

**AGENDA
TOWN OF JUPITER ISLAND
BEACH PROTECTION DISTRICT MEETING
WEDNESDAY, JULY 22, 2026
ISLAND ROOM – TOWN HALL – 2 BRIDGE ROAD
1 PM OR DIRECTLY FOLLOWING TOWN COMMISSION MEETING THAT BEGINS AT 9 AM**

1. Consent Agenda

Category A- To be reviewed and approved (as is or as edited) by the Town Commission

- a. Minutes of the June 22, 2026, Beach Protection District Meeting
- b. Financial Report

2. Public Comment*

3. Fiscal Year 2027 Beach Protection District Ad Valorem Millage Rate

4. Geotechnical Study Spending Authorization (GBA)

5. Beach Conditions Report*

6. Other Items*

** No advanced materials provided*

(QJ) Denotes a quasi-judicial matter or public hearing

Note that time allotments, where indicated, represent anticipated discussion timeframes intended to support the efficient flow of the meeting, and are not intended to establish a time-certain for any specific agenda item.

Town Commission

Anne Scott, Mayor
Joseph Taddeo, Vice Mayor
Marshall Field VI, Commissioner
Patricia Warner, Commissioner
Maria Bayazid, Commissioner

Town Staff

Town Manager, Robert Garlo
Town Attorney, Kyle B. Teal
Town Clerk, Kimberly Kogos

STATE MANDATED STATEMENT

If a person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, he will need a record of the proceedings, and that, for such purpose, he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. Any person requiring a special accommodation at this meeting because of a disability or physical impairment should contact the Town prior to the meeting. Please contact the Town Hall, 2 Bridge Road, Hobe Sound, FL 33455, telephone (772) 545-0103.

**MINUTES
TOWN OF JUPITER ISLAND
BEACH PROTECTION DISTRICT MEETING
MONDAY, JUNE 22, 2026**

TIME: Monday, June 22, 2026 – 1:00 PM

PLACE: Town Hall Island Room – 2 Bridge Rd., Hobe Sound, FL

PRESENT: Present were Vice Mayor Anne Scott, and Commissioners Patricia Warner, Joseph Taddeo and Maria Bayazid. Also present were Town Manager Robert Garlo, Town Clerk Kimberly Kogos, Town Attorney Kyle B. Teal and IT Director Bill Sutton.

1. Mayor/Commissioner Comments*

2. Public Comment*

3. Consent Agenda

MOTION: *Commissioner Warner/Commissioner Taddeo moved to approve the Consent Agenda as presented.*

ACTION: *Motion Passed 4-0.*

Category A- To be reviewed and approved (as is or as edited) by the Town Commission

- a. Minutes of the May 19, 2026, Beach Protection District Meeting
- b. Monthly Finance Report

4. Beach Status* - Gahagan & Bryant

Director Duchock announced the sea turtle nesting totals as follows:

Leatherback	488
Loggerhead	4,479
Green	333

Mr. Clay Bryant of Gahagan and Bryant (G&B) greeted the Commission and introduced team member and Senior Coastal Scientist Melany Larenas. He announced his 50th year working with the Town on its beach front. Mr. Bryant provided the beach status update showing ground photographs of the beach and dunes. He noted young Australian Pine trees growing on the dunes and requested removal of this invasive species.

Mr. Bryant referred to a recent report that expressed concern about the ocean breaching the Island at Pecks Lake, showing historical photographs of the split. In contrast, he displayed current photographs of the wide healthy beach that does not exhibit evidence of a potential breach.

5. Offshore Sand Source History & Discussion* - Gahagan & Bryant

Mr. Bryant stated that the Town directed G&B to obtain a permit for borrow-site expansion and explained that the application process is in progress. He showed the potential expansion site which is approximately 1200 acres and stated that the Town is listed with the state as a potential site claimant.

He showed photographs of the vessel used to conduct the survey, the crew and equipment as well as examples of the imagery collected by the various types of equipment.

He reviewed the timeline of the geophysical survey, finishing in a 25-day period, followed by the total project schedule that should be complete with a permit application submission in November 2026.

6. 12-Year Financial Plan Update

Director Duchock provided a review of the 12-Year Financial Plan, providing background information and necessary adjustments that reflect the budget for the current fiscal year. He reviewed projected revenues, expenses and reserves, noting a decrease in reserves from \$32 M (FY 27) to \$16M (FY 38). He also noted that FEMA/FDEM funds and cost share funds from Martin County for inlet bypass are not included as future revenue.

7. FY 2027 Draft Budget Presentation

Director Duchock briefly reviewed the FY 2026-2027 Draft Budget. He stated that staff is projecting a proposed maximum ad valorem millage tax rate for the Beach District to be set at .9593 mills. This millage rate represents a 9.89% revenue increase over the rolled-back rate of .8730 and is the same millage rate as the current year's rate. He added that the proposed millage rates and public hearing date will be advertised on the Preliminary Tax Notice that is mailed to all Jupiter Island property owners.

8. Other Items*

Director Duchock mentioned that a Gahagan and Bryant spending authorization will be brought in July.

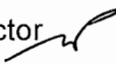
The meeting was adjourned at 2:31pm

Respectfully Submitted,

Kimberly Kogos, Town Clerk



MEMORANDUM

TO: Town of Jupiter Island, Commission
THRU: Robert Garlo, Town Manager
FROM: Matthew Pazanski, Finance/HR Director 
DATE: July 13, 2026
SUBJECT: Beach Erosion District Interim Monthly Financial Report – June 30, 2026

Background

Attached are the month ending June 30, 2026, interim financial reports including the balance sheet and year-to-date revenue and expenditure report.

The balance sheet identifies cash and investments of approximately \$27.9 million. \$1,992,304 is due from the Town, which includes the final reimbursement from FEMA for the 2025 beach nourishment project. These funds were transferred and settled in July.

The year-to-date revenue and expenditure report is as expected with posted revenues from FEMA and State Grant that were from the prior year beach project, interest income is above expectations as the interest rate environment has continued to be favorable for our investments. Overall expenditures are as anticipated and budgeted.

All these items are in line with staff's expectations and are continuously monitored and updated as necessary.

