



Florida Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

November 26, 2008

Kathy Fitzpatrick, P.E., County Engineer
Martin County
2401 Monterey Rd.
Stuart, FL 34996

REQUEST FOR ADDITIONAL INFORMATION (RAI #1)

JCP File Number: 0163447-002-JC, Martin County
Applicant Name: Martin County
Project Name: Bathtub Beach Restoration

Dear Ms. Fitzpatrick:

This letter is to acknowledge receipt of your application for a Joint Coastal Permit, pursuant to Chapter 161 and Part IV of Chapter 373, Florida Statutes; and authorization to use state-owned submerged lands, pursuant to Chapter 253 and 258, Florida Statutes.

Please be advised that your permit application is considered to be incomplete as provided for by Chapter 120.60, Florida Statutes, and Rule 62B-49, Florida Administrative Code. Receipt of information listed below is required. The items of information are numbered to correspond with the item numbers on the application form.

When replying to this Request for Additional Information (RAI), please address your response to my attention (the undersigned permit processor). Please keep your RAI response separate from Scope of Work (SOW) submittals to the Project Manager in the Bureau's Beach Erosion Control Program. Misdirecting your response or combining your response with SOW matters will delay the review of your application. Please feel free to **courtesy copy** any other individuals with your response, but only responses addressed to the permit processor will be reviewed as part of your permit application.

Please submit three (3) hard copies of your response. Also, please prepare and submit one (1) electronic copy of your response (response document text, all attachments, and drawings) and submit it on a CD in Adobe Acrobat Reader® (.pdf) format.

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12. *Has an Erosion Control Line been established pursuant to Sections 161.141 - 161.211, F.S.? If yes, please provide evidence that the ECL has been recorded and show the location of the established ECL on all appropriate drawings.*

This item is complete. The Department has determined that an erosion control line will be required for this project. If you wish for assistance in establishing the ECL, the Project Manager in the Bureau's Beach Erosion Control Program (Mr. Wagner Yajure) may be able to help guide you through the process.

13. *A copy of the Division of State Lands title determination. If you do not have title determination, department staff will request that the Division of State Lands conduct a title check.*

The Bureau has requested a title determination from DSL on your behalf, but is still awaiting the results. No action is needed from you at this time.

- 18.C. *Signature of person authorizing access to the property; name of political subdivision, municipality, or business entity; and title of person signing on its behalf.*

This signature was not provided. Please submit a signed copy of this page.

24. *In addition to the full-size drawings requested above, the information required under Paragraphs (20), (22) and (23) above shall be provided on 8 1/2-inch by 11-inch paper, certified by an engineer duly registered pursuant to Chapter 471, Florida Statutes. Each drawing shall include an accurate scale or dimensions, and all information shown on the drawing shall be clearly legible.*

Please add the R-35 profile in the design permit drawing for future submittals.

The Borrow Site drawings (D-1 to D-4) are marked "Draft." Please submit signed/sealed copies of these drawings, preferably with an index sheet.

Please identify the location of all potential staging and storage areas for the dredging and beach construction equipment, preferably called out on a recent aerial photograph.

27. *Permit applications for excavation or fill activities shall include the following detailed information concerning the material to be excavated and the existing or native material at the beach fill site:*
- e. *Representative physical samples and particle size, color and carbonate content of the existing or native material at the beach fill site.*

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The Department acknowledges that these items will be provided. Your application will remain incomplete until this item has been received and reviewed.

- f. A sediment QA/QC plan that will ensure that the sediment to be used for beach restoration or nourishment will meet the standards set forth in paragraph 62B-41.007(2)(j), F.A.C.*

The Department acknowledges that a sediment QA/QC plan that will ensure that the sediment being placed on the beach will meet the standard in paragraph 62B-41.007(2)(j), F.A.C., will be developed and forwarded to the Department. Staff encourages you to submit a draft of this plan to the Department as soon as possible so that we may provide constructive feedback with minimal delay to the project. Your application will remain incomplete until this item is received and reviewed.

Please include any shapefiles and PDF files suitable for inclusion in ROSS, including but not limited to core locations and borrow areas.

Submit all geotechnical information in electronic file format suitable for input to the Department's Reconnaissance Offshore Sand Search (ROSS) database. The data may be submitted in Excel, Access or gINT files. The MS Access Front End Loader is available on the ROSS website <http://ross.urs-tally.com/>. Visit the gINT website <http://www.gintsoftware.com/> for downloads necessary for the ROSS data structure. Submit electronic geo-referenced maps (shapefiles and metadata) of borrow area boundaries, core boring locations, and seismic track lines with time stamps and shot points, and .pdf files of seismic images with time stamp annotations.

