



REPLY TO  
ATTENTION OF

CESAJ-RD  
West Permits Branch  
Tampa Section

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT  
701 SAN MARCO BOULEVARD  
JACKSONVILLE, FLORIDA 32207-8915

January 24, 2020

## ***PUBLIC NOTICE***

Permit Application No. SAJ-2019-00684(SP-JLC)

TO WHOM IT MAY CONCERN: The Jacksonville District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403) as described below:

APPLICANT: Madeira Beach Town Center, LLC  
c/o Mr. Kevin Bowden  
286 107<sup>th</sup> Ave, Ste 300  
Treasure Island, FL 33706

WATERWAY AND LOCATION: The project would affect waters of the United States associated with Boca Ciega Bay. The project site is located at an existing marina in a canal adjacent to 202 150<sup>th</sup> Avenue, in Section 09, Township 31 South, Range 15 East, Madeira Beach, Pinellas County, Florida 33708.

Directions to the site are as follows: From I-275 South, take exit 25 for 38<sup>th</sup> Ave N. Keep right at the fork, follow signs for US-19 and merge onto 38<sup>th</sup> Ave N. Turn right onto US-19 ALT N/Tyrone Blvd N. Use the left two lanes to take the FL-666 exit toward Madeira Beach/Redington Beach. Merge onto 150<sup>th</sup> Ave/Tom Stuart Causeway. The project site is on the right in the canal adjacent to 410 150<sup>th</sup> Ave.

APPROXIMATE CENTRAL COORDINATES: Latitude: 27.803418°  
Longitude: -82.799518°

### **PROJECT PURPOSE:**

Basic: Navigation/improved boating access

Overall: Increase the navigable depth and reconfigure watercraft access structures at the Madeira Beach Town Center Marina.

EXISTING CONDITIONS: The project is located at an existing marina in a canal in Boca Ciega Bay. The marina currently supports 43 vessel slips. The shoreline is armored with a seawall. A boat basin in the southwest corner of the marina was previously filled without a permit. The applicant's environmental consultant performed a benthic resource survey of the project area. Mangroves were observed along the

shoreline growing out of the seawall. Oyster beds were observed abutting the existing seawall with small patches of oysters observed waterward from the seawall. Approximately 1,250 square feet of seagrass was observed. Species observed consist of turtle grass (*Thalassia testudinum*) and manatee grass (*Syringodium filiforme*). Seagrass presence was sparse throughout the delineated area. Approximately 3,250 square feet of rhizophytic macroalgae was observed in patches in shallow waters. The dominant species of macroalgae was green feather *Caulerpa*. Other macroalgae species were drifting species and not documented. Three colonies of hard coral (*Montastraea* sp., *Siderastrea* sp. and *Agaricia* sp.) and 9 soft corals (sea whips) (*Leptogorgia virgulata*) were also observed attached to the substrate.

**PROPOSED WORK:** The applicant seeks authorization to remove the existing dock structures (2,274 square feet of structures supporting 43 permanent slips); reconfigure and construct new docking structures totaling 3,846 square feet and supporting 43 permanent slips and 5 transient slips; and maintenance dredge an area of 0.65 acre (1,045 cubic yards) of silt/sand from the slip areas to a depth of -4.2 feet mean low water. This application also seeks after-the-fact authorization for the filling of a 700 square foot boat basin (60 cubic yards).

Mechanical dredging using a track hoe is proposed. The dredged material will be loaded into a container on a barge and transferred to a temporary dewatering area in an adjacent parking lot before being loaded into sealed trucks and disposed of in a local landfill.

**AVOIDANCE AND MINIMIZATION INFORMATION** – The applicant has provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment:

The applicant will dredge to the minimum depth necessary. No dredging will occur within five feet of the seawall. The applicant will avoid the area which supports seagrass growth. No work and no mooring will take place in this location. The applicant proposes to relocate the hard and soft corals to a resource recipient area in the southwest corner of the canal. The applicant proposes to conduct semi-annual monitoring and maintenance events to ensure the success of the translocated species for a period of three years.

**COMPENSATORY MITIGATION** – The applicant has provided the following explanation why compensatory mitigation should not be required:

The applicant has indicated that on-site avoidance and relocation of resources is satisfactory mitigation in this case and no additional compensatory mitigation should be required.

**CULTURAL RESOURCES:** The Corps is not aware of any known historic properties within the permit area. By copy of this public notice, the Corps is providing information for review. Our final determination relative to historic resource impacts is subject to

review by and coordination with the State Historic Preservation Officer and those federally recognized tribes with concerns in Florida and the Permit Area.

#### ENDANGERED SPECIES:

The Corps determined the proposed project may affect, but is not likely to adversely affect smalltooth sawfish (*Pristis pectinata*), green sea turtles (*Chelonia mydas*), loggerhead sea turtles (*Caretta caretta*), Kemp's ridley sea turtles (*Lepidochelys kempi*), leatherback sea turtles (*Dermochelys coriacea*) and hawksbill sea turtles (*Eretmochelys imbricata*). The Corps evaluated the proposed work utilizing the National Marine Fisheries Service (NMFS)—Jacksonville District's Programmatic Biological Opinion (JaxBO) dated November 20, 2017. The Corps has programmatic concurrence with this determination pursuant to the JaxBO and no individual concurrence is required.

The Corps determined the project may affect, but is not likely to adversely affect the West Indian manatee (*Trichechus manatus*). The Corps will request informal concurrence with this determination from the U.S. Fish and Wildlife Service by separate letter.

**ESSENTIAL FISH HABITAT (EFH):** This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery Conservation and Management Act 1996. The applicant's proposal involves the on-site translocation of hard and soft corals, and avoidance of seagrass and mangroves. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries in Boca Ciega Bay or the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

**NOTE:** This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program. The jurisdictional line has not been verified by Corps personnel.

**AUTHORIZATION FROM OTHER AGENCIES:** Water Quality Certification may be required from the Florida Department of Environmental Protection and/or one of the state Water Management Districts.

**COMMENTS** regarding the potential authorization of the work proposed should be submitted in writing to the attention of the District Engineer through the Tampa Permits Section, 10117 Princess Palm Avenue, Suite 120, Tampa, FL 33610 within 21 days from the date of this notice.

The decision whether to issue or deny this permit application will be based on the information received from this public notice and the evaluation of the probable impact to

the associated wetlands. This is based on an analysis of the applicant's avoidance and minimization efforts for the project, as well as the compensatory mitigation proposed.

QUESTIONS concerning this application should be directed to the project manager, Jessica Cordwell, in writing at the Tampa Permits Section, 10117 Princess Palm Avenue, Suite 120 Tampa, Florida 33610, by telephone at (813)769-7067, by fax at (813)769-7061, or by electronic mail at [Jessica.L.Cordwell@usace.army.mil](mailto:Jessica.L.Cordwell@usace.army.mil).

ADDITIONAL INFORMATION: After reviewing all available information pertaining to the completed work, the Department of the Army has not recommended legal action at this time. Final determination regarding legal action will be made after review of the project through the permit procedure.

IMPACT ON NATURAL RESOURCES: Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, aesthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act or the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

The US Army Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

COASTAL ZONE MANAGEMENT CONSISTENCY: In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan.

REQUEST FOR PUBLIC HEARING: Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.



# MADEIRA BEACH TOWN CENTER LLC MARINA RESTORATION PERMIT PLANS

MADEIRA BEACH, PINELLAS COUNTY, FLORIDA  
TOWNSHIP: 31S, RANGE 15E, SECTION 9

## SHEET INDEX

### PROJECT INFORMATION

- 1. COVER SHEET & LOCATION MAP
- 2. SPECIFICATIONS
- 3. EXISTING CONDITIONS

### DREDGE

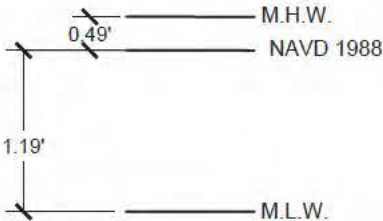
- 4. MARINA DREDGE PLAN
- 5. DREDGE SECTIONS STATIONS 0+00-3+00
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- 10. FLOATING DOCK DETAILS (TYPICAL)
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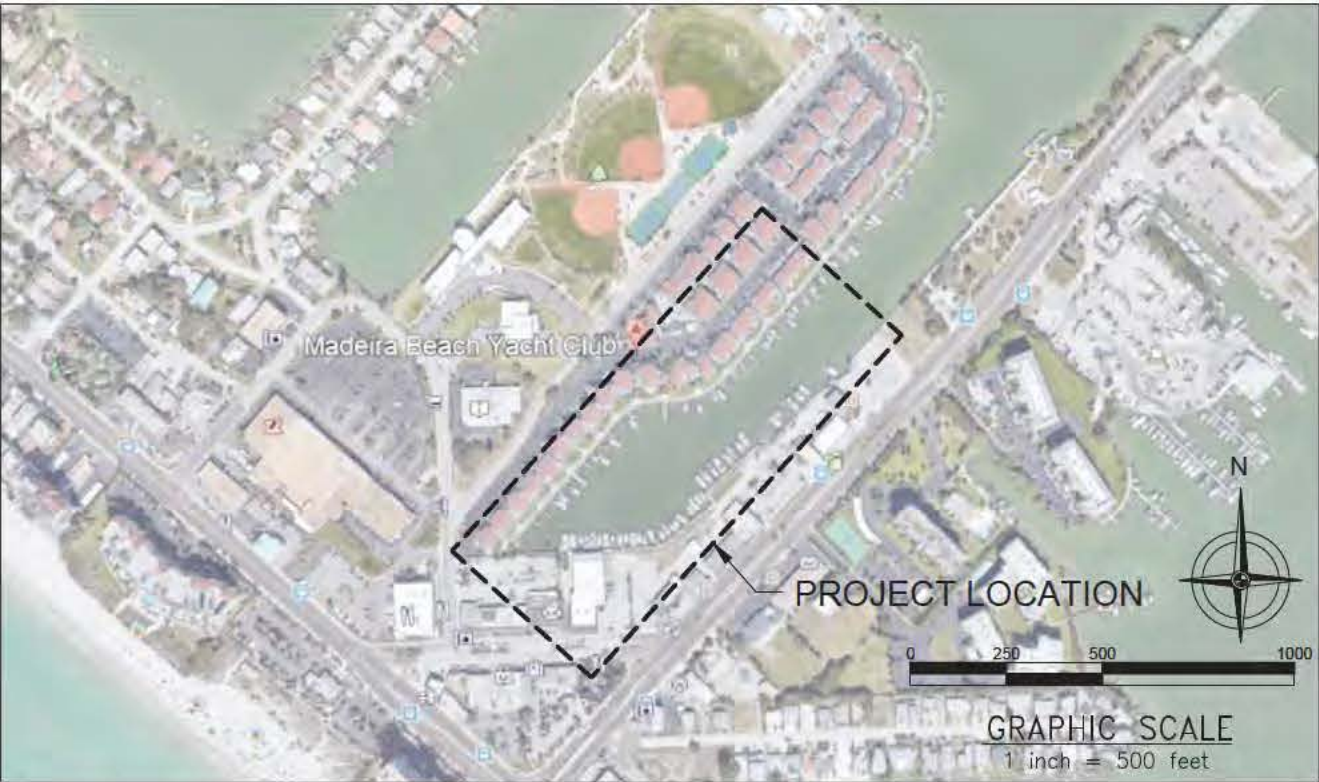
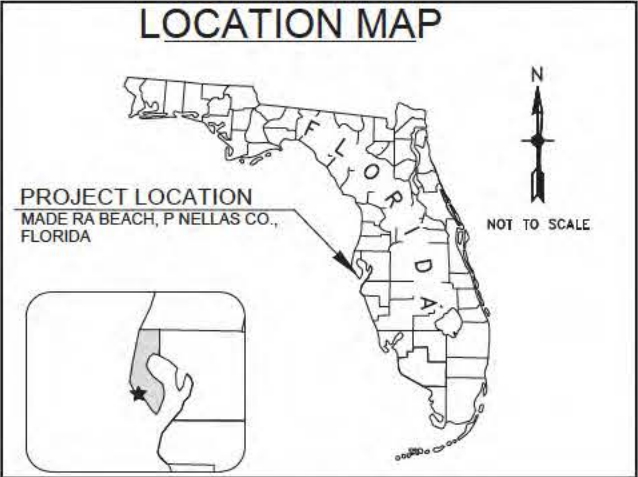
- 12. RESOURCE SURVEY
- 13. RESOURCE MITIGATION

### TIDE INFORMATION



RELATIONSHIP BETWEEN NAVD 1988, ,  
MEAN HIGH WATER, MEAN LOW  
WATER TIDAL DATUM (1983-2001  
EPOCH)

NOTE:  
1. TIDE INFORMATION OBTAINED FROM TIDE STATION I.D 6574  
BOCA CIEGA BAY, MADEIRA BEACH, FLORIDA.



