



Florida Department of Environmental Protection

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3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

CONSOLIDATED JOINT COASTAL PERMIT AND SOVEREIGN SUBMERGED LANDS AUTHORIZATION

PERMITTEE:

~~Pinellas County Board of County
Commissioners
c/o Mr. Douglass Mann
Coastal Planning & Engineering, Inc.
2481 NW Boca Raton Blvd.
Boca Raton, FL 33431
U.S. Army Corps of Engineers
c/o Eric P. Summa
701 San Marco Blvd
Jacksonville, FL 32207~~

PERMIT INFORMATION:

Permit Number: 0221569-008-JM

Project Name: Treasure Island/Long Key Nourishment

County: Pinellas

Issuance Date: March 29, 2010

Expiration Date of Construction Phase: May 17, 2014

REGULATORY AUTHORIZATION:

This major modification is issued under the authority of Chapter 161 and Part IV of Chapter 373, Florida Statutes (F.S.), and Title 62, Florida Administrative Code (F.A.C.). Pursuant to Operating Agreements executed between the Department of Environmental Protection (Department) and the water management districts, as referenced in Chapter 62-113, F.A.C., the Department is responsible for reviewing and taking final agency action on this activity. This major modification, hereafter referred to as Permit No. 0221569-008-JM, **supercedes** Permit No. 0221569-001-JC.

The activity description has been revised as indicated below (~~strikethroughs~~ are deletions, underlines are additions):

ACTIVITY DESCRIPTION:

The project is for the following activities:

- (1) to place between 337,000 and 417,000 cubic yards of dredged material along three beach fill segments on Treasure Island and Long Key (Upham Beach) located between FDEP reference monuments R-126C and 200 feet south of R-128; R-136 to 700 feet south of R-140, and between R-144 and R-148. For the August 2004 beach nourishment event, ~~m~~Most of the proposed fill material will be dredged from

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the federal navigation channel at Pass-a-Grille, located south of Long Key. Some additional material may be dredged one time only from a borrow area located adjacent to the federal navigation channel, seaward of Pass-a-Grille Pass. The 2006 nourishment event will utilize the Egmont Channel Borrow area, which was utilized in the Sand Key Project (Permit No. 52-292320-9), and the approved pipeline corridors depicted in the permit drawings. The 2010 nourishment event will utilize material dredged from Blind Pass to fill the Long Key (Upham Beach) segment between R-144 and R-148. If the Blind Pass dredging produces less than 200,000 cubic yards of material, the beach will not be completely filled to the full planned template volume.

- (2) to modify the south jetty at Blind Pass located at FDEP reference monument R-144, by placing additional armor stone to close the existing 40-foot gap between it and the currently detached breakwater; and
- (3) to construct and maintain five temporary sand-filled geotextile T-head groins to be located in the Upham Beach area between FDEP reference monuments R-144.5 and R-146.

The activity location has been revised as indicated below (~~striketroughs~~ are deletions, underlines are additions):

ACTIVITY LOCATION:

The nourishment activity is located along the Upham Beach shoreline on the north end of Long Key in St. Petersburg, and the north and central segments of Treasure Island (Sunshine Beach and Sunset Beach), Pinellas County, Sections 1, 15, 25, 26, and 36, Townships 32S and 31S, Range 15E, Gulf of Mexico. The borrow area for the 2010 nourishment event is located at Blind Pass, Pinellas County, Section 36, 1 and 6, Township 31 and 32 S, Range 15 and 16E. Both water bodies are designated as Class III Waters, Pinellas County Aquatic Preserve, Outstanding Florida Waters.

PROPRIETARY AUTHORIZATION:

This activity also requires a proprietary authorization, as the activity is located on sovereign submerged lands held in trust by the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), pursuant to Article X, Section 11 of the Florida Constitution, and Sections 253.002 and 253.77, F.S. The activity is not exempt from the need to obtain a proprietary authorization. The Board of Trustees delegated the Department the responsibility to review and take final action on this request for proprietary authorization in accordance with Section 18-21.0051, F.A.C., and the Operating Agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C. In addition to the above, this proprietary authorization has been reviewed in accordance with Chapter 253 and

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Chapter 258, F.S., Chapter 18-20, Chapter 18-21 and Section 62-343.075, F.A.C., and the policies of the Board of Trustees.

As staff to the Board of Trustees, the Department has reviewed the project described above, and has determined that the placement of sand on the beach and the one-time use of each borrow area qualifies for a Letter of Consent to use sovereign, submerged lands, as long as the work performed is located within the boundaries as described herein and is consistent with the terms and conditions herein. Therefore, consent is hereby granted to Pinellas County, the project's local sponsor, pursuant to Chapter 253.77, F.S., to perform the activity on the specified sovereign submerged lands.

COASTAL ZONE MANAGEMENT:

This permit constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act. This permit also constitutes certification of compliance with state water quality standards outside of the expanded mixing zones pursuant to Section 401 of the Clean Water Act, 33 U.S.C. 1341.

LOCAL SPONSOR AGREEMENT:

The Department has entered into a contractual agreement with the local project sponsor, Pinellas County, under which Pinellas County will be responsible for conducting post construction monitoring, and beach maintenance activities for the protection of nesting marine turtles, their hatchlings and their habitat. The agreement is enforceable against Pinellas County and is independent of this permit.

AGENCY ACTION:

The above named Permittee is hereby authorized to construct the work outlined in the activity description and activity location of this permit and shown on the approved permit drawings, plans and other documents attached hereto. This agency action is based on the information submitted to the Department as part of the permit application, and adherence with the final details of that proposal shall be a requirement of the permit. **This permit and authorization to use sovereign submerged lands are subject to the General Conditions and Specific Conditions, which are a binding part of this permit and authorization.** Both the Permittee and their Contractor are responsible for reading and understanding this permit (including the permit conditions and the approved permit drawings) prior to commencing the authorized activities, and for ensuring that the work is conducted in conformance with all the terms, conditions and drawings.

