Amount	Total Cost
Wilson Neck Boat Ramp	NA-08-07	Nassau County	\$50,465	\$138,640
Mooring Field	NA-FB-05-01	City Of Fernandina Beach	\$12,500	\$25,000
Riverfront Boardwalk	NA-FB-05-02	City Of Fernandina Beach	\$112,500	\$225,000
Docks E, F & G Rehabilitation/ Replacement - Phase I	NA-FB-06-03	City Of Fernandina Beach	\$25,000	\$50,000
Mooring Field - Phase II	NA-FB-06-04	City Of Fernandina Beach	\$62,500	\$125,000
Docks E, F & G Rehabilitation - Phase II	NA-FB-07-05	City Of Fernandina Beach	\$221,860	\$443,720
Docks E, F, & G Rehabilitation, Phase II, Part B	NA-FB-08-06	City Of Fernandina Beach	\$168,000	\$336,000
Fernandina Beach Boat Ramp Construction (Withdrawn)	NA-FB-09-08	City Of Fernandina Beach	\$100,000	\$200,000
Fernandina Beach Harbor Marine Basin Dredging- Ph A	NA-FB-11-09	City Of Fernandina Beach	\$174,735	\$434,848
Fernandina Beach Harbor Marine Basin Dredging- Ph B	NA-FB-12-10	City Of Fernandina Beach	\$162,215	\$342,215
Breakwater Dock Improvements	NA-FB-13-11	City Of Fernandina Beach	\$81,000	\$163,000
Marina Public Boat Ramp Dredging	NA-FB-14-12	City Of Fernandina Beach	\$144,450	\$288,900
Marina Welcome Center Deck	NA-FB-14-13	City Of Fernandina Beach	\$20,275	\$40,550
Mooring Field Improvements Ph I	NA-FB-14-14	City Of Fernandina Beach	\$7,774	\$15,547
TOTALS			\$1,343,274	\$2,828,420

ECONOMIC BENEFITS OF THE DISTRICT'S WATERWAYS



Purpose

To update economic benefits in Nassau County of marine-related activities on the District Waterways, as previously estimated in *An Economic Analysis of the District's Waterways in Nassau County*, March 2008, and to provide the general public and Federal, State, and local officials with a clear understanding of the importance of maintaining the waterways.

Scenarios Evaluated

1. Current Existing Conditions
2. Cessation of Waterways Maintenance
3. Increase in Waterways Maintenance
4. Estimated impact of the 2007-2009 U.S. economic recession



ECONOMIC IMPACTS

Current Existing Impacts

- \$47.6 million in business volume
- \$10.8 million in personal income
- 335 jobs
- \$2.5 million in tax revenue

Impacts of Cessation of Waterways Maintenance

- Decrease of \$10.3 million in business volume
- Decrease of \$2.5 million in personal income
- Decrease of 89 jobs
- Decrease of \$0.5 million in tax revenue

Impacts of an Increase in Waterways Maintenance

- Increase of \$2.6 million in business volume
- Increase of \$0.6 million in personal income
- Increase of 15 jobs
- Increase of \$0.1 million in tax revenue

Impact of the 2007-2009 U.S. Economic Recession

- Decrease of \$24.6 million in business volume
- Decrease of \$5.5 million in personal income
- Decrease of 200 jobs
- Decrease of \$1.3 million in tax revenue

Economic Benefits as of April 2011

NASSAU COUNTY



ECONOMIC BENEFITS OF THE DISTRICT'S WATERWAYS

NASSAU COUNTY

The Intracoastal Waterway

The Atlantic Intracoastal Waterway (AICW) is a 1,391-mile channel between Trenton, New Jersey, and Miami, Florida. The Waterway along Florida's eastern seaboard is 406 miles long and follows coastal rivers and lagoons past numerous tourism-oriented communities. The channel is authorized to a depth of 12 feet from Nassau County to Fort Pierce, and a 10 foot depth south through Miami-Dade County. Boating activities on the waterways contribute to the existence of numerous marine-related businesses such as marinas and boatyards and have stimulated development of residential properties on the Waterways.

The Navigation District

The Florida Inland Navigation District, created in 1927, is the local sponsor for the AICW in Florida. In cooperation with the Jacksonville District of the U.S. Army Corps of Engineers, the Navigation District is responsible for maintenance of the AICW in Florida. To maintain navigation, the waterways need to be periodically dredged due to shoaling from currents, upland soil erosion, and the movement of offshore sands through the ocean inlets. Maintenance dredging is projected to cost approximately \$12 to \$16 million annually during the next 50 years, of which 50 percent of the costs are expected to be borne by property owners within the Navigation District's jurisdiction.

The Navigation District also partners with other governments to provide waterway access and improvement facilities for our mutual constituents. These projects include public boat ramps, marinas, side channels, parks, fishing piers, boardwalks, navigation aids, derelict vessel removal, shoreline stabilization, and waterway cleanups.

Source of Data Used in This Analysis

The economic benefits of the Waterways were estimated in March 2008 in *An Economic Analysis of the District's Waterways in Nassau County*.

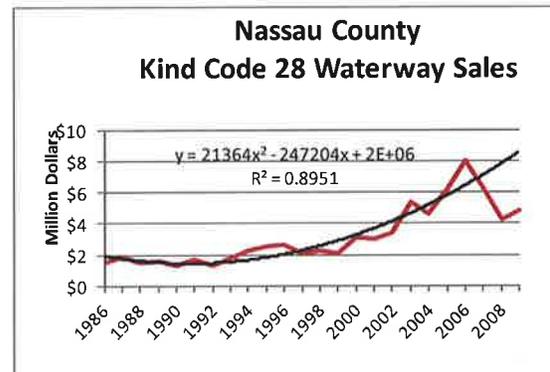
Updating of Previously Estimated Benefits

The benefits presented in this analysis were estimated by updating the direct marine-business

impacts in the original analysis to current values using the change in gross sales reported by boat dealers to the Florida Department of Revenue (FDOR). The updated direct impacts were used in conjunction with an IMPLAN input/output model to estimate total economic benefits.

Estimating the Impact of the Recession

The impact of the recession was estimated by determining the trend in gross sales of boat dealers over the 20-year period prior to the onset of the recession. This trend was used to estimate the theoretical gross sales if sales had continued to increase at the rates previously experienced. The red line in the figure below illustrates reported actual gross sales of boat dealers and the black line illustrates the trend of those sales. From 2007 to 2009 gross boat dealer sales in Nassau County decreased by 24 percent; if the recession had not occurred, it is estimated that gross sales from 2007 to 2009 would have increased by 34 percent.

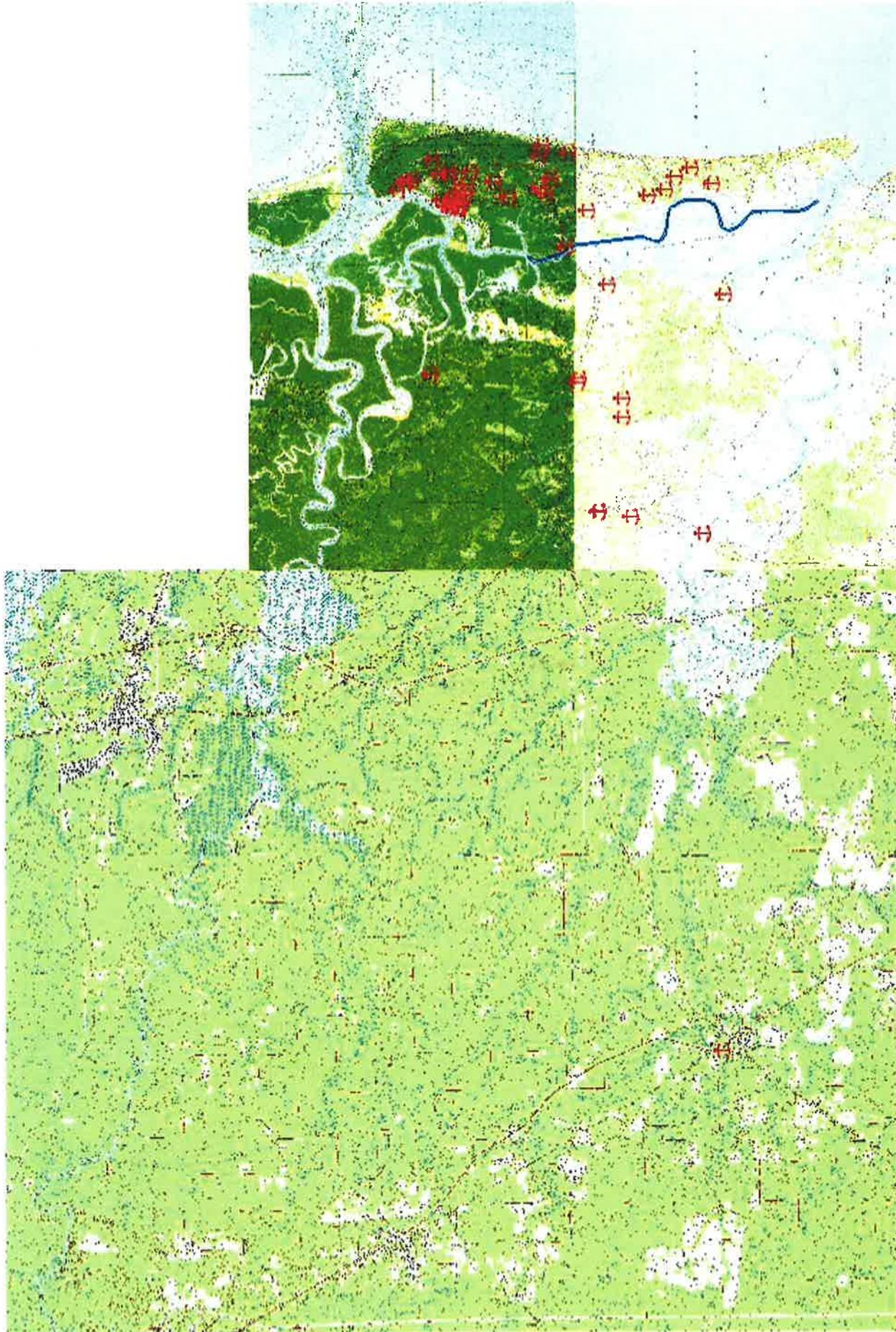


Annual Boater Spending on Gas, Food, and Drinks at Non-Marine-Related Establishments

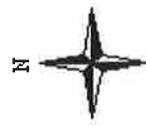
- Current existing conditions: \$4.4 million
- Cessation of maintenance: \$3.8 million
- Increased maintenance: \$4.4 million
- Assuming no recession: \$6.4 million

Vessel Draft Restrictions Assumed for Each Scenario

- Current existing conditions: 6.5 feet MLW
- Cessation of maintenance: 3 feet MLW
- Increased maintenance: 12 feet MLW
- Assuming no recession: 6.5 feet MLW