PROJECT LOCATION  
202 150TH AVE, MADEIRA BEACH, FL 33708

- NOTES:
- 1. COORDINATES SHOWN ARE IN FEET BASED ON THE NORTH AMERICAN DATUM OF 1983, WEST ZONE (NAD83)
  - 2. ELEVATIONS SHOWN ARE IN FEET BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
  - 3. THE VERTICAL DATUMS ESTABLISHED BY DEP FOR THIS AREA ARE: MEAN HIGH WATER ELEVATION +0.49' NAVD, MEAN LOW WATER ELEVATION OF -1.19 NAVD, BASED ON LABINS TIDE INTERPOLATION POINT #6574.
  - 4. NOTE: THESE PERMIT DRAWINGS SHALL NOT BE CONSIDERED VALID FOR CONSTRUCTION PURPOSES UNLESS SIGNED AND SEALED BY:

JOSEPH T. FOSTER, P.E.  
FL LIC# 79708



**FOSTER CONSULTING**  
FL PROFESSIONAL ENGINEER NO. 79708  
DELAWARE LIC. # 18618 NJ LIC.# 24GE05181200  
P: (727) 821-1949  
WWW.JFOSTERCONSULTING.COM  
P.O. BOX 7370, ST. PETERSBURG, FL 33734

DATE:	10-17-19	FILE NAME:	41718
DRAWN BY:	NSN	SHEET:	1 OF 13
CHKD BY:	JTF	REVI:	
SCALE:	AS NOTED		

COVER SHEET &  
LOCATION MAP



202 150TH AVENUE,  
MADEIRA BEACH, FL



1 - GENERAL SCOPE OF WORK

1-A LOCATION OF WORK: CITY OF MADEIRA BEACH  
MADEIRA BEACH YACHT CLUB  
202 150th AVENUE  
MADEIRA BEACH, FL 33708  
LAT: 24° 26' 00.84" N / LONG: 82° 32' 42.02" W

1-B THE WORK CONSISTS OF FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, AND PERFORMING ALL TASKS NECESSARY FOR THE REMOVAL OF EXISTING DOCK AND MOORING STRUCTURES (43 WET SLIPS) AND INSTALLATION OF (23) 3' WIDE X 36' LONG FINGER PIERS WITH MOORING PILES AND FLOATING TRANSIENT DOCKS (48 WETS SLIPS). DREDGING WILL BE REQUIRED TO REACH ADEQUATE MOORING DEPTHS IN AREAS DESIGNATED TO AVOID EXISTING SUBMERGED RESOURCES. LIMITS AND DEPTH OF DREDGE TO BE PER THE PLANS WITH THE LANDWARD DREDGE BOUNDARY OFFSET 5' FROM THE EXISTING SEAWALL (SEE 2-I FOR FURTHER DREDGE DETAILS).

2-DREDGING

2-A. TURBIDITY WILL BE MINIMIZED FOR BOTH MAGNITUDE AND DURATION TO THE MAXIMUM EXTENT PRACTICABLE.  
2-B. TURBIDITY AT THE OUTSIDE EDGE OF THE PROJECT AREA SHALL NOT EXCEED FEDERAL AND STATE WATER STANDARDS.  
2-C. MANAGEMENT PRACTICES AND SUITABLE TECHNOLOGY ARE IMPLEMENTED FOR ALL STATIONARY INSTALLATIONS INCLUDING THOSE CREATED FOR DRAINAGE, FLOOD CONTROL, OR BY DREDGING OR FILLING, AND THERE IS NO ALTERNATIVE TO THE PROPOSED ACTIVITY, INCLUDING THE ALTERNATIVE OF NOT UNDERTAKING ANY CHANGE, EXCEPT AT AN UNREASONABLY HIGHER COST.  
2-D. A TURBIDITY CURTAIN SHALL BE USED ONLY DURING IN-WATER WORK TO MINIMIZE ANY POTENTIAL IMPACTS ON NATURAL RESOURCES.

DE-WATERING

2-E. DE-WATERING OF DREDGED MATERIALS WILL TAKE PLACE ALONG THE SHORELINE/PARKING LOT.

OFFLOAD SITE

2-F. ONCE MATERIALS ARE DE-WATERED THEY WILL BE HAULED TO A SPOIL SITE DETERMINED BY THE CONTRACTOR IN SEALED TRUCKS.

LOADING/UNLOADING

2-H. LOADING AND UNLOADING OF EQUIPMENT WILL TAKE PLACE ON LAND AT THE WESTERN END OF THE PROJECT AREA.

THE CONTRACTOR SHALL PROVIDE ACCESS TO THE CANAL AS REQUESTED AND ONLY AT TIMES WHEN THE WATER QUALITY WITHIN THE PROJECT AREA DOES NOT EXCEED WATER QUALITY STANDARDS.

MECHANICAL DREDGING METHODOLOGY

2-I. PRIOR TO DREDGING, A FLOATING TURBIDITY BOOM WILL BE INSTALLED AROUND THE PROPOSED DREDGE AREA. THE BOOM WILL BE SECURED TO THE SHORELINE ON EACH SIDE OF THE PROJECT AND WILL MAINTAIN CONTACT TO THE BOTTOM AT ALL TIMES. THE BOOM SHALL BE MAINTAINED THROUGHOUT DREDGING ACTIVITIES. TWO MONITORING STATIONS WILL BE ESTABLISHED TO MONITOR TURBIDITY CONTAINMENT. WATER TESTING AND REPORTING WILL BE CONDUCTED AS REQUIRED PER PERMIT STIPULATIONS THROUGHOUT THE DREDGING ACTIVITIES. THE TURBIDITY BOOM SHALL BE LEFT IN PLACE UNTIL ALL SUSPENDED SEDIMENTS HAVE FALLEN OUT OF THE WATER COLUMN AND THE WATER WITHIN THE AREA MEETS STATE WATER QUALITY STANDARDS, AT WHICH POINT IT WILL BE REMOVED. THE DREDGE MATERIAL WILL BE LOADED INTO A CONTAINER ON A BARGE USING A TRACK HOE, AND WILL BE TRANSPORTED TO THE OFFLOADING SITE ALONG THE SHORELINE/PARKING LOT FOR UNLOADING. THE OFFLOADING SITE WILL HAVE STAKED SILT FENCES AND HAY BALES TO PREVENT ANY SEDIMENT RUNOFF DURING THE OFFLOADING ACTIVITIES. THE DREDGE MATERIAL WILL BE PLACED INTO SEALED TRUCKS USING A LAND BASED EXCAVATOR AND WILL BE TRANSPORTED TO AN OFF-SITE SPOIL SITE. THE SPOIL DISPOSAL SITE WILL HAVE STAKED SILT FENCES AND HAY BALES TO PREVENT ANY SEDIMENT RUNOFF. NO DISCHARGE OR RETURN WATER WILL BE ALLOWED TO REACH WETLANDS OR NEARBY WATER BODIES.

3-DOCK

STEEL

3-A REINFORCING STEEL WILL BE GRADE 60, DEFORMED BARS. CONCRETE COVER IS TO BE 3". THE ENDS OF THE REBARS WILL BE 3" FROM THE EXPANSION JOINTS WITH THE CAP STIRRUPS 3-1/2" FROM THE EXPANSION JOINT ON BOTH SIDES OF THE EXPANSION JOINTS.

3-B STIRRUPS WILL BE PLACED AT 12" CENTERS WITH CLOSED STIRRUPS AT EACH VERTICAL JOINT. IF THE CONTRACTOR USES A HDG STEEL CHANNEL SECTION BOLTED TO THE SLABS TO HOLD HIS SHEETS TOGETHER WITH THE TIERODS GOING THROUGH THE CHANNEL. EXPANSION JOINTS SHALL BE COMPLETED PER DETAIL IN PLANS.

3-C THE LOOSE ENDS OF THE REBAR TIES OR TIE-WIRES ARE TO BE PUSHED INSIDE THE CAGE AFTER TYING.

TIMBER FRAME

PILES

3-D - TIMBER FRAME DOCKS ARE TO BE PILE SUPPORTED WITH MINIMUM 9"Ø 0.60 C.C.A. PT WOOD PILES WITH A MINIMUM OF 8.0' EMBEDMENT IN CLEAN SANDS. THE PILES ARE TO SPACED AT 12.0' MAX AND THE PILE BENTS ARE TO BE SPACED AT 12.0' MAX

PILE CAPS

3-E - EACH PILE BENT IS TO CONSIST OF 2"X10" 0.60 C.C.A. PT WOOD PILE CAP FASTENED TO BOTH SIDES OF THE PILES OR A DOUBLE 2"X10" PILE CAP ON THE INTERIOR OF THE BENT.

STRINGERS

3-F - ALL STRINGERS ARE TO BE 2"X8" 0.60 PT WOOD AND ARE TO BE CENTERED BETWEEN PILE CAPS ON EITHER END AND TOE NAILED INTO THE PILE CAP AT EITHER END. THE STRINGERS CAN BE FASTENED TOGETHER BY LAPPING ON EITHER SIDE AND FASTENING OR BUTTING THE STRINGER ENDS AGAINST ONE ANOTHER AND FASTENING TOGETHER WITH A 2"X8" 0.60 C.C.A. PT WOOD SCAB BOARD APPLIED WITH LAP ON EITHER BOARD. THE SCAB BOARD IS TO FASTEN TO EACH STRINGER WITH (5) 16d RINGSHANK NAILS ON EITHER SIDE.

DECKING

3-G - THE DECKING IS TO BE 2"X6" 0.40 A.C.Q. PT WOOD DECKING OR COMPOSITE DECKING WITH 1.5" OVERHANG (WHERE APPLICABLE) WITH 1/2" SPACING BETWEEN THE DECK BOARDS.

4- ENVIRONMENTAL MANAGEMENT PLAN

4-A ALL WORK WILL ADHERE TO PERFORMANCE REQUIREMENTS OF THE CLEAN WATER ACT, SECTION 404 PERMIT AND SECTION 401 WATER QUALITY CERTIFICATION. NO IN-WATER WORK WILL BEGIN UNTIL AFTER ISSUANCE OF REGULATORY AUTHORIZATIONS .

4-B THE CONSTRUCTION CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF AN ENVIRONMENTAL PROTECTION PLAN. THE PLAN WILL BE SUBMITTED AND IMPLEMENTED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. THE PLAN WILL IDENTIFY CONSTRUCTION ELEMENTS AND RECOGNIZE SPILL SOURCES AT THE SITE. THE PLAN WILL OUTLINE BMPS, RESPONSIVE ACTIONS IN THE EVENT OF A SPILL OR RELEASE, AND NOTIFICATION AND REPORTING PROCEDURES. THE PLAN WILL ALSO OUTLINE CONTRACTOR MANAGEMENT ELEMENTS SUCH AS PERSONNEL RESPONSIBILITIES, ACTION AREA SECURITY, SITE INSPECTIONS, AND TRAINING.

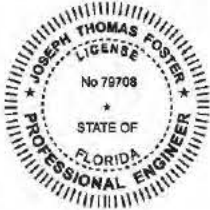
4-C NO PETROLEUM PRODUCTS, LIME, CHEMICALS, OR OTHER TOXIC OR HARMFUL MATERIALS WILL BE ALLOWED TO ENTER SURFACE WATERS.

4-D WASH WATER RESULTING FROM WASH-DOWN OF EQUIPMENT OR WORK AREAS WILL BE CONTAINED FOR PROPER DISPOSAL.

4-E EQUIPMENT THAT ENTERS SURFACE WATERS WILL BE MAINTAINED TO PREVENT ANY VISIBLE SHEEN FROM PETROLEUM PRODUCTS.

4-F NO OIL, FUELS, OR CHEMICALS WILL BE DISCHARGED TO SURFACE WATERS, OR ONTO LAND WHERE THERE IS A POTENTIAL FOR RE-ENTRY INTO SURFACE WATERS. FUEL HOSES, OIL DRUMS, OIL OR FUEL TRANSFER VALVES, FITTINGS, ETC. WILL BE CHECKED REGULARLY FOR LEAKS AND WILL BE MAINTAINED AND STORED PROPERLY TO PREVENT SPILLS.

# SPECIFICATIONS



4-G NO CLEANING SOLVENTS OR CHEMICALS USED FOR TOOLS OR EQUIPMENT CLEANING WILL BE DISCHARGED TO GROUNDWATER OR SURFACE WATERS.

4-H CONSTRUCTION MATERIALS WILL NOT BE STORED WHERE HIGH TIDES, WAVE ACTION, OR UPLAND RUNOFF COULD CAUSE MATERIALS TO ENTER SURFACE WATERS.