- 31. A current Biological Opinion from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, when the Florida Wildlife Conservation Commission has determined that the proposed project will result in a take of marine turtles, which could not be authorized without an incidental take determination under federal law.*

Please note that, because this project involves placing sand on a marine turtle nesting beach, an Incidental Take and Biological Opinions will be required from the U.S. Fish & Wildlife Service even if work were to occur outside sea turtle nesting season. Please note that nesting season begins March 1 in this part of the state, so any work on or after this date would be occurring during marine turtle nesting season. National Marine Fisheries Services, both Protected Species and Essential Fish Habitat, should be contacted to determine if incidental take authorizations are required from that agency due to the potential for impacts to near shore hard bottom habitats as well as impacts due to fill placement.

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33. *Analysis of the expected effect of the proposed activity on the coastal system including but not limited to:*

a. *Analysis of the expected physical effect of the proposed activity on the existing coastal conditions and natural shore and inlet processes. The analysis should include a quantitative description of the existing coastal system, the performance objectives of the proposed activity, the design parameters and assumptions, relevant computations, validation of the results and the data used in the analysis.*

The CE section staff concurs with the Applicant's assessment that periodic beach/dune nourishment placed within the proposed construction fill template has minimum potential risk to the adjacent hardbottom. The CE section staff considers the proposed design of the construction fill template sufficient to minimize the potential for escarpment since the constructed beach profile will be adjusted to local conditions quickly due to the small fill volume. However, the proposed construction template with a high dune with a 1V:5H slope (see R-35F, R-35E, R-35C, R-35A, and R-34G) might cause a temporary formation of an escarpment, which might pose a temporary hazard for pedestrians and turtle nesting. Please address the associated concerns from the Florida Fish and Wildlife Conservation Commission (FWC) outlined in Item 35 below.

If the applicant or the applicant's consultant has any questions about the above comment, please feel free to directly contact Ms. Jenny Cheng, coastal engineer, at jenny.cheng@dep.state.fl.us or (850) 413-7845.

b. *Analysis of the compatibility of the fill material with respect to the native sediment at the placement site. The analysis should include all relevant computations, the overfill ratios, and superimposed graphs of the cumulative grain-size distribution and the frequency distribution of the fill material over the data for the existing or native sediment at the placement site. Provide computations of borrow area volume and composite fill material characteristics (mean grain size and sorting, percent carbonate content) in an electronic spreadsheet.*

A preliminary analysis consisting of the mean grain size of the native beach material and the borrow source material has been provided. In addition, please provide Munsell colors, carbonate content, percent silt and moment statistics.

Please provide a cumulative frequency plot of the grain size distribution of the dredge material and native beach composite for comparison.

d. *Analysis of how water quality and natural communities would be affected by the proposed project. Provide graphic representation (depiction) of the area of direct*

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and secondary influence of the proposed activity and delineate the natural communities within that area. All required surveys shall be representative of conditions existing at the time of submittal. Surveys of submerged aquatic vegetation (SAV) shall be conducted in the field during the growing season for a given climatic region such that they capture the full areal extent and biomass of the SAV community. Species composition and spatial distribution shall also be addressed by the survey. Estimate the affected acreage of each impacted community.

Is there hard bottom in the intertidal zone? The aerial photographs include a darker area close to the shoreline – please describe this feature.

You indicate that you do not propose a mixing zone, but then continue to suggest that a mixing zone of 150 meter radius may be required. Perhaps you meant that a variance is not proposed, but that a mixing zone of 150-meters from point of dredge or discharge is requested? Please clarify. Be advised, however, that the proposed borrow area is within the bounds of the Indian River Lagoon (Vero Beach to Ft. Pierce) Aquatic Preserve, so the dredge contractor will have to meet background water quality conditions outside any mixing zone. For a mixing zone of any size, provide a narrative description and graphic representation of the mixing zone. Identify any areas within the proposed mixing zone that contain significant submerged resources. Explain why the size of the proposed mixing zone is the minimum necessary to meet water quality standards and provide justification for that size.

35. *Describe any methods proposed to protect threatened or endangered species.*

The following additional information is required for the Florida Fish and Wildlife Conservation Commission to complete their review of this project.

