

**Board of
Commissioners Meeting
January 18, 2013**

PRELIMINARY AGENDA

FLORIDA INLAND NAVIGATION DISTRICT Board of Commissioners Board Meeting

9:00 a.m., Friday, January 18, 2013

**Hampton Inn
214 Flagler Avenue, New Smyrna Beach,
Volusia County, Florida.**

Item 1. Call to Order.

Chairman Colee will call the meeting to order.

Item 2. Pledge of Allegiance.

Commissioner Freeman will lead the pledge of allegiance to the United States of America.

Item 3. Roll Call.

Secretary Blow 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 Committee to discuss in depth. Any items removed would then be included in the regular agenda in an order assigned by the Chair.

(see Tab 1)

RECOMMEND Approval of the Consent Agenda.

Item 5. Additions or Deletions.

Any additions or deletions to the meeting agenda will be announced. Additionally, Commissioners can request that Committee items, that would not normally be reviewed and approved by the full Board, be added to the agenda.

RECOMMEND Approval of a final agenda.

Item 6. Board Meeting Minutes.

The Minutes of the following meetings are presented for approval.

- November 16, 2012 Legislative Comm. Meeting (see back up pages 6 - 10)
- November 16, 2012 Finance & Budget Comm. Meeting (see back up pages 11 - 14)
- November 16, 2012 Board of Commissioners Mtg. (see back up pages 15 - 37)

RECOMMEND Approval of the minutes as presented.

Item 7. Public Comments.

The public is invited to provide comments on issues that are not on today's agenda.

Item 8. Staff Report on Volusia County Area Projects.

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

(see back up pages 38 - 59)

Item 9. Palm Beach Polo Holdings, Inc. Dredging Agreement, Broward County.

Palm Beach Polo Holdings, Inc. has submitted a request for a dredging agreement to deepen their mega-yacht basin on the Dania Cutoff canal. If approved a standard dredging agreement will be executed.

(see back up pages 60 – 68)

RECOMMEND Approval of a standard dredging agreement with Palm Beach Polo Holdings, Inc. for the deepening of their marina basin on the Dania Cutoff Canal.

Item 10. Okeechobee Waterway Dredging Project Claim.

Our Okeechobee Waterway dredging contractor, Ferreira Construction, submitted a claim for additional costs because of a potential change of conditions regarding the type of sediment dredged from the Okeechobee Waterway within Lake Okeechobee. Staff indicated at the time that the contract required him to keep working and we would negotiate the claim at the end of the project. Staff will be meeting with the contractor shortly before the Board meeting to discuss his claim and may have a recommendation for the Board to consider at the meeting.

(see back up pages 69 – 76)

Item 11. Feasibility Study for Okeechobee Waterway Cut 1 Sediment Basins, Martin County.

Shoaling within Cut 1 of the Okeechobee Waterway (OWW) at the Crossroads determines the dredging frequency of this area. Because the OWW is only an 8 foot deep project, shoaling quickly affects deeper draft vessels transiting this area. Staff believes that the creation of settling basins on either side of the channel would extend the dredging frequency for this area resulting in cost savings. Staff requested a scope of services and fee quote from the District Engineer to perform a feasibility study for these basins.

(see back up pages 77 - 86)

RECOMMEND Approval of the scope of services and fee quote in the amount of \$74,781.08 for a feasibility study of the proposed sediment basins for Cut 1 of the Okeechobee Waterway.

Item 12. Indian River Reach I Geotechnical Investigation Results.

American Vibracore Services has completed the Indian River Reach I Geotechnical Investigation and staff will review a summary of the results with the Board.

(see back up pages 87 – 97)

Item 13. **Notice to Contractors.**

The Board discussed how to notice our contractors about the performance bond provisions of our projects. Staff and legal counsel developed the Notice in the backup materials for Board review.

(see back up pages 98 - 99)

RECOMMEND Approval of the Notice to Contractor/Materialman/Laborer.

Item 14. **Taylor Engineering Hourly Rate Adjustment.**

Our agreement with Taylor Engineering allows the rates for services to be adjusted annually by mutual agreement. The District Engineer has submitted a letter indicating that no adjustment is requested for this year.

(see back up page 100)

Item 15. **Washington DC. Report.**

The District's Federal Governmental Relations firm submitted a status report on their activities on the District's federal issues.

(see back up page 101)

Item 16. **Personnel Committee Report.**

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

(see Personnel Committee Agenda Package)

RECOMMEND Approval of the recommendations of the District's Personnel Committee.

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 their agenda.

(see Finance and Budget Committee Agenda Package)

RECOMMEND Approval of the recommendations of the District's Finance and Budget Committee and Resolution No. 2013-01.

Item 18. **Additional Staff Comments and Additional Agenda Items.**

Item 19. **Additional Commissioners Comments.**

Item 20. **Adjournment.**

**MINUTES OF THE
FLORIDA INLAND NAVIGATION DISTRICT**

Legislative Committee Meeting

8:07 a.m., Friday, November 16, 2012

Casa Marina Hotel

691 N. 1st Street

Jacksonville Beach, Duval County, Florida

ITEM 1. Call to Order.

Chair Freeman called the meeting to order at 8:07 a.m.

ITEM 2. Roll Call.

Assistant Executive Director Mark Crosley called the roll and Chair Freeman, Commissioner Blow, Commissioner Chappell, and Commissioner Sansom were present. Mr. Crosley stated that a quorum was present.

ITEM 3. Additions or Deletions.

Chair Freeman asked if there were any additions or deletions to the meeting agenda. Mr. Roach stated that there were none.

Commissioner Chappell made a motion to approve the final agenda as presented. The motion was seconded by Commissioner Blow. Chair Freeman asked if there was any further discussion, hearing none, took a vote and the motion passed.

ITEM 4. Certification of the Final Compliance Economic Review of the District Rules.

Mr. Roach stated that the Board previously certified the Compliance Economic Review prepared by staff and legal counsel which found that none of the District's rules

have the economic impacts that the law set forth to be analyzed. He stated that certification was posted on our website for public review and comment and transmitted to the required parties at the state for review and comment. He stated that no comments were received and the final review and report must be published. He stated that the final compliance report must be submitted to the Joint Administrative Procedures Committee by the end of this year.

Commissioner Sansom made a motion to approve a recommendation to the Board for certification of the Final Compliance Economic Review of the District's Rules. The motion was seconded by Commissioner Blow. Chair Freeman asked if there was any further discussion, hearing none, took a vote and the motion passed.

ITEM 5. Community Coordination.

Mr. Roach stated that the Committee discussed the coordination of the District's issues with state and county economic development councils, business development boards, and chambers of commerce. He stated that staff has researched the issue and noted that previously when we discussed these activities no Commissioner expressed a desire to join any of these organizations to date. He stated that staff recommends that membership to these organizations still be by individual Commissioner desire instead of just joining in every county.

Mr. Roach stated that chamber membership costs for most counties are reasonable and each county has at least one chamber with some having multiple chambers. He stated that membership in economic councils and business developments boards range from \$1,000.00 and up and some are by invitation only.

Commissioner Blow stated that some months ago he was appointed to the St. Johns County Industrial Development Authority (IDA) which is a county agency that can issue tax-exempt bond financing for manufacturing facilities within the county. He stated that while on the IDA he has been able to educate members about FIND and the importance of the marine industry to the State of Florida.

Chair Freeman stated that District check presentations are an incredible win-win situation in terms of telling the District's story and reiterating to local government that it is their dollars coming back into the county.

Commissioner Chappell stated that when he talks about the District and explains who we are and what we do there are always some people who do not know about FIND.

Commissioner Sansom stated that each county has different groups that make things happen and that the local commissioner may want to join those groups that appear to be relevant and support the District's activities.

ITEM 6. Washington D.C. Report.

Mr. Roach stated that Congress will return from a lengthy recess on November 13th and it is probable that the appropriations bill will be left for the next Congress.

Commissioner Blow asked about the dates for the next Washington D. C. trip. He noted that currently our representatives are discussing changes to the tax code and limiting interest deductions for those with higher incomes. He stated that about ten years ago a luxury tax was imposed on items over a certain cost and he noted that this luxury tax significantly hurt the marine industry. He stated that during the Washington trip, in addition to waterway issues, we should discuss how these proposed tax changes will hurt the boating industry and boat owners.

Commissioner Sansom stated that the District should obtain information how these changes to the tax code could hurt the marine industry by showing how similar changes hurt Florida's marine industry in the past.

Commissioner Sansom suggested that the Washington D. C. trip be scheduled the last week of February.

Commissioner Blow stated that the District is spending a significant amount of money for dredging in Broward County so that the waterway can accommodate and draw larger yachts to the area. He stated that if this class warfare takes place, the larger yachts may not come to the United States and will go elsewhere, such as the Bahamas.

Commissioner Sansom noted that because the legislative districts were realigned, there were many changes to our representatives during the election and an old friend may not be in the coastal area, but we should still stay in contact with them.

ITEM 7. Tallahassee Report.

Mr. Roach stated that the Tallahassee report was submitted prior to the recent election. He stated that during the 2013 legislative session, the Florida Senate will be led by Senator Don Gaetz and Representative Will Weatherford will lead the Florida House of Representatives.

Commissioner Sansom stated that Representative Chris Dorworth did not make it through the process so he will not become the House Majority Leader and he will not be the House Speaker designate for 2014. He stated that Steve Crisafulli was re-elected and he will become the House Speaker Designate for 2014 and his District is within the District's waterway.

ITEM 8. Additional Staff Comments and Additional Agenda Items.

Chair Freeman asked if there were any additional staff comments. There were none.

ITEM 9. Additional Commissioners Comments.

Chair Freeman asked if there were any additional Commissioner Comments. There were none.

ITEM 10. Adjournment.

Chair Freeman stated that hearing no further business the meeting was adjourned at 8:32 a.m.

**MINUTES OF THE
FLORIDA INLAND NAVIGATION DISTRICT**

Finance and Budget Committee Meeting

8:40 a.m., Friday, November 16, 2012

Casa Marina Hotel

691 N. 1st Street

Jacksonville Beach, Duval County, Florida

ITEM 1. Call to Order.

Chair Chappell called the meeting to order at 8:40 a.m.

ITEM 2. Roll Call.

Assistant Executive Director Mark Crosley called the roll and Chair Chappell, Commissioner Freeman, Commissioner Kavanagh, and Commissioner Sansom were present. Mr. Crosley stated that a quorum was present.

ITEM 3. Financial Statements for September of 2012.

Chair Chappell presented the District's financial statements for September of 2012. Mr. Roach stated that this is the last report for 2012.

Chair Chappell referred to the payment made for Hillsboro Inlet Marina project and asked if that is the first and final payment for that project. Mr. Crosley answered yes and stated that they did not bill out for the full grant amount.

Commissioner Freeman made a motion to approve a recommendation to the full Board of the financial statements for August of 2012. The motion was seconded by Commissioner Sansom. Chair Chappell asked for any additional discussion, hearing none a vote was taken and the motion passed.

ITEM 4. September 2012 Expenditure and Project Status Reports.

Chair Chappell presented the Expenditure and Project Status Report for September 2012 and asked if there were any questions. There were none.

ITEM 5. FY 2011-2012 Budget Amendment No. 2.

Mr. Roach presented Budget Amendment No. 2 to the FY 2011-2012 budget. He stated that amendment is being made to formalize actions taken by the Board on financial items throughout the year as well as to correct some carry forward amounts for some projects.

Mr. Roach stated that we have \$2.6 million in excess funds over proposed expenses for the year. He stated that this Budget Amendment will be the final adjustment to the FY 2011-2012 budget as we go into the audit. He stated that this budget amendment needs to be passed by Resolution. He asked for questions.

Commissioner Sansom referred to the Public Information budget and noted that the expenditure for the Volvo Ocean Race was \$15,000.00 and he asked about the other \$12,000.00 in expenses. Mr. Roach stated that he would provide the information.

Chair Chappell asked if we are carrying forward the \$1.4 million for the performance security bond for the Port Everglades DMMA. Mr. Roach stated it is actually a \$2.5 million performance security bond and it will be carried forward if the Port approves the lease extension. Mr. Roach stated that this item was handled as an expense that has gone out and the year we get the funding back it will be handled as additional revenue. He stated that this funding carries to the end of the lease and we show that the property has not been contaminated.

Commissioner Blow referred to the excess funding on the Interlocal Agreement Broward ICW Dania Deepening project and asked it if could be allocated to the IWW Deepening Broward project. Mr. Roach stated that those funds were allocated to that project in the new budget and he noted that it will not be enough funding as the project moves forward. Commissioner Blow asked about moving the funding to where it is committed to so that it does not look like we have excess funding.

Commissioner Freeman stated that this may create a conflict between last year's budget and next year's budget.

Commissioner Sansom stated that he would like the budget to reflect where the funding was moved.

Mr. Roach stated that staff is most comfortable leaving the FY 2011-2012 budget the way it is and if a questions arises, we can point to the next year's budget and say this is where that money went.

Chair Chappell asked what the Committee would like to do; approve the motion as presented, or approve showing in the budget where the funding was reallocated the following year.

Commissioner Freeman made a motion to approve a recommendation to the full Board of the Resolution No. 2012-06 for Budget Amendment No. 2 to the FY 2011-2012 Budget as presented by staff. The motion was seconded by Commissioner Kavanagh. Chair Chappell asked for any additional discussion, hearing none a vote was taken and the motion passed.

ITEM 6. Delegation of Authority Report.

Chair Chappell referred to the Executive Director's Delegation of Authority actions and stated that four actions were taken from, October 10, 2012 through November 5, 2012 and he asked for questions. There were none.

ITEM 7. Additional Agenda Items or Staff Comments.

Chair Chappell asked if there were any agenda items or staff comments. here were none.

ITEM 8. Additional Commissioners Comments.

Chair Chappell asked if there were any additional Commissioner comments. There were none.

ITEM 9. Adjournment.

Chair Chappell stated that hearing no further business the meeting was adjourned at 8:56 a.m.

**MINUTES OF THE
FLORIDA INLAND NAVIGATION DISTRICT**

Board of Commissioners Meeting

9:00 a.m., Friday, November 16, 2012

Casa Marina Hotel

691 N. 1st Street

Jacksonville Beach, Duval County, Florida

ITEM 1. Call to Order.

Vice-Chair Kavanagh called the meeting to order at 9:05 a.m.

ITEM 2. Pledge of Allegiance.

Commissioner Bowman led the pledge of allegiance to the flag of the United States of America.

ITEM 4. Roll Call.

Secretary Blow called the roll and Vice-Chair Kavanagh, Treasurer Chappell, Commissioner Barkett, Commissioner Bowman, Commissioner Bray, Commissioner Freeman, Commissioner Netts, and Commissioner Sansom were present. Secretary Blow stated that a quorum was present.

ITEM 5. Consent Agenda.

Vice-Chair Kavanagh asked if there were any comments or questions regarding the Consent Agenda.

Treasurer Chappell asked to move from Consent Agenda; Item 3, Major Project Cost Amendment, Bryant Park Boat Ramp Facility Waterway Assistance Program Project, Palm Beach County to the Meeting Agenda as Item 6A.

Commissioner Netts made a motion to approve the Consent Agenda as amended. The motion was seconded by Commissioner Barkett. Vice-Chair Kavanagh asked for any further discussion, hearing none, a vote was taken and the motion passed.

ITEM 6. Additions or Deletions.

Vice-Chair Kavanagh asked if there were any additions or deletions to the meeting agenda. Mr. Roach stated that there were none.

Commissioner Netts made a motion to approve the final agenda with the addition of Item 6A. The motion was seconded by Secretary Blow. Vice-Chair Kavanagh asked for any further discussion, hearing none, a vote was taken and the motion passed.

Item 6A. Major Project Cost Amendment, Bryant Park Boat Ramp Facility Waterways Assistance Program Project, Palm Beach County.

Mr. Roach introduced Mr. Jamie Brown, Public Works Director for the City of Lake Worth. Mr. Brown stated the City ran out of funds for the floating dock because of several construction issues including the installation of two corner pilings with anchors for the seawall construction. He stated that the staging dock has been removed to cover some of this cost overrun and we plan on completing that part of the project next year. He stated that last year Phase I of the seawall and wetland project was completed and that this year Phase II is being completed. He noted that the project does not conflict with the Bryant Park Boat Ramp project.

Treasurer Chappell asked about the completion of the wetland area. Mr. Brown stated that Palm Beach County is currently completing that project.

Commissioner Freeman made a motion to approve the cost amendment to the Bryant Park Boat Ramp Project. The motion was seconded by Treasurer Chappell. Vice-

Chair Kavanagh asked for any further discussion, hearing none, a vote was taken and the motion passed.

ITEM 7. Board Meeting Minutes.

Vice-Chair Kavanagh asked if there were any comments or questions regarding the Board Meeting Minutes.

Secretary Blow made a motion to approve the minutes as presented. The motion was seconded by Treasurer Chappell. Commissioner Freeman asked for any further discussion, hearing none, a vote was taken and the motion passed.

ITEM 8. Public Comments.

Vice-Chair Kavanagh asked if there were any public comments on issues that are not on today's agenda.

Mr. John Nunni, of Jacksonville, stated that he would like to thank the Board for their comments and suggestions provided to him at the District's previous meetings. He stated that FIND is a motivational and inspirational commission and he appreciates the opportunity to address this group.

Mr. Nunni stated that after five years of meetings, he is still seeking a sponsor for the development of a pocket park with a floating dock in Jacksonville. He stated that he plans to approach the new City of Jacksonville Commissioners about this project.

Mr. Nunni stated that two days ago he attended the Jacksonville Waterway Commission meeting and he asked the Commission about the FIND project update and none of the Commissioners knew about it. He stated that last year he participated in the review of potential Waterways Assistance Program (WAP) applications and this year no one knows about the WAP project selection.

Mr. Nunni thanked the Board for listening and would appreciate any suggestions.

Secretary Blow noted that the City of Jacksonville has concentrated on waterway storm water run-off and have cleaned up the waterway. Mr. Nunni stated that Hookers and McCoy Creeks have a thriving eco system within an urban area and are great areas for kayaking. He stated that the City is considering those areas for development and he is concerned that the development could destroy the bird habitat.

Commissioner Sansom encouraged Mr. Nunni to hang in there and keep working on this. He stated that these projects take time.

Commissioner Barkett stated that persistence really has its value. He suggested that Mr. Nunni consider a different direction and go directly to the decision makers. He stated that perhaps Mr. Nunni engage with one group, such as the Audubon Society or a recreation department and make them an ally. He noted that one person may not have the connections to get this type of project going but a larger group may have those contacts.

ITEM 9. Comments from the U.S. Army Corps of Engineers.

Mrs. Shelley Trulock, the Intracoastal Waterway (IWW) Project Manager with the U.S. Army Corps of Engineers, stated that negotiations with the contractor for the outstanding items on the DMMA IR-2 project have been completed. She stated that the projected deduction from the contract is \$7,700 and will be returned to FIND to continue the mowing of the project area and replant the daisies in Zone A. She stated that the Corps will start the contract closeout soon.

Mrs. Trulock stated that IWW St. Augustine maintenance dredging project was completed on October 18th. She stated that demobilization of the pipeline in Salt Run took place November 6th.

Mrs. Trulock stated that two surveys confirmed that during the pipeline leaks some material was deposited back into Salt Run in two areas. She stated that the Department of Environmental Protection (DEP) was notified and they gave approval to go forward with the removal of the material. She stated that Southwind Construction has removed this material and the final survey has been completed and that DEP is happy with the results. She stated that this project has been completed and the Corps will start the contract closeout.

Secretary Blow thanked Mrs. Trulock and the Corps for staying on top of this issue. He suggested that for future projects a pipeline pressure test or some type of quality control should be completed prior to the start of dredging.

Mrs. Trulock stated that the IWW Sawpit Dredging project plans and specifications are being reviewed. She stated that the FIND staff will have an opportunity to review the certified plans and specifications. She stated that a work order will be presented today for the dredging and administration of the contract. She stated that the beach quality material will be placed on the Amelia Island beaches and the material that is not beach quality will be placed in DMMA DU-2.

Mr. Crosley presented Work Order No. 36-2012-03 for the maintenance dredging of the IWW at Sawpit in Nassau/Duval Counties for approval. He stated that the District's NA-1 contract included the contractor offloading DMMA DU-2 so that there would be capacity for this project. He stated that for the IWW Sawpit dredging project we will remove more material than previously identified, but because the majority of material is beach quality, we will be placing less material in DMMA DU-2 than originally thought.

Commissioner Barkett asked, for the record, about the funding source for this project. Mr. Crosley stated that 100 percent of the IWW Sawpit Dredging project will be funded by FIND with the Corps as the contractor. He stated that the funding source is the Florida taxpayer. He stated that the District is funding this project because the federal government does not have money for this project and the waterway needs dredging.

Commissioner Barkett asked about the District's historical mandate with the federal government. Mr. Crosley stated that the District's mandate with the federal government is that the District provides the land for the deposit of dredged material. He stated that the federal government's responsibility is to build and fund the dredged material management sites and complete the dredging of the Intracoastal Waterway.

Commissioner Barkett stated that FIND is providing the funding that the federal government has failed to provide.