4-I BARGE OPERATIONS WILL BE RESTRICTED TO TIDAL ELEVATIONS ADEQUATE TO PREVENT GROUNDING OF A BARGE.

5- TURBIDITY BARRIERS

5-A THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN TURBIDITY CONTROL BARRIERS ON SITE. IF ALLOWABLE WATER QUALITY STANDARDS ARE EXCEEDED, THEN ALL WORK SHALL CEASE AND TURBIDITY CURTAINS SHALL BE DEPLOYED PER DETAIL.

5-B TURBIDITY BARRIERS TO BE MANUFACTURED IN ACCORDANCE WITH SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

5-C BARRIERS SHALL BE ANCHORED AT 100 FT INTERVALS MAX. PROVIDE A BUOY AT EACH ANCHOR LOCATION, WHEN DEPLOYED.

6-EROSION AND SEDIMENT CONTROL

6-A SILT FENCES TO BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH SECTION 104 FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. SILT FENCES ARE TO BE LOCATED ON SITE AND DEPLOYED AS REQUIRED.

7. SIGNAGE

7-A MANATEE SIGNAGE TO BE ADDED TO LIMIT ADVERSE IMPACTS TO THE SPECIES. (SEE FIGURE 1 FOR SIGNAGE)

8-GENERAL CONDITIONS

8-A WORK HOURS ARE 7 00 AM - 6 PM, MONDAY THROUGH FRIDAY. ANY SATURDAY WORK WILL BE AGREED TO BY THE COUNTY/CITY/FDOT AHEAD OF TIME.

8-B A PORT-O-LET WILL BE PROVIDED BY THE CONTRACTOR, SET UP IN AN AREA APPROVED BY THE COUNTY/CITY/FDOT, AND KEPT IN A NEAT AND CLEAN CONDITION AT ALL TIMES.

8-C AFTER EACH WORK DAY THE WORK AREA WILL BE CLEAN WITH ALL PAPERS, CUPS AND TRASH PUT IN GARBAGE BAGS OR CANS.

8-D WHEN PUMPING CONCRETE THE TRUCK CHUTE AND PUMP WILL HAVE VISQUEEN OR SIMILAR PROTECTIVE MATERIAL ON THE ROADWAYS TO PREVENT SPILLAGE ONTO THE ASPHALT OR PAVERS.

8-E ANY EXISTING UTILITIES THAT ARE NOT BEING REMOVED, BUT ARE BEING IMPACTED SHALL BE TEMPORARY SUPPORTED AND REATTACHED AS REQUIRED.

8-F ANY DOCK PILES OR PORTIONS OF DOCK SHALL BE REMOVED AND REINSTALLED AS REQUIRED.

9- INSPECTIONS AND FINAL ACCEPTANCE OF THE WORK

9-A THE CONTRACTOR IS TO NOTIFY ANY APPROPRIATE COUNTY/CITY/FDOT AGENCY TO INSPECT THE WORK PRIOR TO ANY CONCRETE POURS OR OTHER OPERATIONS REQUIRING COUNTY INSPECTION. THE CONTRACTOR IS TO NOTIFY THE ENGINEER AT LEAST 2 DAYS PRIOR TO ANY CONCRETE POURS SO THE FORMS AND REBARS MAY BE INSPECTED PRIOR TO THE POUR.

10- INDEMNIFICATION

10-A TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL INDEMNIFY, DEFEND, AND HOLD HARMLESS OWNER FROM AND AGAINST ANY AND ALL CLAIMS FOR PROPERTY DAMAGE, BODILY INJURY, DEATH, DEMANDS, DAMAGES, ACTIONS, CAUSES OF ACTION, SUITS, LOSSES, JUDGMENTS, AND ANY OTHER LIABILITIES WHICH ARISE OR ARE IN ANY WAY CONNECTED WITH THE WORK PERFORMED, MATERIALS FURNISHED, OR SERVICES PROVIDED UNDER THE EXECUTED CONTRACT FOR WORK BY CONTRACTOR OR ITS EMPLOYEES OR AGENTS. INDEMNIFICATION SHALL EXTEND TO CLAIMS OCCURRING AFTER THIS AGREEMENT IS TERMINATED AS WELL AS WHILE IT IS IN FORCE AND SHALL CONTINUE UNTIL IT IS FINALLY ADJUDICATED AND THAT ANY AND ALL ACTIONS AGAINST THE INDEMNIFIED PARTIES FOR SUCH MATTERS ARE FULLY AND FINALLY BARRED BY APPLICABLE LAW. OWNER'S NEGLIGENCE IS NOT PART OF THE INDEMNIFICATION.

JAXBO CHECKLIST INFORMATION	
After the Fact	
Upland Fill (cy)	60+/-

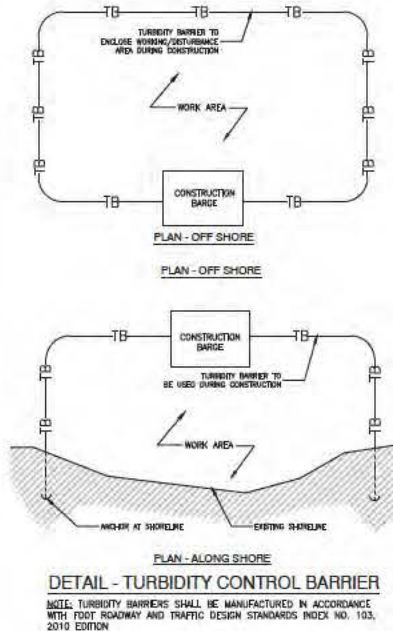
JAXBO CHECKLIST INFORMATION	
Activity 2 - Pile Supported	
Existing Wet Slips	43
Proposed Wet Slips	48
Existing Dry Slips	0
Proposed Dry Slips	0
Pile Type	Wood
Number	314
Individual pile Size (sq. ft)	1
Install Method	Vibratory Hammer

Activity 3 - Dredging	
Dredging Activity	Maintenance
Proposed Depth (MLW)	-3
Dredge Area (Sq. Ft.)	28,355
Dredge Method	Mechanical
Disposal Location	Landfill
Within a federal channel?	No

FIGURE-1 - MANATEE SIGNAGE



CONTRACTOR TO VERIFY THAT ELECTRICAL LINES ARE DEENERGIZED PRIOR TO ANY WORK



SPECIFICATIONS



**FOSTER CONSULTING**  
**FL PROFESSIONAL ENGINEER NO. 79708**  
DELAWARE LIC. # 18618 NJ LIC.# 24GE05181200  
P: (727) 821-1949  
**WWW.JFOSTERCONSULTING.COM**  
P.O. BOX 7370, ST. PETERSBURG, FL 33734

DATE: **10-17-19**  
DRAWN BY: **NSN**  
CHKD BY: **JTF**  
SCALE: **AS NOTED**  
FILE NAME: **41718**  
SHEET: **2 OF 13**  
REV: **12-30-19**  
**1-13-20**

**202 150TH AVENUE,  
MADEIRA BEACH, FL**



MAP LEGEND

EXISTING LAND LEASE

20

DENOTES  
PERMANENT SLIP

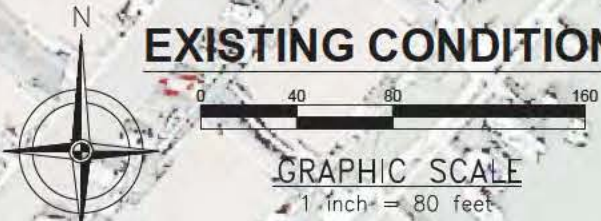
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TRANSIENT  
AREA

DOCK CALCULATIONS

10'X24' DOCKS = 120 SF (EACH)  
8'X45' DOCKS = 360 SF (EACH)  
3'X20' DOCKS = 60 SF (EACH)  
3'X24' DOCKS = 72 SF (EACH)  
3'X40' DOCKS = 120 SF (EACH)  
3'X50' DOCKS = 210 SF (EACH)  
TOTAL DOCK SF = 2,274

EXISTING CONDITIONS



BOCA CIEGA BAY

SUBMERGED LAND LEASE LINE

EXISTING BOAT  
LAUNCH FILLED  
AFTER THE FACT

SUBMERGED LAND LEASE LINE

TOTAL PERMANENT  
SLIPS: 43

Slip #	Dimensions	Slip #	Dimensions
1	13.5 x 30	23	14.0 x 60
2	14.5 x 40	24	14.0 x 60
3	15.5 x 50	25	14.5 x 60
4	15.5 x 50	26	21.0 x 55
5	14.5 x 50	27	21.0 x 55
6	14.5 x 50	28	21.0 x 55
7	15.0 x 50	29	19.5 x 55
8	15.0 x 50	30	19.5 x 55
9	18.0 x 50	31	21.0 x 55
10	15.0 x 50	32	21.0 x 55
11	14.0 x 50	33	18.0 x 55
12	15.0 x 50	34	20.5 x 50
13	11.0 x 50	35	21.5 x 50
14	13.0 x 50	36	21.5 x 50
15	18.0 x 60	37	20.0 x 50
16	18.0 x 60	38	20.0 x 50
17	14.5 x 60	39	19.0 x 50
18	14.5 x 60	40	16.5 x 50
19	14.5 x 60	41	20.5 x 50
20	14.5 x 60	42	21.0 x 45
21	14.5 x 60	43	20.5 x 60
22	14.5 x 60		

EXISTING CONDITIONS



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DELAWARE LIC. # 18618 NJ LIC.# 24GE05181200

P: (727) 821-1949

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P.O. BOX 7370, ST. PETERSBURG, FL 33734

DATE: 10-17-19

DRAWN BY: NSN

CHKD BY: JTF

SCALE: 1" = 80'

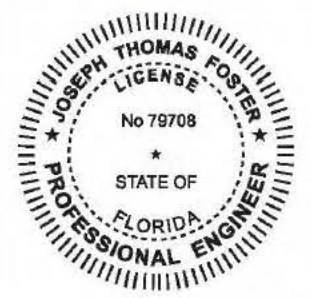
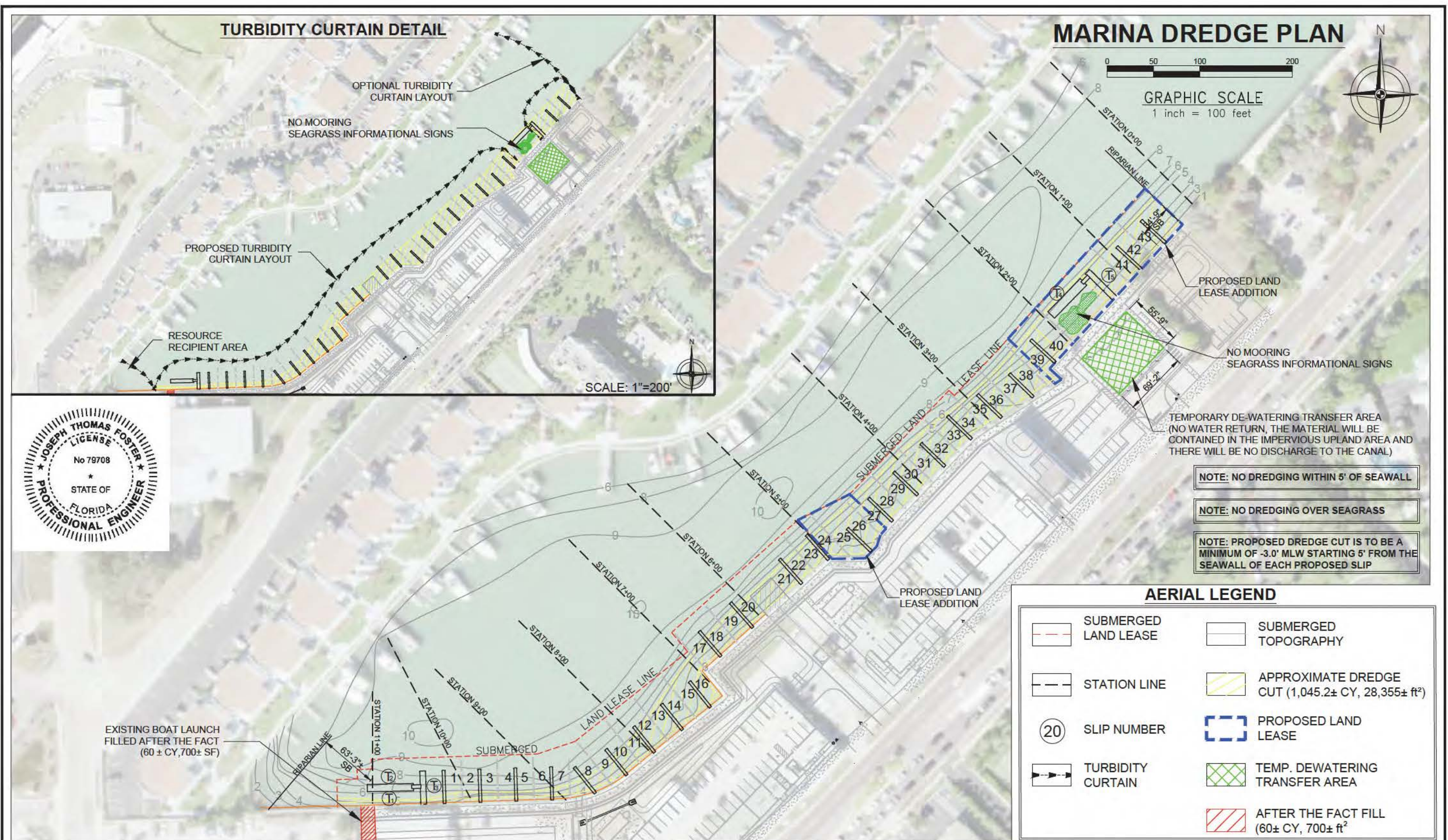
FILE NAME: 41718

