



DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
1520 ROYAL PALM SQUARE BLVD, SUITE 310
FORT MYERS, FLORIDA 33919

December 5, 2019

REPLY TO
ATTENTION OF

Regulatory Division
West Permits Branch
Fort Myers Permits Section
SAJ-2018-03052(NW-SJR)

City of Naples
Streets & Stormwater Department
C/o Gregg Strakaluse
295 Riverside Circle
Naples, FL 34102

Dear Mr. Strakaluse:

The U.S. Army Corps of Engineers (Corps) assigned your application for a Department of the Army permit, which the Corps received on October 11, 2018, the file number SAJ-2018-03052(NW-SJR). A review of the information and drawings provided indicates that the proposed work would result in the removal of five beach outfall structures (#6, 7, 8, 9,10) and permanently seal four of them (#7,8,9,10). The fifth outfall (#6) will be modified as an overflow from a new 80 square foot control weir at Alligator Lake to handle severe weather events. Additionally two 30 inch diameter pipes for storm water discharge will be installed by HDD for approximately 1100 linear feet into the Gulf of Mexico and two 65 foot long 30 inch diameter outfall duckbill diffusers will be located at the terminus end of the pipes and secured to the sea floor with helical anchors. The project is located at Gulf Shore Blvd between 6th Ave N and 2nd Ave S, in Section 33/34, Township 49 South, Range 25 East, Naples, Collier County, Florida.

Your project, as depicted on the enclosed drawings, is authorized by Nationwide Permit (NWP) Numbers 7 & 12. In addition, project specific conditions have been enclosed. This verification is valid until **March 18, 2022**. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this nationwide permit. Please access the U.S. Army Corps of Engineers' (Corps) Jacksonville District's Regulatory Internet page to access Internet links to view the Final Nationwide Permits, Federal Register Vol. 82, dated January 6, 2017, specifically pages 1983 to 2008, and the table of Regional Conditions. The Internet page address is:

<http://www.saj.usace.army.mil/Missions/Regulatory.aspx>

Please be aware this Internet address is case sensitive and should be entered as it appears above. Once there you will need to click on "Source Book"; and, then click on "Nationwide Permits." These files contain the description of the Nationwide Permit authorization, the Nationwide Permit general conditions, and the regional conditions, which apply specifically to this verification for NWP's 7 & 12. Enclosed is a list of the six General Conditions, which apply to all Department of the Army authorizations. You must comply with all of the special and general conditions and any project specific condition of this authorization or you may be subject to enforcement action. In the event you have not completed construction of your project within the specified time limit, a separate application or re-verification may be required.

The following special conditions are included with this verification:

1. All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, Special Projects and Enforcement Branch, 701 San Marco Blvd., Jacksonville, FL 32207. The permittee shall reference this permit number, SAJ-2018-03052(NW-SJR), on all submittals. Electronic compliance documents may be submitted to the following email address: SAJ-RD-Enforcement@usace.army.mil
2. Within 10 days from the date of initiating the work authorized by this permit the Permittee shall submit a completed "Commencement Notification" Form
3. Within 60 days of completion of the work authorized by this permit, the permittee shall complete the attached "Self-Certification Statement of Compliance" form and submit it to the Corps. In the event that the completed work deviates in any manner from the authorized work, the permittee shall describe the deviations between the work 239authorized by this permit and the work as constructed on the "Self-Certification Statement of Compliance" form. The description of any deviations on the "Self-Certification Statement of Compliance" form does not constitute approval of any deviations by the Corps.
4. The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the U.S. Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
5. Cultural Resources/Historic Properties:
 - a. No structure or work shall adversely affect impact or disturb properties listed in the *National Register of Historic Places* (NRHP) or those eligible for inclusion in the NRHP.

b. If during the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work and ground-disturbing activities within a 100-meter diameter of the discovery and notify the Corps within the same business day (8 hours). The Corps shall then notify the Florida State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.

c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above Special Condition ; and if deemed necessary by the SHPO, THPO(s), or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.

d. In the unlikely event that unmarked human remains are identified on non-federal lands, they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO and THPO(s). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the State Archeologist and from the Corps.

6. The Permittee shall comply with the “Standard Manatee Conditions for In-Water Work – 2011”

7. The Permittee shall comply with National Marine Fisheries Service's “Sea Turtle and Smalltooth Sawfish Construction Conditions” dated March 23, 2006

8. The Permittee shall comply with the attached Environmental Plan and not conduct any work on the beach forward of the dune during sea turtle and shorebird nesting seasons.

9. Prior to the initiation of any of the work authorized by this permit, the Permittee shall install floating turbidity barriers with weighted skirts that extend to within 1 foot of the bottom around all work areas that are in, or adjacent to, surface waters. The turbidity barriers shall remain in place and be maintained until the authorized work has been completed and all suspended and erodible materials have been stabilized. Turbidity barriers shall be removed upon stabilization of the work area. Turbidity will be monitored at the terminus end of the HDD bore. If turbidity exceeds the States standards, work will stop until turbidity subsides before continuing.

10. All work must be completed during daylight hours.

11. Comply with the attached National Marine Fisheries Service's "PDCs for In-Water Activities" dated November 20, 2017

12. Comply with the attached National Marine Fisheries Service's "PDCs for Water Management" dated November 20, 2017

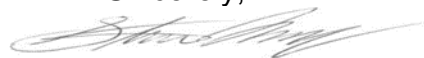
13. Comply with the attached National Marine Fisheries Service's "PDCs for Utility Lines" dated November 20, 2017

This letter of authorization does not give absolute Federal authority to perform the work as specified on your application. The proposed work may be subject to local building restrictions mandated by the National Flood Insurance Program. You should contact your local office that issues building permits to determine if your site is located in a flood-prone area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program.

If you are unable to access the internet or require a hardcopy of any of the conditions, limitations, or expiration date for the above referenced NWP, please contact me by telephone at 239-334-1975 x0009.

Thank you for your cooperation with our permit program. The Corps Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to complete our automated Customer Service Survey at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. Please be aware this Internet address is case sensitive; and, you will need to enter it exactly as it appears above. Your input is appreciated – favorable or otherwise.

