

DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS, JACKSONVILLE DISTRICT 701 SAN MARCO BOULEVARD JACKSONVILLE, FLORIDA 32207-8175

January 5, 2023

Regulatory Division West Branch Tampa Section SAJ-2017-00687(NW-CMW)

Issac Brownman
Town of Longboat Key
600 General Harris St.
Longboat Key, FL 34228
Sent via email: IBrownman@longboatkey.org

Dear Mr. Brownman:

The U.S. Army Corps of Engineers (Corps) has completed the review of your application for a Department of the Army permit received on October 22, 2020. Your application was assigned file number SAJ-2017-00687. A review of the information and drawings provided indicates that the proposed work would result in the construction of a 12,200-linear foot redundant force main underneath Sarasota Bay. The proposed force main will be constructed adjacent to and north of the existing force main using an open cut trench construction approach. Work will include temporary impacts due to open cut trenching, specifically direct impacts to 0.17 acres of freshwater wetlands, 0.79 acres of mangroves, 1.91 acres of seagrasses, and 0.11 acre of oysters. Associated secondary impacts will include 2.41 acres of seagrasses. The activities subject to this permit are authorized pursuant to authorities under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403), and Section 404 of the Clean Water Act (33 U.S.C. § 1344) and Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 408). The project is located in Sarasota Bay, between Longboat Key and Bradenton, Manatee County, Florida.

Your project, as depicted on the enclosed drawings, is authorized by Nationwide Permit (NWP) 58 (Utility Line Activities for Water and Other Substances). **This verification is valid until March 14, 2026.** In order for this NWP authorization to be valid, you must ensure that the work is performed in accordance with the Nationwide Permit General Conditions, the Jacksonville District Regional Conditions, and the General and Project-Specific Special Conditions listed below. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP 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 NWP. You can access the U.S. Army Corps of Engineers' (Corps)

Jacksonville District's Regulatory Source Book webpage for links to view NWP information at: https://www.saj.usace.army.mil/Missions/Regulatory/Source-Book/. Please be aware this Internet address is case sensitive and should be entered as it appears above. Once there, you will need to select "Nationwide Permits." Among other things, this part of the Source Book contains links to the federal register containing the text of the pertinent NWP authorization and the associated NWP general conditions, as well as separate links to the regional conditions applicable to the pertinent NWP verification.

You must comply with all of the special and general conditions for NWP-58, including any project-specific conditions included in this letter and all conditions incorporated by reference as described above.

General Conditions (33 CFR PART 320-330):

- 1. The time limit for completing the work authorized ends on March 14, 2026.
- 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 of 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 on the transfer form attached to this letter and forward a copy 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 (Attachment 2).

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.

Project Specific Special Conditions:

The following project specific special conditions are included with this verification:

- 1. **Reporting Address:** The Permittee shall submit all reports, notifications, documentation, and correspondence required by the general and special conditions of this permit to either (not both) of the following addresses:
 - a. For electronic mail (preferred): <u>SAJ-RD-Enforcement@usace.army.mil</u> (not to exceed 15 MB).
 - b. For standard mail: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019.

The Permittee shall reference this permit number, SAJ-2017-00687 (NW –CMW), on all submittals.

- 2. **Commencement Notification:** Within 10 days from the date of initiating the work authorized by this permit, the Permittee shall submit a completed "Commencement Notification" form (Attachment 3).
- 3. **Posting of Permit:** The Permittee shall have available and maintain for review a copy of this permit and approved plans at the construction site.
- 4. **Local Notice to Mariners:** The contractor is required to contact the United States Coast Guard office a minimum of 2 weeks prior to commencement and provide locations affected, equipment, hours of operation, and duration of the project so that the information can be published in the Local Notice to Mariners.
- 5. **As-Built Certification:** Within 60 days of completion of the authorized work or at the expiration of the construction window of this permit, whichever occurs first, the Permittee shall submit as-built drawings of the authorized work and a completed version of the enclosed "As-Built Certification by Professional Engineer or Surveyor" form (Attachment 4) to the Corps. The drawings shall be signed and sealed by a registered professional engineer or a professional land surveyor confirming the actual location of all authorized work/structures with respect to the Federal channel and/or within the Federal easement and include the following:

- a. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) with an overlay of the work as constructed in the same scale as the attached permit drawings (8½-inch by 11-inch). The drawings shall include the X & Y State Plane coordination points of the most waterward point of the structure, as well as the Z-azimuth for subaqueous utilities. The drawings shall include the dimensions of the structure, depth of water (at mean low water) at the waterward end of the structure, and the distance from the waterward end of the structure to the near design edge of the Federal channel.
- b. List of any deviations between the work authorized by this permit and the work as constructed. In the event the completed work deviates, in any manner, from the authorized work, describe on the As-Built Certification Form the deviations between the work authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note the depiction and/or description of any deviations on the drawings and/or As-Built Certification Form does not constitute approval of any deviations by the Corps.
- c. The Department of the Army Permit number.
- d. Within 60 days of completion of the work authorized by this permit, the Permittee shall provide a courtesy copy of the signed and sealed As-Built drawings to the Corps, Engineering Division. Submittals shall be sent either electronically by email at ENPermits.CESAJ@usace.army.mil or by standard mail at Post Office Box 4970, Jacksonville Florida 32232-0019.

6. 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 permitted activities, items that may have historic or archaeological origin are observed the Permittee shall immediately cease all activities adjacent to the discovery that may result in the destruction of these resources and shall prevent his/her employees from further removing, or otherwise damaging, such resources. The applicant shall notify both the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333 and the Corps, of the observations within the same business day (8 hours). Examples of submerged historical, archaeological or cultural resources include shipwrecks, shipwreck debris fields (such as steam engine parts, or wood planks and beams), anchors, ballast rock, concreted iron objects, concentrations of coal,

prehistoric watercraft (such as log "dugouts"), and other evidence of human activity. The materials may be deeply buried in sediment, resting in shallow sediments or above them, or protruding into water. The Corps shall coordinate with the Florida State Historic Preservation Officer Choose an item to assess the significance of the discovery and devise appropriate actions. Project activities shall not resume without verbal and/or written authorization from the Corps.

- 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 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 nonfederal 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 Archaeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO. 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 SHPO and from the Corps.
- 7. **Assurance of Navigation and Maintenance:** 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.
- 8. **Individual Section 408 Approval:** It has been determined that the activities authorized do not impair the usefulness of the GIWW and are not injurious to the public interest. The Permittee shall adhere to the conditions and limitations referenced in the Section 408 approval memo in Attachment 5 of this permit. All

documentation required in the Section 408 approval memo, including As-built drawings (see special condition #5) shall be submitted either electronically by email at ENPermits.CESAJ@usace.army.mil or by standard mail at Post Office Box 4970, Jacksonville Florida 32232-0019. For all questions related to the Section 408 approval, contact the Corps, Jacksonville Engineering Division by telephone at 904-232-1604. Engineering Division is the appropriate authority to determine compliance with the terms and conditions of Section 408 approval.

- 9. **Manatee Conditions**: The Permittee shall comply with the "Standard Manatee Conditions for In-Water Work 2011" (Attachment 6). The most recent version of the Manatee Conditions must be utilized.
- 10. Manatee Condition for Impact Hammer and Metal Pilings/Sheet Piles: Installation of metal pilings or metal sheet piles by impact hammer may occur under the following conditions:
 - a. Use of at least one dedicated manatee observer, with all work being stopped if a manatee is observed within 1.000 feet:
 - b. No work shall occur outside of daylight hours (defined as one-half hour after sunrise to one-half hour before sunset); and
 - c. No more than 5 piles/day may be installed.
- 11. **Protected Species Construction Conditions:** The Permittee shall comply with National Marine Fisheries Service's "Protected Species Construction Conditions, NOAA Fisheries Southeast Regional Office" dated May 2021 (Attachment 7).
- 12. **Sidecast Material**: Material resulting from trench excavation may be temporarily sidecast (up to three months) into waters of the United States, provided that the material is not placed in such a manner that it is dispersed by currents or other forces. The top 6-12 inches of the trench shall only be backfilled with topsoil from the trench. Furthermore, the trench cannot be constructed in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a French drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.
- 13. **Turbidity Barriers**: 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 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 daily until the authorized work has been completed and turbidity within the construction area has returned to ambient levels. Turbidity barriers shall be removed upon stabilization of the work area.

- 14. **Fill Material**: The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance in toxic amounts, in accordance with Section 307 of the Clean Water Act.
- 15. **(a.) Temporary Aquatic Resource Impacts:** Within 60 days from the date of completing the work authorized by this permit, the Permittee shall restore impact areas to pre-existing contours, elevations, vegetation, habitat type, and hydrology.
 - **(b.) Seagrass Surveys:** The USACE will require pre- and post-construction SAV surveys be conducted between June 1 and September 30 to determine direct and secondary SAV impacts at the approved trench location and construction corridor (e.g., sloughing of side slopes, sediment sidecast, and downdrift sedimentation within 100 feet of both side edges of the construction corridor).

The Permittee will provide in-kind compensatory mitigation for seagrass impacts, direct and secondary, as defined in the **Compensatory Mitigation** special condition below. If proposed impacts are greater than approved, the Permittee will need to notify the Corps prior to commencing mitigation to develop an updated plan to address additional habitat losses.

- 16. **Compensatory Mitigation:** Within 6 months of completion of work, the Permittee shall perform the following work as described in the Mitigation Plan in Attachment 8:
 - a. create/restore 0.17 acres of freshwater marsh wetlands
 - b. restore/enhance 1.18 acres of mangrove habitat
 - c. relocate/enhance 0.22 acres of oyster beds,
 - d. create an 8.64-acre seagrass planting site.
- 17. **Performance Standards:** To meet the objectives of the approved compensatory mitigation plan, the Permittee shall achieve the performance standards included in the attached mitigation plan.

The Permittee shall achieve the documented performance standards by the end of the required 5-year monitoring period, with no maintenance during the final year. In the event that the performance standards have not been achieved, the Permittee shall undertake a remediation program approved by the Corps in accordance with the **Remediation Special Condition** of this permit.

- 18. **Monitoring and Reporting Timeframes**: The Permittee shall comply with the following monitoring and reporting requirements:
 - a. Perform a time-zero monitoring event of the wetland mitigation area(s) within 60 days completion of the compensatory mitigation construction and implementation activities identified in the **Compensatory Mitigation Special Condition** of this permit.
 - b. Submit the time-zero report to the Corps no later than 60 days after completion of the monitoring event. The report will include at least one paragraph depicting baseline conditions of the mitigation site(s) prior to initiation of the compensatory mitigation objectives and a detailed plan view drawing of all created, enhanced and/or restored mitigation areas.
 - c. Subsequent to completion of the compensatory mitigation objectives, perform semi-annual monitoring of the wetland mitigation areas for the first 2 years and annual monitoring thereafter for a total of no less than 5 years of monitoring.
 - d. Submit annual monitoring reports to the Corps no later than 60 days after completion of the final monitoring event for that year. Semi-annual monitoring will be combined into one annual monitoring report.
 - e. Monitor the mitigation area(s) and submit annual monitoring reports to the Corps until released in accordance with the **Mitigation Release Special Condition** of this permit.
- 19. **Reporting Format:** The Permittee shall submit monitoring reports to the Corps, which must include the following:
 - 1. Project Overview:
 - a. Department of the Army Permit Number;
 - b. Name and contact information for the Permittee and authorized consultant;
 - c. Name of the party responsible for conducting the monitoring and the date(s) the inspection was conducted;
 - d. A brief paragraph describing the purpose of the approved project, acreage, type of aquatic resources impacted, and type and acreage of resources authorized to compensate for project impacts;
 - e. (For each compensatory mitigation site) a written description of the location, any identifiable landmarks of the compensatory mitigation project, including information to locate the site perimeter, and decimal

- degree latitude/longitude coordinates of the mitigation site, UTMs, state plane coordinate system, etc.;
- f. Dates compensatory mitigation commenced and/or was completed;
- g. Short statement of whether the performance standards are being met;
- h. Dates and details of any recent corrective or maintenance activities conducted since the submittal of the previous report; and
- Specific recommendations for any additional corrective or remedial actions.
- 2. Requirements: List the monitoring requirements and performance standards, as specified in the approved mitigation plan and special conditions of this permit, and evaluate whether the compensatory mitigation project site is successfully achieving the approved performance standards or trending towards success. A table is a recommended option for comparing the performance standards to the conditions and status of the developing mitigation site.
- 3. <u>Summary Data:</u> Summary data should be provided to substantiate the success and/or potential challenges associated with the compensatory mitigation project. Photo documentation may be provided to support the findings and recommendations referenced in the monitoring report and to assist the Corps project manager in assessing whether the compensatory mitigation project is meeting applicable performance standards for that monitoring period. Submitted photos should be dated and clearly labeled with the direction from which the photo was taken. The photo location points should also be identified on the appropriate maps.
- 4. <u>Maps and Plans</u>: Maps shall be provided to show the location of the compensatory mitigation site(s) relative to other landscape features, habitat types and acreages, locations of photographic reference points, transects, sampling data points, monitoring wells, and/or other features pertinent to the mitigation plan. In addition, the submitted maps and plans shall clearly delineate the mitigation site perimeter(s). Each map or diagram shall include a legend and the location of any photos submitted for review. As-built plans shall be included as required by **As-Built Certification with X-Y-Z Coordinates Special Condition**.
- 5. <u>Conclusions</u>: A general statement shall be included that describes the current conditions of the compensatory mitigation project. If performance standards are not being met, a brief explanation of the difficulties and potential remedial actions proposed by the Permittee or sponsor, including a timetable, shall be provided. The District Engineer will ultimately determine if the mitigation site is successful for a given monitoring period.

- 20. **Remediation:** If the compensatory mitigation fails to meet the performance standards after completion of the compensatory mitigation objectives, the compensatory mitigation will be deemed unsuccessful. No later than 60 days after notification by the Corps that the compensatory mitigation is unsuccessful after the fifth year of post-construction monitoring, the Permittee shall submit to the Corps a remedial compensatory mitigation proposal sufficient to offset adverse impacts. The remedial compensatory mitigation proposal may be required to include additional mitigation to compensate for the temporal loss of wetland functions associated with the unsuccessful compensatory mitigation activities. In order to reduce potential temporal loss, the Permittee may, at any time, request to submit a remedial compensatory mitigation proposal prior to the end of the required monitoring period, if they believe the authorized mitigation may not meet the performance standards. Any remediation or adaptive management plan requires written approval from the Corps, prior to implementation.
- 21. Mitigation Release: It is the Permittee's responsibility to complete the required compensatory mitigation, as set forth in the Compensatory Mitigation Special Condition of this permit. The mitigation requirements will not be considered successful until written verification has been provided by the Corps. A mitigation area that has been released will require no further monitoring or reporting by the Permittee. However, the Permittee, Successors, or any subsequent Transferees remain perpetually responsible to ensure that the mitigation area(s) remains in a condition appropriate to offset the authorized impacts in accordance with General Condition 2 of this permit.
- 22. **Perpetual Conservation:** The Permittee shall maintain the mitigation areas in their naturally existing, restored, enhanced or created condition in perpetuity. The Permittee agrees that the only future utilization of these areas will not be in conflict with the intended ecological function of the site and the following uses and/or activities will be prohibited except as required or authorized by this permit:
 - a. Construction or placing buildings, roads, signs, billboards or other advertising, utilities or other structures on or above the ground;
 - b. Dumping or placing soil or other substances or materials as landfill or dumping or placing of trash, waste or unsightly or offensive materials;
 - c. Removing, destroying or trimming trees, shrubs, or other vegetation, except:
 - i. The removal of dead trees and shrubs or leaning trees that could cause damage to property is authorized;
 - ii. The destruction and removal of noxious, nuisance or exotic invasive plant species as listed on the most recent Florida Exotic Pest Plant Council's List of Invasive Species is authorized; and

- iii. Activities authorized by the Permit or described in the Management Plan or otherwise approved in writing by the Corps.
- d. Excavation, dredging or removal of loam, peat, gravel, soil, rock, or other material substance in such a manner as to affect the surface;
- e. Surface use, except for authorized purposes that permit the land or water area to remain in its naturally restored, enhanced, or created condition;
- f. Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation, including, but not limited to, ditching, diking, clearing, and fencing;
- g. Activities or uses detrimental to such aforementioned retention of land or water areas in their naturally restored, enhanced, or created condition;
- h. Acts or use detrimental to the preservation of the structural integrity or physical appearance of sites or properties having historical, architectural, or cultural significance.
- 23. Notice of Permit: The Permittee shall complete and record the "Notice of Department of the Army Permit" form (Attachment 9) with the Clerk of the County Court, Registrar of Deeds or other appropriate official charged with the responsibility of maintaining records of title to or interest in real property within the county of the authorized activity. No later than 90 days after the effective date of this permit, the Permittee shall provide a copy of the recorded Notice of Permit form to the Corps, clearly showing a stamp from the appropriate official indicating the book and page at which the Notice of Permit is recorded in the official records and the date of recording.

A jurisdiction determination was not completed with this request. Therefore, this is not an appealable action. However, you may request an approved JD, which is an appealable action, by contacting the Corps for further instruction.

This letter of authorization does not include conditions that would prevent the 'take' of a state-listed fish or wildlife species. These species are protected under sec. 379.411, Florida Statutes, and listed under Rule 68A-27, Florida Administrative Code. With regard to fish and wildlife species designated as species of special concern or threatened by the State of Florida, you are responsible for coordinating directly with the Florida Fish and Wildlife Conservation Commission (FWC). You can visit the FWC license and permitting webpage (http://www.myfwc.com/license/wildlife/) for more information, including a list of those fish and wildlife species designated as species of special concern or threatened. The Florida Natural Areas Inventory (http://www.fnai.org/) also maintains updated lists, by county, of documented occurrences of those species.

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.

This letter of authorization does not preclude the necessity to obtain any other Federal, State, or local permits, which may be required.

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 https://regulatory.ops.usace.army.mil/customer-service-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.

Should you have any questions related to this NWP verification or have issues accessing the documents reference in this letter, please contact me at the letterhead address above, via telephone at 813-769-7064, or via e-mail at Candice.M.Wheelahan@usace.army.mil.