Commissioner Bray made a motion to approve Work Order No. 36-2012-03 with the Corps in the amount of \$5,710,100.00 for maintenance dredging, construction administration and supervision services for the IWW Sawpit project in Nassau/Duval Counties. The motion was seconded by Commissioner Sansom. Vice-Chair Kavanagh asked for any further discussion, hearing none, a vote was taken and the motion passed.

ITEM 10. Duval County Area Projects Status Report.

Mr. Roach stated that Phase I of the Dredged Material Management Plan (DMMP) for the Intracoastal Waterway in Duval County was completed in 1986. He stated that Phase II of the DMMP was completed in 1993. He stated that Land acquisition was completed in 1995.

Mr. Roach stated that the 50 year dredging projection for the 21 miles of channel in Duval County is 2.3 million cubic yards and the storage projection is 4.4 million cubic yards. He stated that this ranks as the fifth highest dredging projection of the District's 12 counties.

Mr. Roach stated that six upland Dredged Material Management Areas (DMMA) will manage dredged materials from the waterway. He stated that all sites have been purchased, four sites are fully constructed, and the rest have had Phase 1 development.

Mr. Roach stated that DMMA DU-2 will have approximately 74,000 cubic yards of materials offloaded from it in early 2013 for the DMMA NA-1 Construction Project. He stated that DU-2 will be utilized for the non-beach quality materials being dredged in the Dredging Reach II project which will occur in mid-2013.

Mr. Roach stated that Dredging Reach II in the vicinity of Nassau Sound is scheduled for dredging in 2014.

Mr. Roach stated that the Duval County Waterways Economic Study was first completed in 2005 and updated in late 2011. He stated that there are 392 waterway related businesses in Duval County generating \$1.3 billion in annual sales, 6,169 jobs, \$300 million in personal wages, and \$46 million in tax revenues. He stated that the waterway increases the value of property in Duval County by \$1.3 billion. He stated that if the waterways were not maintained the economic output is predicted to drop by \$138 million with a loss of 846 jobs. He stated that properly maintaining the waterways would result in an increase of \$62 million in economic output and an additional 344 jobs.

Mr. Roach stated that Since 1986, the District has provided \$17.4 million in Waterways Assistance Program funding to 119 projects in the County having a total

constructed value of \$35.8 million. He stated that the County, two cities, and the Port of Jacksonville have participated in the program. He asked for questions.

Secretary Blow asked about a payment to Jaxport in the amount of \$300,000.00 for the Mile Point study. Mr. Crosley stated that the grant project was approved but the funds have not been disbursed. Commissioner Bowman stated that the project is currently in engineering and design. Mr. Roach stated that Taylor Engineering has reviewed the engineering and design specifications and the project will not affect the Intracoastal Waterway.

Treasurer Chappell asked where the material that will be offloaded from DMMA DU-2 will go. Mr. Roach stated that the several months ago we discussed the option of the contractor trucking the material from DMMA DU-2 to DMMA NA-1 or purchasing the material locally. He stated that the Board elected to pay the additional cost to take the material from DMMA DU-2 and truck it to DMMA NA-1. He stated that there was local concern about trucking the material and the contractor has come up with a barging plan that is close to being approved.

ITEM 11. Presentation on Unmanned Automated Vehicles.

Commissioner Bowman introduced Dr. Kamran Mohensi, Director of the University of Florida's Institute for Networked Autonomous Systems, to give a presentation on Unmanned Automated Vehicles (UAV).

Dr. Mohensi stated that he is a mechanical and electrical engineering professor at the University of Florida. He stated that the University of Florida is a flagship university and is also the highest ranking university in the State of Florida. He stated over the last two decades UAV's have become smaller and more affordable.

Dr. Mohensi stated that UAV's are currently operating all over the world. He stated that until ten years ago the Air Force was developing large transports with many sensors that cost hundreds of millions of dollars but, today the trend is towards smaller affordable sensors with more processing capability. He stated that that UAV's can be used for photography and geo-matics can automatically put photographs together for review.

Dr. Mohensi stated that the latest underwater UAV's are equipped with squid thrusters for low speed maneuvering, forward and bottom looking cameras, and a suite of on-board sensors to determine its relative position, velocity and attitude.

Commissioner Barkett asked about the autonomous operation. Dr. Mohensi stated that there are different levels of an autonomous operation. He stated an autonomous operation must have the mission designed and if the vehicle was designed with a target, it will find the target, photograph the target and then dock itself. He stated that if the vehicle crashes it usually does not sustain damage.

Dr. Mohensi stated that the third generation underwater UAV's use a rear propeller for forward propulsion, but contained no control surfaces of any kind. He stated that all of the maneuvering forces are provided by squid or vortex ring thrusters.

Dr. Mohensi stated that the navy has used these vehicles in the Gulf of Mexico for oil and coastal monitoring. He stated that we will tell the vehicle what to look for and it will find the target and photograph all aspects of that target. He stated that these UAV's can be used in the ocean for hurricane reader simulation with real time data.

Commissioner Barkett referred to the small hummingbird vehicle and asked if there is any thought on putting that item for sale on the private market. Dr. Mohensi

stated that to date, the vehicles have been designed for a specific mission and that the market for these vehicles has been the military.

Commissioner Sansom asked about the advantage of deploying many sensors in a swarm, all going to the same place. Dr. Mohensi stated that if you have ten targets, you can send ten vehicles to the target area, but they do not all go to the same place, they spread out and cover an area. He stated also, once the vehicles get to the target area, he can have each vehicle perform a different task and avoid each other.

Commissioner Bowman questioned if the District could use remote monitoring of its dredging projects.

Commissioner Sansom questioned if these UAV's could be used to survey and manage the waterway.

Commissioner Netts stated that another agency that he works with recently did a coastal Florida topography study using LIDAR. He asked if these UAV's could perform that service more efficiently and less expensive. Dr. Mohensi answered yes, probably.

ITEM 12. Preparation of Construction Documents and Construction Administration for the Crossroads Dredging Project, Martin County.

Mr. Roach stated that a recent District survey has shown shoaling in the Intracoastal and Okeechobee Waterways at the Crossroads in Martin County. He stated that deep draft boats are currently experiencing problems in the Okeechobee Waterway at lower tides. He stated that DMMA M-5 is currently being offloaded to regain capacity for these dredged materials and dredging is proposed to initiate when the offloading project is completed in May. He stated that staff requested a scope of services and fee quote from the District Engineer to prepare plans and specifications, provide bid assistance, and provide construction administration for this dredging project. He stated

that we have project permits and plan to move forward with the project in May/June 2013.

Commissioner Freeman made a motion to approve the scope of services and fee quote in the maximum amount of \$159,457.50 from Taylor Engineering for the Preparation of Construction Documents and Construction Administration for the Crossroads Dredging Project. The motion was seconded by Commissioner Netts. Commissioner Netts. Vice-Chair Kavanagh asked for any further discussion, hearing none, a vote was taken and the motion passed.

ITEM 13. Utility Locate Survey for the Broward Intracoastal Waterway Deepening Project.

Mr. Roach stated that staff requested a scope of services and fee quote from our approved southern surveying company for a utility locate survey for the Broward IWW Deepening Project.

Commissioner Netts made a motion to approve the scope of services and fee quote from Morgan & Eklund in the amount of \$19,240.00 for a utility locate survey of the Broward IWW Deepening Project area. The motion was seconded by Treasurer Chappell. Vice-Chair Kavanagh asked for any further discussion, hearing none, a vote was taken and the motion passed.

ITEM 14. Bathymetric Survey of the IWW from Cross Bank to Big Spanish Channel in the Florida Keys, Monroe County.

Mr. Roach stated that because of reports of shoaling in the Intracoastal Waterway in the Florida Keys, the Board approved funding in the budget for a bathymetric of this 77 mile long section of waterway from Cross Bank to the Big Spanish Channel. He stated that this section of the waterway has been deauthorized by the Corps and is no

longer a federal channel. He stated that this channel was developed by Henry Flagler for his use when building the railroad. He stated that there has never been a survey of this section of the waterway and its location is only defined by channel markers to a seven foot depth area and not survey data. He stated that the goal of the project is to document any shoaling in the channel and determine if the channel markers are appropriately set to mark best water. He stated that the survey will be provided to the Coast Guard for marker adjustment as necessary.

Mr. Roach stated that staff has also been working with Everglades National Park on this project as their eastern park boundary is a line established by the waterway channel location. He stated that they will also be retaining our surveyor to determine their in water park boundary during this project.

Treasurer Chappell asked about the use of the survey that was completed of the northern section of this channel. Mr. Roach stated that survey was completed for the District's use during development of our Dredged Material Management Plan. He stated that survey was not provided directly to the Coast Guard for channel marker installation.

Treasurer Chappell stated that he travels through this area three or four times a year and the Tavernier area is the trickiest to navigate through and where the problem with the markers has historically been.

Commissioner Barkett asked, because this channel is not federally authorized and the Coast Guard does not have funding to place markers, why should the District survey this waterway. Mr. Roach stated that this is the first step to take care of an unsafe navigation situation because the District is here to solve problems for our constituents.

Mr. Crosley stated that deauthorization just means that the Corps does not have funding to take care of the waterway, but the U. S. Coast Guard still has the funds and ability to place the markers.

Commissioner Sansom stated that this waterway is part of the IWW and this may provide the District an opportunity to show Monroe County one of the benefits of being part of FIND.

Mr. Roach noted that there is a grounding problem in the Florida Keys with boats not being able to stay in the marked channel. He stated that correct marker placement will improve the environment as well as the safety for boaters.

Treasurer Chappell stated that the U. S. Coast Guard has been lax in providing proper channel markers in the waterway and people have died because of the lack of marking. He stated that this project will show them what areas need to be addressed and it is their job to address them.

Secretary Blow asked about the survey showing the National Park boundary. Mr. Roach stated that the centerline of the channel will be determined by the survey and the National Park boundary is 200 feet off the IWW centerline. He stated that because there has never been a survey of the IWW in this area, that National Park boundary has been fuzzy. He stated that our surveyor will contact the park to work with the park to determine a legal National Park boundary.

Commissioner Bray asked when the District completed the survey of the first section and is it relevant today. Mr. Roach stated that section was completed four years ago, that the waterway is stable in this area, and that the survey is relevant today.

Commissioner Bray made a motion to approve the scope of services and fee quote from Morgan & Eklund in the amount of \$68,045.00 for a bathymetric survey of the IWW in Florida Keys. The motion was seconded by Treasurer Chappell. Vice-Chair Kavanagh asked for any further discussion, hearing none, a vote was taken and the motion passed.

ITEM 15. Holiday Boat Parade Agreements.

Mr. Roach stated that in accordance with the Board's approval at the last meeting for the provision of funding for holiday boat parades, staff and legal counsel have developed a standard agreement. He stated that additionally, staff has developed a policy for the provision of this funding which incorporates the items mentioned by commissioners at the last meeting.

Mr. Crosley noted that of all the programs that this District has started, this one has garnered the most interest and excitement. He stated that staff has already received calls from the groups that sponsor these parades indicating their interest.

Mr. Crosley stated that initially staff thought about funding up to \$500.00 per year, per waterway, per county to be divided by three participants per year. He suggested changing that to two participants per year, per county.

Treasurer Chappell stated that he would like the program to provide funding of up to \$500.00 per waterway.

Commissioner Sansom stated that many counties have multiple waterways and he would like the program to provide funding to of up to \$500.00 per county, per year.

Commissioner Sansom referred to the Policy and suggested eliminating Item One completely and removing "per waterway" from Item Three.

Commissioner Sansom made a motion to approve the policy and standard agreement for holiday boat parades as amended. The motion was seconded by Commissioner Netts. Vice-Chair Kavanagh asked for any further discussion, hearing none, a vote was taken and the motion passed.

ITEM 16. Presentation on Federal and State Public Contract Bonding Laws.

Mr. Roach stated that Peter Breton prepared a comparison of federal and state public contract bonding laws.

Attorney Breton referred to the District's DMMA IR-2 project and a sub-contractor whose payment was delayed. He stated that the Miller Act requires a payment bond on federal projects but this contractor fell in a category where he could not make a claim against the bond. He stated that the Board discussed that, when FIND completes a project, we find a way to make sure that the lower tiered contractors are paid.

Attorney Breton stated that under the Federal Miller Act, the Corps hires a prime contractor for the project. He stated that for all projects over \$100,000.00 the prime contractor is required to provide a payment bond. He stated that the prime contractor hires several sub-contractors and material suppliers, who then hire various tiers of sub-sub-contractors and suppliers. He stated that the payment bond only covers the first and second tier sub-contractors and suppliers. He stated that everyone below the first and second tier have no rights under the bond and would have to sue the party that they have their contract with.

Attorney Breton stated that under Florida's Little Miller Act, which is similar to the Federal Miller Act, the District hires the prime contractor for the project. He stated that for all projects over \$200,000.00 the prime contractor is required to provide a

payment bond. He stated that for projects between \$100,000.00 and \$200,000.00 we have the discretion to require a payment bond. He stated that under Florida's Little Miller Act, the bond only covers the first and second sub-contractor and supplier or the supplier with direct contact to the sub-sub-contractor, everyone under those two contractors or suppliers have no rights under the bond and would have to sue the party that they have their contract with.

Attorney Breton stated that under Florida Construction Lien law, generally there is not a bond and contractors rely on Construction Lien Rights. He stated that a contractor that is not paid can file a lien against the property owner. He stated that the structure of this law is almost identical to the structure of Florida's Little Miller Act. He stated that if you are a third tier contactor or supplier, you are out of luck except for a material supplier to the sub-sub-contractor.

Attorney Breton stated that a contractor working under Florida's Construction Lien law has the same level of protection as a contractor working under Florida's Little Miller Act except that their recourse is against the bond instead of a lien against the property.

Commissioner Barkett questioned why all material suppliers are not protected. Attorney Breton stated that the law states that a material supplier to another material supplier is not protected.

Commissioner Netts stated that the difference between the federal and state laws is minimal.

Commissioner Sansom suggested sending this diagram to all contractors that work on District projects to remind them of their legal responsibilities.

Commissioner Freeman stated that suggestion may put the District outside of the boundaries of our role in the construction process. She stated that the District cannot insure a perfect world for any contractor. She stated that the more effort that we make to avoid a legal situation, the greater the probability of being drawn into the situation.

Attorney Breton stated that the District only deals with the contractor, we may know who the sub-contractor is but as the sub-contractors get farther down the list, we probably do not know who the contractor or sub-contractors are and we do not have a relationship with them.

Commissioner Netts noted that the more obligations we assume, the more liability we assume. He stated that he can envision a situation where a sub-contractor may come to us and say you didn't give me the warning that you gave everybody else.

Mr. Roach stated that the District receives a Notice to Owner on liens on projects. He stated that contractors do not really understand that you cannot lien government property. He stated that staff files the notices and at the end of a District project we make sure that everyone got paid. He stated that with the new law we cannot even make sure that everybody gets paid. He stated that what we could do is respond and advise the contractor or suppliers that that lien law does not apply to the District and here is how the bond will work.

Commissioner Barkett stated that he is not sure that is a great idea. He stated that since we do not have any coverage for third level contractors or suppliers, a notice could cause contract implications, especially if it is incorrect. He stated that if we send a notice it should be very generic and we should not provide a legal opinion. Attorney Breton

stated that a generic notice should state that “this is not legal advice and if you have any questions, you should consult an attorney.”

Secretary Blow suggested that the notice should state that “The District has received your Notice to Owner and this is advising you that this project is subject to the Florida Little Miller Act, please review the Florida Statute.” Commissioner Barkett stated that would be okay, but we must make sure that notice is only sent on projects that fall under the Florida Little Miller Act. Secretary Blow noted that if the Corps is doing the project then the notice should say under the “Federal Miller Act.”

Vice-Chair Kavanagh suggested that a letter or notice be developed and presented to the Board at the next meeting.

ITEM 17. Travel and Per Diem Resolution Correction.

Mr. Roach stated that in 2010, the Board adopted the current Travel and Per Diem Resolution regarding the reimbursement of travel expenses by commissioners, staff and consultants. He stated that the District’s auditor noted that the executed resolution was different in the reimbursable cost for breakfast than what was approved by the Board. He stated that staff has developed Resolution No. 2012-07 to correct this error. He noted that staff implemented the correct per diem reimbursement

Commissioner Freeman made a motion to approve Resolution No. 2012-07. The motion was seconded by Secretary Blow. Vice-Chair Kavanagh asked for any further discussion, hearing none, a vote was taken and the motion passed.

ITEM 18. Legislative Committee Report.

Chair Freeman stated that the Legislative Committee met before today’s Board meeting and the Committee reviewed and recommends approval of the certification of the

Final Compliance Economic Review of the District's Rules. She stated that the previously certified Compliance Economic review of the District's rules was posted on our website for public review and comment and transmitted to the required parties at the state for review and comment. She stated that no comments were received and the final review and report must be published. She stated that the final compliance report must be submitted to the Joint Administrative Procedures Committee by the end of this year.

Commissioner Netts made a motion to approve the recommendations of the Legislative Committee for certification of the Final Compliance Economic Review of the District's Rules. The motion was seconded by Secretary Blow. Vice-Chair Kavanagh asked for any further discussion, hearing none, a vote was taken and the motion passed.

Chair Freeman stated that the committee discussed a listing of high profile boards that Commissioners may want to join. She stated that we would like to encourage each Commissioner get involved in their respective communities to tell the District's story. She stated that the general consensus was that a number of the larger boards are very costly and often times are at invitation only. She stated that does not preclude Commissioners from discussing with staff a request when an invitation has been issued.

Chair Freeman noted that commissioners have a number of opportunities to work with the local community during check presentations and talk about the District.

Chair Freeman stated that she would like to correct a statement made by John Nunni that commissioners are on the board of country clubs and she noted that there has never been a discussion about commissioners being on the board of a country club.

Chair Freeman stated that the committee discussed that because of the recent election there have been changes and items are in limbo and will stay that way for a

while. She stated that Commissioner Sansom requested that the Washington D. C. trip be scheduled the week of February 25, 2013 to avoid the commencement of the Florida Legislature. She stated that Commissioner Sansom pointed out that the District will have new partners to work with and we should get to know these partners during the Washington trip.

Chair Freeman stated that Secretary Blow discussed some of the proposed tax changes. Secretary Blow stated that the District is spending a significant amount of money for dredging in Broward County so that the waterway can accommodate and draw larger yachts to the area. He stated that if this class warfare takes place, the larger yachts may not come to the United States and will go elsewhere, such as the Bahamas. He stated that many larger boats are considered second homes and there is talk about eliminating the interest deduction for second homes. He stated that several years ago a luxury tax was imposed that severely hurt the marine industry in Florida. He suggested discussing this with our elected officials when we visit Washington D. C.

Chair Freeman stated that the committee discussed the Washington D. C. report and noted that Congress returned from a lengthy recess on November 13th and it is probable that the appropriations bill will be left for the next Congress.

Chair Freeman stated that the committee discussed the Tallahassee report and at the time the letter was written the election had not taken place. She stated that the proposed majority leader did not win re-election and therefore Steve Crisafulli who was elected he will become the House Speaker Designate for 2014 and his District is within the District's waterway.

Commissioner Sansom stated the Senate President designate for 2016 is Andy Gardiner and his district is also located along the waterway.

ITEM 19. Finance and Budget Committee Report.

Chair Chappell stated that the District's Finance and Budget Committee met before today's Board meeting and the Committee reviewed and recommends approval of the September 2012 financial statements and Delegation of Authority.

Chair Chappell stated that the committee also reviewed and recommends approval of Resolution No. 2012-06 for Budget Amendment No. 2 to the FY 2011-2012 Budget.

Treasurer Chappell made a motion to approve the recommendations of the Finance and Budget Committee, September 2012 Financial Statements, and Resolution No. 2012-06 for Budget Amendment No. 2 to the FY 2011-2012 Budget. The motion was seconded by Commissioner Netts. Vice-Chair Kavanagh asked for any further discussion, hearing none, a vote was taken and the motion passed.

Vice-Chair Kavanagh asked about the change to the Waterway Cleanup budget from \$7,500.00 to \$9,700.00 and asked why the budget item was changed. Mr. Crosley stated that there was 100 percent participation in the program this year and he noted that previously not every county participated. Mr. Roach noted that the maximum budget is \$10,000.00.

ITEM 20. Additional Staff Comments and Additional Agenda Items.

Vice-Chair Kavanagh asked if there were any additional staff comments or agenda items.

Mr. Crosley stated that he attended the AIWA conference and he noted that the Corps also attended. He stated that he spent time with Dillon Davis, the Corps South

Atlantic Division representative that makes funding decisions. He stated that he learned a lot about waterway conditions in Georgia and found it interesting that no one has taken responsibility to maintain the waterway in Georgia. He stated that North Carolina has a large political influence and they have received federal waterway funding.

Mr. Crosley stated that when he first started attending national and regional conferences he thought that every state had dredged material management plans similar to what we have in Florida and he found out that Florida is far ahead of every other state.

Mr. Roach stated that Secretary Blow has suggested canceling the December 2012 meeting in Volusia County and holding the meeting in January 2013. He stated that if that will work for everyone we will not hold a St. Johns meeting in 2013.