Sincerely,



Steven Rabney
Project Manager

Enclosures

General Conditions

Department of the Army Permit Transfer Request

Commencement Notification Form

Self-Certification Statement of Compliance

Standard Manatee Conditions for In-Water Work

Sea Turtle and Smalltooth Sawfish Construction Conditions

National Marine Fisheries Service's "PDCs for In-Water Activities"

National Marine Fisheries Service's "PDCs for Water Management"

National Marine Fisheries Service's "PDCs for Utility Lines"

Environmental Plan

Permit Drawings

GENERAL CONDITIONS
33 CFR PART 320-330

1. The time limit for completing the work authorized ends on **March 18, 2022**.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow a representative from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

PERMIT NUMBER: SAJ-2018-03052(NW-SJR)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Section, Post Office Box 4970, Jacksonville, FL 32232-0019.

(TRANSFEREE-SIGNATURE)

(SUBDIVISION)

(DATE)

(LOT)

(BLOCK)

(NAME-PRINTED)

(STREET ADDRESS)

(MAILING ADDRESS)

(CITY, STATE, ZIP CODE)

COMMENCEMENT NOTIFICATION

*Within ten (10) days of initiating the authorized work, submit this form via electronic mail to saj-rd-enforcement@usace.army.mil (preferred, not to exceed 15 MB) **or** by standard mail to U.S. Army Corps of Engineers, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019.*

1. **Department of the Army Permit Number:** SAJ-2018-03052(NW-SJR)

2. **Permittee Information:**

Name: _____

Email: _____

Address: _____

Phone: _____

3. **Construction Start Date:** _____

4. **Contact to Schedule Inspection:**

Name: _____

Email: _____

Phone: _____

Signature of Permittee

Printed Name of Permittee

Date

SELF-CERTIFICATION STATEMENT OF COMPLIANCE

*Within sixty (60) days of completion of the authorized work, submit this form via electronic mail to saj-rd-enforcement@usace.army.mil (preferred, not to exceed 15MB) **or** by standard mail to U.S. Army Corps of Engineers, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019.*

1. **Department of the Army Permit Number:** SAJ-2019-03052(NW-SJR)

2. **Permittee Information:** Name: _____
Email: _____
Address: _____

Phone: _____

3. **Date Authorized Work Started:** _____ **Completed:** _____

4. **Contact to Schedule Inspection:** Name: _____
Email: _____
Phone: _____

5. **Description of Authorized Work (e.g. bank stabilization, fill placed within wetlands, docks, dredging, etc.):** _____

6. **Acreage or Square Feet of Impacts to Waters of the United States:** _____

7. **Describe Mitigation completed (if applicable):** _____

8. **Describe any Deviations from Permit (attach drawing(s) depicting the deviations):**

I certify that all work and mitigation (if applicable) was done in accordance with the limitations and conditions as described in the permit. Any deviations as described above are depicted on the attached drawing(s).

Signature of Permittee

Printed Name of Permittee

Date

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. 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.
- 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 will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shut down if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

CAUTION: MANATEE HABITAT

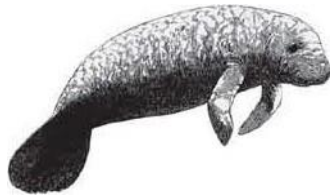
All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:



Wildlife Alert:

888-404-FWCC (3922)

cell *FWC or #FWC



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office 263
13th Avenue South St.
Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824- 5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc



**U.S. Army Corps of Engineers Jacksonville District's Programmatic Biological
Opinion (JaxBO) Project Design Criteria (PDCs) for In-Water Activities**

November 20, 2017

- 1) **(AP.7.) Education and Observation:** The permittee must ensure that all personnel associated with the project are instructed about the potential presence of species protected under the ESA and the Marine Mammal Protection Act (MMPA). All on-site project personnel are responsible for observing water-related activities for the presence of protected species. All personnel shall be advised that there are civil and criminal penalties for harming, harassing, or killing ESA-listed species or marine mammals. To determine which species may be found in the project area, please review the relevant Protected Species List at:
http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/index.html

- 2) **(AP.8.) Reporting of interactions with protected species:**
 - a) Any collision(s) with and/or injury to any sea turtle, sawfish, whale, or sturgeon occurring during the construction of a project, shall be reported immediately to NMFS's Protected Resources Division (PRD) at (1-727-824-5312) or by email to takereport.nmfs@noaa.gov and SAJ-RD-Enforcement@usace.army.mil.
 - b) Smalltooth sawfish: Report sightings to 1-844-SAWFISH or email Sawfish@MyFWC.com
 - c) Sturgeon: Report dead sturgeon to 1-844-STURG 911 (1-844-788-7491) or email nmfs.ser.sturgeonnetwork@noaa.gov
 - d) Sea turtles and marine mammals: Report stranded, injured, or dead animals to 1-877-WHALE HELP (1-877-942-5343).
 - e) North Atlantic right whale: Report injured, dead, or entangled right whales to the USCG via VHF Channel 16.

- 3) **(AP.9.) Vessel Traffic and Construction Equipment:** All vessel operators must watch for and avoid collision with species protected under the ESA and MMPA. Vessel operators must avoid potential interactions with protected species and operate in accordance with the following protective measures:
 - a) *Construction Equipment:*
 - i) All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while operating in water depths where the draft of the vessel provides less than a 4-foot (ft) clearance from the bottom, and in all depths after a protected species has been observed in and has departed the area.
 - ii) All vessels will follow marked channels and/or routes using the maximum water depth whenever possible.
 - iii) Operation of any mechanical construction equipment, including vessels, shall cease immediately if a listed species is observed within a 50-ft radius of

construction equipment and shall not resume until the species has departed the area of its own volition.

- iv) If the detection of species is not possible during certain weather conditions (e.g., fog, rain, wind), then in-water operations will cease until weather conditions improve and detection is again feasible.

b) *All Vessels:*

- i) Sea turtles: Maintain a minimum distance of 150 ft.
- ii) North Atlantic right whale: Maintain a minimum 1,500-ft distance (500 yards).
- iii) Vessels 65 ft in length or longer must comply with the Right Whale Ship Strike Reduction Rule (50 CFR 224.105) which includes reducing speeds to 10 knots or less in Seasonal Management Areas (<http://www.fisheries.noaa.gov/pr/shipstrike/>).
- iv) Mariners shall check various communication media for general information regarding avoiding ship strikes and specific information regarding right whale sightings in the area. These include NOAA weather radio, USCG NAVTEX broadcasts, and Notices to Mariners.
- v) Marine mammals (i.e., dolphins, whales [other than North Atlantic right whales], and porpoises): Maintain a minimum distance of 300 ft.
- vi) When these animals are sighted while the vessel is underway (e.g., bow-riding), attempt to remain parallel to the animal's course. Avoid excessive speed or abrupt changes in direction until they have left the area.
- vii) Reduce speed to 10 knots or less when mother/calf pairs or groups of marine mammals are observed, when safety permits.