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The General Conditions have been revised as indicated below (strikethroughs are deletions, underlines are additions):

GENERAL CONDITIONS:

1. ~~_____ All activities authorized by this permit shall be implemented as set forth in the plans and specification approved as a part of this permit, and all conditions and requirements of this permit. The permittee shall notify the Department in writing of any anticipated deviation from the permit prior to implementation so that the Department can determine whether a modification of the permit is required pursuant to section 62B-49.008, Florida Administrative Code.~~

2. ~~_____ If, for any reason, the permittee does not comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Bureau of Beaches and Coastal Systems and the appropriate District office of the Department with a written report containing the following information: a description of and cause of noncompliance; and the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.~~

3. ~~_____ This permit does not eliminate the necessity to obtain any other applicable licenses or permits which may be required by federal, state, local, special district laws and regulations. This permit is not a waiver or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit.~~

4. ~~_____ This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of sovereignty land of Florida seaward of the mean high water line, or, if established, the erosion control line, unless herein provided and the necessary title, lease, easement, or other form of consent authorizing the proposed use has been obtained from the State. The permittee is responsible for obtaining any necessary authorizations from the Board of Trustees of the Internal Improvement Trust Fund prior to commencing activity on sovereign lands or other state-owned lands.~~

5. ~~_____ Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.~~

6. ~~_____ This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee. The issuance of this permit does not convey any vested rights or any exclusive privileges.~~

7. ~~_____ This permit or a copy thereof, complete with all conditions, attachments, plans and specifications, modifications, and time extensions shall be kept at the work site of the permitted~~

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~~activity. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.~~

~~8. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel with proper identification and at reasonable times, access to the premises where the permitted activity is located or conducted for the purpose of ascertaining compliance with the terms of the permit and with the rules of the Department and to have access to and copy any records that must be kept under conditions of the permit; to inspect the facility, equipment, practices, or operations regulated or required under this permit; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.~~

~~9. At least forty eight (48) hours prior to commencement of activity authorized by this permit, the permittee shall submit to the Bureau of Beaches and Coastal Systems and the appropriate District office of the Department a written notice of commencement of construction indicating the actual start date and the expected completion date and an affirmative statement that the permittee and the contractor, if one is to be used, have read the general and specific conditions of the permit and understand them.~~

~~10. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the State Historic Preservation Officer and the Bureau of Beaches and Coastal Systems.~~

~~11. Within 30 days after completion of construction or completion of a subsequent maintenance event authorized by this permit, the permittee shall submit to the Bureau of Beaches and Coastal Systems and the appropriate District office of the Department a written statement of completion and certification by a registered professional engineer. This certification shall state that all locations and elevations specified by the permit have been verified; the activities authorized by the permit have been performed in compliance with the plans and specifications approved as a part of the permit, and all conditions of the permit; or shall describe any deviations from the plans and specification, and all conditions of the permit. When the completed activity differs substantially from the permitted plans, any substantial deviations shall be noted and explained on two copies of as built drawings submitted to the Department.~~

1. This permit, including its general and specific conditions, must be construed in light of the February 28, 2006 Interagency Coordination Agreement for Civil Works Projects (ICA) between the Department and the Corps. As recognized in the ICA, the Department has the authority to include reasonable conditions in this permit. All of the conditions in this permit, both general and specific, are enforceable to the extent sovereign immunity has been waived under 33 U.S.C. §§ 1323 and 1344(t). The ICA is incorporated herein by reference.

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2. All activities approved shall be implemented as set forth in the drawings incorporated by reference and in compliance with the conditions and requirements of this document. The Corps shall notify the Department in writing of any anticipated changes in:
- a) operational plans;
 - b) project dimensions, size or location;
 - c) ability to adhere to permit conditions;
 - d) project description included in the permit;
 - e) monitoring plans.

If the Department determines that a modification to the permit is required then the Corps shall apply for and obtain the modification. Department approval of the modification shall be obtained prior to implementing the change, unless the change is determined by the Department to reduce the scope of work from that authorized under the original permit, and will not affect compliance with permit conditions or monitoring requirements.

3. If, for any reason, the Corps does not comply with any condition or limitation specified herein, the Corps shall immediately provide the Department with a written report containing the following information:
- a) a description of and cause of noncompliance;
 - b) the period of noncompliance, including dates and times;
 - c) impacts resulting or likely to result from the non-compliance;
 - d) steps being taken to correct the non-compliance; and
 - e) the steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

Compliance with the provisions of this condition shall not preclude the Department from taking any enforcement action allowed under state law with respect to any non-compliance.

4. The Corps shall obtain any applicable licenses, permits, or other authorizations which may be required by federal, state, local or special district laws and regulations. Nothing herein constitutes a waiver or approval of other Department permits or authorizations that may be required for other aspects of the total project.
5. Nothing herein conveys to the Corps or creates in the Corps any property right, any interest in real property, any title to land or water, constitutes State recognition or acknowledgment of title, or constitutes authority for the use of Florida's sovereign submerged lands seaward of the mean high-water line or an established erosion control line, unless herein provided, and the necessary title, lease, easement, or other form of consent authorizing the proposed use has been obtained from the State.
6. Any delineation of the extent of a wetland or other surface water submitted as part of the application, including plans or other supporting documentation, shall not be considered

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specifically approved unless a specific condition of this authorization or a formal determination under section 373.421(2), F.S., provides otherwise.

7. Nothing herein authorizes any entrance upon or activities on property which is not owned or controlled by the Corps or local sponsor, or conveys any vested rights or any exclusive privileges.
8. This document or a copy thereof, complete with all conditions, attachments, modifications, and time extensions shall be kept at the work site of the authorized activity. The Corps shall require the contractor to review this document prior to commencement of the authorized activity.
9. The Corps specifically agrees to allow Department personnel with proper identification, at reasonable times and in compliance with Corps specified safety standards access to the premises where the authorized activity is located or conducted for the purpose of ascertaining compliance with the terms of this document and with the rules of the Department and to have access to and copy any records that must be kept; to inspect the facility, equipment, practices, or operations regulated or required; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance. Reasonable time may depend on the nature of the concern being investigated.
10. At least forty-eight (48) hours prior to the commencement of authorized activity, the Corps shall submit to the Department a written notice of commencement of activities indicating the anticipated start date and the anticipated completion date.
11. If historic or archaeological artifacts such as, but not limited to, Indian canoes, arrow heads, pottery or physical remains, are discovered at any time on the project site, the Corps shall immediately stop all activities in the immediate area which disturb the soil and notify the Department and the State Historic Preservation Officer. In the event that unmarked human remains are encountered during permitted activities, all work shall stop in the immediate area and the proper authorities notified in accordance with Section 872.05, *Florida Statutes*.
12. Within a reasonable time after completion of construction activities authorized by this permit, the Corps shall submit to the Department a written statement of completion. This statement shall notify the Department that the work has been completed as authorized and shall include a description of the actual work completed. The Department shall be provided, if requested, a copy of any as-built drawings required of the contractor or survey performed by the Corps.

