



Florida Department of Environmental Protection

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2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

CONSOLIDATED JOINT COASTAL PERMIT AND INTENT TO GRANT SOVEREIGN SUBMERGED LANDS AUTHORIZATION

CO-PERMITTEES:

City of Sarasota
c/o Alexandra DavisShaw
1565 1st Street Room 100A
Sarasota, Florida 34236

and

U.S. Army Corps of Engineers
c/o Eric Summa
701 San Marco Boulevard
Jacksonville, Florida 32207

AGENT:

Thomas Pierro, P.E., D.CE
Coastal Planning and Engineering, Inc.
2481 NW Boca Raton Boulevard
Boca Raton, Florida 33431

PERMIT INFORMATION:

Permit Number: 0333315-001-JC

Project Name: Lido Key Beach Nourishment
and Groins

County: Sarasota

Issuance Date: June 20, 2018

Expiration Date: June 20, 2033

REGULATORY AUTHORIZATION:

This permit 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.

PROJECT DESCRIPTION:

The Lido Key Beach Nourishment and Groins Project is authorized to be constructed using up to 1.3 million cubic yards of beach compatible material placed along 1.6 miles of

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shoreline. The primary sand source will be portions of Big Sarasota Pass and ebb shoal, split over three cuts (B, C and D). Dredging in Cut B, and the eastern 1,200 feet of Cut C, is prohibited April through September. The fill template design includes a berm crest elevation of +4 feet North American Vertical Datum 1988 (NAVD) and a sloped berm section down to +2 feet NAVD at a slope of 1:100 (vertical:horizontal, v:h). The seaward face of the berm has a slope of 1:10 (v:h). The cut depths at the borrow areas will be to a maximum allowable depth of -13.5 feet NAVD. Two rubble mound groins will also be constructed at the south end of Lido Key. They will consist of 2-ton armor stones, placed on 12-inch-thick foundation mats, lying on geotextile fabric. The northern groin will be 170 feet in length and the southern groin will be 345 feet in length. They will both have a crest width of 9 feet, at an elevation of 4.0 feet NAVD. This permit also authorizes periodic nourishment events.

This activity includes consideration of an application for a 15-year sovereign submerged lands public easement (Instrument No. 41874, BOT File No. 580239425) containing 66.16 acres or 2,882,144.01 square feet, more or less, for borrow area Cut B; 119.87 acres or 5,221,498.64 square feet, more or less, for borrow area Cut C; 137.1 acres or 5,970,092 square feet, more or less, for borrow area Cut D; 0.35 acres or 15,445 square feet, more or less, for the north groin; and 0.64 acres or 27,845 square feet, more or less, for the south groin.

The project will also require mitigation for direct impacts to 1.68 acres of seagrasses located within the borrow areas. The creation of 2.9 acres of seagrass habitat will be required to offset the impacts.

PROJECT LOCATION:

The beach nourishment site is located on Lido Key, between Department Reference Monuments R-35 and R-44. Sections 2, 25, 34 and 35, Townships 36 and 37 South, Range 17 East, Sarasota County, Gulf of Mexico, Class III Waters. The north groin is located to the south of Lido Key, at approximately R-42 and the south groin is located at approximately R-44.

The channel and ebb shoal borrow areas are located in Big Sarasota Pass, which extends from Sarasota Bay, Class II, Waters, Outstanding Florida Waters (OFW), to the Gulf of Mexico, Class III Waters, in Sarasota County.

The mitigation site is located at Perico Preserve, within Sarasota Bay, adjacent to Class II Waters, OFW, in Manatee County.

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, to the Department, the responsibility to review and take final action on this request for proprietary authorization in accordance with

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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. This proprietary authorization has been reviewed in accordance with Chapter 253, F.S., Chapter 18-21 and Section 62-330.075, F.A.C., and the policies of the Board of Trustees.

As staff to the Board of Trustees, the Department has determined that the beach nourishment activity 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 the Permittees, pursuant to Chapter 253.77, F.S., to perform the activity on the specified sovereign submerged lands.

The Department has also determined that the dredging and groin construction activities require a public easement for the use of those lands, pursuant to Chapter 253.77, F.S. The Department intends to grant the public easement, subject to the conditions outlined in the previously issued *Consolidated Intent to Issue* and in the Recommended Proprietary Action (entitled *Delegation of Authority*).

The final documents required to execute the easement will be sent to the Department's Division of State Lands. The Department intends to issue the easement upon satisfactory execution of those documents. **You may not begin construction of this activity on state-owned, sovereign submerged lands until the easement has been executed to the satisfaction of the Department.**

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.

WATER QUALITY CERTIFICATION:

This permit also constitutes certification of compliance with state water quality standards pursuant to Section 401 of the Clean Water Act, 33 U.S.C. 1341.

OTHER PERMITS:

Authorization from the Department does not relieve you from the responsibility of obtaining other permits (Federal, State or local) that may be required for the project.

AGENCY ACTION:

The above named Permittees are hereby authorized to construct the work that is outlined in the project description and project location of this permit and as 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, General Consent Conditions and Specific Conditions, which are a binding part of this**

permit and authorization. Both the Permittees and their Contractors 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.

GENERAL CONDITIONS:

1. All activities authorized by this permit shall be implemented as set forth in the project description, permit drawings, plans and specifications 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 Rule 62B-49.008, F.A.C.
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 Department 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; and, 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 that may be required by federal, state, local or 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 that are not addressed in this permit.
4. Pursuant to Sections 253.77 and 373.422, F.S., prior to conducting any works or other activities on state-owned submerged lands, or other lands of the state, title to which is vested in the Board of Trustees, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees shall not be considered received until it has been fully executed.
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 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.
9. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall electronically submit to the Department, by email at JCPCCompliance@dep.state.fl.us, 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 any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, shipwreck remains or anchors, dugout canoes or other physical remains that could be associated with Native American cultures, or early Colonial or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section at (850)245-6333 or (800)847-7278, as well as the appropriate permitting agency office. Project activities shall not resume without verbal and/or written authorization from the Division of Historical Resources. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, F.S.
11. Within 30 days after completion of construction or completion of a subsequent maintenance event authorized by this permit, the permittee shall electronically submit to the Department, by email at JCPCCompliance@dep.state.fl.us, 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 specifications, 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 as-built drawings electronically submitted to the Department, by email at JCPCCompliance@dep.state.fl.us.

GENERAL CONSENT CONDITIONS:

1. Authorizations are valid only for the specified activity or use. Any unauthorized deviation from the specified activity or use and the conditions for undertaking that activity or use shall constitute a violation. Violation of the authorization shall result in suspension or revocation of the grantee's use of the sovereignty submerged land unless cured to the satisfaction of the Board.
2. Authorizations convey no title to sovereignty submerged land or water column, nor do they constitute recognition or acknowledgment of any other person's title to such land or water.
3. Authorizations may be modified, suspended or revoked in accordance with their terms or the remedies provided in Sections 253.04 and 258.46, F.S., or Chapter 18-14, F.A.C.
4. Structures or activities shall be constructed and used to avoid or minimize adverse impacts to sovereignty submerged lands and resources.
5. Construction, use or operation of the structure or activity shall not adversely affect any species that is endangered, threatened or of special concern, as listed in Rules 68A-27.003, 68A-27.004 and 68A-27.005, F.A.C.
6. Structures or activities shall not unreasonably interfere with riparian rights. When a court of competent jurisdiction determines that riparian rights have been unlawfully affected, the structure or activity shall be modified in accordance with the court's decision.
7. Structures or activities shall not create a navigational hazard.
8. Structures shall be maintained in a functional condition and shall be repaired or removed if they become dilapidated to such an extent that they are no longer functional. This shall not be construed to prohibit the repair or replacement subject to the provisions of Rule 18-21.005, F.A.C., within one year, of a structure damaged in a discrete event such as a storm, flood, accident or fire.
9. Structures or activities shall be constructed, operated and maintained solely for water dependent purposes, or for non-water dependent activities authorized under paragraph 18-21.004(1)(f), F.A.C., or any other applicable law.

