

Responses to:**Request for Additional Information November 21, 2008****File Number: MI-493****Applicant Name: Martin County****Location: Approximately 347 feet north to 660 feet south of the Department of Environmental Protection's reference monument R-35, in Martin County.****Project Address: Bathtub Beach, MacArthur Boulevard, Stuart****Attachment A****Introduction**

Taylor Engineering has provided responses to your Request for Additional Information *in italics* following each RAI (in plain font). Please note that the DEP required a CCCL permit application for this emergency beach fill project because the County anticipated placement of more than the 1,000 cubic yard (cy) maximum for issuance of a field permit for the activity. Little of the sand placed during the efforts remains. Sand placed during the emergency originated from Stewart Mines (8, and from a Sailfish Point stockpile of sand approved for beach placement as part of JCP No. 43-297169-9, Martin County, Sailfish Point Maintenance Dredge and Fill.

This document (Attachment A) refers to the following attachments:

- Attachment B: Permit Fee Worksheet
- Attachment C: Zoning Consistency letter from Martin County
- Attachment D: Site Survey
- Attachment E: Site Drawings
- Attachment F: Placed Sand Characteristics

Comments and Responses

6. A \$500 fee as set forth in Rule 62B-33.0085, Florida Administrative Code. Please include a copy of the Permit Fee Worksheet for DEP 73-100, attached.

Response: Martin County requests a waiver of the \$500 fee, as this was an emergency project, and the County has submitted a JCP application (No 0163447) for a long-term project to protect the same area, and has paid a \$9,000 application fee. See Attachment B for the Permit Fee Worksheet.

8. Written evidence provided by the appropriate local governmental entity having jurisdiction over the activity that the proposed activity as submitted to the Bureau does not contravene local setback requirements or zoning codes.

Response – please see the Attachment C, a letter from Martin County indicating that the project does not contravene local setback requirements or zoning codes.

9. Two original copies of a signed and sealed survey of the subject property. The information depicted on the drawing shall be from a field survey conducted not more than six months prior to the date of the application. The survey shall comply with the requirements given in Rule 62B-33.0081, F.A.C., and shall include the following information:

(10) The horizontal locations of the contour lines corresponding to elevation 0.00, the approximate contour of the mean high water, and the contour of the seasonal high water.

•. **The survey provided does not appear to have a field date and is not signed and sealed. It needs to reflect elevations corresponding to the 0.00 and seasonal high water line contours.**

Response: Please find in Attachment D two copies of the survey revised as requested.

Two copies of a dimensioned site plan. The drawings shall be signed and sealed by an architect, engineer, landscape architect, or professional surveyor and mapper (as appropriate) licensed in the state of Florida. The site plan shall include:

E. The horizontal location of the erosion control line (if one exists), any contour lines corresponding to elevation 0.00, the approximate contour of mean high water and the seasonal high water, and the horizontal location of the seaward line of vegetation and outlines of existing natural vegetation.

F. The horizontal location of the CCCL or the 50-foot setback (if no CCCL is established for the county in which the property is located) for the full width of the subject property, including the location and full stamping of the two nearest Department or published second order or higher horizontal control points.

Response – please find in Attachment E site drawings revised as requested. Note that Taylor Engineering, who produced the site plan, obtained the CCCL line information from the FDEP website

Two copies of a dimensioned grading plan. The drawings shall be signed and sealed by an architect, engineer, landscape architect, or professional surveyor and mapper (as appropriate) licensed in the State of Florida. The grading plan shall include:

B. For any proposed excavation or fill:

(3) Soil and geotechnical data for beach compatible imported or excavated material proposed for placement on the beach seaward of a frontal dune or on the sandy beach. [See Other Information requested below.]

21. .Other Information:

As required, the applicant shall submit two copies of detailed final construction plans and specifications for all proposed structures or excavation including all planned appurtenant structures, permanent exterior lighting, and utilities. These documents shall be signed and sealed by an architect, engineer, landscape architect, or professional surveyor and mapper (as appropriate) licensed in the State of Florida.

Response The project comprised emergency fill activities to protect essential public infrastructure at Bathub Beach County Park and the adjacent MacArthur Boulevard. The emergency project included no planned structures, permanent exterior lighting, or utilities

Please provide the following geotechnical information for both the excavation and native beach sand material so that a sufficient comparison of the native and placement material can be made:

A. Provide either mine assays or core boring logs from the mine source or excavation site.

• Core borings shall be taken from at least two representative points (with a maximum 1,000 foot spacing) throughout the area to be excavated. Then one sample shall then be taken from each level of soil strata within each core boring. • Core boring logs are to extend at least two feet

below the proposed bottom elevation/excavation depth. Report the depth of each visible horizon relative to NAVD and classify the material in each stratum according to grain size.

Beach samples for comparison are to be taken on the berm at 6" to 12" below the surface, with an approximate 500 foot spacing.

- Core boring and/or sampling locations for excavation sites seaward of the control line and the beach berm collection site shall be depicted on a survey drawing or scaled and dimensioned site plan.

Response: The County conducted the project in response to rapid and extreme erosion at Bathtub Beach County Park. The County could not collect beach sand samples for the unanticipated emergency. Please see Attachment F for sand grain size information

B. Provide sediment grain size analyses sieve data sheets.

- Submit one analysis for each sample and each composite.
- Produce gradation curves from sieve analysis of each stratum in the core. Determine grain size distribution down to the standard unit 230 sieve size. If the core log reveals only one stratum for the material to be excavated, then only one curve is needed per sample.
- The sieve stack should use screens at half-phi intervals between (and including) Sieve No.4 and No. 230, in addition to a $\frac{1}{8}$ -inch screen.
- Provide the following in tabular form: 1) the sieve number, 2) the sieve sizes (diameter in phi units and in millimeters), and 3) the weights retained on the sieve (weight retained, weight percent retained, cumulative weight retained, and cumulative percent weight retained). All weights and percentages should be recorded to the nearest 0.01 gm.

C. Provide a summary table of the samples, including the sample number, mean, median (d50), sorting (standard deviation), percent fines (passing #230 sieve), percent carbonate content, and Munsell color. Statistics should be calculated using the moment method.

D. Provide frequency and cumulative frequency plots of each sample.

E. If composite statistics are calculated, provide the spreadsheet as well as a cumulative frequency curve of the composite.

Response: Please find information concerning sand quality in Attachment F, Sand Quality Evaluation, Bathtub Beach CCCL Permit Application MI-493 and related documents

F. To certify that all sand delivered and placed on the beach will meet the rule requirements, submit for approval two copies of a Beach Quality Sediment Quality Assurance/Quality Control (QA/QC) Plan.

Response: The County conducted the project in response to rapid and extreme erosion at Bathtub Beach County Park. The County did not have a QA/QC plan in place for the project site as they have not previously permitted a fill project in that location.

Placement of fill material seaward of the seasonal high water line may require additional information for permit processing under Environmental Resource Permit rules. Please revise the project accordingly or provide an exemption of project activities from environmental resource permitting or other demonstration that fill materials will not enter state waters or affect aquatic resources.

Response: This emergency project placed sand to protect against ongoing extreme erosion at Bathtub Beach, which occurred landward of the mean high water location prior to erosive event. Please also note that the County has applied for a Joint Coastal Permit (JCP application No 0163447) for a more extensive project to provide long-term protection of essential infrastructure at this location.