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

PERMITTEES:
City of Venice
c/o Kathleen Weedon, P.E., City Engineer
401 West Venice Avenue
Venice, FL 34285

and

U.S. Army Corps of Engineers
Jacksonville District
c/o Eric P. Summa, Chief
Environmental Branch
P.O. Box 4970
Jacksonville, FL 32232-0019

AGENT:
Coastal Tech
c/o Lois Edwards, Supervisor
Environmental & Permitting Services Team
3625 20th Street
Vero Beach, FL 32960-2409

PERMIT INFORMATION:
Permit Number: 0211217-005-JC
Project Name: Venice Beach Nourishment
County: Sarasota
Issuance Date: June 13, 2014
Expiration Date: June 13, 2029

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 project is to periodically nourish 3.2 miles of shoreline. The fill template will have a variable berm width at an elevation of 8.4 feet NAVD, and a foreshore slope of 1:15 (vertical:horizontal). Beach-compatible sand will be obtained from up to four offshore borrow areas.

www.dep.state.fl.us
PROJECT LOCATION:

The beach nourishment segment is located south of Venice Inlet, and extends from 300 feet north of DEP range monument R-116 to R-133, in Sarasota County, Sections 1, 2, 12, 13 and 19, Township 39 South, Range 18 and 19 East, extending into the Gulf of Mexico, Class III Waters. The four offshore borrow areas are located approximately 10.5 miles southwest of the beach nourishment site in the Gulf of Mexico, Class III Waters.

PROPRIETARY AUTHORIZATION:

This activity also requires a proprietary authorization, as the activity is located on sovereign submerged lands held in trust by the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), pursuant to Article X, Section 11 of the Florida Constitution, and Sections 253.002 and 253.77, F.S. The activity is not exempt from the need to obtain a proprietary authorization. The Board of Trustees delegated, to the Department, the responsibility to review and take final action on this request for proprietary authorization in accordance with Section 18-21.0051, F.A.C., and the Operating Agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C. This proprietary authorization has been reviewed in accordance with Chapter 253, F.S., Chapter 18-21, F.A.C., 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 reviewed the project described above, and has determined that the beach fill placement 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, pursuant to Section 253.77, F.S., to perform the beach fill placement activity on the specified sovereign submerged lands.

The Department has also determined that the four offshore borrow areas require a public easement for the use of those lands, pursuant to Section 253.77, F.S. The final documents required to execute the public easement have been sent to the Department’s Division of State Lands. The Department intends to issue the public easement to the City of Venice upon satisfactory execution of those documents. You may not begin construction until the public 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 constitutes certification of compliance with state water quality standards pursuant to Section 401 of the Clean Water Act, 33 U.S.C. 1341.
AGENCY ACTION:

The above-named Permittees are hereby authorized to construct the work outlined in the activity description and activity 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, the General Consent Conditions and the Specific Conditions, which are a binding part of this permit and authorization. Both Permittees and their Contractor are responsible for reading and understanding this permit (including the permit conditions and the approved permit drawings) prior to commencing the authorized activities, and for ensuring that the work is conducted in conformance with all the terms, conditions and drawings.

GENERAL CONDITIONS:

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

2. All activities approved shall be implemented as set forth in the drawings incorporated by reference and in compliance with the conditions and requirements of this document. The Corps shall notify the Department in writing of any anticipated changes in:

   a) operational plans;
   b) project dimensions, size or location;
   c) ability to adhere to permit conditions;
   d) project description included in the permit;
   e) monitoring plans.

If the Department determines that a modification to the permit is required then the Corps shall apply for and obtain the modification. Department approval of the modification shall be obtained prior to implementing the change, unless the change is determined by the Department to reduce the scope of work from that authorized under the original permit, and will not affect compliance with permit conditions or monitoring requirements.
3. If, for any reason, the Corps does not comply with any condition or limitation specified herein, the Corps shall immediately provide the Department with a written report containing the following information:
   a) a description of and cause of noncompliance;
   b) the period of noncompliance, including dates and times;
   c) impacts resulting or likely to result from the non-compliance;
   d) steps being taken to correct the non-compliance; and
   e) the steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

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

4. The Corps shall obtain any applicable licenses, permits, or other authorizations which may be required by federal, state, local or special district laws and regulations. Nothing herein constitutes a waiver or approval of other Department permits or authorizations that may be required for other aspects of the total project.

5. Nothing herein conveys to the Corps or creates in the Corps any property right, any interest in real property, any title to land or water, constitutes State recognition or acknowledgment of title, or constitutes authority for the use of Florida’s sovereign submerged lands seaward of the mean high-water line or an established erosion control line, unless herein provided, and the necessary title, lease, easement, or other form of consent authorizing the proposed use has been obtained from the State.

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

7. Nothing herein authorizes any entrance upon or activities on property which is not owned or controlled by the Corps or local sponsor, or conveys any vested rights or any exclusive privileges.

8. This document or a copy thereof, complete with all conditions, attachments, modifications, and time extensions shall be kept at the work site of the authorized activity. The Corps shall require the contractor to review this document prior to commencement of the authorized activity.

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

10. At least forty-eight (48) hours prior to the commencement of authorized activity, the Corps shall submit to the Department a written notice of commencement of activities indicating the anticipated start date and the anticipated completion date.

11. If historic or archaeological artifacts such as, but not limited to, Indian canoes, arrow heads, pottery or physical remains, are discovered at any time on the project site, the Corps shall immediately stop all activities in the immediate area which disturb the soil and notify the Department and the State Historic Preservation Officer. In the event that unmarked human remains are encountered during permitted activities, all work shall stop in the immediate area and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

12. Within a reasonable time after completion of construction activities authorized by this permit, the Corps shall submit to the Department a written statement of completion. This statement shall notify the Department that the work has been completed as authorized and shall include a description of the actual work completed. The Department shall be provided, if requested, a copy of any as-built drawings required of the contractor or survey performed by the Corps.