SHEET: 3 OF 13

REVI: 12-30-19

202 150TH AVENUE,  
MADEIRA BEACH, FL





MARINA DREDGE PLAN



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DATE: 10-17-19  
DRAWN BY: NSN  
CHKD BY: JTF  
SCALE: 1"=100'  
FILE NAME: 41718  
SHEET: 4 OF 13  
REV: 12-30-19

202 150TH AVENUE,  
MADEIRA BEACH, FL



# STATION DREDGE PROFILES

(0+00 - 3+00)

NOTE: NO DREDGING WILL OCCUR WITHIN 5' OF THE SEAWALL

NOTE: PROPOSED DREDGE CUT IS TO BE A MINIMUM OF -3.0' MLW STARTING 5' FROM THE SEAWALL OF EACH PROPOSED SLIP

NOTE: EXISTING SUBMERGED LAND SURVEY WAS CONDUCTED BY FOSTER CONSULTING ON 10/31/18 AND 11/1/18

NOTE: ALL VERTICAL MEASUREMENTS REFERENCE NAVD 88 VERTICAL DATUM



## STATION SECTION LEGEND

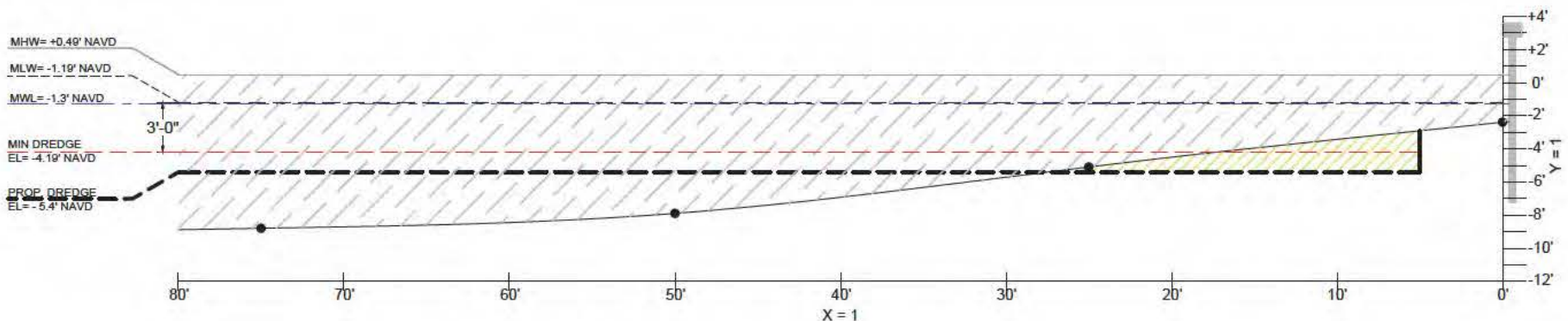
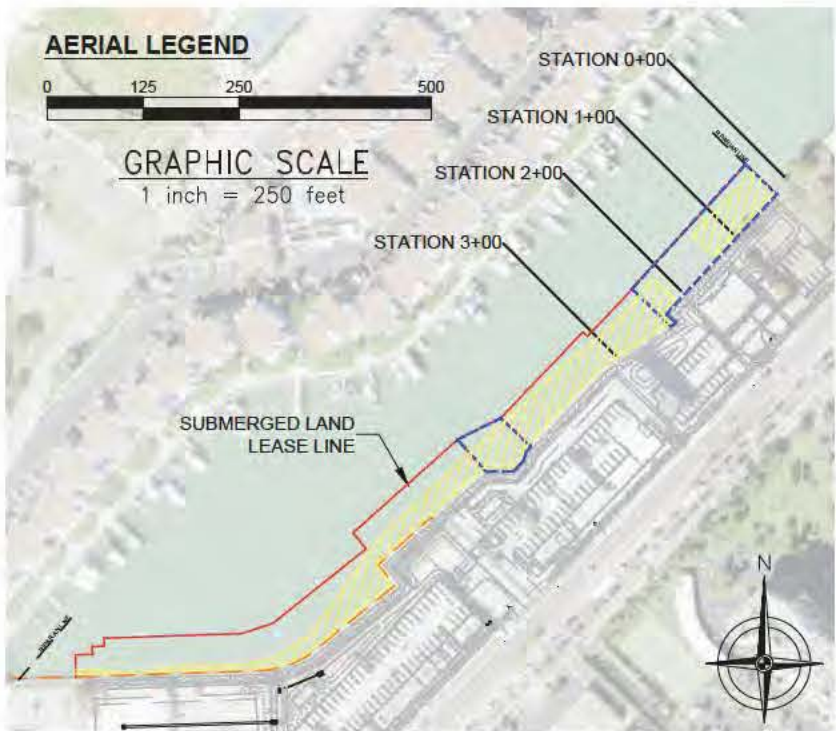
MHW (MEAN HIGH WATER)	PROPOSED DREDGE LINE
MLW (MEAN LOW WATER)	WATER
MWL (MEASURED WATER LINE)	EXISTING SANDS
MIN. ALLOWABLE DREDGE LINE	PROPOSED DREDGE AREA

## AERIAL LEGEND

0 125 250 500

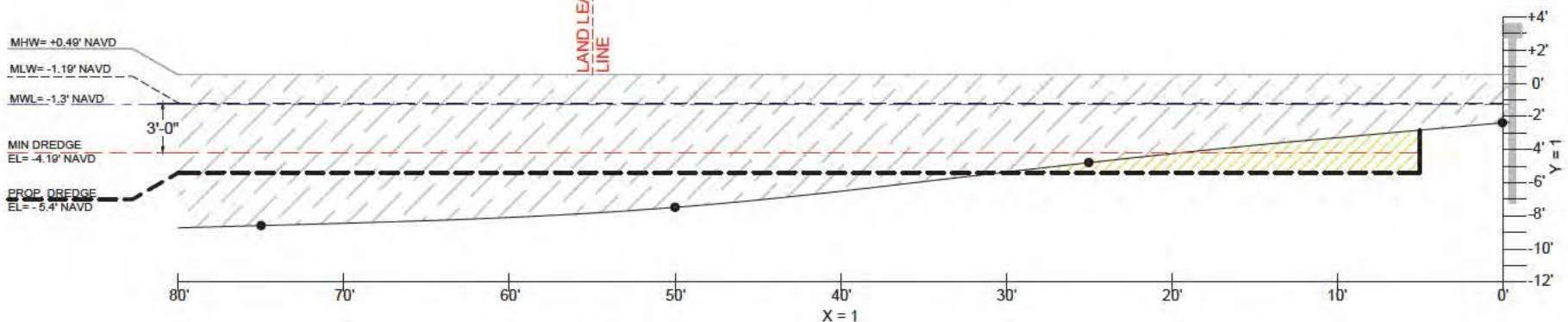
## GRAPHIC SCALE

1 inch = 250 feet



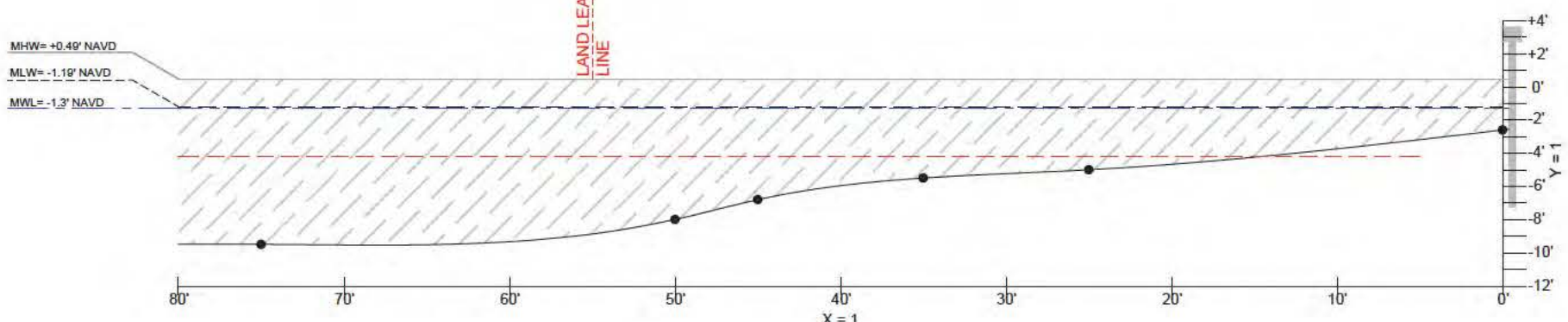
### STATION 0+00

DREDGE AREA  
29.09 SF  
1.08 CY/FT  
50' A.O.I.  
53.9± CUBIC YARDS



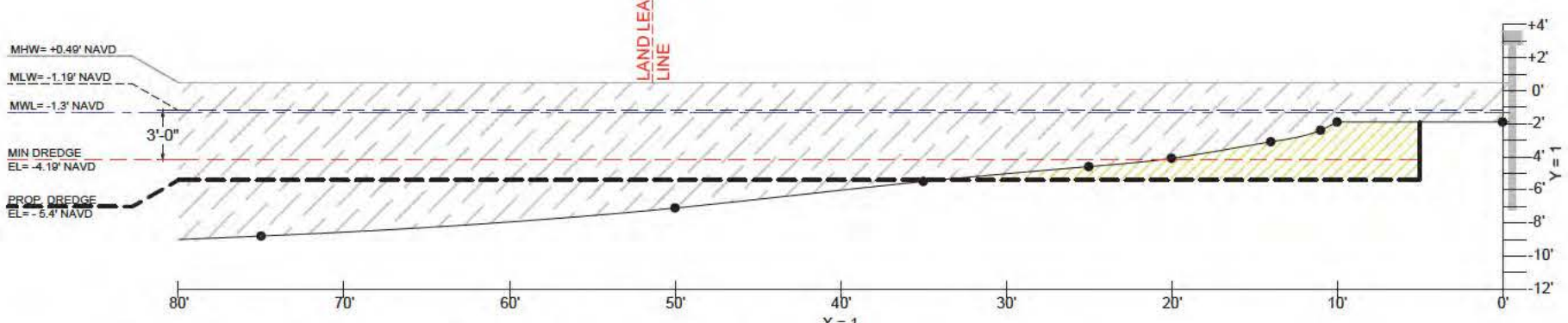
### STATION 1+00

DREDGE AREA  
34.12 SF  
1.26 CY/FT  
100' A.O.I.  
126.4± CUBIC YARDS



### STATION 2+00

DREDGE AREA  
00.00 SF  
0.00 CY/FT  
100' A.O.I.  
0.00± CUBIC YARDS  
NO DREDGE



### STATION 3+00

DREDGE AREA  
48.36 SF  
1.79 CY/FT  
100' A.O.I.  
179.1± CUBIC YARDS

DREDGING SECTIONS  
STATIONS 0+00 - 3+00



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DATE: 10-17-19  
DRAWN BY: NSN  
CHKD BY: JTF  
SCALE: 1"=10'  
FILE NAME: 41718  
SHEET: 5 OF 13  
REVI:

202 150TH AVENUE,  
MADEIRA BEACH, FL



# STATION DREDGE PROFILES

(4+00 - 7+00)

