



FLORIDA DEPARTMENT OF Environmental Protection

Ron DeSantis
Governor

Alexis A. Lambert
Secretary

South District
PO Box 2549
Fort Myers, FL 33902-2549
SouthDistrict@FloridaDEP.gov

Permittee/Authorized Entity:

City of Sanibel
% Holly Milbrandt
800 Dunlop Rd.
Sanibel, FL. 33957
Holly.Milbrandt@mysanibel.com

Sanibel Slough Waterway Dredge

Authorized Agent:

Johnson Engineering, LLC.
% Jordan L. Varble, P.E.
2122 Johnson St.
Fort Myers, FL. 33901
JLV@johnsoneng.com

**Environmental Resource Permit
State-owned Submerged Lands Authorization – Not Applicable**

**U.S. Army Corps of Engineers Authorization – Separate Corps Authorization
Required**

Permit No.: 457045-001 EI

**Permit Issuance Date: June 2, 2025
Permit Construction Phase Expiration Date: June 2, 2030**

Environmental Resource Permit

Permittee: City of Sanibel

Permit No: 457045-001 EI

PROJECT LOCATION

The activities authorized by this permit are located within the Sanibel Slough and adjacent lots between Beach Rd. and proceeding west to Main St., Parcel ID number(s) 30-46-23-T2-U9622.2518, 19-46-23-T3-00013.0000, 30-46-23-T2-00016.0080, 30-46-23-T2-00016.0090, 30-46-23-T2-00500.0050, 30-46-23-T2-00018.0040, 30-46-23-T2-00018.0000, 30-46-23-T2-00018.0010, Sanibel, Florida 33957, in Section 2, Township 46 South, Range 21 East, in Lee County.

PROJECT DESCRIPTION

The permittee is authorized to hydraulically dredge approximately 77,666 square feet of Sanibel Slough waterway to an average depth of -6.0 feet NAVD 88 (-5.11 feet MLW) by removing approximately 5,500 cubic yards of muck material from Sanibel Slough, Class III Waters. The dredged material will be dewatered/stored in adjacent uplands and then hauled off-island to a disposal location that will be approved by the Department prior to construction.

Authorized activities are depicted on the attached exhibits.

AUTHORIZATIONS

Sanibel Slough Waterway Dredge

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

As staff to the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), the Department has determined the activity is not on submerged lands owned by the State of Florida. Therefore, your project is not subject to the requirements of Chapter 253, F.S. or Rule 18-21, F.A.C.

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**

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, as described.

SPECIFIC CONDITIONS – ADMINISTRATIVE

1. All required submittals, such as certifications, monitoring reports, notifications, etc., shall be submitted to the Florida Department of Environmental Protection, South District Office, Submerged Lands and Environmental Resource Permitting, P.O. Box 2549, Fort Myers, FL 33902-2549 or via e-mail to FTMERP_Compliance@dep.state.fl.us . All submittals shall include the project name and indicated permit number when referring to this project.

Note: In the event of an emergency, the Permittee should contact the Department by calling (800)320-0519. During normal business hours, the permittee should call (239)344-5600.

2. The project shall comply with applicable State Water Quality Standards, namely:
 - Rule 62-302.500, F.A.C. – Surface Waters: Minimum Criteria, General Criteria; and,
 - Rule 62-302.530, F.A.C. – Table: Surface Water Quality Criteria – Class III Waters.

SPECIFIC CONDITIONS - PRIOR TO ANY CONSTRUCTION

3. Those portions of the applicant's property that are in wetlands as defined in Chapter 62-340, F.A.C., and not subject to permanent impacts authorized by this permit shall be left in their natural state. These areas shall not be used for parking, equipment storage, building supply storage or as a staging area for construction of the single-family residence, pool, detached garage, driveway or septic tank. These areas shall not be filled, sodded, or cleared without prior written consent from the Department in the form of an Environmental Resource Permit or a modification of this permit.
4. Floating turbidity curtains with weighted skirts that extend to within 1 ft. of the bottom shall be placed prior to the initiation of work authorized by this permit. The screens shall be maintained and remain in place for the duration of the construction to ensure turbidity levels outside the construction area do not exceed 29 NTU's above background levels. The permittee shall be responsible for inspecting and maintaining turbidity control devices so no degradation of the ambient water quality outside of the turbidity screens occurs. Turbidity shall be monitored as described in the monitoring portion of this permit.
5. The applicant shall notify the Department 30 days prior to the commencement of construction in writing for approval of the final disposal location.

SPECIFIC CONDITIONS – CONSTRUCTION ACTIVITIES

6. The permittee shall follow the approved "Turbidity Control and Monitoring" plan during construction.
7. A floating turbidity apron/curtain will remain in place until activities have been completed and turbidity levels within the work area have returned to background levels prior to construction.
8. Watercraft associated with the construction of the permitted structure shall operate within waters of sufficient depth to preclude bottom scouring, prop dredging or damage to submerged bottom or submerged resources. During all construction activities, there shall be

a minimum of 1-foot clearance between the draft of the construction vessel/barge and the top of any submerged resources or submerged bottom.

9. Monitoring for turbidity requires the permittee to be able to visually inspect and monitor in the densest part of the plume therefore dewatering/dredging/construction activities that require turbidity monitoring should be conditioned to cease overnight. This may mean shutting down the dredge earlier for the plume to dissipate before dark.
10. Turbidity levels outside the construction area shall not exceed 29 NTU's above background levels. The following measures shall be taken immediately by the permittee whenever turbidity levels within waters of the State surrounding the project site exceed 29 NTUs above background:
 - a. Notify the Department at 239-344-5600 at the time the violation is first detected.
 - b. Immediately cease all work contributing to the water quality violation.
 - c. Stabilize all exposed soils contributing to the violation. Modify the work procedures that were responsible for the violation, install more turbidity containment devices, and repair any non-functional turbidity containment devices.
 - d. Resume construction activities once turbidity levels outside turbidity curtains fall below 29 NTUs.
11. The dredge material shall be hydraulically dredged and pumped into a geotextile dewatering tubes located at the approved upland disposal location at (No Named Address) Parcel ID # 30-46-23-T2-U9622.2518. Sanibel, Florida 33957, in Section 2, Township 46 South, Range 21 East, in Lee County.
12. Wetland areas or water bodies, which are outside the specific limits of construction authorized by this permit, must be protected from erosion, siltation, scouring and dewatering. There shall be no discharge in violation of the water quality standards in Chapter 62-302, Florida Administrative Code. Turbidity/erosion controls shall be maintained until construction is completed, disturbed areas are stabilized, and turbidity levels have fallen to less than 29 NTU's above background. The turbidity and erosion control devices shall be removed within 14 days once these conditions are met.
13. Effluent from the disposal area shall be routed through a return swale system and filtered through appropriate Best Management Practices so as to reduce the turbidity levels of the effluent. If the swale return system is unable to reduce the turbidity levels of the effluent to within 29 NTU's of the background sample, the dredging operation shall be suspended until adequate control measures have been installed.
14. Dredging shall be limited to daylight hours; no dredging (or dewatering) activities are authorized to be conducted at night.
15. Dredging state-owned submerged lands for the purpose of obtaining backfill material is prohibited.

16. 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 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.

SPECIFIC CONDITIONS LISTED SPECIES

17. 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.
18. If new information (e.g. listing of new species, new critical habitat, etc.) shows that the magnitude of impacts to federally listed species has the potential for adverse effects, the U.S. Fish and Wildlife Service (USFWS) will notify the Department. The Department will initiate coordination with the permittee and with the USFWS to determine what adverse impacts are likely and if additional minimization measures, reporting, or monitoring are required in order to be consistent with the Endangered Species Act, as deemed necessary by USFWS.
19. The Permittee shall report any injured, sick, or dead federally or state listed animal(s) discovered onsite to the Florida Fish and Wildlife Conservation Commission Wildlife Alert number at 888-404-FWCC (3922).

SPECIFIC CONDITIONS - CONSTRUCTION COMPLETION

20. The permittee shall submit one set of signed, dated and sealed as-built drawings to the Department to FTMERP_Compliance@dep.state.fl.us

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.
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 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 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;
- (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 21 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 21 days of publication of the notice or within 21 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 21 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

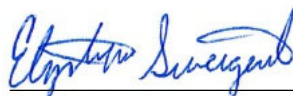
Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000; and by

(This Area Intentionally Left Blank)

filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Executed in Lee County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Elizabeth Sweigert
Director of District Management
South District Office

Attachments:

10 project drawing(s)

Turbidity Monitoring Plan 9pgs

'Post Issuance' forms: <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/forms-environmental-resource>

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments, including all copies, were sent to the addressee and to the following listed persons:

U.S. Army Corps of Engineers, Fort Myers Office, fdep.other@usace.army.mil

Thomas Gregory, Johnson Engineering, LLC., GFT@johnsoneng.com

Dana Dettmer, City of Sanibel, dana.dettmer@mysanibel.com

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52(7), F.S., with the designated Department clerk, receipt of which is hereby acknowledged.


