



# Florida Department of Environmental Protection

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

Rick Scott  
Governor

Jennifer Carroll  
Lt. Governor

Mimi A. Drew  
Secretary

## CONSOLIDATED JOINT COASTAL PERMIT AND SOVEREIGN SUBMERGED LANDS AUTHORIZATION

### PERMITTEE:

Miami-Dade County  
Attn: Mr. Heriberto Jusino  
Department of Environmental Resources  
Management (DERM)  
Water Management Division  
701 NW 1<sup>st</sup> Court, 5<sup>th</sup> Floor  
Miami, FL 33136-3912

### PERMIT INFORMATION:

Permit Number: **0233882-005-JM**

Issuance Date: **January 6, 2011**

Expiration Date : **March 24, 2019**

Project Name: **Miami Beach Truck Haul  
Nourishment and Sand  
Redistribution (Additional  
Placement Areas)**

County: Miami-Dade

---

This major permit modification is issued under the authority of Chapter 161 and Part IV of Chapter 373, Florida Statutes (F.S.), and Title 62, Florida Administrative Code (F.A.C.). Pursuant to Operating Agreements executed between the Department of Environmental Protection (Department) and the water management districts, as referenced in Chapter 62-113, F.A.C., the Department is responsible for reviewing and taking final agency action on this activity. This major modification, hereafter referred to as Permit No. 0233882-005-JM, **supersedes** Permit No. 0233882-004-JM (as previously modified).

The activity description and activity location shall be revised as follows (~~strikethroughs~~ are deletions, underlines are additions):

### ACTIVITY DESCRIPTION:

The project is to nourish six (6) segments of eroded shoreline with sand obtained from either the Ortona Sand Mine or approved upland construction stockpiles. The sand from upland sources will be delivered to the proposed locations via truck-haul. The design berm template for the 27<sup>th</sup> Street segment (R-60 to R-61), the 44<sup>th</sup> Street segment (R-53.7 to R-55.5) and the 55<sup>th</sup> Street segment (R-48.7 to R-50.7) has a height of +8.2 feet NGVD, and the design berm template for Sunny Isles (R-7 to R-15 ~~12~~), Bal Harbour (R-27 to R-32 ~~29~~) and 65<sup>th</sup> Street (R-43 to R-48+700 ~~44+500~~) has a height of +6.8 to +6.9 feet NGVD. The slope from the top of berm to the mean high water (MHW) line will be 1:10 (vertical:horizontal) and 1:5 (vertical:horizontal) from MHW to the

**Joint Coastal Permit**  
**Permit No. 0233882-005-JM**  
**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**  
**Page 2 of 20**

construction toe of fill. Multiple truck-haul nourishment events are authorized for all six (6) segments during the life of this permit.

**ACTIVITY LOCATION**

The nourishment sites are located in Miami Beach, Miami-Dade County. The 27<sup>th</sup> Street segment is located from FDEP reference monuments R-60 to R-61, Section 14, Township 53 South, Range 42 East. The 44<sup>th</sup> Street segment extends from R-53.7 to R-55.5, Section 23, Township 53 South, Range 42 East. The 55<sup>th</sup> Street segment extends from R-48.7 to R-50.7, Section 26, Township 53 South, Range 42 East. The 65<sup>th</sup> Street segment is located between R-43 and ~~R-48+700~~ ~~R-44+500~~, Section 26, Township 52 South and Range 42 East. The Sunny Isles segment is located between R-7 and ~~R-15~~ ~~R-12~~, Sections 19 and 31, Townships 51 and 52 South, Range 42 East. The Bal Harbor segment is located between R-27 and ~~R-32~~ ~~R-29~~, Section 11, Township 53 South, and Range 42 East. All beach areas described above front the Atlantic Ocean, Class III Waters, not in Outstanding Florida Waters.

**PROPRIETARY AUTHORIZATION:**

This activity also requires a proprietary authorization, as the activity is located on sovereign submerged lands held in trust by the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), pursuant to Article X, Section 11 of the Florida Constitution, and Sections 253.002 and 253.77, F.S. The activity is not exempt from the need to obtain a proprietary authorization. The Board of Trustees delegated the Department the responsibility to review and take final action on this request for proprietary authorization in accordance with Section 18-21.0051, F.A.C., and the Operating Agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C. In addition to the above, this proprietary authorization has been reviewed in accordance with Chapter 253, F.S., Chapter 18-21 and Section 62-343.075, F.A.C., and the policies of the Board of Trustees.