NOTE: NO DREDGING WILL OCCUR WITHIN 5' OF THE SEAWALL

NOTE: PROPOSED DREDGE CUT IS TO BE A MINIMUM OF -3.0' MLW STARTING 5' FROM THE SEAWALL OF EACH PROPOSED SLIP

NOTE: EXISTING SUBMERGED LAND SURVEY WAS CONDUCTED BY FOSTER CONSULTING ON 10/31/18 AND 11/1/18

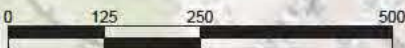
NOTE: ALL VERTICAL MEASUREMENTS REFERENCE NAVD 88 VERTICAL DATUM



## STATION SECTION LEGEND

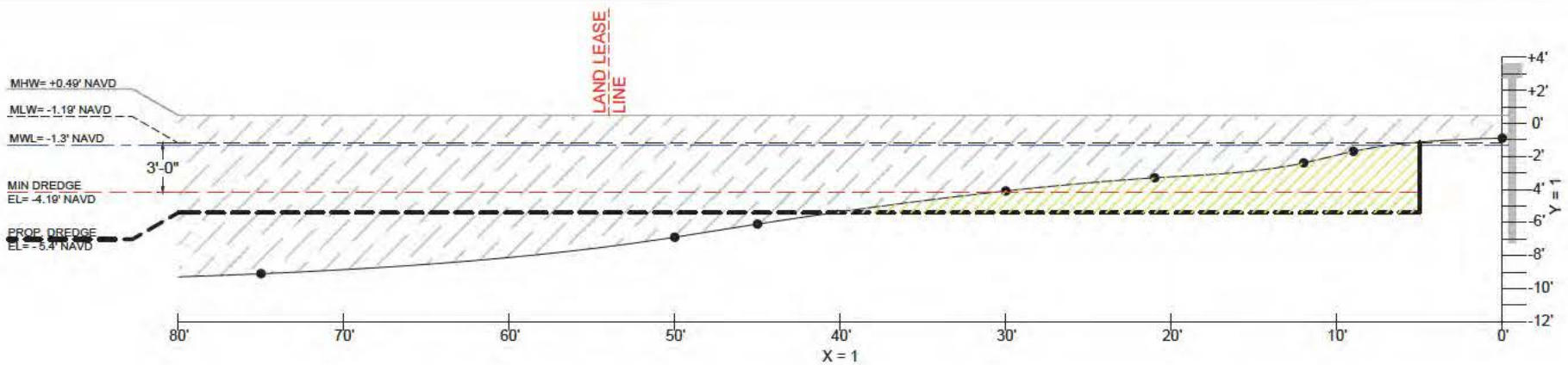
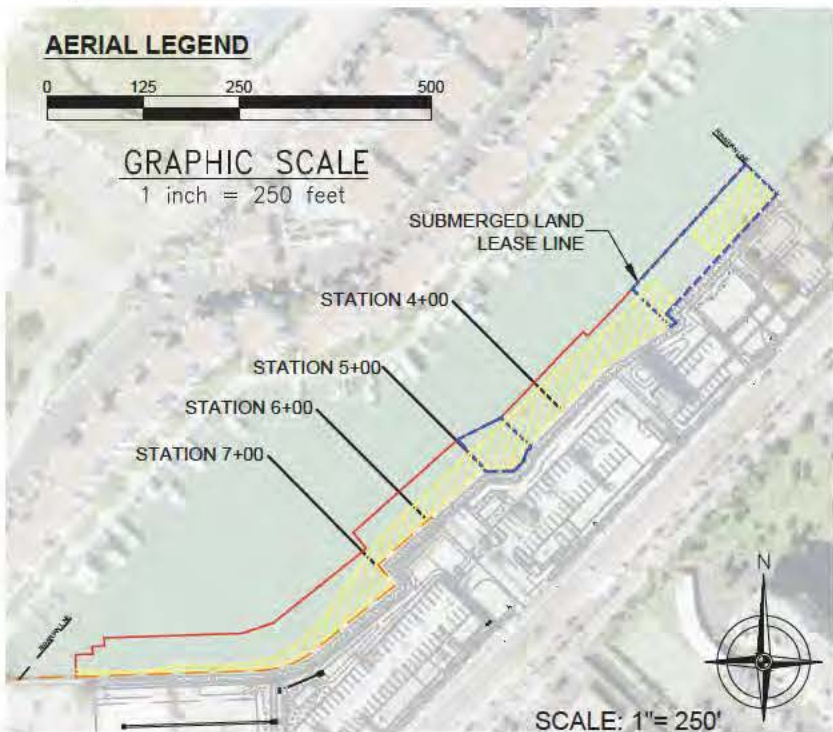
MHW (MEAN HIGH WATER)	PROPOSED DREDGE LINE
MLW (MEAN LOW WATER)	WATER
MWL (MEASURED WATER LINE)	EXISTING SANDS
MIN. ALLOWABLE DREDGE LINE	PROPOSED DREDGE AREA

## AERIAL LEGEND



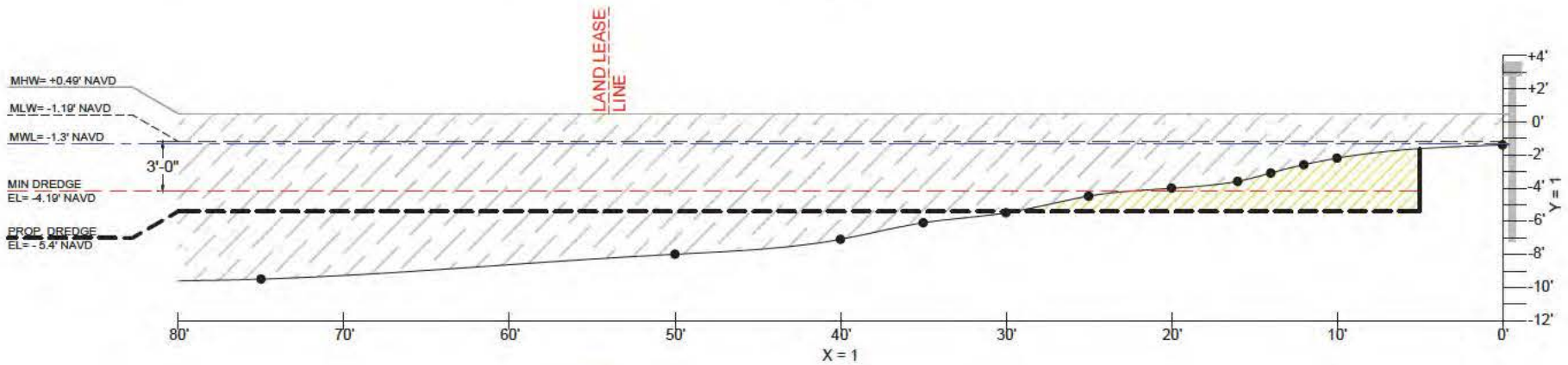
## GRAPHIC SCALE

1 inch = 250 feet



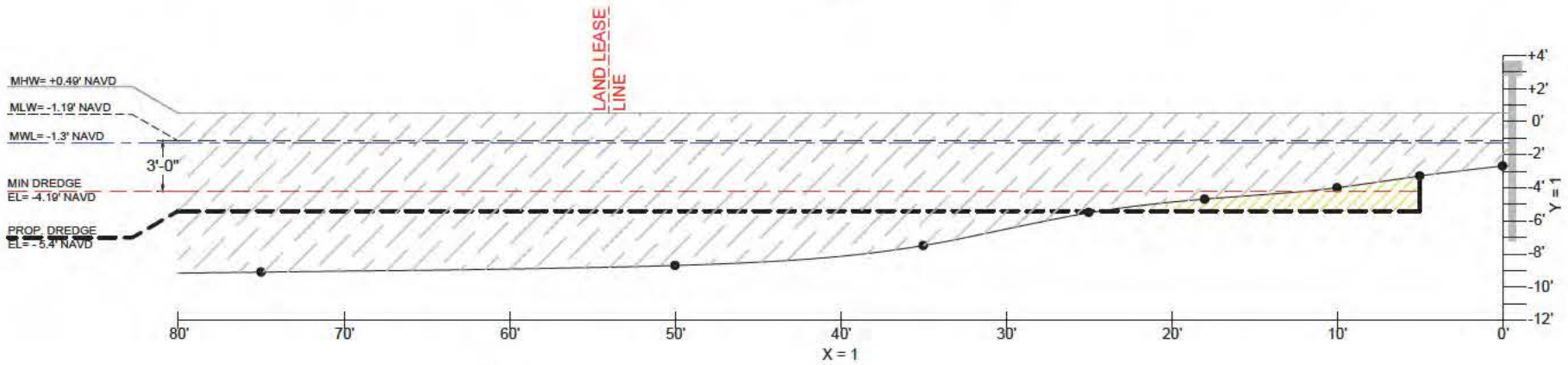
## STATION 4+00

DREDGE AREA  
71.11 SF  
2.63 CY/FT  
100' A.O.I.  
263.4± CUBIC YARDS



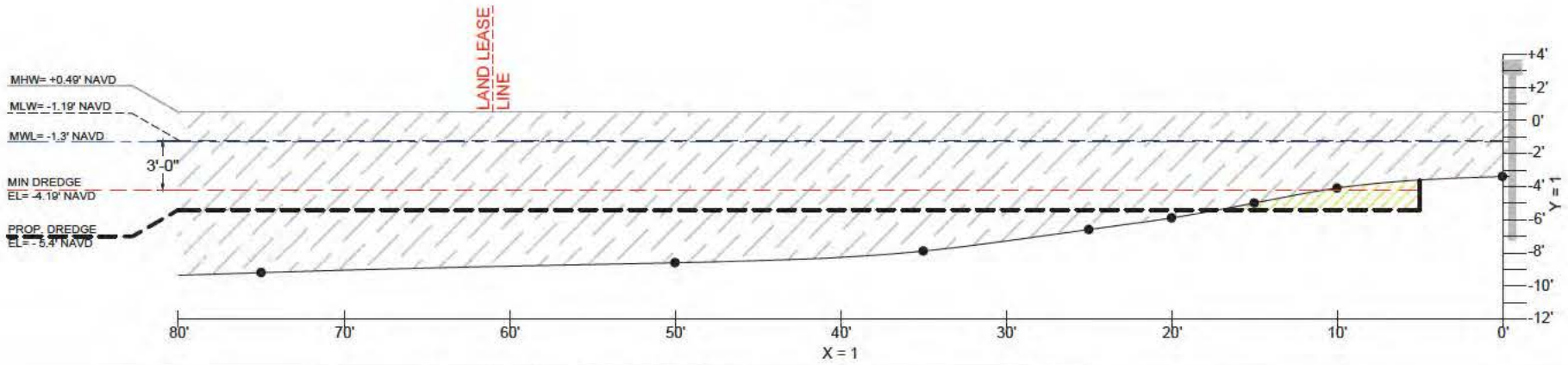
## STATION 5+00

DREDGE AREA  
47.25 SF  
1.75 CY/FT  
100' A.O.I.  
175± CUBIC YARDS



## STATION 6+00

DREDGE AREA  
19.33 SF  
0.72 CY/FT  
100' A.O.I.  
71.6± CUBIC YARDS



## STATION 7+00

DREDGE AREA  
12.79 SF  
0.47 CY/FT  
100' A.O.I.  
47.4± CUBIC YARDS

DREDGING SECTIONS  
STATIONS 4+00 - 7+00



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DATE: 10-17-19  
FILE NAME: 41718  
DRAWN BY: NSN  
SHEET: 6 OF 13  
CHKD BY: JTF  
REVI  
SCALE: 1"=10'

202 150TH AVENUE,  
MADEIRA BEACH, FL



# STATION DREDGE PROFILES

(8+00 - 11+00)