Clerk

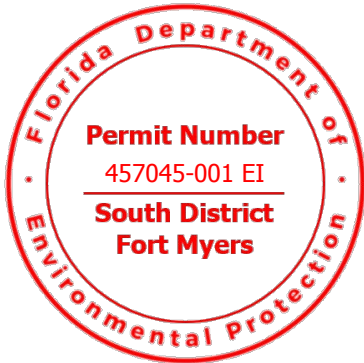
June 2, 2025
Date

OWNER/DEVELOPER



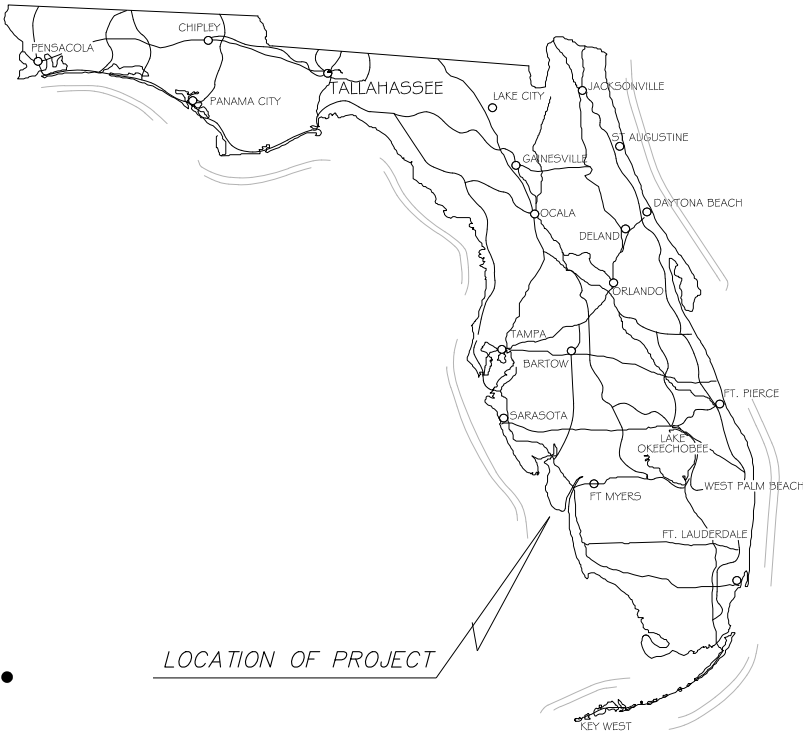
SIZE OF PROJECT

1.40 ACRES



CONSTRUCTION PLANS FOR SANIBEL SLOUGH

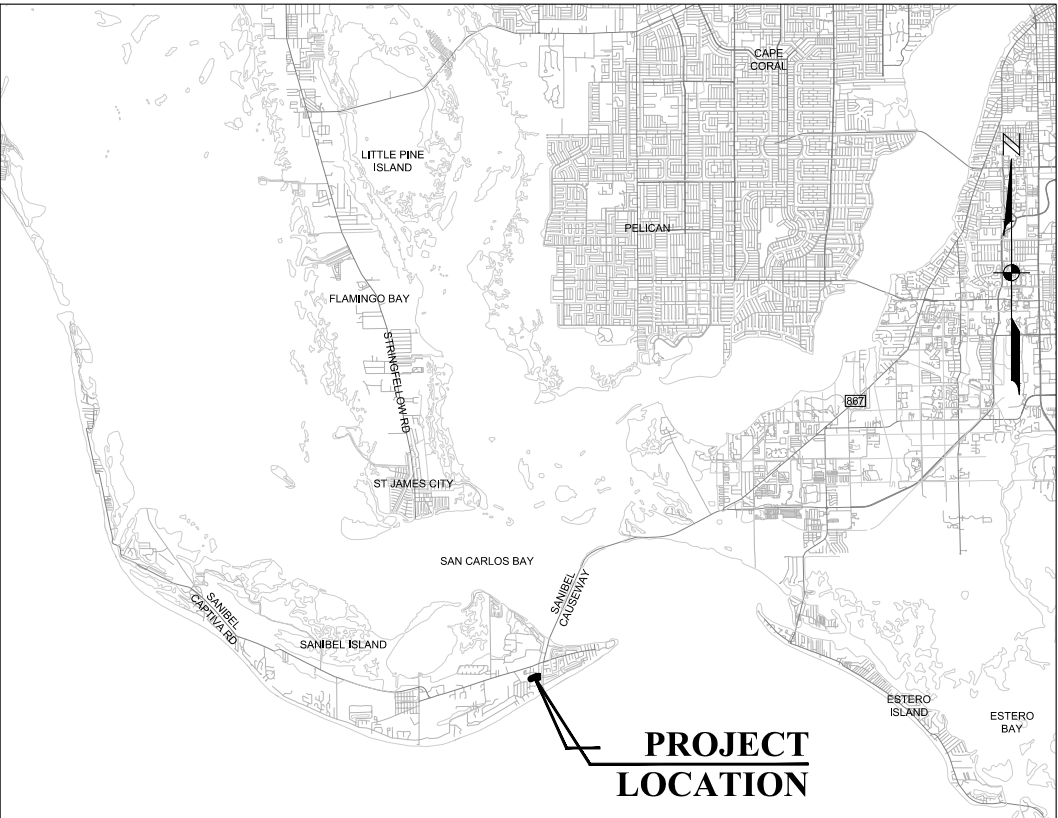
SECTION 02, TOWNSHIP 46 S., RANGE 21 E.
LEE COUNTY, FLORIDA



LOCATION OF PROJECT

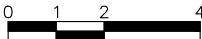
INDEX OF PLANS

SHEET NO.	DESCRIPTION
C01	COVER SHEET
C02	GENERAL NOTES & ABBREVIATIONS
C03	MASTER SITE PLAN
C04	OWNERSHIP MAP
C05	EXISTING CONDITIONS & DEMOLITION PLAN
C06	PLAN AND PROFILE
C07	SEDIMENT CORE SAMPLE PROFILES
C08	SOILS MAP
C09	EROSION CONTROL PLAN
C10	SECTIONS



PROJECT
LOCATION

LOCATION MAP



INTENDED DISPLAY SCALE:
(22"x34" PLAN: 1"=2MI)
(11"x17" PLAN: 1"=4MI)

APRIL 2025

NOTICE TO ALL
CONTRACTORS

IT'S THE LAW IN FLORIDA
2 BUSINESS DAYS BEFORE
YOU DIG
CALL SUNSHINE
1-800-432-4770

STATE, COUNTIES & CITIES
ARE "NOT" PART OF THE
ONE CALL SYSTEM. THEY
MUST BE CALLED
INDIVIDUALLY.