Commissioner Sansom made a motion to approve canceling the December 2012 meeting in Volusia County and holding the meeting in January 2013. The motion was seconded by Commissioner Netts. Vice-Chair Kavanagh asked for any further discussion, hearing none, a vote was taken and the motion passed.

ITEM 21. Additional Commissioners Comments.

Vice-Chair Kavanagh asked if there were any additional Commissioner comments.

Secretary Blow noted that the Vilano Beach Dock funded by the District is already stimulating economic activity and a water taxi has included this facility as one of its stops.

Commissioner Barkett stated work has begun on the Alex McWilliams Park boat ramp improvement project which is a WAP project.

Secretary Freeman stated that the Riverside Park final ribbon cutting ceremony took place recently. She stated that the project included seawall replacement and a floating dock installation. She stated that the City is very grateful for the District's participation in the project.

Commissioner Sansom noted that the new grant cycle is coming up in January and he asked commissioners to let local government know that the District has grant funding available.

ITEM 22. Adjournment.

Vice-Chair Kavanagh stated that hearing no further business the meeting was adjourned at 11:30 a.m.



VOLUSIA COUNTY PROJECT STATUS UPDATE

January 2012

Atlantic Intracoastal Waterway Dredged Material Management Plan.

Phase I of the Dredged Material Management Plan for the Intracoastal Waterway in Volusia County was completed in 1993. Phase II of the DMMP was completed in 1994 and all major land acquisition was completed in 1997. See attached maps.

The 50 year dredging projection is 4.2 million cu/yds. The storage projection is 9 million cu/yds.

To date, 3 of the 7 Dredged Material Management Areas in the county have been fully constructed with MSA 434/434C being completed in November of 2006. This effort also included the offloading of 780,000 cu/yds of beach quality material from MSA 434/434C which was placed on the beaches of New Smyrna to repair the beaches from storm impacts.

All DMMA's with the exception of V-6 have been fenced. The future development area of DMMA V-22A has been cleared and grubbed. The presence of a bald eagle's nest on DMMA V-21 has precluded any development of that site beyond the security fence.

Waterway Dredging

In fall of 2012, the USACE hopper dredge "Currituck" conducted operations in the ICW in the vicinity of Ponce Inlet for a period of approximately 4 days in between assignments on the U.S. east coast. Approximately 3,000 cu/yds. of material was dredged for the temporary relief of shoaling in this vicinity. A full-scale dredging event is scheduled for the summer of 2013. Approximately 216,000 cu/yds are expected to be removed from Cuts V-22 through V-28 and placed in nearby MSA 434/434C under our upland permit exemption. (Please see attached location & project maps)

Waterways Economic Study

The Volusia County Waterways Economic Study Update was completed in 2011 and it found that there were approximately 284 waterway related businesses in the county employing 1,466 people, with salaries of \$53.4 million and an economic output of \$235.4 million. This economic impact generated \$11.2 million in tax revenue. Property values were determined to be increased by \$339 to \$429 million by the presence of the ICW channel. The study reports that these values would decrease by approximately 20% if dredging of the waterways ceased. (Please see attached map).

FIND



VOLUSIA COUNTY PROJECT STATUS UPDATE

January 2012

Waterways Assistance Program

Since 1986, the District has provided \$8.69 million in Waterways Assistance Program funding to complete 87 projects in the County having a total constructed value of approximately \$23.2 million. The County and 9 waterfront municipalities have participated in the program. (Please see attached listing and location map.)

Cooperative Assistance Program

The District's Cooperative Assistance Program has providing funding assistance for the following projects with elements in Volusia County: Florida Clean Marina Program; Florida Clean Vessel Act Program; Deleon Springs State Park Dock Design; Florida Marine Patrol Officer Funding; and the St. Johns River Boating Safety Search and Rescue Program. The District's funding assistance for the Volusia County portion of these projects was approximately \$465,000.

Public Information Program

The District currently prints and distributes the following brochures with specific information about Volusia County Waterways: Volusia County Manatee and Boating Safety Speed Zones; the Economic Impact of Volusia County Waterways; ICW Channel Conditions; and the ICW Moveable Bridge Guide.

Waterway Clean Up Program

The District has partnered with Volusia County for the past several years to provide funding assistance for the removal of trash and debris from Volusia County's waterways. The District provides up to \$10,000 per year for this program.

Small Scale Derelict Vessel Removal Program

To date, no vessels have been removed in Volusia County through this program.

FIND



VOLUSIA COUNTY PROJECT STATUS UPDATE

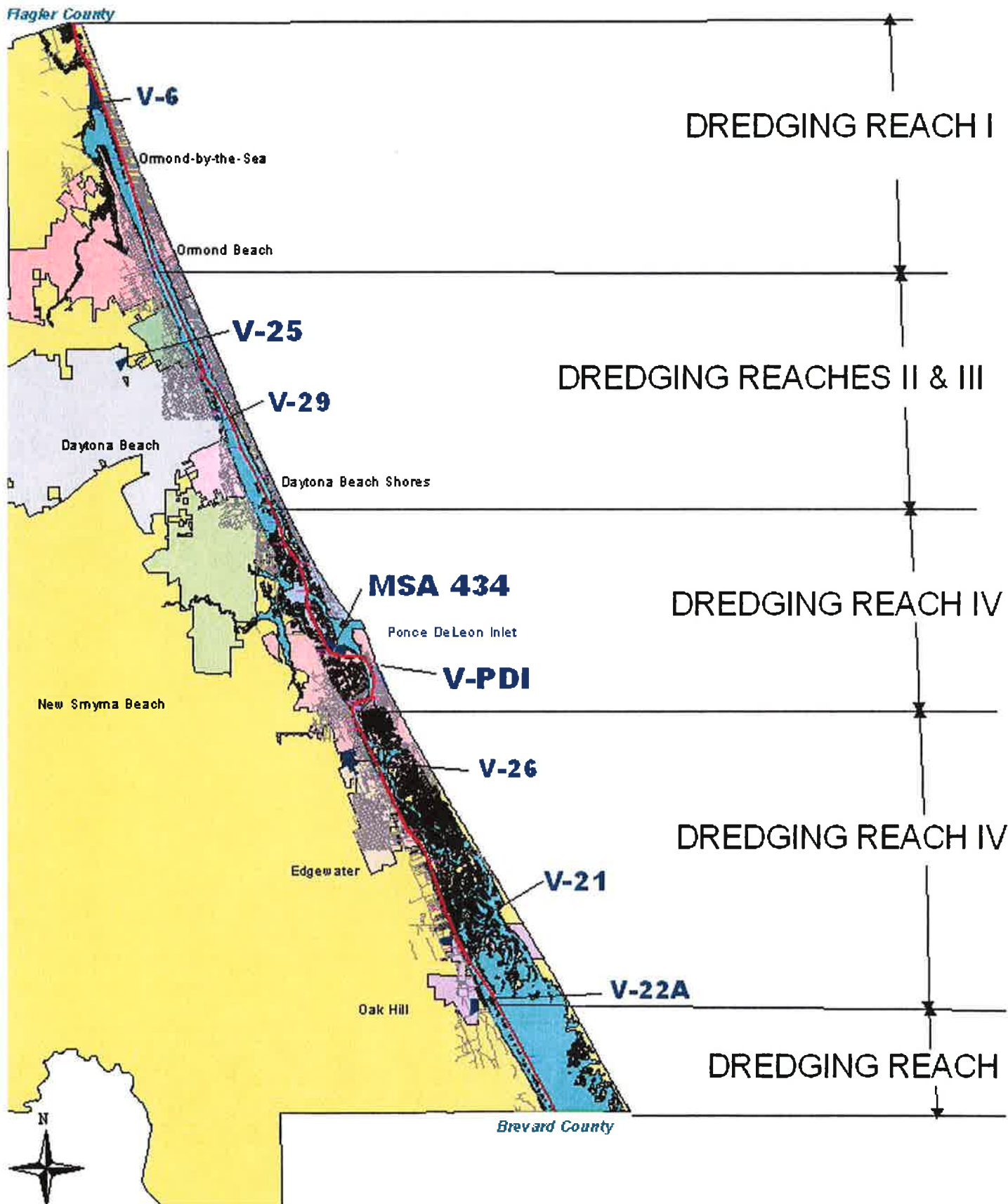
January 2012

Small Scale Spoil Island Enhancement and Restoration Program

The District has assisted Volusia County in the development of a Spoil Island Management Plan.

FIND

INTRACOASTAL WATERWAY
DREDGING REACHES AND
DREDGED MATERIAL MANAGEMENT AREAS
IN VOLUSIA COUNTY

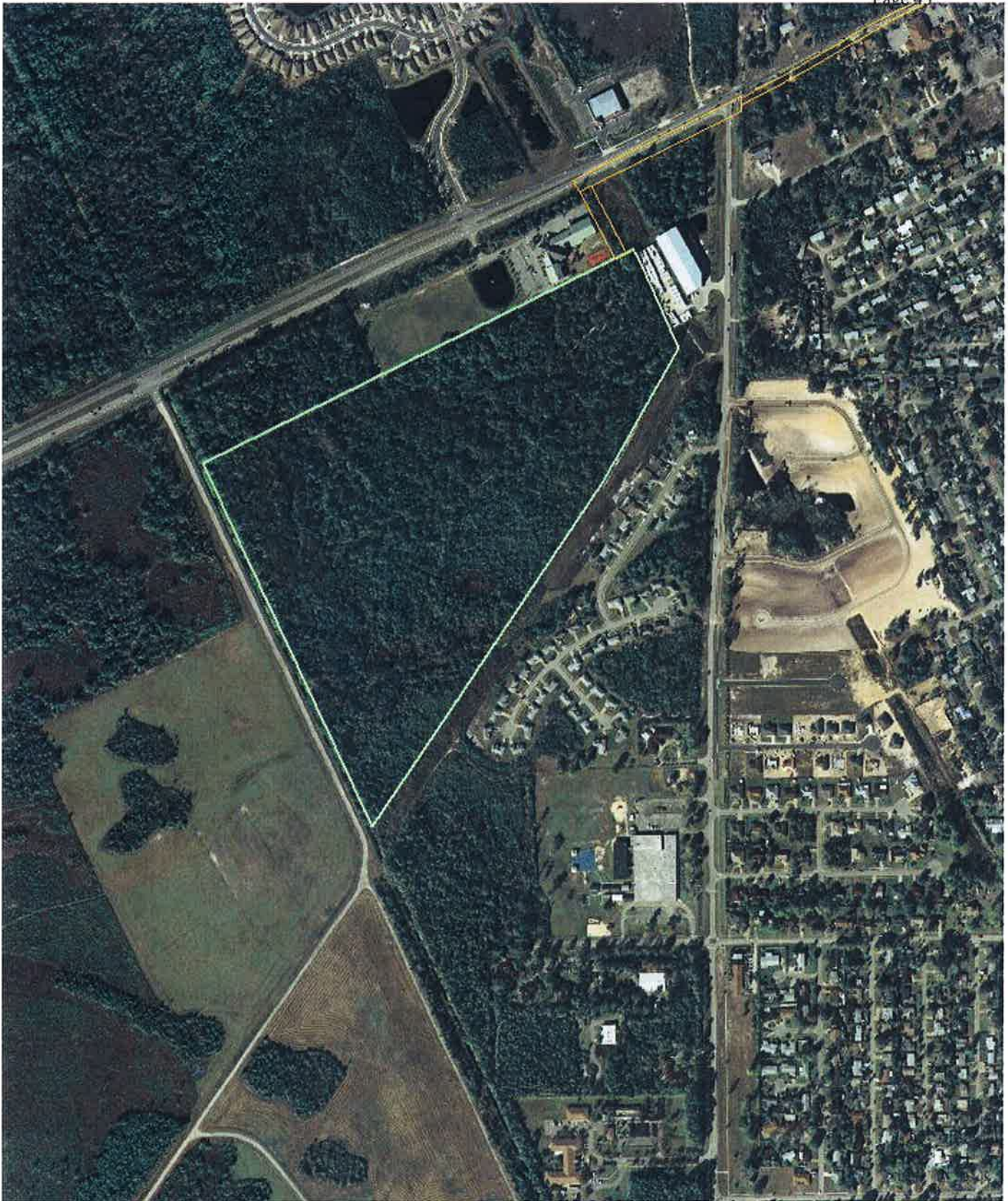




 FWD Easement
 FWD Owned
 Channel
 Right-of-Way

DMMA V-6






DMMA V-25

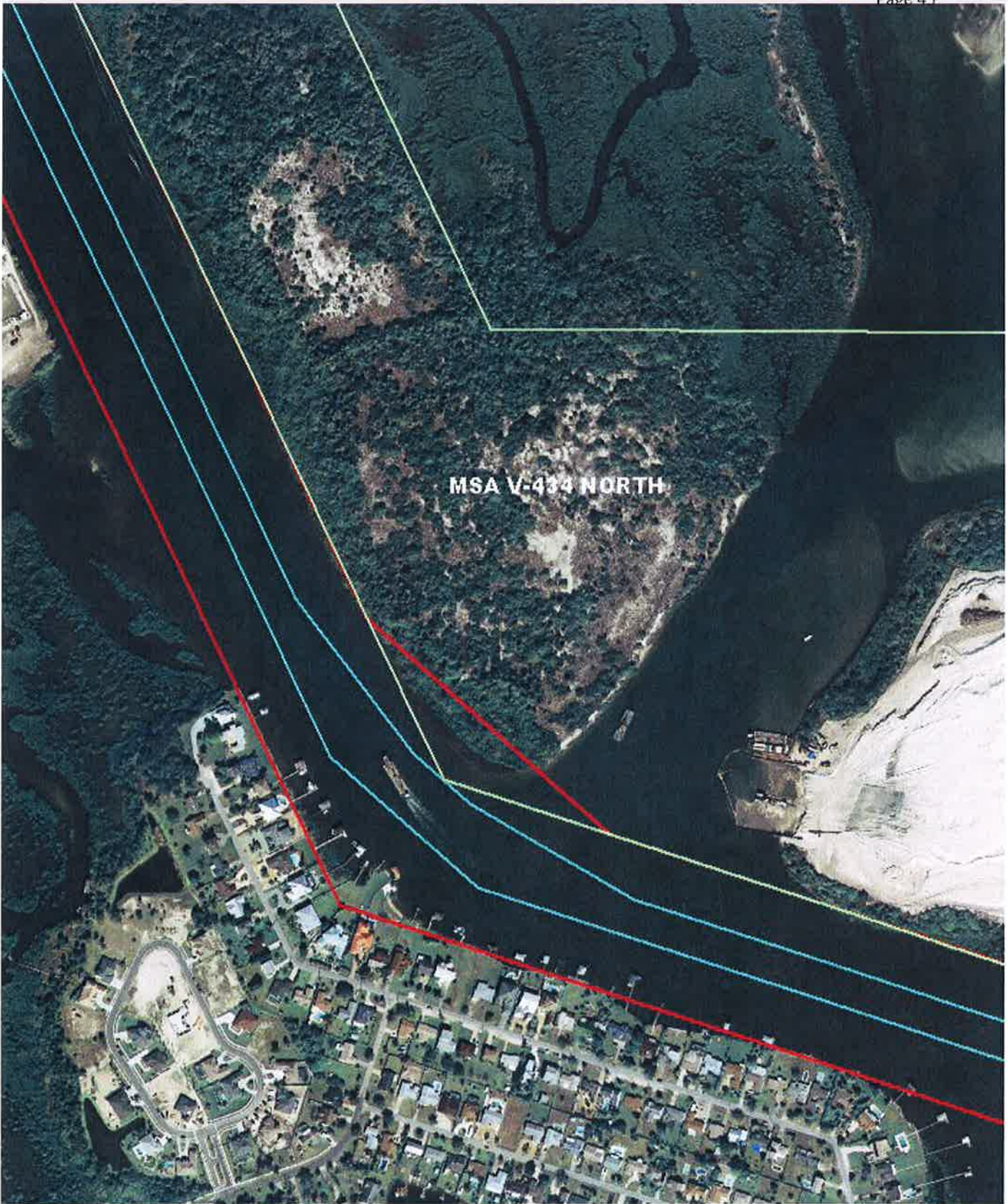




-  PIND Easement
-  PIND Owned
-  Channel
-  CW Right-of-Way

DMMA V-29





MSA V-434 NORTH





FIND Easement
FIND Owned
Channel
CW Right-of-Way

MSA 434/434C





2007
Placement
Area



DMMA V-PIB









- FIRM Easement
- FIRM Owned
- Channel
- NW Right-of-Way

DMMA V-26









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

DMMA V-21

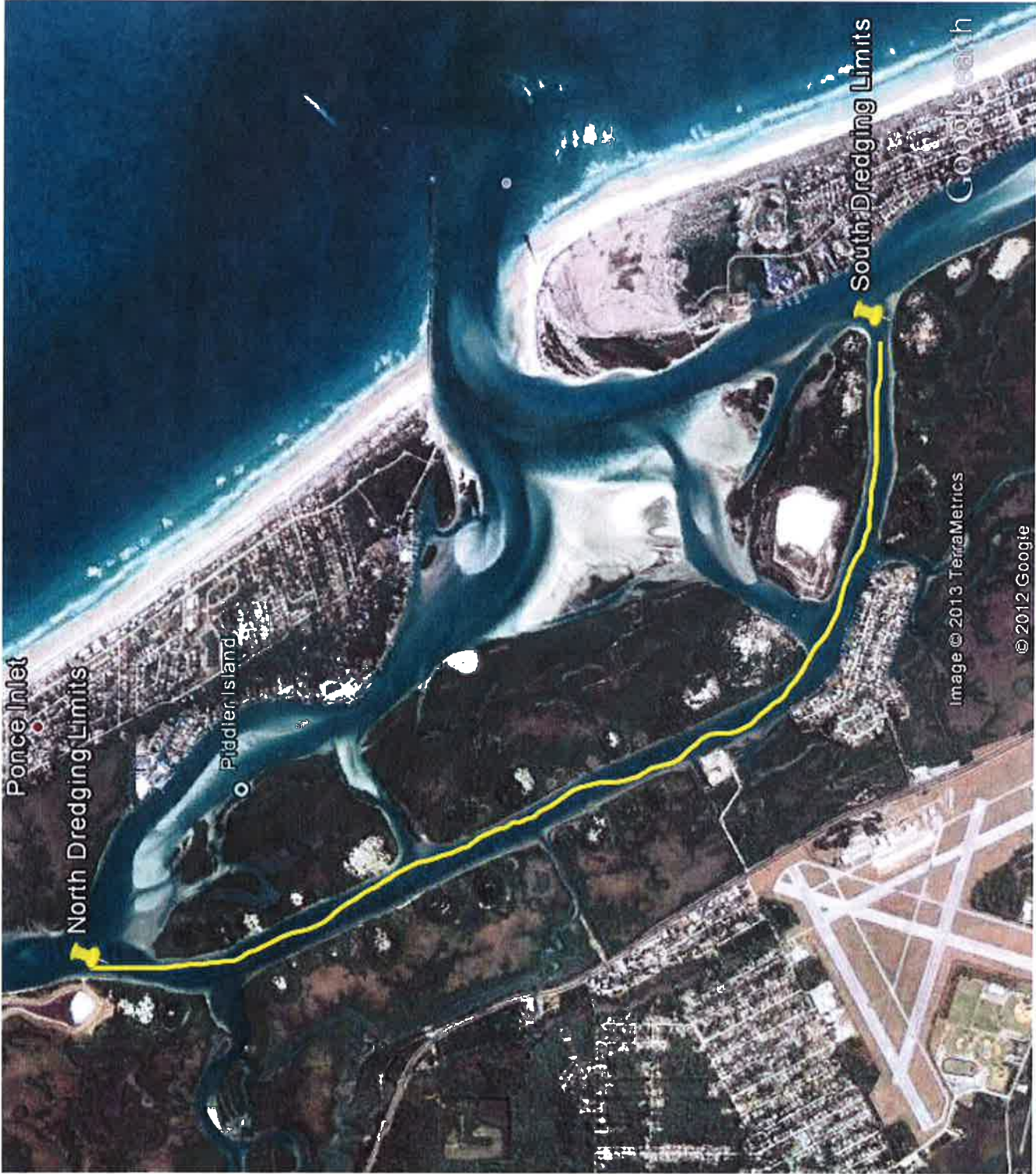




-  FIND Easement
-  FIND Owned
-  Channel
-  ICW Right-of-Way

DMMA V-22A





Google earth

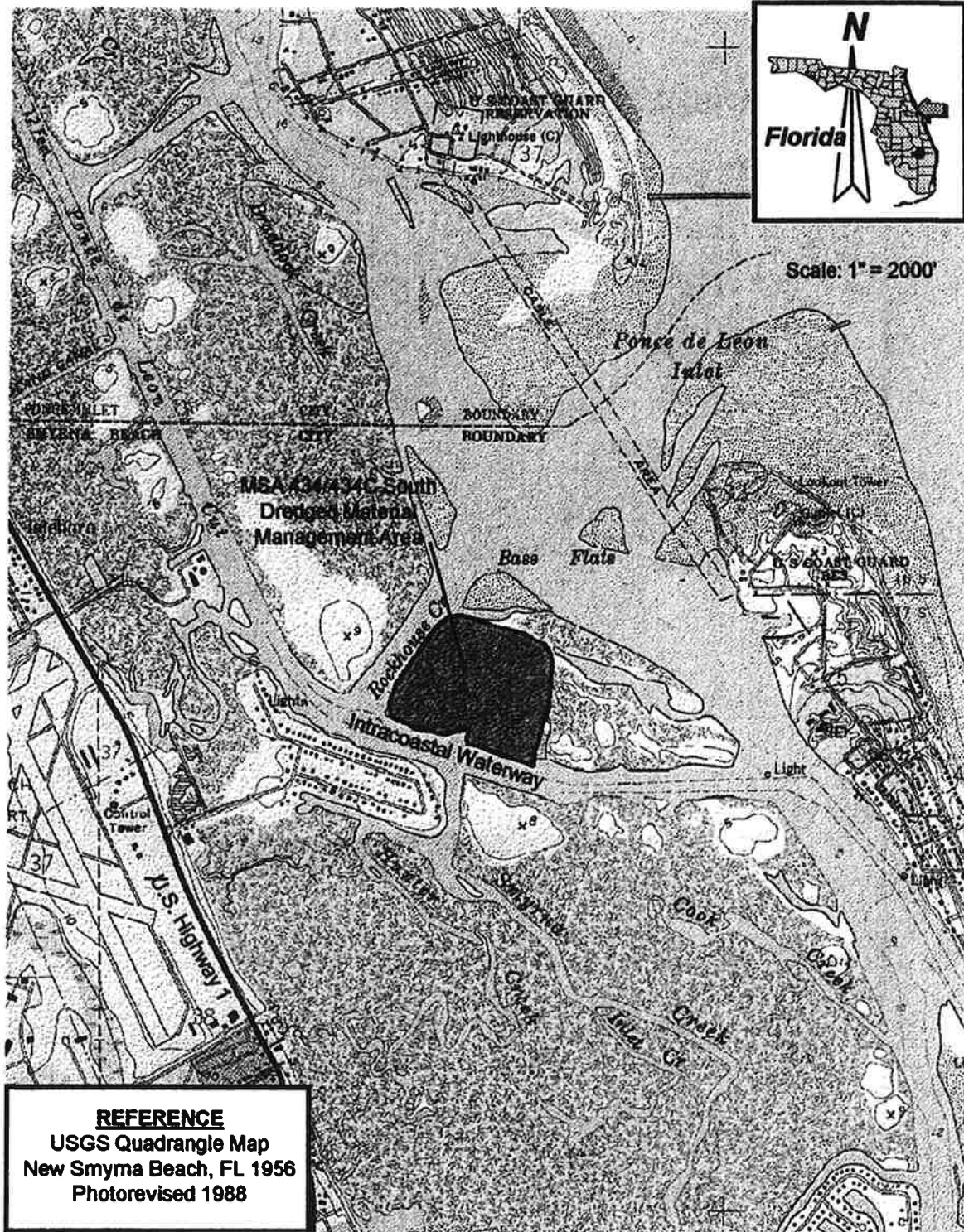
miles
km



Image © 2013 TerraMetrics

© 2012 Google

Google earth



TAYLOR ENGINEERING INC
 9086 CYPRESS GREEN DRIVE
 JACKSONVILLE, FLORIDA 32256

Figure 1.1
 Location of MSA 434/434C South
 Dredged Material Management Area
 Volusia County, Florida