Sincerely,

Candice Wheelahan Project Manager

Cande ie Wheelahan

Enclosures

Cc:

Douglas Robison, ESA (v/email)

Attachments to Department of the Army Permit Number SAJ-2017-00687

- 1. PERMIT DRAWINGS: 15 pages, dated 1/5/2023
- 2. WATER QUALITY CERTIFICATION: Specific Conditions of the water quality permit/certification in accordance with General Condition number 5 on page 2 of this DA permit. 15 pages.
- 3. COMMENCEMENT NOTIFICATION: 1 page
- 4. AS-BUILT CERTIFICATION FORM: 2 pages
- 5. SECTION 408 APPROVAL: 2 pages
- 6. MANATEE CONDITIONS: 2 pages, Standard Manatee Conditions for In-Water Work 2011
- 7. PROTECTED SPECIES CONDITIONS: 2 pages, *Protected Species Construction Conditions, May 2021*
- 8. COMPENSATORY MITIGATION PLAN: 33 pages
- 9. RECORD PERMIT FORM: 2 pages

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Town of Longboat Key	File Number: SAJ-2017-00687	Date: 1/5/2023
Attached is:		See Section below
INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		Α
PROFFERED PERMIT (Standard Permit or Letter of permission)		В
PERMIT DENIAL		С
APPROVED JURISDICTIONAL DETERMINATION		D
PRELIMINARY JURISDICTIONAL DETERMINATION		F

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final
 authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature
 on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal
 the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.
- B: PROFFERED PERMIT: You may accept or appeal the permit
- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final
 authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature
 on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal
 the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you
 may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form
 and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of
 this notice.
- C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.
- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative
 Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by
 the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN IN	NITIAL PROFFERED PERMIT		
REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons)			
proffered permit in clear concise statements. You may attach addit	ional information to this form to cla	rify where your reasons or	
objections are addressed in the administrative record.)			
ADDITIONAL INFORMATION: The appeal is limited to a review of t	the administrative record, the Corp	s memorandum for the record of	
the appeal conference or meeting, and any supplemental information	on that the review officer has deter	mined is needed to clarify the	
administrative record. Neither the appellant nor the Corps may add			
provide additional information to clarify the location of information the	nat is already in the administrative	record.	
POINT OF CONTACT FOR QUESTIONS OR INFORMATION:			
If you have questions regarding this decision and/or the appeal	If you only have questions regard	ling the appeal process you may	
process you may contact:	also contact:		
Enter PM Contact Information	Phillip Shannin Administrative Appeals Re	view Officer	
	USACE – South Atlantic Di		
	60 Forsyth Street SW, Room 10M15		
	Atlanta, Georgia 30303-8801		
	Phone: (404) 562-51377		
RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site			
investigation, and will have the opportunity to participate in all site in		ueu a 15 uay nouce of any site	
invosigation, and will have the opportunity to participate in all site in			
	Date:	Telephone number:	
Signature of appellant or agent.			
organists of appoint of agont.			

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

DA PERMIT NUMBER: <u>SAJ-2017-00687(NW-CMW)</u>

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 or submit via electronic mail to: SAJ-RD-Enforcement@usace.army.mil (not to exceed 15 MB).

(TRANSFEREE-SIGNATURE)	(SUBDIVISION)	(SUBDIVISION)	
(DATE)	(LOT) (BLOCK)		
(NAME-PRINTED)	(STREET ADDRESS)		
(MAILING ADDRESS)			
(CITY, STATE, ZIP CODE)			

12/17/2021

CBOAT COMPORTING

TOWN OF LONGBOAT KEY

ENVIRONMENTAL PERMITTING FOR SUBAQUEOUS FORCEMAIN

PERMIT PLANS - NOT FOR CONSTRUCTION

SHEET INDEX

SHEET	DWG	DESCRIPTION
GENERAL		
1	G01	COVER SHEET
CIVIL		
2	C01	PLAN AND PROFILE STA 19+00 TO 29+00
3	C02	PLAN AND PROFILE STA 29+00 TO 39+00
4	C03	PLAN AND PROFILE STA 39+00 TO 49+00
5	C04	PLAN AND PROFILE STA 49+00 TO 59+00
6	C05	PLAN AND PROFILE STA 59+00 TO 69+00
7	C06	PLAN AND PROFILE STA 69+00 TO 79+00
8	C07	PLAN AND PROFILE STA 79+00 TO 89+00
9	C08	PLAN AND PROFILE STA 89+00 TO 99+00
10	C09	PLAN AND PROFILE STA 99+00 TO 109+00
11	C10	PLAN AND PROFILE STA 109+00 TO 119+00
12	C11	PLAN AND PROFILE STA 119+00 TO 129+00
13	C12	PLAN AND PROFILE STA 129+00 TO 138+34
14	CD1	SECTIONS 1
15	CD2	SECTIONS 2

TIDE DATUM TABLE

 TIDAL DATUM TABLE OBTAINED FROM THE WHITFIELD ESTATES, SARASOTA BAY TIDE STATION, STATION NO 8726159

DATUM	ELEVATION (FT NAVD88)	
MHHW	+0.41	
MHW	+0.13	
MSL	-0.50	
MTL	-0.52	
MLW	-1.16	
MLLW	-1.69	



LONGBOAT KEY COMMISSION

TOWN COMMISSIONER INSTRICT 1

SHERRY DOMINICK

TOWN COMMISSIONER DISTRICT 2

GEORGE SPOLL

MAYOR AND TOWN COMMISSIONER DISTRICT 3

KEN SCHNEIER

TOWN COMMISSIONER DISTRICT 4

JACK DALY

TOWN COMMISSIONER DISTRICT 5

ED ZINZ

TOWN COMMISSIONER DISTRICT 5

ED ZINZ

TOWN COMMISSIONER DISTRICT 5

ED ZINZ

TOWN COMMISSIONER AT LARGE

B. BISHOP

ACCEPTED BY:

ISAAC BROWNMAN, PUBLIC WORKS AND UTILITIES DIRECTOR DATE



401 N. CATTLEMEN RD., SUITE 306 SARASOTA, FL. 34232 PHONE: (941)371-9832 FAX: (941)371-9873 CA 00008571



DRAWING NO.

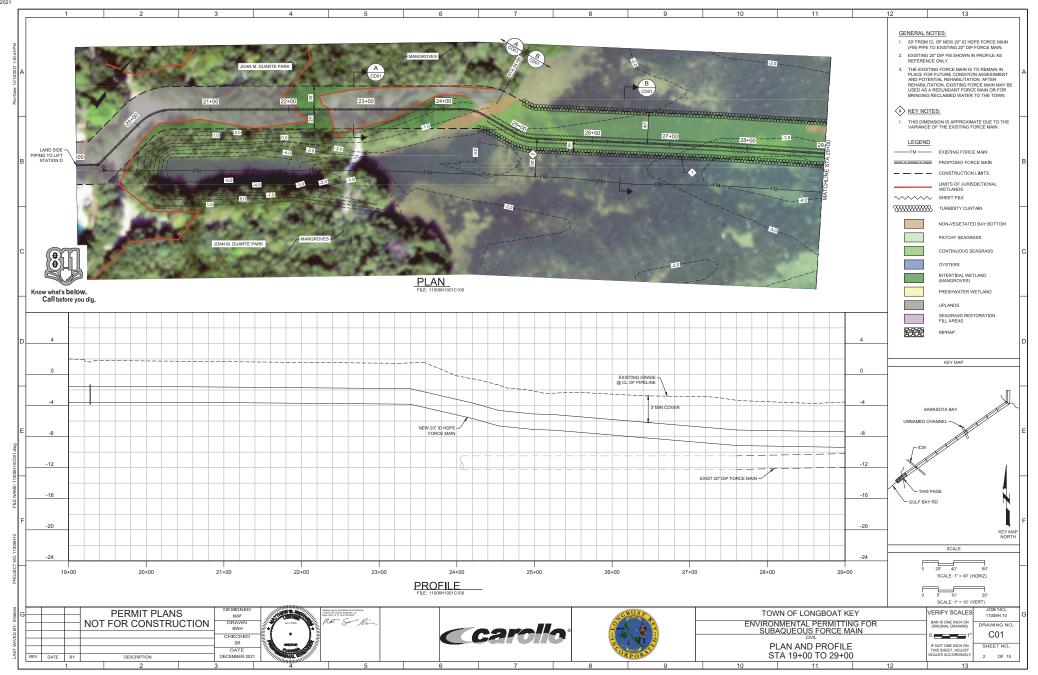
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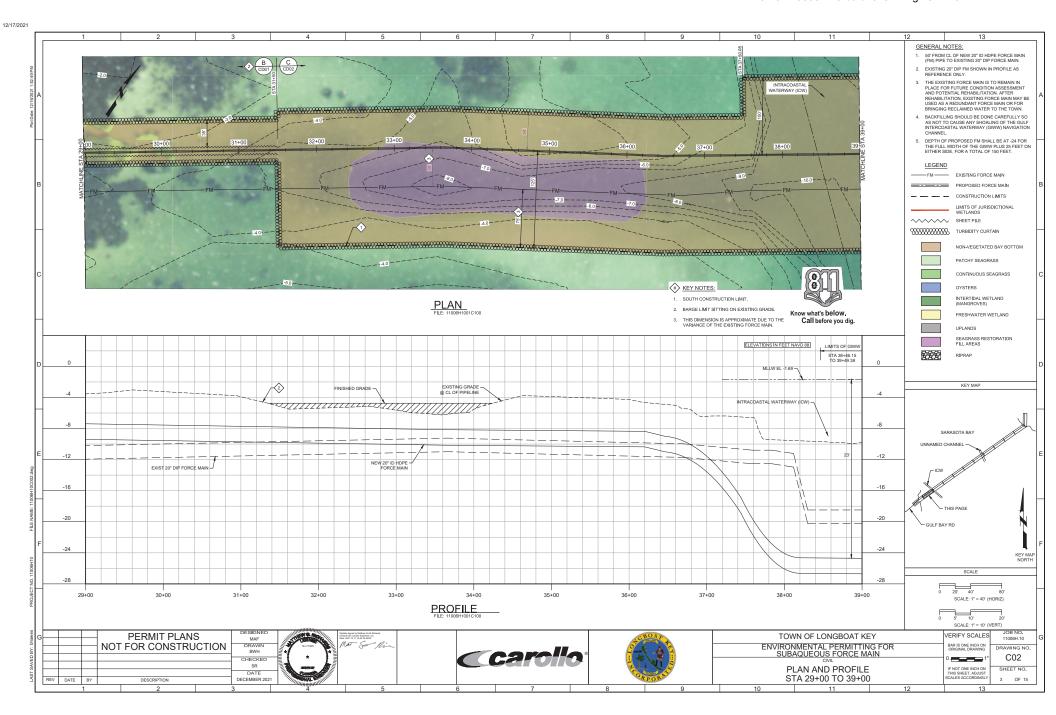
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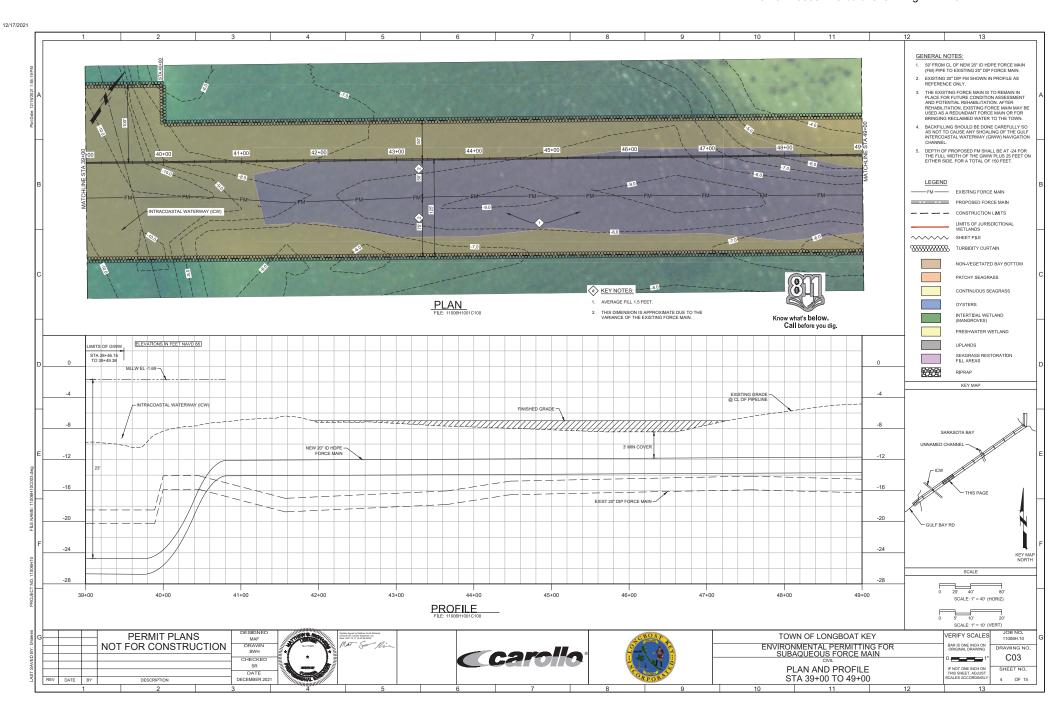
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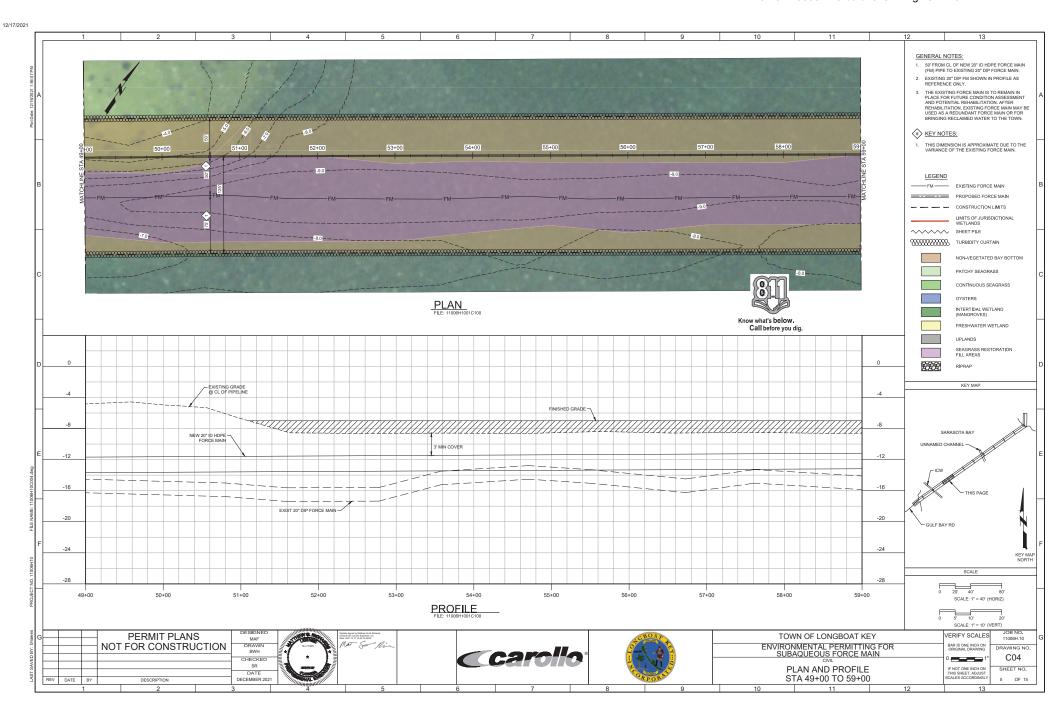
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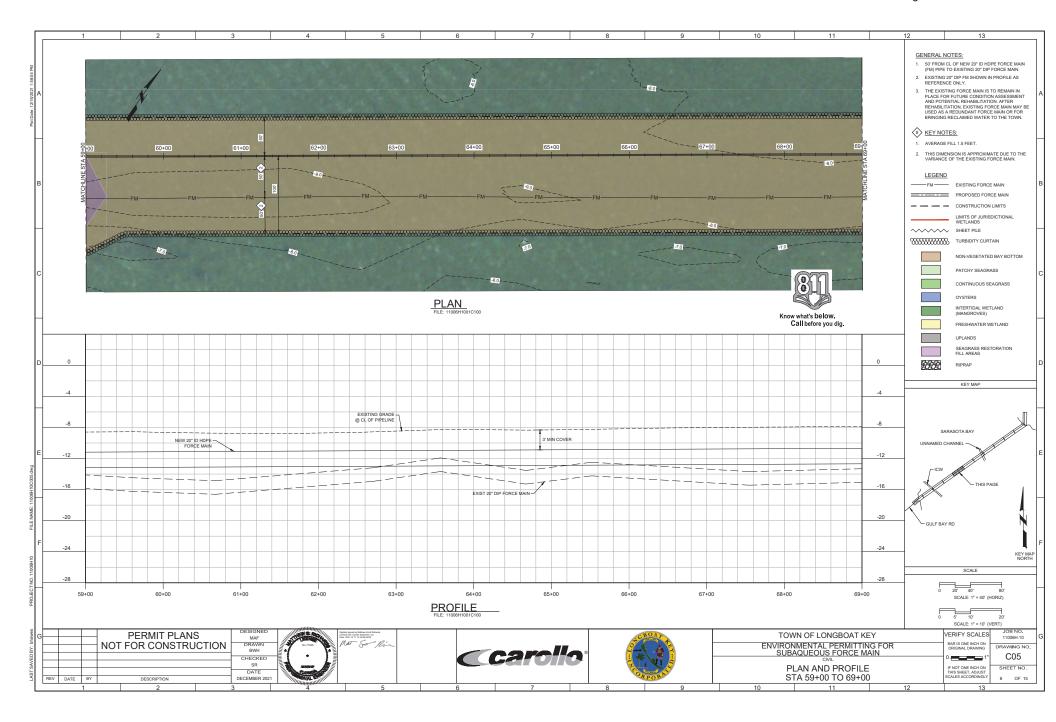
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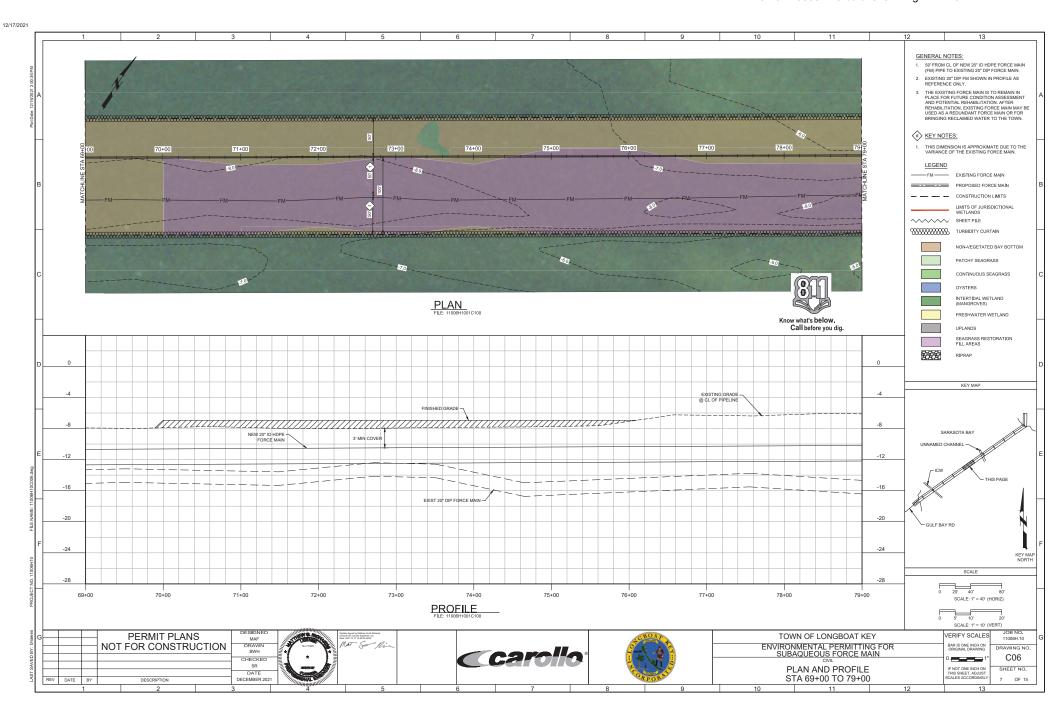