GENERAL CONSENT CONDITIONS (beach fill placement activity):

1. Sovereignty submerged lands may be used 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 will constitute a violation. Violation of the authorization will result in suspension or revocation of the applicant’s use of the sovereignty submerged lands unless cured to the satisfaction of the Board of Trustees.

2. Authorization under Rule 18-21.005, F.A.C., conveys no title to sovereignty submerged lands or water column, nor does it constitute recognition or acknowledgment of any other person’s title to such land or water.

3. Authorizations under Rule 18-21.005, F.A.C., may be modified, suspended or revoked in accordance with its terms or the remedies provided in Sections 253.04, F.S. and Chapter 18-14, F.A.C.
4. Structures or activities will be constructed and used to avoid or minimize adverse impacts to resources.

5. Construction, use, or operation of the structure or activity will not adversely affect any species which 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 will not unreasonably interfere with riparian rights. When a court of competent jurisdiction determines that riparian rights have been unlawfully affected, the structure or activity will be modified in accordance with the court’s decision.

7. Structures or activities will not create a navigational hazard.

8. Structures will be maintained in a functional condition and will be repaired or removed if they become dilapidated to such an extent that they are no longer functional.

9. Structures or activities will be constructed, operated, and maintained solely for water dependent purposes.

10. The applicant agrees to indemnify, defend and hold harmless the Board of Trustees and the State of Florida from all claims, actions, lawsuits and demands in any form arising out of the authorization to use sovereignty submerged lands or the applicant’s use and construction of structures on sovereignty submerged lands. This duty to indemnify and hold harmless will include any and all liabilities that are associated with the structure or activity including special assessments or taxes that are now or in the future assessed against the structure or activity during the period of the authorization.

11. Failure by the Board of Trustees to enforce any violation of a provision of the authorization or waiver by the Board of Trustees of any provision of the authorization will not invalidate the provision not enforced or waived, nor will the failure to enforce or a waiver prevent the Board of Trustees from enforcing the unenforced or waived provision in the event of a violation of that provision.

12. Applicant binds itself and its successors and assigns to abide by the provisions and conditions set forth in the authorization. If the applicant or its successors or assigns fails or refuses to comply with the provisions and conditions of the authorization, the authorization may be terminated by the Board of Trustees after written notice to the applicant or its successors or assigns. Upon receipt of such notice, the applicant or its successors or assigns will have thirty (30) days in which to correct the violations. Failure to correct the violations within this period will result in the automatic revocation of this authorization.
13. All costs incurred by the Board of Trustees in enforcing the terms and conditions of the authorization will be paid by the applicant. Any notice required by law will be made by certified mail at the address shown on page one of the authorization. The applicant will notify the Board of Trustees in writing of any change of address at least ten days before the change becomes effective.

14. This authorization does not allow any activity prohibited in a conservation easement or restrictive covenant that prohibits the activity.

SPECIFIC CONDITIONS:

The following Specific Conditions (1-36) shall be met by at least one of the co-Permittees, according to their respective construction obligations, as indicated below. The U.S. Army Corps of Engineers (Corps) shall be responsible for Specific Conditions 1-21 and 29-34. The City of Venice (City) shall be responsible for Specific Conditions 1, 22-28 and 35-36. Neither the Corps nor the City shall be responsible for meeting such conditions for work undertaken by the other pursuant to this permit.

1. The terms, conditions and provisions of the required public easement shall be met. The Notice to Proceed shall not be issued, and construction shall not commence on sovereign submerged lands, title to which is held by the Board of Trustees, until all public easement documents have been executed to the satisfaction of the Department.

2. All reports, notices or other submittals relating to this permit shall be sent to the Department’s JCP Compliance Officer by e-mail at: JCPCompliance@dep.state.fl.us, unless otherwise specified in the Specific Conditions. All submittals shall clearly indicate the project name (Venice Beach Nourishment) and the permit number (0211217-005-JC).

3. No work shall be conducted under this permit until the Permittee has received a Notice to Proceed from the Department for each nourishment event. At least 30 days prior to the requested date of issuance of the Notice to Proceed, the Permittee shall submit (to the JCP Compliance Officer) an electronic request for a Notice to Proceed for review and approval by the Department, along the following supporting items:

   a. Documentation that the public easement has been fully executed and recorded.

   b. An anticipated construction schedule and a description of the specific type of dredge equipment to be used.

   c. A detailed Final Biological Monitoring Plan, as described in Specific Conditions 32-34.
d. The names, credentials and contact information for the individuals who will conduct the turbidity monitoring and the biological monitoring.

e. The intermediate turbidity monitoring data from the previous nourishment event and a summary to support the appropriate mixing zone size for the beach nourishment site. If the data support a different mixing zone size, the new mixing zone will be documented through an administrative permit modification. This item is **not** required for the initial nourishment event under this permit, but is required for all subsequent events.

f. A Scope of Work for the turbidity monitoring to ensure that the right equipment is available to conduct the monitoring correctly, at the correct location (i.e., wherever the densest portion of the turbidity plume crosses the edge of the mixing zone polygon), and under any conditions. In addition to the equipment needed to collect water samples and measure turbidity, the equipment needed to access the correct sampling site must be listed. This might include boats, jet skis, floatation devices, wet suits, SCUBA gear, etc.