SPECIFIC CONDITIONS:

1. The terms, conditions and provisions of the required easement shall be met. The Notice to Proceed shall not be issued, and construction of this activity shall not commence on sovereign submerged lands, title to which is held by the Board of Trustees, until all easement documents have been executed to the satisfaction of the Department.
2. All reports or notices relating to this permit shall be electronically submitted to the Department's JCP Compliance Officer (e-mail address: JCP.Compliance@dep.state.fl.us) unless otherwise specified in the specific conditions of this permit.
3. The Permittees shall not conduct project operations or store project-related equipment in, on or over dunes, or otherwise impact dune vegetation, outside the approved staging and beach access areas designated in the permit drawings.
4. Only clean rock, which is substantially free of dust and debris, and which will remain stable in the surf zone, may be used for construction of the groins. Armor and bedding stone used in project shall be washed prior to being transported to the construction location to minimize turbidity.
5. ***Notice to Proceed Requirements.*** No work shall be conducted under this permit until the Permittees have received a written Notice to Proceed (NTP) from the Department for the authorized activity under this permit, **for each event**. At least 30 days prior to the requested date of issuance of the NTP, the Permittees shall submit a written request for a NTP and the following items for review and approval by the Department:
 - a. An electronic copy of detailed ***final construction plans and specifications*** for all authorized activities. The plans and specifications shall be consistent with the project description of this permit and the attached permit drawings, and shall also be certified by a professional engineer (P.E.), who is registered in the State of Florida. The Permittees shall point out any deviations from the Project Description of this permit (as stated above) or the approved permit drawings (attached to this permit), and any significant changes would require a permit modification. The plans and specifications shall include a description of the construction methods to be utilized and drawings and surveys that show all biological resources and work spaces (e.g., anchoring areas, staging areas, boat or vehicular access corridors, etc.) to be used for this project. The final plans and specifications submitted under this condition shall comply with all conditions set forth in this permit;
 - b. ***Biological Opinion.*** Documentation from the U.S. Fish and Wildlife Service (FWS) that this work will be covered under a Biological Opinions (BO) issued for construction on this project site. If the BO contains conditions that are not already

- contained herein, the Notice to Proceed will not be issued until the permit has been modified to include those additional conditions;
- c. ***Turbidity monitoring qualifications.*** Documentation that the person(s) who will be conducting the turbidity monitoring meets the following requirements:
 - i. Is independent of both the design contractor and the construction contractor(s);
 - ii. Has formal training in water quality monitoring;
 - iii. Has professional experience in monitoring turbidity for coastal construction projects;
 - d. A ***Scope of Work*** for the turbidity monitoring to ensure that the right equipment is available to conduct the monitoring correctly at any location, and under any conditions if turbidity sampling becomes necessary;
 - e. The approved ***Physical Monitoring Plan***. Any revisions to the plan that are not already approved through a permit modification prior to the NTP request will require review and approval by the Department through a modification;
 - f. Documentation that the ***Public Easement*** has been executed and recorded to the satisfaction of the Department;
 - g. ***Monitoring Staff Qualifications.*** All biological monitoring (as specified in the Mitigation and Monitoring Plan, approved December 2016) shall be conducted by experienced biologists with expertise in surveying seagrass. To ensure that individuals conducting monitoring have appropriate qualifications, documentation demonstrating expertise / experience shall be provided;
 - h. ***Mitigation Site Permit Modifications.*** Manatee County's Rookery at Perico Seagrass Advance Mitigation Permit shall be modified to allow a portion of the Rookery at Perico Seagrass Mitigation Basin (RPSMB) to be used as mitigation for the Lido Key Beach Nourishment and Groins project; the Permittees shall provide documentation that the State and Federal permits have been modified as necessary to allow a portion of the RPSMB be used as mitigation for the Lido Key Beach Nourishment and Groins project;
 - i. ***Specific Purpose Survey.*** The Lido Key Mitigation Site (LKMS), an area of at least 2.9 acres, within the RPSMB shall be field delineated, permanently marked, and surveyed. A signed and sealed Specific Purpose Survey shall be produced by a Florida registered professional surveyor to document the specific location (i.e., spatial extent and boundaries) of the LKMS;

- j. **Site Agreement.** The Permittees and Manatee County shall prepare and sign a legally binding Site Agreement describing the delegation of responsibilities for all mitigation activities (i.e., seagrass planting, monitoring, and subsequent maintenance of the mitigation site), which shall be completed pursuant to the Mitigation and Monitoring Plan, approved December 2016;
 - k. Written documentation that **authorization** has been obtained by the Permittees to use the designated staging and access area(s) for construction;
 - l. Final **Staging and Access Area Dune Restoration Planting Plan**; and
 - m. The Permittees/Contractor's **Environmental Protection Plan (EPP)** shall include details of monitoring for nesting marine turtles and nesting seabirds or shorebirds (shorebirds) onsite during construction. The EPP shall be submitted for review and comment to the FWC prior to the pre-construction conference.
6. **Pre-Construction Conference.** 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, those responsible for turbidity monitoring and the JCP Compliance Officer (or designated alternate). In order to ensure that appropriate representatives are available, at least twenty-one (21) days prior to the intended commencement date for the permitted construction, the Permittee is advised to contact the Department, and the other agency representatives listed below:

JCP Compliance Officer
e-mail: JCPCompliance@dep.state.fl.us

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

The Permittee is also advised to schedule the pre-construction conference at least a week prior to the intended commencement date. At least seven (7) days in advance of the pre-construction conference, the Permittee shall provide written notification, advising the participants (listed above) of the agreed-upon date, time and location of the meeting, and also provide a meeting agenda and a teleconference number.

7. When discharging slurried sand onto the beach from a pipeline, the Permittee shall employ best management practices (BMPs) to reduce turbidity. At a minimum, these BMPs shall include the following:

- a. Use of shore-parallel sand dike to promote settlement of suspended sediment on the beach before return water from the dredged discharge reenters the Gulf of Mexico; and
- b. The pipeline discharge location shall be a minimum of 50 feet landward from open water. If 50 feet is not attainable due to a narrow beach berm, the pipeline discharge location shall be placed as far landward on the beach berm as possible without disturbing the dune.

Restrictions

8. Dredging operations are prohibited in Cut B, and the eastern 1,200 feet of Cut C, from April through September of any construction event year.
9. No more than 1.3 million cubic yards of material shall be dredged from Cuts B, C, and D, during any given construction event.

Fish and Wildlife Protection Conditions

10. **In-water Activity.** The Permittee shall adhere to the following requirements for all in-water activity:
 - a. All personnel associated with the project shall be instructed about the presence of marine turtles and manatees, and the need to avoid collisions with (and injury to) these protected marine species. The Permittee/Contractor shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees or marine turtles, which are protected under the Endangered Species Act, the Marine Mammal Protection Act, the Marine Turtle Protection Act and the Florida Manatee Sanctuary Act.
 - b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels shall follow routes of deep water whenever possible.
 - c. Siltation or turbidity barriers shall be made of material in which manatees and marine turtles cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers shall not impede manatee or marine turtle movement or travel.
 - d. All on-site project personnel are responsible for observing water-related activities for the presence of marine turtles and manatees. All in-water operations, including vessels, shall be shutdown if a marine turtle or manatee comes within

50 feet of the operation. Activities shall not resume until the animal(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the animal(s) has not reappeared within 50 feet of the operation. Animals shall not be herded away or harassed into leaving.

- e. Any collision with, or injury to, a marine turtle or manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922, and to FWC at ImperiledSpecies@myFWC.com. Any collision with, and/or injury to, a marine turtle shall also be reported immediately to the Sea Turtle Stranding and Salvage Network (STSSN) at SeaTurtleStranding@myfwc.com.

Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the Permittees upon completion of the project. Temporary signs that have already been approved for this use by the FWC shall be used. One sign which reads "Caution Boaters – Watch for Manatees shall be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations shall be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to ImperiledSpecies@myFWC.com.

11. If a hopper dredge is used for this project, the following requirements shall be met:
 - a. Handling of captured marine turtles during hopper dredging activities shall be conducted only by persons with prior experience and training in these activities, such as a National Marine Fisheries Service (NMFS)-approved marine turtle observer, or by persons who have submitted documentation of meeting the FWC Marine Turtle Conservation Guidelines specific to stranding activities. The Permittee shall forward documentation of these qualifications to FWC for review, concurrently with the submission of the contractor Environmental Protection Plan. The Permittee shall ensure that any person who has been designated to be responsible for transporting live or dead marine turtles or marine turtle parts into, out of, or within, the state of Florida, shall notify FWC in writing specifying the number, species of turtle, type of specimen, and the destination after transport is complete. Before transport, if the turtle is believed to be alive, the designee shall coordinate with FWC to determine the appropriate facility to receive live marine turtles for rehabilitation. The Permittee and their designee shall abide by the State of Florida's FWC Marine Turtle Conservation Guidelines (<http://www.myfwc.com/wildlifehabitats/managed/sea-turtles/conservation-guidelines/>) specific to transport of live stranded turtles.
 - b. In order to minimize impingement or entrainment of marine turtles within the water column, dredging pumps shall be disengaged by the operator, or the draghead bypass