As staff to the Board of Trustees, the Department has reviewed the project described above, and has determined that the 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, pursuant to Chapter 253.77, F.S., to perform the activity on the specified sovereign submerged lands.

**COASTAL ZONE MANAGEMENT:**

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

## Joint Coastal Permit

Permit No. 0233882-005-JM

Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)

Page 3 of 20

### 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. When the Department received your permit application, a copy was sent to the U.S. Army Corps of Engineers (USACE) for review. The USACE will issue their authorization directly to you, or contact you if additional information is needed. If you have not heard from the USACE within 30 days from the date that your application was received by the Department, contact the nearest USACE regulatory office for status and further information. Failure to obtain USACE authorization prior to construction could subject you to federal enforcement action by that agency.

### AGENCY ACTION:

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

---

### GENERAL CONDITIONS:

1. All activities authorized by this permit shall be implemented as set forth in the 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 section 62B-49.008, Florida Administrative Code.
2. If, for any reason, the permittee does not comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Bureau of Beaches and Coastal Systems and the appropriate District office of the Department with a written report containing the following information: a description of and cause of noncompliance; and the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

## **Joint Coastal Permit**

**Permit No. 0233882-005-JM**

**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**

**Page 4 of 20**

3. This permit does not eliminate the necessity to obtain any other applicable licenses or permits that may be required by federal, state, local, special district laws and regulations. This permit is not a waiver or approval of any other Department permit or authorization that may be required for other aspects of the total project that are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of sovereignty land of Florida seaward of the mean high-water line, or, if established, the erosion control line, unless herein provided and the necessary title, lease, easement, or other form of consent authorizing the proposed use has been obtained from the State. The permittee is responsible for obtaining any necessary authorizations from the Board of Trustees of the Internal Improvement Trust Fund prior to commencing activity on sovereign lands or other state-owned lands.
5. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.
6. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee. The issuance of this permit does not convey any vested rights or any exclusive privileges.
7. This permit or a copy thereof, complete with all conditions, attachments, plans and specifications, modifications, and time extensions shall be kept at the work site of the permitted 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 an copy any records that must be kept under conditions of the permit; to inspect the facility, equipment, practices, or operations regulated or required under this permit; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
9. At least forty-eight (48) hours prior to commencement of activity authorized by this permit, the permittee shall submit to the Bureau of Beaches and Coastal Systems (JCP Compliance Officer) and the appropriate District office of the Department a written

## Joint Coastal Permit

Permit No. 0233882-005-JM

Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)

Page 5 of 20

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 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 permittee shall immediately stop all activities in the immediate area that disturb the soil in the immediate locale and notify the State Historic Preservation Officer and the Bureau of Beaches and Coastal Systems (JCP Compliance 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 872.02, F.S.
11. Within 30 days after completion of construction or completion of a subsequent maintenance event authorized by this permit, the permittee shall submit to the Bureau of Beaches and Coastal Systems (JCP Compliance Officer) 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 two paper copies and one electronic copy of as-built drawings submitted to the Bureau of Beaches and Coastal Systems (JCP Compliance Office)

### SPECIFIC CONDITIONS:

The specific conditions shall be revised as follows (~~strikethroughs~~ are deletions, underlines are additions):

1. All reports or notices relating to this permit shall be sent to the DEP, Bureau of Beaches and Coastal Systems, JCP Compliance Officer, 3900 Commonwealth Boulevard, Mail Station 300, Tallahassee, Florida 32399-3000 (e-mail address: [JCPCCompliance@dep.state.fl.us](mailto:JCPCCompliance@dep.state.fl.us)) and the DEP Southeast District Office (cover letter only), 400 N. Congress Ave., Suite 200, West Palm Beach, FL 33401.
2. No work shall be conducted under this permit until the pPermittee has received a written notice to proceed from the Department for each event prior to the commencement of construction on the beach. At least 30 days prior to the requested date of issuance of the notice to proceed, the pPermittee shall submit the following for review and approval by the Department:

**Joint Coastal Permit**  
**Permit No. 0233882-005-JM**  
**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**  
**Page 6 of 20**