JOHNSON
ENGINEERING
— An Apex Company —

JOHNSON ENGINEERING, LLC.
2122 JOHNSON STREET
FORT MYERS, FLORIDA 33901
PHONE: (239) 334-0046
E.R. #642 & L.B. #642

REGISTERED PROFESSIONAL ENGINEER
FLORIDA LICENSE NO. 81414

JORDAN LEVI VARBLE, PE

DATE

SHEET NUMBER
C01

ABBREVIATIONS

AC	ACRE
ALT	ALTERNATE
APPROX.	APPROXIMATE
ASB	ASBESTOS
BM	BENCH MARK
BLDG	BUILDING
BOT	BOTTOM
CB	CATCH BASIN
CF	CUBIC FEET
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CIP	CAST IRON PIPE
CJ	CONSTRUCTION JOINT
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CV	CHECK VALVE
CF	CUBIC FOOT
CY	CUBIC YARD
CL	CENTER LINE
CLKG	CAULKING
CLF	CHAIN LINK FENCE
COL	COLUMN, COLOR
CONC	CONCRETE
CONST	CONSTRUCTION
CONT.	CONTINUOUS
CONTR	CONTRACTOR
CTRS	CENTERS
CJ	COPPER
CU, IN.	CUBIC INCH
DIA., Ø	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIST.	DISTANCE
DIP	DUCTILE IRON PIPE
DE	DRAINAGE EASEMENT
DWG	DRAWING
E	ELEVATION
EL/ELEV	ELEVATION
EQUIP	EQUIPMENT
EFSP	ELLIPTICAL REINFORCED CONCRETE PIPE
EX	EXISTING
FIN	FINISHED FLOOR
FT	FINISHED FLOOR ELEVATION
FDM	FOUNDATION
FIN	FINISH
FRP	FIBERGLASS REINFORCED PLASTIC
FT	FEET
G	GRAVEL
GI	GALVANIZED IRON
GPM	GALLONS PER MINUTE
GV	GATE VALVE
G	GAUGE
G.L.	GALLON
GR	GRADE
HDPE	HIGH DENSITY POLYETHYLENE
HOR	HORIZONTAL
HYD	HYDRANT
ID	INSIDE DIAMETER
IDD	IONA DRAINAGE DISTRICT
INV	INVERT
IRR	IRRIGATION
LAE	LAKE ACCESS EASEMENT
LCUE	LEE COUNTY UTILITY EASEMENT
LF	LINEAL FEET
LME	LAKE MAINTENANCE EASEMENT
LMT	LAKE MAINTENANCE TRACT
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MJ	MECHANICAL JOINT
MAX	MAXIMUM
MECH	MECHANICAL
MES	MITERED END SECTION
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
N	NORTH
NE	NORTHEAST
NW	NORTHWEST
NPW	NON POTABLE WATER
NTS	NOT TO SCALE
NUM/#	NUMBER
NOM	NOMINAL
NG	NATURAL GAS
OC	ON CENTERS
OCEW	ON CENTER EACH WAY
OD	OUTSIDE DIAMETER
PCF	POUNDS PER CUBIC FOOT
PSF	POUNDS PER SQUARE FOOT
PV	PLUG VALVE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
POLY, PE.	POLYETHYLENE
PAVT	PAVEMENT
PC	POINT OF CURVATURE
PGL	PROPOSED GRADE LINE
PLBG	PROPERTY LINE
PLWD	PLYWOOD
PW	POTABLE WATER
PT	POINT OF TANGENCY
PUE	PUBLIC UTILITY EASEMENT
PVI	POINT OF VERTICAL INTERSECTION
QUAN	QUANTITY
R	RADIUS
RD	ROAD
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
ROW	RIGHT OF WAY
RU	REUSE LINE
R/W	RIGHT OF WAY
S	SOUTH
SE	SOUTHEAST
SW	SOUTHWEST
SS	SANITARY SEWER
SAN	SANITARY
SCH	SCHEDULE
SECT	SECTION
SEW	SEWER
SH	SHEET
SPEC	SPECIFICATION
SQ	SQUARE
ST	STREET
STA	STATION
STL	STEEL
STD	STANDARD
SUR	SURFACE
SYM	SYMMETRICAL
TOE	TOE OF SLOPE
TOB	TOP OF BANK
THK	THICK
TEL	TELEPHONE
TEMP	TEMPERATURE
TRANS	TRANSFORMER
TYP	TYPICAL
UE	UTILITY EASEMENT
VERT	VERTICAL
W	WATER
WM	WATER MAIN
W/	WITH
W/O	WITHOUT
WD	WOOD
WT	WEIGHT
WV	WATER VALVE
WH	WALL HYDRANT

SYMBOLS

	GATE VALVE		IRRIGATION SERVICE (DOUBLE)
	TEE ASSEMBLY		IRRIGATION SERVICE (SINGLE)
	REDUCER		SEWER SERVICE (DOUBLE)
	BLOW OFF		SEWER SERVICE (SINGLE)
	FIRE HYDRANT		WATER SERVICE (DOUBLE)
	FIRE HYDRANT ASSEMBLY W/ GATE VALVE		WATER SERVICE (SINGLE)
	MITERED END SECTION		HEADWALL
	MANHOLE W/ NUMBER		DRAINAGE INLET (SEE PLAN FOR TYPES)
	PLUG VALVE		THROAT INLET
			FLARED END SECTION

HATCH PATTERNS

	WETLAND		EXISTING LAKE TO BE FILLED
	UPLAND BUFFER		PROPOSED LAKE
	UPLAND PRESERVE		LITORAL SHELF AREA
	INDIGENOUS AREA		COMPENSATING LITORAL PLANTING AREA
	NATURAL AREA		RIPRAP / GRAVEL
	FILTER MARSH		BRICK PAVERS
	EXISTING LAKE		

NOTE:
HATCH PATTERNS ARE FOR ILLUSTRATIVE PURPOSES
ONLY. ACTUAL HATCH PATTERNS ON DRAWING MAY
VARY IN SCALE & ANGLE

LINETYPES

	EXISTING	PROPOSED
RIGHT-OF-WAY LINE	---	---
CENTER LINE	---	---
LAKE MAINTENANCE EASEMENT	---	---
PUBLIC UTILITY EASEMENT	---	---
DRAINAGE EASEMENT	---	---
WETLAND BOUNDARY	---	---
FORCE MAIN	---	---
SANITARY SEWER	---	---
WATER MAIN	---	---
IRRIGATION MAIN	---	---
RE-USE MAIN	---	---
PERIMETER BERM	---	---
FENCE LINE	---	---
SILT FENCE	---	---
BULKHEAD	---	---
STRUCTURAL BUFFER	---	---

GENERAL NOTES:

- ELEVATIONS REFERENCE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88) WHICH LIES 1.17 FEET ABOVE THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29) AT THIS LOCATION.
- THE GENERAL NOTES MUST BE PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN AND MUST BE REFERRED TO BY THE CONTRACTOR. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL THE GENERAL NOTES AND ALL OF THE PLANS SPECIFICATION NOTES.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS INCLUDED WITHIN THE PLAN SET AND SHOULD NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS, FABRICATION/ORDERING OF PARTS AND MATERIALS AND START OF SITE WORK.
- JOHNSON ENGINEERING, LLC. IS NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY, JOB SITE SUPERVISION, OR ANYTHING RELATED TO THE SAME. JOHNSON ENGINEERING, LLC. IS NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS, AT ANY TIME.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, STANDARD PLANS (LATEST EDITION), LEE COUNTY DEVELOPMENT STANDARDS AND SPECIFICATIONS AND SANIBEL UTILITIES REQUIREMENTS.
- CONTRACTOR SHALL RETAIN, ON THE WORK SITE, COPIES OF ANY PERMITS NECESSARY FOR CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY REQUIRED DEWATERING PERMITS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY REQUIRED VEGETATION REMOVAL PERMITS.
- THE SITE CONTRACTOR SHALL BECOME FAMILIAR WITH THE GEOTECHNICAL REPORT IF ONE WAS PREPARED. THE CONTRACTOR SHALL COMPLY WITH ALL THE SITE PREPARATION AND OTHER SITE RELATED ITEMS, RECOMMENDATIONS AND PROCEDURES.
- THIS PROJECT WILL NOT ADVERSELY IMPACT ANY SURFACE WATER OR GROUNDWATER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF THE EXISTING STREETS ADJACENT TO THE PROJECT. ALL TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX 102-100 THRU 102-670, OR THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), (LATEST EDITION).
- CONTRACTOR IS REQUIRED TO OBTAIN FROM THE ENGINEER AND OWNER WRITTEN APPROVAL FOR ANY DEVIATIONS FROM THE PLANS AND/OR SPECIFICATIONS.
- EXISTING OFF-SITE DRAINAGE PATTERNS SHALL BE MAINTAINED DURING CONSTRUCTION.
- ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHOULD NOTIFY THE OWNER/ENGINEER WITHOUT DELAY.
- THE LOCATION OF EXISTING UTILITIES, PAVEMENT, VEGETATION, AND MISCELLANEOUS IMPROVEMENTS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
- CONTRACTOR SHALL NOTIFY THE CITY AND ENGINEER A MINIMUM OF 72 HOURS PRIOR TO ALL REQUIRED INSPECTIONS.
- CONTRACTOR TO PROVIDE SILT FENCE AND OTHER APPROPRIATE MEASURES TO AFFECT THE FILTRATION OF SURFACE WATER FLOWS AND TO PROVIDE EROSION PROTECTION DURING CONSTRUCTION ACTIVITIES. PROTECTION IS TO BE MAINTAINED DURING THE CONSTRUCTION PERIOD UNTIL DISTURBED SOILS HAVE BEEN STABILIZED WITH GRASS (FOR EXISTING GRASS AREAS), MANGROVE TREES (FOR EXISTING MANGROVE AREAS), OR SUITABLE EROSION PROTECTION TREATMENT.
- DURING CONSTRUCTION, GRATE INLET AND JUNCTION BOX OPENINGS SHALL BE COVERED WITH FILTER FABRIC (MIRAFI 140N OR APPROVED EQUAL) TO PREVENT DEBRIS AND FILL FROM FALLING INTO THE INLET.
- CONTRACTOR SHALL USE DESIGNATED CONSTRUCTION ENTRANCES AND STAGING AREAS FOR EMPLOYEES AND DELIVERY OF MATERIALS.
- CONTRACTOR SHALL CLEAR ALL EXCAVATION AND FILL AREAS AS SHOWN ON THE PLANS. ACTUAL LIMITS OF CLEARING MAYBE ADJUSTED IN THE FIELD BY OWNER OR ENGINEER.
- CONTRACTOR SHALL REMOVE ALL MUCK AND OTHER UNSUITABLE MATERIAL AS SHOWN ON THE PLANS. ALL MUCK AND OTHER WASTE MATERIAL EXCAVATED SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATION.
- CONTRACTOR SHALL PROMPTLY REPORT ALL FIELD CHANGES TO THE ENGINEER.
- EXISTING FACILITIES SHALL BE RESTORED TO A CONDITION EQUIVALENT TO THAT WHICH EXISTED PRIOR TO COMMENCING CONSTRUCTION, AT NO ADDITIONAL COST TO OWNER.
- ALL UNPAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE SODDED UNLESS NOTED OTHERWISE.