- valve shall be open and in use when the dragheads are not firmly on the bottom. This precaution is especially important during the cleanup phase of dredging operations.
- c. A state-of-the-art rigid deflector draghead shall be used on all hopper dredges at all times of the year.
 - d. The STSSN Coordinator shall be notified at 1-904-573-3930 or via e-mail at Allen.Foley@myfwc.com of the start-up and completion of hopper dredging operations. If a marine turtle is captured or marine turtle parts are recovered, the STSSN shall be contacted at seaturtlestranding@myfwc.com.
12. **Trawling.** If relocation trawling or non-capture trawling for marine turtles is required, as per applicable NMFS Biological Opinions and Incidental Take authorizations, the following is required:
- a. Any activity involving the use of nets to harass and/or to capture and handle marine turtles in Florida waters requires a Marine Turtle Permit from FWC prior to trawling.
 - b. The Permittee or their contractor shall e-mail (MTP@MyFWC.com) weekly reports to the Imperiled Species Management Section on Friday of each week that trawling is conducted in Florida waters. These weekly reports shall include the species and number of turtles captured in Florida waters, their general health, and release information. A summary of all trawling activity (including non-capture trawling) shall be submitted to MTP@myfwc.com by January 15 of the following year, or at the end of the project. The summary shall be provided on the FWC provided Excel spreadsheet, and shall list all turtles captured in Florida waters, the measurements of all captured turtles, the location of captures (latitude and longitude in decimal degrees), the location of tow start-stop points (latitude and longitude in decimal degrees), and times for the start-stop points of the tows (including tows when no turtles are captured).
13. **Shorebird Protection Conditions.** Shorebird surveys should be conducted by trained, dedicated individuals (Bird Monitor) with proven shorebird identification skills and avian survey experience.
- a. Shorebird surveys shall be conducted by trained, dedicated individuals (Bird Monitor), with proven shorebird identification skills and avian survey experience.
 - b. *Selection of Bird Monitors.* A list of Bird Monitors shall be provided to the FWC, along with their contact information and a summary of their qualifications, including bird identification skills and avian survey experience. This information shall be submitted to the FWC Regional Biologist (contact information available at: <http://www.myfwc.com/shorebirds>) for review and consultation prior to any construction or shorebird surveys. If properly trained, a Marine Turtle Permit Holder

may serve concurrently as the Shorebird Monitor. Bird Monitors shall meet the following minimum qualifications:

- i. Ability to identify all species of beach-nesting birds that nest in the project area by sight and sound.
 - ii. Ability to identify breeding/territorial behaviors, and find nests of shorebirds and seabirds that occur in the project area.
 - iii. Ability to identify habitats preferred by shorebirds and seabirds nesting in the project area.
 - iv. Completed full introductory course training (online or webinar) on the *Breeding Bird Protocol for Florida's Seabirds and Shorebirds*, including training in data entry. Training resources can be found on the Florida Shorebird Database website (<https://public.myfwc.com/crossdoi/shorebirds/links.html>).
 - v. Familiar with FWC beach driving guidelines: www.myfwc.com/conservation/you-protect/wildlife/beach-driving.
 - vi. Annually completes refresher course training (online or webinar) for the *Breeding Bird Protocol for Florida's Seabirds and Shorebirds*, including training in data entry.
 - vii. Previously participated in beach-nesting bird surveys associated with FWC, Audubon, or FWS in Florida (please provide references).
 - viii. Experience posting beach-nesting bird sites, consistent with Florida Shorebird Alliance (FSD) Guidelines (<http://flshorebirdalliance.org/resources/instructions-manuals.aspx>).
 - ix. Registered contributor to the Florida Shorebird Database.
- c. The Bird Monitor(s) shall review and become familiar with the general information on the FWC's Florida Shorebird Database (FSD) website (www.FLShorebirdDatabase.org). They shall use the data-collection protocol and implement data-entry procedures as outlined in that website. An outline of data to be collected, including downloadable field data sheets, is available on the website.
- d. Breeding season varies by species. Most species have completed the breeding cycle by September 1, but flightless young may be present through September. The

following dates are based on the best available information regarding ranges and habitat use by species for this project: February 15 – September 1.

- e. Surveys during the breeding season shall begin on the first day of the breeding season or 10 days before any site work begins, whichever is later. Surveys shall be conducted through August 31 or until all breeding activity has concluded, whichever is later.
 - f. During the breeding season, the Bird Monitor(s) shall survey all potential beach-nesting bird habitats that may be affected by construction or pre-construction activities. The Bird Monitor(s) shall establish one or more shorebird survey routes in the FSD website to cover these areas.
 - g. During the pre-construction and construction phases of the project, the Bird Monitor(s) shall complete surveys on a daily basis to detect breeding activity and the presence of flightless chicks before (1) equipment is moved to the area, (2) vehicles are operated in the area, or (3) any other activities occur that have the potential to disrupt breeding behavior or cause harm to the birds or their eggs or young. Once construction is completed, and all personnel and equipment have been removed from the beach, surveys may be conducted at weekly intervals through the final acceptance of beach construction. After final acceptance, the weekly surveys shall be conducted by the local sponsor through the end of the nesting season.
 - h. The Bird Monitor(s) shall survey the project area by walking and looking for evidence of (1) shorebirds exhibiting breeding behavior, (2) shorebird chicks, or (3) shorebird juveniles, as outlined in the FSD's Breeding Bird Protocol for Shorebirds and Seabirds. The Bird Monitor(s) shall use binoculars for these surveys.
 - i. If an ATV or other vehicle is needed to cover large project areas, operators shall adhere to the FWC's Best Management Practices for Operating Vehicles on the Beach (<http://myfwc.com/conservation/you- conserve/wildlife/beach-driving/>). Specifically, the vehicle shall be operated at a speed under 6 mph and only on beaches at or below the high-tide line. The Bird Monitor(s) shall stop at no greater than 200-meter intervals to look for breeding activity.
 - j. Once the Bird Monitor(s) confirms that birds are breeding, as evidenced by the presence of a scrape, eggs, or young, the Bird Monitor(s) shall notify the FWC Regional Species Conservation Biologist (see the attached FWC contact information exhibit) within 24 hours. The Bird Monitor(s) shall report all breeding activity to the FSD website within one week of data collection.
14. **Shorebird Buffer Zones and Travel Corridors.** The Bird Monitor(s) shall establish a disturbance-free buffer zone around any location within the project area where shorebirds

have been engaged in breeding behavior, including territory defense. The FWC considers a 300-foot-wide buffer to be adequate based on published studies; however, a smaller, site-specific buffer may be established if approved by the FWC Regional Species Conservation Biologist (contact information available at: <http://www.myfwc.com/shorebirds>). All sources of human disturbance (including pedestrians, pets, and vehicles) shall be prohibited in the buffer zone.

- a. The Bird Monitor(s) shall keep breeding sites under sufficient surveillance to determine if birds appear agitated or disturbed by construction or other activities in adjacent areas. If birds do appear to be agitated or disturbed by these activities, then the Bird Monitor(s) shall widen the buffer zone immediately to a sufficient size to protect breeding birds.
- b. The Bird Monitor(s) shall ensure that reasonable and traditional pedestrian access is not blocked in situations where breeding birds will tolerate pedestrian traffic. This is generally the case with lateral movement of beach-goers walking parallel to the beach at or below the highest tide line. Pedestrian traffic may also be tolerated when breeding was initiated within 300 feet of an established beach access pathway. The Bird Monitor(s) shall work with the FWC Regional Species Conservation Biologist to determine if pedestrian access can be accommodated without compromising nesting success.
- c. The Bird Monitor(s) shall ensure that the perimeters of designated buffer zones are marked with posts, twine, and signs stating “Do Not Enter, Important Nesting Area” or similar language. The signs shall include the name and a phone number of the entity responsible for posting. Posts shall not be higher than 3 feet once installed. “Symbolic fencing” (i.e., twine, string, or rope) shall be placed between all posts and be clearly visible to pedestrians. In areas where marine turtles nest, the ropes shall be at least 2.5 feet above the ground. If pedestrian pathways are approved by the FWC Regional Species Conservation Biologist within the 300-foot buffer zone, these shall be clearly marked. The Bird Monitor(s) shall ensure that the posting is maintained in good repair until breeding is completed or terminated. Although solitary nesters may leave the buffer zone with their chicks, the posted area continues to provide a potential refuge for the family until breeding is complete. Breeding is not considered to be completed until all chicks have fledged.
- d. The Bird Monitor(s) shall ensure that no construction activities, pedestrians, moving vehicles, or stockpiled equipment are allowed within the buffer area.
- e. The Bird Monitor(s) shall designate and mark travel corridors outside the buffer areas so as not to cause disturbance to breeding birds. Heavy equipment, other vehicles, or pedestrians may go past breeding areas in these corridors. However, other activities