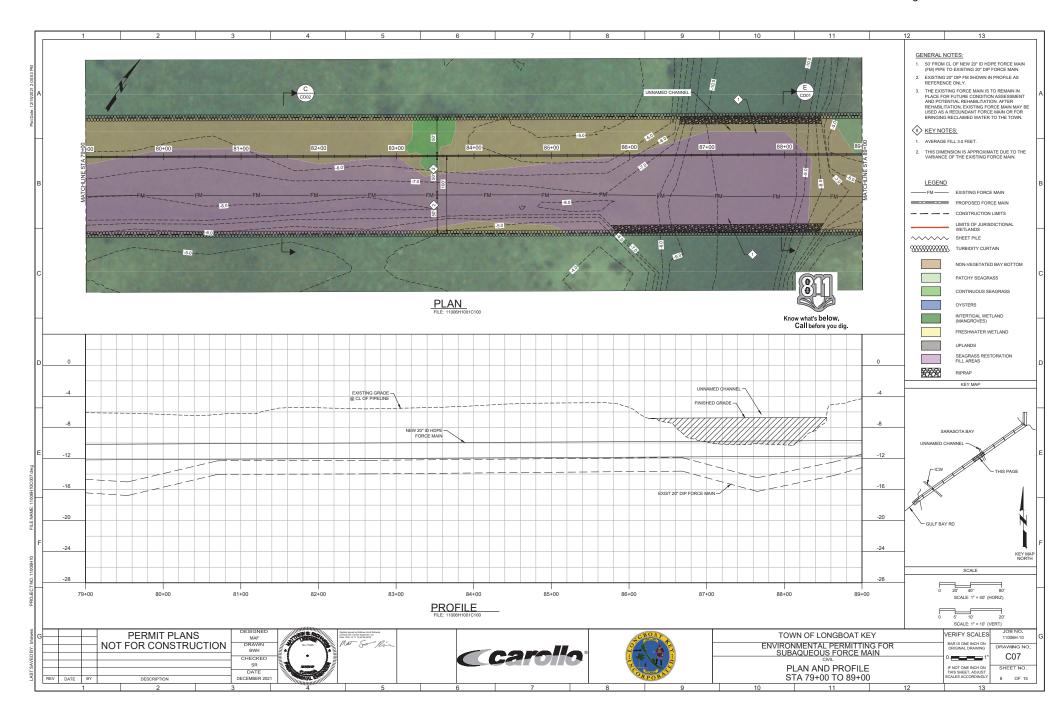


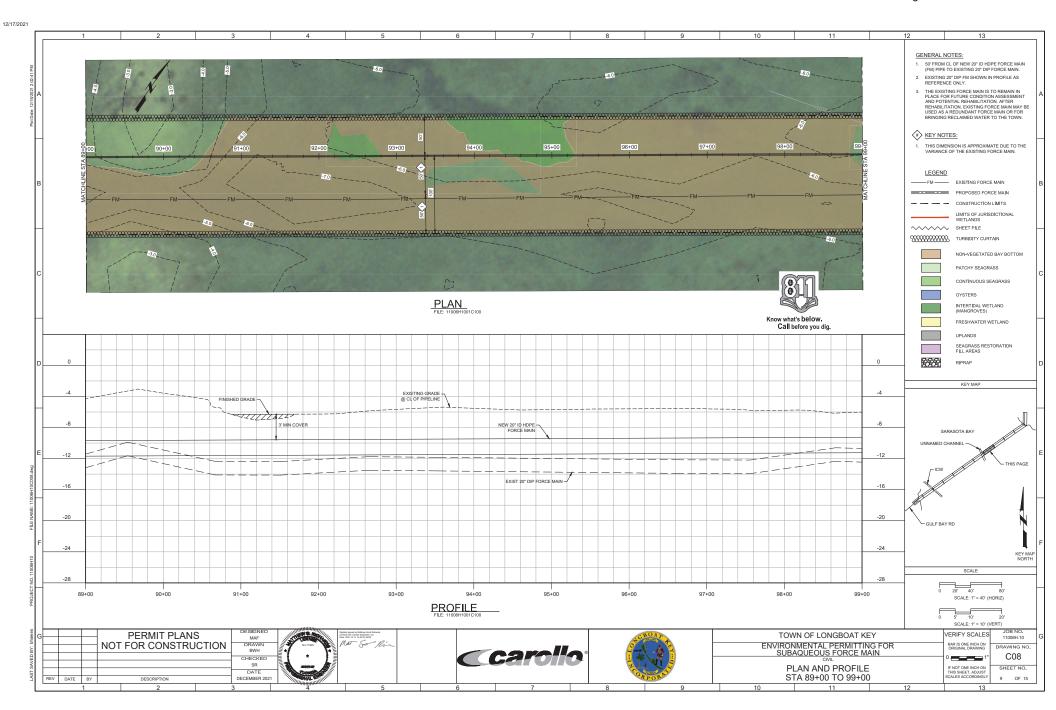


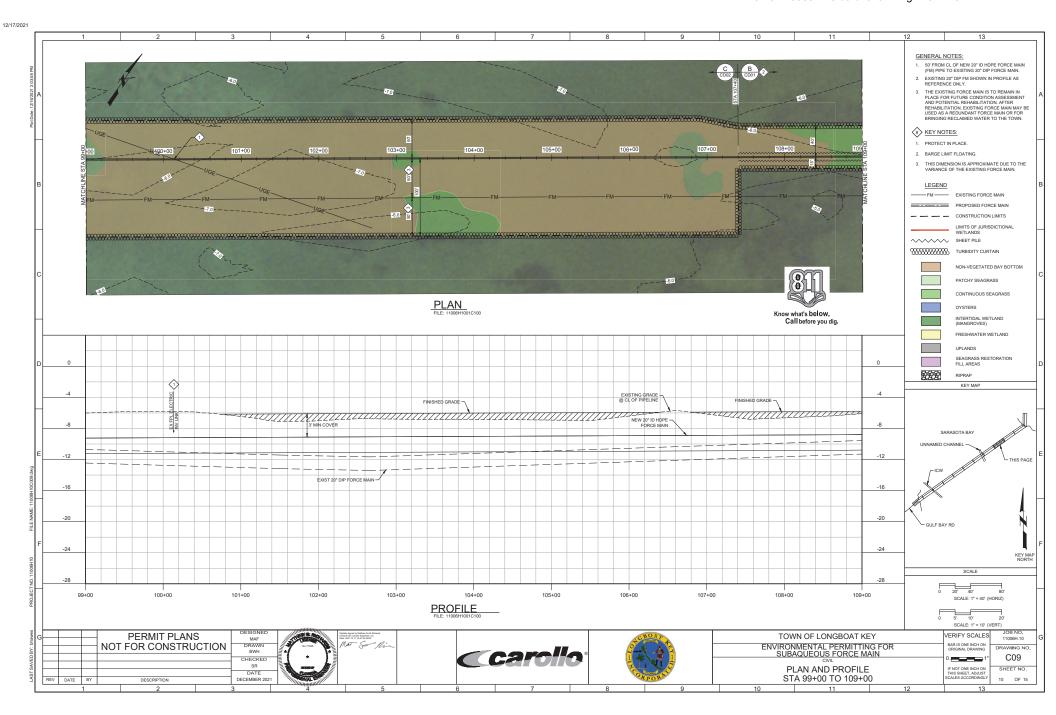


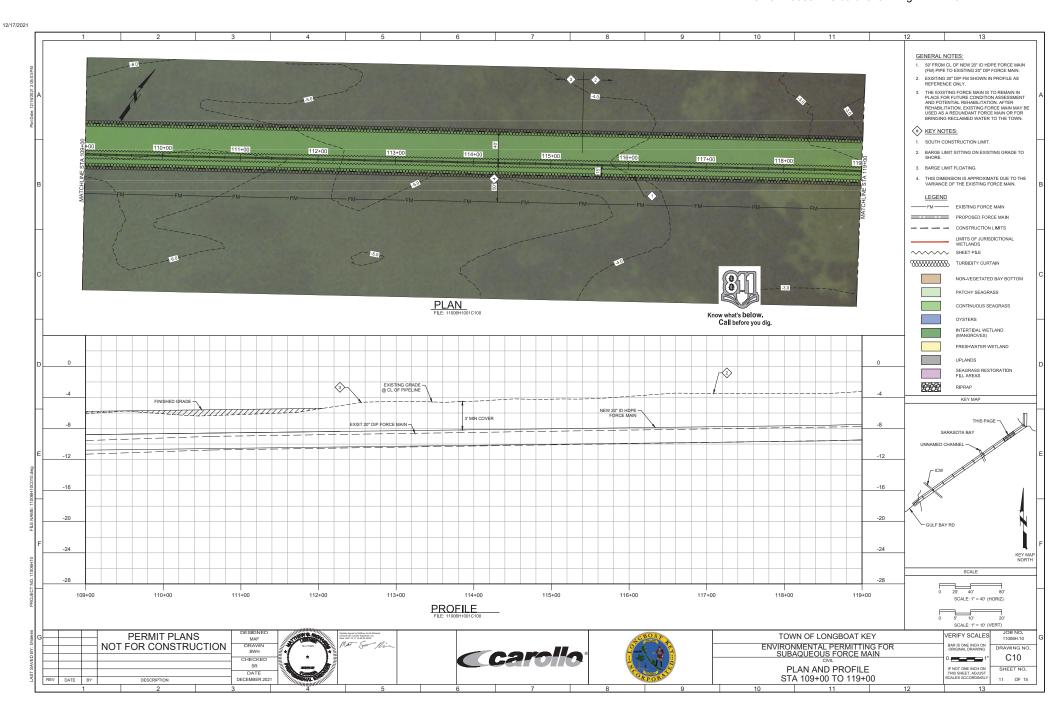


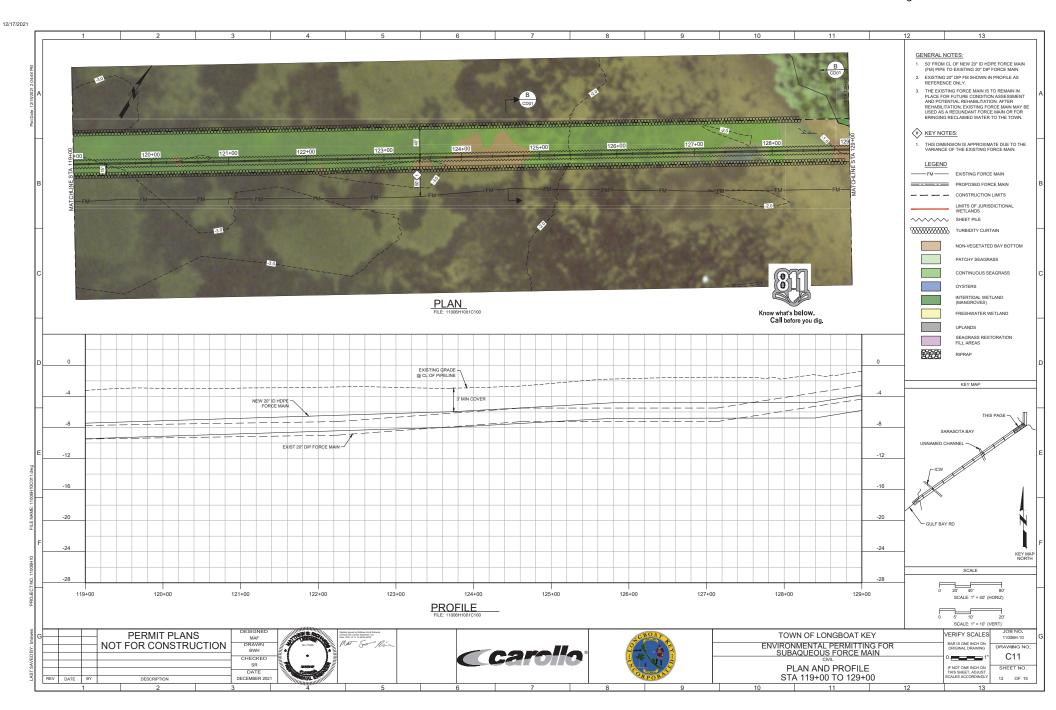


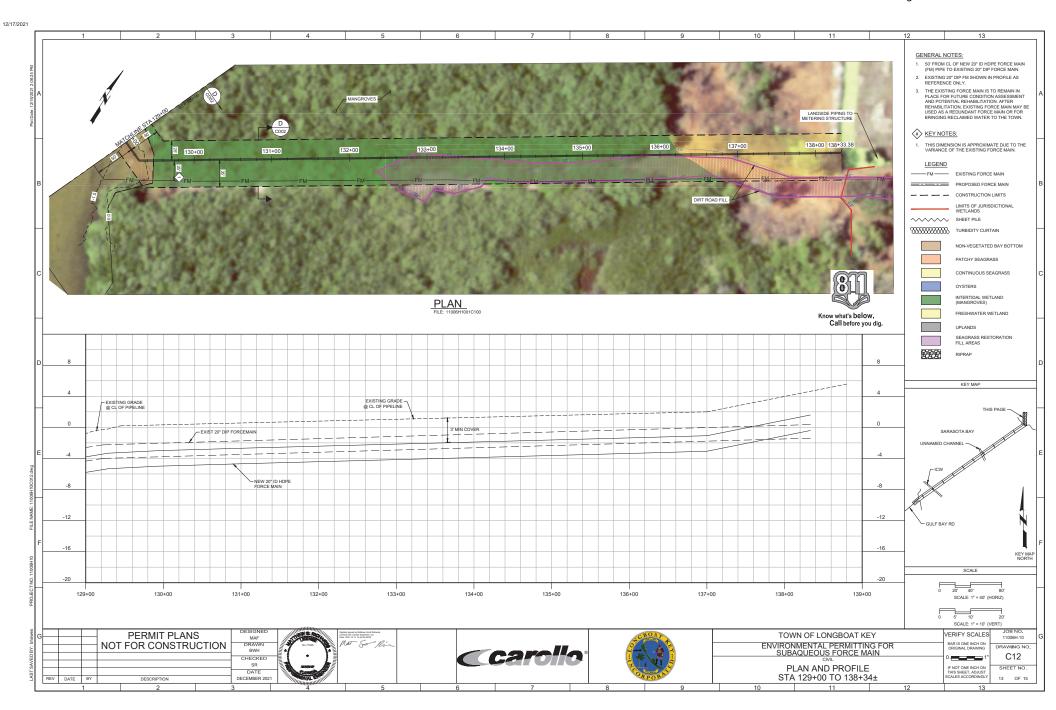


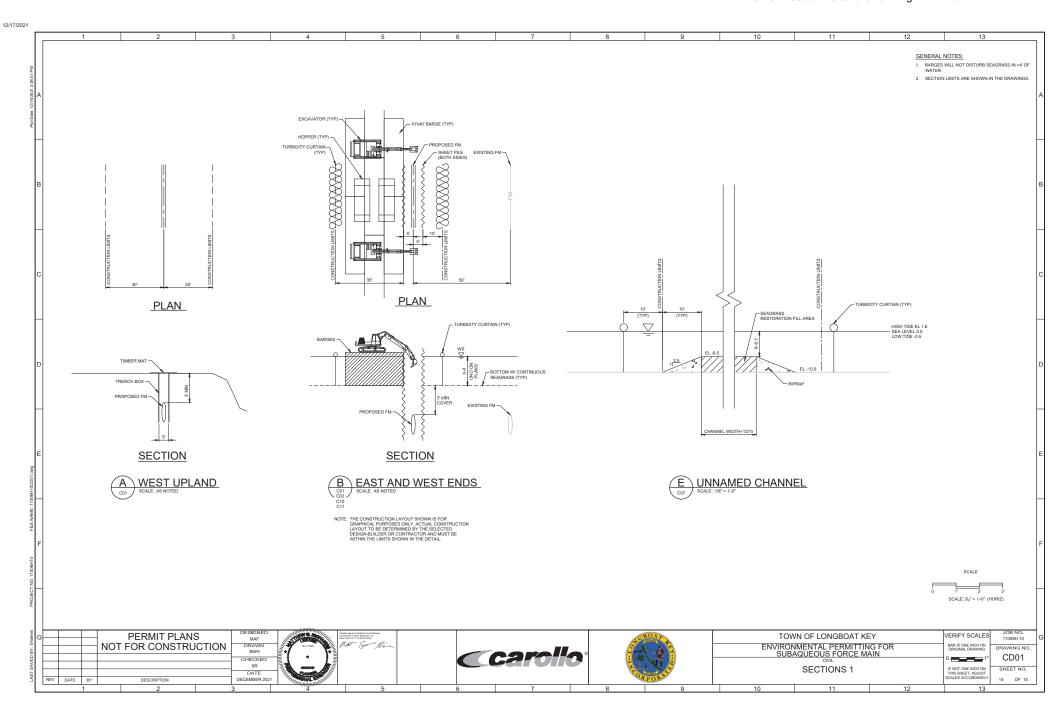


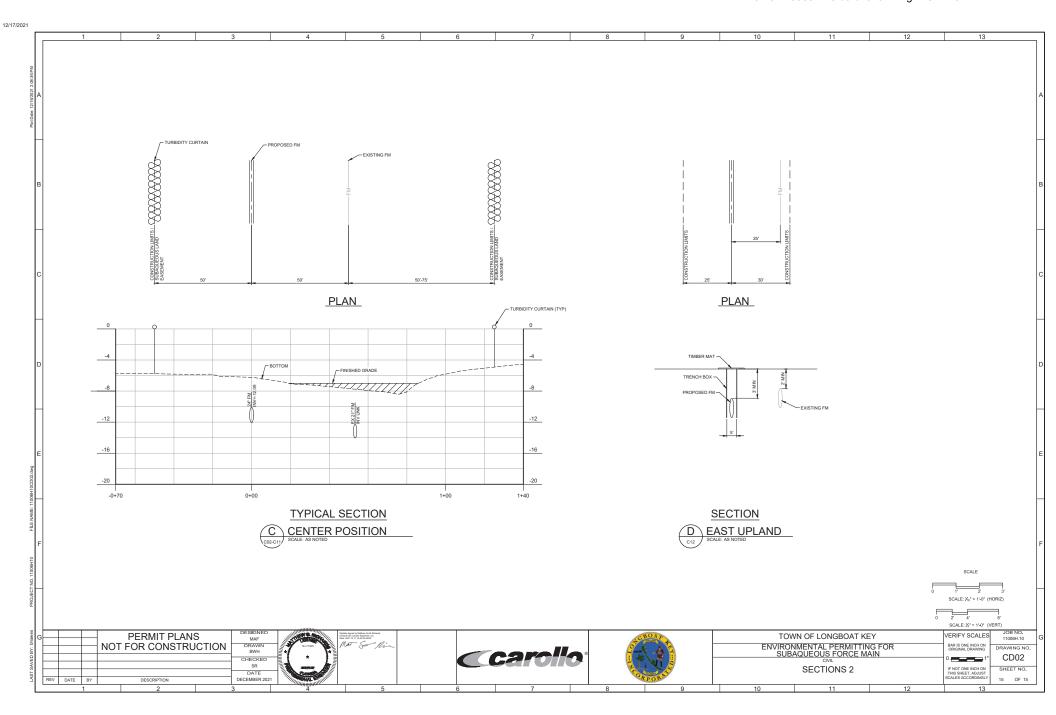














FLORIDA DEPARTMENT OF Environmental Protection

Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

Southwest District Office 13051 North Telecom Parkway #101 Temple Terrace, Florida 33637-0926

January 27, 2022

Town of Longboat Key c/o Isaac Brownman, Director of Public Works 600 General Harris St. Longboat Key, FL 34228-1412 ibrownman@longboatkey.org

Dear Mr. Brownman:

Enclosed is the Environmental Resource Permit, DEP Project No. 41-0393941-001-EI, issued pursuant to Part IV of Chapter 373, Florida Statutes, and Title 62, Florida Administrative Code.