PROJECT	C-9313
REVISION	
SHEET	
DATE	Feb., 1997

2SEP24'12 48-3140640

ECONOMIC BENEFITS OF THE DISTRICT'S WATERWAYS



Purpose

To update economic benefits in Volusia County of marine-related activities on the District Waterways, as previously estimated in *An Economic Analysis of the District's Waterways in Volusia County*, February 2003, 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

- \$235.4 million in business volume
- \$53.4 million in personal income
- 1,466 jobs
- \$11.2 million in tax revenue

Impacts of Cessation of Waterways Maintenance

- Decrease of \$49.97 million in business volume
- Decrease of \$9.2 million in personal income
- Decrease of 307 jobs
- Decrease of \$2.2 million in tax revenue

Impacts of an Increase in Waterways Maintenance

- Increase of \$7.1 million in business volume
- Increase of \$1.53 million in personal income
- Increase of 55 jobs
- Increase of \$0.3 million in tax revenue

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

- Decrease of \$115.4 million in business volume
- Decrease of \$26.2 million in personal income
- Decrease of 720 jobs
- Decrease of \$5.6 million in tax revenue

Economic Benefits as of April 2011

VOLUSIA COUNTY



ECONOMIC BENEFITS OF THE DISTRICT'S WATERWAYS

Page 54

VOLUSIA 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 February 2003 in *An Economic Analysis of the District's Waterways in Volusia County*.

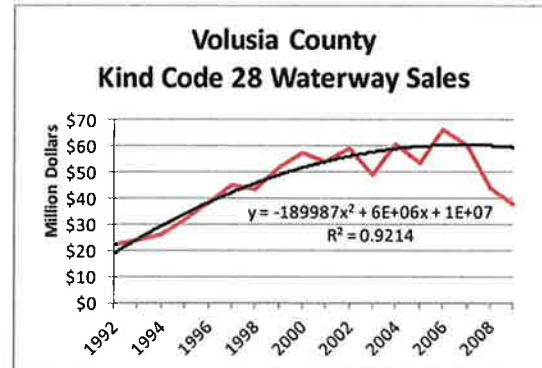
Updating of Previously Estimated Benefits

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 Volusia County decreased by 37 percent; if the recession had not occurred, it is estimated that gross sales from 2007 to 2009 would have decreased by only six percent.



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

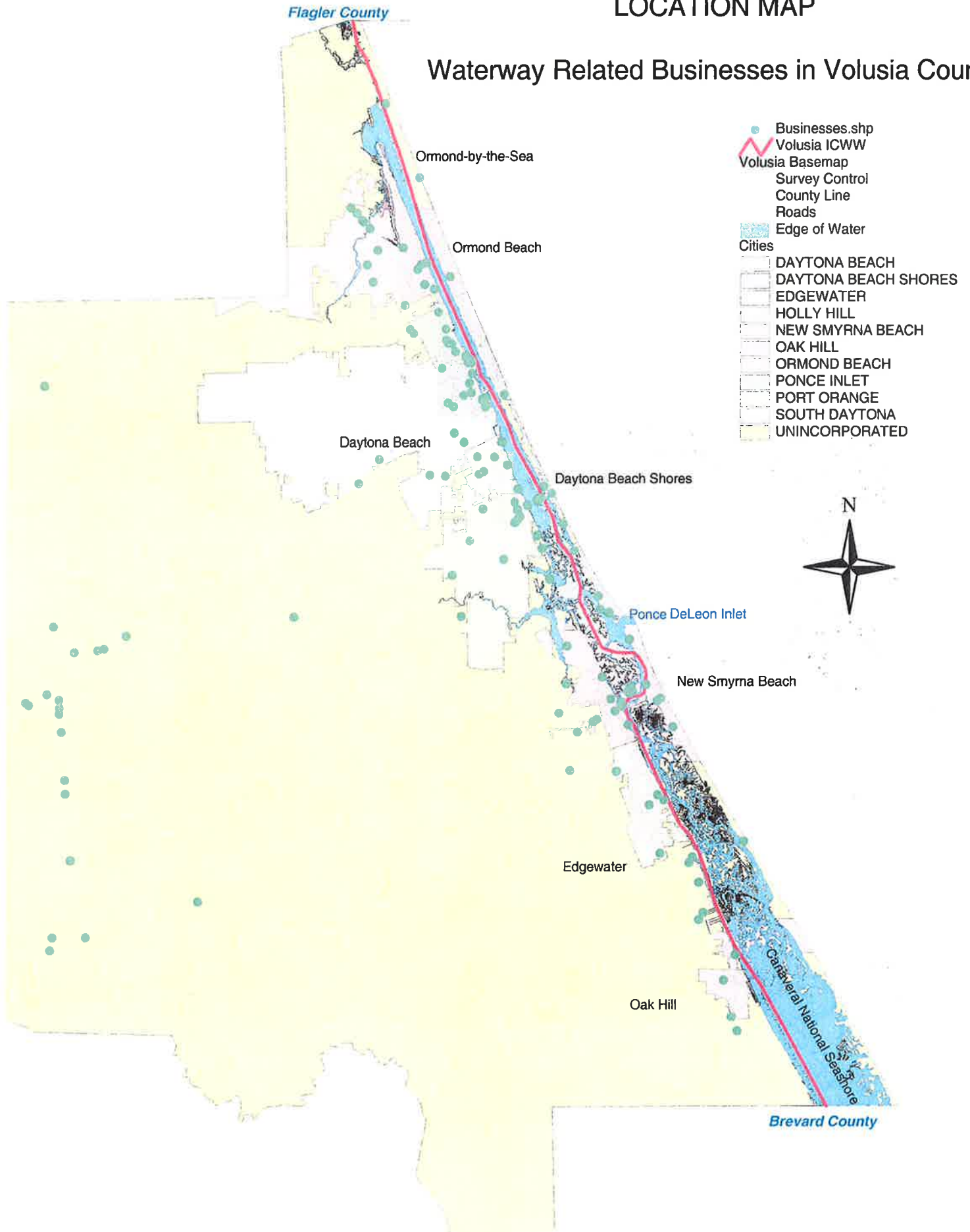
- Current existing conditions: \$24.6 million
- Cessation of maintenance: \$21.7 million
- Increased maintenance: \$24.6 million
- Assuming no recession: \$37.4 million

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

Waterway Related Businesses in Volusia County



FLORIDA INLAND NAVIGATION DISTRICT - WATERWAYS ASSISTANCE PROGRAM PROJECTS IN VOLUSIA COUNTY 1986-2012

ProjectName	ProjectNumber	ProjectSponser	GrantAmount	TotalCost
River Breeze Park	VO-02-55	Volusia County	\$44,000.00	\$88,000.00
Ed Stone Boat Ramp Park Restoration	VO-08-80	Volusia County	\$100,000.00	\$200,000.00
Ed Stone Boat Ramp Park Seawall - Phase I	VO-08-81	Volusia County	\$30,000.00	\$60,000.00
Ed Stone Boat Ramp Park - Seawall Construction- Ph II	VO-10-90	Volusia County	\$100,000.00	\$200,000.00
Mariner's Cove Boat Ramp Expansion - Phase I	VO-11-93	Volusia County	\$15,000.00	\$30,000.00
Mariner's Cove Boat Ramp Expansion - Phase II	VO-12-95	Volusia County	\$40,000.00	\$80,000.00
Highbridge Park - Phase II	VO-89-3	Volusia County	\$40,000.00	\$92,050.00
Spruce Creek Preserve	VO-90-7	Volusia County	\$37,500.00	\$75,000.00
Bicentennial Park Pier And Boardwalk	VO-91-10	County of Volusia	\$28,790.00	\$57,581.00
Spruce Creek Preserve - Phase III	VO-91-9	County of Volusia	\$37,500.00	\$75,000.00
River Breeze Park - Phase I	VO-93-17	County Of Volusia	\$73,850.00	\$147,700.00
River Breeze Park - Phase II	VO-94-20	Volusia County	\$300,000.00	\$755,480.00
Lighthouse Boat Ramp Facility	VO-95-22	Ponce De Leon Port Authority	\$100,000.00	\$315,720.00
Volusia Waterway Env. Education - Phase I	VO-96-28	Volusia County	\$87,500.00	\$120,000.00
Waterway Env. Education Center - Phase II	VO-97-32	County Of Volusia	\$313,461.00	\$368,000.00
Waterways Environmental Education - Phase III	VO-98-35	Volusia County	\$363,000.00	\$532,000.00
Volusia Waterways Environmental Education - Phase IV	VO-99-41	Volusia County	\$161,592.00	\$720,000.00
Environmental Learning Center- Manatee Island	VO-DB-00-44	City Of Daytona Beach	\$107,000.00	\$300,000.00
Police Marine Unit	VO-DB-00-45	City Of Daytona Beach	\$58,938.00	\$80,764.00
Seabreeze Bridge/ Ballough Park	VO-DB-00-46	City Of Daytona Beach	\$86,920.00	\$225,000.00
Sickler Drive - Public Waterfront Park	VO-DB-01-50	City Of Daytona Beach	\$95,000.00	\$190,000.00
Halifax Harbor Marina Dredging Project	VO-DB-02-54	City Of Daytona Beach	\$200,000.00	\$400,000.00
Halifax Harbor South Basin Dredging	VO-DB-04-64	City Of Daytona Beach	\$200,000.00	\$400,000.00
Sickler Road Shoreline Stabilization	VO-DB-05-69	City Of Daytona Beach	\$69,000.00	\$138,000.00
Halifax Harbor North Basin Dredging - Phase I	VO-DB-06-73	City Of Daytona Beach	\$200,000.00	\$400,000.00
Halifax Harbor North & South Basin Retention Dredging	VO-DB-08-79	City Of Daytona Beach	\$28,810.00	\$68,750.00
Halifax Harbor In- River Retention Repair	VO-DB-09-83	City Of Daytona Beach	\$263,750.00	\$527,500.00
Halifax Harbor Marina South Entrance Channel Dredging	VO-DB-10-87	City Of Daytona Beach	\$150,000.00	\$300,000.00
Bethune Point Park Boat Launch Facility	VO-DB-91-11	City of Daytona Beach	\$75,000.00	\$243,000.00
City Island	VO-DB-93-16	City Of Daytona Beach	\$430,000.00	\$1,500,000.00
Halifax River Dredging, Nav. & Env. Improvements	VO-DB-94-18	City Of Daytona Beach	\$24,080.12	\$80,707.12
Riverfront Park Public Waterfront Boardwalk	VO-DB-95-24	City Of Daytona Beach	\$145,000.00	\$355,648.00
Colin's Park Public Fishing & Viewing Piers	VO-DB-96-30	City Of Daytona Beach	\$87,000.00	\$174,000.00

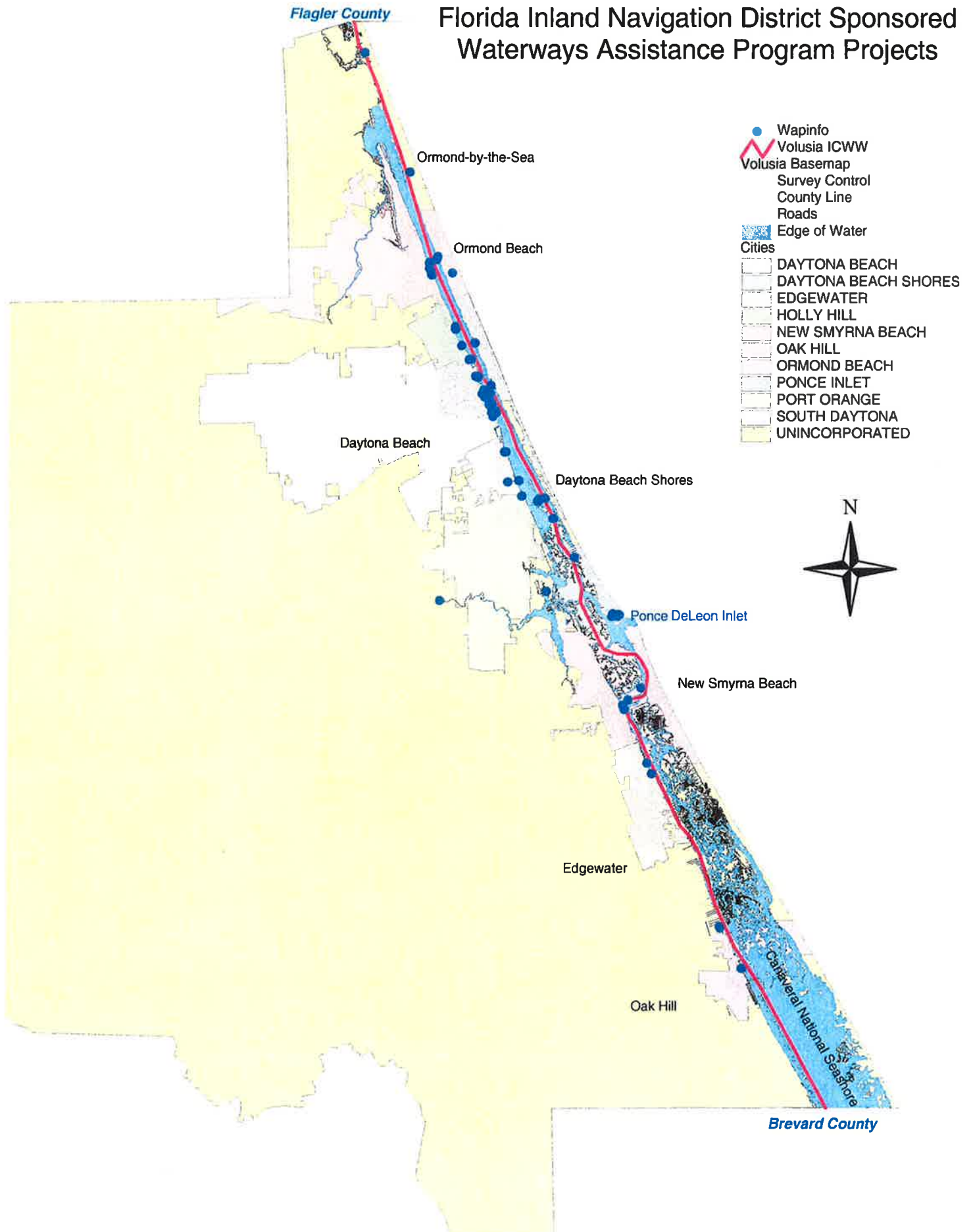
FLORIDA INLAND NAVIGATION DISTRICT - WATERWAYS ASSISTANCE PROGRAM PROJECTS IN VOLUSIA COUNTY 1986-2012

Riverfront Park Public Waterfront Boardwalk	VO-DB-96-31	City Of Daytona Beach	\$55,000.00	\$411,548.00
Manatee Island Environmental Learning Center - Phase I	VO-DB-98-37	City Of Daytona Beach	\$50,000.00	\$81,000.00
Shoreline Stabilization & Boardwalk Repairs	VO-DB-98-38	City Of Daytona Beach	\$50,145.00	\$104,289.00
Halifax Harbor Marina Boat Ramp	VO-DB-99-42	City Of Daytona Beach	\$50,000.00	\$110,000.00
Kennedy Park Pier	VO-EW-03-57	City Of Edgewater	\$60,885.00	\$127,300.00
Riverwalk	VO-EW-91-12	City Of Edgewater	\$65,000.00	\$214,080.00
Sunrise Park Dredging	VO-HH-05-70	City Of Holly Hill	\$45,000.00	\$90,000.00
Sunrise Park	VO-HH-2	City Of Holly Hill	\$100,000.00	\$430,000.00
Sunrise Park Improvements	VO-HH-90-8	City Of Holly Hill	\$40,000.00	\$80,000.00
Ross Point Park - Phase I I I	VO-HH-94-21	City Of Holly Hill	\$47,500.00	\$175,000.00
Marine Discovery Center	VO-NSB-00-47	City Of New Smyrna Beach	\$118,560.00	\$160,000.00
City Marina Reconstruction Project - Phase I	VO-NSB-01-51	City Of New Smyrna Beach	\$65,000.00	\$130,000.00
Riverside Park Shoreline Stabilization	VO-NSB-01-52	City Of New Smyrna Beach	\$62,500.00	\$125,000.00
City Marina Reconstruction Project - Year 1	VO-NSB-03-58	City Of New Smyrna Beach	\$140,000.00	\$1,172,000.00
City Marina Reconstruction Project - Year 2	VO-NSB-04-65	City Of New Smyrna Beach	\$140,000.00	\$1,075,000.00
City Marina Reconstruction	VO-NSB-05-71	City Of New Smyrna Beach	\$140,000.00	\$1,472,767.00
North Causeway Boat Ramps Reconstruction	VO-NSB-07-76	City Of New Smyrna Beach	\$200,000.00	\$400,000.00
Riverside Park Seawall - Phase I	VO-NSB-09-84	City Of New Smyrna Beach	\$85,880.00	\$171,760.00
Canal Calorie Dredging - Phase I	VO-NSB-10-88	City Of New Smyrna Beach	\$15,000.00	\$30,000.00
Riverside Park Bulkhead Repair - Phase I I	VO-NSB-11-91	City Of New Smyrna Beach	\$325,000.00	\$650,000.00
Swoop Public Boat Ramp, Kayak & Parking - Phase I	VO-NSB-11-92	City Of New Smyrna Beach	\$82,800.00	\$165,600.00
Swoope Site Boat Ramp, Parking, Dredge - Phase I I	VO-NSB-12-94	City Of New Smyrna Beach	\$494,000.00	\$988,000.00
Buena Vista Park	VO-NSB-99-40	City Of New Smyrna Beach	\$140,000.00	\$725,000.00
Granada Bridge Pedestrian Underpass	VO-OB-00-48	City Of Ormond Beach	\$73,584.00	\$147,169.00
South Beach Street Riverwalk - Stage I	VO-OB-01-53	City Of Ormond Beach	\$76,917.00	\$153,835.00
Granada Riverfront Park Improvements	VO-OB-89-4	City Of Ormond Beach	\$20,000.00	\$230,000.00
Granada Riverfront Park Improvements - Phase I I	VO-OB-90-6	City Of Ormond Beach	\$150,000.00	\$300,000.00
Ames Park	VO-OB-92-14	City Of Ormond Beach	\$48,000.00	\$91,000.00
Ormond Hotel Riverfront Park - Phase I	VO-OB-94-19	City Of Ormond Beach	\$20,000.00	\$60,000.00
Hotel Ormond Riverfront Park - Phase I I	VO-OB-95-23	City Of Ormond Beach	\$42,000.00	\$84,000.00
Fortunato Park - Phase I I I	VO-OB-96-29	City Of Ormond Beach	\$80,000.00	\$160,000.00
S.R. 40 Halifax River Walkway	VO-OB-97-33	City Of Ormond Beach	\$71,000.00	\$142,000.00
Halifax River Public Outreach Program	VO-OB-98-39	City Of Ormond Beach	\$4,700.00	\$9,400.00
Waterfront Public Fishing & Viewing Pier	VO-OH-03-59	City Of Oak Hill	\$50,000.00	\$100,000.00
Ponce Preserve River Facilities	VO-PI-05-72	Town Of Ponce Inlet	\$150,000.00	\$400,000.00
Ponce Inlet Lighthouse Rehabilitation - Phase I	VO-PI-98-36	Town Of Ponce Inlet	\$29,500.00	\$59,000.00