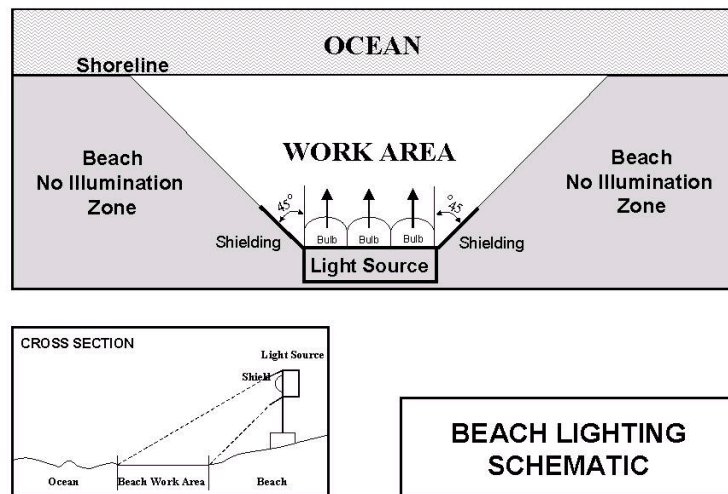
- such as stopping or turning heavy equipment and vehicles shall be prohibited within the designated travel corridors adjacent to the breeding site.
- f. When flightless shorebird chicks are present within or adjacent to equipment travel corridors, movement of vehicles shall be adequately monitored by the Bird Monitor, who shall advise the contractor whose responsibility it is to ensure no chicks are in the path of the moving vehicles, that chicks are not separated from the family unit, and that vehicles leave no tracks capable of trapping flightless chicks. The Bird Monitor shall conduct a shorebird education and identification program with the Contractor to ensure protection of precocial (mobile) chicks.
 - g. The FWC recommends that some activity in the travel corridor is maintained on a daily basis in order to discourage birds from nesting within the travel corridor. These activities shall not be allowed to disturb shorebirds nesting on site or interfere with marine turtle nesting, especially if the corridors are established before construction has started.
 - h. Notification. If the Bird Monitor(s) find that shorebirds are breeding within the project area, he or she shall ensure that an informational bulletin board is placed and maintained in the construction staging area. This bulletin board shall display the location map of the construction site, depict the location(s) of the bird breeding areas, and include a clearly visible warning stating: “NESTING BIRDS ARE PROTECTED BY LAW INCLUDING THE FLORIDA ENDANGERED AND THREATENED SPECIES ACT AND THE STATE AND FEDERAL MIGRATORY BIRD ACTS”.
15. **Marine Turtle Nest Surveys and Relocations.** Daily early morning surveys, beginning no earlier than sunrise, shall be conducted to all sandy beaches within the project area that are seaward of any existing coastal armoring structures or dune crest, and all areas used for beach access. No construction activity may commence until completion of the marine turtle survey each day. Sand placement activities and groin construction may occur during the marine turtle nesting season (April 15 – October 31), except on publicly owned conservation lands such as state parks and areas where such work is prohibited by the managing agency or under applicable local land use codes and only subsequent to authorization of incidental take by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (Service) in accordance with Florida Statute 161.041 (5), 379.2431 (1). The following marine turtle protection conditions shall be met during such work; any additional terms and conditions specified in the federal incidental take authorization shall be incorporated into the permit through modification prior to commencement of construction.
- a. Groin construction or repair or replacement projects may be conducted during the sea turtle nesting season during daylight hours only and may proceed only after issuance of the Service’s incidental take authorization and in accordance with the following requirements:

- i. Daily early morning surveys shall be conducted within the travel corridor, construction and staging area.
 - ii. A barrier (e.g., hay bales, silt screens) sufficient to prevent adult and hatchling sea turtles from accessing the project sit shall be installed in a 100-foot buffer around the perimeter of the project site. The barrier shall be placed parallel to shore, at MHW, as close to the groin or jetty as feasible during the period from sunset to sunrise.
 - iii. On-beach access to the construction site shall be restricted to the wet sand below MHW to the maximum extent possible. Travel corridors on the beach to the MHWL will be delineated. Nests laid within the travel corridor that would impeded traffic will be relocated per the requirements listed above. Nests laid in adjacent areas will be marked and avoided per the requirements listed below. Staging areas for construction equipment shall be located off the beach to the maximum extent possible.
 - iv. No nighttime construction may occur during the nesting season.
 - v. Material stockpiled on the beach shall only occur within the 200-foot barrier (100-foot area on either side). Construction activities shall not occur in any location prior to completion of the necessary marine turtle protection measures outlined below.
 - vi. No permanent or temporary exterior lighting shall be installed in association with the project.
 - vii. If entrapment of marine turtle hatchlings occurs in the groin or jetty system during construction, the Permittee shall contact FWC immediately.
- b. Sand placement activities are authorized to occur on the nesting beach (seaward of existing coastal armoring structures or the dune crest) during the marine turtle nesting season, provided the following requirements are met:
- i. Daily marine turtle nesting surveys shall be initiated 65 days prior to sand placement activities or by April 15, whichever is later.
 - ii. Daily nesting surveys shall continue through the end of the project or through October 31, or until two weeks after the last crawl in the project area, whichever is earlier.

- iii. Hatchling and emerging success monitoring involves checking nests beyond the completion date of the daily early morning nesting surveys. Consequently, after the sand placement is completed, marine turtle nest monitoring and reporting shall continue throughout the nesting season, and shall be conducted according to the Post-Construction Monitoring and Reporting of Marine Turtle Nesting requirements in Specific Condition 24, below.
- c. **Turtle monitors.** Nesting surveys and egg relocations shall only be conducted by persons with prior experience and training in these activities and who are duly authorized to conduct such activities through a valid permit issued by FWC, pursuant to Chapter 68E-1, F.A.C. Please contact FWC's Marine Turtle Management Program in Tequesta at MTP@myfwc.com for information on the permit holder in the project area. It is the responsibility of the Permittee to ensure that nesting surveys are completed by the authorized Marine Turtle Permit Holder.
- d. If nests are laid in areas where they may be affected by sand placement or groin construction activities, eggs shall be relocated per the following requirements:
 - i. Only those nests that may be affected by the construction activities shall be relocated. Nest relocation shall no longer occur after the sand placement is completed. 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. Relocated nests shall not be placed in organized groupings. Relocated nests shall be randomly staggered along the length and width of the beach in settings that are not expected to experience any of the following: daily inundation by high tides; severe erosion; previous egg loss; or illumination by artificial lighting. Nest relocations in association with construction activities shall cease when construction activities no longer threaten nests.
 - ii. Marine turtle nests deposited where the project activities have ceased or will not occur for 65 days, or nests laid in the nourished berm prior to tilling, shall be marked and left in situ unless other factors threaten the success of the nest. The turtle permit holder shall install an on-beach marker at the nest site and shall also install a secondary marker at a point landward as possible to assure that future location of the nest will be possible should the on-beach marker be lost. A series of stakes and highly visible survey ribbon or string shall be installed to establish a 10-foot diameter around the nest. No activity shall occur within this area, nor will any activities occur which could result in impacts to the nest. Nest sites shall be inspected daily to assure nest markers remain in place and the nest has not been disturbed by the project activities.

- e. To the maximum extent possible within the travel corridor, all ruts shall be filled or leveled to the natural beach profile prior to completion of daily construction.
16. Marine Turtle or Nest Encounters. Upon locating a dead or injured marine turtle adult, hatchling or egg that may have been harmed or destroyed as a direct or indirect result of the project, the Permittee shall ensure that the FWC will be notified at FWC Wildlife Alert at 1-888-404-FWCC (3922). Care shall be taken in handling injured marine turtles or eggs to ensure effective treatment or disposition, and in handling dead specimens to preserve biological materials in the best possible state for later analysis. In the event a marine turtle nest is excavated during construction activities, but not as part of the authorized nest relocation process outlined in these specific conditions, the permitted person responsible for egg relocation for the project shall be notified immediately so the eggs can be moved to a suitable relocation site.
17. **Project Lighting.** Direct lighting of the beach and nearshore waters during the marine turtle nesting season shall be limited to the immediate construction area and shall comply with safety requirements. Lighting on offshore or onshore equipment shall be minimized through reduction, shielding, lowering and appropriate placement to avoid excessive illumination of the water's surface and nesting beach while meeting all codified requirements for human safety. Light intensity of lighting equipment shall be reduced to the minimum standard required for General Construction areas, in order not to misdirect marine turtles. Shields shall be affixed to the light housing and be large enough to block light from all lamps from being transmitted outside the construction area (Figure 1 below).

Figure 1



18. **Equipment Storage.** Staging areas for construction equipment for sand placement shall be located off the beach to the maximum extent practicable during the marine turtle nesting season, in accordance with the following protocols:
- a. Nighttime storage of the beach restoration project construction equipment not in use shall be off the beach to minimize disturbance to marine turtle nesting and hatching activities.
 - b. 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.
 - i. Temporary storage of pipes shall be off the beach to the maximum extent possible.
 - ii. Temporary storage of pipes on the beach shall be in such a manner so as to impact the least amount of nesting habitat and shall not compromise the integrity of the dune systems.
 - iii. Pipes placed parallel to the dune shall be five to ten feet away from the toe of the dune.

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 shall be placed landward of the site before birds are active in that area. No pipe or sand shall be placed seaward of a shorebird nesting site during the shorebird nesting season, unless authorized by the FWC Regional Biologist.