- 4) **(AP.10.) Turbidity Control Measures during Construction:** Turbidity must be monitored and controlled. Prior to initiating any of the work covered under this Opinion, the Permittee shall install turbidity curtains as described below. In some instances, the use of turbidity curtains may be waived by the USACE project manager if the project is deemed too minimal to generate turbidity (e.g., certain ATON installation, scientific survey device placement, marine debris removal) or if the current is too strong for the curtains to stay in place. Turbidity curtains specifications:

- a) Install floating turbidity barriers with weighted skirts that extend to within 1 ft of the bottom around all work areas that are in, or adjacent to, surface waters.
- b) Use these turbidity barriers throughout construction to control erosion and siltation and ensure that turbidity levels within the project area do not exceed background conditions.
- c) Position turbidity barriers in a way that does not block species' entry to or exit from designated critical habitat.
- d) Monitor and maintain turbidity barriers in place until the authorized work has been completed and the water quality in the project area has returned to background conditions.
- e) In the range of ESA-listed corals (St. Lucie Inlet, Martin County south to the Dry Tortugas and the U.S. Caribbean) and Johnson's seagrass (Turkey Creek/Palm

Bay south to central Biscayne Bay in the lagoon systems on the east coast of Florida):

- i) Projects that include upland earth moving (e.g., grading to install a building or parking lot associated with a dock and seawall project), must install sediment control barriers to prevent any upland sediments from reaching estuarine or marine waters.
- ii) The turbidity curtain requirement cannot be waived for any project that moves or removes sediment (e.g., dredging, auger to create a pile, trenching to install a cableline). If turbidity curtains are not feasible in an area based on site conditions such as water current, high wave action, or stormy conditions, the project must undergo individual Section 7 consultation and is not covered under this Programmatic Opinion.

5) **(AP.11.) Entanglement:** All turbidity curtains and other in-water equipment must be properly secured with materials that reduce the risk of entanglement of marine species (described below). Turbidity curtains likewise must be made of materials that reduce the risk of entanglement of marine species.

- a) In-water lines (rope, chain, and cable, including the lines to secure turbidity curtains) must be stiff, taut, and non-looping. Examples of such lines are heavy metal chains or heavy cables that do not readily loop and tangle. Flexible in-water lines, such as nylon rope or any lines that could loop or tangle, must be enclosed in a plastic or rubber sleeve/tube to add rigidity and prevent the line from looping and tangling. In all instances, no excess line is allowed in the water.
- b) Turbidity curtains and other in-water equipment must be placed in a manner that does not entrap species within the construction area or block access for them to navigate around the construction area.

JaxBO, National Marine Fisheries Service

**Project Design Criteria (PDCs) specific to Activity 4 for Water-Management
Outfall Structures and Associated Endwalls**

A4.1. Activities covered by this Opinion include:

- 4.1.1 Installation, repair, replacement, extension, and removal of existing metal or concrete pipes, culverts, or other drainage conveyance structures that discharge storm water, surface water, or connect existing water bodies.
- 4.1.2 Installation of new outfall structures to connect 2 existing water bodies to improve water flow and quality or restore hydrology.
- 4.1.3 Installation of metal manatee grates. Grates are installed for manatee protection on all culverts that are between 8-in and 8-ft of diameter.

The following PDCs apply to all the activities described in PDC A4.1 above:

A4.2. This Opinion only covers water-management outfall structures when the effluent from the outfall is authorized, conditionally authorized, specifically exempted, or in compliance with the National Pollutant Discharge Elimination System Program (CWA section 402 or state water quality permit and any implementing regulations). The construction of intake structures is not covered unless it is directly associated with a USACE authorized outfall structure.

A4.3. All outfall discharge shall be designed and implemented to prevent erosion and scour.

Project Design Criteria (PDCs) specific to Activity 8 for Transmission and Utility Line Activities

- A8.1.** Activity 8 includes the installation, repair, replacement, and removal of support structures, footers, foundations, as well as the placement of riprap or concrete mat for pipeline protection. The USACE defines a “utility/transmission line” as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, wire or optical fiber for the transmission for any purpose of electrical energy, telephone, telegraph messages, digital signal, Internet, and radio or television communication.
- A8.2.** Structures permanently placed on the waterbottom (e.g., foundations, piles, and footings) to support aerial transmission lines must total less than a 0.5 ac for all structures combined. Because permanent structures have the potential to interfere with or impede sea turtles from entering or exiting the beach, they cannot be placed on or near beaches used for sea turtle nesting.
- A8.3.** Subaqueous utility and transmission lines may be installed (including as part of a repair/replacement project) using horizontal directional drilling, if the drilling originates and terminates on the uplands (i.e., no in-water work). For subaqueous transmission lines installed, repaired, or replaced using horizontal directional drilling, the applicant must provide and follow a frac-out contingency plan in Appendix D or another plan with at a minimum the same level of information as is provided in the plan contained in Appendix D.
- A8.4.** Subaqueous utility and transmission lines may be installed (including as part of a repair/replacement project) by trenching. When excavating the trench, the bottom sediments may be temporarily sidecast into areas devoid of submerged aquatic vegetation and mangroves. Immediately upon completing the excavation and placing the transmission or utility line into the trench, the trench must be filled and the bottom contours must be restored to pre-construction conditions. The District Engineer may allow the trench to remain open and temporary sidecasting to continue after the excavation is complete, as long as the total time the trench is open and the material is sidecast during and after excavation does not exceed 180 days.
- A8.5.** New subaqueous transmission and utility lines shall not be placed on the sea floor (i.e., pinned or anchored and not buried) under this Opinion. Sections of existing buried lines may be repaired or replaced above the sea floor by pinning or anchoring the new section of line in place to ensure that it does not move and damage surrounding seagrasses, hardbottom, coral, or coral reef habitat.

A8.6. When repairing existing transmission or utility lines, riprap and articulated mats may be placed on subaqueous lines that are buried in trenches or on lines that are attached to the sea floor (in accordance with A8.5) to stabilize the line. Riprap and articulated mats may also be used to stabilize new subaqueous lines placed in high erosion areas. These stabilization materials are limited to the minimum amount necessary to stabilize and protect the lines existing lines (which may have been exposed by scouring) and cannot be placed on seagrasses, hardbottom, corals, or coral reef habitat.