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The Specific Conditions have been revised as indicated below (~~strikethroughs~~ are deletions, underlines are additions):

SPECIFIC CONDITIONS:

1. The terms, conditions, and provisions of Easement No. 40068 shall be met. Construction of this activity shall not commence on sovereign submerged lands, title to which is held by the Board of Trustees of the Internal Improvement Trust Fund, until all proprietary documents have been executed to the satisfaction of the Department.
2. No work shall be conducted until and unless the Department issues a Final Order of Variance (File No. 0221569-002-EV) for the beach nourishment sites and the Pass-a-Grille borrow area, and File No. 0221569-009-BV for the Blind Pass borrow area from Rule 62-4.244(5)(c), F.A.C. to establish an expanded mixing zone for the project.
3. Pursuant to Chapter 161.141, prior to construction of the beach nourishment, groins, or jetty, the board of trustees must establish the line of mean high water for any area affected by this project that does not already have an Erosion Control Line (ECL). This is required to establish the boundary line between sovereignty lands of the state bordering on the Gulf of Mexico and the upland properties. No work shall commence until the Erosion Control Line has been executed to the satisfaction of the Department.
4. **Pre-Construction Submittals.** At least fourteen (14) days prior to the date of the pre-construction conference (as required below), the Permittee shall submit the final plans and specifications for this project, which must be consistent with the activity description of this permit and the approved permit drawings. No work shall be conducted under this permit until the permittee has received a written notice to proceed from the Department. At least 30 days prior to the requested date of issuance of the notice to proceed, the permittee shall submit the following for review and approval by the Department:
 - a. ~~Two copies of final, full-size Construction Plans & Specifications (including full-size bathymetry survey drawings). These documents shall include measures to detect the presence of an oil sheen during night time dredging, measures to contain any such sheen if it develops, measures to detect and avoid placement of contaminated material on the beach and an oil spill contingency plan for coordinating clean up of the oil with the appropriate authorities in the event that oil contaminated material is inadvertently placed on the beach.~~
 - b. ~~A **Monitoring and Mitigation Plan** as outlined in item 2 in the following section "Monitoring Required."~~
 - c. ~~The names and qualifications of the individuals familiar with beach construction techniques and turbidity monitoring who shall be present at the sand disposal sites at all times when fill material is discharged onto the beaches. These individuals shall~~

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~~serve as site supervisor and shall have authority to alter construction techniques or shut down the dredging or beach construction operations if turbidity exceeds 0 NTUs above natural background levels outside of the designated mixing zone. Any individual who performs this function shall be approved by the Department before beginning to serve in this capacity.~~

5. If the Permittee does not construct the five, temporary T-head groin structures at the time of initial project construction, but elects to construct the groin structures within two years of permit issuance, the permittee shall notify the Department of their intent to construct the groins at least 90 days prior to construction. Groin construction shall not commence until a separate notice to proceed is issued by the Department. The Permittee shall submit two copies of final, full-size construction plans and specifications for groin construction at least 30 days prior to the requested date of issuance for Department review and approval. **Authorization for groin construction expires two years from the date of final permit issuance.**

6. At least 7 days prior to commencement of construction activities authorized by this permit (dredging, beach fill placement, groin construction and closure of the jetty gap), the Permittee shall conduct a pre-construction conference to review the specific conditions and monitoring requirements of this permit with the Permittee's contractors, the Engineer of Record, and Department staff representatives. The Permittee shall provide a minimum 14 days advance written notification to the following offices advising of the date, time, and location of the pre-construction conference:-

DEP Bureau of Beaches & Coastal Systems	Bureau of Protected Species Management
<u>JCP Compliance Officer</u>	
Mail Station 300	Office of Environmental Services
3900 Commonwealth Boulevard	Fish & Wildlife Conservation Commission
Tallahassee, Florida 32399-3000	620 South Meridian Street
phone: (850) 414-7716 487-4471	Tallahassee, Florida 32399-1600
fax: (850) 488-5257	phone: (850) 922-4330
e-mail: JCPCompliance@dep.state.fl.us	fax: (850) 921-4369

Florida Fish & Wildlife Conservation Commission (FWC)
Imperiled Species Management Section
620 South Meridian Street
Tallahassee, Florida 32399-1600
phone: (850) 922-4330
fax: (850) 921-4369
e-mail: marineturtle@myfwc.com

DEP Southwest District Office
~~Submerged Lands & Environmental Resources~~
3804 Coconut Palm Drive
Tampa, Florida 33619

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fax: (813) 744-6090
13051 North Telecom Parkway
Temple Terrace, FL 33637
phone: (813) 632-7600
fax (813) 744-6084

7. In order to ensure that marine turtles are not adversely affected by the construction activities authorized by this permit, the Permittee shall adhere to the following conditions:

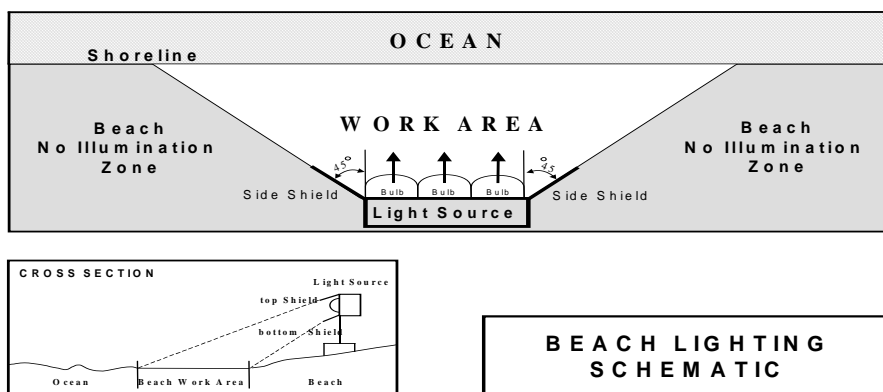
- a) All fill material placed on the beach must be analogous to that which naturally occurs within the project location or vicinity in quartz to carbonate ratio, color, median grain size, and median sorting. Specifically, such material shall be predominately of carbonate, quartz, or similar material with a grain size distribution ranging between 0.062 mm and 4.76 mm (classified as sand by either the Unified Soil Classification System or the Wentworth Classification). The material shall be similar in color and grain size distribution (sand grain frequency, mean, and median grain size, and sorting coefficient) to the material in the existing coastal system at the disposal site and shall not contain:
 - i) Greater than five percent, by weight, silt, clay or colloids passing the #230 sieve;
 - ii) Greater than five percent, by weight, fine gravel retained on the #4 sieve;
 - iii) Coarse gravel, cobbles, or material retained on the ¾ inch sieve in a percentage or size greater than found on the native beach;
 - iv) Construction debris, toxic material or other foreign matter; and
 - v) Not result in cementation of the beach.
 - vi) If rocks or other non-specified materials appear on the surface of the filled beach in excess of 50% of background in any 10,000 square foot area, then surface rock should be removed from those areas. These areas shall also be tested for subsurface rock percentage and remediated as required.
 - vii) If the natural beach exceeds any of the limiting parameters listed above, than the fill material must not exceed the naturally occurring level for that parameter.
- b) Groin construction may occur during the sea turtles nesting season (~~May 1~~April 15 through ~~October~~September 31) pursuant to the restrictions provided under Specific Condition 7(c) below:.
- c) Construction-related activities are authorized to occur on the nesting beach (seaward of existing coastal armoring structures or the dune crest) during the nesting season (~~May 1~~April 15 through ~~October~~September 31) under the following conditions:
 - i) A daily marine turtle nest survey of the nesting beach in the vicinity of the project (including areas of beach access) shall be conducted 65 days prior to nourishment or dredged channel material placement activities or by April 15,