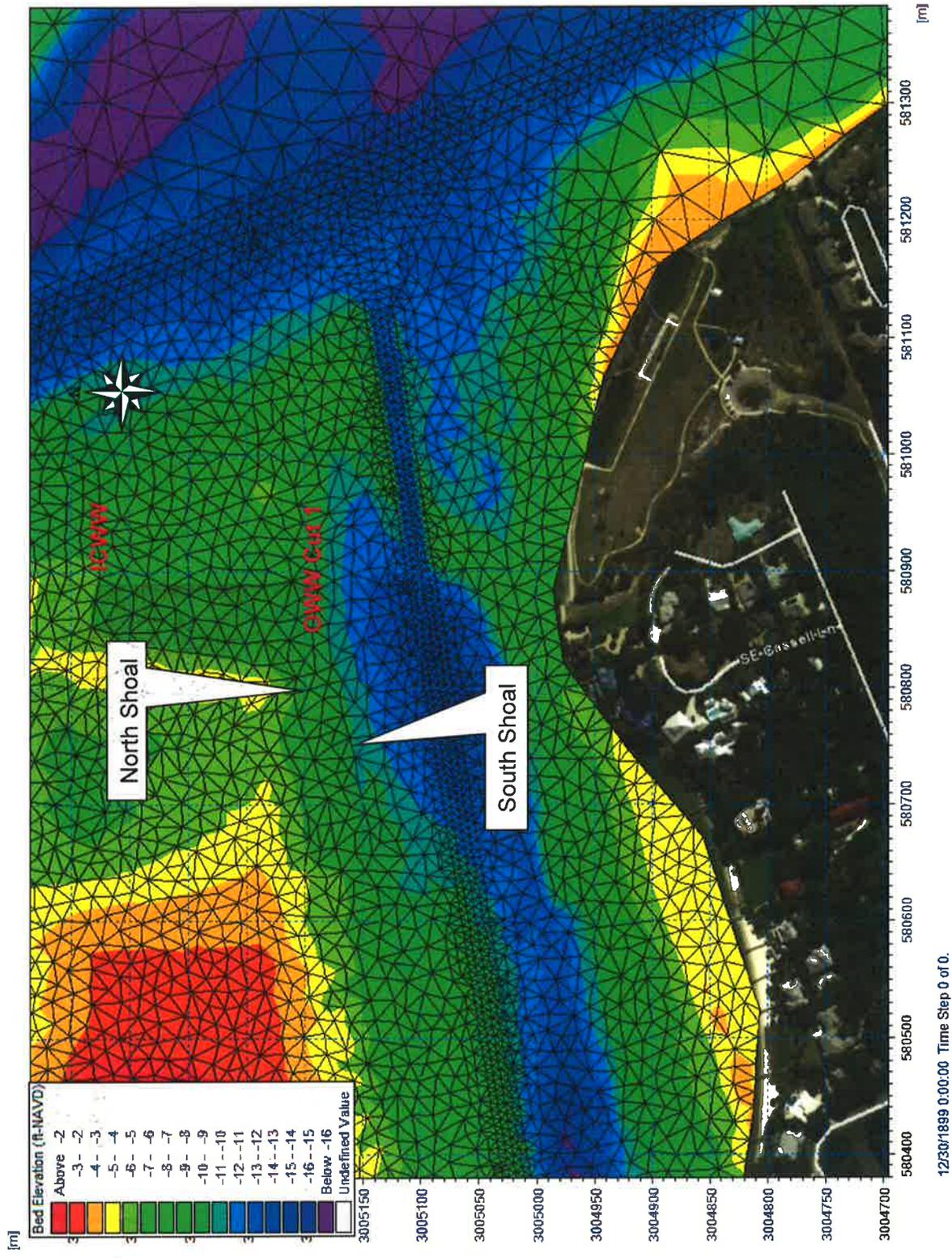


LOCATION MAP
 NASSAU COUNTY
 WATERWAY RELATED BUSINESSES



TAYLOR ENGINEERING PRESENTATION SUMMARY

The Florida Inland Navigation District (FIND) commissioned this study to identify and analyze the existing features, hydrodynamics, and sediment characteristics of the Okeechobee Waterway (OWW) Cut 1 area to determine whether alternatives exist that would reduce sediment inflow into OWW Cut 1. These alternatives, if implemented, would reduce the frequency and costs of maintenance dredging. The FIND first work order funded Phase 1 that resulted in a short-list of viable alternatives that can reduce the frequency and costs of maintenance dredging in the OWW Cut 1 area. The second work order funded Phase 2 that provided further evaluation of short-listed alternatives to estimate their long-term shoaling rates in the OWW Cut 1 area. The longer simulation period accounts for reduction in sediment trapping efficiency as OWW Cut 1 shoals and accounts for long-term variation in sediment transport. The Phase 2 long-term evaluations provided better estimations of the likely shoaling rates at OWW Cut 1 for the No-Action and the two most-promising alternatives — Alternatives 7 and 9. The presentation provides a summary of the findings of the study and recommendations for future actions.



Locations and Elevations of Shoals Adjacent to OWW



June 10, 2015

Mr. Mark Crosley
Executive Director
Florida Inland Navigation District
1314 Marcinski Rd
Jupiter, FL 33477

RE: Work Order 13-03 Modification Request
Dredged Material Management Plan Update
Nassau and Duval County, Florida

Mr. Crosley:

Taylor Engineering has completed the draft Nassau and Duval Dredged Material Management Plan (DMMP). Between February and May 2015, the Florida Inland Navigation District (FIND) received the bathymetric surveys for the subject counties that allow Taylor Engineering to refine the DMMP's with more recent data. In the preliminary review of the Nassau County bathymetric data, Taylor Engineering noted significant shoals (with some areas approaching 5 ft Mean Lower Low Water [MLLW]) within the Fernandina Harbor Project (FHP) area. Historically, FIND did not consider the FHP area as part of the Nassau DMMP as the U.S. Army Corps of Engineers (USACE) maintains most of this area to a depth of 36 ft MLLW. Based on the outcome of numerous discussions with FIND and USACE staff, FIND asked Taylor Engineering to extend the northern limit of the Nassau County study area an additional ± 4 miles to the Florida-Georgia state line.

Taylor Engineering will update both the draft Nassau and Duval DMMP reports to include an updated AIWW channel mileage, in-channel shoal volume, and 50-year maintenance and storage volume requirements. The enclosed Scope of Work (Attachment A) and Cost Proposal (Attachment B) outline these efforts. For the purpose of this Work Order modification request, we have assumed that another Dredged Material Management Area (DMMA) is not required to manage material north of the current Nassau County Reach I. Taylor Engineering will perform these requested and necessary DMMP updates for a fixed fee of \$17,772.00.

Please contact me with any questions you have regarding this effort. We can begin work upon your notice to proceed.

Sincerely,

John Adams, P.E.
Senior Advisor, Waterfront Engineering

Attachments (2)

**WORK ORDER 13-03 MODIFICATION REQUEST
DREDGED MATERIAL MANAGEMENT PLAN UPDATE
NASSAU AND DUVAL COUNTY, FLORIDA**

INTRODUCTION

Taylor Engineering has completed the draft Nassau and Duval Dredged Material Management Plan (DMMP). Between February and May 2015, the Florida Inland Navigation District (FIND) received the bathymetric surveys for the subject counties that allow Taylor Engineering to refine the DMMP's, inclusive of the Fernandina Harbor Project (FHP) area, with an updated channel mileage, in-channel shoal volume, and 50-year maintenance and storage volume requirements.

TASK 1 DREDGED MATERIAL QUANTITY PROJECTIONS

Taylor Engineering will reset ICWW mile 0 at the Florida/Georgia state line and recalculate the ICWW mileage references for each cut in Nassau and Duval counties. Based on the 2014 bathymetric survey data, Taylor Engineering will update both the Nassau and Duval DMMPs to provide consolidated and comprehensive dredging tables and accompanying figures. Baseline shoal volumes will incorporate: 1) the estimated volume of material removed from the channel during maintenance dredging operations, 2) the expected frequencies of dredging, by reach, based upon the updated database, and 3) the estimated shoal volume presently contained within the authorized channel.

TASK 2 DREDGED MATERIAL MANAGEMENT PLAN UPDATE

Applying the results of Task 1, Taylor Engineering will prepare an updated draft Summary DMMP report for each county. Planned updates include revision of the tables, figures, and accompanying text that include references to channel mileage, in-channel shoal volume, and 50-year maintenance and storage volume requirements. Finally, to assist FIND with both immediate and future planning, Taylor Engineering will update the conclusions and recommendations section of the reports to summarize key findings and provide a long-range dredging and DMMA construction schedule. We will submit the completed draft reports to FIND in electronic format for review and comment.

Within three weeks of receipt of FIND's comments on the draft reports Taylor Engineering will submit the revised final reports to FIND. These submittals will include an electronic and two hard copies of each final report, as well as an electronic file, neatly and succinctly organized for each county, of all documents collected and used in the preparation of the two updated DMMPs.

ESTIMATED SCHEDULE

No.	Task	Months from Notice to Proceed			
		1	2	3	4
1	Dredged Material Quantity Projections				
2	Dredged Material Management Plan Update				

ATTACHMENT B

TAYLOR ENGINEERING, INC.
COST SUMMARY BY TASK
P2015-099: WORK ORDER 13-03 MODIFICATION REQUEST; DREDGED MATERIAL
MANAGEMENT PLAN UPDATE; NASSAU AND DUVAL COUNTY, FLORIDA

TASK 1: DREDGED MATERIAL QUANTITY PROJECTIONS

<i>Labor</i>	Hours	Cost (\$)	Task Totals
Director	20.0	3,180.00	
Senior Technical Support	32.0	3,456.00	
Administrative	5.0	260.00	
Total Man-Hours	57.0		
Labor Cost			6,896.00
<i>Total Task 1</i>			\$ 6,896.00

TASK 2: DREDGED MATERIAL MANAGEMENT PLAN UPDATES

<i>Labor</i>	Hours	Cost (\$)	Task Totals
Director	28.0	4,452.00	
Editor	16.0	1,584.00	
Senior Technical Support	40.0	4,320.00	
Administrative	10.0	520.00	
Total Man-Hours	94.0		
Labor Cost			10,876.00
<i>Total Task 2</i>			\$ 10,876.00

Project Total \$ 17,772.00



June 26, 2015

Mr. Mark Crosley
Executive Director
Florida Inland Navigation District
1314 Marcinski Rd
Jupiter, FL 33477

RE: Scope of Professional Engineering and Permitting Services
Fernandina Harbor Project and Nassau Reach I Maintenance Dredging and Permitting
Nassau County, Florida

Mr. Crosley:

Per your request, Taylor Engineering has prepared the attached Scope of Services (Attachment A) and Cost Proposal (Attachment B) for the following services related to the above-referenced dredging project:

- Task 1 – Preliminary Design
- Task 2 – Permitting
- Task 3 – Final Design and Bid Documents
- Task 4 – Bid Administration

Taylor Engineering will complete the work described herein for a cost-plus-maximum fee of \$171,189.12. Of this amount, \$73,995 represents the proposed fee for our surveying (Sea Diversified, Inc.) sub-consultant. Their proposals are included at Attachments C and D. Taylor Engineering selected SEA Diversified, Inc. due to its recent work, under direct contract to FIND, in Nassau County. Please contact me with any questions you have regarding this effort. We can begin work upon your notice to proceed.

Sincerely,

John Adams, P.E.
Senior Advisor, Waterfront Engineering

Attachments (4)
Figure (1)

**SCOPE OF PROFESSIONAL ENGINEERING AND PERMITTING SERVICES
FERNANDINA HARBOR PROJECT AND REACH I MAINTENANCE DREDGING AND
PERMITTING; NASSAU COUNTY, FLORIDA**

INTRODUCTION

This scope of professional engineering and permitting services describes Taylor Engineering's effort to support a proposed project for maintenance dredging a portion of the Fernandina Harbor Project (FHP) and Reach I of the Intracoastal Waterway (ICWW) in Nassau County, Florida (Figure 1). Dredged material disposal would occur within the Florida Inland Navigation District's (FIND) Dredged Material Management Area (DMMA) NA-1 and DMMA DU-2.