FLORIDA INLAND NAVIGATION DISTRICT - WATERWAYS ASSISTANCE PROGRAM PROJECTS IN VOLUSIA COUNTY 1986-2012

Ponce Inlet Lighthouse Rehabilitation - Phase I I	VO-PI-99-43	Town Of Ponce Inlet	\$150,000.00	\$563,000.00
Gamble Place Launching Facility Design - Phase I	VO-PO-03-60	City Of Port Orange	\$20,000.00	\$40,000.00
Marine Unit	VO-PO-03-61	City Of Port Orange	\$28,000.00	\$56,000.00
Gamble Place Canoe Launch Construction - Phase I I	VO-PO-06-74	City Of Port Orange	\$100,000.00	\$200,000.00
Causeway Park Boat Ramp Facilities	VO-PO-07-77	City Of Port Orange	\$40,000.00	\$80,000.00
Russell Park Launch Design - Phase I	VO-PO-07-78	City Of Port Orange	\$22,000.00	\$44,000.00
Russell Park Landing Construction - Phase I I	VO-PO-09-85	City Of Port Orange	\$100,000.00	\$200,000.00
Port Orange Causeway Park	VO-PO-91-13	City of Port Orange	\$65,000.00	\$194,575.00
Riverfront Park	VO-PO-92-15	City of Port Orange	\$100,000.00	\$200,000.00
Causeway Park Expansion	VO-PO-95-25	City Of Port Orange	\$125,000.00	\$241,316.50
Causeway Park Expansion - Phase I I	VO-PO-96-27	City Of Port Orange	\$50,000.00	\$100,000.00
Riverfront Park Fishing Pier & Boat Ramp Renovations	VO-SD-00-49	City Of South Daytona	\$52,871.00	\$165,048.00
Veterans Memorial Park Channel Access Improvements	VO-SD-03-62	City Of South Daytona	\$13,230.00	\$14,700.00
Reed Canal Outfall Dredging And Spoil Site	VO-SD-04-66	City Of South Daytona	\$25,000.00	\$50,000.00
Riverfront Veterans Memorial Park Kayak & Canoe Launch	VO-SD-04-67	City Of South Daytona	\$15,000.00	\$30,000.00
Veteran's Memorial Riverfront Park Parking Expansion	VO-SD-09-86	City Of South Daytona	\$42,500.00	\$85,000.00
Riverfront Veteran's Memorial Park- Boat Pier Extension	VO-SD-10-89	City Of South Daytona	\$30,000.00	\$60,000.00
Riverfront Park Expansion	VO-SD-89-5	City of South Daytona	\$150,000.00	\$323,400.00
Highbridge Park - Phase I	VO-TR-1	Ponce Deleon Port Authority	\$80,000.00	\$160,000.00
Project Totals			\$8,689,263.12	\$23,131,687.62

Florida Inland Navigation District Sponsored Waterways Assistance Program Projects



*PALM BEACH POLO HOLDINGS, INC.
11198 POLO CLUB ROAD
WELLINGTON, FLORIDA 33414*

January 3, 2013

Mr. Mark Crosley
Assistant Executive Director
FIND
1314 Marcinski Rd
Jupiter, FL 33477-9498

RE: Request for Dredging Services by Palm Beach Polo Holdings, Inc. a private marina adjacent to the Dania Cut Off

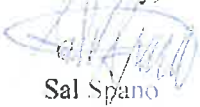
Mr. Glenn Straub, President of the Palm Beach Polo Holding, Inc., owner of the submerged lands adjacent to the Dania Cut Off is requesting inclusion in FIND's dredging contract with their subcontractor to dredge their private basin.

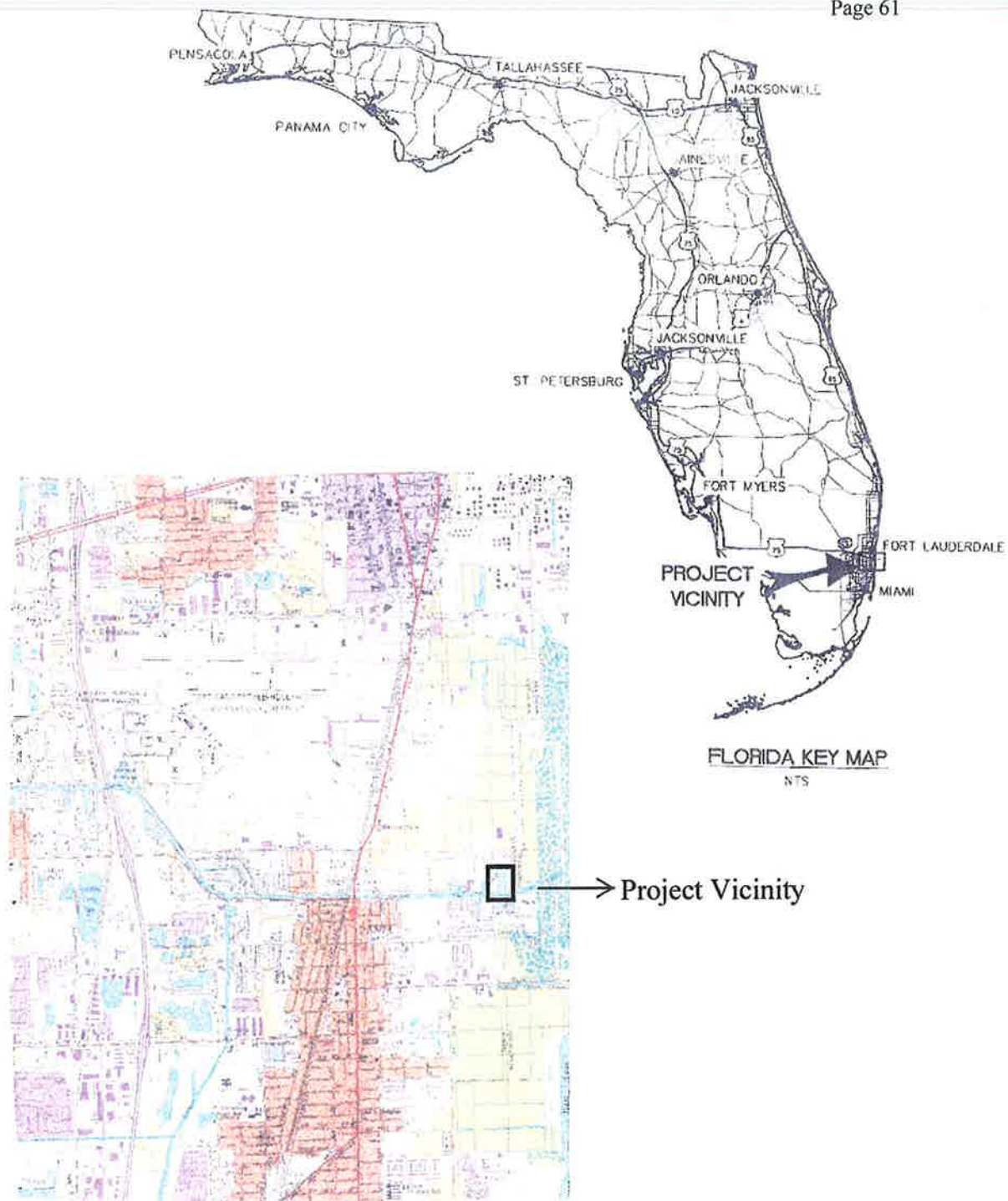
The permit applications for the proposed dredging have been submitted to Broward County and the Army Corps of Engineers for the proposed project. Broward County will be issuing the ERP on behalf of the FDEP. The owner is also coordinating with the adjacent property owner, G&G Shipping to dredge the entire basin. G&G Shipping owns one third of the basin. G&G Shipping's dredge volume will be included under a separate cover letter and is not included in this request.

1. The estimated volume of material to be dredged is 10,000 cubic yards.
2. We have enclosed a location map for the project showing the basin and the division of ownership between the two parties: Palm Beach Polo Holdings and G&G Shipping.
3. The engineered drawings reflecting the proposed dredge area are also enclosed.
4. Copies of environmental permits from Broward County Development and Environmental Regulation Division, Florida Department of Environmental Protection and the Army Corps of Engineers will be provided upon approval from the agencies. The owner will provide copies of the permits and/or their status before FIND's Board Meeting on January 18, 2013.
5. Attached is a copy of the certified sediment analysis report submitted as part of the permit applications.
6. The owner understands that the District will obtain a written fee quote from the Contractor and provide a copy to the Owner; obtain approval from the County to use the DMMA to handle Owner's dredged materials; and obtain a written fee quote from the Engineer to provide construction administration of the work on Owner's Project and provide a copy to the Owner.
7. Upon receipt of approval from the District the Owner will review and approval the price quote within fifteen (15) days and provide proof of approval in a written letter to the District

We look forward to working with you on this project. If you have any questions regarding this matter, please contact our Consultant, Susan Engle at EnviroCare, Inc.

Sincerely,


Sal Spano
Vice President



Loction Map

EnviroCare Inc.
832 NE 26th Street
Wilton Manors, FL 33305

Palm Beach Polo Holdings, Inc.
750 NE 7th Avenue
Dania Beach, FL 33004

Location Map



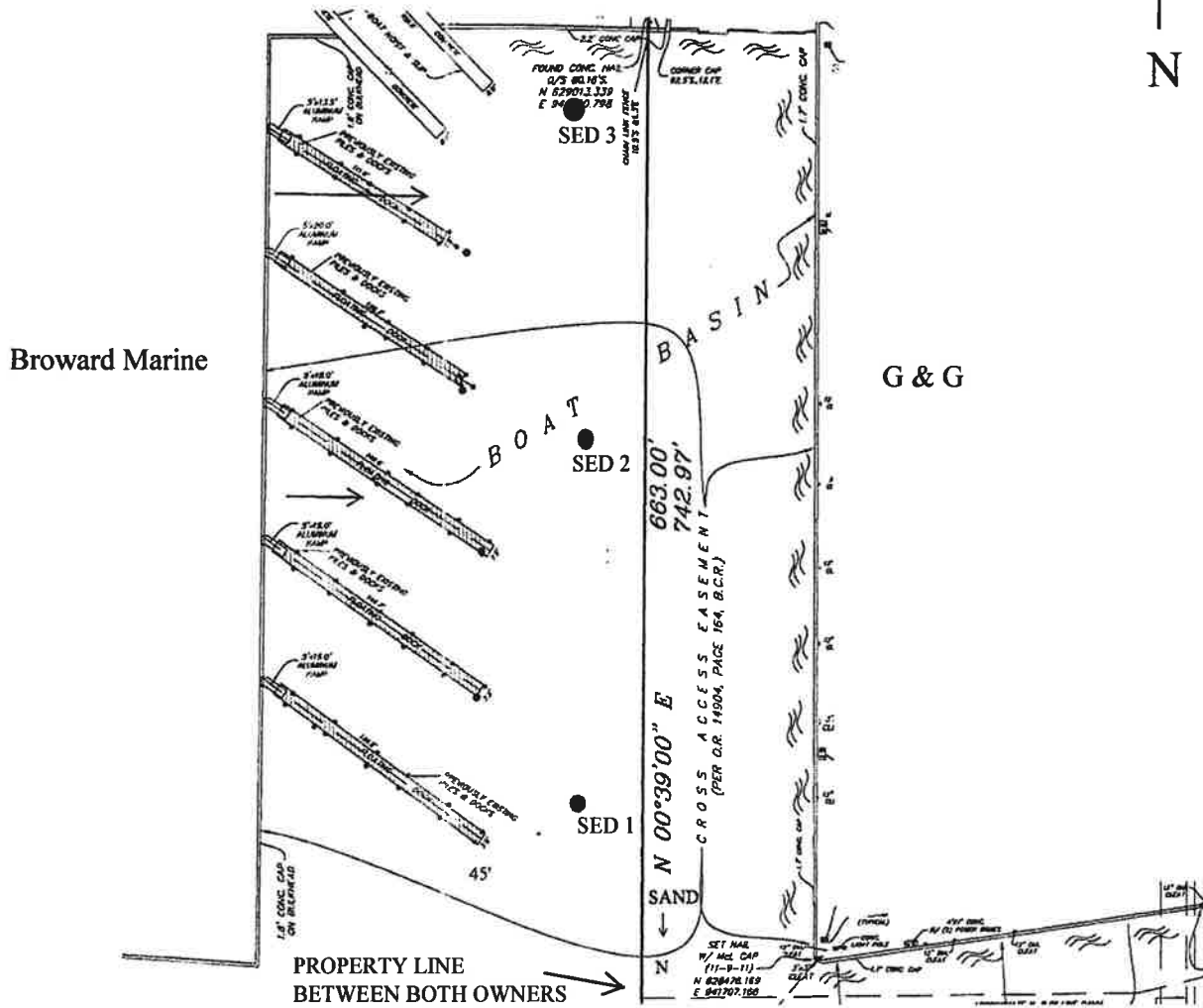
Map Legend

DMMA

Dredging Area

Potential 3rd
Party Facilities

DANIA CUTOFF CANAL DEEPENING PROJECT



SED 1 = RS1, RS2, RS3; 12:45 PM

SED 2 = RS1, RS2, RS3; 1:15 PM

SED 3 = RS1, RS2, RS3; 1:40 PM

DREDGING AGREEMENT

THIS AGREEMENT ("Agreement") is entered into as of the ____ day of _____, 2012 ("Effective Date") between Palm Beach Polo Holdings, Inc., a corporation organized and existing under the laws of the State of Florida ("Owner") and FLORIDA INLAND NAVIGATION DISTRICT, an independent special taxing district of the State of Florida ("District").

RECITALS

Whereas, District has entered into a contract with Lucas Marine Acquisition Company, LLC ("Contractor") for the dredging of the Dania Cutoff Canal (the "Dredging Contract"); and

Whereas, District has entered into a contract with Taylor Engineering, Inc. ("Engineer") to provide construction administration services (the "Engineering Contract"); and

Whereas, District has entered into a license agreement (the "License") with Broward County ("County") to use a portion of the Port Everglades property as a temporary dredged material management area ("DMMA") for materials dredged from the Dania Cutoff Canal; and

Whereas, the License also allows the District to use the DMMA for handling dredged materials removed from third party projects along the Dania Cutoff Canal, subject to the County's review and approval of the analysis of said dredged materials; and

Whereas, the District is willing to cooperate with third parties who own boatyards and marinas along the Dania Cutoff Canal who desire to dredge their facilities in conjunction with the Dredging Contract; and

Whereas, Owner is the owner of real property located adjacent to the Dania Cutoff Canal and more particularly described on Exhibit "A" ("Owner's Property"); and

Whereas, Owner desires to have his marine facilities dredged in conjunction with the District's Dredging Contract ("Owner's Project").

NOW, THEREFORE, Owner and District, in consideration of the premises, the sum of Ten Dollars (\$10.00), and other good and valuable consideration, hereby agree as follows:

1. Incorporation of Recitals. The foregoing recitals are true, correct and incorporated into this Agreement by reference.
2. Request for Dredging Services. Owner shall initially submit a letter to the District requesting inclusion in the Dredging Contract. The letter shall include, at the minimum: (a) the estimated volume of material to be dredged; (b) a location map of the area to be dredged at a scale acceptable to the District; (c) plans and specifications for Owner's Project; (d) true, correct and complete copies of all environmental permits required for the Owner's Project, including, without limitation, the U.S. Army Corps of Engineers,

Environmental Regulation Division; and (e) a certified copy of the sediment analysis report according to the parameters in Attachment 1.

3. District Responsibilities. Upon receipt of a complete letter request, the District shall: (a) obtain a written fee quote from the Contractor and provide a copy to the Owner; (b) obtain approval from the County to use the DMMA to handle Owner's dredged materials; and (c) obtain a written fee quote from the Engineer to provide construction administration of the work on Owner's Project and provide a copy to the Owner.
4. Owner's Review and Approval. Upon receipt of the information in Section 3, Owner shall have fifteen (15) days to submit a letter notifying District that Owner accepts the price quotes and agrees to have the District add Owner's Project to the Dredging Contract and the Engineering Contract. The Owner shall initial and attach copies of the fee quotes to the letter. Simultaneously with the submittal of the letter, Owner shall deliver to the District by certified check or wire transfer a deposit of \$5,000.00 (the "Initial Deposit"). Within 30 days of the start of Owner's project, Owner will submit a sum equal to fifty percent (50%) of the total fee quotes from the Contractor and the Engineer for the Project. Owner shall also submit security for the payment of the balance of the total fee quotes in a form acceptable to District, which may include an escrow account or an irrevocable standby letter of credit. Failure to so notify the District and submit the Initial Deposit and security will result in the termination of this Agreement.
5. Actions upon Owner's Acceptance. Upon Owner's compliance with Section 4, the District shall issue a change order to the Dredging Contract and the Engineering Contract to add Owner's Project. The District shall invoice the Owner at the end of Owner's Project and Owner shall pay the District in full within thirty (30) days of receipt of the invoice. If such payment is not timely received, the District shall have the right, but not the obligation, to proceed against the security provided by Owner. Owner shall receive a reduction in price in the event that the actual volume of dredged material is substantially less than stated in the estimate provided by Owner.
6. Modifications. Should modifications be necessary to Owner's Project resulting from changes in the scope of Owner's Project or unanticipated conditions, including, but not limited to, removal of a greater volume of material than stated in the estimate provided by Owner, discovery of contaminated material not documented in the sediment analysis report provided by Owner, removal of foreign materials not documented in Owner's request, or discovery of utility lines in the Owner's project area, the District will notify Owner and work with the Owner and the Contractor to devise an agreed upon modified scope of work and cost estimate. Upon Owner's approval of the modification the District shall, upon Owner's compliance with Section 4, shall issue change orders to the Dredging Contract and the Engineering Contract to add Owner's Modified Project.
7. DMMA Protection from Contamination. The District is contractually liable to the County to protect the DMMA from contamination and to cleanup any contamination that may unintentionally occur. Therefore, the DMMA will be cleaned out of all dredged materials prior to use for the Owner's Project and the floor of the DMMA will be tested

for contamination. This test will serve as the baseline to compare a similar test after the Owner's dredged material has been placed in the DMMA and then removed. Results of both tests will be provided to Owner and the cost of the final test will be included in the price quote obtained in Section 4. Any contamination of the DMMA caused by Owner's dredged materials will be cleaned up by the District or the County at Owner's expense.

8. Indemnification. Owner agrees to indemnify and hold harmless the District, its commissioners, officers and employees, from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the Owner and persons employed or utilized by the Owner. Owner shall indemnify and hold harmless the District, its commissioners, officers, employees, engineers and contractors from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees, due to or arising from damage to structures in the vicinity of Owner's project, except to the extent caused by the recklessness or intentional wrongful misconduct of the Contractor or persons employed by the Contractor.
9. Notices. Notices required or permitted to be given pursuant to the terms of this Agreement will be delivered in person or by facsimile transmission, (provided the original notice is delivered in person or by mail or delivery service as set forth herein) or sent by certified mail, return receipt requested, postage prepaid, by recognized contract carrier providing signed receipt for delivery, and will be deemed delivered upon receipt or refusal of delivery. Notices will be delivered at the following addresses, subject to the right of any party to change the address at which it is to receive notice by written notice to the other party:

To District:

Florida Inland Navigation District
1314 Marcinski Road
Jupiter, Florida 33477-9498
Attn: Executive Director
Telephone: (561) 627-3386
Facsimile: (561) 624-6480

To Owner:

Palm Beach Polo Holdings, Inc.
11198 Polo Club Road
Wellington, Fl. 33414
Attention: President
Phone: () ____ - ____
Fax: () ____ - ____

10. Integration and Severability. This Agreement and the attachments hereto set forth the entire understanding of District and Owner with the respect to the matters which are the subject of this Agreement, superseding and/or incorporating all prior or contemporaneous

oral or written agreements, and may be changed, modified, or amended only by an instrument in writing executed by the party against whom the enforcement of any such change, modification or amendment is sought.