- a. Final construction plans and specifications that substantially adhere to the approved permit drawings and conditions of this permit. Please submit one (1) hardcopy and one (1) electronic copy and send it to the attention of the JCP compliance officer.
  - b. A summary of construction details, including the exact locations to be nourished, the estimated schedule and the approximate volume of sand to be placed at each site.
  - c. A ~~a~~ diver-verified hardbottom survey in the vicinity of the proposed placement sites, conducted the summer prior to construction between May 1 and September 30 ~~within the previous 12 months~~, showing the landward extent of the nearshore hardbottom. This survey is only required for placement areas where hardbottom resources have ~~previously~~ been identified within 600 ft of the mean low water line (MLWL).
3. At least 7 days prior to commencement of each nourishment event authorized by this permit, the ~~p~~Permittee shall conduct a pre-construction conference to review the specific conditions and monitoring requirements of this permit with permittee's contractors, the engineer of record, and Department staff representatives. The ~~p~~Permittee shall provide written notification, at least 14 days in advance of the meeting, to the following offices advising of the date, time, location, and teleconference number of the pre-construction conference.

DEP Bureau of Beaches & Coastal Systems  
JCP Compliance Officer  
Mail Station 300  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000  
phone: (850) 414-7716  
e-mail: [JCPCCompliance@dep.state.fl.us](mailto:JCPCCompliance@dep.state.fl.us)

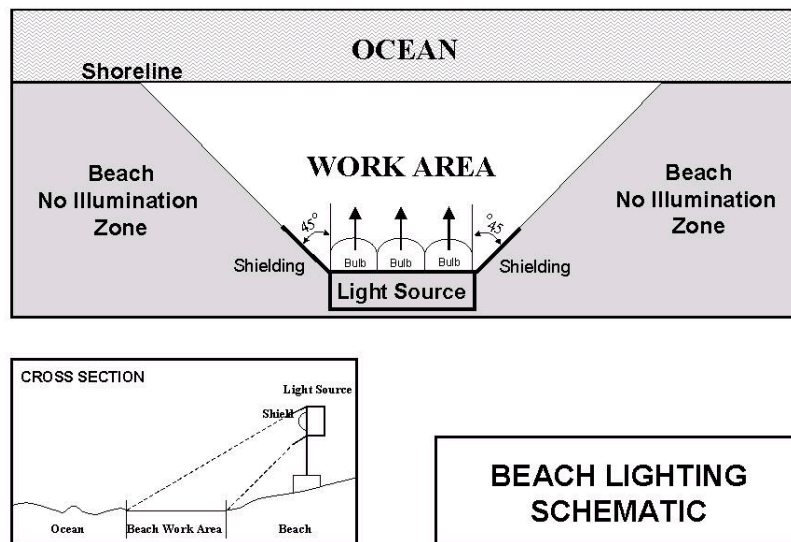
DEP Southeast District Office  
Submerged Lands & Environmental Resources  
400 N. Congress Ave., Suite 200  
West Palm Beach, FL 33401-  
phone: (561) 681-6600

Imperiled Species Management Section  
Florida Fish & Wildlife Conservation Commission  
620 South Meridian Street  
Tallahassee, Florida 32399-1600

**Joint Coastal Permit**  
**Permit No. 0233882-005-JM**  
**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**  
**Page 7 of 20**

phone: (850) 922-4330  
fax: (850) 921-4369

4. The following general sea turtle protection conditions apply to all beach construction events:
- a. From April 1 through November 1, staging areas for construction equipment shall be located off the beach. Nighttime storage of construction equipment or materials not in use shall be off the beach to minimize disturbance to sea turtle nesting.
  - b. From April 1 through November 1, all project lighting shall be limited to the immediate area of active construction only and shall be the minimal lighting necessary to comply with U.S. Coast Guard and/or OSHA requirements. Stationary lighting on the beach and all lighting on the dredge shall be minimized through reduction, shielding, lowering, and appropriate placement of lights to minimize illumination of the nesting beach and water. Lighting on offshore equipment shall be minimized through reduction, shielding lowering, and appropriate placement of lights to avoid excessive illumination of the water, while meeting all U.S. Coast Guard and OSHA requirements (see figure below).



- c. The beach surface shall be inspected subsequent to completion of the project and all tracks or impressions due to the project or movement of heavy equipment across the beach shall be removed or remediated.