The recent (2014) bathymetric survey by SEA Diversified (SDI) provides shoal volumes in Nassau County Reaches (Table 1). As shown, the dredging requirements for FHP and Reach I far exceed the storage requirements for DMMA NA-1. Due to recent offloading of DMMA DU-2, the current available storage capacity is unknown. Ideally and in accord with the Florida Department of Environmental Protection (FDEP) and U.S. Army Corps of Engineers (USACE) maintenance dredging authorizations, the dredging project would excavate the channel to a maximum depth, inclusive of an additional 2-ft of allowable overdepth, to -14 ft MLLW. However, for this optimal scenario to occur, the combined capacities of DMMA NA-1 and DU-2, along with the potential for offloading dewatered dredged sediment during the dredging project, will require evaluation during the preliminary design phase of the project.

On June 22, 2015, Taylor Engineering Staff met with Boat Captains from Vane Brothers. Their company provides the fuel services from Jacksonville to the Paris Island Marine Base in Beaufort, South Carolina. In both the FHP area and Reach I, Cut B, the Boat Captains identified their navigational route that uses available depths outside the limits of the federal channel. Therefore, SDI has included the cost for additional bathymetric surveys to locate the deeper water. With this information, Taylor Engineering will determine whether maintenance dredging of the federal channel is required at this time.

Table 1. Nassau County Shoal Volumes by Reach

REACH	FROM	TO	SHOAL VOLUMES, CY			DREDGED MATERIAL MANAGEMENT AREA
			-12 ft MLLW ¹	-13 ft MLLW	-14 ft MLLW	
FHP	Georgia-Florida State Line	End of Fernandina Harbor Project, Cut B STA 0+00	54,598	75,911	98,573	--
I	Cut B STA 0+00	Cut 27C STA 0+00	212,887	300,292	492,622	DMMA NA-1 (Design/Available Capacity = 187,700 CY)
II	Cut 27C STA 0+00	Nassau-Duval County Line	2,430	10,037	24,211	DMMA DU-2 (Design/Available Capacity = 395,000 CY/Unknown)
		TOTAL	269,915	386,240	615,406	

¹ MLLW = Mean Lower Low Water

TASK 1 PRELIMINARY DESIGN

1.1.1 Utility and Topographic Survey

SEA Diversified will complete a limited utility and magnetometer survey in the proposed project area. Deliverables will include a report that documents the research of utility crossing information between the northern end of Cut 8 through the southern end of Cut 27D. The report, along with providing backup documentation (inclusive of As-Built surveys and permit and easement documentation) from the actual utility companies, shall clearly indicate the locations of utilities within the project area. A signed and sealed survey indicating the 2014 bathymetric survey data and newly acquired utility information will provide detailed cross-sections showing the utility location, depth of burial, and the dredge design template. In order to quantify the available capacity of DMMA DU-2, SEA Diversified will also complete an upland topographic survey of the DMMA interior.

1.1.2 Bathymetric Survey

Sea Diversified will conduct multi-beam bathymetric survey outside of the federal channel along Cuts B and 10. The expansion of Cut B will be to the west and Cut 10 to the south. These surveys will provide depths from the existing federal channel to within 60ft of the shoreline. From this information, Taylor Engineering will consult with USACE and FIND Staff to determine the best approach for dealing with this area at this time. The main restriction concerning the scope of dredging of this northern reach is the lack of capacity in the DMMA to handle the total dredging quantities.

1.2 DMMA Reconnaissance

Taylor Engineering staff will investigate the sites to evaluate and document existing site conditions at DMMA NA-1 and DU-2. Staff will document any visibly apparent geotechnical issues (e.g., erosion, settling, cracking) of the DMMA and weir, and evaluate any potential on-site environmental issues (within the DMMA, pipeline corridor, and within the contractor's likely staging areas). In a letter report to the FIND, we will summarize site conditions and note potential site encumbrances. The report will include photographs, an aerial map detailing any geotechnical and environmental site features and, if necessary, recommend any restorative DMMA features or environmental restrictions required for the project.

1.3 Dredging Template and Dredge Quantities

Taylor Engineering will develop a three-dimensional AutoCAD-based digital terrain model of the project area. In addition to incorporating the newly acquired utility survey information (Task 1.1), we will incorporate SEA Diversified's 2014 bathymetric survey data into the models to develop a dredging template that will include plan area, cross sections, and total required dredging volume. We will assess the shoaling areas and determine, with the combined capacities of DMMA NA-1 and DU-2, the best placement for the material. Because the maintenance dredging volume (to -14 ft MLLW) exceeds the combined storage capacity of NA-1 and DU-2, we will evaluate other maintenance dredging and material handling scenarios, including the potential for offloading dewatered dredged sediment during dredging and strategically reducing the maximum excavation depth from -14 ft MLLW to either -13 or -12 ft MLLW.

1.4 Permit Drawings

In support of Task 2 (Permitting), Taylor Engineering will prepare permit drawings for the various site elements. If appropriate, the permit set will include photo-based sheets depicting the project

ATTACHMENT A

areas. We will obtain existing aerial photography for this purpose. These drawings will provide plan, cross section, and detail views of the proposed maintenance dredging project and the associated upland DMMA's and, if necessary, its return water control structure as well as any necessary seepage, drainage, and erosion control features. We will provide signed and sealed permit drawings in appropriate hard-copy format and in digital (AutoCAD and PDF) format.

TASK 2 PERMITTING

2.1 Permit Application

2.1.1 FDEP Maintenance Dredging Exemption

We will prepare and submit to the FDEP a request for maintenance dredging exemption. The exemption request will include a description of the waterway's design, construction, and maintenance history; drawings showing the maintenance dredging locations, templates, and DMMA's; and description of the dredging and material handling methods

2.1.2 USACE General Permit

Taylor Engineering will prepare and submit to the USACE Jacksonville District a request for verification of the maintenance dredging authorization under Department of the Army Regional General Permit SAJ-93. The verification request will include a description of the waterway's design, construction, and maintenance history; drawings showing the maintenance dredging locations, templates, and DMMA's; and description of the dredging and material handling methods.

2.2 OPTIONAL TASK: Request for Additional Information (RAI) Response and Submittal

After initial review of the maintenance exemption and general permit verification requests, the FDEP and USACE will likely respond with one or more RAIs. An RAI typically comprises a series of questions that require additional clarification or other information regarding the proposed work. Accordingly, we have budgeted a maximum \$11,280.00 (approximately 80 senior professional person-hours) to respond to FDEP and USACE RAIs. Should the RAI responses require more than this budgeted labor (or should the agencies deny the maintenance exemption or verification request and require new state or federal permits), we will evaluate the response requirements and prepare and submit to the FIND a scope of work and cost proposal to respond to the agency requirements. Taylor Engineering will provide all RAI responses to the FIND for review before submittal to the FDEP and USACE.

TASK 3 FINAL DESIGN AND BID DOCUMENTS

3.1 Final Design and Construction Drawings

We will prepare final design documents and construction drawings for the various site elements. Construction drawings will provide plan, cross section, and detail views of the ICWW dredging area and pertinent details (i.e., pipeline corridor, contractor staging area, weir location and discharge area, etc.) of the DMMA's. We will provide construction drawings in appropriate hardcopy format and in digital (AutoCAD) format, as well as record drawings signed and sealed by a Florida Registered Professional Engineer.

ATTACHMENT A

3.2 Contract Documents and Technical Specifications

We will update the Division 00 and 01 Contract Documents and prepare all other Technical Specifications for the project. We will follow the Engineers Joint Contract Documents Committee (EJCDC) and Construction Specification Institute (CSI) standards and guidelines to prepare the specifications.

3.3 Bid Package Submittal

We will prepare a bid package (including Contract Documents, Technical Specifications, and bid schedule) with estimated quantities for all bid items. To give interested bidders immediate access to the bid package, we will provide an electronic copy of the final drawings and specifications for the FIND to upload onto its FTP site. We will provide the FIND with a record set of drawings sealed by a Florida Registered Professional Engineer.

3.4 Opinion of Probable Cost

We will prepare an opinion of probable cost for the project.

TASK 4 BID ASSISTANCE

Taylor Engineering will help the FIND administer the bidding process and help select the contractor. We will remain available at our Jacksonville offices to clarify and interpret project documents and prepare addenda, if required. We will coordinate and attend a pre-bid meeting to answer questions concerning elements of the project for which Taylor Engineering is responsible.

We will help review the bids received and provide the FIND with our recommendations for contractor selection. This work includes reviewing the submitted bid documents, checking technical references of the responsive bidders, and preparing and transmitting a written recommendation for contractor selection. Taylor Engineering will limit its review and recommendations to engineering and technical issues. The FIND will take responsibility for legal review and evaluation of contractors' financial condition, business licenses or authorizations, bonding, contractual requirements, and any other non-engineering or non-technical information.

ESTIMATED SCHEDULE

No	Task	Months from Notice to Proceed							
		1	2	3	4	5	6	7	8
1	Preliminary Design	■	■	■	■				
2	Permitting		■	■	■				
3	Final Design and Bid Documents				■	■	■		
4	Bid Assistance							■	■

TAYLOR ENGINEERING, INC.
COST SUMMARY BY TASK
D PERMITTING SERVICES; FERNANDINA HARBOR PROJECT AND REACH I MAINTENANCE I

TASK 1: PRELIMINARY DESIGN

<i>Labor</i>	Hours	Cost (\$)	Task Totals
Vice President	3.0	555.00	
Senior Advisor	10.5	1,953.00	
Senior Professional	48.0	6,768.00	
Project Professional	56.0	5,936.00	
Editor	2.0	198.00	
Senior Technical Support	100.0	10,800.00	
Administrative	19.0	988.00	
Total Man-Hours	238.5		
Labor Cost			27,198.00
<i>Non-Labor</i>	Units	Cost (\$)	
ty and Topographic Survey (SEA Diversified)	1.0	73,995.00	
Mileage	120.0	69.60	
Per Diem	2.0	30.00	
Non-Labor Cost		74,094.60	
Fee @ 10.0%		7,409.46	
Total Non-Labor Cost			81,504.06
<i>Total Task 1</i>			\$ 108,702.06

TASK 2: PERMITTING

<i>Labor</i>	Hours	Cost (\$)	Task Totals
Senior Advisor	2.0	372.00	
Director	8.0	1,272.00	
Senior Professional	88.0	12,408.00	
Project Professional	20.0	2,120.00	
Senior Technical Support	16.0	1,728.00	
Administrative	5.0	260.00	
Total Man-Hours	139.0		
Labor Cost			18,160.00
<i>Total Task 2</i>			\$ 18,160.00

TASK 3: FINAL DESIGN AND BID DOCUMENTS

<i>Labor</i>	Hours	Cost (\$)	Task Totals
--------------	-------	-----------	-------------