4. At least seven days prior to commencement of construction authorized by this permit, the Permittees shall review the conditions and monitoring requirements of this permit with all contractors, the individuals responsible for turbidity and biological monitoring, the U.S. Army Corps of Engineers (Corps), the JCP Compliance Officer (or designated alternate), and the Florida Fish and Wildlife Conservation Commission (FWC). Once the JCP Compliance Officer has confirmed his/her availability, the Permittee shall provide notification, at least 14 days in advance of the meeting, to each of these offices advising of the agreed-upon date, time, and location of the pre-construction conference, and also provide a meeting agenda and a teleconference number. The contact information for FWC is:

   FWC, Imperiled Species Management Section  
   620 South Meridian Street, 6A  
   Tallahassee, FL 32399-1600  
   Phone: (850) 922-4330  
   Fax: (850) 921-4369  
   E-mail: fcmpmail@myfwc.com

The Permittee may wish to combine this pre-construction conference with the FWC pre-construction conference required in Specific Condition 13.

5. The Permittee shall not store or stockpile tools, equipment, materials, etc., within littoral zones or elsewhere within surface waters of the state without prior written approval from the Department. Storage, stockpiling or access of equipment on, in, over or through seagrass beds (or other aquatic vegetation), wetlands or vegetated dunes is prohibited.
6. The Permittee shall not conduct project activities or store project-related equipment in, on or over dunes, or otherwise impact dune vegetation, outside of the approved staging and beach access areas designated in the permit drawings.

Best management practices (BMPs) shall be used at all times during construction to minimize turbidity at both the borrow/dredge and beach/fill sites. When fill material is hydraulically pumped onto the beach, these BMPs shall include sand dikes parallel to the shore and landward of the mean high water line. The sand/water slurry pumped from the borrow/dredge site shall be discharged along the landward side of the dikes. When the sand/water slurry is hydraulically pumped onto the beach, the opening of the discharge pipe shall be at least 200 feet from the end of the dike where return water from the slurry flows back into open waters of the state.

7. In order to avoid impacts to historic/archeological resources adjacent the borrow areas, a 250-foot buffer shall be maintained between the dredge and six potentially-significant historical resource clusters, as identified in an underwater remote sensing survey conducted in August and September 2010 by Panamerican Consultants, Inc. The Permittee shall also avoid anchoring or other bottom-disturbing activities within 1,000 feet of four nearshore subbottom targets that were identified in the survey as potentially significant cultural resources (see attached letter from the Florida Department of State, Division of Historical Resources dated November 2, 2011).

8. Sediment quality shall be assessed as outlined in the attached Sediment Quality Assurance/Quality Control (QA/QC) Plan dated March 21, 2013. If during construction, the Permittee determines that the beach fill material is not in compliance with the Sediment QA/QC Plan, measures shall be taken to avoid further placement of noncompliant fill. A post-remediation report containing a site map, sediment analysis, and volume of noncompliant fill material removed and replaced shall be submitted to the JCP Compliance Officer within seven days following completion of remediation activities.

9. 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 placement. A summary table of the sediment samples and test results for the sediment compliance parameters, as outlined in Table 1 of the Sediment QA/QC Plan, shall accompany the complete set of laboratory testing results. A statement describing how the fill material compares to the sediment analysis, and volume calculations from the geotechnical investigation shall be included in the sediment testing.
results. The sediment testing results shall be certified by a professional engineer or a professional geologist who represents the testing laboratory.

MANATEE, MARINE TURTLE AND SHOREBIRD PROTECTION

10. During all construction authorized by this permit, and subsequent to authorization of incidental Take by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) in accordance with Sections 161.041(5) and 379.2431(1), F.S., the Permittee shall comply with the following conditions intended to protect manatees, marine turtles and shorebirds from direct project effects:

a. All personnel associated with the project shall be instructed about the presence of marine turtles, manatees and manatee speed zones, and the need to avoid collisions with (and injury to) these protected marine species. The Permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing or killing manatees, which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act, and for killing marine turtles, which are protected under the Endangered Species Act and the Florida Marine Turtle Protection 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 entanglement or entrapment. Barriers shall not impede manatee or marine turtle movement.

d. All on-site project personnel are responsible for observing for the presence of marine turtles and manatees during all in-water activities. **All in-water activities, including vessels, shall be shut down if a marine turtle or manatee comes within 50 feet of the operation.** Activities shall not resume until the animal(s) has moved beyond a 50-foot radius of the project operation, or until 30 minutes has elapsed 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 FWC Hotline at 1-888-404-3922, and to FWC by email at: ImperiledSpecies@myfwc.com. Collision and/or injury shall also be reported to FWS in Jacksonville at 1-904-731-3336.
f. Temporary signs concerning manatees shall be posted prior to and during all in-water activities. Temporary signs that have already been approved for this use by FWC shall be used (see MyFWC.com/manatee). A “Caution: Manatee Habitat” sign (shown below) measuring at least 8 ½ inches by 11 inches shall be posted in a location prominently visible to all personnel engaged in water-related activities. Questions concerning these signs can be sent to the email address listed above. All signs shall be removed by the Permittee upon completion of the project.

![Manatee Habitat Sign](image)

All personnel associated with the project shall be instructed about the potential presence of nesting shorebirds and the need to avoid Take of (including disturbance to) these protected species.

h. All vehicles shall be operated in accordance with FWC’s “Best Management Practices for Operating Vehicles on the Beach” located at: http://myfwc.com/conservation/you-conserve/wildlife/beach-driving/. Specifically, the vehicle shall be operated at a speed of less than six miles per hour, and run at or below the high-tide line.