**Joint Coastal Permit**  
**Permit No. 0233882-005-JM**  
**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**  
**Page 8 of 20**

- d. In the event a sea turtle nest is excavated during construction activities, all work shall cease in that area immediately and the permitted person responsible for egg relocation for the project should be notified so the eggs can be moved to a suitable relocation site.
- e. Immediately after completion of the each fill placement event and prior to April 15 for the following nesting season if placed sand still remains on the beach, the beach shall be tilled as described below or the applicant may follow the procedure outlined below to request a waiver of the tilling requirement. During tilling, at a minimum, the protocol provided below shall be followed:
  - i. The area shall be tilled to a depth of 24 inches. All tilling activity must be completed prior to April 15.
  - ii. An annual summary of compaction surveys and the actions taken shall be submitted to the FWC.
  - iii. If the project is completed just before the nesting season, tilling shall not occur in areas where nests have been left in place or relocated unless authorized by the U.S. Fish and Wildlife Service in an Incidental Take Statement.
  - iv. This condition shall be evaluated annually and may be modified if necessary to address sand compaction problems identified during the previous year.
  - v. Within 30 days of each truck haul event, the Permittee shall provide the dates that tilling of the project and staging area was preformed via FAX to the FWC Tallahassee office (850-921-6988). If tilling was not conducted, the Permittee shall provide a report summarizing all compaction readings. A copy of the information shall also be sent to the Department's JCP Compliance Officer, per Specific Condition No. 1.
- f. To request a waiver of the tilling requirement, the pPermittee may measure sand compaction in the area of restoration in accordance with a protocol agreed to by the FWC, the Department, the U.S. Fish & Wildlife Service, and the Permittee to determine if tilling is necessary. The protocols to be utilized to measure compaction shall be as follows:
  - i. Compaction sampling stations shall be located at 500-foot intervals along the project area. One station shall be at the seaward edge of the dune/bulkhead line (when material is placed in this area) and



**Joint Coastal Permit**  
**Permit No. 0233882-005-JM**  
**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**  
**Page 9 of 20**

- one station shall be midway between the dune line and the high water line (normal wrack line).
- ii. At each station, the cone penetrometer shall be pushed to a depth of 6, 12, and 18 inches three times (three replicates). Material may be removed from the hole if necessary to ensure accurate readings of successive levels of sediment. The penetrometer may need to be reset between pushes, especially if sediment layering exists. Layers of highly compact material may 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.
  - iii. 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.
  - iv. 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. 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
- g. Visual surveys for escarpments along the beach fill area shall be made immediately after completion of the beach nourishment project and prior to April 15 for the following three years if placed sand still remains on the beach. All scarps shall be leveled or the beach profile shall be reconfigured to minimize scarp formation. In addition, weekly surveys of the project area shall be conducted during the two nesting seasons following completion of fill placement as follows. Please note scarp leveling should only be conducted if authorized in writing by the FWC.
- i. The number of escarpments and their location relative to DNR-DEP reference monuments shall be recorded during each weekly survey and reported relative to the length of the beach surveyed (e.g., 50% scarps). Notations on the height of these escarpments shall be included (0 to 2 feet, 2 to 4 feet, and 4 feet or higher) as well as the maximum height of all escarpments.

**Joint Coastal Permit**

**Permit No. 0233882-005-JM**

**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**

**Page 10 of 20**

- ii. Escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of 100 feet shall be leveled to the natural beach contour by April 15. Any escarpment removal shall be reported relative to R-monument.
- iii. If weekly surveys during the marine turtle nesting season document subsequent reformation of escarpments that exceed 18 inches in height for a distance of 100 feet, the FWC shall be contacted immediately to determine the appropriate action to be taken. Upon written notification, the permittee shall level escarpments in accordance with mechanical methods prescribed by the FWC.
- h. The Permittee shall arrange a meeting between representatives of the contractor, the Department, the FWC, and the permitted person responsible for marine turtle nest monitoring at least 30 days prior to the commencement of work on this project. At least 15 days advance notice shall be provided prior to conducting this meeting. This will provide an opportunity for explanation and/or clarification of the sea turtle protection measures.
- i. Upon locating a dead, injured, or sick endangered or threatened sea turtle specimen, initial notification must be made to the FWC at 1-888-404-FWCC. Care should be taken in handling sick or injured specimens to ensure effective treatment and care and in handling dead specimens to preserve biological materials in the best possible state for later analysis of cause of death. In conjunction with the care of sick or injured endangered or threatened species or preservation of biological materials from a dead animal, the finder has the responsibility to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed.
- j. The following monitoring is required for beach restoration projects (See table below). Reports summarizing the nesting should be submitted to the Tequesta office with a copy to the Tallahassee office and DEP by January 15 of the subsequent year. Data for nesting activity on the nourished beach and on an equal length of beach that is not nourished shall be reported separately, and should include numbers of nests lost to erosion or washed out. Summaries of nesting activity shall be submitted in electronic format (Excel spreadsheets).