ATTACHMENT 7: ENVIRONMENTAL PLAN
NAPLES BEACH RESTORATION & STORMWATER IMPROVEMENT PROJECT

The purpose of this document is to outline the Environmental Management Plan for the Project, including (1) assessment of existing environmental/biological conditions and (2) environmental/biological protection measures, particularly for manatees, sea turtles and shorebirds.

Related Documents:

- Permit Drawings (Attachment 5)
- Construction Schedule and Techniques Plan (Attachment 6)
- Avoidance and Minimization Measures (Attachment 8)

Project Description

The Project includes the removal of five beach outfalls and conveyance of the stormwater to a pump station located at 3rd Avenue North with discharge through two directional drilled deep pipelines offshore to approximately -14 to -15 ft NAVD. A new weir (Structure 6-4B) will be installed at Alligator Lake to divert stormwater through an overflow line (modified outfall #6) to convey stormwater during extreme storm events, when peak discharge volumes exceed the maximum rates for the pump stations.

The Project components include (Figure 1) (Items in bold have a component extending waterward of the MHWL under the jurisdiction of USACE):

1. Stormwater consolidation and conveyance to the pump station
2. Pump station located at 3rd Ave N (with backup generator)
3. **Existing outfall removal**
4. **Directionally drilled pipelines for offshore discharge of stormwater**
5. System overflow (**New Weir at Alligator Lake**, modification of existing outfall #6)

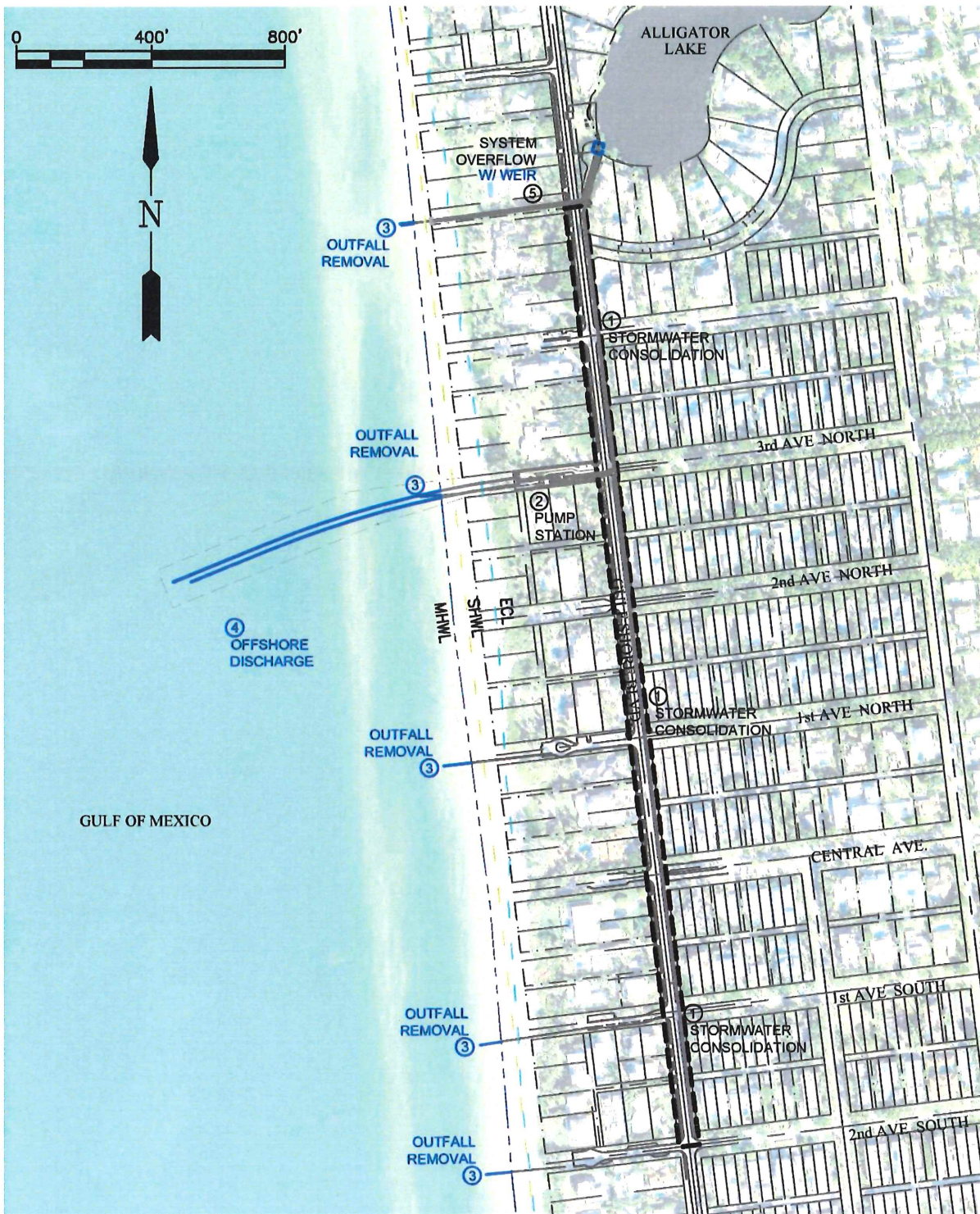


Figure 1. Project Key Components Overview

Existing Environmental / Biological Conditions

Types of areas occurring within the Project Area include urban residential (single and multi-family) built-up areas, coastal scrub and swimming beach based upon the Florida Land Uses and Cover Classification System (FLUCCS) (Attachment 4, Figure 7). Littoral (intertidal) and sublittoral communities are also included within the Project Area for the outfall removal. The littoral zone is defined as the nearshore zone along the beachfront, including the low tide to high tide area and is characterized by coastal dune vegetation, sandy beach and tidal zone. The marine habitat within the Project Area is inhabited by nesting sea turtles, nesting and foraging shorebirds/seabirds, manatees, hard bottom communities and fisheries. These habitats are described in more detail in the following sections.

The urban built up area in the Project Area is comprised of the development east of the primary dune and swimming beach. The development includes single-family homes and condominiums as well as deeded beach access easements.

Protected Species (Shorebirds, Sea Turtles, Manatee)

Several species of shorebirds\seabirds are prevalent on Naples beaches but do not typically nest in the Project Area due to recreational use. Shorebird nesting season spans from March through September.

Several species of shorebirds may forage and rest within the Project Area (Table 1). Of these species, all are protected from take and harassment by the Migratory Bird Treaty Act (MBTA 1918). There is no critical habitat for Piping Plover within the Project Area.