NOTE: NO DREDGING WILL OCCUR WITHIN 5' OF THE SEAWALL

NOTE: PROPOSED DREDGE CUT IS TO BE A MINIMUM OF -3.0' MLW STARTING 5' FROM THE SEAWALL OF EACH PROPOSED SLIP

NOTE: EXISTING SUBMERGED LAND SURVEY WAS CONDUCTED BY FOSTER CONSULTING ON 10/31/18 AND 11/1/18

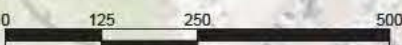
NOTE: ALL VERTICAL MEASUREMENTS REFERENCE NAVD 88 VERTICAL DATUM



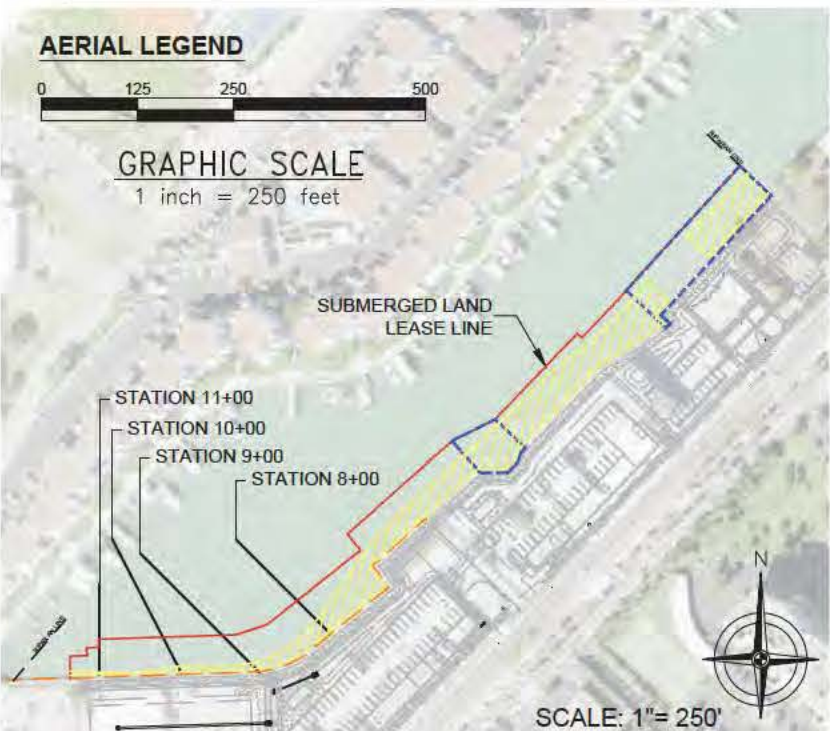
## STATION SECTION LEGEND

MHW (MEAN HIGH WATER)	PROPOSED DREDGE LINE
MLW (MEAN LOW WATER)	WATER
MWL (MEASURED WATER LINE)	EXISTING SANDS
MIN. ALLOWABLE DREDGE LINE	PROPOSED DREDGE AREA

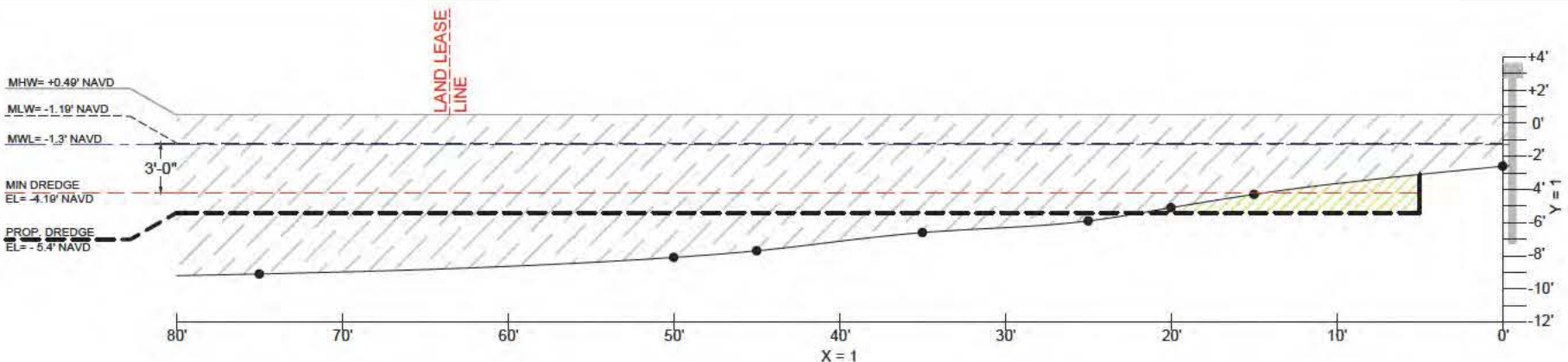
## AERIAL LEGEND



GRAPHIC SCALE  
1 inch = 250 feet

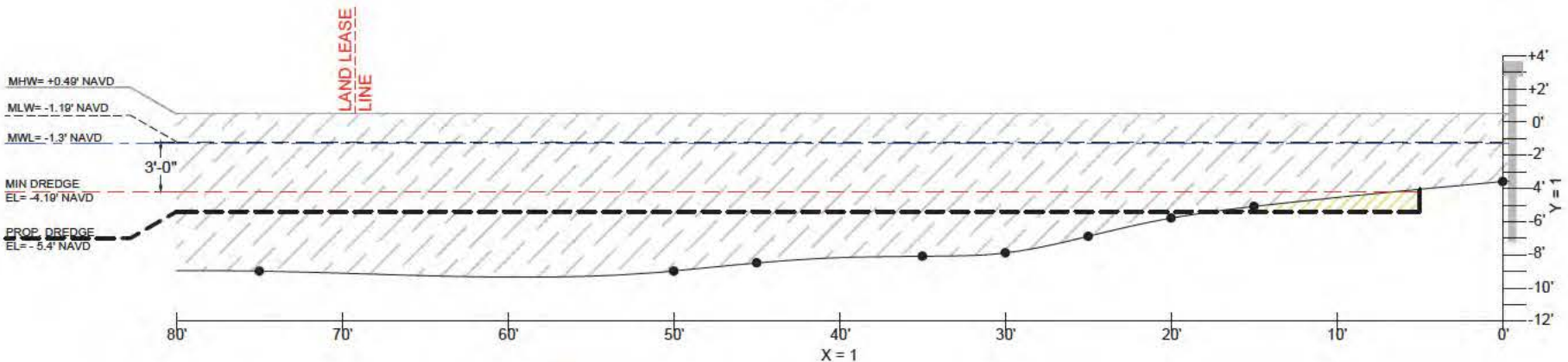


SCALE: 1"= 250'



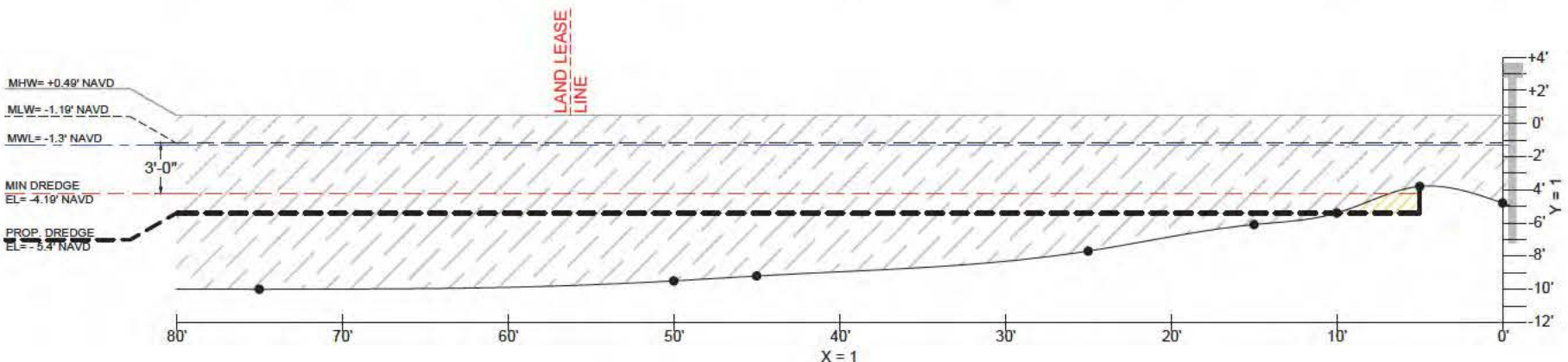
### STATION 8+00

DREDGE AREA  
21.36 SF  
0.79 CY/FT  
100' A.O.I.  
79.1± CUBIC YARDS



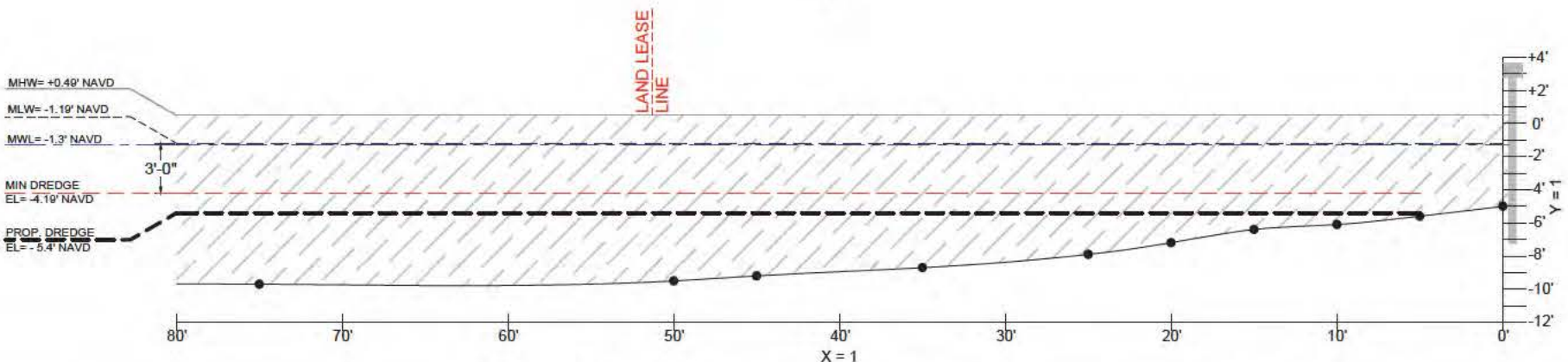
### STATION 9+00

DREDGE AREA  
0.85 SF  
0.33 CY/FT  
100' A.O.I.  
32.8± CUBIC YARDS



### STATION 10+00

DREDGE AREA  
4.46 SF  
0.17 CY/FT  
100' A.O.I.  
16.5± CUBIC YARDS



### STATION 11+00

DREDGE AREA  
0.00 SF  
0.00 CY/FT  
50' A.O.I.  
0.0± CUBIC YARDS  
TOTAL DREDGE  
VOLUME=1,045.2 CY

DREDGING SECTIONS  
STATIONS 8+00 - 11+00



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DATE: 10-17-19  
DRAWN BY: NSN  
CHKD BY: JTF  
SCALE: 1"=10'  
FILE NAME: 41718  
SHEET: 7 OF 13  
REVI

202 150TH AVENUE,  
MADEIRA BEACH, FL



MAP LEGEND

20 DENOTES PERMANENT SLIP

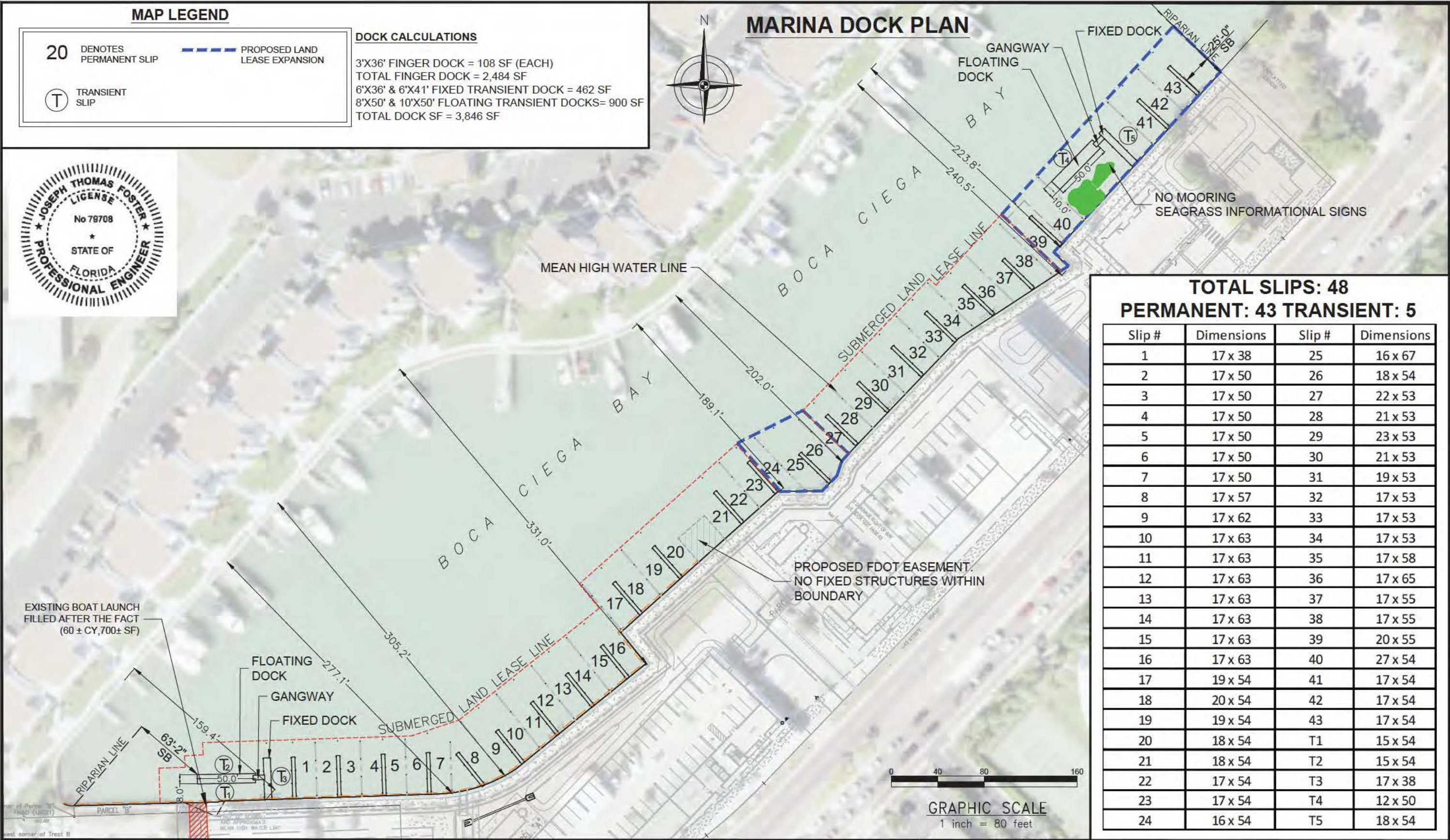
PROPOSED LAND LEASE EXPANSION

T TRANSIENT SLIP

DOCK CALCULATIONS

3'X36' FINGER DOCK = 108 SF (EACH)  
TOTAL FINGER DOCK = 2,484 SF  
6'X36' & 6'X41' FIXED TRANSIENT DOCK = 462 SF  
8'X50' & 10'X50' FLOATING TRANSIENT DOCKS= 900 SF  
TOTAL DOCK SF = 3,846 SF