Appeal rights for you and for any affected third party are described in the text of the permit along with conditions that must be met when authorized activities are undertaken.

You, as the applicant, are responsible for all aspects of permit compliance. You should therefore review this permit document carefully to ensure compliance with the general conditions and specific conditions contained herein. Please be aware of permit General Condition number 4, which states, "At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice"."

If you have any questions about this document, please contact me at <u>Carla.Burrmann@dep.state.fl.us</u> or (813) 470-5763. Thank you for your participation in the permit process and in managing the natural resources of the State of Florida.

Sincerely,

Carla S. Burrmann, M.S., C.W.E.

Environmental Manager

Permitting and Waste Cleanup Program

cc: Carla Burrmann, Southwest District, <arla.burrmann@floridadep.gov
ERP Permitting, Southwest District, sw_erp@floridadep.gov
U.S. Army Corps of Engineers, tampareg@usace.army.mil
Ricardo Borromeo, Carollo Engineers, tborromeo@carollo.com
Doug Robison, ESA, drobison@esassoc.com

Enclosure: Environmental Resource Permit with Attachments (91 pages)



FLORIDA DEPARTMENT OF Environmental Protection

Southwest District Office 13051 North Telecom Parkway #101 Temple Terrace, Florida 33637-0926 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

Permittee/Authorized Entity:

Town of Longboat Key c/o Isaac Brownman, Director of Public Works 600 General Harris St. Longboat Key, FL 34228-1412

Town of Longboat Key - Redundant Sewer Force Main

Authorized Agent:

Carollo Engineers c/o Ricardo Borromeo 10117 Princess Palm Ave. Tampa, FL 33610-8302

Individual Environmental Resource Permit

State-owned Submerged Lands Authorization – Pending

U.S. Army Corps of Engineers Authorization – Not Approved

Permit No.: 41-0393941-001-EI

Permit Issuance Date: 1/27/2022

Permit Construction Phase Expiration Date: 1/27/2027



FLORIDA DEPARTMENT OF Environmental Protection

Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

Southwest District Office 13051 North Telecom Parkway #101 Temple Terrace, Florida 33637-0926

Consolidated Environmental Resource Permit and Recommended Intent to Grant Sovereignty Submerged Lands Authorization

Permittee: Town of Longboat Key Permit No: 41-0393941-001-EI

PROJECT LOCATION

The activities authorized by this permit and sovereignty submerged lands authorization are located from the barrier island at Latitude 27°24′57.4970/Longitude -82°39′16.9880 to the mainland at Latitude 27°25′59.9609/Longitude -82°37′43.2866" from West to East within Sarasota Bay, in Longboat Key, Florida 34228, Section 25, Township 35 South, Range 16 East, Sections 18 and 20, Township 35S, Range 17E, Manatee County.

PROJECT DESCRIPTION

The permittee is authorized to construct an open-cut trench for the installation of a subaqueous redundant domestic wastewater force main within Sarasota Bay, a Class II Outstanding Florida Waterbody. The proposed work will include permanent impacts to 0.17 acres of freshwater marsh (FLUCCS 641), 0.79 acres of mangroves (FLUCCS 612), 1.91 acres of seagrass (*Halodule wrightii* and *Thalassia testudinum*) (FLUCCS 645), and 0.11 acres of oyster bars (FLUCCS 654) as part of the construction of the project. Additionally, temporary impacts to 2.41 acres of seagrass (FLUCCS 645) will occur due to construction of the force main.

To offset unavoidable impacts that will occur from these authorized activities, the permittee is authorized to create/restore 0.17 acres of freshwater marsh wetlands, restore/enhance 1.18 acres of mangrove habitat, relocate/enhance 0.22 acres of oyster beds, and create an 8.64-acre seagrass planting site, within Sarasota Bay, a Class II Outstanding Florida Waterbody. Creation of the seagrass planting area will include depositing clean compatible sediment material to attain design depths within the photic zone and transplanting approximately 1.5-acres of seagrass from the direct impact areas.

Authorized activities are depicted on the attached exhibits.

AUTHORIZATIONS

Environmental Resource Permit

The Department has determined that the activity qualifies for an Environmental Resource Permit. Therefore, the Environmental Resource Permit is hereby granted, pursuant to Part IV of Chapter 373, Florida Statutes (F.S.), and Chapter 62-330, Florida Administrative Code (F.A.C.).

Sovereignty Submerged Lands Authorization

The activity is located on sovereignty submerged lands owned by the State of Florida. It therefore also requires authorization from the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), pursuant to

Permittee: Town of Longboat Key Permit Expiration: January 27, 2027

Permit No.: 41-0393941-001-EI

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Article X, Section 11 of the Florida Constitution, and Section 253.77, F.S., and Chapter 258, F.S. As staff to the Board of Trustees under Sections 253.002, F.S., the Department has determined that the activity qualifies for and requires a public easement, as long as the work performed is located within the boundaries as described and is consistent with the terms and conditions herein.

The final documents required to execute the public easement will be sent to the permittee by the Department's Division of State Lands for execution. The Department intends to issue the public easement, upon satisfactory execution of those documents, including payment of required fees and compliance with the conditions in the attached permit. You may not begin construction of the activities described until you receive a copy of the executed public easement from the Department.

Federal Authorization

Your proposed activity as outlined on your application and attached drawings **does not qualify** for Federal authorization pursuant to the State Programmatic General Permit and a **SEPARATE permit** or authorization **shall be required** from the Corps. You must apply separately to the Corps using their APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT, ENG FORM 4345, or alternative as allowed by their regulations. More information on Corps permitting may be found online in the Jacksonville District Regulatory Division Source Book at: https://www.saj.usace.army.mil/Missions/Regulatory/Source-Book.

Authority for review - an agreement with the USACOE entitled "Coordination Agreement Between the U. S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection (or Duly Authorized Designee), State Programmatic General Permit", Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

Coastal Zone Management

Issuance of this authorization also constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

Water Quality Certification

This permit also constitutes a water quality certification under Section 401 of the Clean Water Act, 33 U.S.C. 1341.

Other Authorizations

You are advised that authorizations or permits for this activity may be required by other federal, state, regional, or local entities including but not limited to local governments or municipalities. This permit does not relieve you from the requirements to obtain all other required permits or authorizations.

The activity described may be conducted only in accordance with the terms, conditions and attachments contained in this document. Issuance and granting of the permit and authorizations herein do not infer, nor guarantee, nor imply that future permits, authorizations, or modifications will be granted by the Department.

PERMIT CONDITIONS

The activities described must be conducted in accordance with:

- The Specific Conditions
- The General Conditions
- The limits, conditions and locations of work shown in the attached drawings
- The term limits of this authorization

Permittee: Town of Longboat Key Permit Expiration: January 27, 2027

Permit No.: 41-0393941-001-EI

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You are advised to read and understand these conditions and drawings prior to beginning the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings herein. If you are using a contractor, the contractor also should read and understand these conditions and drawings prior to beginning any activity. Failure to comply with these conditions, including any mitigation requirements, shall be grounds for the Department to revoke the permit and authorization and to take appropriate enforcement action. Operation of the facility is not authorized except when determined to be in conformance with all applicable rules and this permit authorization, as described.

SPECIFIC CONDITIONS

1. Submittals required herein (e.g., progress reports, as-built drawings, etc.) shall include the permittee's name and permit number 41-0393941-001-EI and shall be directed by e-mail to SW_ERP@floridadep.gov with a subject line of "Compliance: permit number 41-0393941-001-EI", or by mail to:

Department of Environmental Protection Southwest District ATTN: ERP Compliance Assurance 13051 North Telecom Parkway, Suite 101 Temple Terrace, FL 33637-0926

- 2. The structure/work authorized by this permit shall not be placed/conducted on any property, other than that owned by the permittee, without the prior written approval of that property owner.
- 3. In the event the permittee files for bankruptcy prior to completion of work permitted and required by this permit, the permittee must notify the Department within 30 days of filing. The notification shall identify the bankruptcy court and case number and shall include a copy of the bankruptcy petition.
- 4. This permit does not authorize the permittee to cause any adverse impact to or "take" of state listed species and other regulated species of fish and wildlife. Compliance with state laws regulating the take of fish and wildlife is the responsibility of the owner or applicant associated with this project. Please refer to Chapter 68A-27 of the Florida Administrative Code for definitions of "take" and a list of fish and wildlife species. If listed species are observed onsite, FWC staff are available to provide decision support information or assist in obtaining the appropriate FWC permits. Most marine endangered and threatened species are statutorily protected and a "take" permit cannot be issued. Requests for further information or review can be sent to FWCConservationPlanningServices@MyFWC.com.

SPECIFIC CONDITIONS - PRIOR TO ANY CONSTRUCTION

5. Prior to placing any fill material in the seagrass restoration area, that has been obtained from a source other than Cemex Lake Wales Sand Mine or Jahna Independent South Mine, the permittee shall provide the Department with the source and technical specifications of the sediment fill material to be used. This shall include reasonable assurance that the sediment fill material is clean sand, and shall be free of excess silt, clay, organic material and toxic or deleterious substances/contaminants, and has a proportion of clay and silt which does not exceed that of the sediments currently within the project area. No more than 10% of the fill material shall pass through a #200 sieve. If more than 10% of the fill material passes through a #200 sieve, the Permittee shall meet with the Department to determine if further testing or project modifications are necessary, and the project may not commence without written authorization from the Department.

Permit No.: 41-0393941-001-EI

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SPECIFIC CONDITIONS - CONSTRUCTION ACTIVITIES

6. Wetland areas or waterbodies that are outside the specific limits of construction authorized by this permit, must be protected from erosion, sedimentation, siltation, scouring, excess turbidity, and/or dewatering. There shall be no discharge in violation of the water quality standards in Chapter 62 302, F.A.C. Turbidity/erosion controls shall be installed prior to clearing, excavation or placement of fill material, shall be maintained until construction is completed, disturbed areas are stabilized, and turbidity levels have fallen to less than ambient background. The turbidity and erosion control devices shall be removed within 14 days once these conditions are met.

- 7. Areas of exposed soils shall be isolated from wetlands or other surface waters to prevent erosion and deposition of these soils into wetlands or other surface waters during construction and operation of permitted activities.
- 8. The permittee shall be responsible for ensuring erosion control devices/procedures are inspected and maintained daily during all phases of construction authorized by this permit until areas disturbed during construction are sufficiently stabilized to prevent erosion, siltation, and turbid discharges.
- 9. A floating turbidity apron/curtain shall be installed around the waterward boundary of the construction area prior to construction and shall remain in place until construction is complete and turbidity levels within the work area have returned to background levels.
- 10. Turbidity levels outside the construction area shall not exceed ambient levels within the Outstanding Florida Waterbody. The following measures shall be taken immediately by the permittee whenever turbidity levels within waters of the State surrounding the project site exceed ambient levels within the Outstanding Florida Waterbody:
 - a. Notify the Department at 813-470-5700 at the time the violation is first detected.
 - b. Immediately cease all work contributing to the water quality violation.
 - c. Modify the work procedures that were responsible for the violation, install more turbidity containment devices, and repair any non-functional turbidity containment devices.
 - d. As required, perform turbidity monitoring per Specific Conditions 11 and 12.
 - e. Resume construction activities once turbidity levels outside turbidity curtains fall below ambient levels within the Outstanding Florida Waterbody.
- 11. Water turbidity levels shall be monitored if a turbidity plume is observed outside the limits of the required turbidity control devices. Samples shall be taken every four hours, one foot above the bottom, mid-depth, and one-foot below the surface at monitoring stations located as follows:
 - a. Approximately 100 feet up-current of the work sites and clearly outside the influence of construction activities. (This shall serve as the natural background sample against which other turbidity readings shall be compared.)
 - b. Directly outside the turbidity curtains surrounding the work sites and within the densest portion of any visible turbidity plume. (This sample shall serve as the compliance sample.)
 - c. Unauthorized impacts to wetlands as a result of the authorized construction shall be reported to the Department within 24 hours.
- 12. Storage or stockpiling of tools and materials (i.e., lumber, pilings, debris) within wetlands or other surface waters is prohibited.
- 13. The permittee shall ensure that no seagrass is dredged or impacted outside the limits of construction areas and restoration areas shown and authorized on the attached exhibits.

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14. If dredged material encroaches into adjacent waters of the state beyond the construction site limits identified in the attached permit drawings, the impacted areas shall be restored to their original contours and elevations. If the impacted areas were vegetated, they shall be replanted after recontouring, with vegetation of appropriate size and densities and species as is present in the adjacent areas. The restoration shall be completed within 30 days of completion of the dredging operation and the Department shall be so notified within the same 30-day period. Appropriate turbidity control measures shall be followed during the restoration work.

15. All in-water fill shall be contained within appropriate best management practices to prevent sedimentation or turbid discharges due to the escape of fill material.

SPECIFIC CONDITIONS - MITIGATION

- 16. The Permittee shall implement and complete all mitigation activities as identified in the Mitigation Plan document attached within this permit.
- 17. To mitigate for permanent impacts to 0.17 acres of freshwater marsh (FLUCCS 641), 0.79 acres of mangroves (FLUCCS 612), 1.91 acres of seagrass (*Halodule wrightii* and *Thalassia testudinum*) (FLUCCS 645), and 0.11 acres of oyster bars (FLUCCS 654), the permittee shall implement the mitigation plan as described in the Mitigation Plan document (attached) within 30 days of permit issuance. The plan shall consist of:
 - a. the restoration of 0.17 acres of freshwater marsh wetlands.
 - b. the restoration of 1.18 acres of mangrove habitat.
 - c. the restoration/enhancement of 8.64 acres of seagrass area.
 - d. the relocation/enhancement of 0.22 acres of oyster beds.
- 18. The Department's approval of the mitigation plan pursuant to this permit does not constitute a finding by the Department the mitigation will meet the required success criteria. The permittee acknowledges its obligation to meet the intent of the permit regarding the mitigation objective until the mitigation is determined by the Department to be successful.

SPECIFIC CONDITIONS – MONITORING/REPORTING REQUIREMENTS

Mangroves and Freshwater Marsh wetlands

- 19. A "Time Zero" Monitoring Report shall be submitted within 30 days of completion of planting the freshwater marsh wetland and mangrove areas and shall include the following:
 - a. Date the planting was completed;
 - b. Color photographs that provide an accurate representation of the planted areas. The photographs shall be numbered and correspond to their respective locations, shown on an associated map.
 - c. Condition of the substrate and submerged aquatic vegetation (SAV).
- 20. Subsequent mitigation monitoring reports shall be submitted for 3 years (semi-annually the first year, and annually for the second and the third year) and begin one year from the "Time Zero Monitoring Report". The Monitoring reports shall include the following for each mitigation area:
 - a. Color photographic prints taken from the reference points established in the Time Zero Monitoring Report.
 - b. Detailed description of statistical methods used which must include the following:

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i. Subsample method and map of sampling locations

- ii. Method used to determine percent cover and growth
- iii. Statistical analyses used to determine valid subsample size and to analyze results of sampling
- c. Total percent cover by planted species.
- d. Plant species composition with estimates of the contribution of each species to percent cover.
- e. Plan view depicting the locations of specimens replanted. (Indicate numbers of each species replanted).
- f. Growth data for mangrove species. Data shall include measurements of height, diameter, at breast height (dbh) and mean annual growth rate to date.
- g. % Canopy coverage of mangrove species.
- h. Data documenting the hydrologic regime (seasonal high and normal pool; ordinary high; or mean high and low water elevations).
- i. Description of the pertinent climatological conditions preceding the monitoring event.
- j. Description of the soil moisture condition in the mitigation area(s), i.e., soil appears dry, saturated with water or with so many inches of standing water.
- k. Photocopy of the field notes depicting the raw data collected.
- 21. The mitigation shall be deemed successful when the below criteria have been continuously met for a period of at least one (1) year, without intervention in the form of irrigation, removal of undesirable vegetation, or replanting of desirable vegetation.
 - a. Planted herbaceous species and naturally recruited wetland species have achieved a minimum 90% cover.
 - b. Planted mangrove species have achieved a minimum 90% survival and exhibit vigorous growth characteristics consistent with the species
 - c. Total contribution to percent cover by non-native wetland species and species not listed in 62-340.450, F.A.C. shall be maintained below 10%.
 - d. The Department's State Lands and Environmental Resource Program staff has inspected the mitigation area and determined that the mitigation area(s) meet the above success criteria.

Seagrass Restoration Area

- 22. Subsequent Monitoring Reports for seagrass restoration areas shall be submitted annually for five years, beginning one year from the date of the "Time Zero" Monitoring Report, and shall include the following:
 - a. Date the annual assessment was conducted.
 - b. Color photographs that provide an accurate representation of the planted areas. The photographs shall be numbered and correspond to their respective locations, shown on an associated map.
 - c. Total percent cover by any planted species.
 - d. Plant species composition with estimates of the contribution of each species to percent
 - e. Description of the pertinent climatological conditions preceding the monitoring event.
- 23. The seagrass restoration areas shall be deemed successful when the below criteria have been continuously met for a period of at least one (1) year, without intervention in the form of removal of undesirable vegetation or replanting of desirable vegetation:
 - a. The restoration areas identified in the Mitigation Plan (attached) have become established with greater than 75% coverage of seagrass.

Permit No.: 41-0393941-001-EI

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b. Total contribution to percent cover by non-native wetland species and species not listed in 62-340.450, F.A.C. shall be maintained below 5%.

c. The Department's State Lands and Environmental Resource Program staff has inspected the seagrass creation areas and determined that the project meets the above success criteria.

All Mitigation Areas

- 24. The responsibility to assess if the creation areas are meeting the permit-specified success criteria shall not fall solely on the Department. In the event the permittee becomes aware the project is not meeting the success criteria (based on either site observations or review of monitoring reports), the permittee, no later than six months before the permit construction phase expiration date, shall submit an alternative habitat creation plan to the Department for review and approval.
- 25. The permittee shall implement the alternative plan no later than 60 days after receiving Department approval.
- 26. Failure of the Department to notify the permittee of project failure does not prevent the Department from requiring the permittee to meet the success criteria as defined in Specific Condition Nos. 21 and 23.

SPECIFIC CONDITIONS - MANATEES

- 27. 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.
- 28. 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.
- 29. No nighttime mechanical dredging, such as clamshell, shall occur.
- 30. 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 shall not impede manatee movement.
- 31. All on-site project personnel are responsible for observing water-related activities for the presence of manatees. All in-water operations, including vessels, shall be shutdown if a manatee comes within 50 feet of the operation. Activities shall not resume until every manatee has moved beyond the 50-foot radius of the project operation, or until 30 minutes has elapsed wherein a manatee has not reappeared within 50 feet of the operation. Animals shall not be herded away or harassed into leaving.
- 32. Any collision with or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-FWCC. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida.