11. Successors and Assigns. This Agreement will inure to the benefit of and be binding upon, and is intended solely for the benefit of, the parties hereto, and their respective heirs, personal representatives, successors, and assigns; and no third party will have any rights, privileges or other beneficial interests herein or hereunder. Notwithstanding the foregoing, Owner will not assign this Agreement without the prior written consent of District, which consent may be withheld in District's sole and absolute discretion.
12. Governing Law. This Agreement is governed by and will be construed in accordance with the laws of the State of Florida, and in the event of any litigation concerning the terms of this Agreement, proper venue thereof will be in Palm Beach County.
13. Invalid Provisions. In the event any term or provision of this Agreement is held illegal, unenforceable or inoperative as a matter of law, the remaining terms and provisions will not be affected thereby, but will be valid and remain in force and effect, provided that the inoperative provisions are not essential to the interpretation or performance of this Agreement in accordance with the clear intent of the parties.
14. Counterparts. This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which will constitute the same instrument; and delivery of signatures transmitted by facsimile will be sufficient to bind the signing party.
15. No Waiver of Default. No waiver by a party of any breach of this Agreement or of any warranty or representation hereunder by the other party will be deemed to be a waiver of any other breach by such other party (whether preceding or succeeding and whether or not of the same or similar nature), and no acceptance of payment or performance by a party after any breach by the other party will be deemed to be a waiver of any breach of this Agreement or of any representation or warranty hereunder by such other party, whether or not the first party knows of such breach at the time it accepts such payment or performance. No failure or delay by a party to exercise any right it may have by reason of the default of the other party will operate as a waiver of default or modification of this Agreement or will prevent the exercise of any right by the first party while the other party continues so to be in default.
16. Jury Waiver. IN ANY CIVIL ACTION, COUNTERCLAIM OR PROCEEDING, WHETHER AT LAW OR IN EQUITY, WHICH ARISES OUT OF, CONCERNS, OR RELATES TO THIS AGREEMENT, AND ANY AND ALL TRANSACTIONS CONTEMPLATED HEREUNDER, THE PERFORMANCE HEREOF, OR THE RELATIONSHIP CREATED HEREBY, WHETHER SOUNDING IN CONTRACT, TORT, STRICT LIABILITY OR OTHERWISE, TRIAL WILL BE TO A COURT OF COMPETENT JURISDICTION AND NOT TO A JURY. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY.

ANY PARTY MAY FILE AN ORIGINAL COUNTERPART OR A COPY OF THIS AGREEMENT WITH ANY COURT AS WRITTEN EVIDENCE OF THE CONSENT OF THE PARTIES HERETO OF THE WAIVER OF THEIR RIGHT TO TRIAL BY JURY. NEITHER PARTY HAS MADE OR RELIED UPON ANY ORAL REPRESENTATIONS TO OR BY ANY OTHER PARTY REGARDING THE ENFORCEABILITY OF THIS PROVISION. EACH PARTY HAS READ AND UNDERSTANDS THE EFFECT OF THIS JURY WAIVER PROVISION.

17. Time; Effective Date. Time is of the essence with respect to the payment of moneys and the performance of each and every obligation set forth in this Agreement. "Effective Date" means the first date upon which this Agreement has been executed by both District and Owner as set forth in the first grammatical paragraph of this Agreement.
18. Performance Subject to Appropriations. District's obligations hereunder are subject to appropriations by its Governing Board.

IN WITNESS WHEREOF the parties hereto have set their hands and seals as of the date first above written.

“District”
FLORIDA INLAND NAVIGATION
DISTRICT

By: _____, Chair

Approved as to Form and
Legal Sufficiency

Attorney for Florida Inland
Navigation District

“Owner”

By: _____

Name: _____

Title: _____



"Structuring the Present...Shaping the Future"

11/14/12

Cert# 7010 0290 0000 6755 0552

Lori Brownell, PE
 Taylor Engineering, Inc.
 10151 Deerwood Park Blvd., Bldg. 300, Suite 300
 Jacksonville, FL 32256
 Phone (904) 731-7040
 Direct (904) 256-1367
 Mobile (904) 866-3835
 Fax (904) 731-9847
www.taylorengeering.com

REF: NOTICE OF CLAIM – Silt Dredge Material

SUBJECT: Differing Site Conditions – Dredge Material, Change in Contract Time and/ or Change in Contract Price.

Dear Lori;

The following is the summary of changes Due to Differing Site Conditions, Change in Contract Time and Change in Contract Price. Please review the content below for the extent of the Change in Contract Time, and Change in Contract Price, and approve this Request for Claim due to Differing Site Conditions, Change in Contract Time and Change in Contract Price.

Change in Contract Price:

The change in the composition of the dredge material requires additional handling in order to complete the dredge profile. Equipment, labor and work time have been required to increase production enough to complete the project in a reasonable time period relative to the contract time allowed in the original contract. The contract price changes in four areas;

- | | |
|--|--------------|
| 1) Survey – survey has had to be done periodically to check the status of the shifting material. | \$ 6,530 |
| 2) Maintenance of erosion control – the high liquid volume of the material has required additional erosion control and turbidity control throughout the dredge, offload and material transfer process. | \$ 4,457 |
| 3) The material offload site – a substantial amount of maintenance has been required to keep the offload site clean and safe for continual operations. Material had to be double handled because the truck could not drive down the slippery ramp for direct loading. Additional limerock, and timber has been required due the nature of the silty/clayey material. | \$ 15,066 |
| 4) The dredge operation required additional equipment, labor, longer hours of operations, and additional days to complete.(7,600 CY @ \$37.92) | \$183,388 |
| Total: | \$209,441.00 |

Originally the dredge crew consisted of;

Description	Qty	hrs	Rate
Pick up truck w/tools	1	320	21.084
JD 444J Loader	1	320	110.00
Daewoo 300 Long reach	1	320	143.00
Inland Tug boat	1	320	135.00
ML5 Barge	1	320	150.00
Disposal Fee	7600		10.00
Lab-Foreman	1	320	20.00
Lab	1	320	15.00
Oper	1	320	18.00

Now the dredge crew consists of; (The equipment and labor added is highlighted)

Description	Qty	hrs	Rate	
Pick up truck w/tools	2	720	21.084	QTY from 1 to 2
JD 444J Loader	1	360	110.00	
Daewoo 300 Long reach	1	360	143.00	
John Deere 200 long reach	1	360	138.00	
Inland Tug boat	1	360	135.00	
ML3 Barge	1	360	135.00	
ML5 Barge	1	360	150.00	
Disposal Fee	7600		10.00	
Lab-Foreman	1	720	20.00	
Lab	2	720	15.00	QTY from 1 to 2
Oper	2	360	18.00	QTY from 1 to 2

- There has been a second crew truck added for transporting additional crew members to and from job.
- There has been ML3 barge with a long reach backhoe added to increase productivity for time limits and constraints on project time.
- There has been a labor and operator to man the additional barge set up.
- The hours required to complete dredging went from
320 hours at 190 CY per day
to
360 hours at 253 CY per day (loss from water, and material gains from drifting material significantly increase QTY)

Additional material above and beyond 7,600 CY, will need to be paid at the increased unit rate on contract bid item 4. This claim is for the first 7,600 CY, remaining material to be paid in the revised unit price shown below;

Contract unit price:	\$46.28
Increase from Claim:	\$37.92
Total unit price:	\$84.20

Change in Contract Time:

The additional contract time required to complete dredging of 7,600 CY material is broken down as follows;

Original scheduled time for dredge: **40 days**

Revised scheduled time for dredge:

Dredging 30 days

Mobilization of additional equip; 5 days

Additional survey and review; 5 days

Additional days for offload site clean up; 5 days

Total: **45 days**

Additional days requested above and beyond contract time: **5 days**

Please review the extent of the Change in Contract Time, and Change in Contract Price, and approve this Request for Claim due to Differing Site Conditions, Change in Contract Time and Change in Contract Price, and issue a Change Order.

Sincerely,



Casey Cass, Vice President
Ferreira Construction – Southern Division

Date: 11-14-2012

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
<hr/>										
BID ITEM = 110										
Description =	Survey - extended requirements silt/clay		Land Item Unit =	SCHEDULE: 1 100 LS Takeoff Quan:			1.000	Engr Quan:		1.000
1-11010	Survey - extended requirements silt/clay		Quan:	1.00 LS Hrs/Shift: 8.00 Cal: 008 WC: 03						
4SURV	Survey Sub		4.00 DAY	1,400.000				5.600		5.600
<hr/>										
BID ITEM = 120										
Description =	Maintenance of erosion control		Land Item Unit =	SCHEDULE: 1 100 LS Takeoff Quan:			1.000	Engr Quan:		1.000
1-12020	Install Silt Fence		Quan:	500.00 LF Hrs/Shift: 8.00 Cal: 008 WC: 03						
<u>ER20</u>	INSTALL SILT FENCE		4.00 CH	Prod: 0.5000 S	Lab Pcs: 2.00	Eqp Pcs: 1.00				**Unreviewed
2EC230	Silt Fence, 3x100@107%		500.00 LF	0.540	289					289
8VPT02	Pickup,w/Tools	1.00	4.00 HR	21.084		84				84
LB12	LAB BASIC 1 FLORIDA	2.00	8.00 MH	15.000	181					181
S554.64	0.0160 MH/LF		8.00 MH	[0.24]	181	289		84		555
1-12030	Floating Turbidity Barrier		Marine Quan:	500.00 LF Hrs/Shift: 8.00 Cal: 008 WC: 03						
<u>GEN03</u>	GENERAL CREW-3 LAB		16.00 CH	Prod: 2.0000 S	Lab Pcs: 2.00	Eqp Pcs: 1.00				**Unreviewed
3EC030	Turbidity Barrier@107%	1.00	250.00 LF	7.500	2,006					2,006
8VPT02	Pickup,w/Tools	1.00	16.00 HR	21.084		337				337
LB12	LAB BASIC 1 FLORIDA	1.00	16.00 MH	15.000	418					418
LB13	LAB BASIC 2 FLORIDA	1.00	16.00 MH	13.000	506					506
\$3,268.03	0.0640 MH/LF		32.00 MH	[0.896]	924	2,006		337		3,268
<hr/>										
====>	Item Totals: 120 - Maintenance of erosion control									
\$3,822.67	40.0000 MH/LS		40.00 MH	[568]	1,106	289	2,006	422		3,823
3,822.670	1 LS				1,105.85	288.90	2,006.25	421.67		3,822.67
<hr/>										
BID ITEM = 130										
Description =	Maintenance of Off-Load site		Land Item Unit =	SCHEDULE: 1 100 LS Takeoff Quan:			1.000	Engr Quan:		1.000
1-13050	Off-Load Site		Quan:	1.00 LS Hrs/Shift: 9.00 Cal: 009 WC: 03						
<hr/>										
this item cover the additional maintenance required to maintain the unloading pathway and haul route to kanner hwy crossover, as well as the ramp and loading platform to barge.										
misc = base rock for temp roadway, timber, hardware for ramp, maint patching material for geotextile										
<u>Z090</u>	LABOR CREW FOREMAN & 2 MAN		30.00 CH	Prod: 3.3333 S	Lab Pcs: 4.00	Eqp Pcs: 2.50				
2MISC	Miscellaneous Mtr@107%	1.00	LS	3,123.000	3,342					3,342
8VPT02	Pickup,w/Tools	1.00	30.00 HR	21.084		633				633
8ZF398	Bomag Vib BW177d Rolle	0.50	15.00 HR	43.309		650				650
8ZF688	Daewoo 300 long reach	1.00	30.00 HR	142.000		4,260				4,260
9FS71	Ice & Water@107%		75.00 BAG	1.850		148				148
9FS73	Porta John@107%		1.00 MO	95.000		102				102
LB02	LAB-FOREMAN	1.00	30.00 MH	20.000	1,504					1,504
LB12	LAB BASIC 1 FLORIDA	2.00	60.00 MH	15.000	1,427					1,427
OP102	OP FLORIDA	1.00	30.00 MH	18.000	856					856
\$12,920.46	120.0000 MH/LS		120.00 MH	[2153.42]	3,787	3,342	250	5,542		12,920
<hr/>										
====>	Item Totals: 130 - Maintenance of Off-Load site									
\$12,920.46	120.0000 MH/LS		120.00 MH	[2153.42]	3,787	3,342	250	5,542		12,920
12,920.460	1 LS				3,786.61	3,341.61	250.11	5,542.13		12,920.46

Direct Cost Report

Activity Resource	Desc	Quantity Pes	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
<hr/>										
BID ITEM = 150										
Description =	Mech Dredge Sil/Clay									
		Land Item	Unit =	SCHEDULE: 1	100					
				CY	Takeoff Quan:	7,600.000	Engr Quan:	7,600.000		
<hr/>										
1-15010	Mechanical Dredging and Material Trans Marine	Quan:	7,600.00 CY	Hrs/Shft:	12.00	Cal:	012	WC:	03	
										**Unreviewed
project manager will be the CQC staff member/manager										
7090	LABOR CREW FOREMAN & 2 MAN	360.47	CH	Prod:	30.0395 S	Lab Pes:	5.00	Eqp Pes:	8.00	
8VPT02	Pickup,w/Tools	2.00	720.95 HR	21.084			15,201		15,201	
8ZF473	JD 444J Loader	1.00	360.47 HR	110.000			39,652		39,652	
8ZF688	Daewoo 300 long reach	1.00	360.47 HR	143.000			51,547		51,547	
8ZF722	Inland Tug boat	1.00	360.47 HR	135.000			48,663		48,663	
8ZF724	ML3 Barge 125 CY	1.00	360.47 HR	142.000			51,187		51,187	
8ZF726	ML5 Barge 130ft x 35ft	1.00	360.47 HR	150.000			54,070		54,070	
8ZF787	John Deere 200D LC	1.00	360.47 HR	138.000			49,745		49,745	
9DISPFEE	LPR disposal fee@107%	7,600.00	CY	10.000			81,320		81,320	
1.1302	LAB-FOREMAN	1.00	360.47 MH	20.000	20,787				20,787	
LB12	LAB BASIC 1 FLORIDA	2.00	720.95 MH	15.000	21,227				21,227	
OP102	OP FLORIDA	2.00	720.95 MH	18.000	25,472				25,472	
S458,871.50	0.2371 MH/CY	1,802.37	MH	[4.759]	67,487		81,320	310,065	458,872	
<hr/>										
====>	Item Totals:	150	- Mech Dredge Silt/Clay							
S458,871.50	0.2371 MH/CY	1,802.37	MH	[4.759]	67,487		81,320	310,065	458,872	
60.378	7600 CY				8.88		10.70	40.80	60.38	
<hr/>										
S481,214.63	*** Report Totals ***	1,962.37	MH		72,379	3,631	83,576	316,029	5,600	481,215

>>> indicates Non Additive Activity

-----Report Notes:-----

The estimate was prepared with TAKEOFF Quantities.

This report shows TAKEOFF Quantities with the resources.

"Unreviewed" Activities are marked.

Bid Date: 05/02/12 Owner: Engineering Firm:

Estimator-In-Charge:

JOB DOES NOT HAVE NOTES

* on units of MH indicate average labor unit cost was used rather than base rate.

[] in the Unit Cost Column = Labor Unit Cost Without Labor Burdens

In equipment resources, rent % and EOE % not = 100% are represented as XXX%YYY where XXX=Rent% and YYY=EOE%

-----Calendar Codes-----

008 8 HOURS per DAY (Default Calendar)
009 9 HOURS per DAY
010 10 HOURS per DAY
012 12 hours per day
15T TIME AND ONE HALF
20T DOUBLE TIME

CIKLIN LUBITZ MARTENS & O'CONNELL

A PARTNERSHIP INCLUDING PROFESSIONAL ASSOCIATIONS

LINDA DICKHAUS AGNANT, P.A.
 BRUCE G. ALEXANDER, P.A.
 JERALD S. BEER, P.A.
 JOHN D. BOYKIN, P.A.
 PATRICK J. CASEY, P.A.*
 RICHARD R. CHAVES, P.A.
 PATRICIA M. CHRISTIANSEN, P.A.
 ALAN J. CIKLIN, P.A.
 ROBERT L. CRANE, P.A.
 RONALD E. CRESCENZO, P.A.
 ASHLEY N. CRISPIN
 JOY A. FOGLIETTA
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 MICHAEL J. GORE
 JASON S. HASELKORN, P.A.
 KARINA HAYCOOK

CHRISTINE M. HOKE, P.A.
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 RICHARD A. JAROLEM, P.A.
 BRIAN B. JOSLYN, P.A.
 GREGORY S. KINO, P.A.
 CHARLES A. LUBITZ, P.A.
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 CHARLES L. PICKETT
 MATTHEW N. THIBAUT, P.A.
 DEAN VEGOSEN, P.L.
 GARY WALK, P.A.
 LAURA O. ZBOROWSKI

PHILLIP D. O'CONNELL, SR. (1907-1987)

OF COUNSEL

MICHAEL J. KENNEDY, P.A.
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 KEITH J. PUYA, P.A.
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 TELEPHONE: (561) 832-5900
 FACSIMILE: (561) 833-4209

*RETIRED FROM THE FIRM

December 17, 2012

SENT VIA EMAIL TO droach@aicw.org

Mr. David Roach
 Florida Inland Navigation District
 1314 Marcinski Road
 Jupiter, FL 33477

SENT VIA EMAIL TO**lbrownell@taylorengineering.com**

Lori S. Brownell, P.E.
 10151 Deerwood Park Boulevard
 Building 300, Suite 300
 Jacksonville, FL 32256

RE: Ferreira Construction Company, Inc./Okeechobee Waterway Project

Dear Sir and Madam:

The undersigned represents Ferreira Construction Company, Inc. (hereinafter "FCC") with regard to this request for equitable adjustment of the contract sum pursuant to Article 13 of the General Conditions.

As you know FCC has encountered conditions which materially and substantially differed from the representations in the contract documents. The contract documents included soils/boring logs, which indicated that the materials within the dredge site were classified using Unified Soil Classification System, as Course-Grained Soils (more than 50% retained in No. 200 sieve), with the log showing Sands with Fines SC CM classifications with 21.08% passing through a No. 200 sieve. Unfortunately, the actual site conditions are materially different than those represented.

On October 14, 2012 FCC submitted its Notice of Intent to Claim which addressed the site conditions which varied materially and substantially from the representations from in the Contract documents. That Notice of Claim was supported by cost data and sought an increase of the contract sum by \$209,441.00, a revision of contract unit price for contract bid Item #4 to \$84.20 for all quantities above 7,600 cubic yards and additional contract time. On October 17,

2012 FCC submitted a Notice of Intent to Claim which succinctly addressed the basis of the claim. On October 22, 2012 Taylor Engineering responded to that Notice of Intent to Claim. Subsequently on November 12, 2012 FCC submitted a written Notice of Claim and Delay based upon the differing site conditions it experienced and which has caused it additional substantial costs, expenses and time. The November 12, 2012 Notice of Claim included the October 17, 2012 Notice of Claim along with its attachments.

Those attachments are the salient documents which apply to FCC's claim for equitable adjustment as a result of the differing site conditions it has encountered; specifically the Sieve Analysis which was supplied to FCC in the bid packet and the ASTM Unified Soil Classification System chart. The Sieve Analysis which was denoted as RC-01 identifies the soils in the project's limits as being SC-SM with 21.08% passing through a No. 200 sieve. It became apparent that the materials that were being dredged by FCC were substantially different and materially more difficult to dredge than the soils which were represented in the project's bid package. The materials that were within the project's limits were far more "soupy" and difficult to manage than those which were reasonably and justifiably expected to be found on the site.

FCC retained Ardaman & Associates to sample and test materials from the project site. That report has been provided to you and unequivocally establishes that the material sample from the channel when tested **revealed 92% of the material passed through the No. 200 Sieve**. When this sample is compared to the supplied Sieve analysis information for sample # RC-01 which showed only 21.08% passing the No 200 Sieve, it is clear that FCC has encountered materials that are several orders of magnitude different from the materials represented in the supplied soil tests. In Taylor Engineering's December 7, 2012 response to FCC's claim of November 12, 2012, Taylor Engineering, Inc has acknowledged that "a differing site condition exists within the Route 1 portion of the project." Based upon Taylor Engineering Inc.'s response of December 7, 2012, we assume that the issue is not whether a differing site condition exists, but rather your view that the admonitory and exculpatory clauses in the Instructions to Bidders, the Bid Form and Article 2 of the General Conditions defeats FCC's claim.

This position is simply misplaced. First, the contract does not place any obligation on FCC to conduct any geotechnical or subsurface investigations or tests. Second, when read in their entirety, the cited sections are modified by the terms "reasonably ascertainable". The prevailing case law allows a contractor such as FCC to reasonably rely upon the representations in the owner supplied documents. Here FCC was provided with geotechnical data as part of the bid packet that was not only inaccurate, it misrepresented the actual in situ conditions by several orders of magnitude.

The result was that FCC was faced with attempting to dredge materials from the site that were several orders of magnitude more difficult to dredge, transport, offload and dry in the containment area. This has resulted in a material and substantial increase in cost to FCC and had delayed and extended its time of performance.