- i. It appears that the shoal material is bimodal in composition, with larger shell fragments and finer silicate sand grains. Are such sediments, with very large standard deviation for phi, appropriate for the models used to estimate project performance? Also the large amount of calcium carbonate (~54%) and larger grain size could have a negative impact on marine turtle nesting. [Please address.]
- ii. Creation of an elevated beach berm can expose marine turtle hatchlings to lights that were not visible prior to the beach project. Under existing state requirements, marine turtle nests cannot be relocated due to lighting. Prior to construction, the local government should ensure that appropriate measures are in place, such as a lighting ordinance, within the project area. Please provide a copy of the existing lighting ordinance for this area, some indication of efforts by the applicant to ensure compliance with this ordinance, and a plan for surveying the beaches after construction to identify and resolve any lighting impacts.

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- iii. Please discuss the potential for escarpment formation with the proposed construction and design templates.
 - iv. The near shore reefs and hard bottom along Florida's East Coast provide significant foraging ground for marine turtles, particularly juveniles of the endangered green turtle. Please discuss monitoring for juvenile green sea turtles on any near shore hard bottom that will be impacted by the project.
39. *A fee, as set forth in Rule 62B-49.006, F.A.C. A spreadsheet is available on the Bureau's web page to aid in calculating the correct application fee. In order to calculate the fee, please provide the following: the acreage of proposed filling seaward of the MHW line; the acreage of proposed dredging; the cubic yardage of fill to be placed on the beach (above and below the MHW line); the cubic yardage of material to be dredged from an inlet and then placed either in an upland or offshore disposal site; the length of rigid coastal structures (groins, breakwaters, jetties, seawalls and revetments); and the number of inlet-related structures (new channels, sand traps and bypassing plants).*

The sum of the fees required by Chapters 62-4, 62B-41, and 18-21, Florida Administrative Code, has been calculated as **\$10,000**. The components of this fee are as follows: Rule 62-4.050(4)(h) requires \$8,000 for the dredging and filling of between 50 acres and 100 acres of sovereign submerged land and Rule 62B-41.0085(3)(b) requires \$2,000 for the 25,000 cubic yards of beach fill. Please note that Rule 62B-41.0085(6) provides for a waiver of that portion of the fees above the local government pro rata share for the fees required under Chapter 62B-41. If you wish to request this waiver, please contact Mr. Wagner Yajure, Project Manager in the Bureau's Beach Erosion Control Program, to determine your cost share eligibility and deduct the proportional amount from the \$2,000 fee listed above. For example, if the state will pay for 50% of the total (non-federal) project cost, then you may deduct (50% x \$2,000) \$1,000 from the total \$10,000 fee indicated.

Please publish the enclosed Notice of Application. Pursuant to Section 403.815, Florida Statutes and Rule 62-110.106, Florida Administrative Code, you (the applicant) are required to publish at your own expense the enclosed Notice of Application. This notice shall be published one time only within 14 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, Florida Statutes, in the county where the activity is to take place. The applicant shall provide proof of publication to the Department within seven (7) days of publication.

If the applicant fails to provide all information required to complete the application within six (6) months after a request for additional information has been sent, the staff will close the permit application file after written notice to the applicant, except that a request for an extension of time

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for a period agreeable to the Department, but not to exceed one year, shall be granted upon demonstration by the applicant that the delay in completion of the application has been caused by matters beyond the control of the applicant. Application files closed under these procedures shall be closed without prejudice and a new application, accompanied by the appropriate fee, shall be required to renew the application.

If the processing of the application is prolonged, or if a storm event is known to have altered the shoreline such that the staff determines that the topographic and bathymetric survey data is no longer adequate to complete its analysis, then an updated survey shall be required as specified in Item No. 20 above. In the event that an updated survey is required, the application shall be treated as an amended application.

If I may be of any further assistance, please contact me at the letterhead address (add Mail Station 300), by e-mail at merrie.neely@dep.state.fl.us by telephone at (850) 413-7785.

Sincerely,



Merrie Beth Neely, Ph.D.
Environmental Specialist
Bureau of Beaches and Coastal Systems

Enclosure(s): Notice of Application

cc:

David Stites, Taylor Engineering
Jeff Stukel, Sailfish Point
Mary Anne Poole, FWC, OPSC
Robbin Trindell, FWC, ISMS
Tori White, USACE, Palm Beach Gardens
Eric Shea, DEP, SE District Branch Office
Laura Herren, DEP, CAMA – IRL Aquatic Preserve
Michael Barnett, BBCS-Chief
Robert Brantly, BBCS-CE
El Kromhout, BBCS-CE

Paden Woodruff, BBCS-BECP
Wagner Yajure, BBCS-BECP
Roxane Dow, BBCS-BECP
Martin Seeling, BBCS-JCP
Vladimir Kosmynin, BBCS-JCP
Kristen Sella, BBCS-CCCL
Mark Taynton, BBCS-CCCL
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