Table 1. Potential Feeding and Resting Shorebirds

Species Common Name	Scientific Name
Black-Bellied Plover	<i>(Pluvialis squatarola)</i>
Brown Pelican	<i>(Pelecanus occidentalis)</i>
Double-Crested Cormorant	<i>(Phalacrocorax auritus)</i>
Gull	<i>(Laridae, spp.)</i>
Least Tern	<i>(Charadrius wilsonia)</i>
Piping Plover	<i>(Charadrius melodus)</i>
Red Knot	<i>(Calidris canutus)</i>
Royal Tern	<i>(Sterna maxima)</i>
Sanderling	<i>(Calidris alba)</i>
Sandwich Terns	<i>(Sterna sandvicensis)</i>
Snowy Egret	<i>(Egretta thula)</i>
White Ibis	<i>(Eudocimus albus)</i>
Willet	<i>(Catoptrophorus semipalmatus)</i>

A list of sea turtle species which may nest on Naples Beach is provided in Table 2. The loggerhead sea turtle is the primary turtle nesting species on Naples Beaches; however, the Project Area is not classified as critical loggerhead habitat. While other species occasionally nest on Naples Beaches, loggerhead sea turtles represent 99% of the nests in Collier County.

Table 2. Potential Sea Turtle Species

Species Common Name	Scientific Name	USWF/NMF Status
Loggerhead Sea Turtle	<i>(Caretta caretta)</i>	Threatened
Green Sea Turtle	<i>(Chelonia mydas)</i>	Endangered
Leatherback Sea Turtle	<i>(Dermochelys coriacea)</i>	Endangered
Hawksbill Sea Turtle	<i>(Eretmochelys imbricata)</i>	Endangered
Kemp's Ridley Sea Turtle	<i>(Lepidochelys kempii)</i>	Endangered

The West Indian Manatee (*Trichechus manatus*) is federally protected under the Endangered Species Act (ESA 1973) and the Marine Mammal Protection Act (MMPA 1972). In addition, it is protected under Florida State laws (Chapter 62C-22, F.A.C.). The nearshore habitat fronting the Project site is suitable habitat for mating and traveling manatees. There are no congregations of seagrass within the Project area, and therefore it is an unlikely habitat for foraging manatees.

Hardbottom & Fisheries

The evaluation of the overall ecological diversity and relief of the hardbottom within the Project Area was based on prior studies associated with the Collier County Beach Nourishment Project. These prior studies are described briefly below.

In 2003, Coastal Planning & Engineering, Inc. (CP&E) conducted a pre-construction survey for 4 Segments along the Collier County coastline: Vanderbilt Beach, Pelican Bay, Park Shore and Naples. The purpose of this report was to characterize and evaluate the biodiversity of the nearshore hardbottom resources located within the zone of influence of the Naples Beach Re-Nourishment Segment (CPE, 2003). This report concluded that the condition (biodiversity) of the Naples Segment hardbottom (along with the Park Shore Segment) contained the lowest vertical relief, the least amount of macroalgae, the highest average frequency of 100% sand cover, and also contained the least amounts of corals (hard, soft and colonies). The data collected by CP&E for the Naples Segment, resulted in their determination that the hardbottom was a chronically disturbed habitat. Thus indicating that the hardbottom was ephemeral due to the low relief.

The 2006 Collier County Beach Re-Nourishment Project authorized 1.09 acres of impacts to nearshore hardbottom. To offset these impacts, the Collier County provided mitigation in the

form of a 1.09 acre artificial reef (3.5-4.5 foot diameter limestone boulders) located approximately 900 ft from R-66 (offshore between Outfalls 6 and 7). The reef was constructed in 2007 and after two years of post-construction monitoring was deemed a success (CPE, 2009).

The most recent hardbottom survey was conducted in August-September 2015 as a post-construction event to the 2013/14 Collier County Beach Nourishment Project and the Doctors Pass Maintenance Dredging Project. The monitoring event scheduled for September 2017 was cancelled due to Hurricane Irma and is tentatively scheduled for Summer/Fall 2018.

The outer edges of the hardbottom within the Project Area are provided on the Permit Drawings (Attachment 5). The hardbottom is ephemeral in nature with the 2008/09 surveys documenting the largest area of exposed hardbottom resources. The hardbottom has continually been characterized as low vertical relief hardbottom with no notable coral heads (Figure 2).

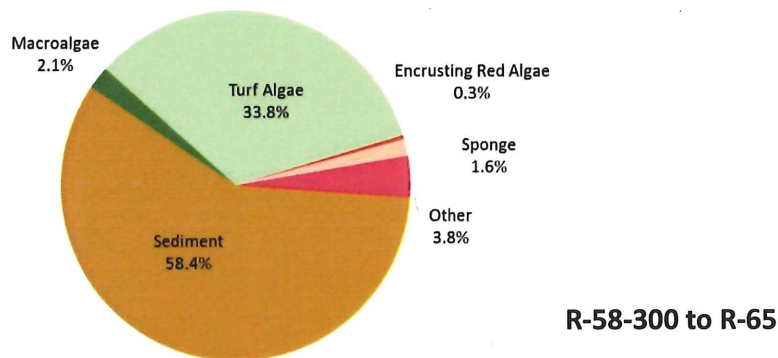


Figure 2. Average Benthic Cover along Naples Beach (2015)

Fisheries occurring inshore on Naples beaches include rod and reel fishing on a commercial and recreational level. Notable fish include striped mullet (*Mugil cephalus*), spotted seatrout (*Cynoscion nebulosus*), pompano (*Trachinotus carolinus*), grouper (*Mycteroperca* and *Epinephelus sp*), red snapper (*Lutianus campechanus*), tarpon (*Megalops atlanticus*), snook (*Centropomus undecimalis*), red drum (*Sciaenops ocellatus*) and mangrove snapper (*Lutianus griseus*). Notable shellfish include pink shrimp (*Panaeus duorarum*), blue crab (*Callinectes sapidus*) and stone crab (*Menippe mercenaria*).

Within the Project Area there is frequent pounding and scouring of the shoreline resulting from wave and tidal action. The benthic community consists of several species of snails, starfish, urchins, anemone and whelks. In addition, several species of invertebrates such as, snails, crabs and shrimp, inhabit the benthic community. Small bait fish congregate in the nearshore waters of the tidal zone. These small congregations of bait fish attract larger shallow water

predators. This provides important fish congregations for commercial and recreational fisherman.