FISH AND WILDLIFE PROTECTION DURING DREDGING ACTIVITIES

11. **Hopper Dredging.** In the event a hopper dredge is utilized, the following requirements shall be met in addition to the terms and conditions of the applicable NMFS Regional Biological Opinion for Hopper Dredging (Gulf of Mexico):

   a. Handling of captured marine turtle(s) shall be conducted only by persons with prior experience and training in these activities, and who is duly authorized to conduct such activities through a valid Marine Turtle Permit issued by FWC, pursuant to Chapter 68E-1, F.A.C.
b. To minimize impingement or entrapment of marine turtles within the water column, dredge 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 activities.

c. A state-of-the-art rigid deflector draghead shall be used on all hopper dredges, in all channels, at all times of the year.

d. The Sea Turtle Stranding and Salvage Network (STSSN) Coordinator shall be notified by email at Allen.Foley@myfwc.com at the start-up and completion of hopper dredging operations. In the event of capturing or recovering marine turtles or marine turtle parts, the STSSN should be contacted by email at: SeaTurtleStranding@myfwc.com.

e. Relocation trawling or non-capture trawling shall be implemented in accordance with the applicable NMFS Biological Opinion and Incidental Take authorization. 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.

f. The Permittee or their contractor shall email weekly reports to the FWC’s Imperiled Species Management Section at MTP@myfwc.com by Friday each week that trawling is conducted in Florida waters. These weekly reports shall include the species and number of turtles captured in Florida waters, general health, and release information. The Permittee(s) shall submit a summary (using the FWC-provided Excel spreadsheet) of all trawling activity, including non-capture trawling, and all turtles captured in Florida waters to MTP@myfwc.com by January 15 of the following year or at the end of the project. The summary shall include the following information: all measurements, the latitude and longitude (in decimal degrees) of captures and tow start-stop points, and times for the start-stop points of the tows, including those tows in which no turtles are captured.

FISH AND WILDLIFE PROTECTION DURING BEACH PLACEMENT ACTIVITIES

12. Beach Maintenance. All derelict coastal armoring material and other debris shall be removed from the beach to the maximum extent practicable prior to any fill placement. If debris removal activities will take place during shorebird breeding or marine turtle nesting seasons, the work shall be conducted during daylight hours only and shall not commence until the completion of daily seabird, shorebird or marine turtle surveys. 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 unless otherwise authorized.
13. **Pre-Construction Meeting.** A meeting between representatives of the contractor, FWS, FWC, the permitted marine turtle surveyor and Bird Monitors as appropriate, shall be held prior to commencement of construction. At least ten-business days advance notice shall be provided prior to conducting this meeting. The meeting shall provide an opportunity for explanation and/or clarification of the protection measures, as well as additional guidelines when construction occurs during nesting season, such as staging equipment and reporting, as well as follow up meetings during construction. The Permittee may wish to combine this pre-construction meeting with the Department’s pre-construction conference required in Specific Condition 4.

14. **Nesting Seabird and Shorebird Protection Conditions.** Nesting seabird and shorebird (shorebird) surveys shall be conducted by trained, dedicated individuals (Bird Monitor) with proven shorebird identification skills and avian survey experience. A list of candidate Bird Monitors with their contact information, summary of qualifications, including bird identification skills, and avian survey experience, shall be provided to FWC. This information shall be submitted to the FWC Regional Species Biologist (contact information attached) prior to any construction or hiring for shorebird surveys for revision and consultation. Bird Monitors shall use the following survey protocols:

   a. Bird Monitors shall review and become familiar with the general information, employ the data collection protocol, and implement data entry procedures outlined in FWC’s Florida Shorebird Database (FSD) located at: www.FLShorebirdDatabase.org. An outline of data to be collected, including downloadable field data sheets, is available on the website.

   b. 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 around the state:

      Sarasota County: February 15 – September 1

      Breeding season surveys shall begin on the first day of the breeding season or ten days prior to project commencement (including surveying activities and other pre-construction presence on the beach), whichever is later. Surveys shall be conducted through August 31st or until all breeding activity has concluded, whichever is later.

   c. Breeding season surveys shall be conducted in all potential beach-nesting bird habitats within the project boundaries that may be impacted by construction or pre-construction activities. Portions of the project in which there is no potential for project-related activity during the nesting season may be excluded. One or
more shorebird survey routes shall be established in the FSD website to cover these areas.

d. During the pre-construction and construction phases of the project, surveys for detecting breeding activity and the presence of flightless chicks shall be completed on a daily basis prior to movement of equipment, operation of vehicles, or other activities that could potentially disrupt breeding behavior or cause harm to the birds or their eggs or young.

e. Surveys shall be conducted by walking the length of the project area and visually surveying for the presence of shorebirds exhibiting breeding behavior, shorebird/seabird chicks, or shorebird/seabird juveniles as outlined in the FSD “Breeding Bird Protocol for Shorebirds and Seabirds”. Use of binoculars is required. If an ATV or other vehicle is needed to cover large project areas, vehicles shall be operated in accordance with FWC’s “Best Management Practices for Operating Vehicles on the Beach” located at: http://myfwc.com/conservation/you-conserve/wildlife/beach-driving/.

Specifically, the vehicle shall be operated at a speed of less than six miles per hour and run at or below the high-tide line. The Bird Monitor shall stop at no greater than 200-meter intervals to visually inspect for breeding activity.

f. Once breeding is confirmed by the presence of a scrape, eggs, or young, the Bird Monitor shall notify the FWC Regional Species Biologist within 24 hours. All breeding activity shall be reported to the FSD website within one week of data collection.