**Joint Coastal Permit  
 Permit No. 0233882-005-JM  
 Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)  
 Page 11 of 20**

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

5. Prior to nesting season after the first fill placement event authorized in this modification, the Permittee shall provide a copy of each lighting ordinance adopted by the local governments in the project area.
  
6. The following sea turtle protection conditions only apply to nourishment activities where upland sand is transported to the beach via truck:
  - a. Beach placement and dune construction activities are authorized to occur on the nesting beach (seaward of existing coastal armoring structures or the dune crest) under the following conditions:
    - i. Fill material placed shall be sand that is similar to the native beach in the vicinity of the site that has not been affected by prior restoration or nourishment activities. The fill material must be similar in both coloration

**Joint Coastal Permit**  
**Permit No. 0233882-005-JM**  
**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**  
**Page 12 of 20**

and grain size distribution (sand grain frequency, mean and median grain size, and sorting coefficient) and be suitable for marine turtle nesting. Foreign matter, concrete, and other debris shall be removed from the sand prior to placement on the beach.

- ii. No truck-hauling of sand shall occur along the beach between sunset and sunrise.
- iii. Daily early morning surveys for marine turtle nests shall be required if any portion of the beach nourishment project occurs during the period from April 1 through November 30. Nesting surveys must be initiated 65 days prior to nourishment activities or by April 1, whichever is later. Surveys to assess hatchling success should continue until the last marked nest has hatched. If nests are constructed in areas where they could be affected by construction activities, eggs must be relocated per the following requirements.
  - a. All marine turtle nests in the proposed construction area that the marine turtle permit holder determines may be affected by the construction activities shall be moved no later than 9 a.m. in the morning following deposition to a nearby self-release beach site in a secure setting where artificial lighting will not interfere with hatchling orientation. No restraining hatcheries shall be utilized unless authorized in writing by FWC.
  - b. Loggerhead nests documented in any access areas outside the current beach and dune construction site shall be marked and left in place unless other factors threaten the success of the nest. Such nests will be marked and the actual location of the clutch determined. A circle with a radius of ten (10) feet, centered at the clutch or the apex of the false crawl, shall be marked by stake and survey tape or string.
  - c. Nest inventories shall be conducted on all marked nests in accordance with FWC's Sea Turtle Protection Guidelines.
  - d. No construction activity may commence until completion of the marine turtle survey and all nest protection measures each day.
  - e. It is the responsibility of the permittee to ensure that the project area and access sites are surveyed for marine turtle nesting activity. All nesting surveys, nest relocations screening or caging activities etc. shall be conducted only by persons with prior

**Joint Coastal Permit**  
**Permit No. 0233882-005-JM**  
**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**  
**Page 13 of 20**

experience and training in these activities and who is duly authorized to conduct such activities through a valid permit issued by the Fish and Wildlife Conservation Commission (FWC), pursuant to Florida Administrative Code 68E1-1.

- b. Reports on all nesting activity shall be provided to the FWC (with a copy sent to the JCP Compliance Officer) for the initial nesting season and for two additional nesting seasons if placed sand remains on the beach. Monitoring of nesting activity in the nesting seasons following construction shall include daily surveys and any additional measures authorized by the FWC. Reports submitted shall include daily report sheets noting all activity, nesting success rates, hatching success of all relocated nests, hatching success of a representative sampling of nests left in place (if any), dates of construction and names of all personnel involved in nest surveys and relocation activities. Summaries of nesting activity shall be submitted in electronic format (Excel spreadsheets). All reports should be submitted by January 15 of the following year.

**Shorebird Protection:**

7. Shorebird surveys should be conducted by trained, dedicated individuals using accepted, appropriate ecological survey procedures. The shorebird nesting season generally is 1 April – 1 September, but some nesting may occur through September. In addition, the imperiled snowy plover (*Charadrius alexandrinus*) may nest as early as February along the west coast and panhandle of Florida.
  - a. Nesting season surveys shall begin on April 1 (or February 1 in snowy plover habitat) or 45 days prior to construction commencement, whichever is later, and be conducted daily throughout the construction period or through September if no shorebird nesting activity is observed.
  - b. For projects conducted in piping plover habitat, surveys to detect piping plovers or concentrations of other wintering or migratory shorebirds should begin 14 days prior to construction commencement and be conducted once every 2 weeks.
  - c. Each shorebird species observed, a rough estimate of numbers of each species, the location of the birds, and their activity (e.g., foraging, resting, nesting, courtship behavior) should be logged and reported to the FWC Regional Wildlife Diversity Conservation Biologist monthly.
8. Within the project area, the permittee shall establish a 300 ft-wide buffer zone around any location where shorebirds have been engaged in courtship or nesting behavior, or around areas where piping plovers occur or winter migrants congregate in significant numbers.