19. **Fill Restrictions.** During nesting season, the contractor shall not advance the beach fill more than 500 feet along the shoreline between dusk and the following day until the daily nesting survey has been completed and the beach cleared for fill advancement. An exception to this may occur if there is a permitted marine turtle monitor present on-site to ensure that no nesting and hatching marine turtles are present within the extended work area. If the 500-foot advancement limitation is not feasible for the project, an agreed upon distance shall be established during the preconstruction meeting. Once the beach has been cleared for fill advancement, 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.
20. **Beach Maintenance.** All debris, including derelict concrete, metal, and coastal armoring material shall be removed from the beach to the maximum extent practicable prior to any placement of construction material. If debris removal activities will take place from April 15 through October 30, the work shall be conducted during daylight hours only and shall not commence until completion of the sea turtle survey each day. If flightless shorebird young are present within or adjacent to the work zone or equipment travel

corridor, a Shorebird Monitor shall be present during the operation to ensure that equipment does not operate within 300 feet of the flightless young. It is the Permittee's responsibility to have their Contractor ensure that no chicks are in the path of the moving vehicle, and that the equipment leaves no tracks capable of trapping flightless chicks. All excavations and temporary alterations of the beach topography shall be filled or leveled to the natural beach profile prior to 9 p.m. each day. The beach surface shall be inspected subsequent to completion of the project, and all tracks or impressions left by construction equipment on the beach shall be removed.

21. **Compaction Sampling.** Immediately after completion of the beach nourishment project, and prior to April 1, for 3 subsequent years, sand compaction shall be monitored in the area of sand placement in accordance with the protocol agreed to by the FWC and the Permittee. The requirement for compaction monitoring can be eliminated if the placed sand is tilled, regardless of post-construction compaction levels. Out-year compaction monitoring and remediation are not required if placed sand no longer remains on the beach. At a minimum, the protocol provided under Specific Conditions 21a and 21b (below) shall be followed. If the average value for any depth exceeds 500 pounds per square inch (psi) for any two or more adjacent stations, then that area shall be tilled prior to the beginning of marine turtle nesting season.
- a. 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).
 - b. At each station, the cone penetrometer shall be pushed to a depth of 6, 12, and 18 inches three times (i.e., three replicates at each depth). 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 lie 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.
 - c. 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 April 15.
 - d. 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.

22. **Tilling Requirements.** If tilling is required, as specified in Specific Condition 21, above, the area shall be tilled to a depth of 24 inches. All tilling activity shall be completed prior to the marine turtle nesting season. If tilling occurs during shorebird nesting season, shorebird surveys shall be required prior to tilling, per the Shorebird Conditions included within this document. It is the responsibility of the Permittee to ensure that their contractors avoid tilling, scarp removal or dune vegetation planting in areas where nesting birds are present. Each pass of the tilling equipment shall be overlapped to allow thorough and even tilling. If the project is completed during the marine turtle nesting season, tilling shall not be performed in areas where nests have been left in place or relocated. If compaction measurements are taken, a report on the results of the compaction monitoring shall be submitted electronically to FWC at marineturtle@myfwc.com prior to any tilling actions being taken.
- a. No tilling shall occur within 300 feet of any shorebird nest.
 - b. If flightless shorebird young are present within the work zone or equipment travel corridor, a Bird Monitor shall be present during the operation to ensure that equipment does not operate within 300 feet of the flightless young.
 - c. 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.
 - d. Tilling shall occur landward of the wrack line, and shall avoid all naturally vegetated areas that are at least 3 square feet in size, as well as any planted areas that have been authorized by the Department. A 3-foot-wide No Tilling buffer shall be maintained around the vegetated areas. The slope between the mean high water line and the mean low water line shall be maintained to approximate natural slopes.
 - e. Any vehicles operated on the beach in association with tilling shall operate in accordance with the FWC's Best Management Practices for Operating Vehicles on the Beach (<http://myfwc.com/conservation/you-serve/wildlife/beach-driving/>).
23. **Escarpment Surveys.** Visual surveys for escarpments along the project area shall be made immediately after completion of sand placement, and two weeks prior to marine turtle nesting season, for three (3) subsequent years if placed sand still remains on the beach. In addition, weekly surveys of the project area shall be conducted during the two nesting seasons following completion of fill placement. Escarpments that interfere with marine turtle nesting or that exceed 18 inches in height for a distance of at least 100 feet shall be leveled and the beach profile shall be reconfigured to minimize scarp formation by the beginning of marine turtle nesting season. Any escarpment removal shall be reported by location to FWC, with a copy sent to the JCP Compliance Officer. If the project is completed during the marine turtle nesting and hatching season, escarpment leveling may be required immediately, while protecting nests that have been relocated or

left in place. The Permittee shall contact FWC immediately if subsequent reformation of escarpments occurs during the nesting and hatching season, and the escarpments interfere with marine turtle nesting or if the escarpments exceed 18 inches in height for a distance of 100 feet. The FWC would then determine the appropriate action to be taken. If it is determined that escarpment leveling is required during the nesting or hatching season, the FWC will provide a brief written authorization that describes methods to be used to reduce the likelihood of impacting existing nests. An annual summary of escarpment surveys and actions taken shall be submitted electronically to marineturtle@myfwc.com along with the annual summary, as described below. If escarpment removal will occur during shorebird breeding season, shorebirds surveys shall be required prior to removal, per the Shorebird Conditions included within this document. (NOTE: Out-year escarpment monitoring and remediation are not required if placed material no longer remains on the dry beach).

- a. No heavy equipment shall operate within 300 feet of any shorebird nest.
- b. If flightless shorebird young are present within the work zone or equipment travel corridor, a Shorebird Monitor shall be present during the operation to ensure that equipment does not operate within 300 feet of the flightless young.
- c. Any vehicles operated on the beach in association with escarpment surveys or removal shall operate in accordance with the FWC's Best Management Practices for Operating Vehicles on the Beach (<http://myfwc.com/conservation/you-protect/conservation/wildlife/beach-driving/>).

24. **Post-construction Conditions, Monitoring and Reporting.** Monitoring of nesting activity in the seasons following construction 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 the nourished areas and for an equal length of adjacent beach that is not nourished in accordance with the attached Table. Reports on all nesting activity shall be provided for the initial nesting season and for a minimum of three additional nesting seasons as follows:

- a. For the remainder of the nesting season immediately following construction, and for the following year, the number and type of emergences (nests or false crawls) shall be reported per species in accordance with **Table 1** (below). An additional year of nesting surveys may be required if nesting success for any species on the nourished beach is less than 40%.
- b. For the remainder of the nesting season immediately following construction, reproductive success shall be reported per species in accordance with **Table 1**

- (below). Reproductive success shall be reported for all loggerhead, Kemp's ridley, and green and leatherback nests.
- c. If the documented reproductive success for each species meets or exceeds the required criteria, as outlined in **Table 1** (below), monitoring for reproductive success shall be recommended, but not required for the second year post-construction.
 - d. Monitoring of nesting activity in the seasons following construction shall include daily surveys and any additional measures authorized by the FWC. Summaries shall include all crawl activity, nesting success rates, hatching success of all relocated nests, hatching success of a representative sampling of nests left in place (if any) by species, project name, permit numbers and dates of construction.
 - e. **Lighting Surveys.** Two lighting surveys shall be conducted of all artificial lighting visible from the nourished berm. The first survey shall be conducted between May 1 and May 15 of the first nesting season following construction, or immediately after placement if construction is not completed until after May 15. The second survey shall be conducted between July 15 and August 1. The survey shall be conducted from the top of the foreshore slope (i.e., the seaward edge of the filled berm before it slopes into the water), facing landward. The survey shall follow standard techniques for such a survey and include number and type of visible lights, location of lights and photo documentation. For each visible light source, the Permittee shall document that the property owner has been notified of the problem light and has been provided with recommendations for correcting the light. Recommendations shall be in accordance with local lighting ordinances, and a report summarizing all visible lights shall be forwarded to local code enforcement, or if no lighting ordinances exist, the recommendation shall be that no lights, light sources or glow shall be visible from the newly elevated beach. A report summarizing all visible lights shall be submitted to FWC Imperiled Species Management Section at marineturtle@myfwc.com and **copied to** JCPCompliance@dep.state.fl.us by the 1st of the month following the survey. A summary report documenting what corrective actions or local enforcement actions have been taken shall also be submitted by December 15 of that year. After the annual report is completed, the Permittee shall set up a meeting with the county or municipality and FWC to discuss the survey report, as well as any documented marine turtle disorientations in or adjacent to the project area.
 - f. Data shall be reported for the nourished areas and reference beach in accordance with the **Table 1** (below), and shall include the number of nests that were lost to erosion or that were washed out. Data on nesting activity on the nourished beach and on equal length of beach that is not nourished shall be reported separately, and should include number of nests lost to erosion or washed out. Summaries of nesting activity shall be submitted in electronic format (Excel spreadsheets) to the FWC Imperiled Species Management Section at marineturtle@myfwc.com and **copied to**

JCPCCompliance@dep.state.fl.us. All summaries shall be submitted by January 15th of the following year. The FWC Excel spreadsheet is available upon request from marineturtle@myfwc.com.