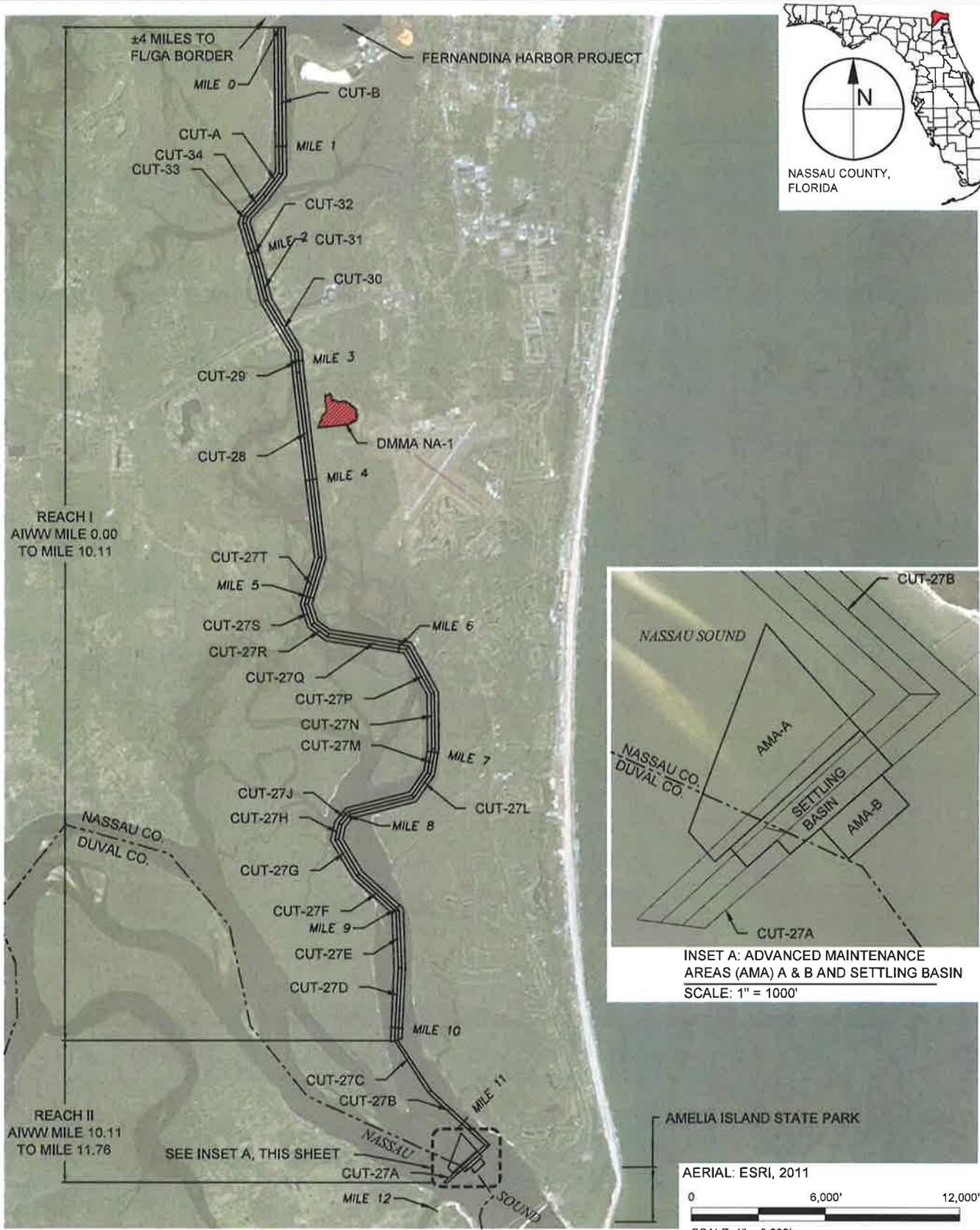
D PERMITTING SERVICES; FERNANDINA HARBOR PROJECT AND REACH I MAINTENANCE I

Vice President	4.0	740.00	
Senior Advisor	11.5	2,139.00	
Director	11.0	1,749.00	
Senior Professional	52.0	7,332.00	
Project Professional	136.0	14,416.00	
Editor	8.0	792.00	
Senior Technical Support	60.0	6,480.00	
Administrative	25.0	1,300.00	
Total Man-Hours	307.5		
Labor Cost			34,948.00
Total Task 3			\$ 34,948.00

TASK 4: BID ASSISTANCE

<i>Labor</i>	Hours	Cost (\$)	Task Totals
Senior Advisor	7.0	1,302.00	
Senior Professional	22.0	3,102.00	
Project Professional	40.0	4,240.00	
Editor	3.0	297.00	
Administrative	6.0	312.00	
Total Man-Hours	78.0		
Labor Cost			9,253.00
<i>Non-Labor</i>	Units	Cost (\$)	
Mileage	120.0	69.60	
Per Diem	3.0	45.00	
Non-Labor Cost		114.60	
Fee @ 10.0%		11.46	
Total Non-Labor Cost			126.06
Total Task 4			\$ 9,379.06

Project Total \$ 171,189.12



ANTON FLEWELLING X:\S\PROJECTS\C2013-031 NASSAU DMMP\FIGURES\C2013-031-F-NASSAU FIGURE 1 REVISED.DWG 6/22/2015 10:40:06 AM

TAYLOR ENGINEERING INC.
 10151 DEERWOOD PARK BLVD.
 BLDG. 300, SUITE 300
 JACKSONVILLE, FL 32256
 CERTIFICATE OF AUTHORIZATION # 4615

FIGURE 1
 REACH LIMITS AND DESIGNATED DREDGED MATERIAL
 MANAGEMENT SITES
 ATLANTIC INTRACOASTAL WATERWAY
 NASSAU COUNTY, FLORIDA

PROJECT	C2013-031
DRAWN BY	AF
SHEET	1 OF 1
DATE	JUNE 2015



Sea Diversified, Inc.

21 N.W. 2nd Street
 Delray Beach, Florida 33444
 Phone: 561-243-4920
 Facsimile: 561-243-4957

1900 S. Harbor City Blvd, Ste 110
 Melbourne, Florida 32901
 Phone: 321-984-7268
 Facsimile: 321-984-7270

June 23, 2015
 (Original June 15, 2015)

Ms. Lori S. Brownell, P.E.
 Director, Waterfront Engineering
 Taylor Engineering, Inc.
 10151 Deerwood Park Blvd
 Bldg. 300, Suite 300
 Jacksonville, FL 32256

*forwarded via electronic mail 06/23/2015
 (LBrownell@Taylorengineering.com)*

**Re: Proposal / Agreement for Professional Services
 Topographic Survey of DMMA DU-2 and Submerged
 Utility Investigation of ICWW Cut-8 through Cut-27D
 Nassau County, Florida
 Sea Diversified P.N. 15-2309**

Dear Ms. Brownell:

In accordance with your request, Sea Diversified, Inc. (SDI) is pleased to submit the following proposal for professional services. The scope of work shall include a topographic survey of Florida Inland Navigation District (FIND) Dredge Material Management Area (DMMA) DU-2 and submerged utilities investigation of the Intracoastal Waterway (ICWW) Cuts 8 to 27D, in Nassau County, Florida. Per your request in electronic mail dated June 08, 2015, the scope of work shall particularly include the following:

General:

SDI shall provide supervision, field / office support staff and equipment to perform the scope of work described, herewith. All work shall be conducted to the highest level of industry standards and under the responsible charge of a Professional Surveyor and Mapper registered in the State of Florida. All work shall meet or exceed the Minimal Technical Standards set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes. If time permits, deviations from the scope of work shall be addressed via formal approved addendum to the executed Agreement for Professional Services.

Horizontal and Vertical Data:

Horizontal Data: Feet, relative to the Florida State Plane Coordinate System, East Zone, North American Datum of 1983 (NAD83)
 Vertical Datum: Feet, relative to the North American Vertical Datum of 1988 (NAVD88)

Horizontal / Vertical Control Establishment

SDI will conduct an initial site reconnaissance to identify all necessary vertical and horizontal control needed for the survey. Prior to data collection efforts, survey control will be recovered and verified using either conventional methods or Real-time Kinematic Differential Global Positioning techniques, whichever methodology is deemed most practical.

Topographic Survey

SDI shall conduct a topographic survey of FIND DMMA DU-2 to determine the available capacity within 4-feet of the dike crest. The survey will consist of ground elevations at 100-foot intervals from the top of dike, across the spoil containment area, to the top of the adjacent dike, or whatever is deemed most practical to define the DMMA interior. Ground elevations will be collected at a maximum distance of fifty (50) feet, and any significant changes of material or changes in elevation over one (1) foot.



**Proposal / Agreement for Professional Services
Topographic Survey of DMMA DU-2 and Submerged
Utility Investigation of ICWW Cut-8 through Cut-27D
Nassau County, Florida
June 23, 2015 (Original 6/15/15)
Page 2 of 5**

Submerged Utility Investigation

SDI shall perform a desktop study to pre-determine the extent and location of known utility crossings along the Atlantic ICWW, from the northern end of Cut 8 through the southern end of Cut 27D in Nassau County. The east-west extent of both areas shall identify any utilities, permits, and submerged land easements within the entire ICWW Right-of-Way (ROW).

Using available as-built records, SDI will superimpose the reported location of the utilities on base maps to create a Utility Crossing Report. This information will be used to assist in the planning of field data collection efforts. The utility report, along with back-up documentation (inclusive of As-Built surveys and permit and easement documentation) from the actual utility companies and the Florida Department of Environmental Protection (FDEP), shall clearly indicate the locations of obstructions within the project area. To verify the horizontal locations of utilities identified within the Utility Crossing Report, SDI shall perform a magnetometer and side scan sonar survey. Note that diver-assisted "groundtruthing" investigations, not included as part of this cost estimate, would be required for vertical locations of subterranean utilities. The use of this remote sensing equipment will not determine the burial depth or elevation of utility crossing, unless detected on the surface of the seafloor with side scan sonar investigation. Subsequent diver investigations would be required to confirm both the horizontal and vertical location of any utilities detected through remote sensing operations. ***Diver operations are not included as part of the scope of work described herewith, and will be addressed via supplemental agreement based on the extent of diver operations necessary.***

Magnetometer Survey

SDI shall conduct a magnetometer survey within the described limits of the ICWW. Magnetometer data will be used to identify and map features of ferrous composition that are either buried or projecting above the seafloor including submerged cables and pipelines and /or other submerged items that may be pertinent to the channel deepening project. The survey shall be conducted using a cesium magnetometer or equivalent with topside positioning / navigation system. Data shall be collected along the ICWW centerline with longitudinal lines at fifty (50) feet, one hundred (100) feet, and two hundred (200) feet east and west of the centerline, and include any upland utility identifiers/landmarks.. Additional data may be collected along transects oriented perpendicular to the channel, specifically at bridge locations within the project limits or at known or marked utility crossings.

It is noted that isolated magnetic anomalies detected from the sensor may warrant diver verification operations. Diver groundtruthing pertaining to isolated magnetic anomalies is not included as part of the scope of work described, herewith and will be addressed via supplemental agreement based on the extent of groundtruthing necessary.

Side Scan Sonar Survey:

SDI shall conduct a side scan sonar survey of the waterway at each project location to identify and map exposed cables or other utilities that may be lying on the bottom. This data will assist in the processing of the magnetometer data and specifically aid in the horizontal mapping of submerged cables and pipelines. The side scan sonar survey will also identify other features projecting above the seafloor such as rock outcrops, rip-rap material, manmade debris, and /or other submerged items that may impact the channel deepening project. The survey shall be conducted using an EdgeTech high frequency tow-fish with topside navigation and digital data collection and processing software. The system will be set to achieve one hundred percent seafloor coverage within the described limits of the survey with sufficient overlap to maximize the operator's ability to classify features detected from the sensor. Upon completion of the field survey, digital images will be translated to a fully georeferenced mosaic and overlaid with the charts produced from the magnetometer survey. Features of interest will be mapped and classified. Features of unknown or questionable classification will be noted accordingly for subsequent diver verification, if necessary.