whichever is later, starting May 1 and continue through the end of the project or through September until October 31, whichever is earlier. Only those nests that may be affected by sand placement shall be relocated. Nests requiring relocation shall be moved no later than 9 a.m. the morning following deposition to a nearby self-release beach site in a secure setting where artificial lighting will not interfere with hatchling orientation. Nest relocations shall cease when sand placement activities no longer threaten nests. Nests deposited within areas where sand placement activities have ceased or will not occur for 65 days, or where groin construction will occur, shall be marked and left in place unless other factors threaten the success of the nest. Such nests will be marked and the actual location of the clutch determined. A circle with a radius of ten (10) feet, centered at the clutch, shall be marked by stake and survey tape or string. No construction activities shall enter this circle and no adjacent construction shall be allowed which might directly or indirectly disturb the area within the staked circle.

- ii) Nests shall not be relocated for t-groin construction. Any nests left in the t-groin construction area must be clearly marked as described in (i) above.
 - iii) No construction activity may commence until completion of the marine turtle survey each day. If construction is to occur on a 24 hour basis, the contractor shall not extend the beach fill more than 500 feet (or another distance agreed upon by FWC) along the shoreline between dusk and the following day until the daily nesting survey has been completed and the beach cleared for fill advancement. Once the beach has been cleared and the necessary nest relocations have been completed, the contractor is allowed to proceed with the placement of fill during daylight hours until dusk at which time the 500-foot length limitation shall apply.
 - iv) It is the responsibility of the permittee to ensure that the project area and access sites are surveyed for marine turtle nesting activity. All nesting surveys, nest relocations screening or caging activities etc. shall be conducted only by persons with prior experience and training in these activities and who is duly authorized to conduct such activities through a valid permit issued by the Fish and Wildlife Conservation Commission (FWC), pursuant to Florida Administrative Code 68E-1.
- ~~d). — If the beach nourishment project will be conducted during the period from November 1 through November 30, daily early morning sea turtle nesting surveys must be conducted 65 days prior to project initiation and continue through September 30, and eggs must be relocated per the preceding requirements.~~

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- e)d). From ~~May~~ April 15 through November ~~30~~, all project lighting shall be limited to the immediate area of active construction only and shall be the minimal lighting necessary to comply with U.S. Coast Guard and/or OSHA requirements. Stationary lighting on the beach and all lighting on the dredge shall be minimized through reduction, shielding, lowering, and appropriate placement of lights to minimize illumination of the nesting beach and water. Shields must be affixed to the light housing and be large enough to block light from all lamps from being transmitted outside the construction area.



- f)e). From ~~May~~ April 15 through November ~~30~~ September 30, staging areas for construction equipment shall be located off the beach. Nighttime storage of construction equipment not in use shall be off the beach to minimize disturbance to sea turtle nesting and hatching activities. All construction pipes that are placed on the beach shall be located as far landward as possible without compromising the integrity of the existing or reconstructed dune system.
- g)f). Immediately after completion of the fill placement event and prior to ~~May~~ April 15 for 3 subsequent years if placed sand still remains on the beach, the beach shall be tilled by the Local Sponsor as described below. During the 3 years following each fill placement event, the permittee may measure sand compaction in the area of restoration in accordance with a protocol agreed to by the FWC, the Department, the U.S. Fish & Wildlife Service, and the applicant to determine if tilling is necessary. Sand compaction monitoring shall be performed prior to April 15. At a minimum, the protocol provided under i) and ii) below shall be followed. If required, the area shall be tilled to a depth of 24 inches. All tilling activity must be completed prior to ~~May~~ April 15. An annual summary of compaction surveys and the actions taken shall be submitted to the FWC. If the project is completed during the nesting season, tilling shall not occur in areas where nests have been left in place or relocated unless authorized by the U.S. Fish and Wildlife Service in an Incidental Take Statement.

This condition shall be evaluated annually and may be modified if necessary to address sand compaction problems identified during the previous year.

- i) Compaction sampling stations shall be located at 500-foot intervals along the project area. One station shall be at the seaward edge of the dune/bulkhead line (when material is placed in this area) and one station shall be midway between the dune line and the high water line (normal wrack line).
 - ii) At each station, the cone penetrometer shall be pushed to a depth of 6, 12, and 18 inches three times (three replicates). Material may be removed from the hole if necessary to ensure accurate readings of successive levels of sediment. The penetrometer may need to be reset between pushes, especially if sediment layering exists. Layers of highly compact material may lay over less compact layers. Replicates shall be located as close to each other as possible, without interacting with the previous hole and/or disturbed sediments. The three replicate compaction values for each depth shall be averaged to produce final values for each depth at each station. Reports shall include all 18 values for each transect line, and the final 6 averaged compaction values.
 - iii) If the average value for any depth exceeds 500 psi for any two or more adjacent stations, then that area shall be tilled prior to ~~May 1~~April 15. If values exceeding 500 psi are distributed throughout the project area but in no case do those values exist at two adjacent stations at the same depth, then consultation with the FWC shall be required to determine if tilling is required. If a few values exceeding 500 psi are present randomly within the project area, tilling shall not be required.
- ~~h)g~~. Visual surveys for escarpments along the beach fill area shall be made immediately after completion of the beach nourishment project and prior to ~~April~~March 15 for the following three years by the Local Sponsor if placed sand still remains on the beach. All scarps shall be leveled or the beach profile shall be reconfigured to minimize scarp formation. In addition, weekly surveys of the project area shall be conducted during the two nesting seasons following completion of fill placement as follows:-
- i) The number of escarpments and their location relative to DNR-DEP reference monuments shall be recorded during each weekly survey and reported relative to the length of the beach surveyed (e.g., 50% scarps). Notations on the height of these escarpments shall be included (0 to 2 feet, 2 to 4 feet, and 4 feet or higher) as well as the maximum height of all escarpments.
 - ii) Escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of 100 feet shall be leveled to the natural beach contour by ~~May 1~~April 15. Any escarpment removal shall be reported relative to R-monument.