Table 1. Marine Turtle Monitoring for Beach Placement of Material

Metric	Duration	Variable	Criterion
Nesting Success	Year of in-season construction, two years post construction if placed sand remains on beach and variable does not meet criterion based on previous year.	Number of nests and non-nesting events.	40% or greater
Hatching Success	Year of in-season construction. And one year post construction if placed sand remains on beach and variable does not meet success criterion based on previous year.	Number of hatchlings by species to hatch from egg.	60 percent or greater (a statistically valid number of loggerhead and green nests, and all leatherback nests).
Emergence Success	Year of in-season construction and one year post construction if placed sand remains on beach and variable does not meet success criterion based on previous year.	Number of hatchlings by species to emerge from nest onto beach	80 percent or greater (a statistically valid number of loggerhead and green nests, and all leatherback nests).
Disorientation	Year of in-season construction and two years post construction if placed sand remains on the beach.	Number of nests and individuals that disorient or disorient.	Disorientation Report Form http://myfwc.com/media/418153/Seaturtle_Guidelines_A_LDIR_Directions.pdf
Lighting Surveys	Two surveys the year following construction, one survey between May 1 and May 15 and second survey between July 15 and August 1.	Number, location and photographs of lights visible from nourished berm, corrective actions and notifications made	Lighting survey and meeting resulting with plan for reduction in lights visible from nourished berm within one to two month period.

Metric	Duration	Variable	Criterion
Compaction	Three seasons following construction. Not required if the beach is tilled prior to nesting season each year placed sand remains on beach.	Shear resistance	Less than 500 psi
Escarpment Surveys	Weekly during nesting season for up to three years each year placed sand remains on the beach.	Number of scarps 18 inches or greater extending for more than 100 feet that persist for more than 2 weeks	Successful remediation of all persistent scarps as needed

PHYSICAL MONITORING REQUIRED:

25. **Monitoring and reporting of the permitted project shall be conducted in accordance with the Physical Monitoring Plan dated August 2016 (received with the Applicant’s response to RAI#2) and the conditions of this permit.**

The approved Monitoring Plan can be revised at any later time by written request of the Permittee and with the written approval of the Department. If, after approval of the Monitoring Plan, there is a request for modification of the permit, the Department may require revised or additional monitoring requirements as a condition of approval of the permit modification.

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 prior to commencement of construction and immediately following completion of construction. Thereafter, monitoring surveys shall be conducted annually for a period of three (3) years, and then biennially until the next beach nourishment event. A pre-construction survey of the project area to receive beach fill may use surveys conducted for purposes of construction bidding, contracting or construction management. The post-construction survey of the beach fill may use surveys and other information collected periodically during construction for purposes of construction management and payment. Alternatively, the post-construction survey may consist of a single beach-offshore profile survey event of the project monitoring area conducted within 60 days after completion of beach fill placement.

The monitoring surveys shall be conducted during a spring or summer month and repeated as close as practicable during that same month of the year. If the time between the immediate post-construction survey and the first biennial monitoring survey is less than six months, then the Permittee may, at their discretion, postpone the first monitoring survey until the following spring/summer.

The monitoring area shall include profile surveys at each of the Department of Environmental Protection's reference monuments on Lido Key and north Siesta Key. All work activities and deliverables for the biennial monitoring surveys shall be conducted in accordance with the latest update of the Department's *Monitoring Standards for Beach Erosion Control Projects, Sections 01000 and 01100*.

- b. Bathymetric surveys of borrow area(s) located at inlet channels and shoals 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 of the inlet borrow area(s) and ebb shoal shall be surveyed one-year following completion of construction and then concurrently with the biennial beach and offshore surveys required above. A prior design survey may be submitted for the pre-construction survey.

Survey grid lines across the borrow area(s) shall be spaced to provide sufficient detail for accurate volumetric calculations but spaced not more than a maximum of 500 feet apart. For borrow sites located in tidal inlet shoals, bathymetric surveys of the entire shoal complex, including any attachment bars, shall be conducted unless otherwise specified by the Department based upon the size of the shoal and the potential effects of the dredging on inlet processes. In all other aspects, work activities and deliverables shall be consistent with the Department's *Monitoring Standards for Beach Erosion Control Projects, Section 01200*.

- c. The Permittee shall submit an engineering report and the monitoring data to the JCP Compliance Officer within 90 days following completion of the post-construction survey and each annual or biennial monitoring survey.

The report shall summarize and discuss the data, the performance of the beach fill project, and identify erosion and accretion patterns within the monitored area. Results shall be analyzed for patterns, trends, or changes between annual surveys and cumulatively since project construction. In addition, the report shall include a comparative review of project performance to performance expectations and identification of adverse effects attributable to the project. The report shall specifically include:

- A record of the volume and location of all beach fill or inlet sand bypassing material placed within the project area;

- The volume and distribution of infilling of the inlet borrow area(s) and changes of the inlet channels and shoals;
- The volume and percentage of advance nourishment lost since the last beach nourishment project as measured landward of the MHW line of the most recent survey;
- The most recent MHW shoreline positions (feet) in comparison with the design profile at each individual monument location;
- The MHW shoreline position changes (feet) relative to the pre-construction survey at each individual monument location for all the monitoring periods;
- The total measured remaining volume (cy) in comparison with the total predicted remaining volume (cy) above the MHW line and above the Depth of Closure for the entire project area over the successive monitoring periods;
- A comparison of the monitored shoreline position of north Siesta Key and the historical shoreline position;
- Other shoreline position and volumetric analysis the Permittee or engineer deem useful in assessing, with quantitative measurements, the performance of the project.
- An updated sediment budget of Big Sarasota Pass and the adjacent beaches of Lido Key and north Siesta Key prior to subsequent use of the ebb shoal borrow areas;

The report shall include computations, tables and graphic illustrations of volumetric and shoreline position changes for the monitoring area. An appendix shall include superimposed plots of the two most recent beach profile surveys, the design profile, and pre- and post-construction beach profile at each individual monument location.

- d. A digital copy of the monitoring report and a digital file of the survey data shall be submitted to the JCP Compliance Officer. Failure to submit reports and data in a timely manner constitutes grounds for revocation of the permit. When submitting any monitoring information to the Department, 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 the approved Monitoring Plan for Permit No. [XX] for the monitoring period [XX]."**
26. The Permittee shall seek a modification of the permit prior to subsequent use of the borrow areas should the engineering analysis of the monitoring data indicate the project has not met performance expectations. Performance expectations are generally described as beach nourishment every five years using the permitted Big Sarasota Pass ebb shoal

borrow areas, and the sediment budget is balanced between Big Sarasota Pass and the adjacent beaches of Lido Key and north Siesta Key, such that fluctuations in the pattern of erosion and accretion of the beaches of north Siesta Key will not exceed the landward recession of historical fluctuations of the shoreline. Specifically, a modification shall be obtained if the updated sediment budget based upon approximately five-years of post-construction monitoring indicates the volume of sand retained in the channels and shoals of Big Sarasota Pass increases while the volume of sand reaching Siesta Key decreases such that erosion occurs on the north gulf beaches of Siesta Key that exceeds the historical fluctuations of the beaches. The measurement of landward recession shall be determined by shoreline changes at any two (2) adjacent FDEP reference monuments between R-48 to R-52 on Siesta Key.

Additionally, should engineering analysis of the monitoring data indicate the groins are not performing as expected, then the Permittee shall seek a modification of the permit to construct adjustments of the groins.

Sediment Quality

27. Sediment quality shall be assessed as outlined in the Sediment QA/QC Plan, dated August 2015. Any occurrences of placement of material not in compliance with the Plan shall be handled according to the protocols set forth in the Sediment QA/QC plan. The sediment testing result shall be submitted to the JCP Compliance Officer within 90 days following the completion of beach construction. The Sediment QA/QC plan includes the following:
 - a. If during construction, the Permittee or Engineer determines that the beach fill material does not comply with the sediment compliance specifications, measures shall be taken to avoid further placement of noncompliant fill, and the sediment inspection results shall be reported to the JCP Compliance Officer.
 - b. The Permittee shall submit post-construction sediment testing results and an analysis report as outlined in the Sediment QA/QC plan to the JCP Compliance Officer within 90 days following beach construction event. The sediment testing results shall be certified by a P.E. or P.G. from the testing laboratory. A summary table of the sediment samples and test results for the sediment compliance parameters, as outlined in Table 1 of the Sediment QA/QA plan, shall accompany the complete set of laboratory testing results. A statement of how the placed fill material compares to the sediment analysis and volume calculations from the geotechnical investigation shall be included in the sediment testing results report.
 - c. A post-remediation report containing the site map, sediment analysis, and volume of noncompliant fill material removed and replaced shall be submitted to the JCP Compliance Officer within 7 days following completion of remediation activities.