Permit No.: 41-0393941-001-EI Page 10 of 15

SPECIFIC CONDITIONS - OTHER LISTED SPECIES

33. This permit does not authorize the permittee to cause any adverse impact to or "take" of state listed species and other regulated species of fish and wildlife. Compliance with state laws regulating the take of fish and wildlife is the responsibility of the owner or applicant associated with this project. Please refer to Chapter 68A-27 of the Florida Administrative Code for definitions of "take" and a list of fish and wildlife species. If listed species are observed onsite, FWC staff are available to provide decision support information or assist in obtaining the appropriate FWC permits. Most marine endangered and threatened species are statutorily protected and a "take" permit cannot be issued. Requests for further information or review can be sent to FWCConservationPlanningServices@MyFWC.com.

SPECIFIC CONDITIONS - CONSTRUCTION COMPLETION

The permittee shall comply with the following conditions prior to the transfer to operation phase of the facility. All documentation required below shall be included with the permittee's request to transfer the project to the operation phase [Form No. 62-330.310(2), F.A.C.].

34. The permittee shall submit one set of signed, dated and sealed as-built drawings to the Department via email at SW_ERP@dep.state.fl.us for review and approval within 30 days of completion of construction. (Please contact the Department for files that are too large to email for alternative means of submitting electronically.) The as-built drawings shall be based on the Department permitted construction drawings and any pertinent specific conditions, which should be revised to reflect changes made during construction. Both the original design and constructed elevations must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawings. Surveyed dimensions and elevations required shall be verified and signed, dated and sealed by a Florida registered professional. As-builts shall be submitted to the Department regardless of whether or not deviations are present.

The following information shall be verified on the as-built drawing from the engineering drawings signed and sealed by Matthew S. Richards, P.E., #71505, on December 17, 2021.

Plan View/ Cross Section Name	Drawing Number
Cable Installation Plan and Cross-sections	Pages 2-15

GENERAL CONDITIONS FOR INDIVIDUAL PERMITS

The following general conditions are binding on all individual permits issued under chapter 62-330, F.A.C., except where the conditions are not applicable to the authorized activity, or where the conditions must be modified to accommodate project-specific conditions.

- 1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
- 2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.

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3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007*), and the *Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008*), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5., F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.

- 4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice," [October 1, 2013], which is incorporated by reference in paragraph 62-330.350(1)(d), F.A.C., indicating the expected start and completion dates. A copy of this form may be obtained from the Agency, as described in subsection 62-330.010(5), F.A.C. If available, an Agency website that fulfills this notification requirement may be used in lieu of the form.
- 5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.
- 6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
 - a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex –
 "Construction Completion and Inspection Certification for Activities Associated With a Private
 Single-Family Dwelling Unit" [Form 62-330.310(3)]; or
 - b. For all other activities "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
 - c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.
- 7. If the final operation and maintenance entity is a third party:
 - a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as-built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
 - b. Within 30 days of submittal of the as-built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the

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documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.

8. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.

- 9. This permit does not:
 - a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
 - b. Convey to the permittee or create in the permittee any interest in real property;
 - c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
 - d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.
- 10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.
- 11. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.
- 12. The permittee shall notify the Agency in writing:
 - a. Immediately if any previously submitted information is discovered to be inaccurate; and
 - b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.
- 13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.
- 14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well

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as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.

- 15. 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 binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.
- 16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.
- 17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.
- 18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with subsection 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rule 28-106.201, F.A.C., a petition for an administrative hearing must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, any email address, any facsimile number, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;

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(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant must be filed within 14 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within 14 days of receipt of such notice, regardless of the date of publication. The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

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

Judicial Review

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

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Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Michael Lynch

Permitting Program Administrator Permitting & Waste Cleanup Programs

2/___

Southwest District

Attachments:

- 1. Project Drawings and Design Specs., 17 pages
- 2. Mitigation Plan document, 33 pages
- 3. Mitigation Plan drawings, 17 pages
- 4. Construction Commencement Notice/Form 62-330.350(1), 1 page
- 5. Operation and Maintenance Inspection Certification, 2 pages
- 6. As-built Certification and Request for Conversion to Operational Phase/ Form 62-330.310(1), 3 pages
- 7. Request for Transfer of ERP to the Perpetual Operation Entity, 1 page
- 8. Request to Transfer Permit, 2 pages

Copies furnished to:

Carla Burrmann, Southwest District, <arla.burrmann@floridadep.gov Michael Lynch, FDEP, Michael.Lynch@floridadep.gov
ERP Permitting, Southwest District, sw_erp@floridadep.gov
U.S. Army Corps of Engineers, tampareg@usace.army.mil
Ricardo Borromeo, Carollo Engineers, rborromeo@carollo.com
Doug Robison, ESA, drobison@esassoc.com

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this permit, including all copies, were mailed before the close of business on <u>January 27, 2022</u>, to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, under 120.52(7) of the Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

January 27, 2022

Date

COMMENCEMENT NOTIFICATION

Within ten (10) days of initiating the authorized work, submit this form to via electronic mail to saj-rd-enforcement@usace.army.mil (preferred, not to exceed 15 MB) <u>or</u> 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-2017-00687(NW-CMW) 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

AS-BUILT CERTIFICATION BY PROFESSIONAL ENGINEER

Submit this form and one set of as-built engineering drawings to the U.S. Army Corps of Engineers, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019. For electronic mail saj-rd-enforcement@usace.army.mil (not to exceed 15 MB).

1. Department of the Army Permit Number: SAJ-2017-00687(NW-CMW)

2. Permittee Information:	:		
Name:			
Address:			
3. Project Site Identificat	ion (physical location/a	ddress):	
by Special Conditions to t the Army permit with any	the permit, has been ac deviations noted belov and conducted by me c	e authorized work, including any ecomplished in accordance with v. This determination is based u or by a project representative und engineering drawings.	the Department of upon on-site
Signature of Engineer		Name (<i>Please type</i>)	
(FL, PR, or VI) Reg. Num	ıber	Company Name	
City		State	ZIP
(Affix Seal)			
Date		Telephone Number	

Date Work Started:	Date Work Completed:	
Identify any deviations from the a additional pages if necessary):	approved permit drawings and/or special conditions (attach	

CESAJ-EN 20 July 2022

MEMORANDUM FOR Chief, Regulatory Division

SUBJECT: Town of Longboat Key - Force Main Replacement, GIWW, Sarasota and Manatee Counties, Florida Regulatory File #SAJ-2017-00687.

- 1. Reference Regulatory email dated 09 March 2022, requesting Engineering Division review the permit package for SAJ-2017-00687 Town of Longboat Key Force Main Replacement, GIWW (2022-0028). The applicant proposes to construct a 12,200-linear-foot redundant force main underneath Sarasota Bay. The proposed force main will be constructed adjacent and north of the existing force main using an open cut trench construction approach. The existing force main will be rehabilitated by lining it with a smaller diameter HDPE pipe. Work will include temporary impacts due to open cut trenching, specifically direct impacts to 1.5 acres of mangroves, 3.5 acres of seagrasses, and 0.2 acre of oysters. Associated secondary impacts will include 2.2 acres of seagrasses.
- 2. Engineering Division does not object to issuance of the permit and approves the request for SAJ-2017-00687 Town of Longboat Key Force Main Replacement, GIWW (2022-0028) as referenced herein as the proposed meets SAJ criteria.
- 3. Approval of these modifications to GIWW, Central and Southern Florida (C&SF) Project is in accordance with 33 U.S.C. 408. It also complies with the National Environmental Policy Act, as the proposed modifications were previously analyzed in the *Department of Army Permit SAJ-2017-00687*.
- 4. The applicant shall comply with Engineering Circular 1165-2-220, dated 10 September 2018, Policy and Procedural Guidance for Processing Requests to Alter U.S. Army Corps of Engineers Civil Works Projects Pursuant to 33 U.S.C. 408, Appendix K, paragraphs 1. to 16. (enclosed) and the time limit for completing the work authorized in *Department of Army Permit SAJ-2017-00687*. The applicant is responsible for the quality control for performance of the work and for ensuring these actions do not interfere with the functions of the GIWW C&SF Project. Documentation of the completed work must be furnished to the Corps within 60 days after completion of the work for our records. This documentation will need to include a certification that the work was completed in accordance with the approved plans and specifications, GPS readings for the limits of the work performed, as-built drawings, and the date the work started and was completed.
- 5. If you have any questions, please feel free to contact the Engineering Division POC Murika Davis at 904-232-1604 or by email to murika.davis@usace.army.mil.

BOROCHANER.LAUR Digitally signed by BOROCHANER.LAUR BOROCHANER.LAUREEN.A.12290 EEN.A.1229042080 42080 Date: 2022.07.20 16:41:34 -04'00' Laureen A. Borochaner, P.E. Chief, Engineering Division

EC 1165-2-220 10 Sep 18

APPENDIX K

Standard Terms and Conditions

This appendix includes the standard conditions that must be included in all Section 408 approval notifications, except where marked as optional. Use of optional conditions should be based on scope and scale of the approved activity:

LIMITS OF THE AUTHORIZATION

- 1. This permission only authorizes you, the requester, to undertake the activity described herein under the authority provided in Section 14 of the Rivers and Harbors Act of 1899, as amended (33 USC 408). This permission does not obviate the need to obtain other federal, state, or local authorizations required by law. This permission does not grant any property rights or exclusive privileges, and you must have appropriate real estate instruments in place prior to construction and/or installation.
- 2. The time limit for completing the work authorized ends on ______. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached. Addressed in the 408 approval letter or 408 EN Memo.
- 3. Without prior written approval of the USACE, you must neither transfer nor assign this permission nor sublet the premises or any part thereof, nor grant any interest, privilege or license whatsoever in connection with this permission. Failure to comply with this condition will constitute noncompliance for which the permission may be revoked immediately by USACE.
- 4. The requester understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration of the work herein authorized, or if, in the opinion of the Secretary of the Army or an authorized representative, said work will cause unreasonable conditions and/or obstruction of USACE project authorized design, the requester will be required upon due notice from the USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim can be made against the United States on account of any such removal or alteration.

INDEMNIFICATION AND HOLD HARMLESS

- 5. The United States will in no case be liable for:
 - a. any damage or injury to the structures or work authorized by this permission that may be caused or result from future operations undertaken by the United States, and no claim or right to compensation will accrue from any damage; or
 - b. damage claims associated with any future modification, suspension or revocation of this permission.

- 6. The United States will not be responsible for damages or injuries which may arise from or be incident to the construction, maintenance, and use of the project requested by you, nor for damages to the property or injuries to your officers, agents, servants, or employees, or others who may be on your premises or project work areas or the federal project(s) rights-of-way. By accepting this permission, you hereby agree to fully defend, **indemnify**, and **hold harmless** the United States and USACE from any and all such claims, subject to any limitations in law.
- 7. Any damage to the water resources development project or other portions of any federal project(s) resulting from your activities must be repaired at your expense.

REEVALUATION OF PERMISSION

- 8. The determination that the activity authorized by this permission would not impair the usefulness of the federal project and would not be injurious to the public interest was made in reliance on the information you provided.
- 9. This office, at its sole discretion, may reevaluate its decision to issue this permission at any time circumstances warrant, which may result in a determination that it is appropriate or necessary to modify or revoke this permission. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - a. you fail to comply with the terms and conditions of this permission;
 - b. the information provided in support of your application for permission proves to have been inaccurate or incomplete; or
 - c. significant new information surfaces which this office did not consider in reaching the original decision that the activity would not impair the usefulness of the water resources development project and would not be injurious to the public interest.

CONDUCT OF WORK UNDER THIS PERMISSION

- 10. You are responsible for implementing any requirements for mitigation, reasonable and prudent alternatives, or other conditions or requirements imposed as a result of environmental compliance.
- 11. Work/usage allowed under this permission must proceed in a manner that avoids interference with the inspection, operation, and maintenance of the federal project.
- 12. In the event of any deficiency in the design or construction of the requested activity, you are solely responsible for taking remedial action to correct the deficiency.
- 13. The right is reserved to the USACE to enter upon the premises at any time and for any purpose necessary or convenient in connection with government purposes, to make inspections, to operate and/or to make any other use of the lands as may be necessary in connection with government purposes, and you will have no claim for damages on account thereof against the United States or any officer, agent or employee thereof.

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- 14. You must provide copies of pertinent design, construction, and/or usage submittals/documents. USACE may request that survey and photographic documentation of the alteration work and the impacted project area be provided before, during, and after construction and/or installation.
- 15. You may be required to perform an inspection of the federal project with the USACE, prior to your use of the structure, to document existing conditions.
- 16. USACE shall not be responsible for the technical sufficiency of the alteration design nor for the construction and/or installation work.
- 17. (optional, at the discretion of the district) Once permission is granted, you must notify the USACE District at least () days before work/usage is started so that post- permission over sight can be performed by USACE.
- 18. (optional, at the discretion of the district) You must schedule a final inspection with the USACE within () days after completion of the work/usage.
- 19. (optional, at the discretion of the district) You must submit a copy of "as-built" drawings within () days of completion of work showing the new work as it relates to identifiable features of the federal project. **Included in the 408 approval letter**.

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

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 shutdown 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 lmperiledSpecies@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:

1-888-404-FWCC(3922)

cell *FWC or #FWC



Southeast Regional Office

PROTECTED SPECIES CONSTRUCTION CONDITIONS, NOAA FISHERIES SOUTHEAST REGIONAL OFFICE

The action agency and any permittee shall comply with the following construction conditions for protected species under the jurisdiction of NOAA Fisheries Southeast Regional Office (SERO) Protected Resources Division (PRD):¹

Protected Species Sightings—The action agency and any permittee shall ensure that all personnel associated with the project are instructed about the potential presence of species protected under the Endangered Species Act (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 listed species and all marine mammals. To determine which protected species and critical habitat may be found in the transit area, please review the relevant marine mammal and ESA-listed species at Find A Species (https://www.fisheries.noaa.gov/find-species) and the consultation documents that have been completed for the project.

- 1. **Equipment**—Turbidity curtains, if used, shall be made of material in which protected species cannot become entangled and be regularly monitored to avoid protected species entrapment. All turbidity curtains and other in-water equipment shall be properly secured with materials that reduce the risk of protected species entanglement and entrapment.
 - a. In-water lines (rope, chain, and cable, including the lines to secure turbidity curtains) shall 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, shall 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 shall be allowed in the water. All anchoring shall be in areas free from hardbottom and seagrass.
 - b. Turbidity curtains and other in-water equipment shall be placed in a manner that does not entrap protected species within the project area and minimizes the extent and duration of their exclusion from the project area.
 - c. Turbidity barriers shall be positioned in a way that minimizes the extent and duration of protected species exclusion from important habitat (e.g. critical habitat, hardbottom, seagrass) in the project area.
- 2. **Operations**—For construction work that is generally stationary (e.g., barge-mounted equipment dredging a berth or section of river, or shore-based equipment extending into the water):
 - a. Operations of moving equipment shall cease if a protected species is observed within 150 feet of operations.

¹ Manatees are managed under the jurisdiction of the U.S. Fish and Wildlife Service.

- b. Activities shall not resume until the protected species has departed the project area of its own volition (e.g., species was observed departing or 20 minutes have passed since the animal was last seen in the area).
- 3. **Vessels**—For projects requiring vessels, the action agency, and any permittee shall ensure conditions in the Vessel Strike Avoidance Measures are implemented as part of the project/permit issuance (https://www.fisheries.noaa.gov/southeast/consultations/regulations-policies-and-guidance).
- 4. **Consultation Reporting Requirements**—Any interaction with a protected species shall be reported immediately to NOAA Fisheries SERO PRD and the local authorized stranding/rescue organization.

To report to NOAA Fisheries SERO PRD, send an email to takereport.nmfsser@noaa.gov. Please include the species involved, the circumstances of the interaction, the fate and disposition of the species involved, photos (if available), and contact information for the person who can provide additional details if requested. Please include the project's Environmental Consultation Organizer (ECO) number and project title in the subject line of email reports.

To report the interaction to the local stranding/rescue organization, please see the following website for the most up to date information for reporting sick, injured, or dead protected species:

Reporting Violations—To report an ESA or MMPA violation, call the NOAA Fisheries Enforcement Hotline. This hotline is available 24 hours a day, 7 days week for anyone in the United States.

NOAA Fisheries Enforcement Hotline (800) 853-1964

5. **Additional Conditions**—Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the project consultation and must also be complied with.

For additional information, please contact NOAA Fisheries SERO PRD at:

NOAA Fisheries Service Southeast Regional Office 263 13th Avenue South St. Petersburg, Florida 33701

Tel: (727) 824-5312

Visit us on the web at Protected Marine Life in the Southeast

(https://www.fisheries.noaa.gov/region/southeast#protected-marine-life)

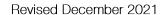
Revised: May 2021

Final

LONGBOAT KEY SUBAQUEOUS FORCE MAIN

Mitigation Plan Document

Prepared for Town of Longboat Key









Attachment 8 * SAJ-2017-00687 * Page 2 of 33

Final

LONGBOAT KEY SUBAQUEOUS FORCE MAIN

Mitigation Plan Document

Prepared for
Town of Longboat Key
Under Subcontract to Carollo Engineers

Revised December 2021

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LONGBOAT KEY SUBAQUEOUS FORCE MAIN

Mitigation Plan Document

1.0 Introduction

1.1 Project Background

Currently, domestic wastewater from the barrier island Town of Longboat Key (Town) is collected and pumped, via Lift Station D, to the mainland for treatment at the Manatee County Southwest Regional Water Reclamation Facility (SWRWRF). The wastewater is transported via a 20-inch inner diameter (ID) ductile iron pipe (DIP) force main that was constructed in 1973 and placed into operation in 1975. This pipeline is the sole mode of wastewater transmission from the barrier island to the mainland and has been in continuous service for 45 years. When constructed, the service life is considered to be 50 years. The existing force main was constructed using barge mounted equipment that excavated an open trench along the bottom of Sarasota Bay, laid the pipe in the trench, and then buried the pipe with the excavated material. Upon project completion, an as-built survey was completed.

The subaqueous force main provided decades of service without any known incidents of leakage or failure. However, due to concerns about the age of the force main, the Town began conducting inspections of the subaqueous pipeline to determine the depth of the bury and the general external condition of the ductile iron pipe. Inspections were conducted in 1992, 1996, 2007, and 2011. In 2015 the Town conducted an internal Smart Ball® pipe wall assessment of the force main interior condition to determine the pipe wall thickness and degree of corrosion. The conclusions derived from the external inspections were that the force main was generally in good condition with sufficient bury depth (e.g., 2 foot minimum); while the 2017 internal inspection concluded that the pipe wall thickness was sufficient to provide another 20-25 years of service.

Given the age of the force main, the Town contracted with CDM Smith in 2015 to evaluate five alternative alignments (routes), including the existing alignment, as well as various pipe materials and alternative construction approaches for replacing the existing force main (CDM Smith/Laney, 2015). A total of 90 scenarios (alignment + pipe material + construction approach) were identified. After an initial feasibility screening, the list of scenarios was reduced to 44. These various scenarios were ranked pursuant to a range of criteria.

The highest ranked scenario was the existing alignment (Alignment 1) using a single pull Horizontal Directional Drill (HDD). However, these conclusions were qualified, contingent upon the determination of suitable geotechnical conditions in the subaqueous portion of the alignment,

as well as the technical feasibility of conducting a single pull HDD under the 2.3 mile crossing of Sarasota Bay. At the time of this writing, the 2.3-mile crossing of Sarasota Bay would be longest HDD single pull subaqueous project in the U.S., testing the limits of this technology.