- iii) If weekly surveys during the marine turtle nesting season document subsequent reformation of escarpments that exceed 18 inches in height for a distance of 100 feet, the FWC shall be contacted immediately to determine the appropriate action to be taken. Upon written notification, the permittee shall level escarpments in accordance with mechanical methods prescribed by the FWC.
- ~~i)h).~~ ~~A lighting survey shall be conducted from the restored berm immediately following completion of construction. A report summarizing all lights visible, using standard survey techniques for such surveys, shall be submitted to FWC within fifteen (15) days following completion of the survey documenting all compliance and enforcement action. An additional survey shall be conducted once during the early nesting season, (July) and results reported within fifteen (15) days of completion of the second survey. Copies of the weekly disorientation reports shall also be submitted each month.~~ Lighting Surveys. A survey shall be conducted of all lighting visible from the beach placement area by the local sponsor, using standard techniques for such a survey, between May 1 and May 15, and between July 15 and August 1, in the year following construction. For each light source visible, the local sponsor shall notify the property owner(s) and/or the municipality/county (in which the property(s) may be located) of the light and to specify the action(s) recommended for correcting the light within a reasonable resolution timeframe. A summary report of the surveys including documentation of property owner notification shall be submitted to the FWC Imperiled Species Management Section in Tallahassee by December 1 of each year in which surveys are conducted. After the annual report is completed, a meeting shall be set up by the local sponsor with the municipality, FWC and the U.S. Fish and Wildlife Service to discuss the survey report, as well as any documented sea turtle disorientations in or adjacent to the project area.
- ~~j)i).~~ The erosion control structures must be removed or modified if they are determined to not be effective or to be causing a significant adverse impact.
- ~~k)j).~~ The Applicant shall arrange a meeting between representatives of the contractor, the Department, the FWC, and the permitted person responsible for egg relocation at least 14 days prior to the commencement of work on this project. At least 10 days advance notice shall be provided prior to conducting this meeting. This will provide an opportunity for explanation and/or clarification of the sea turtle protection measures.
- ~~h)k).~~ Reports on all nesting activity shall be provided for the initial nesting season and for a minimum of two additional nesting seasons (conducted by the Local Sponsor). Monitoring of nesting activity in the three seasons following construction shall include daily surveys and any additional measures authorized by the FWC. Reports submitted shall include daily report sheets noting all activity, nesting success rates, hatching success of all relocated nests, hatching success of a representative sampling of nests left in place (if any), dates of construction and names of all personnel involved in nest surveys and relocation activities. Data should be reported separately for filled areas

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and nonfilled areas in accordance with the attached Table (Attachment 1). All reports should be submitted by January 15 of the following year.

- Ⓜ)l). In the event a sea turtle nest is excavated during construction activities, all work shall cease in that area immediately and the permitted person responsible for egg relocation for the project should be notified so the eggs can be moved to a suitable relocation site.
- Ⓜ)m). Upon locating a dead, injured, or sick endangered or threatened sea turtle specimen, initial notification must be made to the FWC at 1-888-404-FWCC. Care should be taken in handling sick or injured specimens to ensure effective treatment and care and in handling dead specimens to preserve biological materials in the best possible state for later analysis of cause of death. In conjunction with the care of sick or injured endangered or threatened species or preservation of biological materials from a dead animal, the finder has the responsibility to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed.
- Ⓜ)n). The following monitoring is required for beach restoration projects. Reports summarizing the nesting should be submitted to the FWC Tequesta office with a copy to the Tallahassee office by January 15 of the subsequent year. Data for nesting activity on filled and nonfilled areas should be reported separately, and should include numbers of nests lost to erosion or washed out.

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Table 1 Marine turtle monitoring for beach restoration projects

Characteristic	Parameter	Measurement	Variable
Nesting Success	False crawls - number	Visual assessment of all false crawls	Number and location of false crawls in fill areas and nonfill areas: any interaction of the turtle with obstructions, such as groins, seawalls, or scarps, should be noted.
	False crawl - type	Categorization of the stage at which nesting was abandoned	Number in each of the following categories: emergence-no digging, preliminary body pit, abandoned egg chamber
	Nests	Number	The number of marine turtle nests in filled and nonfilled areas should be noted. If possible, the location of all marine turtle nests shall be marked on map of project, and approximate distance to sea walls or scarps measured using a meter tape (optional). Any abnormal cavity morphologies should be reported as well as whether turtle touched groins, seawalls, or scarps during nest excavation
		Lost Nests	The number of nests lost to inundation, erosion or the number with lost markers that could not be found
Reproductive Success	Emergence & hatching success	Standard survey protocol	Numbers of the following: unhatched eggs, depredated nests and eggs, live pipped eggs, dead pipped eggs, live hatchlings in nest, dead hatchlings in nest, hatchlings emerged, disoriented hatchlings, depredated hatchlings

8. All filling, and repair of geotextile tubes that involves heavy equipment or excavation must be conducted outside the marine turtle nesting season (~~November-October~~ October 1 through April 15) unless the permittee receives authorization for incidental take from the U.S. Fish & Wildlife Service that specifically addresses geotextile tube repair.

9. The Permittee shall comply with the following manatee protection construction conditions:

- a. The Permittee shall instruct all personnel associated with the project of the potential presence of manatees and the need to avoid collisions with manatees. All construction personnel are responsible for observing water-related activities for the presence of manatee(s).
- b. The Permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972, The Endangered Species Act of 1973, and

the Florida Manatee Sanctuary Act.

- c. Siltation barriers shall be made of material in which manatees cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment. Barriers must not block manatee entry to or exist from essential habitat.
 - d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
 - e. If manatee(s) are seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure protection of the manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet of a manatee. Operation of any equipment closer than 50 feet to a manatee shall necessitate immediate shutdown of that equipment. Activities will not resume until the manatee(s) has departed the project area of its own volition.
 - f. Any collision with and/or injury to a manatee shall be reported immediately to the "FWC Hotline" at 1-888-404-FWCC. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-232-2580) for north Florida or Vero Beach (1-772-562-3909) in south Florida.
 - g. Temporary signs concerning manatees shall be posted prior to and during all construction/dredging activities. All signs are to be removed by the permittee upon completion of the project. A sign measuring at least 3 ft. by 4 ft. which reads *Caution: Manatee Area* will be posted in a location prominently visible to water related construction crews. A second sign should be posted if vessels are associated with the construction, and should be placed visible to the vessel operator. The second sign should be at least 8 1/2" by 11" which reads *Caution: Manatee Habitat. Idle speed is required if operating a vessel in the construction area. All equipment must be shutdown if a manatee comes within 50 feet of operation. Any collision with and/or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-FWCC. The U.S. Fish and Wildlife Service should also be contacted in Jacksonville (1-904-232-2580) for north Florida or in Vero Beach (1-772-562-3909) for south Florida.*
10. In order to minimize the potential for elevated turbidity in Outstanding Florida Waters, the Permittee shall construct and maintain a shore-parallel sand dike at the beach fill area at all times during hydraulic discharge on the beach and maintain a minimum set-back for the discharge pipe from open water.