Dunes and Coastal Vegetation

Beaches of Naples are gently sloping with a relatively low berm and a nominally +5 ft elevation dune. Notable grasses include sea oats (*Uniola paniculata*), panic grass (*Panicum amarum*) and muhly grass (*Muhlenbergia filipes*). Notable trees and shrubs include seagrape (*Coccoloba uvifera*), beach naupaka (*Scaevola taccada*), cabbage palm (*Sabal palmetto*), saw palmetto (*Serenoa repens*), coconut palms (*cocos nucifera*) and sporadic pockets of inkberry (*Scaevola ivifolia*).

These terrestrial habitats provide suitable nesting, foraging and shelter for a variety of wildlife species including sea turtles and shorebirds.

Photographs of the coastal habitat at Outfall #6 (Typical Outfall Removal) and Outfall #7 (Proposed 3rd Ave N Pump Station and Offshore Directional Drill) are shown in Figure 3 to Figure 6.



Figure 3. Beach-Dune Vegetation at Outfall #6 / March 16, 2016



Figure 4. Beach-Dune Vegetation at Outfall #6 / November 5, 2015



Figure 5. Beach-Dune Vegetation at Outfall #7 / 3rd Ave N, March 16, 2016



Figure 6. Beach-Dune Vegetation at Outfall #7 / 3rd Ave N, November 5, 2015

Wetland Vegetation

A photograph of the shoreline in the vicinity of the future Structure 6-4B (weir) location is provided in Figure 7. No impacts to mangroves or other sensitive or protected wetland species are anticipated. Vegetation impacts are expected to be limited as the existing ground cover is primarily comprised of rip rap.

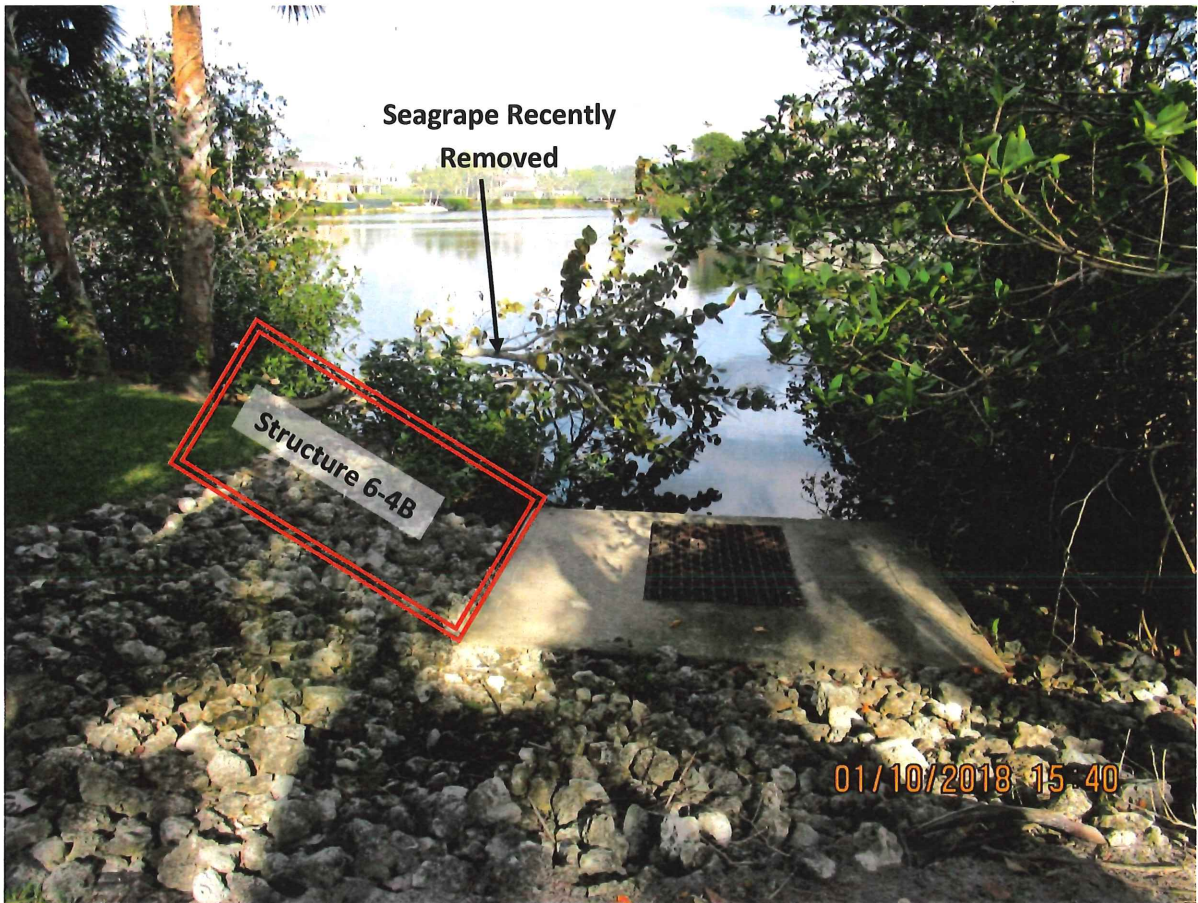


Figure 7. Structure 6-4B Future Weir Location, Jan 2018 (Post-Irma)

Environmental/Biological Protection

Protected Species (Shorebirds, Sea Turtles, Manatee)

Construction activities occurring within potential shorebird and sea turtle nesting habitat, generally defined as the active beach expanding from the MHW to the dune/vegetation line, is limited to (1) modification of the existing Outfall #6 for the overflow system and (2) removal of the existing beach Outfalls # 7-10. The offshore discharge pipeline is directionally drilled below grade with staging and access occurring landward of the dune line; therefore, this activity is not considered to occur within potential nesting habitat. The exception is an offshore to onshore pipeline pull which requires a 1 day crossing of the fused pipeline over the beach as described in the construction sequencing and techniques plan. This activity may not occur during sea turtle nesting season unless appropriate clearance is given by the marine turtle permit holder.

The shorebird and sea turtle nesting seasons for Collier County beaches are March 1 to August 31 and May 1 to October 31, respectively. For avoidance of nesting impacts, construction

activities seaward of the dune line, i.e. those identified above, will occur between November 1 and February 28.

The nearshore habitat fronting the Project site is suitable habitat for manatees. There are no congregations of seagrass within the Project area, and it is therefore unlikely that foraging manatees would be observed within the project area; however, the waters fronting the Project site are suitable habitat for mating and traveling manatees.