GENERAL NOTES (CONTINUED):

- THE CONTRACTOR SHALL SUBMIT A BATHYMETRIC SURVEY ON A FINAL SET OF RECORDED DRAWINGS WHICH SHALL BE DELIVERED TO THE ENGINEER.
- THE CONTRACTOR SHALL ASSURE COMPLIANCE WITH ANY OSHA, EPA, AND/OR OTHER FEDERAL OR STATE OF FLORIDA RULES, REGULATIONS OR OTHER REQUIREMENTS, AS EACH MAY APPLY.

SITE DEMOLITION:

- ANY SITE DEMOLITION IS BASED ON AVAILABLE INFORMATION PROVIDED TO ENGINEER AND MAY NOT COVER ALL ASPECTS OF THE PROJECT. INCLUDING BUT NOT LIMITED TO IRRIGATION LINES/SERVICES AND ELECTRICAL SERVICES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COVER ALL EXISTING INFRASTRUCTURE TO BE REMOVED IN THEIR DEMOLITION BUDGET.

EXISTING UTILITY NOTE:

- CONTRACTOR TO CONTACT "SUNSHINE 811" FOR LOCATES TWO BUSINESS DAYS BEFORE YOU DIG, 1-800-432-4770. STATE, COUNTIES, AND CITIES ARE NOT PART OF THE ONE CALL SYSTEM, THEY MUST BE CALLED INDIVIDUALLY.

ACCESSIBILITY DESIGN GUIDELINES:

- ALL ACCESSIBLE (A.K.A. ADA) COMPONENTS AND ACCESSIBLE ROUTES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM THE MOST STRINGENT OF: (A) THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. § 12101 ET SEQ. AND 42 U.S.C. § 4151 ET SEQ.); AND (B) ANY APPLICABLE LOCAL AND STATE GUIDELINES, AND ANY AND ALL AMENDMENTS TO BOTH, WHICH ARE IN EFFECT AT THE TIME OF CONSTRUCTION.

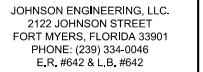
FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD DETAIL NOTES:

- ALL REFERENCES TO FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS ARE (LATEST EDITION).



REVISIONS	DATE
DESCRIPTION	
NO.	

DATE:	APRIL 2025
PROJECT NO.	20214111-009
FILE NO.	02-46-21
SCALE:	AS SHOWN



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FL License No. 81414



SANIBEL SLOUGH
LEE COUNTY, FLORIDA

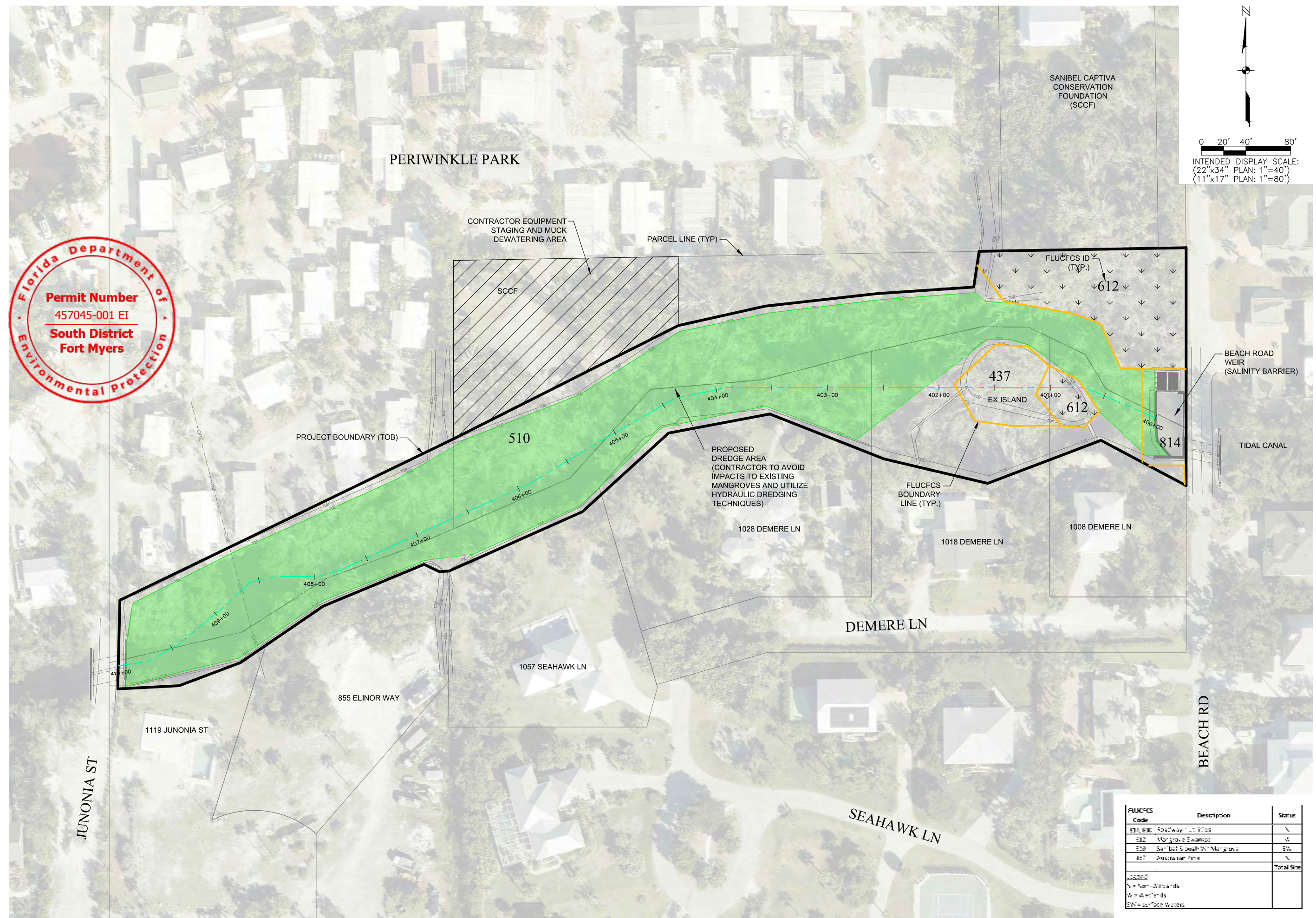
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PROJECT NO.	20214111-009
FILE NO.	02-46-21
SCALE:	AS SHOWN

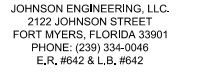
MASTER SITE PLAN
WITH FLUCFCS

SHEET NUMBER

C03



\\ftms01\Drawings\2021\20214111-009\Engineering\Drawings\DO\214111-009-MSP.dwg (C03 - MSP) Alex.Kerr Apr 03, 2025 - 3:51pm



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SANIBEL SLOUGH
LEE COUNTY, FLORIDA

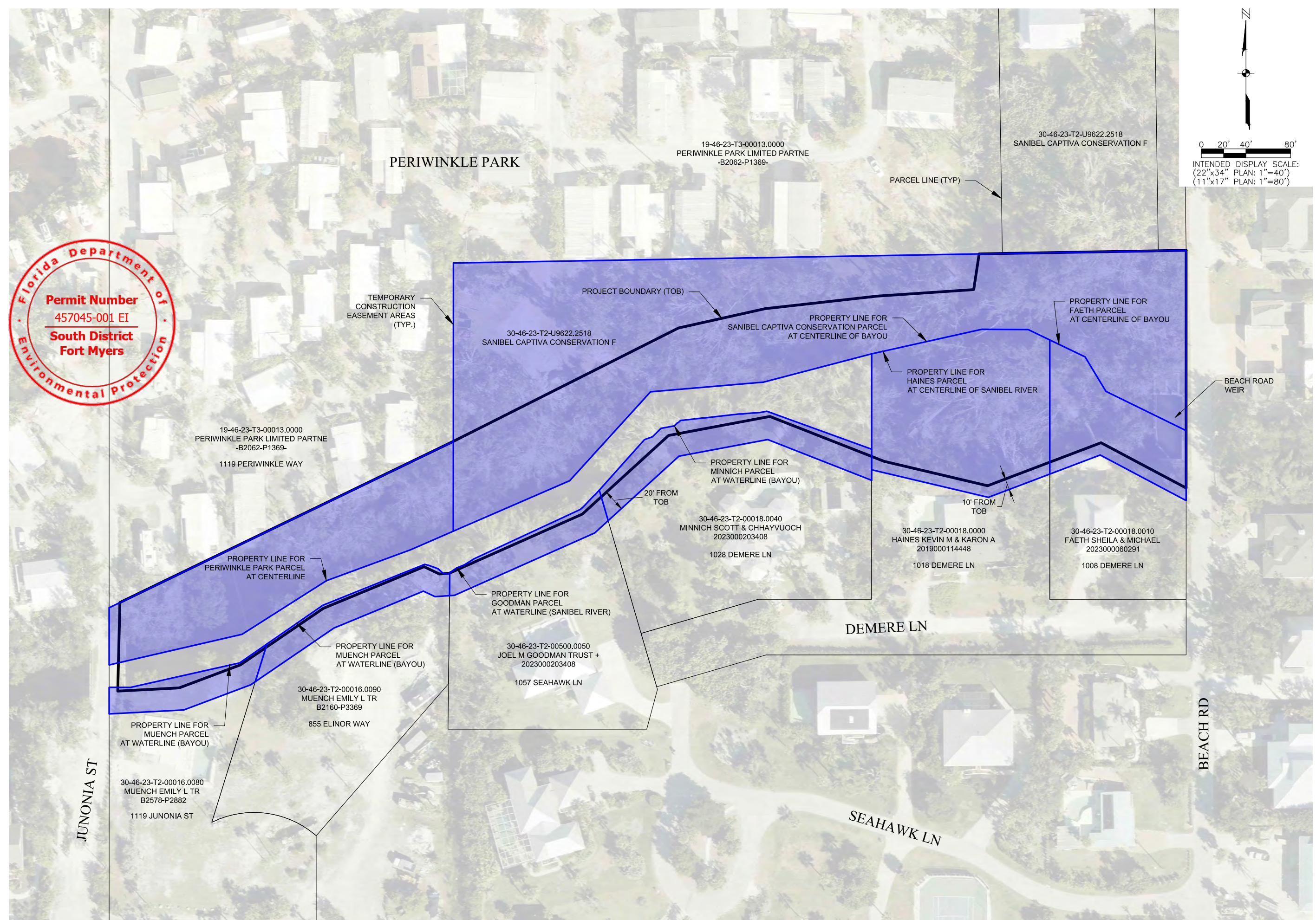
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NO.	DESCRIPTION	