Charts will be prepared depicting the location of apparent utility crossings as determined through analysis of the magnetometer data and side scan sonar imagery (if applicable). Bathymetric contours, from the 2014 FIND ICWW multi-beam centerline survey, can be superimposed on the charts to assess



**Proposal / Agreement for Professional Services
Topographic Survey of DMMA DU-2 and Submerged
Utility Investigation of ICWW Cut-8 through Cut-27D
Nassau County, Florida
June 23, 2015 (Original 6/15/15)
Page 3 of 5**

the pertinence of the submerged utility relative to the proposed dredging operations. Isolated magnetic anomalies shall be tabulated by position (X-Y SPCS and Lat/Lon) and magnetic intensity (gammas). Other objects detected from the side scan sonar survey, if applicable, will also be depicted on the final maps. Digital data files and CADD drawing files will be provided on CD along with a survey report describing the methodologies used for the project along with a summary of results.

Upon completion of the remote sensing operations, SDI shall meet with Taylor Engineering representatives to discuss the findings of the investigations. At the direction of the Client, SDI will prepare a supplemental scope of work along with estimated fees to conduct additional diver-assisted services pertaining to the vertical locations of submerged utilities.

Supplemental Utility Locates Task (Not Included):

Underwater Diver Operations – Part One

As requested, via formal addendum to the aforementioned scope of work, SDI shall deploy a dive team to electronically track and map the horizontal location of apparent utility crossings within the limits of the investigation. It is noted that the ability for divers to electronically track these utilities will be based on whether or not a tone can be placed on the cable or pipeline and how effectively the line carries the tone from one side of the waterway to the other. Limited excavation may be required in order to place a tone on the cable or pipeline. Upon inducing the tone, divers will mark the apparent location of each utility via electronically tracking the tone across the waterway. Surveyors will be onsite during the dive operations to locate the marked positions of the utilities using DGPS methodologies. Minimal excavation to expose utilities will be included in this initial phase of work; however, approximate burial depths will be recorded to the extent practical using the electronic tracking device.

Upon completion of dive operations, SDI will provide X,Y,Z coordinate data each submerged utility along with a report describing the methodologies, results and inherent reliability of the field locates. CADD files will be provided, as necessary.

Underwater Diver Operations – Part Two

Depending upon the results of the remote sensing operations and expected reliability of the subsequent electronic utility locates, it may be warranted to verify the precise horizontal and vertical location of submerged utilities through subsequent diver groundtruthing operations. As requested, via formal addendum, SDI shall re-deploy divers to physically expose, identify and map the horizontal and vertical location of submerged utilities using either water jetting equipment or air sand lifts to expose utilities to the extent required for classification and location. Each known utility will be exposed at random intervals along the submerged length extending from the westerly to easterly shorelines. SDI survey crews will be onsite during the dive operations to locate the exposed utilities both horizontally and vertically using conventional survey and / or DGPS methodologies.

It is noted that exposing buried pipelines or cables using the methods described here is generally limited to a maximum burial depth of three (3) to four (4) feet depending on the nature of the sediments, tidal currents, vessel traffic and extent of wake. Utilities buried beyond this depth may require additional personnel, different equipment or other methodologies.

Data Processing and Final Deliverables:

Upon completion of field survey activities, data will be edited and reduced to the project datum and formatted as required for modeling and chart preparation. Certified charts will be prepared of the DMMA interior, inclusive of the dike crest, providing volumetric calculations of the available capacity within four (4) feet of the dike crest top elevation. Upon completion of the utilities investigation, SDI will provide a written report that documents the research of utility crossing information within the project area. Additionally, SDI will provide a signed and sealed bathymetric survey that includes the previously supplied 2014 bathymetric survey information overlain with each identified utility crossing along, and a detailed cross-section view showing the utility location, depth of burial, and the dredge design template.



**Proposal / Agreement for Professional Services
Topographic Survey of DMMA DU-2 and Submerged
Utility Investigation of ICWW Cut-8 through Cut-27D
Nassau County, Florida
June 23, 2015 (Original 6/15/15)
Page 4 of 5**

Final deliverables shall include the following:

- Certified planview charts provided in hardcopy format (1 set each, paper media)
- Electronic CADD files – MicroStation (.dgn), AutoCAD (.dwg) or other version, as required
- Electronic planview charts - Adobe (.PDF) format
- Electronic data files – ASCII, (.xyz) format

Cost:

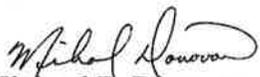
Topographic Survey: \$ 16,915.00 Lump Sum
(one-time survey event including control verification, data collection, processing, and final deliverables)

Submerged Utility Investigation: \$ 49,910.00 Lump Sum
(including desktop research, field data collection, processing, expenses, and final deliverables)

Should you have questions or require additional information please do not hesitate to contact us at your convenience. We appreciate this opportunity to assist you with this project and look forward to hearing from you soon.

Best Regards,

Approved this ____ day of _____, 2015


Michael P. Donovan, Jr.
Project Manager
Sea Diversified, Inc.

Ms. Lori S. Brownell, P.E. or Authorized
Taylor Engineering Representative



**Proposal / Agreement for Professional Services
Topographic Survey of DMMA DU-2 and Submerged
Utility Investigation of ICWW Cut-8 through Cut-27D
Nassau County, Florida
June 23, 2015 (Original 6/15/15)
Page 5 of 5**

ATTACHMENT A





Sea Diversified, Inc.

21 N.W. 2nd Street
 Delray Beach, Florida 33444
 Phone: 561-243-4920
 Facsimile: 561-243-4957

1900 S. Harbor City Blvd, Ste 110
 Melbourne, Florida 32901
 Phone: 321-984-7268
 Facsimile: 321-984-7270

June 24, 2015

Mr. John F. Adams, P.E.
 Senior Advisor, Waterfront Group
 Taylor Engineering, Inc.
 10151 Deerwood Park Blvd, Bldg. 300, Suite 300
 Jacksonville, FL 32256

*forwarded via electronic mail 06/24/2015
 (JAdams@Taylorengineering.com)*

**Re: Proposal / Agreement for Professional Services
 Multibeam Bathymetric Survey of the ICWW at
 Cut-10 and Cut-B Shoal Areas
 Nassau County, Florida
 Sea Diversified P.N. 15-2312**

Dear Mr. Adams:

In accordance with your request, Sea Diversified, Inc. (SDI) is pleased to submit the following proposal for professional services. The scope of work shall include a hydrographic (multi-beam bathymetric) survey of the Intracoastal Waterway (ICWW) at reported shoaled areas within Cut 10 and Cut B, in Nassau County, Florida. The following fee estimate is contingent upon coordination with the mobilization of the ICWW Utility Surveys of Cuts 8 to 27D (*reference SDI Project #15-2309*), and not requiring a re-mobilization. Per your request in electronic mail dated June 22, 2015 with attachment shown on "Attachment A" herein, the scope of work shall particularly include the following:

General:

SDI shall provide supervision, field / office support staff and equipment to perform the scope of work described, herewith. All work shall be conducted to the highest level of industry standards and under the responsible charge of a Professional Surveyor and Mapper registered in the State of Florida. All work shall meet or exceed the Minimal Technical Standards set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes. If time permits, deviations from the scope of work shall be addressed via formal approved addendum to the executed Agreement for Professional Services.

Horizontal and Vertical Data:

Horizontal Data: Feet, relative to the Florida State Plane Coordinate System, East Zone, North American Datum of 1983 (NAD83)
 Vertical Datum: Feet, relative to the North American Vertical Datum of 1988 (NAVD88)

Horizontal / Vertical Control Establishment

SDI will conduct an initial site reconnaissance to identify all necessary vertical and horizontal control needed for the survey. Prior to data collection efforts, survey control will be recovered and verified using either conventional methods or Real-time Kinematic Differential Global Positioning techniques, whichever methodology is deemed most practical.

Hydrographic (Multi-beam Bathymetric) Survey

SDI shall conduct a bathymetric survey of the ICWW Cut 10 & Cut B, as shown in "Attachment A" and as directed by Client. Bathymetric data shall be collected using an automated hydrographic system comprised of a shallow draft survey launch equipped with a Teledyne Odom MB1 shallow water multi-beam swath system (120-degree minimum swath coverage) with integrated Teledyne TSS DMS-05 Motion Sensor. A Trimble SPS-461 RTK/DGPS shall be used for vessel positioning and heading. For navigation, data collection and processing SDI shall employ a computer equipped with Coastal Oceanographic's HYPACK / HYSWEEP software. Equipment calibration procedures shall follow manufacturer recommendations.



**Proposal / Agreement for Professional Services
Multibeam Bathymetric Survey of the ICWW at
Cut-10 and Cut-B Shoal Areas
Nassau County, Florida
June 24, 2015
Page 2 of 3**

Soundings will be collected in both raw and adjusted (tide corrected) formats using RTK GPS derived water surface elevations. Data shall be collected in feet relative to the project datum. Redundant tide measurements will be recorded as a quality control check on the RTK GPS derived water surface elevations. A tide gauge shall be employed to record continuous tidal data during the course of bathymetric data collection. Tidal data shall be collected and recorded at intervals 10-minute intervals or less. In areas deemed impractical for multi-beam sounding technology, SDI shall use a combination of single-beam sounding methods, RTK GPS, total station and/or standard poling techniques.

Data Processing and Final Deliverables:

Upon completion of field survey activities, data will be edited and reduced to the project datum and formatted as required for modeling and chart preparation. Final data, reduced to an x,y,z, ASCII format will be imported to a CADD environment and translated to Digital Terrain Model (DTM) for preparation of cross-sections and/or volumetric calculations.

Final deliverables shall include the following:

- Certified planview charts provided in hardcopy format (1 set each, paper media)
- Electronic CADD files – MicroStation (.dgn), AutoCAD (.dwg) or other version, as required
- Electronic planview charts - Adobe (.PDF) format
- Electronic data files – ASCII, (.xyz) format

Cost:

Hydrographic (Multi-beam Bathymetric) Survey:

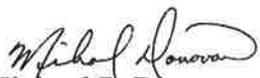
\$ 7,170.00 Lump Sum

(one-time survey event including control verification, data collection, processing, and final deliverables)

Should you have questions or require additional information please do not hesitate to contact us at your convenience. We appreciate this opportunity to assist you with this project and look forward to hearing from you soon.