15. **Seabird and Shorebird Buffer Zones and Travel Corridors.** Within the project area, the Permittee shall establish a disturbance-free buffer zone around any location where shorebirds have been engaged in breeding behavior, including territory defense. A 300-foot-wide buffer is considered adequate, based on published studies. However, a smaller, site-specific buffer may be implemented upon approval by the FWC Regional Species Biologist, as needed. All sources of human disturbance, including pedestrians, pets and vehicles shall be prohibited in the buffer zone.

a. The Bird Monitor 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 width of the buffer zone shall be increased immediately to a sufficient size to protect breeding birds.

b. Reasonable and traditional pedestrian access shall not be blocked 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 www.dep.state.fl.us
tide line. Pedestrian traffic may also be tolerated when breeding was initiated within 300 feet of an established beach access pathway. The Permittee shall work with the FWC Regional Species Biologist to determine if pedestrian access can be accommodated without compromising nesting success.

c. The perimeter of designated buffer zones shall be marked with posts, twine and signs stating “Do Not Enter, Important Nesting Area” or similar language, and shall include the name and a phone number of the entity responsible for posting. Posts shall not exceed three feet in height once installed. Symbolic fencing (e.g., twine, string or rope) shall be placed between all posts at least 2.5 feet above the ground, and shall be clearly visible to pedestrians. If pedestrian pathways are approved by the FWC Regional Species Biologist within the 300-foot buffer zone, the pathways shall be clearly marked. The posting shall be 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 complete until all chicks have fledged.

d. No construction activities, pedestrians, movement of vehicles, or stockpiling of equipment shall be allowed within the buffer area.

e. Travel corridors shall be designated and marked outside the buffer areas so as not to cause disturbance to breeding birds. Heavy equipment, other vehicles and pedestrians may transit past breeding areas in these corridors. However, other activities such as stopping or turning shall be prohibited within the designated travel corridors adjacent to the breeding site. When flightless chicks are present within or adjacent to travel corridors, movement of vehicles shall be accompanied by the Bird Monitor who shall ensure that no chicks are in the path of the moving vehicle and no tracks capable of trapping flightless chicks result.

f. To discourage nesting within the travel corridor, it is recommended that the Permittee maintain some activity within these corridors on a daily basis, without disturbing any nesting shorebirds documented on site or interfering with marine turtle nesting, especially when those corridors are established prior to commencement of construction.

16. **Notification.** If shorebird breeding occurs within the project area, a bulletin board shall be placed and maintained in the construction staging area. The bulletin board shall include a location map of the construction site that shows the bird breeding areas, and a clearly-visible warning that states: “NESTING BIRDS ARE PROTECTED BY LAW INCLUDING THE FLORIDA ENDANGERED AND THREATENED SPECIES ACT AND THE STATE and FEDERAL MIGRATORY BIRD ACTS”.
17. **Marine Turtle Nest Surveys and Relocation.** Sand placement may occur during the marine turtle nesting season, May 1 through October 31, provided the following marine turtle protection conditions are met, except where such work is prohibited by the managing agency or under applicable local land use codes.

a. In accordance with Section 161.041(5), F.S., no construction that could result in Take of marine turtles shall begin until the federal incidental Take authorization is issued in accordance with the Endangered Species Act. In the event that additional or different requirements from the permit conditions are specified in the FWS Incidental Take Authorization and Biological Opinion, additional marine turtle protection conditions shall be incorporated into the permit specific conditions through an administrative permit modification. No relocation of marine turtle nests shall occur unless specifically authorized by FWC in a permit issued pursuant to Section 379.2431(1), F.S. and Chapter 68E-1, F.A.C.

b. For sand placement projects that occur during the period from April 15 through October 31, daily early morning surveys (before 9 a.m.) shall be conducted beginning April 15, and shall continue through September 30.

c. Upon receipt of the FWS Incidental Take Authorization, eggs shall be relocated per the requirements below. *Note: Marine turtle monitors shall not enter posted shorebird buffer areas to conduct monitoring or to relocate nests.*

i. Nesting surveys and nest marking shall only be conducted by persons with prior experience and training in these activities, and who are authorized to conduct such activities through a valid marine turtle permit issued by FWC, pursuant to Chapter 68E-1, F.A.C. Please contact FWC’s Marine Turtle Management Program by email at MTP@myfwc.com for information on the permit holder in the project area. Nesting surveys shall be conducted daily between sunrise and 9 a.m. (for all time zones). The contractor shall not initiate work until daily notice has been received from the marine turtle permit holder that the morning survey has been completed. Surveys shall be performed in such a manner so as to ensure that the construction activity does not occur in any location prior to completion of the necessary marine turtle protection measures.

ii. Only those nests in the area where sand placement occurs shall be relocated. Nest relocation shall not occur upon completion of sand placement. 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 daily inundation.
by high tides or known to routinely experience severe erosion and egg loss, or that are subject to artificial lighting. Nest relocations in association with construction activities shall cease when sand placement activities no longer threaten nests.

iii. Nests deposited within areas where construction 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 place unless other factors threaten the success of the nest. The marine turtle permit holder shall install an on-beach marker at the nest site and/or a secondary marker at a point as far landward as possible to ensure that future location of the nest will be possible should the on-beach marker be lost. No project activities shall occur within this area nor shall any activities occur that could result in impacts to the nest. Nest sites shall be inspected daily to ensure nest markers remain in place and that the nest has not been disturbed by the project.

18. **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 be responsible for notifying STSSN by email at: SeaTurtleStranding@myfwc.com. 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, the permit holder responsible for egg relocation shall be notified immediately so the eggs can be moved to a suitable relocation site.

19. **Equipment Storage and Placement.** All construction pipes that are placed on the beach shall be located as far landward as possible without compromising the integrity of the existing dune system. Pipes placed parallel to the dune shall be no farther seaward than five to ten feet away from the toe of the dune. Temporary storage of pipes shall be off the beach to the maximum extent possible. 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.

20. **Project Lighting.** Direct lighting of the beach and nearshore waters shall be limited to the immediate construction area during the marine turtle nesting season 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 Coast Guard, EM 385-1-1, and OSHA requirements. Light intensity of lighting equipment shall be reduced.
to the minimum standard required by OSHA for General Construction areas, in order not to misdirect marine turtles. Shields shall be affixed to the light housing and shall be large enough to block light from all lamps from being transmitted outside the construction area (see figure below).

21. **Fill Restrictions.** During the marine turtle nesting season, the contractor shall not extend 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 surveyor present on site to ensure no nesting and hatching marine turtles are present within the extended work area. If 500 feet is not feasible for the project, the Permittee may submit a request for an alternate distance to FWC, and FWC will decide if that distance is acceptable during the pre-construction meeting. Once the beach has been cleared and the necessary nest relocations have been completed, the contractor shall be allowed to proceed with the placement of fill during daylight hours until dusk at which time the 500-foot-length limitation shall apply.