BEACH EROSION DISTRICT
INTERIM BALANCE SHEET
PERIOD ENDING 6/30/2026

GL Number	Description	Balance
Fund 101 - BEACH PROTECTION DISTRICT		
*** Assets ***		
101-000-101.000	CASH IN BANK-SEACOAST NATIONA	1,156,488.23
101-000-101.001	MONEY MARKET-SEACOAST NATIONA	1,683,871.05
101-000-101.152	INVESTMENT POOL	6,669,520.58
101-000-101.154	INVESTMENT- FL PALM	18,279,420.33
101-000-101.155	INVESTMENT-SBA	109,051.82
101-000-131.001	DUE FROM GENERAL FUND	1,992,303.75
	Total Assets	29,890,655.76
*** Liabilities ***		
101-000-202.000	ACCOUNTS PAYABLE	151,732.10
	Total Liabilities	151,732.10
*** Fund Balance ***		
101-000-280.001	NONSPENDABLE PREPAID	1,246.78
101-000-284.000	FUND BALANCE	29,737,676.88
	Total Fund Balance	29,890,655.76
	Total Liabilities And Fund Balance	29,890,655.76

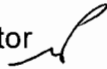
BEACH EROSION DISTRICT
INTERIM REVENUE AND EXPENDITURE REPORT
PERIOD ENDING 6/30/2026

2025-26						
GL NUMBER	DESCRIPTION	ORIGINAL BUDGET	AMENDED BUDGET	2025-26	YTD BALANCE 06/30/2026	% BDGT USED
Fund 101 - BEACH PROTECTION DISTRICT						
Revenues						
Dept 000						
101-000-311.000	AD VALOREM TAXES	3,655,318.00	3,655,318.00		3,680,497.98	100.69
101-000-331.391	FEMA REIMBURSEMENT	0.00	0.00		13,388,567.72	100.00
101-000-334.391	STATE GRANT-BEACH RENOURISHMN	0.00	0.00		140,835.15	100.00
101-000-361.100	INTEREST	225,000.00	225,000.00		514,219.30	228.54
Total Dept 000		3,880,318.00	3,880,318.00		17,724,120.15	456.77
TOTAL REVENUES						
		3,880,318.00	3,880,318.00		17,724,120.15	456.77
Expenditures						
Dept 211 - BEACH PROTECTION ADMINISTRATION						
PERSONNEL AND BENEFITS						
OPERATING						
		284,870.00	284,870.00		192,932.28	67.73
		284,520.00	284,520.00		123,260.13	43.32
Total Dept 211 - BEACH PROTECTION ADMINISTRATION		569,390.00	569,390.00		316,192.41	55.53
Dept 221 - BEACH PROTECTION PROJECTS						
Total Dept 221 - BEACH PROTECTION PROJECTS		3,310,928.00	3,310,928.00		328,699.68	9.93
TOTAL EXPENDITURES						
		3,880,318.00	3,880,318.00		644,892.09	16.62
Fund 101 - BEACH PROTECTION DISTRICT:						
TOTAL REVENUES						
		3,880,318.00	3,880,318.00		17,724,120.15	456.77
TOTAL EXPENDITURES						
		3,880,318.00	3,880,318.00		644,892.09	16.62
NET OF REVENUES & EXPENDITURES						
		0.00	0.00		17,079,228.06	100.00



MEMORANDUM

TO: Town of Jupiter Island, Commission
THRU: Robert Garlo, Town Manager

FROM: Matthew Pazanski, Finance/HR Director 

DATE: July 10, 2026

SUBJECT: FY 2026 - 2027 Proposed Beach Protection District Budget Review and Setting the Proposed Ad Valorem Millage Tax Rate and First Budget Public Hearing Date

Background

The main purpose of Wednesday, July 22, 2026, Beach Protection District meeting budget agenda item is to set the proposed ad valorem millage tax rate and to set the date for the first public hearing for the FY 2026-2027 Annual Budget. The proposed millage rate must reflect the maximum rate that can be levied during the next fiscal year. The proposed millage rate and public hearing date will be advertised on the Preliminary Tax Notice that is mailed to all Jupiter Island property owners.

Discussion

Attached is the FY 2026-2027 Proposed Beach Protection District Budget. The budget document also includes a budget calendar to highlight ongoing budget milestones, meetings and requirements.

During the discussion of the budget staff will review the preliminary taxable values and new construction figures obtained from the Martin County Property Appraiser.

- \$4,436,619,291 – Preliminary taxable value
- 11.62% - Increase in overall taxable value
- \$67,840,115 - Preliminary new construction

Based on the current information, staff is recommending a proposed (maximum) ad valorem millage tax rate for the Beach Protection District to be set at .9593 mills. This millage rate represents a 9.91% tax increase over the rolled back rate of .8728 and is the same millage rate as the current year's rate.

Budget Meeting Calendar:

The Town's budget public hearings cannot occur on the same date and time as Martin County Board of County Commissioner (BOCC) or the Martin County School Board, their budget hearing dates are as follows: School Board Final Public Hearing - September 8, 2026, at 5:05pm; BOCC Public Hearings - September 15 & 29, 2026, at 5:05pm.

1. Based on direction from the Town Commission, staff recommends setting the date for the first budget public hearing for Monday, September 14, 2026, at 5:01pm. At this meeting staff will present the FY 2026-2027 Tentative Ad Valorem Millage Tax Rates and Annual Budget and incorporate the Town Commission recommendations from the previous meetings as well as any additional outstanding revenue and expenditure items.

2. On Thursday, September 17, 2026, at 4:00pm, the Town Commission and staff will have the opportunity to review the budget during the Beach Protection District's regular monthly meeting.