**Joint Coastal Permit**  
**Permit No. 0233882-005-JM**  
**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**  
**Page 14 of 20**

Any and all construction activities, including movement of vehicles, should be prohibited in the buffer zone.

- a. The width of the buffer zone shall be increased if birds appear agitated or disturbed by construction or other activities in adjacent areas.
  - b. Site-specific buffers may be implemented upon approval by FWC as needed.
  - c. Designated buffer zones must be posted with clearly marked signs around the perimeter. These markings shall be maintained until nesting is completed or terminated, the chicks fledge, or piping plovers or winter migrants depart.
  - d. No construction activities or stockpiling of equipment shall be allowed within the buffer area.
  - e. FWC-approved travel corridors should be designated and marked outside the buffer areas. Heavy equipment, other vehicles, or pedestrians may transit past nesting areas in these corridors. However, other activities such as stopping or turning shall be prohibited within the designated travel corridors adjacent to the nesting site.
  - f. Where such a travel corridor must be established within the project area it should avoid critical areas for shorebirds (known nesting sites, wintering grounds, FWC-designated Critical Wildlife Areas, and USFWS-designated critical piping plover habitat) as much as possible, and be marked with signs clearly delineating the travel corridor from the shorebird buffer areas described above.
  - g. To the degree possible, the permittee should maintain some activity within these corridors on a daily basis, without directly disturbing any shorebirds documented on site or interfering with sea turtle nesting, especially when those corridors are established prior to commencement of construction. Passive methods to modify nesting site suitability must be approved by the FWC Wildlife Diversity Conservation Biologist for that region.
9. If shorebird nesting occurs within the project area, a bulletin board will be placed and maintained in the construction area with the location map of the construction site showing the bird nesting areas and a warning, clearly visible, stating that “BIRD NESTING AREAS ARE PROTECTED BY THE FLORIDA THREATENED AND ENDANGERED SPECIES ACT AND THE FEDERAL MIGRATORY BIRD ACT”.

**Joint Coastal Permit**  
**Permit No. 0233882-005-JM**  
**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**  
**Page 15 of 20**

**Physical Monitoring:**

10. Physical Monitoring Requirements for the Sunny Isles segment, the Bal Harbor segment, and the 65<sup>th</sup> Street segment, the 44<sup>th</sup> Street Segment, the 55<sup>th</sup> Street Segment, and the 27<sup>th</sup> Street Segment.

- a. Topographic and bathymetric profile surveys of the beach and offshore shall be conducted within 90 days prior to commencement of construction, and within 60 days following completion of construction at the project area. Monitoring surveys shall be conducted at the 27<sup>th</sup> Street Project area annually until such time the Department determines there are no adverse impacts from the project, or until such time as the Department and Miami-Dade County can develop an agreement for an acceptable management and maintenance plan. For the remaining areas where fill material is placed, annual surveys shall be conducted for a minimum of two (2) years subsequent to the last nourishment event. The annual monitoring surveys shall be conducted during a spring or summer month and repeated as close as practicable during that same month of the year. These project-monitoring surveys should be conducted in conjunction with the annual countywide survey conducted by Miami-Dade County.

In addition to the proposed routine survey intervals, additional survey events will be conducted following significant storm events. The threshold for initiating surveys following storm events will be established by the Department.

- b. See Table 10-1 for summaries of monitoring areas, survey locations, and landward and seaward extent of profiles to be surveyed. All work activities and deliverables shall be conducted in accordance with the latest update of the Bureau of Beaches and Coastal Systems (BBCS) *Monitoring Standards for Beach Erosion Control Projects, Sections 01000 and 01100*. (<http://www.dep.state.fl.us/beaches/publications/tech-rpt.htm#RegionalMonitoringPlan>)

*(the remainder of this page intentionally left blank)*

**Joint Coastal Permit**  
**Permit No. 0233882-005-JM**  
**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**  
**Page 16 of 20**

Table 10-1 Summaries of Monitoring Areas, Survey Locations, and Landward and Seaward Extent of Profiles to be Surveyed for the Sunny Isles Segment, the Bal Harbor Segment, the 65<sup>th</sup> Street Segment, the 55<sup>th</sup> Street Segment, the 44<sup>th</sup> Street Segment, and the 27<sup>th</sup> Street Segment.