Best Regards,

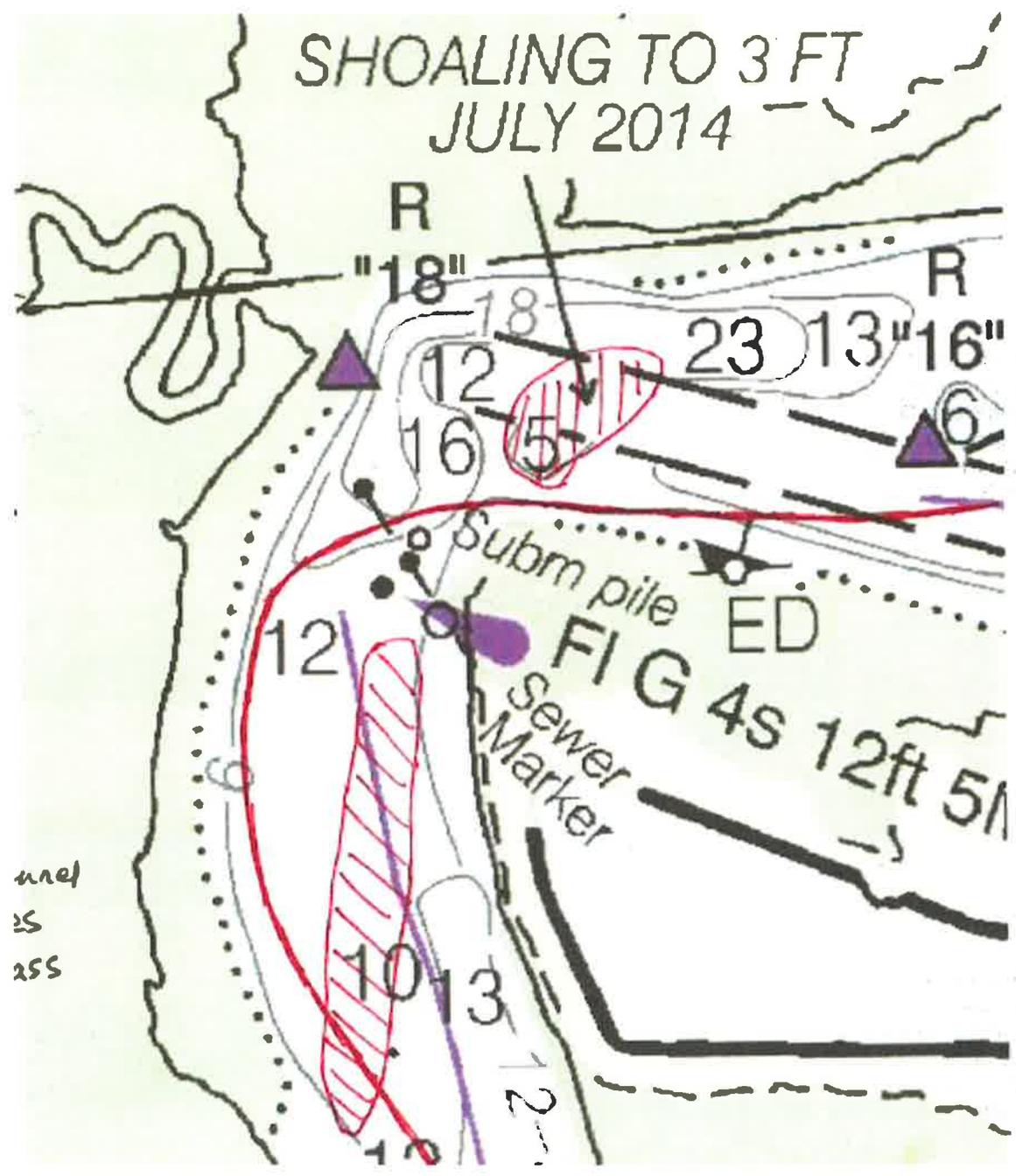
Approved this ____ day of _____, 2015


Michael P. Donovan, Jr.
Project Manager
Sea Diversified, Inc.

Mr. John F. Adams, P.E. or Authorized
Taylor Engineering Representative



ATTACHMENT A



2015 - 2016 Cooperative Assistance Program Project Applications

Agenda Item#	PROJECT SPONSOR	PROJECT TITLE	TOTAL COST	ASSISTANCE REQUESTED	AVERAGE SCORE
10.2	SJRWMD	Eau Gallie Dredging Phase IIA DMMA and Road Crossings	\$4,510,000	\$1,500,000	45.82
10.4	Florida DEP	Clean Vessel Act Program	\$300,000	\$150,000	45.00
10.5	Florida DEP	Hugh Taylor Birch Access Improvement Phase II	\$5,000,000	\$2,500,000	44.55
10.3	Florida DEP	Clean Marina Program	\$300,000	\$150,000	43.18
10.1	USFWS	Merritt Island Biolab Boat Ramp & Kayak Launch	\$166,572	\$83,286	42.36

Totals \$10,276,572 \$4,383,286

2015-2016 Waterway Assistance Program Project Applications

AGENDA ITEM#	COUNTY	PROJECT SPONSOR	PROJECT TITLE	TOTAL COST	ASSISTANCE REQUESTED	AVERAGE SCORE
11.42	Brevard	City of Cocoa Beach	200 Channel Dredging	\$710,000.00	\$355,555.00	48.82
11.71	Broward	City of Fort Lauderdale	Las Olas Marina and Access Dredging Phase I	\$466,689.00	\$258,898.00	48.60
11.23	Miami-Dade	City of Miami	Seybold Canal & Wagner Creek Dredging Phase E	\$1,400,000.00	\$700,000.00	48.09
11.72	Broward	City of Fort Lauderdale	Bahia Mar Yachting Center Dredging Phase I	\$297,004.00	\$206,543.00	48.00
11.15	St. Johns	City of St. Augustine	San Sebastian River Channel Dredging Part 3	\$300,000.00	\$150,000.00	47.82
11.14	St. Johns	City of St. Augustine	Salt Run Navigation Channel Dredging	\$200,000.00	\$150,000.00	47.55
11.79	Duval	City of Jacksonville	Pottsburg Creek Dredge Phase II	\$771,624.00	\$385,812.00	47.50
11.51	Martin	Martin County	Phipps Park Shoreline Stabilization and Access	\$740,000.00	\$370,000.00	46.91
11.54	Palm Beach	City of Boca Raton	Hillsboro Canal Dredging Ph II	\$550,000.00	\$412,500.00	46.00
11.44	Brevard	Brevard County	POW/MIA Park Channel Dredging Phase II	\$440,000.00	\$200,000.00	45.64
11.39	Miami-Dade	Miami-Dade County	Matheson Hammock Marina Boat Ramps	\$433,655.00	\$283,059.00	45.55
11.66	Broward	City of Pompano Beach	ICW Taxi Station Phase II	\$197,000.00	\$98,500.00	45.50
11.75	Duval	City of Jacksonville	Mayport Boat Ramp Phase 2B	\$198,000.00	\$99,000.00	45.50
11.26	Miami-Dade	City of Miami	Derelict Vessel Removal City of Miami	\$60,000.00	\$30,000.00	45.45
11.12	St. Johns	St. Augustine St. Johns County Airport Authority	Barge/Seaplane Ramp Phase II	\$370,000.00	\$185,000.00	45.40
11.57	Palm Beach	Palm Beach County	Phil Foster Floating Dock	\$729,750.00	\$364,875.00	45.18
11.37	Miami-Dade	Miami-Dade County	Crandon Marina Boat Ramps	\$430,531.00	\$215,266.00	45.09
11.64	Broward	City of Deerfield Beach	Sullivan Park Maritime Village	\$3,667,174.00	\$1,833,587.00	45.00
11.81	Duval	City of Jacksonville	Metro Park Dock Replacement Phase I	\$476,364.00	\$238,182.00	45.00
11.2	Miami-Dade	City of Miami	Miami Marina Park Wet Slips & Mooring Field Phase I	\$100,000.00	\$50,000.00	44.91
11.38	Miami-Dade	Miami-Dade County	Matheson Hammock Marina Wet Slip Renovations	\$209,399.00	\$104,699.00	44.82
11.56	Palm Beach	Palm Beach County	Burt Reynolds Park - Westside Phase IIB	\$400,000.00	\$200,000.00	44.82
11.11	Flagler	Flagler County	Moody Boat Launch and Restroom	\$238,500.00	\$119,250.00	44.73
11.32	Miami-Dade	City of Miami	Bayside Wharf at Miamarina Phase I	\$100,000.00	\$50,000.00	44.73
11.74	Duval	City of Jacksonville	Sisters Creek Dock Redesign Phase II	\$279,048.00	\$139,524.00	44.70
11.8	Duval	City of Jacksonville	Joe Carlucci Boat Ramp Dock Ext Phase I	\$93,000.00	\$46,500.00	44.70

2015-2016 Waterway Assistance Program Project Applications

AGENDA ITEM#	COUNTY	PROJECT SPONSOR	PROJECT TITLE	TOTAL COST	ASSISTANCE REQUESTED	AVERAGE SCORE
11.3	Miami-Dade	City of Miami	Dinner Key Marina Pumpout Upgrade	\$500,000.00	\$150,000.00	44.64
11.45	Brevard	City of Melbourne	Marina Towers Seawall and Boat Ramp	\$800,000.00	\$387,500.00	44.64
11.01	St. Lucie	City of Fort Pierce	Dinghy Dock @ Ft Pierce Marina	\$425,724.00	\$190,687.00	44.55
11.4	Miami-Dade	Miami-Dade County	Crandon Floating Dock Renovations	\$778,763.00	\$389,381.00	44.55
11.1	Flagler	Flagler County	Boater Improvements at Herschel King Park	\$137,000.00	\$68,500.00	44.36
11.61	Palm Beach	City of Riviera Beach	Riviera Beach Dredging Part I Phase 2B	\$2,420,000.00	\$1,110,000.00	44.27
11.78	Duval	City of Jacksonville	Wayne B Stevens Docks	\$121,000.00	\$60,500.00	44.20
11.52	Martin	Martin County	Charlie Leighton Park Accessible Floating Dock	\$120,000.00	\$60,000.00	44.18
11.05	Volusia	City of Daytona Beach	Daytona Beach Day Docks Phase I	\$268,353.00	\$134,176.50	44.09
11.25	Miami-Dade	City of Miami	Spring Garden Park Seawall & kayak launch Phase I	\$150,000.00	\$75,000.00	44.09
11.33	Miami-Dade	City of Miami	Legion Park Seawall & Boat Ramp Phase I	\$100,000.00	\$50,000.00	44.09
11.24	Miami-Dade	City of Miami	Baywalk Southside FEC Slip Phase II	\$2,500,000.00	\$1,250,000.00	44.00
11.41	Miami-Dade	Miami-Dade County	Homestead Bayfront Marina Wet Slip Renovations	\$410,000.00	\$205,000.00	44.00
11.35	Miami-Dade	City of Miami Beach	Maurice Gibb Memorial Park Dock & Launch	\$150,000.00	\$75,000.00	43.91
11.55	Palm Beach	Palm Beach County	Bert Winters Park Phase IIA	\$2,000,000.00	\$1,000,000.00	43.91
11.16	Nassau	City of Fernandina Beach	Dock 6 Fire Safety Enhancements	\$10,000.00	\$5,000.00	43.73
11.09	Flagler	Town of Marineland	Marineland Marina Phase 2B	\$742,210.00	\$200,000.00	43.64
11.17	Nassau	City of Fernandina Beach	Managed Mooring Field Capacity Increase Phase II	\$150,000.00	\$75,000.00	43.64
11.46	Indian River	City of Sebastian	Working Waterfront Park Phase 2A	\$300,000.00	\$150,000.00	43.64
11.62	Palm Beach	City of Belle Glade	Pavilion Lake Ramp & Dredging to Lake O	\$625,000.00	\$312,500.00	43.55
11.49	Indian River	Indian River County	Round Island Riverside Park Improvements	\$180,000.00	\$90,000.00	43.45
11.29	Miami-Dade	City of Miami	Morningside Park Seawall & Kayak Launch Phase I	\$50,000.00	\$25,000.00	43.36