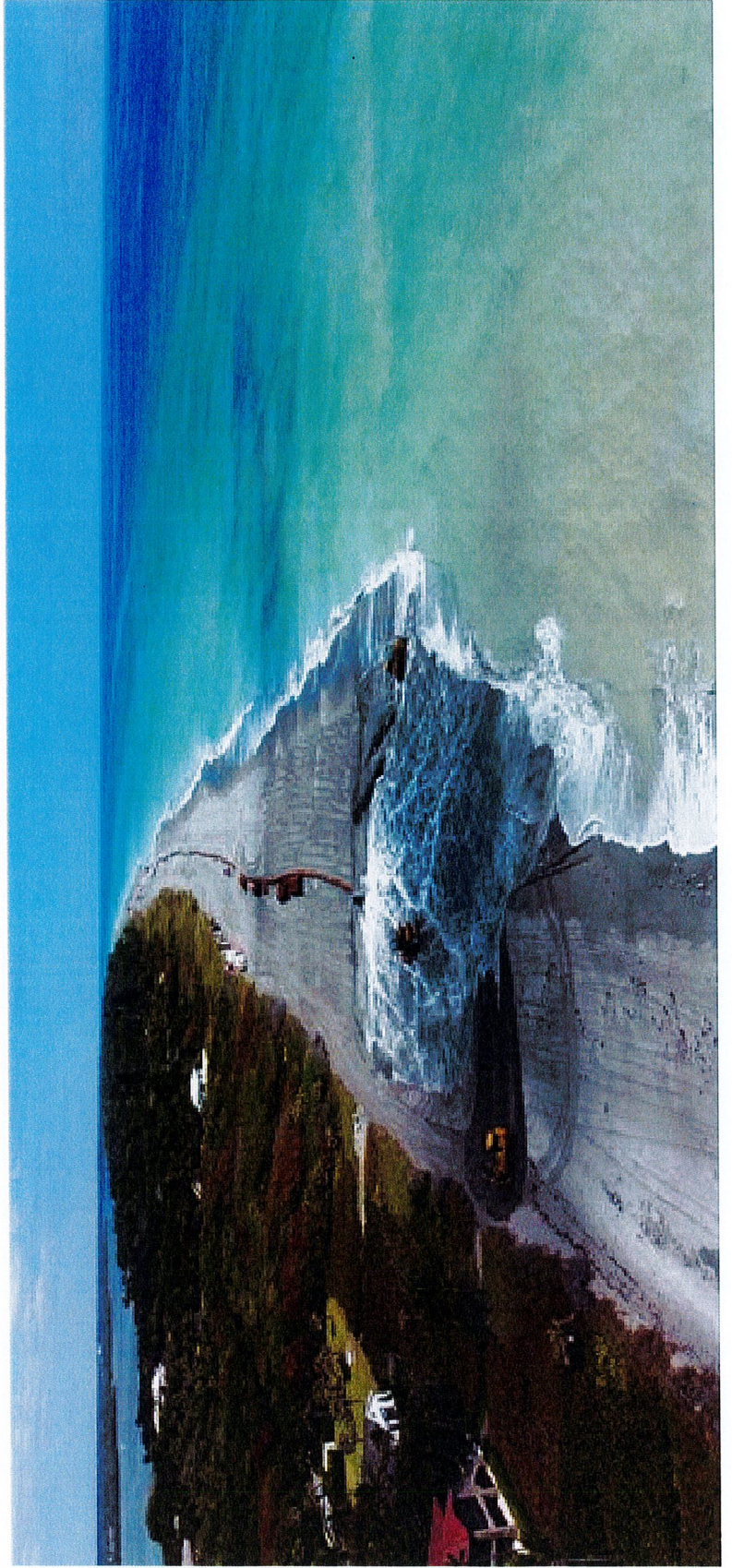
3. Based on direction from the Town Commission, the final public hearing meeting is recommended for Thursday, September 17, 2026, at 5:01pm. Staff will be prepared to review and discuss the Final Millage Rates and Annual Budgets at that meeting.

Staff will continue to work through outstanding revenue and expenditure items and provide updates to the Town Commission at future meetings. Staff will anticipate obtaining consensus from the Town Commission concerning all outstanding items to assist with the preparation of the tentative and final millage rates and budgets.

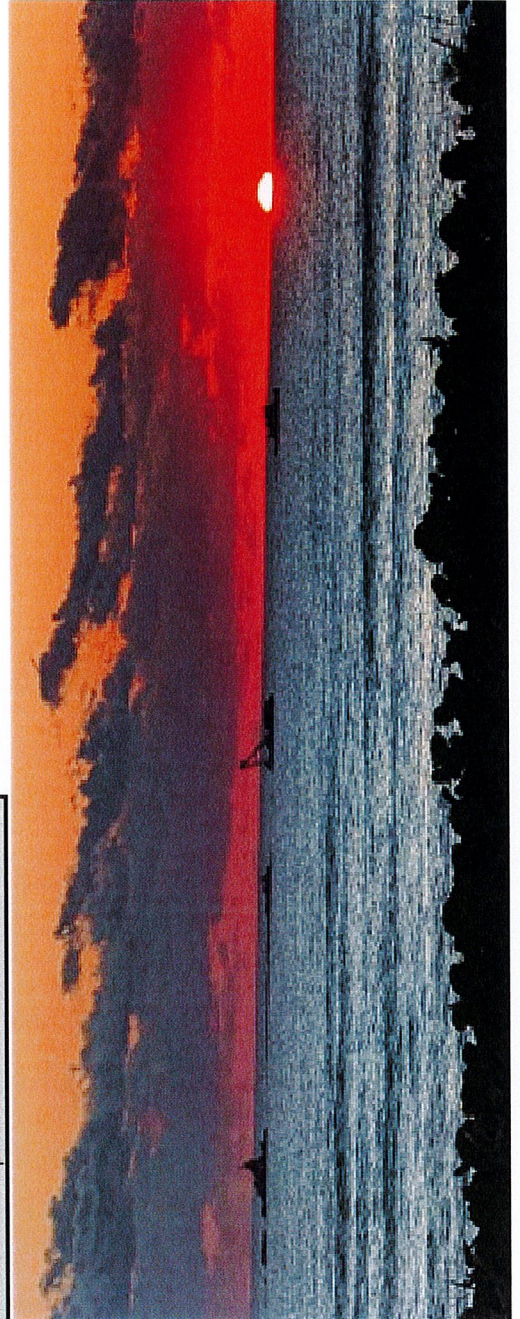
Recommendation

Staff recommends the Town Commission consider a motion to set the Beach Protection District proposed ad valorem millage tax rate for Fiscal Year 2026-2027 at .9593 mills and to set the date for the first budget public hearing for Monday, September 14, 2026, at 5:01pm.