Due to concerns about the suitable geotechnical conditions, technical feasibility, failure risks, and cost of the HDD construction approach, the Town contracted with Carollo Engineers (Carollo) and Environmental Science Associates (ESA) in 2017 to initiate discussions with the Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (USACE) to assess the permitability of an open cut construction approach to install a redundant force main adjacent to the existing force main. Based on the feedback received from the FDEP and USACE in these meetings, ESA conducted an environmental assessment of the marine resources at risk in the existing alignment - including seagrasses, mangroves, and oysters (ESA, 2019).

In 2019 Carollo and ESA conducted pre-application meetings with the FDEP and the USACE, during which the findings of the environmental assessment were presented, and the intent to pursue an open cut construction approach within the existing alignment was discussed. Feedback was received from both agencies with respect to the need to conduct an alternatives analysis, and to select an alignment and construction approach that best avoids and/or minimizes environmental impacts and risks.

On June 29, 2020, a sewage leak was discovered within the mangrove fringe along the east side of the existing force main alignment in Manatee County, approximately 350 feet from the open waters of Sarasota Bay, underneath fringing mangroves. The cause of the leak appeared to be corrosion of the buried pipe where it was found to be in contact with a log or tree stump.

The leak was quickly contained and repaired, and the volume of sewage that was discharged to the environment was determined to be approximately 14 million gallons. To gain access to repair the leak a dirt haul road had to be constructed into the mangroves (see **Figure 1-1**). In addition, the discharge of raw sewage resulted in the die off of mangroves due to hydrologic stress. In total, the sewage leak and the road fill impacts resulted in 1.43 acres of impacts to mangroves and fringe freshwater wetlands.

On February 22, 2021 the Town of Longboat Key executed a Consent Order with the FDEP to address restoration of the mangrove and freshwater wetland impacts, as well as other measures to prevent future leaks, and to respond in a timely and effective manner if another leak occurs. The June 2020 leak has elevated concerns about the condition and remaining service life of the existing force main, thus creating a need to further explore the construction of a new redundant force main at this time.



Figure 1-1
Repair of Existing Force Main Within Mangroves

In October 2020, the Town of Longboat Key submitted permit applications to both the FDEP and USACE for a new redundant sewer force main, proposing an open cut trench construction approach. A *Permit Support Document* (Carollo Engineers/ESA) was included as part of the permit applications submittals. That document provided: a summary of the alternatives analysis conducted by the Carollo/ESA consultant team; a summary of the proposed open-cut construction approach for the preferred alignment; a description of existing environmental conditions; quantification of temporary impacts to aquatic resources; and a narrative discussion of the proposed conceptual mitigation approach to compensate for those impacts.

This Longboat Key Redundant Force Main Mitigation Plan document has been prepared to provide a detailed description of the various proposed mitigation components for the project in response to agency Requests for Additional Information. The mitigation plan described herein addresses the 12 elements of a mitigation plan, as required under 40 CFR Part 230 Compensatory Mitigation for Losses of Aquatic Resources; Final Rule, promulgated by the U.S. Environmental Protection Agency in 2008. In addition to this document, construction plans for the proposed mitigation components are provided as part of the revised Permit Plans set, submitted concurrently.

1.2 Project Purpose and Need

The purpose of the proposed project is to construct a redundant domestic wastewater force main adjacent to, and north of, the existing force main. Given the approaching end of the projected service life of the existing force main, and the recently discovered and repaired sewage leak, there is a high degree of urgency to obtain permits to allow the Town the ability to complete this critical infrastructure project expeditiously.

Given that there are very limited options for conveying domestic sewage flows to the wastewater treatment plant should there a failure of existing sewer force main, the construction of a new redundant force main is a high priority infrastructure project needed to reduce the risk of future sewage leaks, to provide additional and redundant flow capacity, and to potentially facilitate the return of reclaimed water to Longboat Key to support regional potable water conservation initiatives.

1.3 Alternatives Analysis

In October 2020, the Town of Longboat Key submitted permit applications to both the FDEP and USACE for a new redundant sewer force main, proposing an open cut trench construction approach. The *Permit Support Document* (Carollo Engineers/ESA) was provided as part of the permit applications submittals. This document included a detailed alternatives analysis.

1.3.1 Alignment Alternatives

The alternatives analysis evaluated several subaqueous alignments, including the alignment of the existing force main (Alignment 1), as well as an upland alignment (Alignment 5). The other subaqueous alignments would all involve new impacts to previously unimpacted wetlands and submerged habitats, and were eliminated from further consideration accordingly. Alignment 5 would involve the construction of a new pipeline and pump stations northward across Longboat Pass to Bradenton Beach, and then across Sarasota Bay along the Cortez Road bridge corridor to the Manatee County SWRWRF. Given that impacts to aquatic resources would likely be reduced, this alignment was evaluated for feasibility.

Constructing a new force main along Alignment 5 would require substantial modifications to the Town's existing wastewater infrastructure. In addition, Alignment 5 poses numerous and extensive engineering and public impact constraints, including: ROW limitations; hydraulic constraints; utility and roadway conflicts; increased operation and maintenance requirements; traffic disruptions; odor; and overall public opposition. Given concerns about the recent leak and the remaining service life of the existing force main, the construction of a redundant force main is a critical and urgent priority infrastructure project. All of these issues cumulatively make Alignment 5 infeasible with respect to schedule as well as budget.

Based on the CDM Smith/Laney (2015) alignment analysis, and the evaluations presented in the *Permit Support Document*, Alignment 1 is clearly the preferred alignment. The Town's wastewater infrastructure has been designed and constructed over the years to collect and pump domestic sewage to existing Lift Station D, and to pump all collected sewage from this lift station to the Manatee County SWRWRF through the existing subaqueous force main. Alignment 1 is a

long-established and previously impacted utility corridor which encompasses the existing force main; and could accommodate the construction of a redundant force main parallel to the existing force main with minimal new environmental impacts. The location and alignment of the existing and proposed new force main is shown in **Figure 1-2** below.

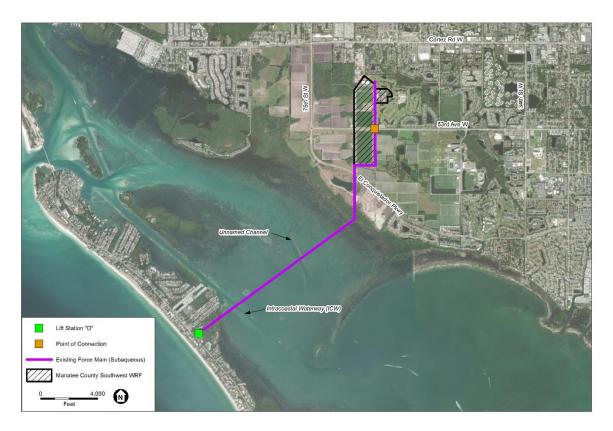


Figure 1-2
Existing Force Main Alignment (Alignment 1)

1.3.2 Construction Alternatives

The highest ranked construction alternative for Alignment 1 was Alternative 1 (All Open-Cut Trench), followed by Alternatives 5 (Hybrid 3) and Alternative 6 (Hybrid 4). Alternatives 5 and 6 both involve trenchless construction approaches (e.g., horizontal directional drill) on the western end of the project that would avoid surface impacts west of the Intra-Coastal Waterway (ICW). However, four of the eight hybrid alternatives evaluated were eliminated due to the fatal engineering flaw of having high points in the force main transmission line that would require an air release valve (ARV) be installed in Sarasota Bay, which would require frequent maintenance and pose high failure and leak risks. Furthermore, all of the trenchless construction approaches have the additional risk of frac-outs, or the collapse of the bore hole and the discharge of drilling fluids into overlying surface waters.

Given that the open-cut trench construction approach is the most proven construction method that meets all other engineering specifications, Alternative 1 was chosen as the preferred construction alternative for the proposed project. The full alternatives analysis is presented in the *Permit Support Document* (Carollo Engineers/ESA, 2020).

While Alternative 1 (All Open-Cut Trench) does have the greatest impacts to wetlands and submerged habitats, it must be emphasized here that any and all impacts to these resources caused by the proposed project are associated with project construction only. No components of the proposed project will result in a permanent loss of any ecological resources within Alignment 1; therefore, all impacts are considered to be temporary. Furthermore, the proposed construction approach has been developed to avoid and minimize impacts to wetlands and submerged habitats to the greatest extent feasible.

1.4 Proposed Construction Approach

As proposed, the redundant force main will be constructed of 20-inch ID High Density Polyethylene (HDPE) pipe, which is impervious to corrosion and is highly resilient, thus making it ideal for applications in the marine environment. The proposed new force main will be constructed adjacent to, and 50 feet north (in most segments) of the existing force main using an open cut trench construction approach. Upon completion of the new force main, the existing force main may be rehabilitated by lining it with a smaller diameter HDPE pipe, upon which it can be used as a redundant sewage line, or used for the return of the highly treated reclaimed water back to Longboat Key to offset the use of potable water for irrigation

During construction, direct physical impacts to the surface area of the bay bottom, as well as to the mangrove fringe on both ends of the project, will be minimized through tight confinement of the work areas. Secondary impacts caused by turbidity will be stringently controlled and minimized by using sheet piling, shoring, and turbidity screens. The project construction corridor along Alignment 1 can be broken down into five segments based on ground conditions and water depth, as shown in **Figure 1-3.**

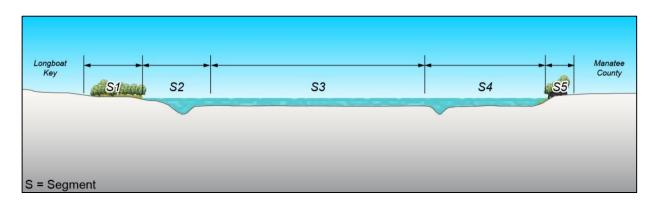


Figure 1-3
Project Segmentation Scheme

The project construction limits and methods vary in each of the five segments based on ground conditions, water depth and other constraints such as existing easements and public facilities. It should be noted that the extent of impacts has been reduced from the initial permit application submittals, as the project construction limits and methods were subsequently revised to further minimize impacts to wetlands and submerged habitats. Specifically, the project construction cross-section widths were reduced in Segments 1, 2, 4, and 5 compared to the initial *Permit Plans* set. The following figures show the construction limits and methods to be used in the five project segments.

Figure 1-4 and **Figure 1-5** show the typical construction limits and proposed construction methods for Segment 1 (west end intertidal/upland zone) and Segment 5 (east end intertidal/upland zone), respectively.

In both Segments 1 and 5, earthmoving equipment will be used to dig the trench, install the trench box and pipe material, and to bury the new force main. Spoils will be temporarily stockpiled immediately adjacent to the trench cut, and then placed back into the trench. Following construction, all disturbed work areas will be restored back to pre-construction topographic elevations, and re-planted with mangroves and/or freshwater wetland species, as described in Section 2.

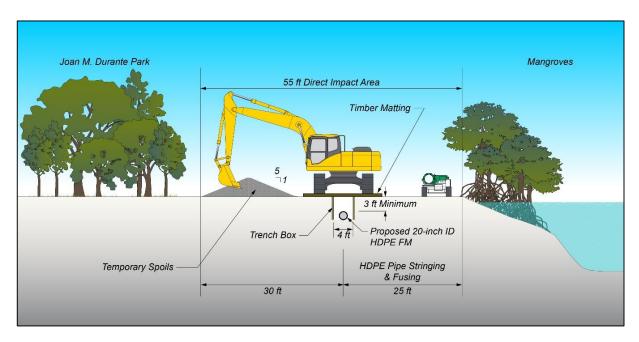


Figure 1-4
Construction Limits and Methods in Segment 1

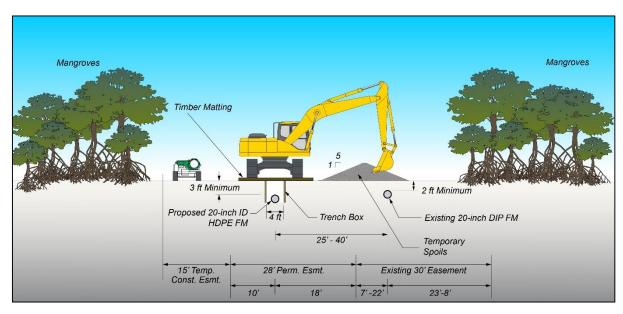


Figure 1-5
Construction Limits and Methods in Segment 2

Figure 1-6 shows the typical construction limits and proposed construction methods for Segments 2 and 4 (shallow subtidal zones). In Segments 2 and 4, barge mounted earthmoving equipment will be used to dig the trench, install the pipe material, and to bury the new force main. Spoils will be temporarily stockpiled in the barge-mounted hoppers with fluid containment and turbidity controls, and then placed back into the trench. Following construction, all disturbed work areas will be restored back to pre-construction bathymetric elevations.

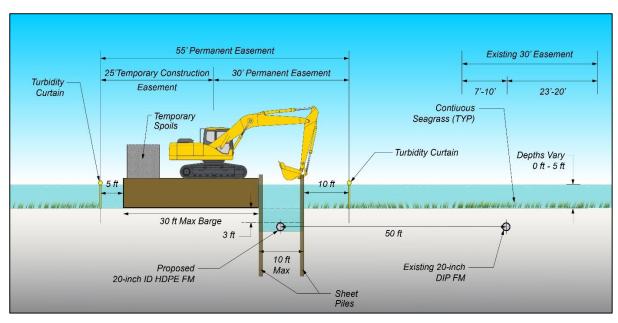


Figure 1-6 Construction Limits and Methods in Segments 2 and 4

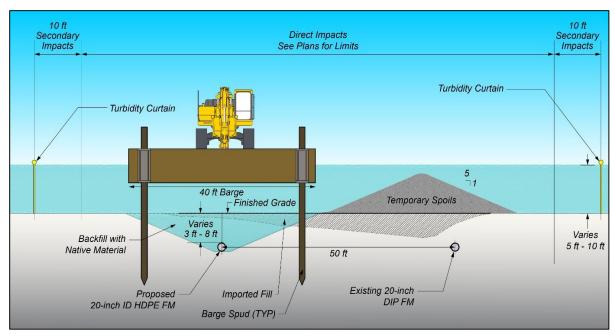


Figure 1-7
Construction Limits and Methods in Segment 3

Figure 1-7 shows the typical construction limits and proposed construction methods for Segments 3 (deep subtidal zone). In Segment 3, barge mounted earthmoving equipment will be used to dig the trench, install the pipe material, and to bury the new force main. Spoils will be temporarily stockpiled on the bay bottom adjacent to the existing force main, and then placed back into the trench cut. The entire work area will be contained by turbidity screens. Following construction, the new trench cut will be restored back to pre-construction bathymetric elevations. Excess spoils will be used to fill the old trench cut from the existing force main, and supplemented with additional offsite material, as a component of the project mitigation plan discussed in Section 2 below.

The difference in construction methods between Segments 2 and 4, and Segment 3, is that in the shallow subtidal areas smaller shallow-draft barges will be used; whereas in the deeper subtidal areas, larger floating barges with spuds will be used. The smaller shallow-draft barges used in Segments 2 and 4 will rest on the bottom in some areas during low tides, thus causing physical disturbance of the bottom. The larger barges used in Segment 3 will not rest on the bottom; however, some physical disturbance of the bottom will likely occur where spuds are used to secure the barge position.

1.5 Project Impacts

The construction limits methods described above have been designed to avoid and minimize impacts to wetlands and submerged habitats to the greatest extent possible. Avoidance and minimization of impacts will be achieved through: 1) routing of the new force main north of the existing force main, which avoids some areas of continuous seagrass by staying within the impact area of the existing force main, and minimizes impacts to mangroves on the west side of the

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December 2021

project; and 2) development of specific construction methods for each segment, which minimize the open-cut trench footprint, as well as secondary impacts caused by temporary turbidity increases. Nonetheless, as proposed, the project will incur impacts to wetlands and submerged habitats.

Table 1-1 below provides a summary of direct and secondary impacts to wetlands and the submerged habitats of concern in Alignment 1. As noted above, the extent of project impacts has been reduced from the initial permit application submittals, as the project construction limits and methods were subsequently revised to further minimize impacts to wetlands and submerged habitats.

TABLE 1-1
SUMMARY OF PROJECT IMPACTS TO WETLANDS AND SUBMERGED HABITATS

Wetlands and Submerged Habitats	Direct Impact Area (acres)	Secondary Impact Area (acres)	Total Impact Area (acres)
Freshwater Wetlands	0.17	N/A	0.17
Mangroves and Tidal Flats	0.79	N/A	0.79
Seagrasses	1.91	2.41	4.32
Oysters	0.11	N/A	0.11

For seagrasses the impact quantification was based on the 2020 seagrass survey conducted by ESA. The subsequent release of 2020 seagrass maps produced by the Southwest Florida Water Management District have confirmed the general seagrass distribution in the project area as mapped by ESA, and show even less seagrass in the Segment 3 of Alignment 1. For freshwater and intertidal wetland, and oysters, 2020 aerial photography from Manatee County was utilized, supplemented by field surveys.

In Table 1-1, direct impacts represent the land or bottom surface area that will be physically disturbed by excavation of soils and sediments to access the construction areas and install the new force main, followed by the burial of the force main with the same native materials. Secondary impacts represent the surface area of submerged bottom that may be impacted by increased turbidity within the work areas. Secondary impacts areas are outside of the sheet piling that will contain the excavation and force main burial activities, but within turbidity screening that will encompass the entire construction area.

It must be emphasized that all direct and secondary impacts associated with the proposed project using the open-cut trench construction approach will be **temporary impacts only**. There will be no permanent hardening or placement of structures on the land surface or on the bay bottom in the work areas, and there will be no permanent alteration of topographic elevations or bathymetric contours (e.g., permanent dredge and fill areas). All directly impacted areas will be restored back to natural elevations and grades immediately upon installation and burial of the new force main. In addition, as part of the proposed mitigation plan described in Section 2, old trench and dredge cuts will be backfilled to adjacent grade with suitable sediment material and appropriately stabilized to support seagrass recovery in previously impacted areas that have been too deep to support seagrass for over 50 years.

2.0 Mitigation Plan

As stated above the mitigation plan described in the following sections addresses the 12 elements of a mitigation plan, as required under 40 CFR Part 230 Compensatory Mitigation for Losses of Aquatic Resources; Final Rule, promulgated by the U.S. Environmental Protection Agency in 2008. In addition to this document, construction plans for the proposed mitigation components are provided as part of the revised *Permit Plans* set, submitted concurrently as part of this response to Requests for Additional Information.

2.1 Objectives

The quantitative objectives of this proposed mitigation plan in terms of both acreages and ratios, and the methods to attain these objectives, are summarized in **Table 2-1** below.