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11. Shorebird surveys should be conducted by trained, dedicated individuals using accepted, appropriate ecological survey procedures (for example, see “*Breeding Season Population Census Techniques for Seabirds and Colonial Waterbirds Throughout North America*” at URL: <http://www.mp2-pwrc.usgs.gov/cwb/manual/>). The shorebird nesting season generally is April 1 – September 1, but some nesting may occur through September. In addition, the imperiled snowy plover (*Charadrius alexandrinus*) may nest as early as February along the west coast and panhandle of Florida.

- a. Nesting season surveys shall begin on April 1 (or February 15 in snowy plover habitat) or 45 10 days prior to construction commencement, whichever is later, and be conducted daily throughout the construction period or through ~~September~~ August if no shorebird nesting activity is observed.
- b. For projects conducted in piping plover habitat, surveys to detect piping plovers or concentrations of other wintering or migratory shorebirds should begin 14 days prior to construction commencement and be conducted once every 2 weeks.
- c. Each shorebird species observed, a rough estimate of numbers of each species, the location of the birds, and their activity (e.g., foraging, resting, nesting, courtship behavior) should be logged and reported to the FWC Regional Wildlife Diversity Conservation Biologist monthly.

12. Within the project area, the Permittee shall establish a 300 ft-wide buffer zone around any location where shorebirds have been engaged in courtship or nesting behavior, or around areas where piping plovers occur or winter migrants congregate in significant numbers. Any and all construction activities, including movement of vehicles, should be prohibited in the buffer zone.

- a. The width of the buffer zone shall be increased if birds appear agitated or disturbed by construction or other activities in adjacent areas.
- b. Site-specific buffers may be implemented upon approval by FWC as needed.
- c. Designated buffer zones must be posted with clearly marked signs around the perimeter. These markings shall be maintained until nesting is completed or terminated, the chicks fledge, or piping plovers or winter migrants depart.
- d. No construction activities or stockpiling of equipment shall be allowed within the buffer area.
- e. FWC-approved travel corridors should be designated and marked outside the buffer areas. Heavy equipment, other vehicles, or pedestrians may transit past nesting areas in these corridors. However, other activities such as stopping or turning, shall be prohibited within the designated travel corridors adjacent to the nesting site.

- f. Where such a travel corridor must be established within the project area it should avoid critical areas for shorebirds (known nesting sites, wintering grounds, FWC-designated Critical Wildlife Areas, and USFWS-designated critical piping plover habitat) as much as possible, and be marked with signs clearly delineating the travel corridor from the shorebird buffer areas described above.
- g. To the degree possible, the permittee should maintain some activity within these corridors on a daily basis, without directly disturbing any shorebirds documented on site or interfering with sea turtle nesting, especially when those corridors are established prior to commencement of construction. Passive methods to modify nesting site suitability must be approved by the FWC Wildlife Diversity Conservation Biologist for that region.

13. If shorebird nesting occurs within the project area, a bulletin board will be placed and maintained in the construction area with the location map of the construction site showing the bird nesting areas and a warning, clearly visible, stating that “BIRD NESTING AREAS ARE PROTECTED BY THE FLORIDA THREATENED AND ENDANGERED SPECIES ACT AND THE FEDERAL MIGRATORY BIRD ACT.”

14. All tilling and scarp removal should be done outside the shorebird nesting season. If necessary, contractors should contact the FWC Regional Wildlife Diversity Conservation Biologist to obtain data on known shorebird nesting areas. It is the responsibility of the contractors to avoid tilling or scarp removal in areas where nesting birds are present.

- a. A relatively even surface, with no deep ruts or furrows, shall be created during tilling. To do this, chain-linked fencing or other material shall be dragged over those areas as necessary after tilling.
- b. The slope between the mean high water line and the mean low water line must be maintained in such a manner as to approximate natural slopes.

15. If it will be necessary to extend construction pipes past a known shorebird nesting site or over-wintering area for piping plovers, then whenever possible those pipes should be placed landward of the site before birds are active in that area. No sand shall be placed seaward of a known shorebird nesting site during the shorebird nesting season.

16. A 3” rock screen shall be kept on-site for the duration of the project. Should any rock be pumped on the beach at any time during the project, the rock screen shall be immediately placed on the pipe to prevent any further rock from being placed on the beach. Any rock placed on the beach shall be handled under the guidelines set forth in the sediment QA/QC plan.

17. The Blind Pass Dredging activity shall commence at the innermost borrow area of the Blind Pass Channel out towards the Gulf of Mexico, dredging not more than required / available to nourish the Upham Beach area.

18. Sediment quality will be assessed as outlined in the Sediment QA/QC Plan (attached). Any occurrences of unacceptable material will be handled according to the protocols set forth in the Sediment QA/QC Plan. The sediment testing results shall be submitted to FDEP within 90 days following the completion of beach construction.

19. No impacts to seagrasses are authorized under this permit. Prior to the commencement of the Blind Pass dredging event, the edge of the small seagrass bed adjacent to, and northeast of, the dredge footprint shall be surveyed and marked with a series of surface buoys to clearly identify the seagrass bed limits. Following completion of dredging, the seagrass beds shall again be surveyed for any impacts, including physical damage from construction equipment or impacts from sedimentation or sloughing. Unauthorized impacts to seagrasses shall require remediation and may be subject to further compensatory mitigation requirements.

20. In the event that the local sponsor (Pinellas County) does not conduct all necessary protection and monitoring requirements outlined in the Local Sponsor Agreement, the Permittee is still responsible for those measures specified by the applicable U. S. Fish and Wildlife Service Biological Opinion and National Marine Fisheries Service Biological Opinion.