To avoid direct adverse impacts to shorebirds, marine turtles and manatee by marine construction activities, the following protective measures shall be followed:

- 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.
- 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.
- Siltation or turbidity barriers, if used, 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 must not impede manatee or marine turtle movement.
- All on-site project personnel are responsible for observing water-related activities for the presence of marine turtles and manatees. All in-water operations, including vessels, shall be 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 the 50-foot radius of the project operation, or until 30 minutes elapses if the animal(s) has not reappeared within 50 feet of the operation. Animals shall not be herded away or harassed into leaving.

- Any collision with or injury to a marine turtle or manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922, and to FWC at ImperiledSpecies@myFWC.com.
- Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs shall be removed by the Permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC shall be used. One sign that reads "Caution Boaters, Watch for Manatees" shall be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shutdown of in-water operations shall be posted in a location prominently visible to all personnel engaged in water-related activities. Signs already approved by the FWC can be viewed at http://www.myfwc.com/media/415211/Manatee_EducationalSign.pdf. Questions concerning these signs can be sent to the email address listed above.
- 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.

Hardbottom & Fisheries

During construction the drilling contractor will be required to avoid and minimize, as much as practical, the discharge of bentonite drilling fluids/slurry into the Gulf of Mexico. Through discussions with drilling contractors, this can likely be accomplished through the use of either gulf "seawater" or a biodegradable drilling mud such as Biobore for the last 200 ft of drilling prior to daylighting (i.e. emergence) of the pipeline on the seafloor. Appendix 7-A provides general information and MSDS Sheet for Biobore.

During construction of this seaward terminus, the pipeline will emerge from the seafloor and could potentially result in minor turbidity at this site. The remainder of the pipeline will be installed using directional drilling techniques under the seabed which will not result in turbidity. Prior experience yields that the turbidity levels generated will not exceed State Water Quality standards.

To avoid and minimize turbidity impacts, in situ turbidity will be measured in NTUs at least twice daily during construction of the seaward terminus of the pipeline.

Dunes and Coastal Vegetation

Three construction activities have works occurring seaward of the dune/vegetation line including (1) modification of the existing Outfall #6 for the overflow system, (2) removal of the existing beach Outfalls # 7-10 and (3) the directionally drilled offshore discharge pipeline. With respect to the protection of the dunes and coastal vegetation, the following avoidance and minimization measures are taken for these activities:

- Modification of the existing outfall will occur within the same location and general footprint. No permanent impacts to the dune and/or coastal vegetation is proposed.
- Removal of the existing beach outfalls will occur on the sandy beach only, and will terminate (cap) at the vegetation line so as not to result in impacts to the dunes and coastal vegetation.
- The gulf discharge pipeline will be directionally drilled from a point landward of the dune with staging and access also occurring landward of the dune line.
- Any unintentional impacts to coastal vegetation occurring during construction will be mitigated following construction at a 1:1 ratio with like species.

NAPLES BEACH RESTORATION & STORMWATER IMPROVEMENT PROJECT USACE PERMIT DRAWINGS

Prepared For:
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Gary Price, Vice Mayor
Terry Hutchinson, Council Member
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Reg Buxton, Council Member
Linda Penniman, Council Member
A. William Moss, City Manager

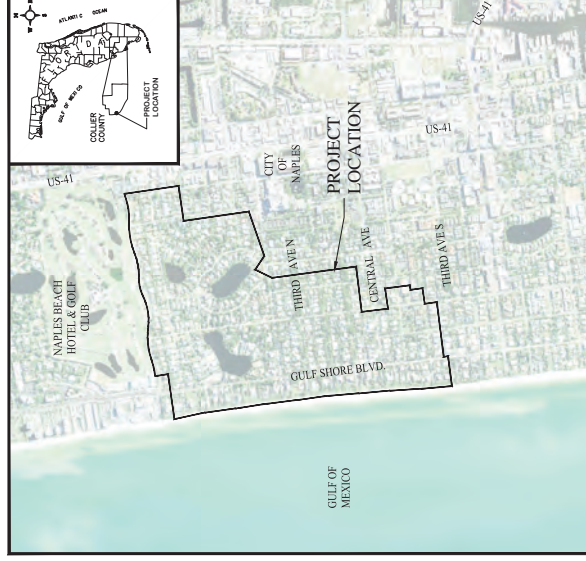
Gregg Strakaluse,
Streets & Stormwater Management Director

Prepared By:



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Date: October 2018



VICINITY MAP

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- 3 PROJECT KEY SHEET

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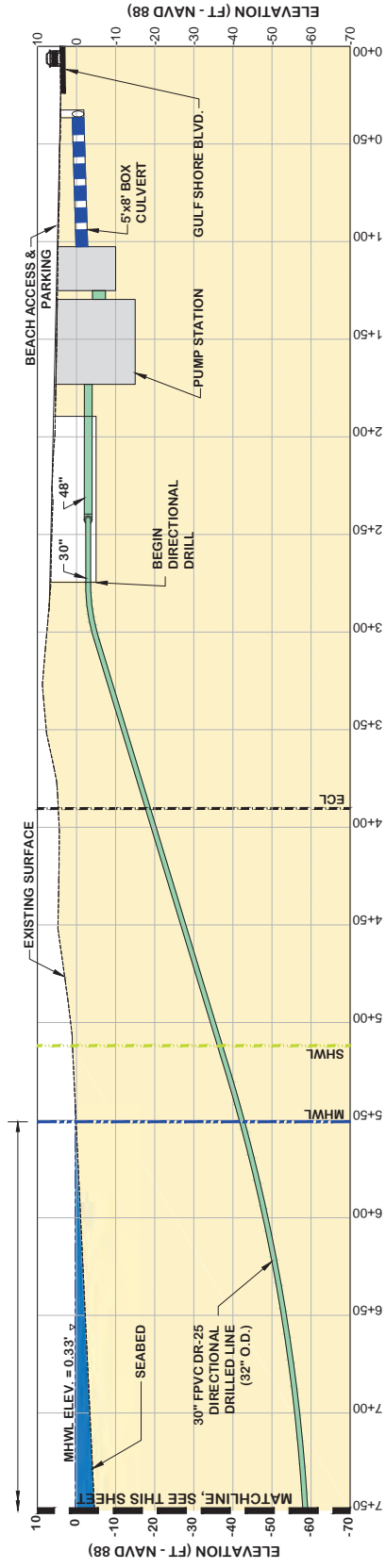
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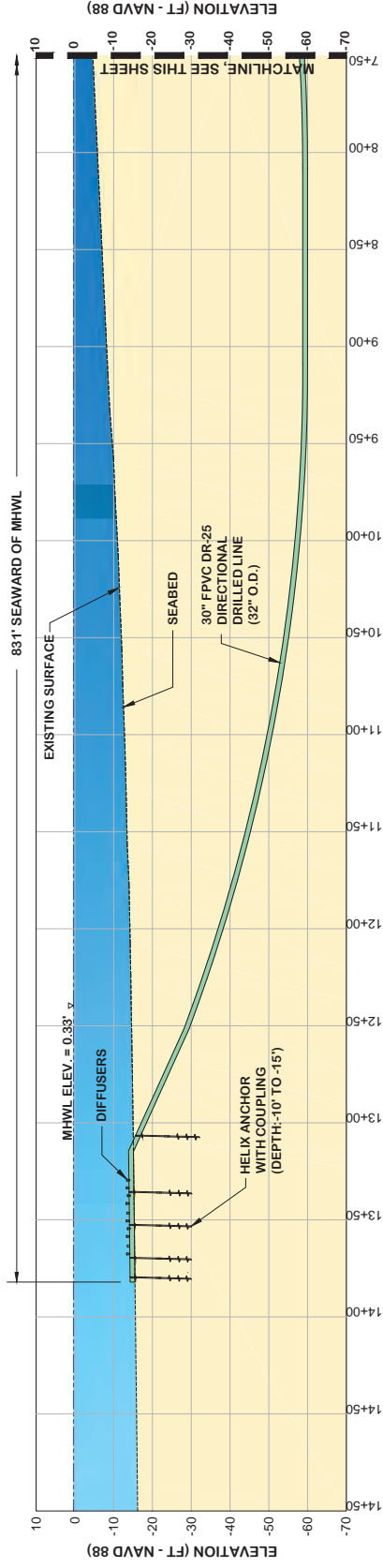
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ECE Project No.: 16-329