DATE: APRIL 2025
PROJECT NO. 202141111-009
FILE NO. 02-46-21
SCALE: AS SHOWN

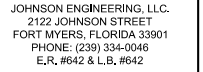
OWNERSHIP MAP

SHEET NUMBER

C04



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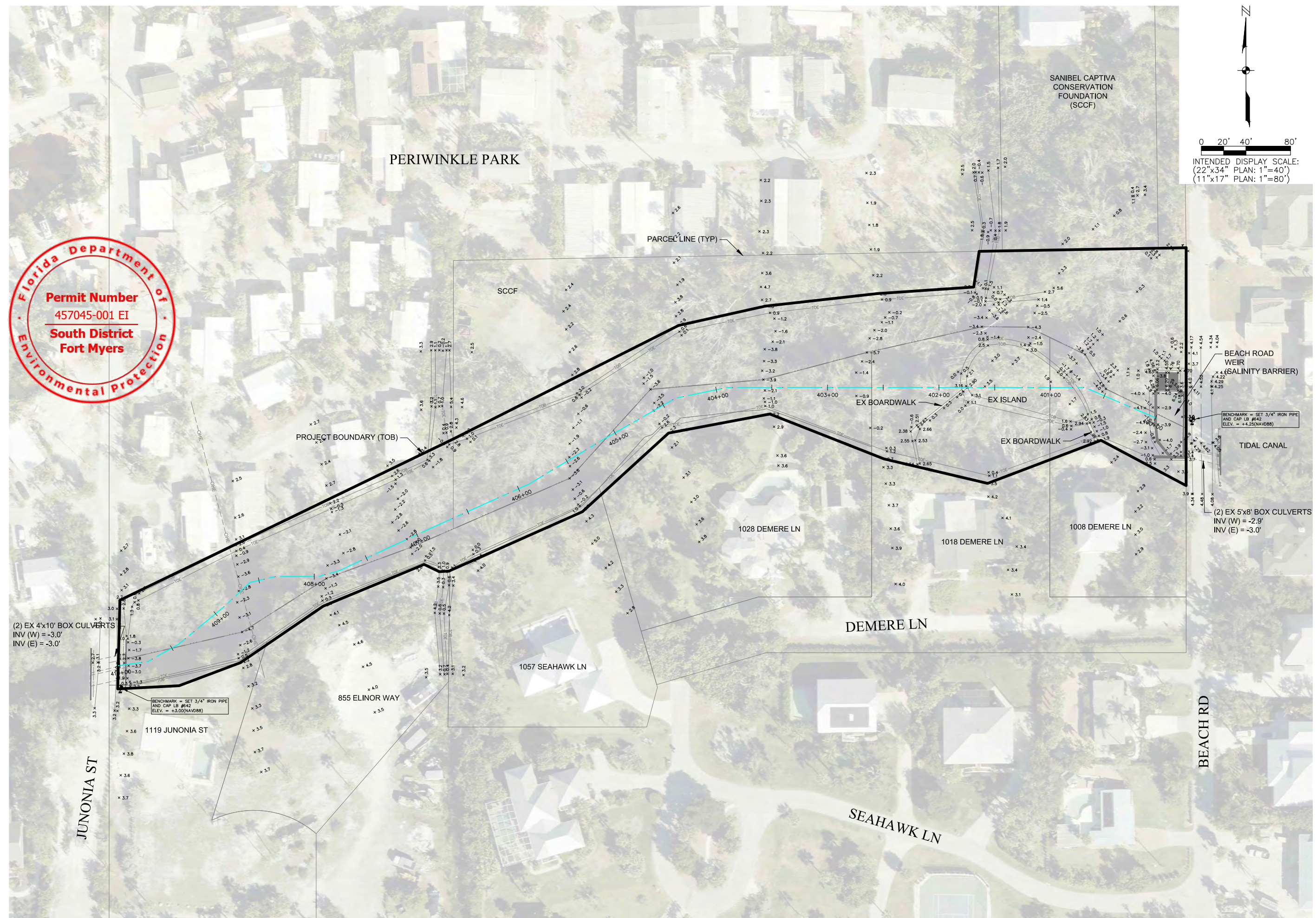
SANIBEL SLOUGH
LEE COUNTY, FLORIDA

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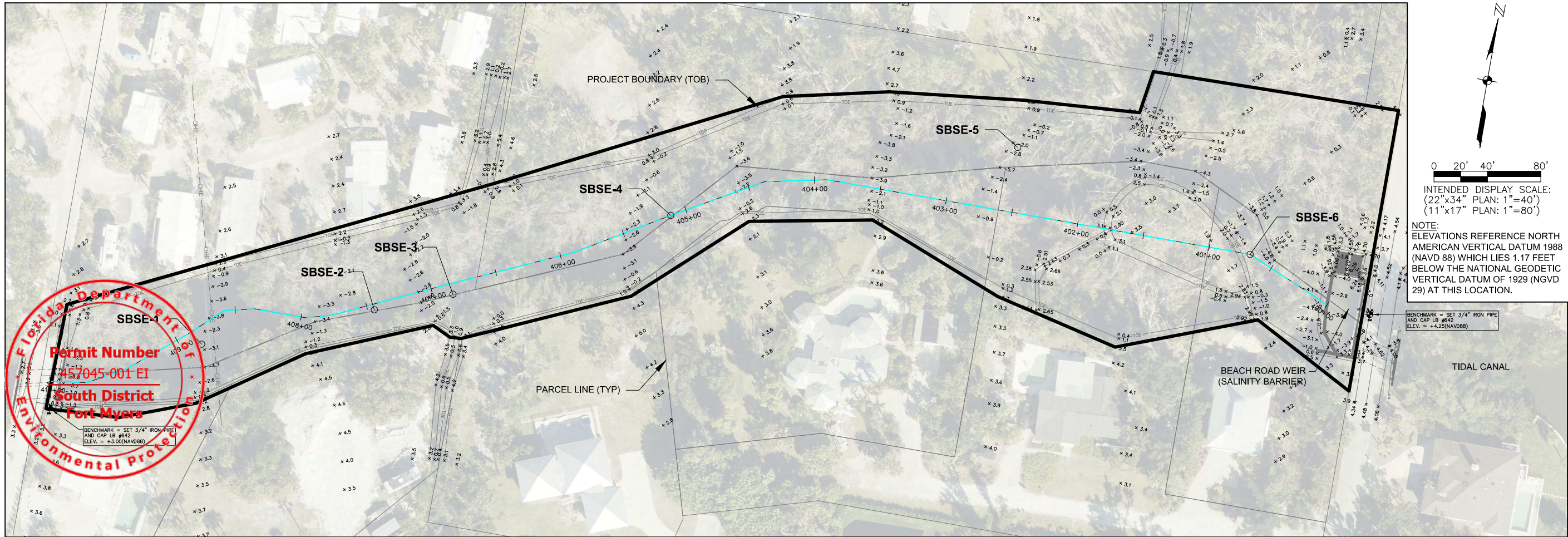
EXISTING
CONDITIONS &
DEMOLITION PLAN