MONITORING REQUIRED:

1. Water Quality

Dredge sites:

Parameter: Turbidity - Nephelometric Turbidity Units (NTUs)

Frequency: Every four hours during dredging for use of the Pass-a-Grille Pass and Channel or Blind Pass within the Aquatic Preserve. While dredging the Egmont Channel Borrow area, samples shall be collected twice daily, at least four hours apart, beginning at least two hours after dredging begins and continuing during dredging activities.

Pass-a-Grille Pass and Channel Background station: At least 500 meters in the opposite direction of the prevailing flow, clearly outside of any visible turbidity plume. Samples shall be collected from the surface and mid-depth.

Egmont Channel Background station: At least 200 meters in the opposite direction of the prevailing flow, clearly outside of any visible turbidity plume. Samples shall be collected at mid-depth.

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Blind Pass Channel Background Station: At least 300 meters in the opposite direction of the prevailing flow, clearly outside of any visible turbidity plume. Samples shall be collected from the surface and mid-depth.

Pass-a -Grille Pass and Channel Compliance Station: No more than 1,500 meters downcurrent from the dredge, in the densest portion of any visible turbidity plume. Samples shall be collected from the surface and mid-depth.

Egmont Channel Compliance Station: Not more than 150 meters downcurrent from the dredge, in the densest portion of any visible turbidity plume. Samples shall be collected at mid-depth.

Blind Pass Channel Compliance Station: No more than 1,000 meters downcurrent from the dredge, in the densest portion of any visible turbidity plume. Samples shall be collected from the surface and mid-depth.

Beach Disposal Area:

Parameter: Turbidity - Nephelometric Turbidity Units (NTUs)

Frequency: Every six hours during pumping operations.

Background: At least 1,000 meters updrift from the discharge point, clearly outside of any visible turbidity plume. Samples shall be collected from the surface and mid-depth, at the same distance offshore as the compliance station.

Compliance: No more than 300 meters offshore and no more than 1,500 meters downdrift from the discharge point within the densest portion of any visible turbidity plume. Samples shall be collected from the surface and mid-depth.

Weekly summaries of all monitoring data shall be submitted to the Compliance Officer of the Bureau of Beaches and Coastal Systems and to the Southwest District Office within one week of analysis with documents containing the following information: (1) "Treasure Island/Long Key Nourishment Project, Permit Number 0221569-~~001-JC008-BM~~"; (2) dates and times of sampling and analysis; (3) a statement describing the methods used in collection, handling, storage and analysis of the samples; (4) a map indicating the sampling locations; and (5) a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data.

Monitoring reports shall also include the following information for each sample that is taken: a) time of day samples taken; b) depth of water body; c) depth of sample; d) antecedent weather conditions; e) tidal stage and direction of flow; and f) wind direction and velocity.

The compliance locations given above shall be considered the limits of the temporary mixing zone for turbidity allowed during construction. If monitoring reveals turbidity levels at the

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compliance sites are greater than 0 NTUs above the associated background turbidity levels, at the nourishment site, ~~or~~ Pass-a-Grille Pass and Channel, or Blind Pass, or greater than 29 NTUs above the associated background turbidity levels at the Egmont Channel Borrow Area, construction activities shall **cease immediately** and not resume until corrective measures have been taken and turbidity has returned to acceptable levels. Any such occurrence shall also be immediately reported to the JCP Compliance Officer in Tallahassee at (850) 414-7716 or JCPCompliance@dep.state.fl.us.

Monitoring reports shall be submitted to the Compliance Officer of the Bureau of Beaches and Coastal Systems in Tallahassee. Failure to submit reports in a timely manner constitutes grounds for revocation of the permit. When submitting this information to the DEP, please clearly include, at the top of each page or as a cover page to the submittal: **"This information being provided in partial fulfillment of the monitoring requirements in Permit No. 0221569-008-BM001-JC, Treasure Island/Long Key Nourishment Project."**

2. Hydrographic and Other Miscellaneous

Pursuant to 62B-41.005(16), F.A.C., physical monitoring of the project is required through acquisition of project-specific data to include, at a minimum, topographic and bathymetric surveys of the beach, offshore, and borrow sites, aerial photography, and engineering analysis. The monitoring data is necessary in order for both the project sponsor and the Department to regularly observe and assess, with quantitative measurements, the performance of the project, any adverse effects which have occurred, and the need for any adjustments, modifications, or mitigative response to the project. The scientific monitoring process also provides the project sponsor and Department information necessary to plan, design, and optimize subsequent follow-up projects, potentially reducing the need for and costs of unnecessary work, as well as potentially reducing any environmental impacts that may have occurred or be expected.

~~**Prior to the issuance of the first Notice to Proceed, the permittee shall submit a detailed Monitoring and Mitigation Plan for review and approval by the Department.**~~ Their Physical Monitoring and Mitigation Plan shall indicate the project's predicted design life, restated all design goals and expectations set forth in the permit application for the final proposed project, and restated the plan for mitigating downdrift impacts. An additional Physical Monitoring Plan was submitted in May 2009, and pertains to the placement of Blind Pass dredged material on Long Key only. This Plan is attached to this modification.

This plan shall also include a section on geotube inspections and anticipated maintenance activities and procedures. At a minimum, this section shall specify that once exposed, observations of the geotextile groins shall be conducted once per month, with additional observations after each storm event. A professional engineer shall review the t-head groins at least twice a year. The permittee may undertake minor maintenance of the structures after notifying FDEP staff. The Department and the field engineer shall be informed of major repairs

involving heavy equipment to the groins before the activity is conducted and shall provide photographic documentation before and after the major repairs.

The approved Monitoring and Mitigation Plan can be revised at any later time by written request of the permittee and with the written approval of the Department.

As guidance for obtaining Department approval, the plan shall generally contain the following items:

- a. Topographic and bathymetric profile surveys of the beach and offshore shall be conducted within 90 days prior to commencement of construction, and within 60 days following completion of construction of the project. Thereafter, monitoring surveys shall be conducted ~~twice~~ once annually, unless a t-groin becomes exposed, then twice annually, for a period of two (2) years, then annually until the next beach nourishment event. as long as a T-groin remains exposed until the next beach nourishment event. When the t-groin becomes exposed, a survey shall be conducted along the length of the groin field only. The additional surveys for the project monitoring area shall be conducted along the full lengths of Treasure Island and Long Key annually for 3 years, then biennially until the next beach nourishment event. The ~~annual~~ monitoring surveys shall be conducted during a spring or summer month and repeated as close as practicable during the same month of the year. A prior survey of the beach and offshore may be submitted for the pre-construction survey if consistent with the other requirements of this condition.