2015-2016 Waterway Assistance Program Project Applications

AGENDA ITEM#	COUNTY	PROJECT SPONSOR	PROJECT TITLE	TOTAL COST	ASSISTANCE REQUESTED	AVERAGE SCORE
11.47	Indian River	City of Vero Beach	Fishing Pier at Riverside Park Phase I	\$25,000.00	\$12,500.00	43.36
11.76	Duval	City of Jacksonville	County Dock Boat Ramp Phase II	\$125,230.00	\$62,615.00	43.30
11.03	Volusia	City of Port Orange	Riverwalk Park North B Phase II	\$600,000.00	\$300,000.00	43.18
11.06	Volusia	City of South Daytona	Riverfront Veterans Memorial Park Kayak Launch	\$70,000.00	\$35,000.00	43.18
11.18	Nassau	City of Fernandina Beach	Breakwater Dock Safety Enhancements Phase II	\$190,000.00	\$95,000.00	43.18
11.28	Miami-Dade	City of Miami	Marine Stadium Baywalk Phase II	\$1,000,000.00	\$500,000.00	42.91
11.53	Martin	City of Stuart	Shepard Park Improvements	\$879,500.00	\$439,750.00	42.91
11.48	Indian River	City of Vero Beach	Restroom at MacWilliam Boat Ramps	\$125,000.00	\$62,500.00	42.90
11.02	St. Lucie	City of Port St. Lucie	Canal Park Marine Unit Boatlift and Dock	\$50,000.00	\$25,000.00	42.64
11.04	Volusia	City of Daytona Beach	Riverfront Park Esplanade Phase I	\$220,000.00	\$110,000.00	42.64
11.13	St. Johns	City of St. Augustine	Riberia Pointe Kayak Launch Phase I	\$20,000.00	\$10,000.00	42.64
11.67	Broward	City of Fort Lauderdale	FLPD Marine Motors Replacement Boat#12	\$42,000.00	\$21,000.00	42.60
11.68	Broward	City of Fort Lauderdale	Coontie Hatchee Lagoon Phase I	\$254,000.00	\$127,000.00	42.60
11.07	Volusia	Volusia County	Shell Harbor Park Phase I	\$135,000.00	\$67,500.00	42.45
11.27	Miami-Dade	City of Miami	Miamarina Upgrade of Electrical System	\$750,000.00	\$375,000.00	42.45
11.34	Miami-Dade	North Bay Village	Baywalk Plaza Phase IIA	\$400,000.00	\$200,000.00	42.18
11.5	Indian River	Indian River County	Archie Smith Fish House Phase IIA Restoration	\$483,200.00	\$241,600.00	42.18
11.6	Palm Beach	Village of North Palm Beach	Anchorage Park Kayak launch and Day Dock	\$400,000.00	\$200,000.00	42.00
11.65	Broward	City of Pompano Beach	Exchange Club Park Improvements	\$120,000.00	\$60,000.00	41.80
11.77	Duval	City of Jacksonville	Tillie Fowler Kayak Launch Phase I	\$92,000.00	\$46,000.00	41.80
11.43	Brevard	City of Cape Canaveral	Banana River Park Kayak Launch	\$129,010.00	\$53,505.00	41.73
11.63	Palm Beach	City of Belle Glade	Torry Island Park Sanitary Service Expansion	\$130,000.00	\$65,000.00	41.55
11.69	Broward	City of Fort Lauderdale	Trash Skimming Vessel	\$40,000.00	\$20,000.00	41.50
11.7	Broward	City of Fort Lauderdale	Sweeting Park Dock	\$50,000.00	\$25,000.00	41.20
11.08	Volusia	Volusia County	Smyrna Dunes Park Fishing Pier	\$415,176.00	\$165,000.00	41.18

2015-2016 Waterway Assistance Program Project Applications

AGENDA ITEM#	COUNTY	PROJECT SPONSOR	PROJECT TITLE	TOTAL COST	ASSISTANCE REQUESTED	AVERAGE SCORE
11.21	Miami-Dade	City of Miami	Pallot Park Seawall, Baywalk & Kayak Launch Ph II	\$300,000.00	\$150,000.00	41.18
11.31	Miami-Dade	City of Miami	Alice Wainwright Park Seawall & Baywalk Phase I	\$125,000.00	\$62,500.00	40.82
11.59	Palm Beach	Palm Beach County	West Palm Beach Living Shorelines	\$782,350.00	\$391,175.00	40.64
11.73	Duval	City of Atlantic Beach	Marsh Preserve Improvements Phase 3	\$540,120.00	\$270,000.00	40.40
11.22	Miami-Dade	City of Miami	Baywood Park Seawall Phase I	\$50,000.00	\$25,000.00	40.27
11.19	Miami-Dade	Town of Surfside	Surfside Seawall Replacement Part 2	\$844,500.00	\$422,250.00	38.27

TOTALS

\$36,182,874.00 \$17,949,889.50

FLORIDA INLAND NAVIGATION DISTRICT



TO: All FIND Commissioners, Executive Director
 FROM: Janet Zimmerman, Assistant Executive Director
 DATE: July 6, 2015
 SUBJECT: Initial Discussion of Proposed Assistance Program Rule Changes

COMMISSIONERS

J. CARL BLOW
 CHAIR
 ST. JOHNS COUNTY

DONALD J. CUOZZO
 VICE-CHAIR
 MARTIN COUNTY

JON NETTS
 TREASURER
 FLAGLER COUNTY

SUSANNE McCABE
 SECRETARY
 VOLUSIA COUNTY

E. TYLER CHAPPELL
 BROWARD COUNTY

T. SPENCER CROWLEY, III
 MIAMI-DADE COUNTY

DON DONALDSON
 ST. LUCIE COUNTY

PAUL U. DRITENBAS
 INDIAN RIVER COUNTY

CHARLES C. ISIMINGER
 PALM BEACH COUNTY

JERRY H. SANSOM
 BREVARD COUNTY

LYNETTE SELF
 DUVAL COUNTY

LYNN A. WILLIAMS
 NASSAU COUNTY

MARK T. CROSLEY
 EXECUTIVE DIRECTOR

JANET ZIMMERMAN
 ASSISTANT EXECUTIVE
 DIRECTOR

In working with the Assistance Program and listening to the Commissioner discussion over the past few months, staff has prepared the following list of items for additional consideration by the Board. Should the Board elect to initiate specific changes to our program rules, staff and our attorney will draft specific language to be considered at our August meeting.

- ❖ Revise and update application forms and questions to ultimately achieve an electronic grant application;
- ❖ Remove or increase verbiage limiting funding for replacement vessels, **66B-2.008(1)(c)2**. “Marine law enforcement and other vessels are eligible for a maximum of \$30,000 in initial District funding.”
- ❖ Increase the incentive and/or FIND % match for commercial marina/boat ramp/working waterfront projects, currently matched at 50% and listed as Priority #5 **66B-2.008 (1)(a)**
- ❖ Clarify wording for Public Navigation projects – “provide public navigation channel access to two or more publicly accessible launching, mooring or docking facilities”, **66B-2.005(6)**;
- ❖ Allow picnic shelters and furniture as eligible project elements list as long as they are located on the waterfront, **66B-2.008(1)(b)8**
 Ineligible Projects or Project Elements. Project costs ineligible for program funding or matching funds will include: contingencies, miscellaneous, reoccurring personnel related costs, irrigation equipment, ball-courts, park and playground equipment, and any extraneous recreational amenities not directly related to the waterway such as the following:
 1. Landscaping that does not provide shoreline stabilization or aquatic habitat;
 2. Restrooms for non-waterway users;
 3. Roadways providing access to non-waterway users;
 4. Parking areas for non-waterway users;
 5. Utilities for non-waterway related facilities;
 6. Lighting for non-waterway related facilities;
 7. Project maintenance and maintenance equipment;
 8. Picnic shelters and furniture for non-waterway related facilities;
- ❖ Address grant compliance post project completion, and partial payments and payout of completed project (contractor disputes) in grant agreement.



Office: 206 N. Beach St, Suite 205 / Daytona Beach, FL 32114
 Mail: P.O. Box 4036 / Ormond Beach, FL 32175-4036
 Ph. 407-491-9477

July 3, 2015

Janet Zimmerman, Assistant Executive Director
 Florida Inland Navigation District
 1314 Marcinski Road
 Jupiter, FL 33477

RE: ~~VO-14-101~~ ^{VO-DB-14-101} Halifax River Greenway Trail and Pedestrian Underpass
 City of Daytona Beach
 Major Cost Modification Request

Dear Janet:

The Florida Inland Navigation District is one of four funding sources for the above-referenced project being implemented by the City of Daytona Beach (project sponsor). The other funding partners include the Florida Department of Transportation and the Florida Department of Environmental Protection. The City also has local redevelopment funds committed to the project.

At the time of the application, the other funding sources were not finalized (grant agreements signed, etc.). During the process of preparing the bid documents and finalizing the grant agreements with the other agencies, it became evident which sources of funding will pay for specific components of the project. As such, it is necessary to modify the project components we are asking FIND to fund, as noted in the table below.

Project Elements <i>(Please list the MAJOR project elements and provide a general cost break out for each one.)</i>	Quantity or Total Estimated Cost <i>(Number and/or Footage etc.)</i>	Applicant's Cost	FIND Cost
<i>Project Management</i>	\$25,000	\$12,500	\$12,500
<i><u>Turbidity Barrier</u></i>	\$6,050	\$3,025	\$3,025
<i><u>Wooden Boardwalk (210+/- LF-38% of total)</u></i>	\$74,678	\$37,339	\$37,339



Office: 206 N. Beach St, Suite 205 / Daytona Beach, FL 32114
 Mail: P.O. Box 4036 / Ormond Beach, FL 32175-4036
 Ph. 407-491-9477

<i>Geotechnical</i>	\$12,438	\$6,219	\$6,219
<i>Mobilization</i>	\$27,500	\$13,750	\$13,750
<i>Bench Construction</i>	\$3,500	\$1,750	\$1,750
<i>Trash Receptacles</i>	\$700	\$350	\$350
<i>Concrete Sections of Multiuse Trail</i>	\$28,390	\$14,195	\$14,195
<i>As-Builts (record drawings)</i>	\$8,200	\$4,100	\$4,100
** TOTALS =	\$105,728	\$52,864	\$52,864

The project is not changing from what was proposed in the City's application, nor is the City requesting additional funding.

This modification request is simply to allow the City to keep the project fully funded and assist the funding partners by ensuring the project costs for which we will request reimbursement are clearly eligible for grant funding.

The City truly appreciates the opportunity to partner with the Florida Inland Navigation District to provide this pedestrian underpass and trail along the Halifax River! As you know, the project is part of the 3,000-mile East Coast Greenway Trail and will connect publicly-owned City Island with Riverfront Park.

Thank you again for your assistance. Should you have any questions, or need additional information, please do not hesitate to contact me. I will be in attendance at the board meeting this month to answer any questions.

Sincerely,

A handwritten signature in blue ink that reads "Beth G. Lemke".

Beth G. Lemke, AICP
 President

cc: James V. Chisholm, City Manager

ALCALDE & FAY

GOVERNMENT & PUBLIC AFFAIRS CONSULTANTS

June 26, 2015

MEMORANDUM

TO: Mark Crosley, Executive Director
Janet Zimmerman, Assistant Executive Director

FROM: Jim Davenport

SUBJECT: Federal Legislative Report

ASSESSMENT OF THE INTRACOASTAL WATERWAY

On June 10th, we attended a House Water Resources Subcommittee hearing to address the implementation of the Water Resources Reform and Development Act of 2014. U.S. Army Corps of Engineers Secretary Jo-Ellen Darcy was on hand to answer questions from the Subcommittee members. As we discussed with you, prior to the hearing, we asked Representative Lois Frankel (D-FL) to ask Secretary Darcy about the status of the implementation of the Atlantic Intracoastal Waterway Assessment that was authorized in the WRRDA. We also discussed this issue with the Water Resources staff, and were told to contact Representative David Rouzer (R-NC), who also has interest in the implementation of the assessment.

Per our suggestion, Reps. Frankel and Rouzer both asked the Corps about the status of the assessment. Essentially, the Corps claims (as they stated to us in our February meeting) that they need funding to implement the study. During her question, Rep. Frankel utilized the FIND information we provided to her staff about the AIWW in Florida, and the importance of the marine recreational economy. She also put Rep. Daniel Webster (R-FL), a Subcommittee member, on notice to assist with these efforts. Rep. Rouzer suggested that the Corps reprogram money internally to get the study accomplished.