Beach Protection District FY 2026 – 2027 Proposed Budget



FY 2026-2027 Budget Calendar							
Description	April	May	June	July	August	September	October
Kick off departmental budget meetings are scheduled and conducted.	5/1/2026						
Estimated Preliminary Taxable Values received from Property Appraiser's Office		5/29/2026					
Budget review meeting with departments		5/29/2026					
Draft departmental budget submitted to Town Manager			6/9/2026				
Preliminary Taxable Values due from Property Appraiser's Office				7/1/2026			
Budget review based upon taxable values received from Property Appraiser's Office				7/1/2026			
Proposed budget presentation to Town Commission (Revenues, Expenses, and Capital).							
<u>Propose millage rate & 1st public hearing date MUST be approved.</u>				7/22/2026			
Budget review meeting with departments based upon Commission comments				7/24/2026			
Town Commission Meeting in August, if necessary*					n/a		
Town Commission Meeting tentative budget review						9/14/2026 (9:00am)	
1st Public hearing for the tentative millage rates and budget <u>(Must be between September 3-18.)</u>						9/14/2026 (5:01pm)	
Beach Protection District Meeting budget review						9/17/2026 (4:00pm)	
2nd Public hearing for the final millage rates and adopted budget <u>(Must be within 15 days of the 1st public hearing; can be as soon as 3 days, must be held 2-5 days after advertising.)</u>							
Adopted budget scheduled to begin						9/17/2026 (5:01pm)	10/1/2026
Indicates Completed							



FY 2026-2027 Beach Protection District Revenues				
Account Description	Adopted Budget FY 2025-2026	Budget FY 2026-2027	Difference	% Change
Ad Valorem Taxes (Proposed 0.9593 Mills)	\$ 3,655,318	\$ 4,085,807	\$ 430,489	11.8%
FEMA Reimbursement	\$ -	\$ -	\$ -	0.0%
State Grant-Beach Renourishment	\$ -	\$ -	\$ -	0.0%
State Disaster Relief	\$ -	\$ -	\$ -	0.0%
Interest Income	\$ 225,000	\$ 225,000	\$ -	0.0%
County Cost Share	\$ -	\$ -	\$ -	0.0%
Transfer-Design for Beach Renourishment	\$ -	\$ -	\$ -	0.0%
Debt Proceeds	\$ -	\$ -	\$ -	0.0%
Total Revenues	\$ 3,880,318	\$ 4,310,807	\$ 430,489	11.1%

FY 2026-2027 Beach Protection District Operating Expenditures				
Account Description	Adopted Budget FY 2025-2026	Budget FY 2026-2027	Difference	% Change
Total Personnel Cost	\$ 284,870	\$ 287,936	\$ 3,066	1.1%
Total Professional Expenses	\$ 157,500	\$ 162,500	\$ 5,000	3.2%
Total Operating Costs	\$ 127,020	\$ 120,520	\$ (6,500)	-5.1%
Total General Government	\$ 569,390	\$ 570,956	\$ 1,566	0.3%

Beach Project Expenditures				
Account Description	Adopted Budget FY 2025-2026	Budget FY 2026-2027	Difference	% Change
Prof Svcs-Eng Consultants	\$ 250,000	\$ 500,000	\$ 250,000	100.0%
Turtle Monitoring/Shorebird Monitoring	\$ 250,000	\$ 370,000	\$ 120,000	48.0%
Reef Monitoring	\$ 120,000	\$ 120,000	\$ -	0.0%
Beach Surveys	\$ 150,000	\$ 150,000	\$ -	0.0%
Beach Maintenance	\$ 35,000	\$ 35,000	\$ -	0.0%
Dune Restoration	\$ 500,000	\$ 500,000	\$ -	0.0%
Beach Renourishment Project	\$ -	\$ -	\$ -	0.0%
Debt Service	\$ -	\$ -	\$ -	0.0%
Contingency	\$ 100,000	\$ 100,000	\$ -	0.0%
Total Project Expenditures	\$ 1,405,000	\$ 1,775,000	\$ 370,000	26.3%
Total District Expenditures	\$ 1,974,390	\$ 2,345,956	\$ 371,566	18.8%
Transfer to Reserves for Future Beach Projects	\$ 1,905,928	\$ 1,964,851	\$ 58,923	3.1%
Total Reserves and Expenditures	\$ 3,880,318	\$ 4,310,807	\$ 430,489	11.1%

Millage Rate

2026 Beach Protection District Millage Rate - .9593

2027 Beach Proposed Millage Rate - .9593

2027 Beach Rolled Back Rate - .8728





TOWN OF JUPITER ISLAND

MEMORANDUM

To: Mayor & Town Commission

Through: Robert Garlo, Town Manager *RG*

CC: Kimberly Kogos, Town Clerk

From: John Duchock, Asst. Town Manager

RE: Agenda Item No. 4 – Geotechnical Study (Gahagan & Bryant Associates)

Date: 7/13/2026

Background:

Gahagan & Bryant Associates has completed the initial historical research, as well as the additional offshore surveys within the proposed expanded borrow site. The additional offshore surveys were performed to characterize the nature and consistency of the sandy bottom within the proposed borrow site investigational area and to screen for any magnetic anomalies which may be related to historical shipwrecks or artifacts. The results of the surveys generally indicated a well-formed borrow site without significant environmental and archaeological concerns.

It is critically important that the Town continue the process of identifying and securing additional offshore sand sources for future beach renourishment projects. The final steps to completely define and characterize the borrow site for regulatory approval require collection of sand samples through vibracoring for field and lab testing to ensure that the sediments meet the regulatory requirements for use under the Town's beach nourishment permits (Joint Coastal Permit). To support the Town, Gahagan & Bryant Associates has provided the attached scope of work for conducting the geotechnical study, including the following: Task 1) Mobilization & Vibracoring Field Operations; Task 2) Core Logging and Sediment Analysis; Task 3) Compatibility Analysis & Modeling of Potential Shoreline Impacts; and, Task 4) Site Design and Summary Report.

A total of 40 core samples will be collected under this effort and then analyzed for compatibility and final borrow site layout and design. The cost of the study is \$391,444.

Recommendation:

Town staff is seeking Commission approval of the scope of work as presented by Gahagan & Bryant, under their existing continuing services contract, for a lump sum cost of \$391,444.00.