22. **Compaction Sampling.** Sand compaction shall be monitored in the area of sand placement immediately after completion of the project and prior to April 15 for three subsequent years. Compaction shall be monitored in accordance with a protocol agreed to by FWS, FWC and the Permittee. The requirement for compaction monitoring can be eliminated if the decision is made to till regardless of post-construction compaction levels. Out-year compaction monitoring and remediation are not required if placed material no longer remains on the beach.

At a minimum, the protocol provided 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 immediately prior to April 15. If values exceeding 500 psi are distributed throughout the project area, but in no case do those values exist at two adjacent stations at the same depth, then consultation with FWC or FWS shall be required to determine if tilling is required. If a few values exceeding 500 psi are randomly present within the project area, tilling shall not be required.

a. Compaction sampling stations shall be located at 500-foot intervals along the project area. One station shall be located at the seaward edge of the dune/bulkhead line (when material is placed in this area), and one station shall be located midway between the dune line and the high water line (normal wrack line).

b. At each station, the cone penetrometer shall be pushed to depths of 6, 12 and 18 inches, three times at each depth (three replicates). Material may be removed from the hole if necessary to ensure accurate readings of successive levels of sediment. The penetrometer may need to be reset between pushes, especially if sediment layering exists. Layers of highly compact material may 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 six averaged compaction values.

c. No compaction sampling shall occur within 300 feet of any shorebird nest.


23. **Tilling Requirements.** If tilling is required as specified above, the area shall be tilled to a depth of 36 inches. Tilling shall be completed prior to the marine turtle nesting season. If tilling occurs during shorebird nesting season, shorebird surveys prior to tilling shall be required. It is the responsibility of the contractors to 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 to FWC by email 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 observed 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 avoid all vegetated areas three square feet or greater with a three-foot buffer around the vegetated areas. The slope between the mean high water line and the mean low water line shall be maintained in such a manner as to approximate natural slopes.

e. Any vehicles operated on the beach in association with compaction surveys shall operate in accordance with FWC’s “Best Management Practices for Operating Vehicles on the Beach” located at: http://myfwc.com/conservation/you-conserve/wildlife/beach-driving/.

24. Escarpment Surveys. Visual surveys for escarpments along the project area shall be conducted immediately after completion of the sand placement project, weekly during marine turtle nesting season, and between March 15 and April 15 for three subsequent years by the City if sand from the project still remains on the beach. Weekly reports shall be submitted by Friday each week to FWC by email at: marineturtle@myfwc.com.

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 April 15. Any escarpment removal shall be reported to FWC by location. If the project is completed during the marine turtle nesting and hatching season, escarpments may be required to be leveled immediately, while protecting nests that have been relocated or left in place. If, during the nesting and hatching season, there is any subsequent reformation of escarpments that interfere with marine turtle nesting or that exceed 18 inches in height for a distance of 100 feet, the Permittee shall immediately contact FWC to determine the appropriate action to be taken. If it is determined that escarpment leveling is required during the nesting or hatching season, FWS or 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 to FWC by email at marineturtle@myfwc.com, as described below. If escarpment removal occurs during shorebird breeding season, shorebirds surveys shall be required prior to removal. 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.

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b. If flightless shorebird young are observed 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.


25. All terms and conditions in the FWS Programmatic Piping Plover Biological Opinion dated May 22, 2013, shall be met.

POST-CONSTRUCTION SHOREBIRD PROTECTION

26. If beach cleaning will occur on the nourished beach, a minimum of 30% of the biotic material within the wrack line shall be left on the beach post-cleaning at the strand line in a natural configuration to ensure that the nourished beach re-establishes its function as foraging habitat for shorebirds. This shall occur for as long as the placed sand remains on the beach.

POST-CONSTRUCTION MONITORING AND REPORTING FOR MARINE TURTLE PROTECTION

27. Reports on all marine turtle nesting activity shall be provided for the initial marine turtle nesting (May 1 through September 15) and hatching (through October 31) season, and for up to three additional nesting seasons as follows:

a. For the initial nesting season and the following year, the number and type of emergences (nests or false crawls) shall be reported per species in accordance with the table 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 initial nesting season, reproductive success shall be reported per species in accordance with the table below. Reproductive success shall be reported for all marine turtle nests if possible. Otherwise, a statistically significant number of nests for each species shall be reported.

c. In the event that the reproductive success documented by species meets or exceeds required criteria (outlined in the table below) for each species, 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 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, applicable project permit numbers and dates of construction.

Data shall be reported for the nourished areas in accordance with the table below and shall 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’s Imperiled Species Management Section by email at: MTP@myfwc.com. All summaries shall be submitted by January 15 of the following year. The FWC Excel spreadsheet is available upon request by email at: MTP@myfwc.com.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Duration</th>
<th>Variable</th>
<th>Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nesting Success</td>
<td>Year of construction, one year to two or three years post construction if placed sand remains on beach and variable does not meet criterion based on previous year</td>
<td>Number of nests and non-nesting emergences by day by species</td>
<td>40% or greater</td>
</tr>
<tr>
<td>Hatching Success</td>
<td>Year of construction and one to three years post construction if placed sand remains on beach and variable does not meet criterion based on previous year</td>
<td>Number of hatchlings by species to completely escape egg</td>
<td>Average of 60% or greater (data must include washed out nests)</td>
</tr>
<tr>
<td>Emergence Success</td>
<td>Year of construction and one to three years post construction if placed sand remains on beach and variable does not meet success criterion based on previous year</td>
<td>Number of hatchlings by species to emerge from nest onto beach</td>
<td>Average must not be significantly different than the average hatching success</td>
</tr>
<tr>
<td>Disorientation</td>
<td>Year of construction and one to three years post construction if placed sand remains on beach</td>
<td>Number of nests and individuals that misorient or disorient</td>
<td></td>
</tr>
<tr>
<td>Lighting Surveys</td>
<td>Two surveys the year following construction, one survey between May 1 and May 15 and second survey between July 15 and August 1</td>
<td>Number, location and photographs of lights visible from nourished berm, corrective actions and notifications made</td>
<td>100% reduction in lights visible from nourished berm within one to two month period</td>
</tr>
<tr>
<td>Compaction</td>
<td>Not required if the beach is tilled prior to nesting season each year placed sand remains on beach</td>
<td>Shear resistance</td>
<td>Less than 500 psi</td>
</tr>
</tbody>
</table>