SHEET NUMBER

C05



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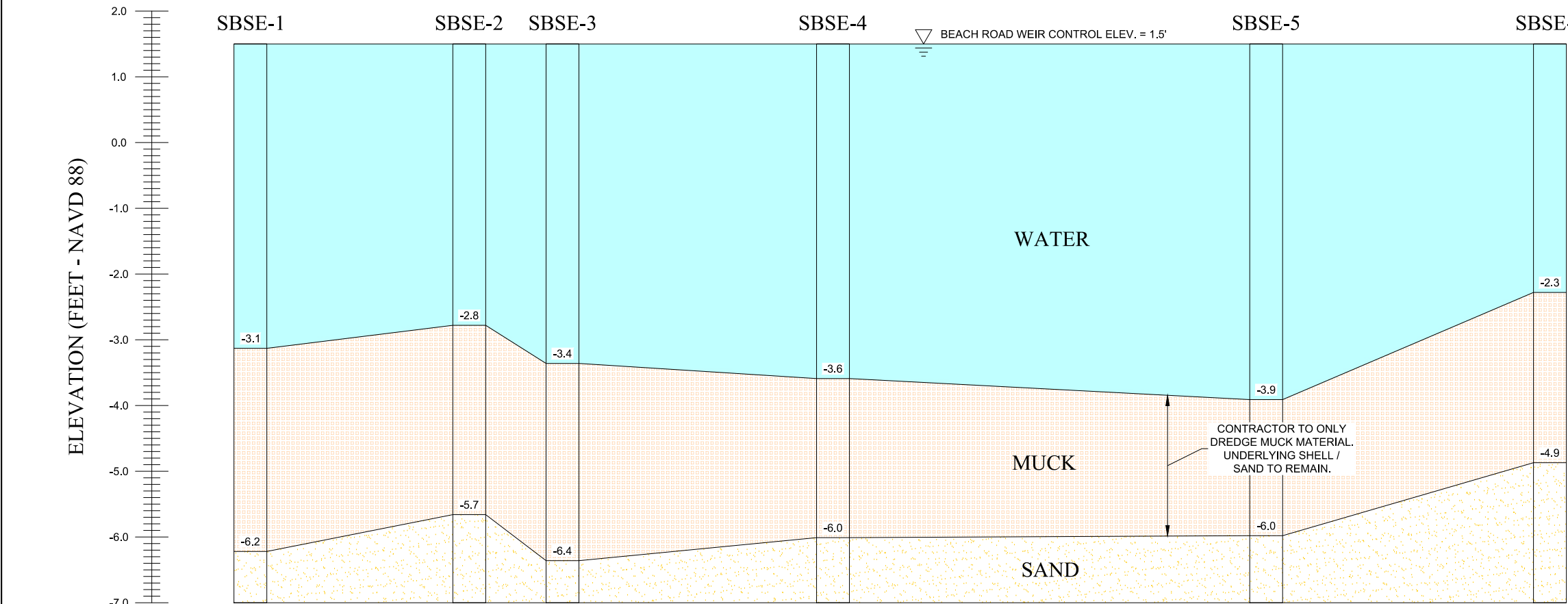
SANIBEL SLOUGH
LEE COUNTY, FLORIDA

REVISIONS	DESCRIPTION	DATE
NO.		
DATE:	APRIL 2025	
PROJECT NO.	20214111-009	
FILE NO.	02-46-21	
SCALE:	AS SHOWN	

SEDIMENT CORE
SAMPLE PROFILES

SHEET NUMBER

C07



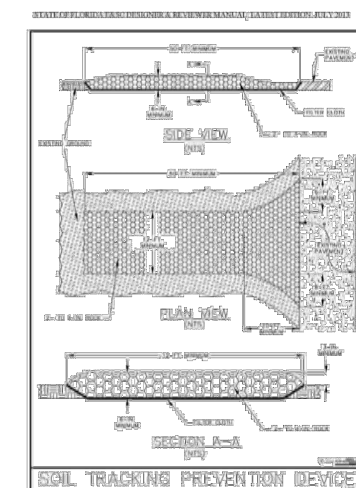
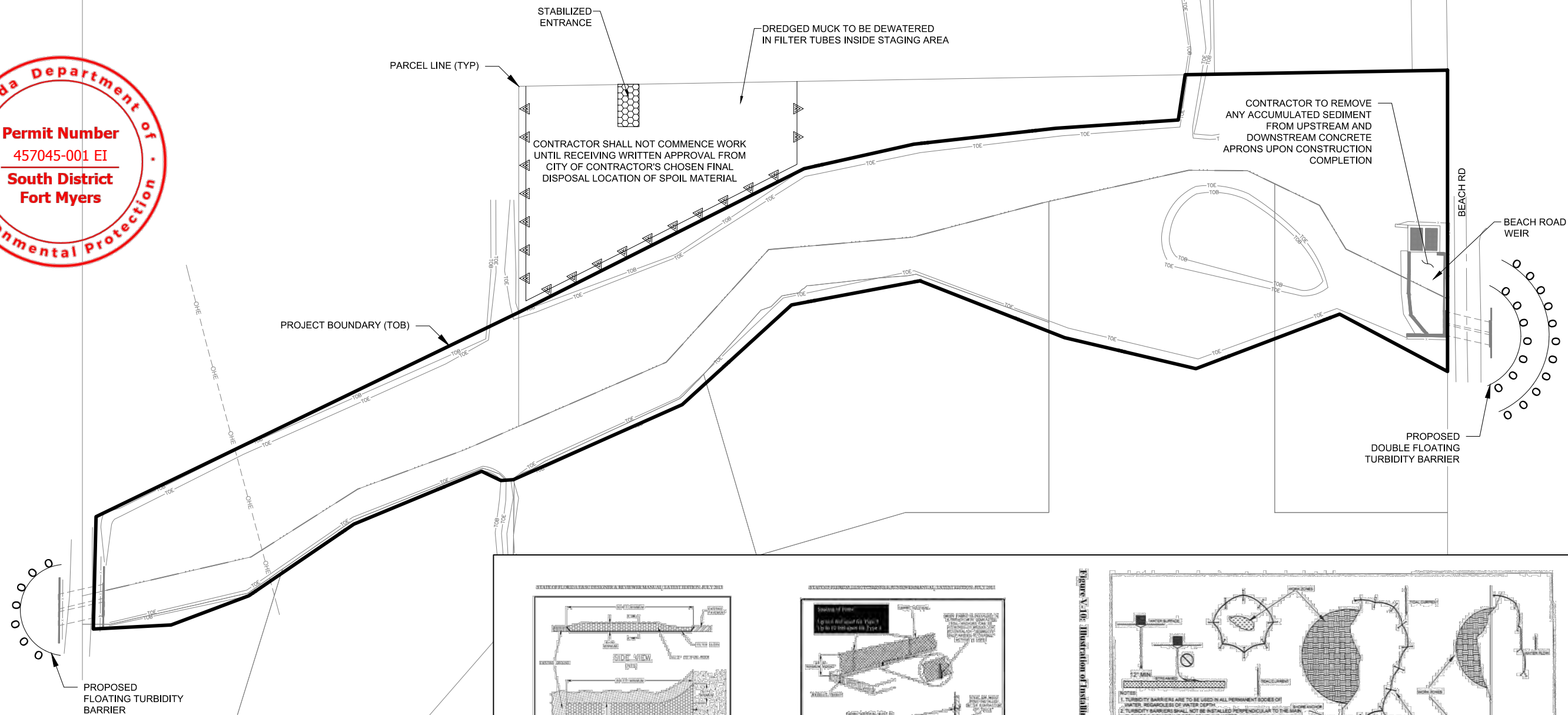
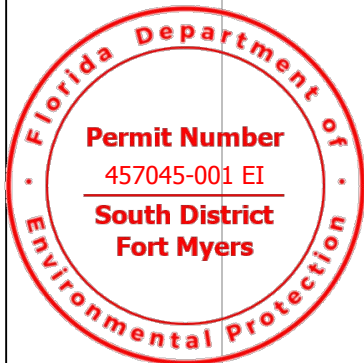