Gahagan & Bryant Associates, Inc.
3802 W. Bay to Bay Blvd., Suite B-22
Tampa, Florida 33629
(813) 831-4408 Fax (813) 831-4216
info@gba-inc.com



July 10, 2026

Mr. John Duchock, PE
Beach District Manager
Town of Jupiter Island
2 Bridge Road
Hobe Sound, FL 33455

**RE: Scope of Services and Fee Proposal
In Support of the Jupiter Island Beach Restoration Program
Vibrocoring Sampling & Sediment Testing and Analysis Supporting Development of
Borrow Site B Southern Expansion Area**

Dear John,

Below please find the requested scope of work and fee schedule for the continuation of the sand search investigation of the southern portion of the Borrow Site B Investigation Area (Figure 1), to provide for securing and fully developing the available sand resources offshore of the Town. This portion of the work will include the mobilization of an 80' research vessel to provide for the collection of approximately 40 vibrocores, for the purpose of identifying and characterizing the subsurface sediments within the delineated borrow area. The recently collected geophysical and cultural resource survey data will be utilized to provide direction as to areas of avoidance such as hardbottom communities, objects, vessels, or sites of potential prehistoric or historic significance. The fieldwork would be performed during a August-September 2026 timeframe, when offshore sea conditions are still typically favorable. The estimated proposed cost for the performance of this vibrocoring investigation and preparation of reports and deliverables is detailed below.

Task 1) Mobilization & Vibrocoring Field Operations

The vibrocoring investigation will collect a limited number of vibrocores within the delineated potential borrow expansion area as a result of the recent geophysical survey. The field operations are envisioned to be performed during August\September 2026. These cores will be used to verify sub-bottom data and potential layer thickness, as well as textural characteristics of the sediments. Data from the preliminary field investigations will be used to develop a detailed field investigation plan of the most promising regions of the investigation area. Potential areas with insufficient layer thickness or extents, and incompatible material will be eliminated from the sand search.

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Approximately 40 vibracores will be collected from a large offshore research vessel, at spacing that adheres with permitting agencies requirements for offshore borrow areas (i.e. 1000' grid). 20-foot vibracores will be collected on a pre-determined grid pattern, split, logged and photographed. The locations of the vibracore samples will be collected utilizing a real-time kinematic global positioning system (RTK-GPS). The coring operations will be supervised by trained and experienced geotechnical technicians who will also document accurate locations of the individual vibracores during the progress of the field operations. The field vibracoring effort is estimated to require a 7 day duration, consisting of 4 working days to complete the collection of 40 vibracores, with an additional 3 days of weather related downtime.

The vibracoring operations will be subcontracted to Athena Technologies, Inc. Athena is an experienced vibracore contractor with project experience along the entire eastern seaboard of the US. The vibracores are to be advanced to a depth of 20 feet below the seafloor. Water depths are expected to range from 40 feet to 60 feet.

Athena's 80-foot research vessel, *MV Thunderforce*, will be utilized as the vibracore sampling platform for this effort. Thunderforce is equipped with all required U.S. Coast Guard (USCG) safety gear and will be operated by a USCG certified 100-Ton Master Captain. The captain will be accompanied by four to five additional crew members. Athena will utilize a Trimble Differential Global Positioning System (sub-meter accurate) interfaced with HYPACK for horizontal positioning. A Trimble R12i Global Satellite Navigation System (GNSS) interfaced with the Trimble RTX correction network (accurate to +/-5cm) will be utilized to determine water level and sediment surface elevations.

During vibracore operations, *MV Thunderforce* will be maneuvered to the desired sample location using coordinates and guidance provided by GBA. An Alpine-style pneumatic vibracore system will then be utilized to collect the vibracore sample. It consists of an air-driven vibratory hammer assembly; an H-beam which acts as the vertical guide for the vibrator; a set of four steel support pads and legs which hold the system upright on the sea floor; a steel sample barrel; a cutting edge; a core catcher; a clear, 3.625-inch, polycarbonate core liner; and a penetrometer which records time and depth of penetration of the sample barrel into the sea floor. An air hose array provides compressed air from the compressor on deck to drive the vibracore. The sampler will be lowered to the sediment surface using a crane attached to an A-Frame on the deck of *Thunderforce*, and the vibracore machine is then turned on and the sample barrel is allowed to penetrate until it reaches the required target depth or encounters refusal. The sampler will then be retrieved via the crane and A-frame. Once the sampler is on deck, the liner will be removed, cut into five-foot lengths, capped, labelled, and measured. Athena will collect penetration data at each sample location to verify vibracore refusal, if encountered.

If vibracore recovery is less than 80%, or if refusal is met and the material at the base of the core is not limestone, carbonate-cemented clastic sediments, or indurated silt/clay, then Athena will make one additional vibracore attempt, or one jetting attempt, to reach the required penetration depth and/or increase recovery.

Task 2) Core Logging and Sediment Analysis

Upon completion of coring, the vibracores will be transported to Athena's core processing facility in McClellanville, South Carolina. The cores will be opened, scraped, allowed to partially dry, and then will be photographed when the sediment is "moist" per Florida Department of Environmental Protection (FDEP) sand-search guidance. Samples from the vibracores will be collected from each distinct lithological layer for further testing and analysis. Following sampling and photographing, the cores will be wrapped in plastic wrap, inserted into 6-mil plastic tubing, and then transported to GBA in Wilmington, NC, to allow for subsequent logging, sub-sampling, and archiving. The individual samples will be transferred to our USACE certified geotechnical laboratory for analysis and classification. The primary testing will consist of mechanical sieve grain size analysis, Munsell Color, and carbonate content analysis. Geotechnical analyses will follow American Society for Testing and Materials (ASTM) standards and guidelines. Deliverables to be provided include:

- Vibracore logs to include approximate easting, northing, and top of hole elevation
- Vibracore Photos
- Plan view drawings of the vibracore locations
- Laboratory Results- Grain size, Munsell Color, and carbonate content analysis
- Characterization of the materials

Task 3) Compatibility Analysis & Modeling of Potential Shoreline Impacts

Beach Compatibility Analysis: To determine compatibility between the borrow site and the beach nourishment area, native sand samples must be analyzed as well. Ideally, the native sample will be completely natural, and void of any artificially placed sediment from prior beach renourishment projects. Typically, sediment samples are obtained along differing elevations across the entire active beach profile, from the dune area out to depth of closure. Prior native beach grain size analysis will be reviewed and analyzed, and composite statistics will be developed for comparison to potential borrow area composite statistics.