MARINA DOCK PLAN



**TOTAL SLIPS: 48**  
**PERMANENT: 43 TRANSIENT: 5**

Slip #	Dimensions	Slip #	Dimensions
1	17 x 38	25	16 x 67
2	17 x 50	26	18 x 54
3	17 x 50	27	22 x 53
4	17 x 50	28	21 x 53
5	17 x 50	29	23 x 53
6	17 x 50	30	21 x 53
7	17 x 50	31	19 x 53
8	17 x 57	32	17 x 53
9	17 x 62	33	17 x 53
10	17 x 63	34	17 x 53
11	17 x 63	35	17 x 58
12	17 x 63	36	17 x 65
13	17 x 63	37	17 x 55
14	17 x 63	38	17 x 55
15	17 x 63	39	20 x 55
16	17 x 63	40	27 x 54
17	19 x 54	41	17 x 54
18	20 x 54	42	17 x 54
19	19 x 54	43	17 x 54
20	18 x 54	T1	15 x 54
21	18 x 54	T2	15 x 54
22	17 x 54	T3	17 x 38
23	17 x 54	T4	12 x 50
24	16 x 54	T5	18 x 54

MARINA DOCK PLAN

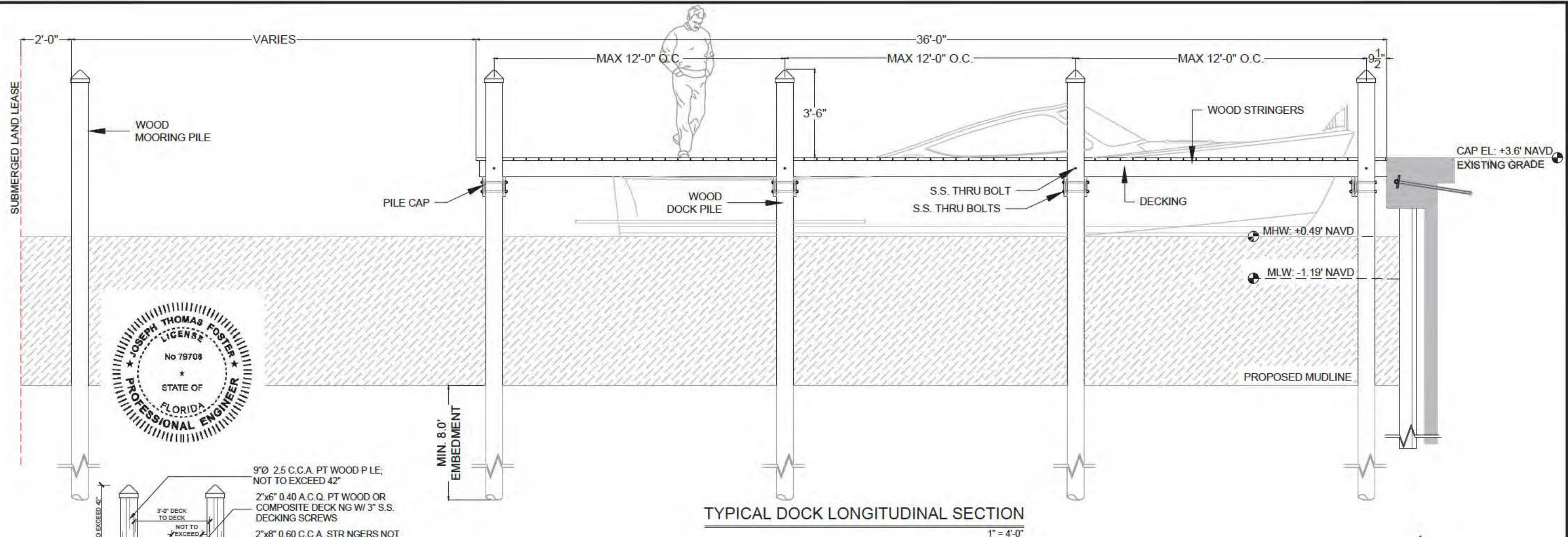


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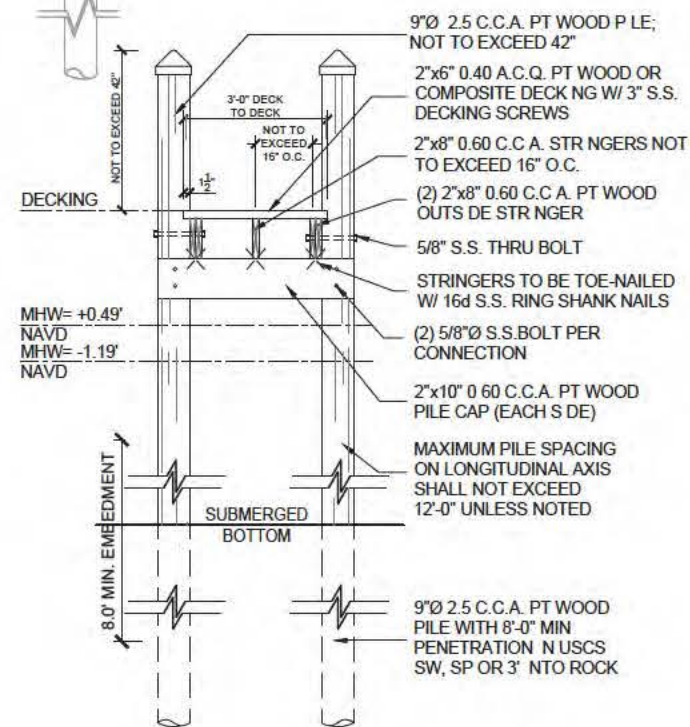
DATE: 10-17-19  
DRAWN BY: NSN  
CHKD BY: JTF  
SCALE: 1" = 80'  
FILE NAME: 41718  
SHEET: 8 OF 13  
REVI:

202 150TH AVENUE,  
MADEIRA BEACH, FL

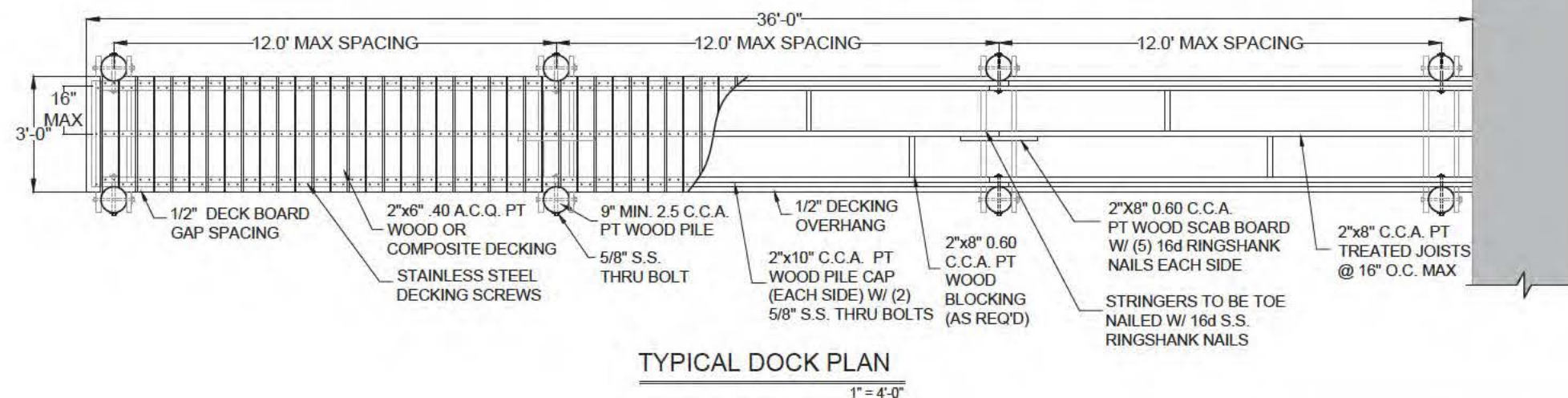




TYPICAL DOCK LONGITUDINAL SECTION  
1" = 4'-0"



TYPICAL DOCK  
CROSS SECTION  
N.T.S.



TYPICAL DOCK PLAN  
1" = 4'-0"

## TYPICAL FINGER DOCK DETAILS

**NOTE:** ALL FINGER DOCKS ARE TO BE 3' WIDE X 36' LONG PRESSURE TREATED TIMBER FRAME WITH EXTERIOR PILES. ALL SLIP DIMENSIONS REPRESENT THE CLEAR SPAN DISTANCE FOR EACH SLIP.

FINGER DOCK  
DETAILS (TYPICAL)