TABLE 2-1
SUMMARY OF MITIGATION PLAN OBJECTIVES AND COMPENSATION METHODS

Wetlands and Submerged Habitats	Total Impact Area (acres)	Compensation Method(s)	Compensation Area / Ratio (acres)
Freshwater Wetlands	0.17	Restoration	0.17 / 1:1
Mangroves and Tidal Flats	0.79	Restoration/Enhancement	1.18 / 1.5:1
Seagrasses	4.32	Restoration/Establishment	8.64 / 2:1
Oysters	0.11	Restoration/Establishment	0.22 / 2:1

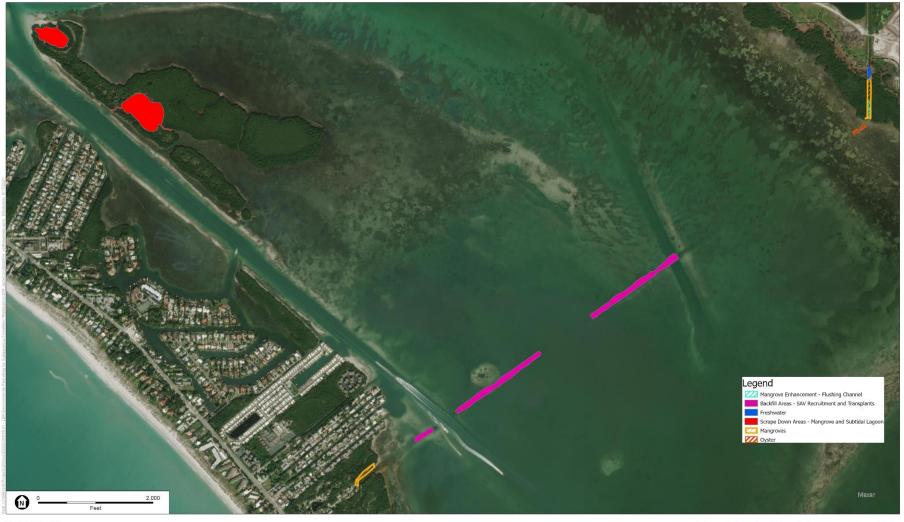
There are four components of this mitigation plan, which correspond to each of the four types of wetlands or submerged habitats to be impacted. Section 2.6 below provides a narrative description of each of the four mitigation components, while the *Mitigation Plan Set* provides plans and general specifications for each component.

2.2 Site Selection

All four mitigation components will be conducted onsite within the project limits, and in immediately adjacent or nearby areas. Figure 2-1 below shows the location of each of the four mitigation components.

Onsite mitigation is most appropriate as there are numerous opportunities within the project limits, and in immediately adjacent or nearby areas, where previous dredge and fill impacts can be effectively remediated. There are several old trench and dredge cuts within the project limits that have not supported seagrasses for decades, even during the apex of seagrass expansion in northern Sarasota Bay (circa 2016), as bottom depths are below the photic zone.

In addition to old trench and dredge cuts, Sister Keys - a cluster of mangrove islands owned by the Town of Longboat Key - offer extensive opportunities to restore tidal wetlands in two areas that were filled with dredge spoil material generated during the construction of the ICW. These areas will only be used for mitigation as part of an adaptive management approach if the proposed mitigation has not proven to be successful over the monitoring period.



SOURCE: ESA, 2019.

Town of Longboat Key Subaqueous Force Main Figure 2-1 Longboat Key Mitigation Plan



Given the regional seagrass losses in northern Sarasota Bay, as described in Section 2.4, and the numerous historic dredge and fill impacts in the project vicinity, there are extensive opportunities to accomplish ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and preservation onsite and in immediately adjacent or nearby areas. These mitigation opportunities are the most practical for the affected watershed. All four components of the mitigation plan, as well as success monitoring, can be accomplished most cost-effectively if implemented with the immediate vicinity of the project.

2.3 Site Protection Instrument

The primary mitigation site protection instruments will be utility and/or conservation easements recorded by, or dedicated to the Town of Longboat and the State of Florida. The approach for each project segment (see Figure 1-3) is summarized below.

- Segment 1 (western project terminus) Impacts to mangroves and other intertidal wetlands
 will be restored on lands currently owned by the Town of Longboat Key. The Town will
 maintain a utility easement over these areas. The utility easement will allow for any necessary
 maintenance or repair of the submerged force main, but will otherwise restrict or prohibit any
 other disturbances or dredge and fill impacts within the easement limits.
- Segments 2, 3, and 4 (submerged lands) Impacts to seagrasses will be mitigated by backfilling old trench and dredge cuts, and seagrass transplanting, on submerged lands owned by the State of Florida. The Town has applied for a sovereign submerged lands lease and utility easement with the State of Florida. The utility easement will allow for any necessary maintenance or repair of the submerged force mains, but will otherwise restrict prohibit any other disturbances or dredge and fill impacts within the easement limits.
- Segment 5 (eastern project terminus) Impacts to mangroves and other intertidal wetlands will be restored on lands currently owned by the Long Bar Pointe Mitigation Bank, and will be consistent with the plans approved as part of the mitigation bank permit. The Town will maintain a utility easement over these areas. The utility easement will allow for any necessary maintenance or repair of the submerged force main, but will otherwise restrict or prohibit any other disturbances or dredge and fill impacts within the easement limits.

In addition to mitigation constructed within the project limits, the Town will record a conservation easement over all mitigation areas constructed on Sister Keys (e.g. scrape down of fill areas to create new tidal wetlands) if these areas are subsequently used for mitigation, as part of an adaptive management plan. In summary, all restoration, enhancement, and establishment areas will be protected under protected utility and/or conservation easements in perpetuity.

2.4 Baseline Information

Relevant baseline information for the wetlands and submerged habitats affected by the proposed project.

2.4.1 Freshwater Wetlands

The only freshwater wetlands to be impacted by the proposed project are highly disturbed wetlands that exist within the existing force main easement, on the eastern terminus (Segment 5) of the project limits. These wetlands are encompassed within the Long Bar Pointe Mitigation Bank, permitted by the FDEP (pending USACE approval). As part of the mitigation bank activities, the property owner cleared extensive Brazilian pepper along the upland fringe of mangroves in this area in 2019 and left these areas non-vegetated, to be restored to native species as part of the mitigation bank master plan. Currently, these wetlands are infested with invasive nuisance species including castor bean and primrose willow, but are expected to be restored pursuant to the specifications defined in the State mitigation bank permit.

2.4.2 Mangroves and Tidal Flats

Mangroves and non-vegetated tidal flats and estuarine beaches occur on both the western terminus (Segment 1) and eastern terminus (Segment 5) of the project limits. These are fringe mangrove forests fronting northern Sarasota Bay, and are composed of red (*Rhizophora mangle*), black (*Avicennia germanens*) and white (*Laguncularia racemosa*) mangroves. In Segment 5, the mangrove fringe occurs on lands owned by the Town of Longboat Key (Joan M. Durante Park), and has been impacted by minor historical dredge and fill activities. In Segment 5, the mangrove fringe occurs on lands owned by the Long Bar Pointe Mitigation Bank, and has been impacted by: 1) previous construction of the original force main; 2) temporary road fill associated with the repair of the recent force main leak; and 3) hydrologic stress from the discharge and pooling of raw sewage.

2.4.3 Seagrasses

The Southwest Florida Water Management District (SWFWMD) surveys and maps seagrass, oyster, and tidal flat distributions within the coastal waters in its jurisdiction every two years, with data extending back to 1988. Geospatial datasets and maps are produced and provided to the public for resource management purposes. The methodology used to develop these data include the collection of high resolution aerial imagery under ideal conditions for subtidal observations, when water clarity is optimal (e.g. winter months during low tides). The aerial imagery is then groundtruthed in the field and digital polygons of these marine resources are produced through both geospatial machine-learning algorithms and visual digitization. Seagrass is mapped as two categories: 1) sparse; and 2) continuous. **Figure 2-2** shows a time series plot of seagrass coverage in northern Sarasota Bay (e.g., between Siesta Key Drive and Manatee Avenue), as derived from the SWFWMD seagrass mapping program and other historical data sources.

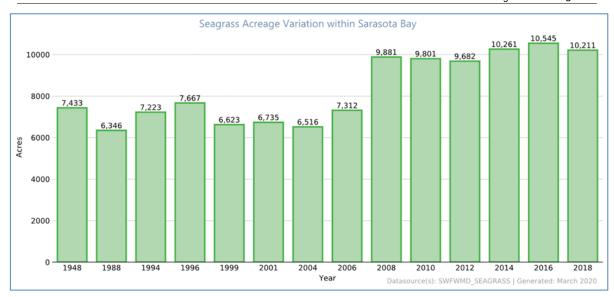


Figure 2-2 Seagrass Acreage Trends in Northern Sarasota Bay

As shown in Figure 2-2, seagrass coverage in northern Sarasota Bay reached its apex in the 2016 mapping period. Beginning in the summer of 2018 there was a protracted red tide event that co-occurred with the sustained chlorophyll-a values seen over the same months. Water quality data collected during this during time period suggest that northern Sarasota Bay was impacted by both a red tide and a more traditional phytoplankton bloom during the period of late 2018 to early 2019. There was also a lesser red tide event in 2016-2017 that didn't appear to have the same effect on chlorophyll-a. Based on SWFWMD seagrass mapping, the 2018-2019 period seems to co-occur with the period during which seagrass meadows have been lost or substantially diminished in the waters north and west of Long Bar Point.

Thus, the combination of algal blooms from both red tide and non-red tide organisms appears to have resulted in a substantial reduction in water clarity, which caused a rapid and massive decline in seagrass coverage in the project vicinity. SWFWMD has recently released their 2020 seagrass maps as provisional, and they indicated even more substantial seagrass losses between 2018 and 2020.

Figure 2-3 shows seagrass coverage in 2018 (SWFWMD) and 2020 (ESA) within the project limits of Alignment 1, which is represented by a 300-foot wide corridor with the existing force main serving as the centerline. Consistent with observed seagrass trends discussed above, the 2020 seagrass coverage shows a very substantial decline over the 2018 coverage. Of particular note are the deep trenched areas in Segment 3 that did not support seagrass during the 2016 apex of seagrass coverage in this area. Similarly, the entire bottom area of the unnamed is also devoid of seagrass in 2016, and likely has never supported seagrass since it was dredged. As described in the *Permit Support Document*, the cause for the lack of seagrass coverage in these areas is the deeper bottom depths, which fall below the viable photic zone for seagrass recruitment and growth.

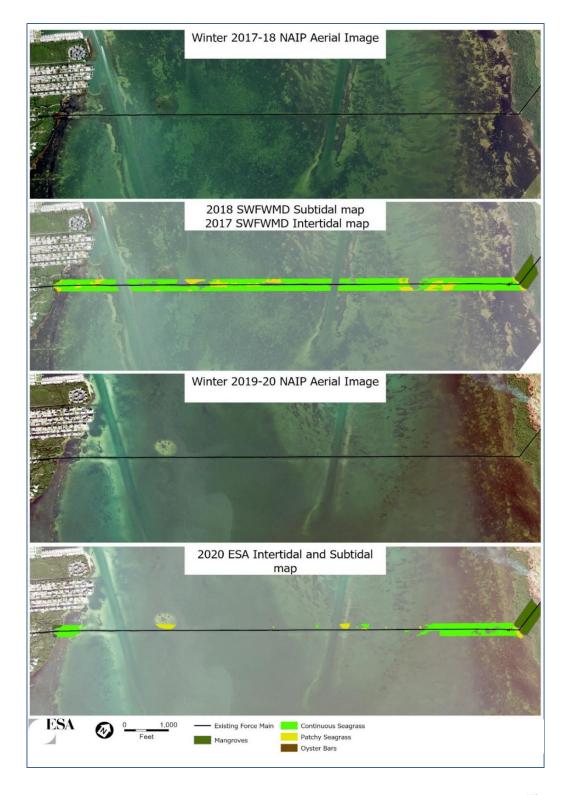


Figure 2-3
Seagrass Coverage Within the Project Limits 2017-2020

2.4.4 Oysters

Several small (~0.1 acre) oval-shaped oyster reefs occur along the eastern shoreline of northern Sarasota Bay, and appear to be associated with relict karst features and/or minor freshwater spring discharges. In addition to natural oyster reefs, the Sarasota Bay Estuary Program has constructed four oyster reef "restoration" projects along the same shoreline, which appear very similar to the natural reefs. All of the oyster reefs in the project vicinity are low-relief (1-3 feet) clusters of aggregated eastern oyster (*Crassostrea virginica*) shells that occur on the sediment surface. Oyster reefs in the project vicinity have not be significantly impacted by dredge and fill activities nor degraded water quality.

2.5 Determination of Credits

As noted above, the extent of project impacts has been reduced from the initial permit application submittals, as the project construction limits and methods were subsequently revised to further minimize impacts to wetlands and submerged habitats. In addition, mitigation options and the proposed mitigation plan have come into better focus. Accordingly, a revised Uniform Mitigation Assessment Methodology (UMAM) analysis has been prepared for project to reflect the reductions in project impacts and quantification and feasibility determination of the four mitigation plan components.

Table 2-2 below shows the revised UMAM analysis, including risk and time lag factors. This analysis shows that project impacts and mitigation can be feasibly balanced, and that all project impacts should effectively be offset by the proposed mitigation plan activities.

2.6 Mitigation Work Plan

Detailed mitigation plans including appropriate plan-view and cross section drawings, and specifications, have been prepared in CADD format and submitted concurrently with this Mitigation Plan document. The narratives provided below describe background information and the mitigation work plan associated with each of the mitigation components.

2.6.1 Component 1 – Freshwater Wetlands

The only freshwater wetlands to be impacted by the proposed project occur on the eastern terminus of the project limits. The proposed project will impact approximately 0.17 acres of highly disturbed freshwater wetlands within the existing force main easement. These wetlands are encompassed by the Long Bar Pointe Mitigation Bank, permitted by the FDEP (pending USACE approval).

As part of the mitigation bank activities, the property owner cleared extensive Brazilian pepper along the upland fringe of mangroves in this area in 2019 and left these areas non-vegetated, to be restored with native species as part of the mitigation bank master plan. Currently, these wetlands are infested with invasive nuisance species including castor bean and primrose willow

TABLE 2-2 Town of Longboat Key Redundant Subaqueous Sewer Force Main UMAM Summary (Revised December 2021)

Impacts

<u></u>		Landscape		Water		Community Structure		Total Score			Functional
	Area (Acres)	Pre/Impact	With Impact	Pre/Impact	With Impact	Pre/Impact	With Impact	Pre/Impact	With Impact	Delta	Loss
Freshwater Wetlands	0.17	3	3	3	3	2	0	0.27	0.20	-0.07	-0.01
Mangroves/Tidal Flats	0.79	8	8	7	7	7	0	0.73	0.50	-0.23	-0.18
Seagrasses – Direct	1.91	7	7	7	7	7	0	0.70	0.47	-0.23	-0.45
Seagrasses - Secondary	2.41	7	7	7	7	7	4	0.70	0.60	-0.10	-0.24
Oysters	0.11	8	8	7	7	7	5	0.73	0.67	-0.07	-0.01
Total	5.39								Total		-0.89

Mitigation

Mitigation		Land	scape	W	/ater	Communi	ty Structure		Total Score		Only Use Preserva	ation	R	isk Factors		Functional
	Area (Acres)	Current	W/Mitigation	Current	W/Mitigation	Current	W/Mitigation	Current	W/Mitigation	Delta	Pres. Adj. Factor	Adj. Mit. Delta	Risk	Time Lag	RFG	Gain
Freshwater wetland restoration via grading and planting with desirable native species	0.17	3	3	3	5	2	8	0.27	0.53	0.27	N/A	N/A	1.50	1.20	0.15	0.03
Mangrove restoration and enhancement via grading, planting, and improved tidal flushing	1.18	8	8	7	8	7	9	0.73	0.83	0.10	N/A	N/A	1.40	1.10	0.06	0.08
Seagrass restoration and establishment via dredge cut backfilling and transplanting plugs from impact areas	8.64	7	7	5	8	3	8	0.50	0.77	0.27	N/A	N/A	2.00	1.50	0.09	0.77
Oyster restoration and establishment via relocation of existing oysters and placement of oyster bags and modules	0.22	7	8	7	8	7	8	0.70	0.80	0.10	N/A	N/A	1.20	1.00	0.08	0.02
Total	10.21													Tot	al	0.89

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Given the current poor condition of wetlands in this area, the Town of Longboat Key proposes to restore 0.17 acres of freshwater wetlands for a mitigation to impact ratio of 1:1. This will be accomplished by direct restoration through grading and planting of the impact areas within the existing force main easement. Native 1-gallon nursery-grown herbaceous wetland plants will be installed on 3-foot centers. The Town will coordinate with the Long Bar Pointe Mitigation Bank to ensure that project mitigation activities are consistent with those approved for this portion of the mitigation bank master plan with respect to the restored topographic contours and wetland plant species mix. Nuisance species management will be conducted for one year to ensure proper plant succession, and ongoing mitigation maintenance activities thereafter will be coordinated with the Long Bar Pointe Mitigation Bank.

2.6.2 Component 2 – Mangroves and Tidal Flats

The proposed project will impact a total of 0.79 acres of mangroves and tidal flats that occur on both the western (Segment 1) and eastern (Segment 5) ends of the project limits. Impacts on the western end of the project occur on lands owned by the Town of Longboat Key, including portions of Joan M. Durante Park. Impacts on the east end of the project occur within the existing force main easement on lands encompassed by the Long Bar Pointe Mitigation Bank, permitted by the FDEP (pending USACE approval).

Given the time lag loss of ecological function as mangrove plantings grow, the Town proposes to restore 1.18 acres of mangroves for a mitigation to impact ratio of 1.5:1. This objective will be attained entirely through onsite restoration and enhancement. To attain this ratio, all mangrove impact areas within the Town's existing utility easement will be restored. Prior to the sewage leak there was approximately 0.2 acres of non-vegetated fill areas along the existing force main alignment, as determined from historical aerial photography. Most of these areas were impacted by the temporary haul road that was constructed to repair the sewage leak. As part of the mitigation plan, these areas will also be restored. Finally, the Town will coordinate with the Long Bar Pointe Mitigation Bank to identify other mangrove restoration areas immediately adjacent to existing utility easement.

Impacted mangroves and non-vegetated tidal flats will be directly restored immediately following installation of the new force main by grading these areas back to pre-construction topographic elevations, and then planting with 1-gallon local nursery-grown mangroves on 3-foot centers. It is anticipated that the majority of the plant material will be black mangroves (*Avicennia germanens*); however, red and white mangroves may also be planted where appropriate based on natural zonation.

The Town will coordinate with the Long Bar Pointe Mitigation Bank to ensure that project mitigation activities are consistent with those approved for this portion of the mitigation bank master plan with respect to the restored topographic contours and wetland plant species mix. Nuisance species management will be conducted for one year to ensure proper plant succession, and ongoing mitigation maintenance activities thereafter will be coordinated with the Long Bar Pointe Mitigation Bank.

2.6.3 Component 3 – Seagrasses

As redesigned, the proposed project will directly impact 1.91 acres of seagrasses through excavation, and may result in secondary impacts to seagrasses (through turbidity shading) of up to 2.41 acres (seagrasses contained within turbidity screened areas). The total maximum seagrass impact area is estimated to be 4.32 acres, assuming the destruction of all seagrasses within the secondary impact areas, which is not likely

As discussed in Section 2.4.3 above, as well as the *Permit Support Document* submitted with the permit application, Sarasota Bay has experienced a very substantial seagrass loss over the past 2-3 years due to a severe and extended red tide bloom, and possibly more chronic declines in water clarity. This is particularly true for the northern Sarasota Bay project area. Mitigation for the proposed project has the potential to result in a net environmental benefit to the Sarasota Bay marine ecosystem with respect to seagrass recovery.