The most important statistic to match between the native sand sample and the borrow material is the overall grain size and range of size throughout the borrow site. The native sand found on the beach will indicate the type of material that will allow the beach to gain equilibrium. Applying a finer grain sediment to the beach will result in increased erosion and a flatter beach profile, as material is removed from the beach face and transported to the nearshore regime. A coarser material will reduce erosion, as it requires more wave energy to move larger, heavier grains. However, if the sediment is too coarse, a steeper beach profile will occur. Ideally, an identical grain size distribution would be used for nourishment of all beaches, however, the sorting that occurs while sediment is transported greatly limits the probability of finding a viable borrow site with these exact characteristics. Generally, using a slightly coarser material for replenishment is the best option as the larger grain size increases the longevity of the project while diminishing the amount of overfill material needed on the beach. Additional characteristics such as Munsell color and carbonate content will be used in the compatibility analysis. Native beach material sample statistics will be

compared with borrow area statistics to ensure they meet compatibility requirements set forth by permitting agencies.

Modeling of Potential Shoreline Impacts Assessment: Upon determination of potential borrow sites, the mapping of hardbottom and environmental resources will provide design guidance in the appropriate borrow site limits, to avoid impacts to the sensitive marine resources. Additionally, an evaluation of potential changes in nearshore wave climate will be performed through the use of numerical models, to determine if excavation of the borrow areas could result in undesirable impacts to adjacent beaches. The modeling will provide insight to the maximum depth of excavation to avoid the development of potential shoreline erosional impacts.

Task 4) Site Design and Summary Report

Utilizing the collected data from the geophysical surveys and vibracore sampling and analysis, the limits of potential sand borrow areas within the investigation area will be determined. Final borrow area delineation will be determined based upon available volume, material characteristics, magnetic anomalies and proximity to any adjacent hardbottom areas. Additionally, a legal description of the final delineated borrow site shall be prepared by a Florida PLS and supporting easement mapping and documents shall be created for submission to FDEP. The depth of excavation in the subject borrow regions will be determined from the vibracore logs and sediment analysis data, as well as, the results of the shoreline impact modeling.

A summary report of Cultural Resource Survey, the vibracore collection and sediment analysis, the native beach compatibility analysis, and the shoreline modeling will be prepared. These reports and data will be combined into a single database in a format usable by the Town and the potential borrow area will be defined.

The final report may include, but is not limited to, the following information:

- Description of the work performed
- Description of the geology/ geomorphology of the potential borrow areas
- Bathymetric maps
- Isopach maps of sediment thickness, and/or the elevation of the bottom of beach compatible material
- Plan view map of vibracore locations and survey tracklines depicting both the investigation as a whole (all vibracore locations and seismic survey tracklines) and each targeted sedimentary feature/ borrow area
- Cross-sections of the borrow areas
- Vibracore logs
- Tabular summary of gradation analyses for the borrow area sediments
- Sediment compatibility analysis
- Wave modeling analysis of potential shoreline impacts
- Results of the Cultural Resource Survey
- Borrow area available sand volumes
- Recommendations and conclusions for future work and/or use of borrow area identified
- Discussion of borrow area design with respect to dredging efficiency.



The estimated cost for the performance of the vibracore sampling, sediment analysis, beach compatibility analysis, modeling of shoreline impacts, site design, and preparation of a summary report is given below:

Task 1): Mobilization, Vibracoring Field Operations.....	\$250,051
Task 2): Vibracore Logging & Sediment Testing and Analysis.....	\$54,526
Task 3): Compatibility Analysis & Modeling of Potential Shoreline Impacts.....	\$46,501
Task 4): Site Design & Summary Reports	\$40,366
Total Vibracoring & Sediment Analysis Cost: Lump Sum.....	\$391,444

The attached spreadsheet provides a breakdown of the estimated requisite labor, equipment, and expenses. We trust that this proposal meets with your approval. Should you have any questions or require any additional information regarding this matter, please do not hesitate to call.

Best regards,

Clay M. Bryant, P.E.

Town of Jupiter Island Beach Restoration Program

2026 Geophysical Surveys of Borrow Site B Southern Expansion Area
Gahagan & Bryant Associates, Inc. July 2026

Vibracore Field Sample Collection, Sediment Analysis, Site Design, and Summary Report

LABOR:

Sr. Associate
Sr. Coastal Engineer
Sr. Engineer/ Geophysical Technician
Engineer II- Geotech
Sr. Technician
Technician II
CADD Operator

Vibracore Field Sample Collection	Labor Manhours				Site Design & Summary Report
	Core Logging & Sediment Analysis	Sediment Analysis: Sieve, Munsell, Carbonate %	Compatibility Analysis & Modeling Shoreline Impacts		
0	0	2	36	40	48
0	0	6	88	48	0
100	48	0	40	0	0
0	16	160	40	80	0
100	0	0	0	0	0
0	0	0	0	16	0
0	0	16	30	48	0

Unit	Unit Cost	Total
78 Manhours	\$ 266.00	\$20,748.00
142 Manhours	\$ 215.00	\$30,530.00
188 Manhours	\$ 188.00	\$35,344.00
296 Manhours	\$ 141.00	\$41,736.00
100 Manhours	\$ 145.00	\$14,500.00
16 Manhours	\$ 109.00	\$1,744.00
94 Manhours	\$ 109.00	\$10,246.00
Total Labor:		\$154,848.00

EQUIPMENT:

Navigation Computer w/Quinsy software
Work Station (w/Software Including one: CAD, ARC, ETC.)
Starlink Internet
Trimble RTK GPS System
4x4 Truck
Survey Van, SUV

Equipment Usage Days			
7	0	0	0
7	0	5	15
7	0	0	0
7	0	0	0
10	0	0	0
0	5	0	0

Unit	Unit Cost	Total
7.0 Day	\$ 265.00	\$1,855.00
37.0 Day	\$ 105.00	\$3,885.00
7.0 Day	\$ 50.00	\$350.00
7.0 Day	\$ 200.00	\$1,400.00
10.0 Day	\$ 105.00	\$1,050.00
5.0 Day	\$ 75.00	\$375.00
Total Equipment:		\$8,915.00

80' VIBRACORE VESSEL & CREW SUBCONTRACT:

Mobilization/Demobilization
20-Foot Vibracore
Standby Weather Day
Vibracore Logging
Trimble RTK/RTX GPS System
Core Freight to GBA Wilmington, NC Office
Survey Van, SUV

Equipment Usage Days			
1	0	0	0
40	0	0	0
3	0	0	0
0	40	0	0
1	0	0	0
0	1	0	0
0	0	0	0