FCC has suffered damages from the differing site condition of \$209,441.00, delays and extended times of performance of its work and additional costs. Demand is made for an immediate adjustment of the contract sum supplemental payment to FCC in that amount and the execution of a change order granting FCC additional days to its contract time. Additionally, FCC has experienced unexpected weather conditions which due to safety concerns have also extended the time of its performance.

In closing, FCC is desirous of resolving this matter without litigation and toward that end I have been authorized to explore alternative dispute resolution as a voluntary step before advancing this controversy to litigation. Toward that end, I recommend that voluntary pre-suit mediation or non binding arbitration pursuant to Chapter 44 Florida Statutes be explored.

We look forward to your prompt response to this claim.

Very truly yours,



Michael J. Kennedy

MJK:ld

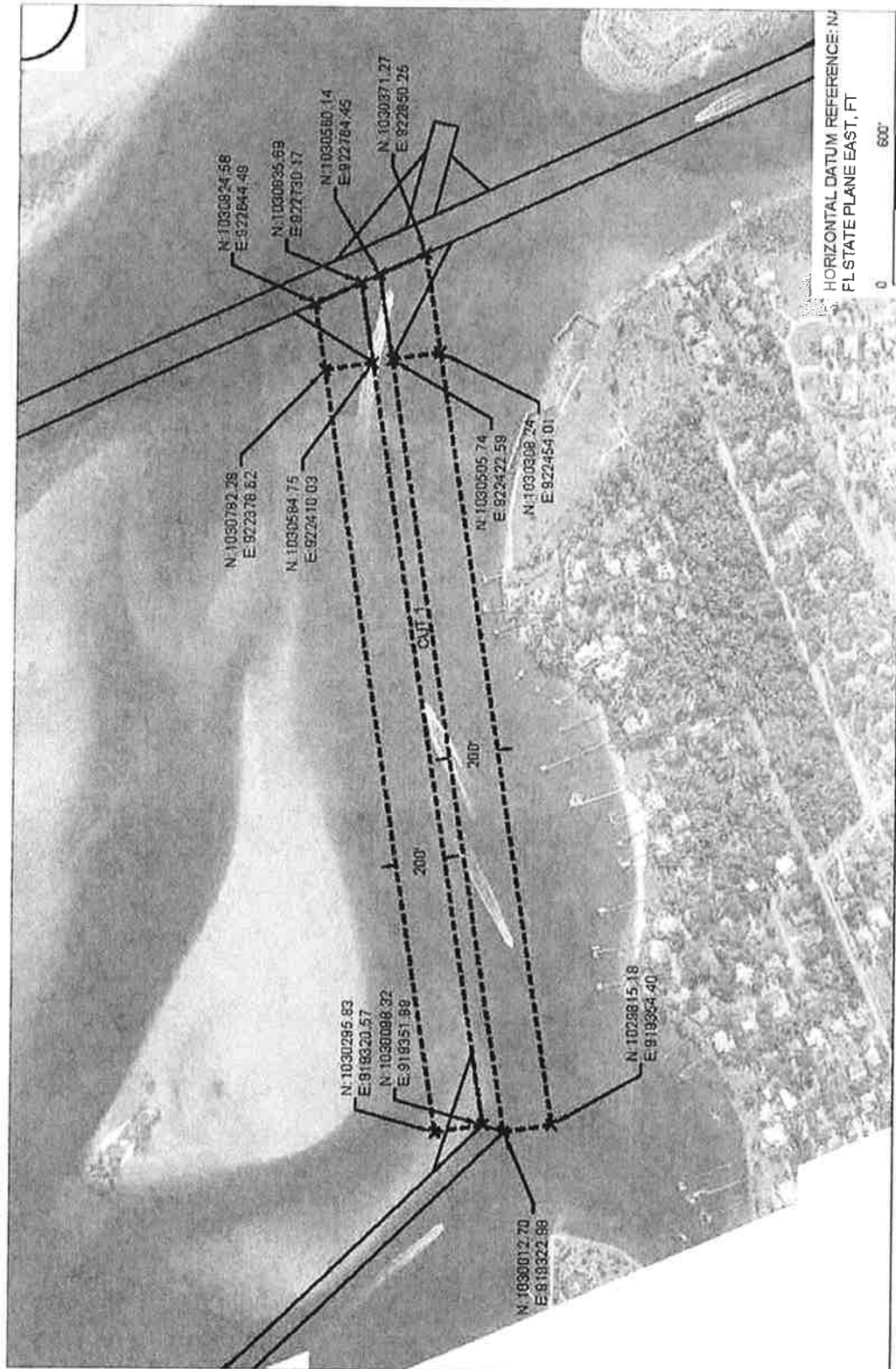


Figure 1. Project Area showing Cut 1 and 200-ft offsets in the vicinity of the Okeechobee Waterway (Courtesy of Taylor Engineering, Inc.).

JAN - 7 2018

FLORIDA INLAND
NAVIGATION DISTRICT
EXHIBIT A

SCOPE OF PROFESSIONAL ENGINEERING SERVICES
Proposed Sediment Basins at North and South of Cut 1 of Okeechobee Waterway
in Martin County, Florida
Feasibility Study

Overview

Waterway channels, especially those located near tidal inlets, require maintenance dredging to remove shoals that impede navigation. In the case of Cut 1 of the Okeechobee Waterway (OWW) in Martin County, Florida, currents entrain and transport littoral sediment into St. Lucie Inlet and Indian River Lagoon. These currents continue to transport these sediments inshore until flow velocities decrease below a critical value, at which point sediments fall out of suspension onto the waterway bottom and form shoals. Experience at several east coast Florida inlets and waterways shows a deposition basin, by providing an area of deep water, effectively decreases flow velocities and causes sediment to settle in a designated area. An effective deposition basin near a waterway can capture sediments, serve as a replenishing sand source for sand bypassing operations, reduce sediment deposition in navigable waterways, and reduce expensive maintenance dredging requirements within navigation channels. At OWW Cut 1 in the St. Lucie River, two deposition basins located immediately north and south of Cut 1 channel could, with periodic dredging, provide sand source and reduce shoaling in the navigational channel.

The prospect of this positive outcome encouraged the Florida Inland Navigation District (FIND) to sponsor a study to determine the feasibility of constructing two deposition basins near Cut 1. The proposal that follows outlines the steps Taylor Engineering will take to complete the study.

A solid understanding of the hydraulics and variation of suspended sediment concentration in the OWW will provide a sound basis for the feasibility study of deposition basins. We propose to collect available water level, flow velocity, and suspended sediment concentration data to add to our understanding of the waterway sediment transport process. Tasks include collection of data describing tide levels, flow velocity, waves, winds, and sediment, and numerical modeling to evaluate the sediment trapping capacity of the deposition basins. Although tide, wind, and wave data collection may not directly support our effort to validate sediment transport assumptions in Cut 1, the data collected in this scope of work will directly support hydrodynamic, wave modeling, and sediment transport modeling for the waterway and surrounding areas.

The following scope of work describes (1) data collection and analyses, (2) field data measurements, (3) development of a numerical model and modeling to evaluate baseline conditions, (4) modeling to evaluate the sediment trapping efficiency of proposed deposition basins near OWW Cut 1, (5) cost estimations and recommendations, and (6) preparation of a feasibility study report. If the deposition basins prove technically and economically feasible, we will provide conceptual basin designs. A detailed description of each task follows below. Exhibit B provides cost estimates to complete each task. Exhibit C provides a project schedule.

Task 1 Collection and Analyses of Available Data and Review of Previous Studies

A key component needed to develop the sediment basin alternatives involves understanding the dominant hydraulic processes affecting sediment transport in the OWW and adjacent waterways. Without this understanding, any approach to reduce sediment inflow into the OWW channel may produce unanticipated and unwanted results.

To better understand the sediment transport processes in the area, we will collect and review existing literature and data covering the OWW and adjacent waterways. This review will provide an historical perspective on past study efforts and allow us to document and assess existing data. Examples of existing literature and data include water surface elevation (tides), currents (flow velocity), winds, offshore waves, sediment concentration, and bathymetric data in the OWW and nearby areas. We will limit our review to relevant hydraulic and morphological studies near OWW Cut 1. Available tide and velocity data may include measurements Taylor Engineering collected at nearby locations. We will collect relevant Florida Coastal Forcing Project (FCFP) or Wave Information Study (WIS) offshore wave and wind data to determine wave and wind characteristics during episodic northeasters and storm events. We will collect bed elevation data from previous bathymetric surveys of the OWW, St. Lucie River, Indian River Lagoon, St. Lucie Inlet, and Atlantic Ocean. We will limit our data collection to readily available data. Task 2, describes new field measurements of tides, velocity, and sediments.

Potential sources of information include

- U.S. Army Corps of Engineers (USACE) Jacksonville District;
- Florida Department of Environmental Protection (FDEP);
- Florida Inland Navigation District (FIND);
- National Oceanic and Atmospheric Administration (NOAA);
- U.S. Geological Survey (USGS);

- Martin County; and
- South Florida Water Management District.

Task 2 Field Data Measurements

In the case this study finds the construction and maintenance of sediment basins feasible, FDEP permitting requirements will likely require numerical model validation (Task 4) to use site-specific data for the hydrodynamic models needed to estimate sediment movement. To provide hydrodynamic model validation data, we will collect tide level measurements at six locations in St. Lucie River and Indian River Lagoon and water flow velocity measurements in the project area.

Water flow (current) velocity measurement by an Acoustic Doppler Current Profiler (ADCP) provides an accurate method of measuring the vertical distribution of velocity along horizontal transects. ADCP measurements at the project site will provide the necessary information to calibrate the hydraulic model. We will measure the current velocity at the stations during spring and neap tide periods.

We will measure the tide level at the project site to calibrate and run the hydraulic model. Tide data at the project site will provide additional model calibration data. Tide measurements shall consist of water surface elevation during spring and neap tide periods. We will record tide level during the velocity measurements. For the purpose of tide gage installation, data reading, and gage retrieval, we will determine suitable locations.

We will collect sediment grab samples for laboratory analyses of sediment size, gradation, porosity, and density.

Task 3 Baseline Model Setup and Validation

An evaluation of baseline hydraulics and sediment transport in the waterway requires an understanding of the role currents and possibly waves play on the erosion and deposition processes. Task 3 will focus on development and validation MIKE21 models to simulate the existing (baseline) hydraulics and sediment transport patterns in the waterway and in areas immediately north and south of OWW Cut 1. Model validation ensures that the model is capable of simulating the forces that drive sediment transport — currents and waves. A good comparison of model results with measured tides, currents, and waves typically validates the performance of the model.

We will construct baseline versions of the MIKE21 hydrodynamic, wave, and sediment transport models. Model development consists of generation of model boundary conditions and construction of the model grid. During Task 3 we will define forcing conditions (tides, surge, and waves) that we will apply to evaluate Task 3 baseline conditions and basin alternatives (Task 4). We will use data collected in Tasks 1 and 2 — including available data from NOAA, the state's FCFP, or USACE's WIS — to generate hydrodynamic and wave models forcing conditions.

With the forcing mechanisms established, we will transform an existing RMA2 hydrodynamic model to a MIKE21 hydrodynamic model. We will start the hydrodynamic model setup by building on information from previous hydraulic models we setup for modeling projects in the St. Lucie River, Indian River Lagoon, and St. Lucie Inlet. In defining the domain of the new model, we will include bathymetric data from recently surveyed estuary profiles supplied by FIND, Martin County, previous hydrodynamic models, NOAA nautical charts, and USACE survey data. The model domain will include the OWW, St. Lucie River, St. Lucie Inlet, portions of the Atlantic Ocean, and a portion of the Indian River Lagoon.

We will refine the model domain to an appropriate resolution to examine the relevant physical processes while minimizing any unintended boundary effects for the scenarios considered. We will then calibrate the MIKE21 hydrodynamic model to known conditions by adjusting relevant model parameters. Next, we will perform a model verification run to confirm the modeling approach and test the applicability of model calibrated parameters to simulate events outside the calibration period. The measured inshore tides and waterway flow data will provide the calibration and verification boundary condition data. Tide and current data at or near the waterway will provide the calibration and verification data. The wave data from FCFP or the WIS station will provide the wave model boundary.

We will setup a baseline MIKE21 sediment transport model to estimate sand movement through the waterway and through the areas immediately north and south of OWW Cut 1. The sediment transport model will include morphological computations that will estimate accretion and erosion in the waterway and nearby areas — specifically, the shoaling rate in the proposed sediment basins north and south of OWW Cut 1 as part of Task 4. We will use available and/or measured sediment data to describe sediment characteristics in the waterway and its immediate vicinity. We will evaluate the sensitivity of model validation to changes in bed friction and sediment property.

Task 4 Basin Alternatives Analyses

Task 4 will establish a general location and geometry for the proposed basins. Basin initial design variables include depth, width, length, and offset from OWW Cut 1. We will modify the baseline models to include alternative basin designs and to evaluate their performance. We assume we will analyze up to three different sediment basin design alternatives to determine the basin's sediment trapping capacities, trapping efficiency, and impacts on waterway navigability. We will evaluate the sensitivity of model results to changes in sediment property. The model documentation will include a written summary of the modeling approach and results, as well as summary graphics and animations.

Task 5 Recommendations and Economic Analysis

If our analyses show that any of the proposed basins is hydraulically and morphologically feasible, we will provide recommendations for detailed engineering design, potential dredging methods, estimates of construction and maintenance costs, and descriptions for permitting requirements. We will evaluate and rank each design alternative based on its capability to trap sediments. We will develop estimated construction and maintenance costs for each feasible alternative.

Task 6 Preparation of Feasibility Report and Presentation

We will submit a feasibility report that includes Tasks 1 – 5 available data collection, field data measurements, model development, validation, and application. We assume we will make one presentation to the FIND to describe the methodology and results of the study.

End Scope of Services

We propose to perform the above scope of services for a fixed fee, lump sum of \$74,781.08. Exhibit B provides a summary of our cost. We will deliver the final report and complete the above scope of services within eight months of a written notice-to-proceed.

TAYLOR ENGINEERING, INC.
COST SUMMARY BY TASK
STUDY OF SEDIMENT BASINS AT NORTH AND SOUTH OF OKEECHOBEE WATERWAY

TASK 1: Collection and Analyses of Available Data

<i>Labor</i>	Hours	Cost	Task Totals
Senior Professional	12.00	1,548.00	
Staff Professional	22.00	1,892.00	
Total Man-Hours	34.00		
Labor Cost			3,440.00
<i>Total Task 1</i>			3,440.00

TASK 2: Field Data Measurements

<i>Labor</i>	Hours	Cost	Task Totals
Senior Professional	17.00	2,193.00	
Project Professional	48.00	5,040.00	
Staff Professional	44.00	3,784.00	
Senior Technician	6.00	540.00	
Total Man-Hours	115.00		
Labor Cost			11,557.00
<i>Non-Labor</i>	Units	Cost	
hotel accomodation	10.0	750.00	
per diem	20.0	720.00	
car rental	6.0	450.00	
boat rental	3.0	1,500.00	
ADCP rental	2.0	1,000.00	
tide gage rental	84.0	2,100.00	
geotechnical sampling and analyses	1.0	3,500.00	
	-	-	
	-	-	
	-	-	
Non-Labor Cost		10,020.00	
Fee @ 10.0%		1,002.00	
Total Non-Labor Cost			11,022.00
<i>Total Task 2</i>			22,579.00

TASK 3: Baseline Model Setup and Validation

<i>Labor</i>	Hours	Cost	Task Totals
Vice President	4.00	740.00	
Senior Advisor	10.00	1,770.00	
Director	4.00	616.00	
Senior Professional	136.00	17,544.00	
Senior GIS Technician	8.00	768.00	

STUDY OF SEDIMENT BASINS AT NORTH AND SOUTH OF OKEECHOBEE WATERWAY

Total Man-Hours	162.00	
Labor Cost		21,438.00
<i>Total Task 3</i>		<i>\$ 21,438.00</i>

TASK 4: Basin Alternatives Analyses

<i>Labor</i>	<i>Hours</i>	<i>Cost</i>	<i>Task Totals</i>
R. Bruce Taylor, Ph.D.	1.00	306.00	
Vice President	4.00	740.00	
Senior Advisor	6.00	1,062.00	
Director	8.00	1,232.00	
Senior Professional	86.00	11,094.00	
Senior GIS Technician	6.00	576.00	
Total Man-Hours	111.00		
Labor Cost			15,010.00
<i>Total Task 4</i>			<i>\$ 15,010.00</i>

TASK 5: Recommendations and Economic Analysis

<i>Labor</i>	<i>Hours</i>	<i>Cost</i>	<i>Task Totals</i>
Director	3.00	462.00	
Senior Professional	12.00	1,548.00	
Staff Professional	6.00	516.00	
Total Man-Hours	21.00		
Labor Cost			2,526.00
<i>Total Task 5</i>			<i>\$ 2,526.00</i>

TASK 6: Preparation of Feasibility Report and Presentation

<i>Labor</i>	<i>Hours</i>	<i>Cost</i>	<i>Task Totals</i>
R. Bruce Taylor, Ph.D.	2.00	612.00	
Vice President	12.00	2,220.00	
Senior Advisor	4.00	708.00	
Director	5.00	770.00	
Senior Professional	32.00	4,128.00	
Staff Professional	2.00	172.00	
Technical Editor	4.00	396.00	
Administrative	3.00	168.00	
Total Man-Hours	64.00		
Labor Cost			9,174.00
<i>Non-Labor</i>	<i>Units</i>	<i>Cost</i>	
reports	3.0	225.00	
mileage	250.0	111.25	
hotel accomodation	2.0	150.00	
per diem	2.0	72.00	

STUDY OF SEDIMENT BASINS AT NORTH AND SOUTH OF OKEECHOBEE WATERWAY

Non-Labor Cost	558.25	
Fee @ 10.0%	55.83	
Total Non-Labor Cost		614.08
<i>Total Task 6</i>		\$ 9,788.08

Project Total \$ 74,781.08

EXHIBIT C**Table 1** Proposed Schedule of Tasks

No.	Task	Months from Notice to Proceed											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Collection and Analyses of Available Data and Review of Previous Studies	■											
2	Field Data Measurements	■	■										
3	Baseline Model Setup and Validation			■	■	■	■						
4	Basin Alternatives Analyses					■	■	■	■				
5	Recommendations and Economic Analysis							■					
6	Preparation of Feasibility Report and Presentation								■	■			



FLORIDA INLAND NAVIGATION DISTRICT

November 13, 2012

COMMISSIONERS

DONN R. COLEE, JR.
CHAIR
PALM BEACH COUNTY

GAIL KAVANAGH
VICE-CHAIR
ST. LUCIE COUNTY

E. TYLER CHAPPELL
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J. CARL BLOW
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INDIAN RIVER COUNTY

AARON L. BOWMAN
DUVAL COUNTY

S. NORMAN BRAY
NASSAU COUNTY

T. SPENCER CROWLEY, III
MIAMI-DADE COUNTY

DONALD J. CUOZZO
MARTIN COUNTY

NANCY J. FREEMAN
VOLUSIA COUNTY

JONATHAN S. NETTS
FLAGLER COUNTY

JERRY H. SANSOM
BREVARD COUNTY

DAVID K. ROACH
EXECUTIVE DIRECTOR

MARK T. CROSLEY
ASSISTANT EXECUTIVE DIRECTOR

To: Interested Parties
From: David Roach, Executive Director *DR*
Subject: Indian River Reach I Geotechnical Investigation Report

The District has recently received the Indian River Reach I Geotechnical Investigation Report. This report details the sampling and analyses of sediments proposed to be dredged in the upcoming Intracoastal Waterway Maintenance Dredging Project for Indian River County Dredging Reach I with placement of the sediments in Dredged Material Management Area IR-2 in Sebastian. The report has been certified by a Florida Registered Geologist and a Florida Registered Professional Engineer.

Thirteen core boring were taken in the areas to be dredged and 13 composite samples and 14 individual samples taken from the cores were analyzed in a state and federal certified laboratory. The samples were analyzed for 9 metals, 49 petroleum and pesticide products, and methyl-mercury. The physical attributes of the sediment was determined in accordance with the American Society for Testing and Materials (ASTM) standards to be fine grain sand with up to 30% silt.

No petroleum products or pesticides were detected in the samples. Methyl-mercury was found in only one sample at a very low level. Trace amounts of metals were found in the samples indicative of their natural presence in the earth's soils with some minor anthropomorphic contributions.

The sample results were compared to the Florida Department of Environmental Protection's (FDEP) Soil Cleanup Target Levels (SCTL's) found in Chapter 62-777, Florida Administrative Code. These SCTL's provide guidance on the acceptable levels of constituents based upon their

Memorandum
IRCO Geotechnical Report
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natural occurrence in Florida soils as well as their known toxicity levels. The FDEP has set forth SCTL's for residential and commercial properties.

The sample analyses has determined only one analyte was found to exceed the residential SCTL and none exceeded the commercial SCTL. Arsenic exceeds the residential SCTL in 17 of the 27 samples. Arsenic is naturally occurring in Florida soils in wide ranging quantities and is encountered in almost every dredging project. Only an expensive elutriate test can determine naturally occurring arsenic versus anthropomorphic arsenic.

The FDEP has determined in the past that District Dredged Material Management Areas are suitable to place these types of materials. The arsenic bonds to the sediment and does not become soluble. The ultimate re-use of the dredged materials will be restricted to commercial uses where it will not be in direct human contact.