In any event, the purpose of the questions were to put the Corps on notice that Members of Congress are interested on the Corps progress on the implementation of the AIWW assessment. As a follow up, we are working with Reps. Rouzer and Frankel, as well as members of Congress along the AIWW and GIWW from Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana and Texas,

to send a letter to the Corps. We are collaborating with the Atlantic Intracoastal Waterway Association on this effort and will keep you apprised of it.

MAGNUSON STEVENS ACT REAUTHORIZATION AND COMPENSATORY MITIGATION LANGUAGE

As you are aware, we recently met with Senator Bill Nelson and Senator Marco Rubio's staff to discuss our proposed language for the Magnuson Stevens Act reauthorization pertaining to mitigation for maintenance dredging.

Senator Nelson's staff was joined by the Minority Staff Director from the Subcommittee on Oceans, Atmosphere, Fisheries and Coast Guard, which has jurisdiction over the Magnuson Stevens and the Coast Guard bills. The Minority Staff Director agreed with FIND's position that mitigation should not be required for maintenance dredging of a waterway. He reviewed our language and made some minor revisions to it, and offered to try to include in the Coast Guard reauthorization bill (S. 1611), which was pending a markup by the full Senate Commerce Committee on June 25th. It was relayed to us that Nelson's staff and the Staff Director presented it to Sen. Nelson and the Subcommittee Majority Staff, and that it was not accepted by the Majority Staff that handle Coast Guard issues because of their unfamiliarity with this particular Magnuson issue. However, Nelson's staff indicated their willingness to continue to work with us to have the language added to Magnuson Stevens or in the Coast Guard conference report.

Senator Rubio's staff said they would review the language, but gave no commitments as to whether they would include it in part of a Magnuson Stevens Reauthorization bill, which has not been introduced in the Senate. As you recall, Senator Rubio chairs the Subcommittee (referenced above) that has jurisdiction over the Magnuson Stevens Bill.

We will continue to keep you apprised of our efforts, and please contact me with any questions.

PRELIMINARY CONSENT AGENDA

FLORIDA INLAND NAVIGATION DISTRICT Board of Commissioners Board Meeting 9:00 a.m., Saturday, July 18, 2015

Hampton Inn & Suites
19 S. Second St.
Fernandina Beach, Nassau County, Florida 32034-4201

Item A. U.S. Coast Guard Auxiliary Sub-Lease of a Portion of MSA 727B (Alsdorf Park) in Pompano Beach (Broward County), FL.

The City of Pompano Beach leases MSA 727B from the District to operate the Alsdorf Park public boat ramp. With the District's permission, the City has been sub-leasing a small portion of the remaining property of the park to the U.S. Coast Guard Auxiliary for a training building. The building is used to teach boating safety courses. The City is requesting approval to extend the sub-lease through March 1, 2018. All terms and conditions of the agreement will remain the same.

(Please see back up pages 55-59)

RECOMMEND Renewal of approval of a sub-lease for a portion of MSA 727B (Alsdorf Park) by the City of Pompano Beach to the U.S. Coast Guard Auxiliary Flotilla 34 for a training building.

Item B. FIND Interlocal Agreement (Project #ICW-MA-14-01) Extension with Martin County - Boating Traffic Study at the St. Lucie River Railroad Bridge, Martin County, FL.

On May 17, 2014, the Navigation District approved an Interlocal agreement with Martin County for a data collection study to gage the effects of potential increased train bridge operations on boat navigation on the St. Lucie River (Okeechobee Waterway) railroad bridge. Martin County has requested a one-year extension to complete the project. By law and District program rules, this agreement can be extended for one additional year (Revised expiration date: July 1, 2016).

(Please see back up page 60)

RECOMMEND Approval of the requested project agreement extension for one additional year.

Item C. Approval of Additional Exotic Vegetation Removal/Mowing at MSA 610 (aka Bluff's Dog Park), in the Town of Jupiter, Palm Beach County, FL.

The Town of Jupiter has been conducting exotic vegetation removal at the District's Long-Range Dredged Material Management Area MSA 610. A portion of the site is leased to the Town for use as a passive park and dog walk. The District has the opportunity to piggy-back on this contract and remove additional vegetation at a very reasonable price.

(Please see back up page 62)

RECOMMEND Approval of \$13,000.00 for additional exotic vegetation removal at MSA 610 in Jupiter (Palm Beach County), FL.

EXTENSION AGREEMENT

THIS IS AN EXTENSION AGREEMENT dated the _____ day of _____, 2015, between:

CITY OF POMPANO BEACH, a municipal corporation of the State of Florida, whose address is 100 West Atlantic Boulevard, Pompano Beach, Florida 33060, hereinafter referred to as "CITY,"

and

UNITED STATES COAST GUARD AUXILIARY FLOTILLA 34, an instrumentality of the Government of the United States, hereinafter referred to as "FLOTILLA 34."

WHEREAS, the parties entered into a Sublease Agreement of a portion of the parcel currently leased by the City from the Florida Inland Navigation District, commonly known as Alsdorf Park, for the purpose of conducting boating safety classes, public education, member training and other activities in support of the missions and operations of the United States Coast Guard, on November 19, 2010, ("Original Agreement"), and approved by City Ordinance No. 2011-8; and

WHEREAS, the parties desire to extend the term to March 1, 2018.

WITNESSETH:

IN CONSIDERATION of the mutual terms, conditions, promises, covenants and payments herein set forth CITY and FLOTILLA 34 agree as follows:

1. Each "WHEREAS" clause set forth above is true and correct and herein incorporated by this reference.

2. The Original Agreement effective November 19, 2010, a copy of which is attached hereto and made a part hereof as Exhibit "A," shall remain in full force and effect except as specifically amended hereinbelow.

3. That the Original Agreement between CITY and FLOTILLA 34 to Sublease a portion of Alsdorf Park, formerly approved by Ordinance No. 2011-8, shall be extended to March 1, 2018.

4. All terms, covenants and conditions contained in the Original Agreement now existing between CITY and FLOTILLA 34, with the exception of the provisions above, shall remain unchanged, and the parties agree to keep, observe and perform all covenants and conditions contained therein.

5. This Agreement shall bind the parties and their respective executors, administrators, successors and assign and shall be fully effective as though the extension had been originally included in the Agreement.

IN WITNESS OF THE FOREGOING, the parties have set their hands and seals the day and year first above written.

"CITY":

Witnesses:

CITY OF POMPANO BEACH

By: _____
LAMAR FISHER, MAYOR

By: _____
DENNIS W. BEACH, CITY MANAGER

Attest:

ASCELETA HAMMOND, CITY CLERK

(SEAL)

Approved by:

GORDON B. LINN, CITY ATTORNEY

STATE OF FLORIDA
COUNTY OF BROWARD

The foregoing instrument was acknowledged before me this _____ day of _____, 2015, by **LAMAR FISHER** as Mayor, **DENNIS W. BEACH** as City Manager, and **ASCELETA HAMMOND** as City Clerk of the City of Pompano Beach, Florida, a municipal corporation, on behalf of the municipal corporation, who is personally known to me.

NOTARY'S SEAL:

NOTARY PUBLIC, STATE OF FLORIDA

(Name of Acknowledger Typed, Printed or Stamped)

Commission Number

"FLOTILLA 34":

Witnesses:

**UNITED STATES COAST GUARD
AUXILIARY FLOTILLA 34**

By: _____

Print Name

Typed or Printed Name

Title: _____

(SEAL)

Print Name

STATE OF FLORIDA

COUNTY OF BROWARD

The foregoing instrument was acknowledged before me this _____ day of _____, 2015, by _____ as _____ of United States Coast Guard Auxiliary Flotilla 34, an instrumentality of the Government of the United States. He/she is personally known to me or who has produced _____ (type of identification) as identification.

NOTARY'S SEAL:

NOTARY PUBLIC, STATE OF FLORIDA

(Name of Acknowledger Typed, Printed or Stamped)

Commission Number

CONSENT TO EXTENSION OF SUBLEASE

Florida Inland Navigation District (FIND) consents to the Extension Agreement for the subleasing of a portion of parcel MSA 727-B, a more particular description of said portion being attached hereto as Exhibit "B," now occupied by the CITY, under the terms of the Sublease Agreement. This consent is not a waiver of the restriction or limitation on subleasing of the Leased Premises by City without the consent of FIND, and FIND reserves the right to approve any future tenant with whom the CITY desires to make any additional sublease.

Dated this _____ day of _____, 2015.

Witnesses:

Florida Inland Navigation District

By: _____

Print Name: _____
As Chair

(SEAL)

STATE OF FLORIDA
COUNTY OF BREVARD

The foregoing instrument was acknowledged before me this _____ day of _____, 2015 by _____, as Chair of Florida Inland Navigation District, an independent special district organized under the law of the State of Florida, on behalf of said District. He/she is personally known to me or who has produced _____ (type of identification) as identification.

NOTARY'S SEAL:

NOTARY PUBLIC, STATE OF FLORIDA

(Name of Acknowledger Typed, Printed or Stamped)

Commission Number

GBL/jrm
6/23/15
l:agt/recr/2015-1065



MARTIN COUNTY
BOARD OF COUNTY COMMISSIONERS
 2401 S.E. MONTEREY ROAD • STUART, FL 34996

July 2, 2015

Telephone: 772-288-5795

Fax: 772-288-5955

Email: jgarland@martin.fl.us

DOUG SMITH
 Commissioner, District 1

ED FIELDING
 Commissioner, District 2

ANNE SCOTT
 Commissioner, District 3

SARAH HEARD
 Commissioner, District 4

JOHN HADDOX
 Commissioner, District 5

TARYN KRYZDA, CPM
 County Administrator

MICHAEL D. DURHAM
 County Attorney

Mark Crosley
 Florida Inland Navigational District
 1314 Marcinski Road
 Jupiter, Florida 33477

RE: Time extension for Agreement No. MA-14-71

Dear Mr. Crosley;

Per the above local agreement executed on July 23, 2014, Martin County respectfully requests an extension of the grant from the current expiration date of July 1, 2015 to a new expiration date of July 1, 2016.

We appreciate the District's support especially as these grant funds are a key component of this effort. An extension of 1 year to this grant will help finish the Boat traffic study at the St. Lucie River Railroad Bridge. If you have any questions or concerns pertaining to this request, please feel free to call me at 772-288-5429 or by email at kfitzpat@martin.fl.us.

Sincerely,

Kathy FitzPatrick, P.E.
 Coastal Engineer

Cc: Lisandra Bonet, Financial Analyst MCBOCC
 Diane Moore, Financial Analyst MCBOCC

TELEPHONE
 772-288-5400

WEB ADDRESS
<http://www.martin.fl.us>



John Brown & Sons, Inc.



Mowing Division
775 23rd Avenue
Vero Beach, FL 32962
Tel: (772) 569-7741
Cell: (772) 216-8876

June 29, 2015

Mr. Mark Crosley
Executive Director
Florida Inland Navigational Dist
1314 Marcinski Road
Jupiter, FL 33477

Dear Mark:

John Brown & Sons, Inc is pleased to quote you on your exotic mowing at your F.I.N.D Park located in the Bluffs Development off Marcinski Road in Jupiter Florida. Aside from the \$10,000.00 in work, which we are doing for the District an additional \$3,000.00 has been added for more work on this site. This amount brings the total to \$13,000.00 for a total of 10 - 8 hour days of exotic mowing on this site. This work is being performed using the Palm Beach County Contract Rate. Also please find attached a copy of the Palm Beach County Contract Renewal through 12/31/2015.

Sincerely,

John Pudvar
Division Manager