Unit	Unit Cost	Total
1.0 Day	\$ 75,825.00	\$75,825.00
40.0 Day	\$ 2,975.00	\$119,000.00
3.0 Day	\$ 4,150.00	\$12,450.00
40.0 Day	\$ 300.00	\$12,000.00
1.0 Day	\$ 1,500.00	\$1,500.00
1.0 Day	\$ 2,500.00	\$2,500.00
0.0 Day	\$ 75.00	\$0.00
Total Equipment:		\$223,275.00

EXPENSES:

Crew Per Diem
Lodging
Supplies, misc.
Vessel fuel & supplies & dockage
Fuel

Expenses Days\Cost			
9	5	0	0
16	4	0	0
\$ -	\$ 100.00	\$ 300.00	\$ -
\$ 200.00	\$ -	\$ -	\$ 100.00
\$ 340.00	\$ 75.00	\$ -	\$ -

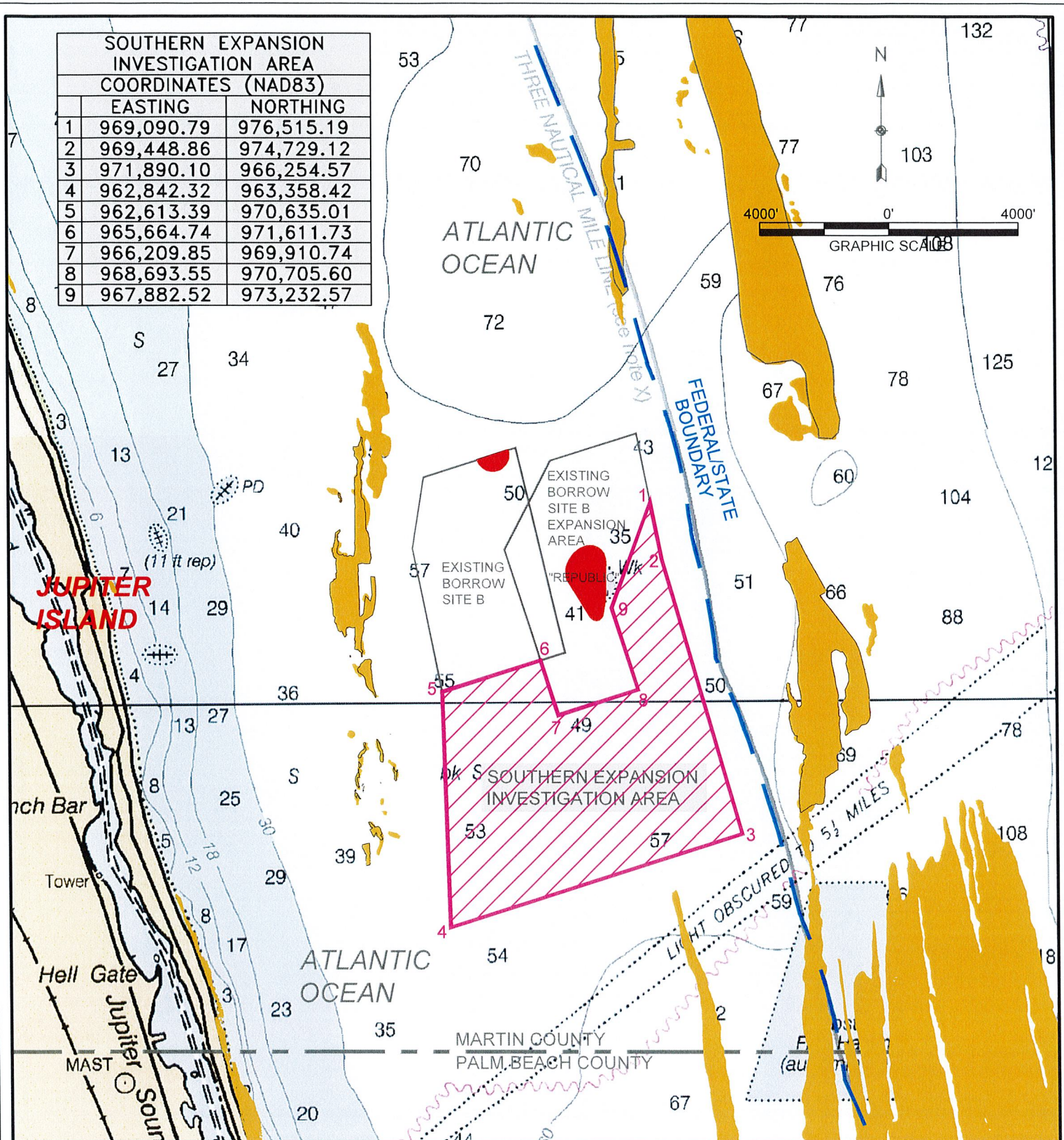
Total Expenses:

\$6,581.00

Weather Downtime Equipment Credit: (\$2,175.00)

Total Cost of Survey Event: \$391,444.00

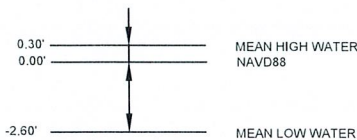
SOUTHERN EXPANSION INVESTIGATION AREA		
COORDINATES (NAD83)		
	EASTING	NORTHING
1	969,090.79	976,515.19
2	969,448.86	974,729.12
3	971,890.10	966,254.57
4	962,842.32	963,358.42
5	962,613.39	970,635.01
6	965,664.74	971,611.73
7	966,209.85	969,910.74
8	968,693.55	970,705.60
9	967,882.52	973,232.57



- GENERAL NOTES:
- ALL ELEVATIONS ARE IN FEET AND REFER TO MEAN LOWER LOW WATER (MLLW)
 - COORDINATES ARE BASED ON THE STATE PLANE COORDINATE SYSTEM FOR THE EAST ZONE OF FLORIDA, NAD83.
 - DATE OF NOAA NAUTICAL CHART: 2024.