The monitoring area shall include profile surveys at each of the Department of Environmental Protection's DNR reference monuments within the bounds of the beach fill area and along at least 5,000 feet of the adjacent shoreline of the beach fill area. Additional profile lines shall be surveyed at a sufficient number of intermediate locations between each groin to accurately identify patterns of erosion and accretion around the groins and jetty. All work activities and deliverables shall be conducted in accordance with the latest update of the *BBCS Statewide Coastal Monitoring Program, Regional Data Collection and Processing Plan, Monitoring Plan Technical Specifications for Topographic and Bathymetric Surveying* Monitoring Standards for Beach Erosion Control Projects, Sections 01000 and 01100.

- b. Bathymetric surveys of the borrow areas shall be conducted within 90 days prior to commencement of construction, and within 60 days following completion of construction of the project concurrently with the beach and offshore surveys required above. Thereafter, monitoring surveys of the borrow areas shall be dependent on their location. Borrow sites located in tidal inlet shoals or in nearshore waters above the depth of closure for littoral transport processes shall be at two (2) year intervals concurrently with the beach and offshore surveys required above. These biennially monitoring surveys are not required for borrow sites located below the depth of closure for littoral transport processes. A prior design survey of the borrow areas

may be submitted for the pre-construction survey if consistent with the other requirements of this condition.

Survey grid lines across borrow areas shall be spaced to provide sufficient detail for accurate volumetric calculations but spaced not more than a maximum of 500 feet apart, and shall extend a minimum of 500 feet beyond the boundaries of the borrow site. For borrow sites located in tidal inlet shoals, bathymetric surveys of the entire shoal complex, including any attachments bars, shall be conducted unless otherwise specified by the Department based upon the size of the shoal and potential effects of the dredging on inlet processes. In all other aspects, work activities and deliverables shall be consistent with ~~conducted in accordance with the latest update of the BBCS Statewide Coastal Monitoring Program, Regional Data Collection and Processing Plan, Monitoring Plan Technical Specifications for Topographic and Bathymetric Surveying~~ BBCS Monitoring Standards for Beach Erosion Control Projects, Sections 01200.

- c. Aerial photography of the beach shall be taken concurrently with the post-construction survey and each annual monitoring survey required above, as close to the date of the beach profile surveys as possible, and during approximate low-water tide on that date. The limits of the photography shall include the surveyed monitoring area as described above. The photography shall be color vertical photos with a 30% forward overlap, taken from an elevation of 3,000 feet (1:6,000 negative scale) and centered on the local shoreline. A digital scan of the color photos at a rate of 21 microns with a pixel size of 0.4 feet shall be made and submitted in TIF format (uncompressed) on CD or DVD.
- d. The permittee shall submit an engineering report and the monitoring data to the Bureau of Beaches and Coastal Systems within 90 days following completion of the post-construction survey and each annual monitoring survey. The survey data and control information should be submitted on electronic media such as floppy disk, or CD-ROM, in ASCII format stored as specified in the *Statewide Coastal Monitoring Program, Regional Data Collection and Processing Plan, Monitoring Plan Technical Specifications*.

The report shall summarize and discuss the data, the performance of the structures and the beach fill project, and identify erosion and accretion patterns within the monitored area. In addition, the report shall include a comparative review of actual project performance, as measured and observed during the monitoring period, with all stated pre-project performance expectations, as well as identification of any measured or observed adverse impacts along with a discussion on how these impacts might possibly be attributable to the project.

Appendices should include plots of survey profiles and graphical representations of volumetric and shoreline position changes for the monitored area. Results should be

analyzed for patterns, trends, or changes between annual surveys as well as cumulatively since project construction.

- e. Monitoring reports and data shall be submitted to the Bureau of Beaches and Coastal Systems in Tallahassee. Failure to submit reports and data in a timely manner constitutes grounds for revocation of the permit and may require removal of the groins. When submitting any monitoring information to the Bureau, please include a transmittal cover letter clearly labeled with the following at the top of each page: **“This monitoring information is submitted in accordance with item [XX] of the approved Monitoring Plan for Permit No. 0221569-001-JC008-BM, Treasure Island/Long Key Nourishment Project, for the monitoring period [XX].”**

3. Maintenance Required:

It is to be expected that the geotextile structures will require maintenance. This is based on the nature of the geotextile materials, the abrasive nature of the surf zone, and the potential for impact by debris. It is also possible that these structures could be vandalized or otherwise intentionally damaged. Impacts to the geotextile structures could occur at any time of the year; therefore, this maintenance plan shall include repair options for both inside and outside of sea turtle nesting season. These are described below:-

- a. All Repairs

In the event that maintenance of the geotextile structures is required, ~~the~~Pinellas County (the County) shall notify the FDEP Bureau of Beaches and Coastal Systems, FDEP's local inspector, and FWC of the need for repairs. A brief summary of the work to be performed shall be provided. The County shall provide a statement that all previous permit conditions including required monitoring and analysis have been complied with to date. The County shall notify FDEP of the completion of all repairs.

- b. ~~November~~ October 1 – April ~~30~~14

The County shall undertake repairs utilizing any equipment necessary to make those repairs. All equipment will be brought to the beach through any of the authorized existing beach access points. At the conclusion of the repairs, the site shall be restored to pre-construction conditions, including tilling of the beach if necessary. The County shall notify the FDEP of the completion of repairs.

- c. ~~May~~April 15 to ~~October 31~~September 30

~~The County shall undertake only those repairs that can be completed using hand tools with no heavy equipment or other equipment that could impact nesting sea turtles. In the event that authorization for incidental take is granted by the U.S. Fish & Wildlife~~

~~Service to allow repairs to the geotextile structures during sea turtle nesting season, all terms and conditions in that document will be incorporated into the Maintenance Plan.~~ All terms and conditions in the U.S. Fish and Wildlife Service Biological Opinion regarding geotube repair will be incorporated into the Maintenance Plan. If a geotextile tube begins to disintegrate, the tube shall be repaired or removed and all material exfoliating from it shall be removed immediately. If maintenance of a tube is required during the period from April 15 through September 30, no work shall be initiated without prior coordination with the Fish and Wildlife Service Jacksonville Field Office. Additionally, the County shall consult with the FWC regarding appropriate equipment. No repairs shall be performed at night. The County may perform a temporary repair to allow for completion of sea turtle nesting season. Once sea turtle nesting season is complete, a permanent repair will be performed using procedures in Section b above.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION




Michael Barnett, P.E. Chief
Bureau of Beaches and Coastal Systems

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.



Deputy Clerk



Date

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Attachments: Physical Monitoring Plan (dated May 12 2009)
Sediment QA/ QC Plan (dated September 25 2009)
Local Sponsor Agreement
Drawings (10)

Prepared by: Lainie Edwards, Ph.D.