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28. 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 the first nesting season following construction, or immediately after placement if construction is not completed until after May 15. A second survey shall be conducted between July 15 and August 1. The survey shall be conducted by the Permittee, and shall include a landward view from the seaward most extent of the new beach profile. The survey shall follow standard techniques for such a survey, and shall include the number and type of visible lights, location of lights and photo documentation. For each light source visible, it shall be documented that the property owner(s) has been notified of the problem light with recommendations for correcting the light. Recommendations shall be in accordance with the “Florida Model Lighting Ordinance for Marine Turtle Protection” pursuant to Chapter 62B-55, F.A.C. and local lighting restrictions. A report summarizing all visible lights observed during the first survey and the notices sent to property owners shall be submitted to FWC’s Imperiled Species Management Section by email at: marineturtle@myfwc.com by the 1st of the month following the survey. A summary report of the second survey documenting the lights that are still visible after the property owners had been notified shall also be submitted by December 15 of that year. After the annual report is completed, a meeting shall be set up with the Permittee, county or municipality, FWC and FWS to discuss the survey report, as well as any documented marine turtle disorientations in or adjacent to the project area.

MONITORING REQUIRED:

TURBIDITY MONITORING

29. Turbidity monitoring shall be conducted during all dredging and beach placement activities. Monitoring shall be conducted as follows:

Units: Nephelometric Turbidity Units (NTUs).

Frequency: Three times daily, approximately four hours apart, while the heaviest turbidity plume is crossing the edge of the mixing zone. The compliance samples and the corresponding background samples shall be collected at approximately the same time, i.e., one shall immediately follow the other. Since turbidity levels can be related to pumping rates, the dredge pumping rates shall be recorded according to date and time, and provided to the
Department upon request. If needed, this would to provide supporting evidence that turbidity sampling occurred at times of peak turbidity.

Location: **Borrow/Dredge Site:**

Background: Samples shall be collected at surface, mid-depth and two meters above the bottom, at least 500 meters upcurrent from the source of turbidity at the dredge and clearly outside the influence of any turbidity generated by the project.

Compliance: Samples shall be collected at surface, mid-depth and two meters above the bottom, no more than 150 meters downcurrent from the source of turbidity at the dredge, or at the nearest hardbottom edge downcurrent from the source of turbidity at the dredge, whichever is closer to the source of turbidity, within the densest portion of any visible turbidity plume.

**Beach/Discharge Site:**

Background: Samples shall be collected at surface and mid-depth, at least 300 meters upcurrent from any portion of the beach that has been, or is being, filled during the current construction event, clearly outside the influence of any turbidity generated by the project, and the same distance offshore as the associated compliance and intermediate samples.

Compliance: Samples shall be collected at surface and mid-depth, where the densest portion of the turbidity plume crosses the edge of the mixing zone polygon, which measures up to 150 meters offshore and up to 1,000 meters alongshore from the point where the return water from the dredged discharge reenters the Gulf of Mexico. *Note: If the plume flows parallel to the shoreline, the densest portion of the plume may be close to shore, in water that is too shallow for a boat (see Diagram 1). In that case, it may be necessary to access the sampling location from the shore, by wading, swimming or using floatation devices, diving gear or other equipment.*

Intermediate Monitoring: Samples shall be collected within the mixing zone, at surface and mid-depth, where the densest portion of the turbidity plume reaches 250 meters, 500 meters and 750 meters from the point where the return water from the dredged discharge reenters the Gulf of Mexico. These measurements will not be used to determine compliance with the water quality standard for turbidity, but will be used to calibrate the size of the mixing zone for future events.

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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

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 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.

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 attached to the permit and shall be implemented without the need for a permit modification.
30. 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 that are greater than 29 NTUs above the corresponding background turbidity levels, construction activities shall cease immediately and not resume until corrective measures have been taken and turbidity has returned to acceptable levels. Any such occurrence shall also be immediately reported to the Department’s JCP Compliance Officer via email at JCP Compliance@dep.state.fl.us. The subject line of the email shall state “TURBIDITY EXCEEDANCE”.

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, 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, 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 “PROJECT-ASSOCIATED DISCHARGE-OTHER”. When reporting a turbidity exceedance, the following information shall also be included:

a. project name;
b. permit number (0211217-005-JC);
c. location and level (NTUs above background) of the turbidity exceedance;
d. time and date that the exceedance occurred; and
e. time and date that construction ceased.

Prior to re-commencing construction, a report shall be submitted to the 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.
31. **Turbidity Monitoring 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 above background at each depth. Any exceedances of the turbidity standard (29 NTUs above background) 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;
j. a statement describing the methods used in collection, handling, storage and analysis of the samples; and
k. a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection, calibration, and accuracy of both the turbidity and GPS data.