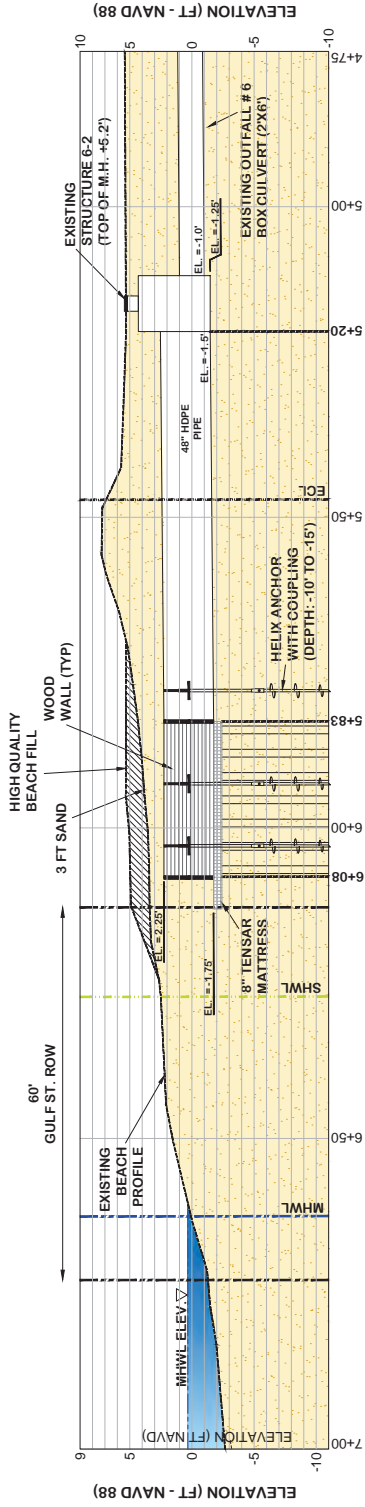


SOUTH PROFILE OFFSHORE DISCHARGE
 SCALE: 1"=60' (H)
 1"=30' (V)

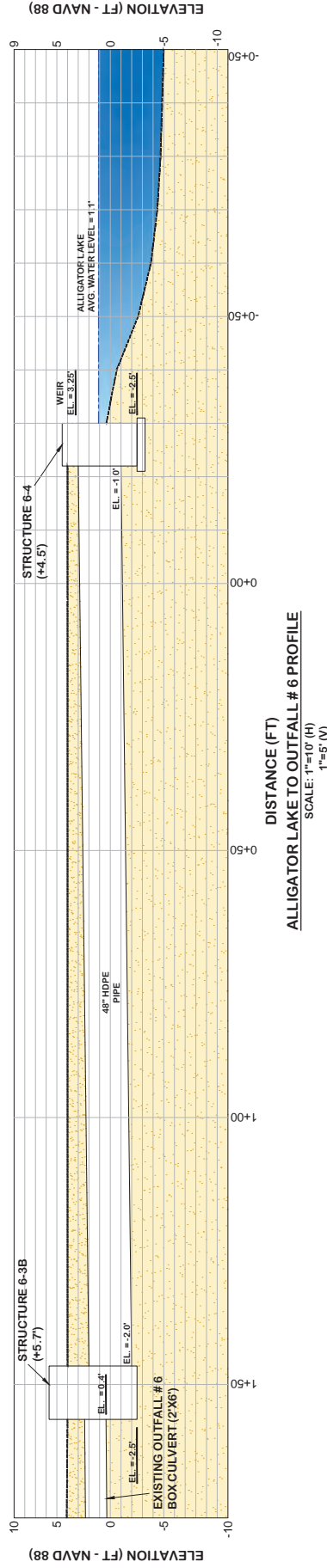


SOUTH PROFILE OFFSHORE DISCHARGE
 SCALE: 1"=60' (H)
 1"=30' (V)

		PIPELINE PROFILE VIEW	
Client/Project CITY OF NAPLES 733 BRN ST S NAPLES, FL Naples Beach Restoration & Stormwater Improvement Project		Project No. 16-529 Scale AS NOTED Drawing No. 8 of 17 Revision 0	
		Consultants	
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ALLIGATOR LAKE TO OUTFALL # 6 PROFILE
 SCALE: 1"=10' (H)
 1"=5' (V)



ALLIGATOR LAKE TO OUTFALL # 6 PROFILE
 SCALE: 1"=10' (H)
 1"=5' (V)

Client/Project CITY OF NAPLES 733 9th St S Naples, FL Naples Beach Restoration & Stormwater Improvement Project		City of Naples 		OVERFLOW SYSTEM SECTIONS	
Revised 09 Drawn 09 Checked 09 Reviewed 09		Scale AS NOTED		Revision 0	
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