Nourishment Sites	Project Area	Monitoring Area (at a minimum)	Survey Locations Within Monitoring Area	Landward and Seaward Extent of Profiles to be Surveyed
Sunny Isles	R-7 to R- <del>15</del> <sup>42</sup>	R-6 to R- <del>16</del> <sup>43</sup>	Each of FDNR monuments <b>and</b> intermediate locations approximately midway between adjacent reference monuments	See <i>Monitoring Standards for Beach Erosion Control Projects, Sections 01000 (PART II.A.10) and 01100 (PART II.A.7.C)</i> .
Bal Harbor	R-27 to R- <del>32</del> <sup>29</sup>	R-26 to R- <del>33</del> <sup>30</sup>		
65 <sup>th</sup> Street	R-43 to R- <del>48+700</del> <sup>44+500</sup>	R-42 to R- <del>50</del> <sup>46</sup>		
55 <sup>th</sup> Street	R-48.7 to R-50.7	R-48 to R-52		
44 <sup>th</sup> Street	R-53.7 to R-55.5	R-53 to R-56		
27 <sup>th</sup> Street	R-60 to R-61	R-56 to R-62	At 200 feet intervals	From the Erosion Control Line (ECL) to a depth of -5.0 ft-NAVD
		R-58 to R-62 ( <b>This monitoring area shall be surveyed at a tighter line spacing to evaluate downdrift impacts from the 32<sup>nd</sup> Street breakwaters</b> )		

- c. The Permittee shall submit an engineering report and the monitoring data to the BBSCS within 90 days following completion of the post-construction survey and each annual survey. The report shall summarize and discuss the data, the performance of the beach fill project, and identify erosion and accretion patterns within the monitoring area. In addition, the report shall include a comparative review of project performance-to-performance expectations and identification of adverse impacts attributable to the project. Appendices shall include plots of survey profiles and graphical representations of volumetric and shoreline position changes for the monitoring area. Results shall be analyzed for pattern, trends, or changes between annual surveys and cumulatively since project construction.

Additional reports evaluating storm effects shall be submitted if deemed necessary after consultation with the Department.

- d. Two paper copies and one electronic copy of the monitoring report, and one electronic copy of the survey data shall be submitted to the Bureau of Beaches



and Coastal Systems in Tallahassee. Failure to submit reports and data in a timely manner constitutes grounds for revocation of the permit. When submitting any monitoring information to the Bureau, please include a transmittal cover letter clearly labeled with the following at the top of each page: "This monitoring information is submitted in accordance with Item No. [xx] of the approved Monitoring Plan for Permit No. [xx] for the monitoring period [xx]".

**Performance Criteria and Mitigation Triggers:**

11. To date, while the 27th St. Breakwaters project has performed well, there is some downdrift erosion which has needed sand placement to offset those losses and maintain the design profile. The project sites located at 44<sup>th</sup> and 55<sup>th</sup> streets are conventional erosional areas and a less intensive survey plan is proposed. Also, a mitigation plan is proposed ~~only~~ for the breakwater location ~~since no adverse effects resulting from fill placement is anticipated at the other sites~~ and the locations where nearshore biological communities are present, specifically in the vicinity of R-49.

Because the proposed project will occur within the limits of a federally-authorized shore protection project, the project must not create conditions that will compromise the authorized federal project design profile. As such, it is proposed that the criteria by which the project will be assessed, as well as any mitigation thresholds be linked to the design requirements of the federal project. This consideration required that the proposed project be coordinated with the U.S. Army Corps of Engineers, Jacksonville District to establish the minimum design criteria that would need to be maintained. After extensive discussions, and a formal in-house review by Corps staff, it was agreed that the following would be required for areas within the influence of the breakwater project:

- a. The minimum design berm width and elevation specified by the federal project must be maintained. This equates to a level berm of 50' in front of the dune feature, or 125' from the Erosion Control Line (ECL), at an elevation of 8.2 feet NGVD (9.0' MLW).
- b. The cross sectional area (and corresponding volumes when applied over a distance) must be greater than or equal to those associated with the authorized project design. This criterion is to be applied only to that portion of the profile above the -5.0 foot (NGVD) contour, which is the approximate location of the seaward toe of the proposed structures. This depth cutoff was proposed for setting the evaluation criteria due to the differences in the specified design slopes of the federal project and those actually present on the project. The authorized design section specifies a 1 on 20 slope seaward of the berm to elevation 0 NGVD, followed by a 1 on 40 slope to closure. Equilibrium profiles on the project, however, are usually much steeper,

typically ranging from 1 on 10, to 1 on 13. Because the offshore slope specified by the authorized project design cannot be achieved in practice, it was agreed that as long as the areal cross sections (and corresponding volumes) of the profile to -5.0 NGVD, was equal to or greater than the federal design section, then the proposed project would comply with the shore protection requirements of the federal project. An initial application of this criterion to the project based on initial predictions indicates that the predicted post-construction profiles will far exceed the federal project requirements in almost all cases.

**Mitigation Triggers:**

12. Since the application of the evaluation criteria above will be used to assess the performance of the proposed project, it is logical that the thresholds determining when mitigation is required should also be linked directly to the evaluation criteria. As such, it is proposed that each profile be compared to the federal design section following the quarterly monitoring surveys, or after storm events, if deemed necessary. Sections shall be determined to be deficient if the areal cross section of the profile, or the corresponding volumes, is less than the area or volume specified by the federal design section. If any profile is found to be deficient on two successive survey events, mitigation shall be implemented to minimally restore the required design section. Subsequent actions, which may include structure modification and/ or additional fill placement, will be determined in consultation with the Department. Mitigation shall be implemented within thirty (30) days of approval of the mitigation plan by the Department. If, after the completion of one year of monitoring, it is determined that the structures have created conditions resulting in recurring design section deficiencies, the structures will be further modified, or removed at the direction of the Department. The structures will also be subject to modification or removal if they create acute adverse erosion following construction.
13. In areas where impacts to nearshore resources may occur, a pre- and post-construction impact assessment shall be conducted to determine the required mitigation.
  - a. Within 30 days of discovery of impact, the Permittee will be required to submit an impact report to the Department for review and approval.
  - b. The Permittee will be required submit a Mitigation Plan to the Department for review and approval within 60 days of the assessment.
  - c. The Permittee will be required to implement the Mitigation Plan within 6 months of approval of the Plan.

**Joint Coastal Permit**  
**Permit No. 0233882-005-JM**  
**Miami Beach Truck Haul Nourishment and Sand Redistribution (Add'l Placement Areas)**  
**Page 19 of 20**

**Water Quality Monitoring:**

13. The permittee shall monitor for Turbidity - Nephelometric Turbidity Units (NTUs)

Frequency: Twice daily during placement operations at least 4 hours apart, whenever a visible work-generated plume extends into the Biscayne Bay Aquatic Preserve at Baker's Haulover Inlet, and whenever a significant plume is observed to extend beyond the limits of the approved mixing zone such that a water quality violation may exist.

Location: Background: Mid-depth, at a point approximately 150 meters offshore and 500 meters upcurrent from the total project site for any given event, clearly outside of any turbidity generated by the project.

Compliance: Mid-depth, at a point or points approximately 150 meters offshore and no more than 150 meters downcurrent from each current work (excavation or placement) site, within the densest portion of any visible turbidity plume.

Weekly summaries of all monitoring data shall be submitted to the Bureau of Beaches & Coastal Systems (JCP Compliance Officer) and to the Southeast District Office within one week of collection, with documents containing the following information: (1) **"Permit No. 0233882-0054-JM"**; (2) **"Miami Beach Truck Haul Nourishment and Sand Redistribution (additional placement areas)"**; (3) dates and times of sampling and analysis; (4) a statement describing the methods used in collection, handling, storage and analysis of the samples; (5) a map indicating the sampling locations; and (6) a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data. Monitoring reports shall also include the following information for each sample that is taken: a) time of day samples taken; b) depth of water body; c) depth of sample; d) antecedent weather conditions; e) tidal stage and direction of flow; and f) wind direction and velocity and g) wave height.

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 associated background turbidity levels, or above zero (0) NTUs over background within the Biscayne Bay Aquatic Preserve, construction activities shall **cease immediately** and not resume until corrective measures have been taken and turbidity has returned to acceptable levels.

14. The Permittee shall comply with and implement the attached Borrow Area Sediment Quality Assurance/Quality Control Plan approved August 26, 2009 ~~January 12, 2009~~. Should any additional sources of fill material become available or be requested by the