Monitoring reports shall be submitted by email to the JCP Compliance Officer. The project name (Venice Beach Nourishment), permit number (0211217-005-JC) and the dates of the monitoring interval shall be included in the subject line of the reports, on the cover page, and at the top of each page. Failure to submit reports in a timely manner shall constitute grounds for revocation of the permit.
BIOLOGICAL MONITORING

32. As required in Specific Condition 3, the Permittee shall submit a detailed Final Biological Monitoring Plan subject to review and approval by the Department prior to issuance of a Notice to Proceed.

33. **Borrow Area Sedimentation Monitoring.** Impacts to offshore hardbottom areas adjacent to each borrow area from sedimentation generated by dredging operations shall be monitored throughout construction.

   a. A pre-construction survey shall be conducted to delineate hardbottom areas adjacent to each proposed borrow area. The parameters of the hardbottom monitoring were generally outlined in a draft biological monitoring plan, which provided reasonable assurance for issuance of the final permit. These parameters shall be finalized after the pre-construction delineation and shall be included in the final biological monitoring plan. The final biological monitoring plan shall be submitted with the request for a Notice to Proceed. The raw data shall be submitted to the JCP Compliance Officer within 60 days of completion of the survey, and the pre-construction survey results shall be submitted to the JCP Compliance Officer within 90 days of completion of the survey. The monitoring program shall measure the amount and duration of sedimentation on the hardbottom, and shall include observations for indicators of biological stress to certain species of stony coral (scleractinian) and soft corals (octocorals), and other prominent benthic organisms, if present on the hardbottom areas. Monitoring stations shall be installed in hardbottom areas located within 300 meters from the edge of each borrow area, and shall be monitored twice prior to construction, once a week during construction, and twice post-construction. Only the monitoring stations located within 300 meters of dredging operations are required to be monitored that week during construction. Standard methodology including 30-meter-long strategically-placed permanent transects with quadrats, line-intercept, and interval sediment depth measurements shall be used for monitoring. A post-construction survey shall be conducted within 90 days of completion of dredging operations to evaluate any damage caused by sedimentation, and shall be provided to the JCP Compliance Officer within 60 days of completion of the survey.

   b. A buffer of at least 600 feet (approximately 180 meters) shall be maintained between dredging operations and the edge of the nearest hardbottom area. If a 600-foot (180-meter) buffer cannot be maintained during construction, a buffer of no less than 400 feet (approximately 120 meters) shall be maintained. If a buffer between 400 feet (120 meters) and 600 feet (180 meters) is used, the frequency of monitoring shall increase to twice per week during construction.
c. In the event that monitoring reveals average daily sediment accumulation levels of more than 1.5 millimeters (mm), as determined by interval sediment depth measurements; and/or stress on benthic organisms (as determined using qualitative visual observation of sediment accumulation on the surrounding benthic community or comparable methodology), then dredging shall be relocated at least 300 meters away from the affected area until conditions change such that sedimentation on the affected hardbottom is no longer occurring, and notification shall be provided to the JCP Compliance Officer within 24 hours. The condition of the affected hardbottom shall be evaluated and compared to the pre-construction survey. Compensatory mitigation may be required to offset adverse impacts to hardbottom as a result of sediment accumulation.

34. **Pipeline Corridor Monitoring.** Pipeline corridors shall be located to avoid exposed hardbottom areas where possible. A pre-construction survey of the pipeline corridor shall be conducted prior to placement of the pipeline to verify that hardbottom organisms are not present within the corridor. In the event that the pipeline crosses areas of exposed hardbottom, or if a pump station is located less than 600 feet (approximately 180 meters) from hardbottom, then the condition of these hardbottom areas shall be quantitatively evaluated. The raw data shall be submitted to the JCP Compliance Officer within 60 days of completion of the survey, and the pre-construction survey results shall be submitted to the JCP Compliance Officer within 90 days of completion of the survey. Corridors shall be visually inspected immediately post-construction to evaluate any damage caused by movement of the pipeline and/or by discharge of slurry along the length of the pipeline. If damage to hardbottom organisms is detected, the JCP Compliance Officer shall be notified within 24 hours, the cause of the damage shall be fixed and the damage shall be immediately remediated. If the remediation does not fully restore the functions of the damaged hardbottom, mitigation may be required. Construction shall cease if substantial leaks (i.e., leaks resulting in turbidity that exceeds state water quality standards) are found, and the JCP Compliance Officer shall be notified within 24 hours. Note that there is no mixing zone for the pipeline corridor; therefore, turbidity shall be measured at the leak. Operations may resume upon appropriate repair of the affected pipeline and/or pump station. Following completion of dredging activities and pipeline demobilization, a post-construction inspection shall be conducted in areas where the pipelines crossed hardbottom.

PHYSICAL MONITORING

35. The Permittee shall conduct physical monitoring in accordance with the attached Physical Monitoring Plan dated December 4, 2013.

36. If the Permittee is unable to complete at least two nourishment events within the 15-year life of this permit, they may request an extension of time to allow a second nourishment
event to be completed. The time extension would be implemented through an administrative modification of the permit, with no application fee.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

_________________________________
Martin K. Seeling, Administrator
Beaches, Inlets and Ports Program

cc:  Paul Karch, Corps, Jacksonville District  JCP Compliance Officer
     Kristina May, DWRM                    Megan Mills, DEP South District
     Ralph Clark, DWRM                    Luke Davis, FWC
     Vladimir Kosmynin, DWRM               Marineturtle@myfwc.com
     Jennifer Coor, DWRM                   FWCconservationplanningservices@fwc.com
     Vince George, DWRM                   FCMPmail@fwc.com
     Roxane Dow, DWRM

Attachments:  Approved Permit Drawings (24 pages)
               QA/QC Plan dated March 21, 2013 (7 pages)
               DHR Letter dated November 2, 2011 (2 pages)
               FWC Regional Species Biologist – Contacts for Shorebird Issues (1 page)
               Physical Monitoring Plan dated December 4, 2013 (3 pages)
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.

06/13/14

Deputy Clerk Date