28. **Seagrass Mitigation and Biological Monitoring.** Mitigation and monitoring for seagrass shall be completed in accordance with the *Lido Key Hurricane and Storm Damage Reduction Project Seagrass Mitigation and Monitoring Plan* (hereafter referred to as the SMMP). In addition to the Notice to Proceed Requirements (pursuant to Specific Condition 5), the Permittees shall complete all mitigation activities, monitoring surveys, and submit all deliverables as required by the Department-approved SMMP. Required mitigation activities, biological monitoring tasks, associated deliverables, and the deadline for each of these are summarized below, but additional important details are prescribed in the SMMP. The SMMP is herein incorporated by reference and enforceable as an integral component of this specific condition of the permit.

All mitigation activities (including planting and harvesting) and all biological monitoring shall be completed during the seagrass growing season (June - September).

The Permittee shall notify the JCP Compliance Officer prior to the initiation of each mitigation activity and monitoring task and provide an approximate date that work will begin. The Permittees shall notify the JCP Compliance Office when work has been initiated and when work has been completed.

a. Mitigation Monitoring Requirements:

Monitoring will be conducted to 1) document success of the mitigation site by assessing survival of planting units and measuring the expansion / coalescence of seagrass at the LKMS, 2) provide an analogous dataset for the reference site for comparison to the LKMS, and 3) document seagrass recovery at the donor site(s).

- i. *Pre-Harvesting Survey:* A survey shall be completed to designate / delineate at least 2.9 acres of suitable *H. wrightii*-dominated donor area in Perico Bayou, and the results of this survey shall be used to develop a Harvesting Plan that, along with the raw data, shall be submitted to the Department, prior to the harvesting of any seagrass materials and prior to the Baseline Survey at the donor site.
- ii. *Pre-Planting Survey:* A survey of the LKMS shall be completed to identify any natural seagrass resources, and the results of this survey shall be used to develop a Planting Plan that shall be submitted to the JCP Compliance Officer prior to the planting of any seagrass materials and prior to the Baseline Survey at the LKMS.
- iii. *Reference Site Selection Survey:* A qualitative in-water survey shall be completed to designate / delineate specific reference site(s) that will be used for comparison to the LKMS, and a Reference Site Selection Report describing the site(s) and the rationale for selecting the site(s) shall be submitted to the JCP Compliance Officer prior to the Baseline Survey of the reference site(s).

- iv. *Planting Completion Report:* Within 90 days after the completion of planting at the LKMS, a Planting Completion Report shall be prepared and submitted to the JCP Compliance Officer. The Planting Completion Report shall include final planting area, planting layout, location of permanent monitoring transects, planting density, and total number of planting units transplanted to the site.
- v. *Baseline and Annual Surveys:* All three sites (LKMS, reference site, and donor site) shall be surveyed annually during the growing season, beginning the year that planting activities are completed (Baseline Survey). Annual Surveys of the LKMS and corresponding reference site(s) shall be conducted for five (5) years following planting, or until the site achieves the permit-required success criteria (Specific Condition 28b). An Annual Survey shall also be completed each year at the donor site(s) for three (3) years following harvesting, or until recovery of the site(s) is documented (Specific Condition 28b). ArcMap GIS files and representative photos of the sites shall be submitted within 45 days of the completion of Baseline and Annual Surveys at each of the three sites: LKMS, reference site and donor site. A single comprehensive Annual Report summarizing the survey results for all three sites shall be submitted to the JCP Compliance Officer no later than 90 days after the completion of Annual Surveys each year.

b. Success Criteria for Seagrass Mitigation

- i. *Lido Key Mitigation Site:* The success criteria for the Lido Key Mitigation Site (LKMS) site shall be based on comparison to corresponding surveys of the reference site(s), as the goal of the mitigation will be to establish a seagrass community that resembles the existing *H. wrightii*-dominated seagrass habitat found in the Perico Bayou reference site(s). The LKMS will be considered successful once the 2.9 acres of seagrass habitat has a net-acreage of SAV and an estimated average percent cover of SAV that are within 10% of the reference site, as documented by transect line surveys and quantitative data collection within quadrats (per the SMMP). Individual seagrass taxa are not required to achieve any specific criteria for net-acreage or percent cover. Success criteria will be based on the cumulative net-acreage and percent cover by three seagrass taxa: *Halodule wrightii*, *Syringodium filiforme*, and *Thalassia testudinum*; only these three taxa will count toward the net-acreage and percent cover criteria for determining mitigation success.
- ii. *Donor Site:* The donor site will be considered to have successfully recovered when the holes from which seagrass was harvested are no longer discernable and the linear coverage (as determined by transect surveys) of seagrass along transects at the donor site is within ~10% of the values documented during the Baseline

Survey. Note: natural variation in seagrass coverage at the reference site will be considered when assessing recovery of the donor site(s).

- c. Contingency Mitigation Plan:** The Permittees will develop and submit a Contingency Mitigation Plan to the Department’s JCP Compliance Officer for review and approval if the mitigation site **a)** has less than 50% survival of planting units following the Year 2 Annual Survey or **b)** is not within 30% of reference site percent cover or not within 30% of acreage requirement following the Year 4 Annual Survey. The Contingency Mitigation Plan shall be submitted with the Annual Report (Year 2 if triggered by condition “a” or Year 4 if triggered by condition “b”, above). Additionally, if the donor site has not recovered by the end of the monitoring period, then the Permittees shall coordinate with the Department following the submission of the Year 3 Annual Report to determine if remediation or other actions, including (but not limited) to additional monitoring are warranted.

Table #2: Summary of mitigation tasks and associated monitoring / reporting requirements

Task	Deliverable	Timeline for Completion
Pre-Harvesting Survey	Harvesting Plan / Raw data	Prior to harvesting and Baseline Survey
Reference Site Selection Survey	Reference Site Selection Report	Prior to Baseline Survey
Pre-Planting Survey	Planting Plan	Prior to planting and Baseline Survey
Baseline Surveys	Raw data	Growing season planting occurs*
Seagrass Transplantation	Planting Completion Report	Immediately after planting
Annual Survey (Year 1)	Annual Report (Year 1) / Raw data	1 year after planting
Annual Survey (Year 2)	Annual Report (Year 2) / Raw data	2 years after planting
Annual Survey (Year 3)	Annual Report (Year 3) / Raw data	3 years after planting
Annual Survey (Year 4)	Annual Report (Year 4) / Raw data	4 years after planting
Annual Survey (Year 5)	Annual Report (Year 5) / Raw data	5 years after planting
Evaluation of success	Contingency Mitigation Plan	Only if success criteria are not achieved

*Donor site shall be surveyed prior to harvesting; planting site surveyed immediately post-planting, and reference site surveyed during the same growing season.

- d. Monitoring for Secondary Impacts:** Monitoring shall be conducted to document the condition of resources outside of the borrow areas to identify any potential secondary (indirect) impacts to seagrass that may result from construction of the Lido HSDR project, including (but not limited to) sloughing and sedimentation.
- i. Seagrass monitoring shall include all resources located within 150 meters of the dredging footprint or the authorized mixing zone, whichever is greater. If only a portion of the authorized footprint will be dredging during a construction event, then biological monitoring shall only be required for those resources within 150 meters of the portion of the footprint to be dredged (or the mixing zone for that area) during that event.

- ii. Each survey shall include 1) delineation of seagrass patches / beds boundaries, 2) qualitative assessment of seagrass condition within each patch / bed, and 3) quantitative assessment for species composition and abundance of seagrasses using quadrats.
 - iii. *Reporting:* Raw data (field sheets and Excel spreadsheets), ArcView GIS files, and representative photos of the site shall be submitted within 45 days of the completion of each survey. Following each dredging event, a Seagrass Monitoring Report (SMR) will be prepared and submitted to the JCP Compliance Officer within 90 days of the completion of the Post-Construction Survey.
29. **Restoration of Dunes and Mangroves.** In the event that dunes and dune vegetation is temporarily impacted to allow access for construction activities through approved access corridors, the impacted dunes shall be restored at minimum to pre-construction conditions. Prior to completion of the construction activity, the Permittees shall restore and replant the dunes according to the following conditions:
- a. The Permittees shall place clean, beach-compatible sand to create a stable dune system seaward of the major structures (seawalls, revetments, single family dwellings) and continuous with the natural dune features in the area. Side slopes shall match the slope of natural dunes in the area or shall be equal to or less than the angle of repose for the proposed fill material, and in no case shall it exceed a 1:3 (vertical:horizontal) slope. The crest elevation of the restored dune shall be set at the crest elevation of natural dunes in the area.
 - b. The Permittees shall plant the restored dune with a minimum of three different species of native salt-tolerant vegetation, including a minimum of 70 percent coverage by dune grasses. Planting materials shall be appropriate to the region of the planting site. Dune restoration plants shall be spaced throughout the designated area in staggered rows at a maximum distance of 18 inches on center for 2-inch plugs, or up to 18 inches on center for gallon size planting units. Grasses shall be planted at least 6 inches deep. The Permittee shall fertilize and water-in the planting units at the time of installation, and shall only irrigate and fertilize as necessary until the plants are established and meet the survival criteria below, for a minimum of 90 days. If irrigation systems are needed, they shall be installed below grade and shall remain below grade until they are removed.
 - c. Within 180 days, the Permittee shall achieve the following success criteria: at least 80 percent of the planting units shall have survived. Gaps in the shore parallel coverage shall be replanted. The Permittee shall replant all deficient areas and maintain the plantings until the above success criteria are met. Irrigation systems and other structures placed during plant installation and initial cultivation shall be

removed within thirty days from the submittal of the final project certification, but only after the Department has acknowledged planting success.