Figure N-19: Illustration of a Soil Tracking Prevention Device

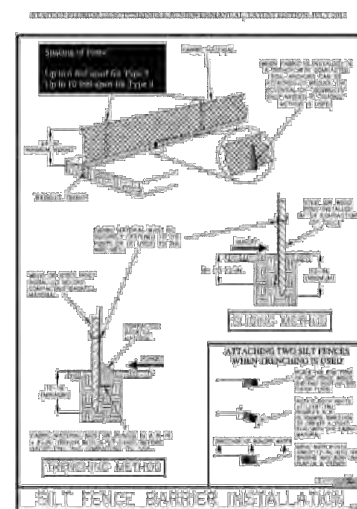


Figure 3-1 Illustration of a Silt Fence Barrier

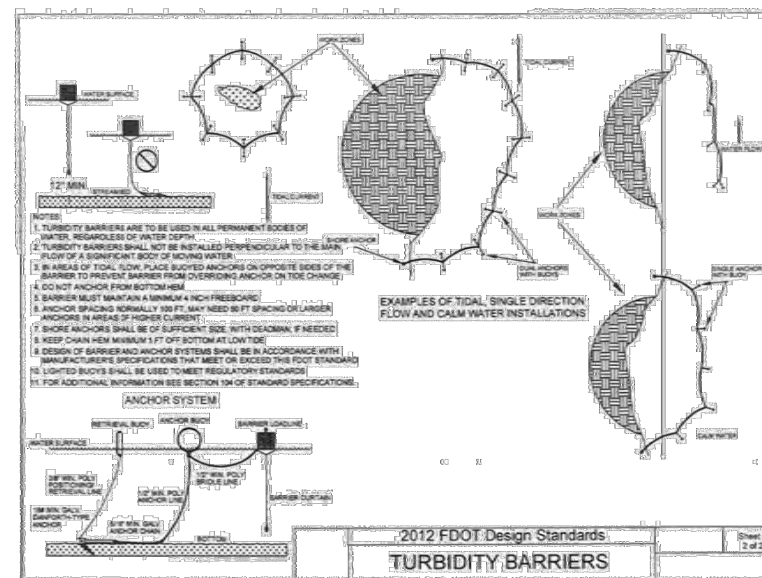
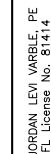


Figure X-103 Illustration of Installing a Floating Turbidity Barrier



SANIBEL SLOUGH
LEE COUNTY, FLORIDA

REVISIONS					
NO.	DESCRIPTION	DATE			

DATE:	APRIL 2025
PROJECT NO.	20214111-008
FILE NO.	02-46-2
SCALE:	AS SHOWN

EROSION CONTROL PLAN

SHEET NUMBER

C09



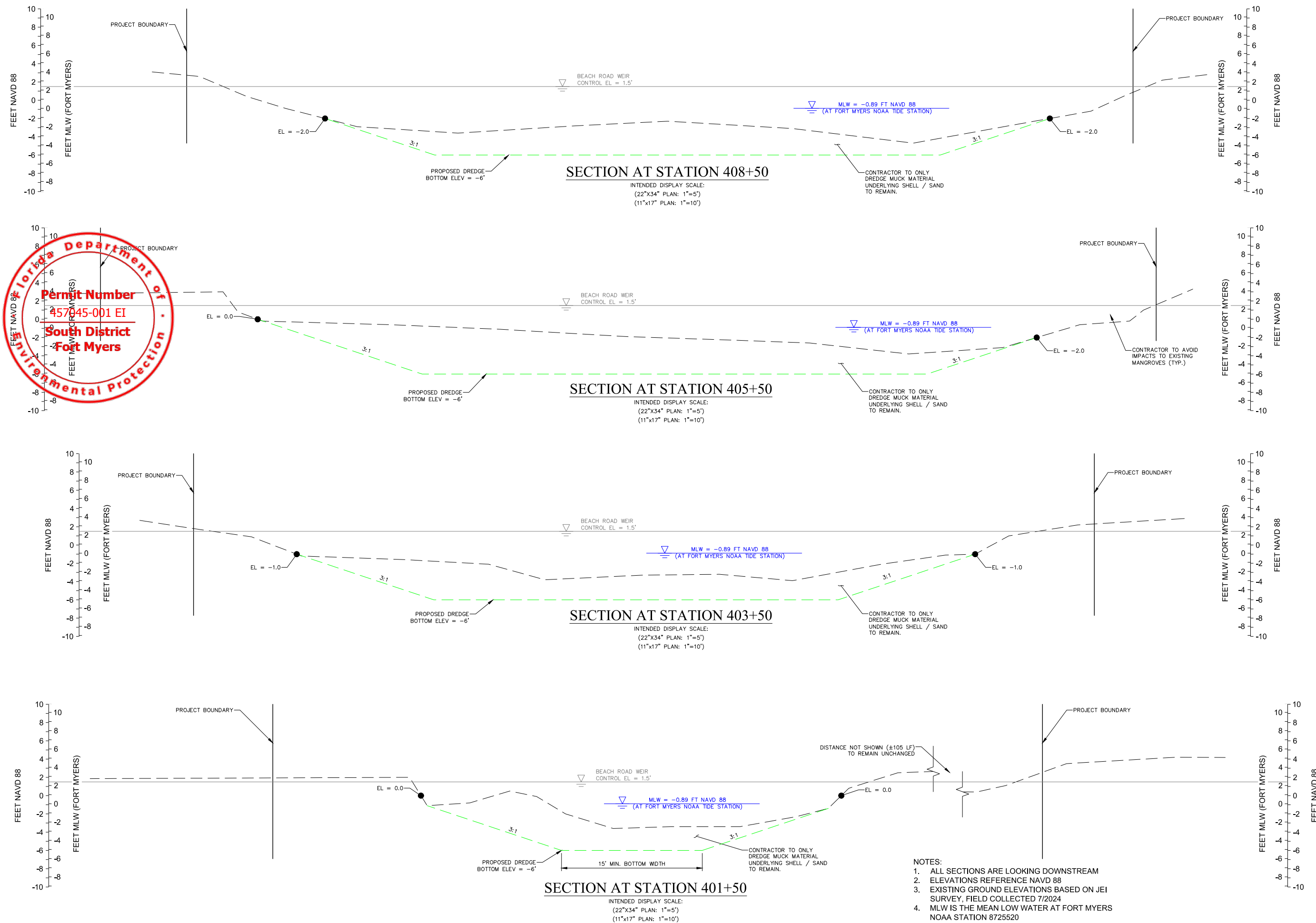
SANIBEL SLOUGH
LEE COUNTY, FLORIDA

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SECTIONS

SHEET NUMBER

C10



TURBIDITY CONTROL AND MONITORING

PART 1 - GENERAL

1.01 SCOPE.

- A. Summary of Work: The Contractor shall furnish all necessary equipment, labor, and materials and utilize appropriate means and methods of turbidity controls necessary and sufficient to ensure that the more restrictive and protective of the following are achieved at all times: (1) all applicable State water quality standards, as prescribed in Chapter 62-302.530, Florida Administrative Code (F.A.C.), incorporated by reference, (2) all applicable environmental permit conditions, as prescribed in the permits appended to the Contract, and (3) all stormwater and erosion control shall be in accordance with the Florida Department of Environmental Protection (FDEP) Florida Stormwater Erosion and Sedimentation Control Inspector's Manual.

For this project, hydraulic dredging will be utilized. The dredged material (slurry) will be pumped into a geotextile dewatering tubes in upland containment area using, where solids will be retained. The clarified return water will be discharged by overland flow from the dewatering area back into the Sanibel. The return water will be monitored and managed to ensure compliance with FDEP turbidity standards, and best management practices (BMPs) such as turbidity barriers and controlled discharge locations will be used as needed to minimize water quality impacts.

1.02 APPLICABLE STANDARDS AND PUBLICATIONS:

- A. Standards or Codes: The edition of the standards or codes of the organizations listed below in effect at the time of the advertisement for bids form a part of this Section to the extent referenced.
- B. The environmental protection rules and standards in the applicable sections of the Florida Administrative Code (F.A.C.) incorporated herein by reference are:
1. <https://floridadep.gov/ogc/ogc/content/rules>
 2. Quality Assurance – Chapter 62-160, F.A.C.
 3. Surface Water Quality Standards – Chapter 62-302, F.A.C.
 4. Generic Permits – Rule 62-621.300(2) & (4), F.A.C.
- C. Florida Department of Environmental Protection (FDEP)
1. Florida Stormwater Erosion and Sedimentation Control Inspector's Manual

D. Florida Department of Transportation (FDOT) (latest edition)

1. Standard Specification for Road and Bridge Construction - Sections 104-1, -2, -3, -4, -6 and -7

E. U.S. Army Corps of Engineers (USACE)

1.03 SUBMITTALS. The Contractor shall make submittals for the turbidity control and monitoring system in accordance with Section 01300 and the requirements herein.

- A. Provide details of the turbidity controls proposed.
- B. Provide proposed layout of the turbidity controls and monitoring system on the Site Plan.
- C. Obtain the monitoring data and prepare quarterly reports in accordance with Paragraph 3.03B.

1.04 QUALIFICATIONS.

- A. Not Applicable

1.05 INSPECTION COORDINATION.

- A. The Contractor shall provide access to the Work for the Owner, and Owner's Engineer as requested for inspection. The Contractor shall provide at least forty-eight (48) hours advance notice of its intention to begin new Work activities.

PART 2 - PRODUCTS

2.01 FABRIC.

- A. The Contractor shall provide floating turbidity barriers with fabric that is flexible and of sufficiently fine mesh to prevent passage of suspended material through the fabric. The floating turbidity barriers shall extend to within a foot of the bottom of the river except in the areas with the potential for the presence of manatees the barriers shall be two (2) feet above the bottom.