Portions of the open cut trench previously excavated for the placement of the existing force main were never properly backfilled, resulting in persistent deep areas with bottom depths that have not supported seagrasses for over 50 years, even when seagrass coverage was at its apex in 2016. In addition, an unnamed dredged channel runs perpendicular to the existing force main along the eastern side of the project. This channel was dredged prior to Clean Water Act requirements, and it too has bottom depths that have not supported seagrasses since it was constructed.

As part of the project mitigation plan, the old trench cut, and a portion of the unmarked dredged channel will be backfilled to adjacent grades with suitable sediment material, and appropriately stabilized, to support seagrass recovery. Identified sources of suitable sediment material to be used for backfilling include:

- Excess excavation material generated from the installation of the new force main; and
- Upland-sourced fill material from FDOT-approved sand mines.

Excess excavation material generated from the installation of the new force main are native fine sands with same grain size distribution and organic matter content as the areas to be backfilled. Upland-sourced fill material will be imported only from FDOT-approved sand mines to ensure compliance with Chapter 62-777, F.A.C. In addition, imported material will be selected from the various available grades to be consistent in grain size composition with native fine sands in the project area. Based on sediment analyses and geotechnical borings, the median sediment particle size (D50) in the project construction corridor ranges from 0.1 to 0.3 millimeters. Upland-sourced fine sands with D50 values on the higher end of this range will ensure that this material is dense enough to be stable when placed in the backfill areas, and not subject to resuspension or erosion.

The Town proposes to backfill 8.73 acres of historical and persistent deep dredge cuts up to the natural adjacent bathymetry, which in most places occurs within the photic zone under current water quality conditions. The fill areas include the old trench cut from the original force main installation, as well as a portion of the unnamed channel. The 8.73 acres of backfill will result in a mitigation to total impact ratio of approximately 2:1. This ratio assumes complete destruction of all seagrass in the secondary impact areas, which is not likely.

Over time, the proper backfilling of these persistent deep areas will fully offset all temporary disturbances to seagrasses associated with project construction, and could result in a net increase in seagrass coverage in the project vicinity as regional seagrass recovery in northern Sarasota Bay progresses. The rate of seagrass recovery in the backfill mitigation areas will be dependent primarily on the finished depth, sediment quality, and water clarity over the long term.

While the depth and sediment quality in the backfilled areas can be controlled in the mitigation construction process, the long-term clarity of the overlying water column will be a function of nutrient inputs to northern Sarasota Bay, as well as other factors such as periodic red tide events. Therefore, unlike the freshwater wetland and mangrove mitigation, natural recruitment and recovery of seagrasses in the project area will not be fully under the control of the Town.

Given the time lag and uncertainties involved in natural seagrass recruitment, the Town will supplement the backfill mitigation component by transplanting 1.5 acres of dense continuous seagrasses from the direct impact areas to adjacent non-vegetated shallow (-2 to -6 depths NAVD88) areas within 200 feet of the construction corridor. This accounts for greater than 50 percent of the mapped continuous seagrasses within the direct impact areas. Transplanting healthy seagrasses from the direct impact areas will both reduce direct impacts and accelerate natural seagrass recruitment and recovery in the project area by providing a local seed source.

Project experience has shown that seagrass transplanting success rates increase when it involves thick continuous seagrass material with dense root mats that can be extracted as consolidated plant/sediment plugs and installed immediately to nearby recipient sites. Therefore, seagrasses will be transplanted by manually excavating 18-inch diameter plugs from the direct impact areas and installing them at natural grade in excavated holes of the same diameter. The Sarasota Bay Estuary Program (SBEP) has indicated that they support this approach to seagrass transplanting for the proposed project, given the current uncertainties in regional water quality status and trends. Furthermore, the SBEP has agreed to assist the Town in selecting appropriate recipient sites, and to monitor their success and expansion over time.

If monitoring indicates that the backfilled deep cut areas are not recruiting seagrass at an acceptable rate, it may be possible to create new shallow subtidal lagoons by scraping down portions of the dredge spoil disposal areas on Sister Keys. Dredge spoil removed from these areas can also potentially be used as a source of suitable fill material to backfill the deep cut areas, as noted above. The Town will consider the restoration of intertidal and subtidal wetlands in these spoil disposal areas, and the beneficial reuse of this spoil material for backfilling other deep dredged cuts, as part of an adaptive management plan if the proposed mitigation does not attain the defined success criteria.

2.6.4 Component 4 – Oysters

The proposed project will directly impact approximately 0.11 acres of oyster habitat. The impact area is located just offshore of the eastern shoreline, where the new force main construction will transect the northern edge of two small oval-shaped oyster reefs. The oysters present in the project construction area are low-relief accreted shell clusters that reside on the sediment surface. The Town proposes to relocate living oyster clusters from the direct impact areas to the southeast

and southwest sides of the two affected oyster outcrops, prior to the construction of the new force main through these areas.

Relocation of oysters from the direct impact areas prior to construction will significantly reduce oyster impacts, and may avoid oyster impacts entirely. Nonetheless, to provide further reasonable assurance, the Town proposes to restore 0.22 acres of oysters for a mitigation to impact ratio of 2:1. This objective will be attained entirely through onsite restoration and enhancement. The appropriate and proven technique for establishing new oyster reef growth is filling biodegradable mesh bags with cleaned oyster shell, and placing the bags along with hollow concrete oyster modules in locations with suitable salinity and a quiescent wave energy environment. These methods have been successfully used by the Sarasota Bay Estuary Program (SBEP) to create new oyster reefs in northern Sarasota Bay at the same depths with similar bottom conditions as the proposed mitigation for this project.

As proposed, oyster bags and modules will be placed on the southeast and southwest edges of the impacted oyster reefs, outside of the relocated oyster clusters, to extend the perimeter and footprint of the affected reefs such that the objective of 0.22 acres of oyster restoration and enhancement is attained.

2.7 Maintenance Plan

The purpose of maintenance activities is to provide continued support of the habitat enhancement, restoration and creation areas such that they attain the desired end points and performance standards. The Town is committed to appropriately maintaining the restored and/or created habitats associated with the four components of this mitigation plan to ensure that the objectives and performance standards are met within the prescribed permit monitoring and maintenance timeframes. Maintenance activities for each of the four mitigation plan components are briefly discussed below, while **Table 2-2** summarizes the maintenance plan components.

2.7.1 Component 1 – Freshwater Wetlands

The freshwater wetland restoration areas will be planted with native herbaceous species, consistent with the Long Bar Pointe Mitigation Bank master plan. The planted areas will be monitored to determine plant survival and community succession. Any observed dead plants will be replaced with the same species immediately. If it is determined that the observed successional zonation would better support different species, then the planting plan will be appropriately revised and implemented to ensure that the performance standards are met. In addition, bi-annual maintenance activities will include herbicide spraying as needed to control exotic and nuisance species, to be coordinated with the Long Bar Pointe Mitigation Bank.

2.7.2 Component 2 – Mangroves and Tidal Flats

The intertidal wetland restoration areas will be planted with three mangrove species (black, red and white mangroves). The planted areas will be monitored to determine plant survival and community succession. Any observed dead plants will be replaced with the same species immediately. If it is determined that the observed successional zonation would better support

different species, then the planting plan will be appropriately revised and implemented to ensure that the performance standards are met.

2.7.3 Component 3 – Seagrasses

Seagrass restoration areas will be backfilled with suitable sediment material to attain design depths within the photic zone. In addition, 1.5 acres of existing seagrass from the direct impact areas will be transplanted into shallower portions of the project construction corridor. Maintenance activities for the seagrass component will involve monitoring of the backfill areas to ensure that the design depths area being maintained and significant erosion is not occurring. If the backfill material is eroding, then the placement of additional higher-density sediment material may be required. In addition, the seagrass transplant areas will be monitored to determine plant survival and community succession, and that that the design coverage is being attained. Dead individual seagrass transplants will be replaced during the first year of monitoring if it is determined that the overall transplant zone is succeeding (e.g., native sediments and depths are conducive to recruitment).

2.7.4 Component 4 – Oysters

The oyster restoration areas involve both relocation of existing oysters and the placement of oyster shell bags and modules along the perimeter of the impacted oyster reefs. Oyster restoration areas will be monitored to ensure that relocated oysters are surviving, and that the oyster bags and modules are recruiting new oysters (e.g., they are in appropriate depth and salinity zones). If either of these criteria are not being met, then the additional oyster bags and/or modules may be placed in other more suitable nearby locations.

Table 2-2
Summary of Maintenance Plan Components

Mitigation Plan Component	Mitigation Area (acres)	Compensation Methods	Maintenance Methods
Freshwater Wetlands	0.17	Plantings	Replacement plantings Exotic controls
Mangroves and Tidal Flats	1.18	Plantings	Replacement plantings Maintenance of tidal flushing channel
Seagrasses	8.64	Backfill deep trench/dredge cuts Transplanting existing seagrass	Maintenance of design depths Replacement transplants
Oysters	0.22	Relocation of existing oysters Placement of shell bags/modules	Additional shell bags/modules

2.8 Performance Standards

Performance standards for compensatory mitigation projects are ecologically-based metrics to be used to determine whether the mitigation plan components are attaining the stated objectives. Metrics typically include vegetative, hydrological, and sediment criteria – with specific attainment timeframes - that can be readily measured to document success or failure. **Table 2-3**

shows the proposed performance standards and associated attainment timeframes for each of the mitigation plan components.

TABLE 2-3
PROPOSED PERFORMANCE STANDARDS

Mitigation Plan Component	Mitigation Area (acres)	Performance Standards	Attainment Timeframe
Freshwater Wetlands	0.17	>90% coverage of desirable native species; <10% coverage of exotic/nuisance species	3 years
Mangroves and Tidal Flats	1.18	>90% survival of planted mangroves; >90% coverage mangroves in planted areas	4 years
		Tidal flushing channel functioning properly	
Seagrasses	8.64	100% of backfill areas at design depth; evidence of natural seagrass recruitment	5 years
		>75% survival of seagrass transplants	
Oysters	0.22	>90% survival of relocated oysters; shell bags/modules clearly recruiting new oysters	2 years

2.9 Monitoring Requirements

Monitoring of the four mitigation plan components will be critical to attaining the overall plan objectives and the specific performance standards for each. Periodic routine monitoring is required to assess whether the compensatory mitigation project is on track to meet performance standards, or if adaptive management measures are needed. The Town will conduct monitoring of the various mitigation plan components pursuant to the following schedule.

- **Freshwater Wetlands:** time zero (completion of plant installation); 30-days; 90-days, 6-months, 1-year; and annually thereafter.
- **Mangroves and Tidal Flats:** time zero (completion of plant installation); 30-days; 90-days, 6-months, 1-year; and annually thereafter.
- **Seagrass Transplants:** time zero (completion of transplants); 30-days; 90-days, 6-months, 1-year; and annually thereafter.
- Seagrass Sediment Backfill: annual bathymetric survey of backfill areas.
- **Oyster Relocation/Enhancement:** time zero (completion of relocation and bag/module placement); 6-months, 1-year; and annually thereafter.

Monitoring will be conducted for a period not to exceed 5 years, to cover the attainment timeframes shown in Table 2-3 above. Monitoring will be discontinued for mitigation components that meet their performance standards at the end of their specified attainment timeframe. However, if a mitigation component is not meeting its performance standard at the end of its attainment timeframe, then monitoring will continue until the performance standard is met. It should also be noted that seagrass extent and density in the project limits, including the

mitigation areas, will be monitoring by SWFWMD every two years as part of their routine seagrass and subtidal habitat mapping program.

The Town will also submit comprehensive annual monitoring reports to the Florida Department of Environmental Protection (FDEP) USACE, and NMFS. A total of five (5) annual monitoring reports will be submitted unless monitoring is extended due to a failure to meet a specified performance standard. The annual monitoring reports shall include all required content, and be provided in the format, specified in *Regulatory Guidance Letter 08-03: Minimum Monitoring Requirements for Compensatory Mitigation Projects Involving the Restoration, Establishment, and/or Enhancement of Aquatic Resources* (USACE, 2008).

2.10 Long-Term Management Plan

Long-term management of the four mitigation plan components will be addressed primarily through their respective landscape locations.

2.10.1 Component 1 – Freshwater Wetlands

One freshwater wetland mitigation area is located at the east end of the project limits will become part of the Long Bar Pointe Mitigation Bank. Although a utility easement will remain over both the existing and new force main, habitats and vegetation communities within the easement will be protected and managed consistent with the State mitigation bank permit

2.10.2 Component 2 – Mangroves and Intertidal Habitats

Mangrove and intertidal habitat mitigation areas are located on both the west and east ends of the project limits. On the west side, this mitigation will be conducted within Joan Durante Park, a natural and recreational area owned by the Town of Longboat Key. Protection and management of these areas will be conducted as part of the park management plan. On the east side, the mangrove mitigation will become part of the Long Bar Pointe Mitigation Bank. Although a utility easement will remain over both the existing and new force main, habitats and vegetation communities within the easement will be managed as part of the mitigation bank permit. Additional mangrove and intertidal wetland mitigation that may be constructed on Sister Keys as part of an adaptive management plan will be managed as natural areas by the Town of Longboat Key, the owner of the property.

2.10.3 Component 3 – Seagrasses

Seagrass mitigation areas located within the subtidal portions of the force main construction corridor will remain under the ownership of the State of Florida as sovereign submerged lands. Although a utility easement will remain over both the existing and new force main, seagrasses and other subtidal habitats will be protected and subject to the resource and water quality management conducted by multiple agencies including the Florida Department of Environmental Protection, the Florida Fish and Wildlife Conservation Commission, and the Sarasota Bay Estuary Program. In addition, SWFWMD will continue to monitor and map seagrasses and other subtidal habitats in the project vicinity. Additional seagrass and subtidal habitat mitigation that

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may be constructed on Sister Keys will be managed as natural areas by the Town of Longboat Key, the owner of the property.

2.10.4 Component 4 – Oysters

The oyster mitigation located within the subtidal portions of the force main construction corridor will remain under the ownership of the State of Florida as sovereign submerged lands. Although a utility easement will remain over both the existing and new force main, seagrasses and other subtidal habitats will be protected and subject to resource management conducted by multiple agencies including the Florida Department of Environmental Protection, the Florida Fish and Wildlife Conservation Commission, and the Sarasota Bay Estuary Program. In addition, SWFWMD will continue to monitor and map seagrasses and oyster reefs in the project vicinity.

2.11 Adaptive Management Plan

Adaptive management refers to a management strategy that addresses unforeseen changes in site conditions or other components of a compensatory mitigation project, including the party or parties responsible for implementing adaptive management measures.

Clearly, the most unpredictable aspect of the proposed mitigation plan is the natural recovery of seagrasses within the project vicinity. The primary factor involved in seagrass recovery within the project vicinity is water clarity, which in turn is a function of nutrient inputs as well as periodic red tide events. The Town has little or no control in maintaining or improving regional water clarity. Therefore, the primary goal of the seagrass mitigation component is to restore bathymetric and benthic conditions such that they will support natural seagrass recovery when water quality conditions are suitable. To help offset this risk, the Town has proposed to transplant 1.5 acres of the dense continuous seagrass from direct impacts areas to shallower areas (<6 feet deep) within the project limits to increase the probability of transplant success.

If the seagrass mitigation component proves to be unsuccessful, and performance standards are not being met by year 5, the Town will coordinate with state and federal agencies to develop an appropriate adaptive management plan. Sister Keys owned by the Town of Longboat Key offers numerous marine and estuarine habitat restoration opportunities. The excavation of spoil disposal areas on Sister Keys to create shallow tidal lagoons with subtidal habitat suitable for seagrass recruitment is proposed as an adaptive management strategy to offset the unlikely failure of the seagrass mitigation plan described herein. However, as noted previously, the Town would prefer to pursue such work on Sister Keys as part of a cooperatively-funded habitat restoration project.

Given the relative certainty of attaining performance standards, adaptive management strategies are not proposed or needed for the freshwater wetland, mangrove/tidal flat, and oyster components of the mitigation plan.

2.12 Financial Assurances

The Town of Longboat Key, an incorporated local government in the State of Florida, will be responsible for the full implementation of this mitigation plan, including construction, monitoring, and maintenance as part of the construction of a new redundant force main along the

preferred alignment. As described in Section 1 above, the proposed redundant sewer force main project is a critical infrastructure need for the Town of Longboat Key. The project is a component of the Town's Capital Improvement Program (CIP), and will be fully funded to include all mitigation commitments described herein.

Prepared by:		
Permittee:		_
Address:		_
Phone:		_

NOTICE OF DEPARTMENT OF THE ARMY PERMIT

TAKE NOTICE the United States Army Corps of Engineers (Corps) has issued a permit or verification SAJ-2017-00687 to the Town of Longboat Key (Permittee) on December 23, 2022, authorizing work in navigable waters of the United States in accordance with Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344) on a parcel of land known as Folio/Parcel ID:

Manaton County Florida located at Longboat Key,

Manatee County, Florida.

Within 30 days of any transfer of interest or control of said property, the Permittee must notify the Corps in writing of the property transfer by submitting the completed permit transfer page included with the issued permit or verification. Notification of the transfer does not by itself constitute a permit transfer. Therefore, purchasers of that portion of the premises containing the area authorized to be filled (or any portion thereof) are notified that it is unlawful for any person to construct, alter, operate, maintain, remove or abandon any works, including dredging or filling, or any other work within, over, or under waters of the United States (including wetlands) without first having obtained a permit from the Corps in the purchaser's name.

The subject Permit concerns only that portion of the property determined to fall within the jurisdiction of the Corps and this notice is applicable only to those portions of the subject property containing areas authorized to be impacted for mitigation, subject to the Permit.

Conditions of the Permit/Verification: The permit or verification is subject to General Conditions and Special Conditions which may affect the use of the work authorized in Sarasota Bay. Accordingly, interested parties should closely examine the entire permit or verification, all associated applications, and any subsequent modifications.

To obtain a copy of the authorization in its entirety submit a written request to: U.S. Army Corps of Engineers
Regulatory Division - Special Projects & Enforcement Branch
Post Office Box 4970
Jacksonville, Florida 32232-0019

Questions regarding compliance with these conditions should be directed to: U.S. Army Corps of Engineers
Enforcement Section
Post Office Box 4970
Jacksonville, Florida 32232-0019

Conflict Between Notice and Permit

This Notice of Authorization is not a complete summary of the issued permit or verification. Provisions in this Notice of Permit shall not be used in interpreting the permit or verification

provisions. In the event of conflict between this Notice of Permit and the permit or verification, the permit or verification shall control.

This Notice is Not an Encumbrance

My Commission Expires_____

This Notice is for informational purposes only. It is not intended to be a lien, encumbrance, or cloud on the title of the premises.

Release This Notice may not be released or remo consent of the Corps.	ved from the public records without the prior written
This Notice of Authorization is executed This document is being submi County, Florida as part of the requirement by Corps.	on this day of, tted for recordation in the Public Records of Manatee at imposed by the authorization SAJ-2017-00687 issued
	Permittee:
	Address:
	Phone:
STATE OF FLORIDA COUNTY OF	
The foregoing instrument was acknowled, 20, by	lged before me thisday of, who is personally known to me or has as identification.
produced	as identification.
(seal)	Notary Public
	Print