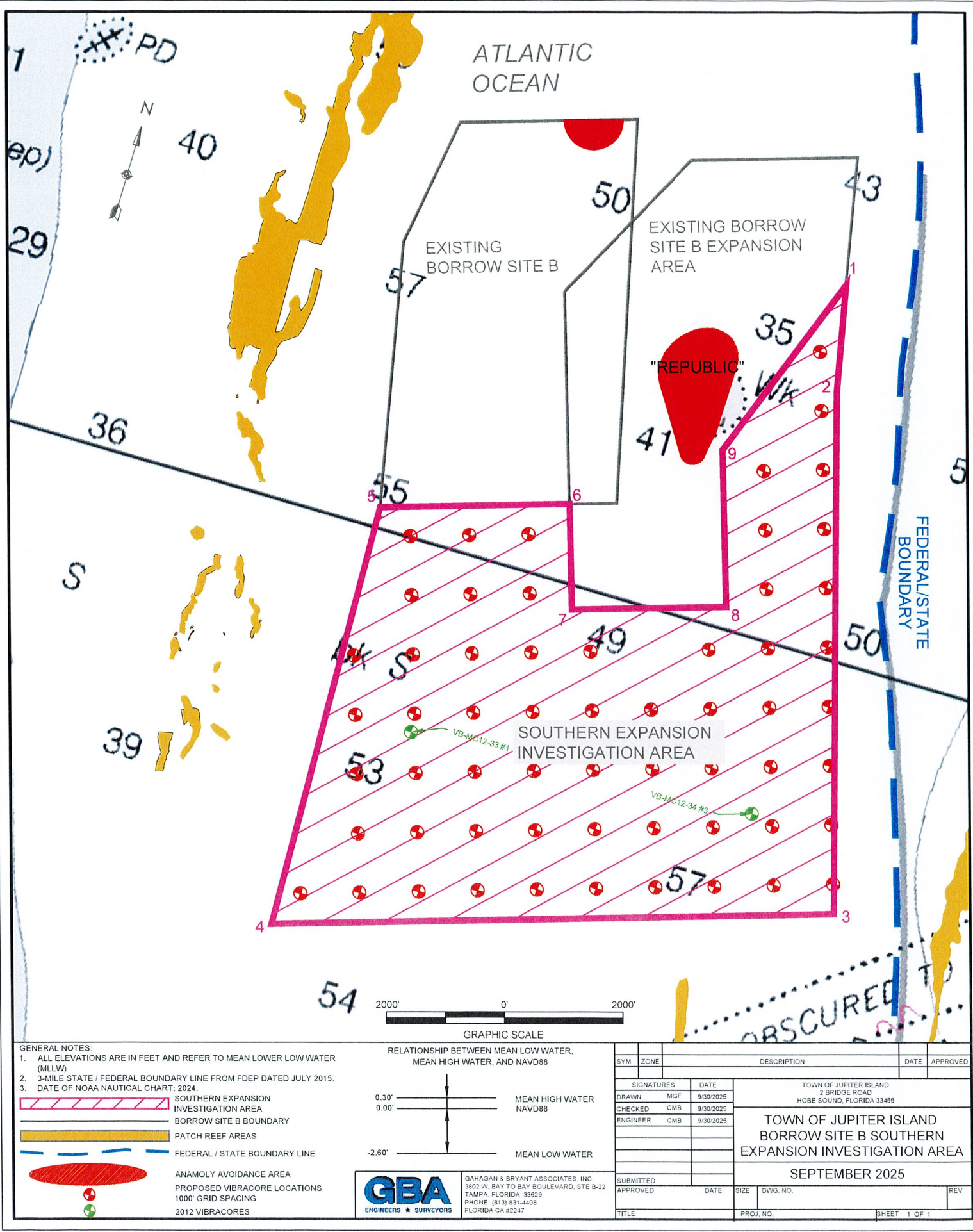
- SOUTHERN EXPANSION INVESTIGATION AREA
- COUNTY LINE
- BORROW SITE B BOUNDARY
- PATCH REEF AREAS
- FEDERAL / STATE BOUNDARY LINE
- ANAMOLY AVOIDANCE AREA

RELATIONSHIP BETWEEN MEAN LOW WATER,
MEAN HIGH WATER, AND NAVD88

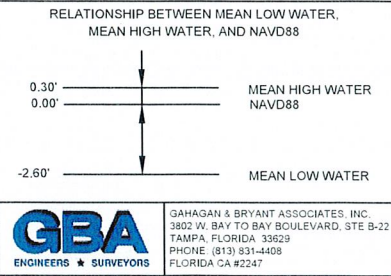


GAHAGAN & BRYANT ASSOCIATES, INC.
3802 W. BAY TO BAY BOULEVARD, STE B-22
TAMPA, FLORIDA 33629
PHONE: (813) 831-4408
FLORIDA CA #2347

SYM	ZONE	DESCRIPTION			DATE APPROVED
SIGNATURES		DATE	TOWN OF JUPITER ISLAND 2 BRIDGE ROAD HOBE SOUND, FLORIDA 33455		
DRAWN	MGF	9/26/2025			
CHECKED	CMB	9/26/2025			
ENGINEER	CMB	9/26/2025	TOWN OF JUPITER ISLAND BORROW SITE B SOUTHERN EXPANSION INVESTIGATION AREA		
SUBMITTED			SEPTEMBER 2025		
APPROVED		DATE	SIZE	DWG. NO.	
				REV	
TITLE		PROJ. NO.		SHEET 1 OF 1	



- GENERAL NOTES:
1. ALL ELEVATIONS ARE IN FEET AND REFER TO MEAN LOWER LOW WATER (MLLW)
 2. 3-MILE STATE / FEDERAL BOUNDARY LINE FROM FDEP DATED JULY 2015.
 3. DATE OF NOAA NAUTICAL CHART: 2024.
- SOUTHERN EXPANSION INVESTIGATION AREA
- BORROW SITE B BOUNDARY
- PATCH REEF AREAS
- FEDERAL / STATE BOUNDARY LINE
- ANOMOLY AVOIDANCE AREA
- PROPOSED VIBRACORE LOCATIONS
- 1000' GRID SPACING
- 2012 VIBRACORES



SYM	ZONE	DESCRIPTION			DATE	APPROVED
SIGNATURES		DATE	TOWN OF JUPITER ISLAND 2 BRIDGE ROAD HOBE SOUND, FLORIDA 33455			
DRAWN	MGF	9/30/2025	TOWN OF JUPITER ISLAND BORROW SITE B SOUTHERN EXPANSION INVESTIGATION AREA			
CHECKED	CMB	9/30/2025				
ENGINEER	CMB	9/30/2025				
SUBMITTED		SEPTEMBER 2025				
APPROVED		DATE	SIZE	DWG. NO.		REV
TITLE		PROJ. NO.			SHEET 1 OF 1	