2.02 FLOATS.

- A. The Contractor shall provide floats for the turbidity barriers of sufficient buoyancy to prevent the top of the barrier from submerging under any water and wind conditions. If the top of the barrier becomes submerged for any reason, the Contractor shall suspend construction operations until the condition is corrected.

2.03 ANCHORS AND WEIGHTS.

- A. The Contractor shall provide and maintain an anchor system to secure the turbidity barrier in position. The Contractor shall attach weights to the barrier as necessary to keep the fabric at an angle to the vertical of thirty (30) degrees or less. Fabric material shall not be attached to the canal bottom.

2.04 UPLAND CONTAINMENT.

- A. The Contractor shall provide a return water management system suitable for hydraulic dredging, including geotextile tubes. The system shall be designed to retain suspended solids prior to return water discharge. The return water outfall shall include energy dissipation and vegetated buffers where applicable to reduce erosion and turbidity.

PART 3 - EXECUTION

3.01 TURBIDITY BARRIERS.

- A. The Contractor shall install and maintain the turbidity barriers as noted in the Construction Plans and where necessary to maintain turbidity releases at or below the permit compliance levels. Turbidity barriers shall be installed prior to any backfilling, clearing and grubbing, dredging, or excavation and maintained in place until construction is complete and turbidity from construction has dissipated. All barriers shall be adequately marked and appropriate signage erected to identify them as obstructions to navigation.
- B. The 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. The barriers must not impede manatee movement.
- C. The applicable U.S. Army Corps of Engineers in-water work protection guidelines for the endangered West Indian Manatee incorporated herein by reference are: http://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/endangered_species/Manatee/2011_StandardConditionsForIn-waterWork.pdf. Any rips or tears that occur in the turbidity barrier material during use shall be repaired or replaced immediately by the Contractor at its expense. Rips or tears that occur in the turbidity barrier material in use that are not repaired or replaced immediately by the Contractor will result in a suspension of dredging operations, and shall require repairs and replacements as a prerequisite to the resumption of Work.
- D. The Contractor shall keep in place and maintain all barriers until the Work is complete (construction areas stabilized with vegetation) and

turbidity levels return to the background levels based on the monitoring results. Upon completion of use, the Contractor shall remove the turbidity barriers and associated items to an off-site location at its own expense.

- E. The Contractor shall conduct its operations at all times in a manner that minimizes turbidity. The Contractor is required to conform to the State Water Quality standards as prescribed in Chapter 62-302.530, F.A.C., and to meet the special requirements of any environmental permits that have been issued.
- F. The turbidity controls shall be inspected by the Contractor every work day, after every rainfall event of 0.5 inches or greater in a twenty-four (24) hour period, and after every extreme weather event that could dislodge or damage the turbidity controls, to assure that the turbidity controls remain properly installed, undamaged, and fully functional at all times.
- G. The Contractor shall ensure that all return water meets turbidity compliance standards prior to discharge.

3.02 EROSION CONTROL.

- A. The Contractor shall prevent and control erosion, sedimentation and water pollution as per the FDOT Specification Sections 104-1, -2, -3, -4, -6 and -7 and FDEP regulations and permit conditions.

3.03 MONITORING.

- A. The Contractor shall conduct and record the results of turbidity monitoring appropriate to the conditions and at the locations, times, and frequencies specified below. An FDEP approved Turbidity Monitoring Log is attached (Appendix A) for the Contractor's use.
 - 1. Background Monitoring Location: At least one hundred (100) feet (or as specified in the applicable environmental permit) upstream of any construction activities that may generate turbidity within a canal or conveyance feature outside the construction area, in the middle of the canal, at mid-depth in the water column, and outside of any visible turbidity plume.
 - 2. Compliance Monitoring Location: Located in the canal or water body adjacent to each Work area, downstream or radial to the construction or maintenance work area, directly outside of the turbidity barriers, and within the densest portion of any visible plume.
 - 3. Sampling Time:

- a. During Activities or Environmental Conditions that Can Generate Construction-Related Turbidity: Water samples for the turbidity measurement shall be collected beginning no sooner than one (1) hour after and no later than two (2) hours after construction activity commences (or as specified in the applicable environmental permit) and every four (4) hours thereafter until the work day ends. Water samples shall be collected at the same time(s) every work day according to this schedule. Any substantial deviation from this schedule must be approved by the Owner, unless otherwise compelled by force majeure, in which case, an explanation must be provided verbally as soon as possible and in writing within forty-eight (48) hours of the deviation.
 - b. During Activities and Conditions That Cannot Generate Construction-Related Turbidity: Once daily at 10:00 AM or as specified in the applicable environmental permit.
4. Equipment: The turbidity monitoring equipment shall meet the Specifications and be calibrated, maintained, repaired, and replaced according to the methods, procedures, and frequencies set forth in Chapter 62-160, F.A.C.
5. Records Management: The individual conducting the turbidity monitoring shall transcribe the readings to the approved Daily Turbidity Monitoring Log form (Appendix A) and sign and date the form at the close of each monitoring day. The notebook containing the signed and dated daily turbidity monitoring log forms shall be accessible at the construction Site during the work day.
- B. The Contractor shall submit the daily monitoring data (Turbidity Monitoring Log forms), to the Owner and Owner's Engineer. Documents submitted shall contain the following information:
 1. Permit number;
 2. Project name;
 3. Dates of sampling and analysis;
 4. A statement describing the methods used in collection, handling, storage and analysis of the samples;
 5. A map indicating the sampling locations; and
 6. A statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data.
- C. The Contractor shall submit monitoring reports that also include the

following information for each sample that is taken:

1. Date and time of the day samples were taken;
2. Depth of the water body;
3. Depth of the sample;
4. Antecedent weather conditions;
5. Water level stage; and
6. Direction of flow.

3.04 EXCEEDANCES OF WATER QUALITY STANDARDS

- A. If at any time, monitoring reveals the turbidity level, at the compliance sampling station is greater than 29 NTUs above the corresponding background sample in Class I or III receiving waters or greater than 0 NTU above background samples in receiving waters classified as OFW (Outstanding Florida Waters), construction activities shall cease immediately and not resume until corrective measures have been taken and turbidity has returned to an acceptable level. Turbidity violations and corrective measures shall be documented in the monitoring reports.

3.05 HYDRAULIC DREDGING

A. The Contractor shall monitor return water discharged from the upland containment area. Compliance sampling shall occur at the point where return water reenters surface waters, consistent with FDEP requirements. The monitoring location shall be downstream of turbidity barriers and in the densest part of any visible plume. Return water shall be sampled no sooner than one (1) hour after dredging begins and every four (4) hours thereafter. Any exceedance of 29 NTUs above background shall require immediate cessation of dredging, corrective action, and documentation.

B. Any rips or tears that occur in the geotextile dewatering tubes during use shall be repaired or replaced immediately by the Contractor at its expense. Rips or tears that are not repaired or replaced immediately will result in the suspension of dredging operations and shall require full restoration of the tubes as a prerequisite to the resumption of Work.

End of Section

APPENDIX A

DAILY TURBIDITY MONITORING LOG

Multiple work areas that may contribute to turbidity in receiving waters must be monitored separately.

A Site map depicting sampling locations must accompany the quarterly turbidity monitoring reports.

Project Name:	Permit No.:
Collector Name:	Collection Date:
Meter/Sonde Identification No.	

Water Observations	Weather Observations
Water Level Stages	Temperature:
Direction of Flow	Conditions:
Water Depth	

Activity Taking Place During Sampling	Yes	No
Excavation or Filling within 50 ft radius of surface waters or wetlands?		
Please describe:		
Other In-Water Work? (e.g., dewatering; installing piling or forms; injecting concrete; sand blasting; painting)		
Please describe:		
Other Activity? (e.g., materials transfer; washdown; interim stabilization)		
Please describe:		

Turbidity Monitoring Data						
Background Location Description:	Background	Compliance	Background	Compliance	Background	Compliance
Compliance Location Description:						
	A.M. Mid-Depth		Mid-Day Mid-Depth		P.M. Mid-Depth	
Collection Time						
Analysis Time						
Turbidity (NTU)						
Did Compliance Sample exceed 29 NTU's above Background Sample?	<input type="checkbox"/> Yes* <input type="checkbox"/> No		<input type="checkbox"/> Yes* <input type="checkbox"/> No		<input type="checkbox"/> Yes* <input type="checkbox"/> No	
*If the 29 NTU limitation is exceeded, please describe cause and corrective actions taken on reverse side of this form. Immediately stop activities contributing to turbidity and notify the SFWMD Construction Manager and Permit Compliance Staff.						
Explanation of gaps in sampling activity (e.g., rained out, phased activity, etc.):						
Construction activity complete and slopes stabilized? <input type="checkbox"/> Yes <input type="checkbox"/> No						

Statement of Authenticity
I certify this test was performed as required by Chapter 62-160, F.A.C., conducted with an approved instrument calibrated in accordance with the appropriate FDEP-SOPs. The results are complete and