- d. The dune restoration area shall be protected from foot traffic or other encroachments. Signs, rope and post/bollard barriers with weighted surface anchors or sand fencing shall be constructed to prevent trampling of vegetation and erosion of the restored dune feature.
- e. Within 30 days of project completion, the Permittees shall submit to the Department's JCP Compliance Officer for approval, an as-built plan prepared and certified by a licensed landscape architect showing the dune restoration/ replanting.
- f. In the event a marine turtle nest is disturbed or uncovered during planting activity, the Permittees shall cease all work and immediately contact the person(s) responsible for marine turtle conservation measures within the project area. If a nest(s) cannot be safely avoided during construction, all activity within the affected project area shall be delayed until complete hatching and emergence of the nest.

30. **Water Quality Monitoring.** Turbidity shall be monitored as follows:

Units: Nephelometric Turbidity Units (NTUs).

Frequency: Turbidity monitoring shall be conducted at least three (3) times daily, approximately four (4) hours apart, and at any other time that there is a likelihood of an exceedance of the turbidity standard. Monitoring shall occur **while the highest project-related turbidity levels are crossing the edge of the mixing zone.**

Location: Background: At surface and mid-depth, clearly outside the influence of any artificially generated turbidity plume or the influence of an outgoing inlet plume, coincidental with compliance measurements.

Dredge Sites: Samples shall be collected at surface and mid-depth, at least 300 meters upcurrent from the dredge site and clearly outside the influence of any turbidity generated by the project.

Beach Site: Samples shall be collected at surface and mid-depth, at a point approximately 300 meters upcurrent from any portion of the beach that has been, or is being, filled during the current construction event, at the same distance offshore as the compliance station, clearly outside of any turbidity plume generated by the project.

Groin Sites: Samples shall be collected where the densest portion of the turbidity plume crosses the edge of the mixing zone, which measures 300 meters up current from the groin construction site.

Compliance: Three times daily at least four (4) hours apart during dredging and fill placement activity, at surface and mid-depth, while the densest turbidity plume is crossing the edge of the mixing zone. **Note:** If the plume flows parallel to the shoreline, the densest portion of the plume may be close to shore, in shallow water, and may cross the edge of the mixing zone less than 150 meters offshore. In that case, it may be necessary to access the sampling location from the shore, in water that is too shallow for a boat.

Dredge Sites: Samples shall be collected 150 meters down-current from the dredge head in the downcurrent direction **and** from any other source of turbidity generated by the dredge, in the densest portion of any visible turbidity plume. If no plume is visible, follow the likely direction of flow.

Beach Site: Samples shall be collected where the densest portion of the turbidity plume crosses the edge of the mixing zone, which measures 150 meters in radius from the point where the return water from the dredged discharge reenters the Gulf of Mexico.

Groin Sites: Samples shall be collected where the densest portion of the turbidity plume crosses the edge of the mixing zone, which measures 150 meters in radius from the groin construction site.

Calibration: The instruments used to measure turbidity shall be fully calibrated with primary standards within one month of the commencement of the project, and at least once a month throughout the project. Calibration with secondary standards shall be verified each morning prior to use, after each time the instrument is turned on, and after field sampling using two secondary turbidity “standards” that bracket the anticipated turbidity samples. If the post-sampling calibration value deviates more than 8% from the previous calibration value, results shall be reported as estimated and a description of the problem shall be included in the field notes.

The monitoring requirements for the type of activity and location of the sampling site shall be reflected on the monitoring report forms.

Analysis of turbidity samples shall be performed in compliance with DEP-SOP-001/01 FT 1600 Field Measurement of Turbidity:

<http://publicfiles.dep.state.fl.us/dear/sas/sopdoc/2008sops/ft1600.pdf>

If the turbidity monitoring protocol specified above prevents the collection of accurate data, the person in charge of the turbidity monitoring shall contact the JCP Compliance Officer to establish a more appropriate protocol. Once approved in writing by the Department, the new protocol shall be implemented through an administrative permit modification.

31. 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 compliance sites are greater than 29 NTUs above the corresponding background turbidity levels, or 11.9 NTUs above background within OFW, construction activities shall **cease immediately** and not resume until corrective measures have been taken and turbidity has returned to acceptable levels.

Any project-associated turbidity source other than dredging or fill placement for beach nourishment (e.g., scow or pipeline leakage) shall be monitored as close to the source as possible. If the turbidity level exceeds 29 NTUs above background, or 11.9 NTUs above background within OFW, the construction activities related to the exceedance shall **cease immediately** and not resume until corrective measures have been taken and turbidity has returned to acceptable levels. This turbidity monitoring shall continue every hour until background turbidity levels are restored or until otherwise directed by the Department. The Permittee shall notify the Department's JCP Compliance Officer, by separate email to the JCP Compliance Officer, of such an event within 24 hours of the time the Permittee first becomes aware of the discharge. The subject line of the email shall state "OTHER PROJECT-ASSOCIATED DISCHARGE, TURBIDITY EXCEEDANCE".

When reporting a turbidity exceedance, the following information shall also be included:

- a. The Project Name;
- b. The Permit Number;
- c. Location and level (NTUs above background) of the turbidity exceedance;
- d. The time and date that the exceedance occurred; and
- e. The time and date that construction ceased.

Prior to re-commencing the construction, a report shall be emailed to the Department's JCP Compliance Officer with the same information that was included in the "Exceedance Report", plus the following information:

- a. Turbidity monitoring data collected during the shutdown documenting the decline in turbidity levels and achievement of acceptable levels;

- b. Corrective measures that were taken; and
 - c. Cause of the exceedance.
32. **Turbidity Reports:** All turbidity monitoring data shall be submitted within one week of analysis. The data shall be presented in tabular format, indicating the measured turbidity levels at the compliance sites for each depth, the corresponding background levels at each depth and the number of NTUs over background at each depth. Any exceedances of the turbidity standard (29 NTUs above background, or 11.9 NTUs above background within OFW) shall be highlighted in the table. In addition to the raw and processed data, the reports shall also contain the following information:
- a. Time of day samples were taken;
 - b. Dates of sampling and analysis;
 - c. GPS location of sample;
 - d. Depth of water body;
 - e. Depth of each sample;
 - f. Antecedent weather conditions, including wind direction and velocity;
 - g. Tidal stage and direction of flow;
 - h. Water temperature;
 - i. A map, overlaid on an aerial photograph, indicating the sampling locations, dredging and discharge locations, and direction of flow. A sample map shall reviewed and approved by the Department prior to construction;
 - j. A statement describing the methods used in collection, handling, storage and analysis of the samples;
 - k. A statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection, calibration of the meter, accuracy of the data and precision of the GPS measurements;
 - l. When samples cannot be collected, an explanation shall be included in the report. If unable to collect samples due to severe weather conditions, include a copy of a current report from a reliable, independent source, such as an online weather service.

Monitoring reports shall be submitted by email to the JCP Compliance Officer. In the subject line of the reports, include the Project Name, Permit Number and the dates of the monitoring interval. Failure to submit reports in a timely manner constitutes grounds for revocation of the permit. When submitting this information to the JCP Compliance Officer, on the cover page to the submittal and at the top of each page, please state: "This information is provided in partial fulfillment of the monitoring requirements in Permit No. 0333315-001-JC, for the Lido Key Beach Nourishment and Groins."

33. If the Permittee is unable to complete two maintenance events within the 15-year life of the permit, the Permittee may request (prior to the expiration date of the permit), and the Department shall grant, an extension of the permit expiration date in order to allow completion of the second maintenance event. The extension would be documented through an administrative modification.

NOTICE OF RIGHTS

FLAWAC Review

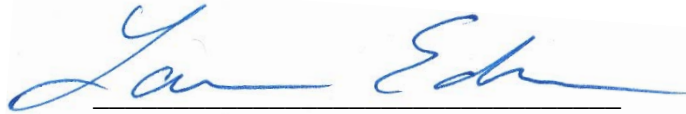
The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when this order is filed with the Clerk of the Department.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Lainie Edwards, Ph.D.
Deputy Director
Division of Water Resource Management

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

06/20/2018

Date

Permit Attachments: Permit Drawings
Sediment QA/QC Plan
Physical Monitoring Plan
Seagrass Mitigation and Monitoring Plan
Dune Restoration Planting Plan