Attached to this memorandum is a tabulation of the sample results prepared by the District from the report. The full report is available on the District's website at <http://www.aicw.org/news.jhtml?method=view&news.id=23>.

**TABULATION OF THE SAMPLE RESULTS
OF THE INDIAN RIVER REACH I GEOTECHNICAL INVESTIGATION**

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Sample ID	Analyte	Test Result	Residential SCTL	Commercial SCTL
CB-1C	Aluminum	14,000	80,000	None
	Arsenic	5.5	2.1	12
	Cadmium	0.60 U	82	1,700
	Chromium	34.1	210	470
	Copper	14.8	150	89,000
	Lead	20	400	1,400
	Mercury	0.079 I	3	17
	Nickel	6.5	340	35,000
	Zinc	46.7	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-2C	Aluminum	17,300	80,000	None
	Arsenic	6	2.1	12
	Cadmium	0.80 U	82	1,700
	Chromium	42	210	470
	Copper	17.9	150	89,000
	Lead	22.4	400	1,400
	Mercury	0.072 I	3	17
	Nickel	7.9	340	35,000
	Zinc	57.1	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-3A	Aluminum	3,740	80,000	None
	Arsenic	2.0	2.1	12
	Cadmium	0.22 U	82	1,700
	Chromium ^a	9.9	210	470
	Copper	0.96 I	150	89,000
	Lead ^a	2.9 I	400	1,400
	Mercury	0.0098 I	3	17
	Nickel	1.4 I	340	35,000
	Zinc ^a	5.3	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-3B	Aluminum	2,850	80,000	None
	Arsenic	1.7	2.1	12
	Cadmium	0.31 U	82	1,700
	Chromium ^a	6.3	210	470
	Copper	0.85 I	150	89,000
	Lead ^a	2.0 I	400	1,400

**TABULATION OF THE SAMPLE RESULTS
OF THE INDIAN RIVER REACH I GEOTECHNICAL INVESTIGATION**

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Sample ID	Analyte	Test Result	Residential SCTL	Commercial SCTL
	Mercury	0.010 U	3	17
	Nickel	1.1 I	340	35,000
	Zinc ^a	3.4 I	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-3C	Aluminum	3,100	80,000	None
	Arsenic	1.7	2.1	12
	Cadmium	0.24 U	82	1,700
	Chromium ^a	8.1	210	470
	Copper	2.1	150	89,000
	Lead ^a	3.3 I	400	1,400
	Mercury	0.016 I	3	17
	Nickel	1.3 I	340	35,000
	Zinc ^a	7.9	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-4A	Aluminum	3,450	80,000	None
	Arsenic	1.6	2.1	12
	Cadmium	0.10 U	82	1,700
	Chromium ^a	8.6	210	470
	Copper	2.6	150	89,000
	Lead ^a	4.5	400	1,400
	Mercury	0.017 I	3	17
	Nickel	1.8 I	340	35,000
	Zinc ^a	9.5	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-4B	Aluminum	1,090	80,000	None
	Arsenic	0.61	2.1	12
	Cadmium	0.49 U	82	1,700
	Chromium	2.2	210	470
	Copper	0.48 I	150	89,000
	Lead	1.1	400	1,400
	Mercury	0.0093 U	3	17
	Nickel	0.51 I	340	35,000
	Zinc	1.6	26,000	630,000
	Methyl-Mercury	ND	1.1	6

**TABULATION OF THE SAMPLE RESULTS
OF THE INDIAN RIVER REACH I GEOTECHNICAL INVESTIGATION**

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Sample ID	Analyte	Test Result	Residential SCTL	Commercial SCTL
CB-4C	Aluminum	3,450	80,000	None
	Arsenic	1.6	2.1	12
	Cadmium	0.048 U	82	1,700
	Chromium	7.7	210	470
	Copper	2.8	150	89,000
	Lead	4.3	400	1,400
	Mercury	0.014 l	3	17
	Nickel	2.3	340	35,000
	Zinc	8.7	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-5C	Aluminum	3,930	80,000	None
	Arsenic	1.8	2.1	12
	Cadmium	0.11 U	82	1,700
	Chromium ^a	10.2	210	470
	Copper	3.6	150	89,000
	Lead ^a	5.4	400	1,400
	Mercury	0.021 l	3	17
	Nickel	1.8 l	340	35,000
	Zinc ^a	12.6	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-6A	Aluminum	9,130	80,000	None
	Arsenic	4.5	2.1	12
	Cadmium	0.20 U	82	1,700
	Chromium ^a	24.2	210	470
	Copper	11.0	150	89,000
	Lead ^a	12.0	400	1,400
	Mercury	0.041 l	3	17
	Nickel	3.9 l	340	35,000
	Zinc ^a	31.4	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-6B	Aluminum	5,390	80,000	None
	Arsenic	2.6	2.1	12
	Cadmium	0.36 U	82	1,700
	Chromium ^a	16.5	210	470
	Copper	3.9	150	89,000

**TABULATION OF THE SAMPLE RESULTS
OF THE INDIAN RIVER REACH I GEOTECHNICAL INVESTIGATION**

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Sample ID	Analyte	Test Result	Residential SCTL	Commercial SCTL
	Lead ^a	7.7	400	1,400
	Mercury	0.029 I	3	17
	Nickel	2.3 I	340	35,000
	Zinc ^a	16.3	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-6C	Aluminum	5,520	80,000	None
	Arsenic	3.2	2.1	12
	Cadmium	0.37 U	82	1,700
	Chromium ^a	18.9	210	470
	Copper	5.3	150	89,000
	Lead ^a	8.0	400	1,400
	Mercury	0.033 I	3	17
	Nickel	3.1	340	35,000
	Zinc ^a	20.8	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-7C	Aluminum	11,800	80,000	None
	Arsenic	4.7	2.1	12
	Cadmium	0.55 U	82	1,700
	Chromium	29.5	210	470
	Copper	15.5	150	89,000
	Lead	17.4	400	1,400
	Mercury	0.071 I	3	17
	Nickel	5.4	340	35,000
	Zinc	39.5	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-8A	Aluminum	16,600	80,000	None
	Arsenic	6.6	2.1	12
	Cadmium	0.55 U	82	1,700
	Chromium	38.7	210	470
	Copper	21.4	150	89,000
	Lead	24.4	400	1,400
	Mercury	0.085 I	3	17
	Nickel	7.3	340	35,000
	Zinc	52.3	26,000	630,000
	Methyl-Mercury	ND	1.1	6

TABULATION OF THE SAMPLE RESULTS
OF THE INDIAN RIVER REACH I GEOTECHNICAL INVESTIGATION

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Sample ID	Analyte	Test Result	Residential SCTL	Commercial SCTL
CB-8B	Aluminum	12,900	80,000	None
	Arsenic	5.5	2.1	12
	Cadmium	0.13 U	82	1,700
	Chromium	31.4	210	470
	Copper	11.4	150	89,000
	Lead	19.7	400	1,400
	Mercury	0.091 I	3	17
	Nickel	5.9	340	35,000
	Zinc	35.2	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-8C	Aluminum	8,680	80,000	None
	Arsenic	4.6	2.1	12
	Cadmium	0.14 U	82	1,700
	Chromium ^a	26.0	210	470
	Copper	7.8	150	89,000
	Lead ^a	14.1	400	1,400
	Mercury	0.055 I	3	17
	Nickel	4.1	340	35,000
	Zinc ^a	27.9	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-9A	Aluminum	10,400	80,000	None
	Arsenic	4.4	2.1	12
	Cadmium	0.13 U	82	1,700
	Chromium	26.3	210	470
	Copper	15.0	150	89,000
	Lead	14.4	400	1,400
	Mercury	0.079 I	3	17
	Nickel	4.6 I	340	35,000
	Zinc	36.0	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-9B	Aluminum	12,100	80,000	None
	Arsenic	5.4	2.1	12
	Cadmium	0.13 U	82	1,700
	Chromium	29.5	210	470
	Copper	6.9	150	89,000
	Lead	16.3	400	1,400

**TABULATION OF THE SAMPLE RESULTS
OF THE INDIAN RIVER REACH I GEOTECHNICAL INVESTIGATION**

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Sample ID	Analyte	Test Result	Residential SCTL	Commercial SCTL
	Mercury	0.070 I	3	17
	Nickel	5.6	340	35,000
	Zinc	24.8	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-9C	Aluminum	11,500	80,000	None
	Arsenic	4.8	2.1	12
	Cadmium	0.50 U	82	1,700
	Chromium	28.8	210	470
	Copper	17.8	150	89,000
	Lead	18.6	400	1,400
	Mercury	0.068 I	3	17
	Nickel	5.2	340	35,000
	Zinc	41.3	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-10A	Aluminum	12,800	80,000	None
	Arsenic	5.8	2.1	12
	Cadmium	0.15 U	82	1,700
	Chromium	33.2	210	470
	Copper	16.4	150	89,000
	Lead	20.6	400	1,400
	Mercury	0.068 I	3	17
	Nickel	6.0	340	35,000
	Zinc	45.0	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-10B	Aluminum	6,600	80,000	None
	Arsenic	3.1	2.1	12
	Cadmium	0.13 U	82	1,700
	Chromium ^a	20.4	210	470
	Copper	4.1	150	89,000
	Lead ^a	10.6	400	1,400
	Mercury	0.059 I	3	17
	Nickel	2.9	340	35,000
	Zinc ^a	16.5	26,000	630,000
	Methyl-Mercury	ND	1.1	6

**TABULATION OF THE SAMPLE RESULTS
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Sample ID	Analyte	Test Result	Residential SCTL	Commercial SCTL
CB-10C	Aluminum	9,080	80,000	None
	Arsenic	3.7	2.1	12
	Cadmium	0.10 U	82	1,700
	Chromium	23.2	210	470
	Copper	8.5	150	89,000
	Lead	12.3	400	1,400
	Mercury	0.063 I	3	17
	Nickel	3.9 I	340	35,000
	Zinc	24.6	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-11C	Aluminum	12,300	80,000	None
	Arsenic	4.8	2.1	12
	Cadmium	0.60 U	82	1,700
	Chromium	30.2	210	470
	Copper	8.5	150	89,000
	Lead	16.4	400	1,400
	Mercury	0.067 I	3	17
	Nickel	5.3	340	35,000
	Zinc	27.5	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-12A	Aluminum	4,070	80,000	None
	Arsenic	2.0	2.1	12
	Cadmium	0.58 U	82	1,700
	Chromium	10.9	210	470
	Copper	2.3	150	89,000
	Lead	4.5	400	1,400
	Mercury	0.021 I	3	17
	Nickel	1.7 I	340	35,000
	Zinc	7.8	26,000	630,000
	Methyl-Mercury	0.014	1.1	6
CB-12B	Aluminum	2,000	80,000	None
	Arsenic	2.1	2.1	12
	Cadmium	0.28 U	82	1,700
	Chromium ^a	8.0	210	470
	Copper	0.61 I	150	89,000
	Lead ^a	1.9 I	400	1,400

**TABULATION OF THE SAMPLE RESULTS
OF THE INDIAN RIVER REACH I GEOTECHNICAL INVESTIGATION**

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Sample ID	Analyte	Test Result	Residential SCTL	Commercial SCTL
	Mercury	0.010 I	3	17
	Nickel	0.83 I	340	35,000
	Zinc ^a	4.6 I	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-12C				
	Aluminum	1,480	80,000	None
	Arsenic	1.4	2.1	12
	Cadmium	0.22 U	82	1,700
	Chromium ^a	6.2	210	470
	Copper	1.1	150	89,000
	Lead ^a	1.9 I	400	1,400
	Mercury	0.013 I	3	17
	Nickel	0.64 I	340	35,000
	Zinc ^a	5.1	26,000	630,000
	Methyl-Mercury	ND	1.1	6
CB-13C				
	Aluminum ^a	7,270	80,000	None
	Arsenic ^a	2.6 I	2.1	12
	Cadmium	0.28 U	82	1,700
	Chromium ^a	19.2	210	470
	Copper ^a	5.8 I	150	89,000
	Lead	8.2	400	1,400
	Mercury	0.032 I	3	17
	Nickel ^a	3.3 I	340	35,000
	Zinc ^a	19.3	26,000	630,000
	Methyl-Mercury	ND	1.1	6

All samples were also analyzed for the following analytes which were not detected in any of the samples:

Acenphthene	Aldrin	Aroclor 1016
Acenaphtylene	alpha-BHC	Aroclor 1221
Anthracene	beta-BHC	Aroclor 1232
Benzo(a)anthracene	delta-BHC	Aroclor 1242
Benzo(a)pyrene	gamma-BHC (Lindane)	Aroclor 1248
Benzo(a)fluoranthene	alpha-Chlordane	Aroclor 1254
Benzo(g,h,i)perylene	gamma-Chlordane	Aroclor 1260
Benzo(k)fluoranthene	Dieldren	
Chrysene	4,4'-DDD	
Dibenzo(a,h)anthracene	4,4'-DDE	

**TABULATION OF THE SAMPLE RESULTS
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Fluoranthene	4,4'-DDT
Fluorene	Endrin
Indeno(1,2,3-cd)pyrene	Endosulfan sulfate
1-Methylnaphthalene	Endrin aldehyde
2-Methylnaphthalene	Endrin ketone
Napththalene	Endosulfan-I
Phenanthrene	Endosulfan-II
Pyrene	Heptachlor
	Heptachlor epoxide
	Methoxychlor
	Toxaphene

NOTES:

This report was tabulated by FIND staff from the results of the Indian River Reach I Geotechnical Investigation Report dated October 2012 by American Vibracore Systems to assist in reading and interpreting the sample results in comparison to the Florida Department of Environmental Protection's Soil Cleanup Target Levels as set forth in Chapter 62-777 Florida Administrative Code

Sample ID Numbers

CB indicates Core Boring

The letter A following the Core Boring number indicates that the sample was taken 1/3 of the core distance up the shallower elevation

The letter B following the Core Boring number indicates that the sample was taken at approximately the -14 foot depth

The letter C following the Core Boring number indicates that the sample is a composite sample

SCTL means Soil Cleanup Target Level

Bold numbers indicate sample results exceed the Residential SCTL

Sample result measurements

Metal results and SCTL's are in measured in mg/kg.

Petroluem and Pesticides are measured in ug/kg

Methyl-mercury is measured in ng/g

^a indicates elevated reporting limit(s) due to matrix interference.

U indicates a result less than the Method Detection Limit

I indicates a result greater than the Method Detection Limit but less than the Practical Quantation Limit

ND indicates analyte was not detected

Notice to Contractor/Materialman/Laborer

The Florida Inland Navigation District is in receipt of your Notice to Owner/Notice to Contractor/Surety. This reply is to inform you that this is a:

☐ State government project

☐ Federal government project

and is occurring on governmentally owned land which is not subject to liens under Section 713.06, Florida Statutes.

The project is governed by:

☐ Federal Miller Act (40 U.S.C. Sections 3131-3134)

☐ Florida's "Little Miller Act" (Section 255.05, Florida Statutes)

The project ☐ is/ ☐ is not covered by a bond. If covered by a bond, a copy of the project bond is attached.

The District encourages you to review the appropriate law to determine your rights and responsibilities and whether you are covered under the project bond, if any.

The foregoing does not constitute legal advice and you are encouraged to consult with your legal counsel if you have any questions.

If you need additional information you may contact the District at:

Florida Inland Navigation District
1314 Marcinski Road
Jupiter, Fl. 33477
(561) 627-3386

WARNING! FLORIDA'S CONSTRUCTION LIEN LAW ALLOWS SOME UNPAID CONTRACTORS, SUBCONTRACTORS, AND MATERIAL SUPPLIERS TO FILE LIENS AGAINST YOUR PROPERTY EVEN IF YOU HAVE MADE PAYMENT IN FULL.

UNDER FLORIDA LAW, YOUR FAILURE TO MAKE SURE THAT WE ARE PAID MAY RESULT IN A LIEN AGAINST YOUR PROPERTY AND YOUR PAYING TWICE. Page 99

TO AVOID A LIEN AND PAYING TWICE, YOU MUST OBTAIN A WRITTEN RELEASE FROM US (Lienor) EVERY TIME YOU PAY YOUR CONTRACTOR.

DECEMBER 28, 2012

NOTICE TO OWNER / NOTICE TO CONTRACTOR

To: (Owner)

OVERNIGHT LETTER

FLORIDA INLAND NAVIGATION DISTRICT
1314 MARCINSKI RD
JUPITER FL 33477

FLORIDA INLAND NAVIGATION DISTRICT
1314 MARCINSKI RD
JUPITER FL 33477

The undersigned hereby informs you that he or she has furnished or is furnishing services or materials as follows:

SALE OR RENTAL OF MISCELLANEOUS CONSTRUCTION EQUIPMENT

for the improvements of real property identified as "DANIA CUTOFF CANAL DEEPENING PROJECT", BOND NUMBER 105697093, BROWARD COUNTY, FLORIDA.

under an order given by LUCAS MARINE CONSTRUCTION.

REC'D _____

DEC 31 2012

FLORIDA INLAND
NAVIGATION DISTRICT

Florida law prescribes the serving of this notice and restricts your rights to make payments under your contract in accordance with Section 713.06, Florida Statutes. In the event that the contract for improvement is bonded, pursuant to Section 255.05 or Section 713.23, Florida Statutes Title 40 USC Section 3131, et seq., or any other form of bond, the undersigned intends to look to that bond for protection and payment. The undersigned requests a copy of the payment bond and a copy of any direct contracts pertaining to the improvements for this project and agrees to pay reasonable copy costs for such copy.

IMPORTANT INFORMATION FOR YOUR PROTECTION

Under Florida's laws, those who work on your property or provide materials and are not paid, have a right to enforce their claim for payment against your property. This claim is known as a construction lien.

If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, **EVEN IF YOU HAVE PAID YOUR CONTRACTOR IN FULL.**

PROTECT YOURSELF:

--RECOGNIZE that this Notice to Owner may result in a lien against your property unless all those supplying a Notice to Owner have been paid.

--LEARN more about the Construction Lien Law, Chapter 713, Part I, Florida Statutes, and the meaning of this notice by contacting an attorney or the Florida Department of Business and Professional Regulation.

COPIES TO:

OVERNIGHT LETTER

(GEN CONTR)

LUCAS MARINE ACQUISITION
COMPANY LLC
3130 SE SLATER ST
STUART FL 34997

(Under an order given by)
LUCAS MARINE CONSTRUCTION
3130 SE SLATER ST
STUART FL 34997

OVERNIGHT LETTER

(BOND)

TRAVELERS CASUALTY AND SURETY
COMPANY OF AMERICA
ONE TOWER SQ
HARTFORD CT 06183

By:

WILLIAM D. MEEKER, JR. / NACM Services Corp. (813)289-8894

Any demand made pursuant to Section 713.16, Florida Statutes, must be directed to the attention of the Lienor's representative at the address of the Lienor shown below.

As Authorized Agent for Lienor:

NEFF RENTAL LLC
GISELLE MEDINA
1925 NORTHWEST 18TH STREET
POMPANO BEACH FL 33069
(Ref#: 40001984/2865)



January 7, 2013

Mr. David K. Roach
Executive Director
Florida Inland Navigation District
1314 Marcinski Road
Jupiter, FL 33477

Re: Annual Adjustment of Billing Rates

Dear Mr. Roach:

Our Agreement for Engineering Services with the Florida Inland Navigation District allows for annual review and adjustment of billing rates. Taylor Engineering has incurred increases in our rates due to normal cost of living adjustments. However, in light of continued uncertainty in the economy and state budgets, we will not request any adjustment to our billing rates for 2013. We will honor the rates you approved in early 2012 through December 31, 2013.

We look forward to continuing our partnership with the District as we move through these tough times together.

Sincerely,

R. Bruce Taylor, Ph.D., P.E.
CEO/Chairman of the Board

:lar

January 7, 2013

MEMORANDUM

TO: David Roach, Executive Director
Mark Crosley, Assistant Executive Director

FROM: Jim Davenport

SUBJECT: Federal Legislative Report

Last week, the President approved legislation to avoid or delay the majority of the "fiscal cliff," bringing to a close the latest chapter in Washington's debate over the nation's fiscal future, but likely setting up new fights this winter over federal spending and raising the debt ceiling.

The bill, H.R. 8, the *American Taxpayer Relief Act of 2012*, was passed by the Senate on New Year's Eve by a vote of 89-8. The House then passed the bill by a vote of 257-167, following a day of uncertainty about whether there was sufficient support among the Republican caucus to amend the bill to include more spending cuts, a move that likely would have killed its chances of being passed before the 112th Congress adjourns.

The bill postpones sequestration for two months to March 27, 2013, the same day that funding for the government on the current FY13 continuing resolution expires. This means that Congress will be tackling the following hot-button issues between now and March 27: (1) Hurricane Sandy relief; (2) raising the debt ceiling; (3) sequestration; and (4) fiscal year (FY) 2013 appropriations legislation.

Despite the full calendar of contentious spending issues, we are hopeful that congress will remain focused on passing an FY 2013 omnibus appropriations bill. As the House and Senate Appropriations Committees continue to work on putting together and omnibus, we will work to obtain funding that would support inland waterway maintenance.

Please contact me with any questions.