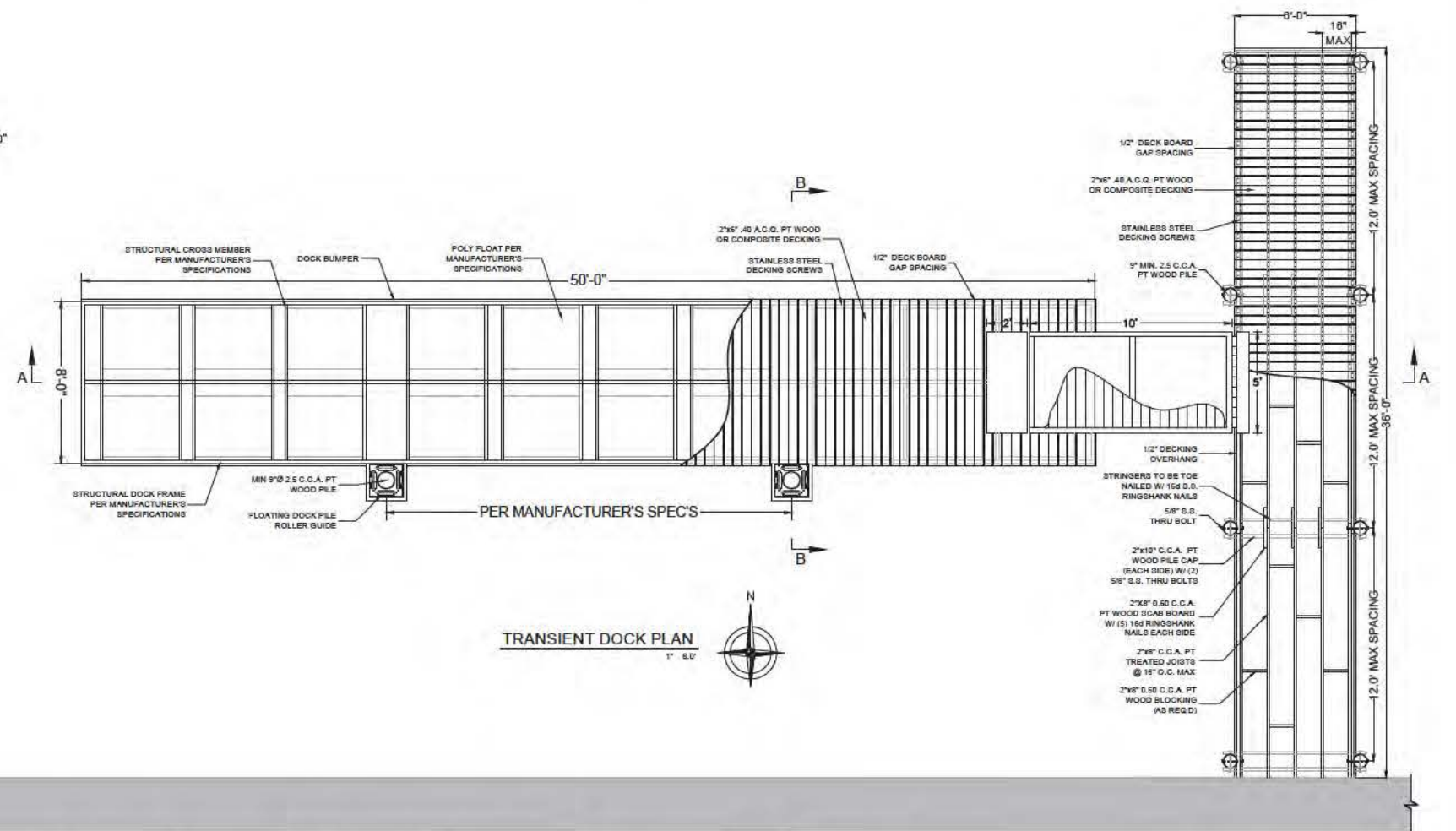
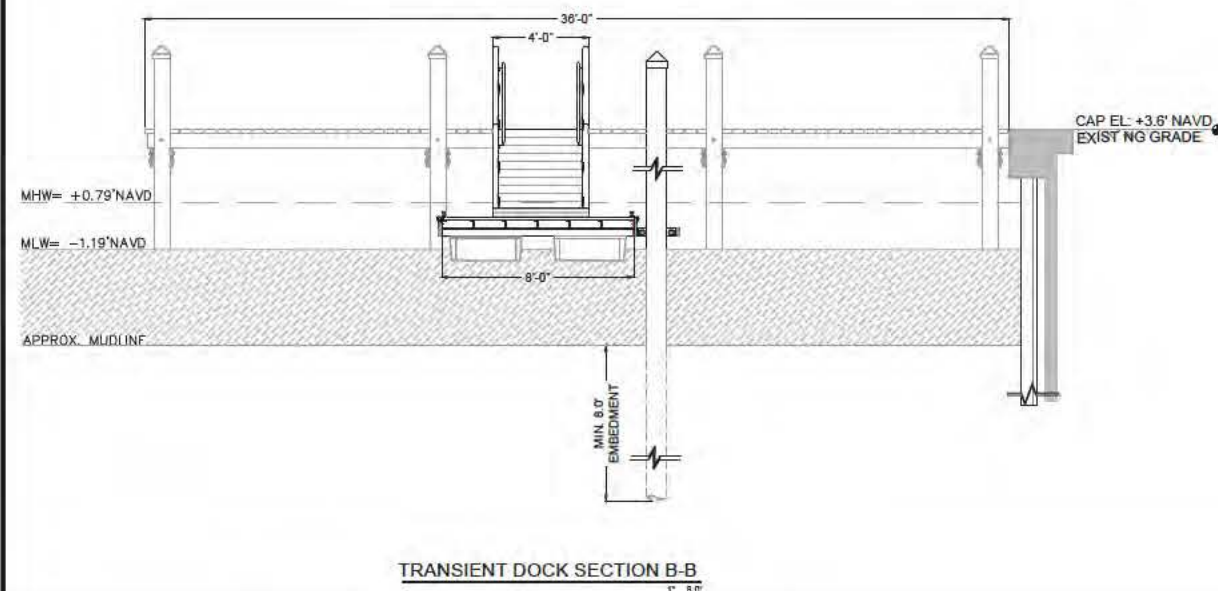
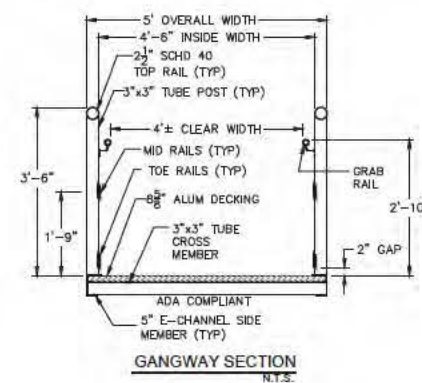
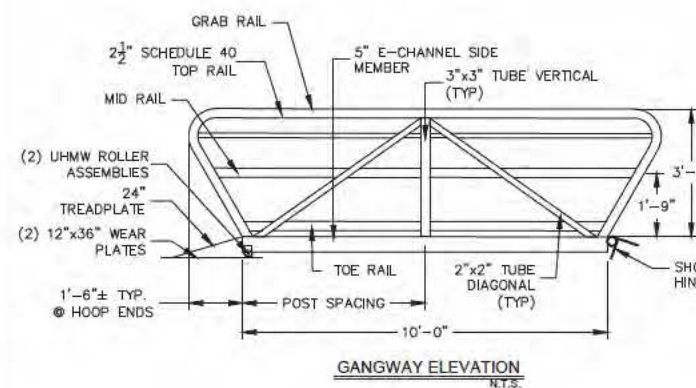
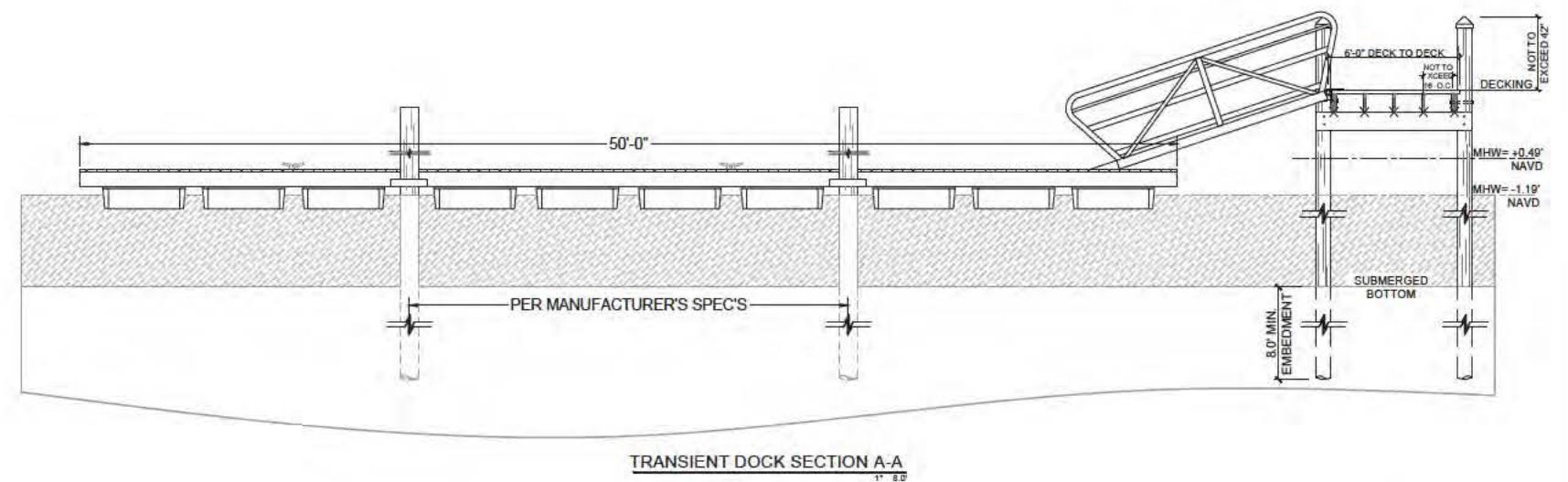
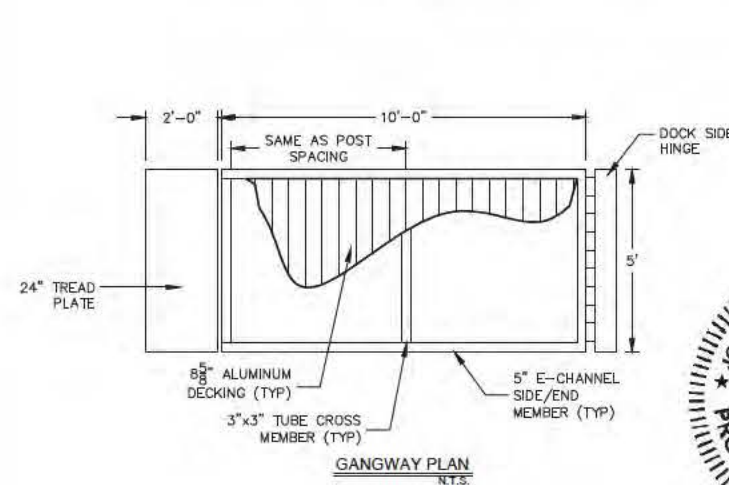
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DATE: 10-17-19  
DRAWN BY: NSN  
CHKD BY: JTF  
SCALE: AS NOTED  
FILE NAME: 41718  
SHEET: 9 OF 13  
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# TYPICAL FLOATING DOCK DETAILS



FLOATING DOCK  
DETAILS (TYPICAL)



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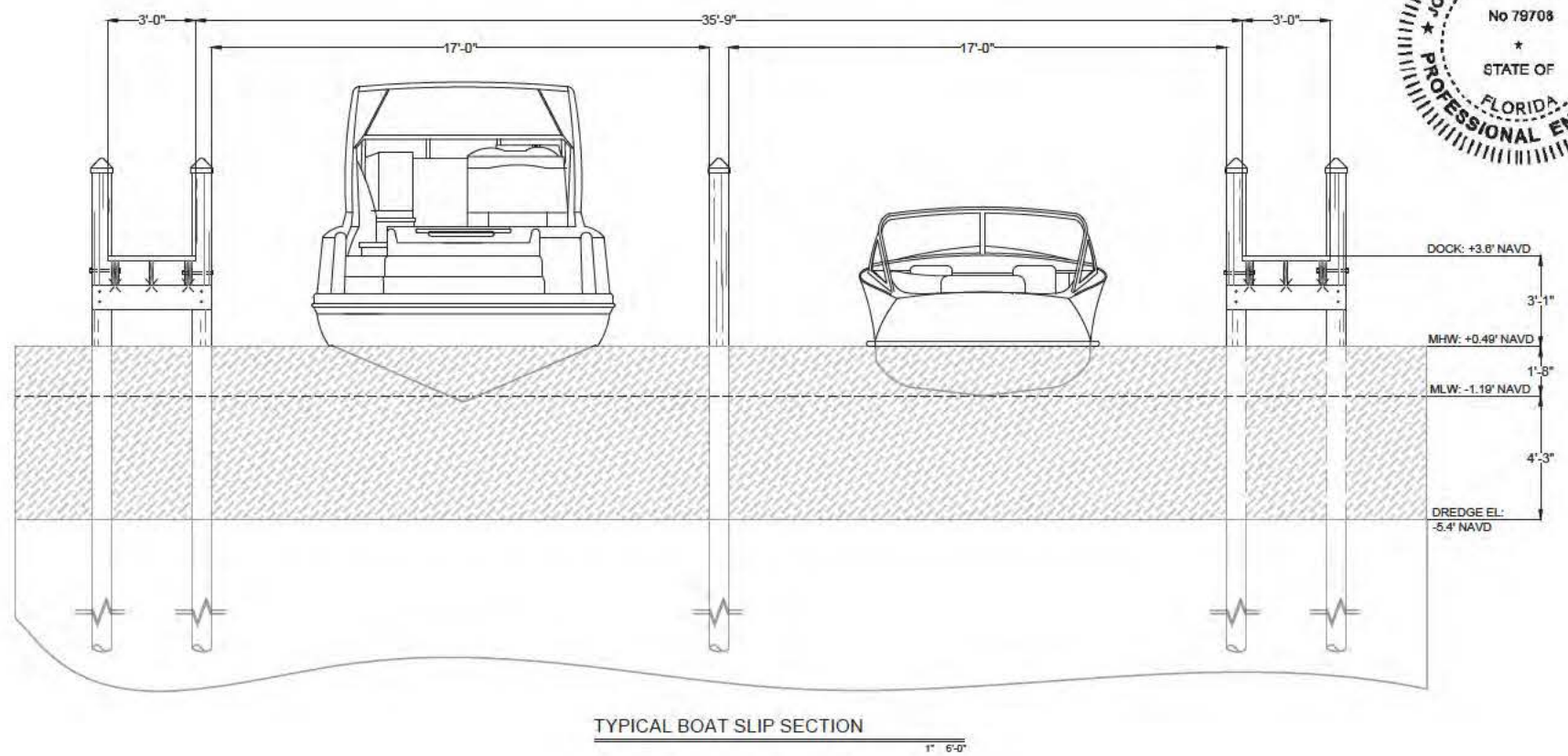
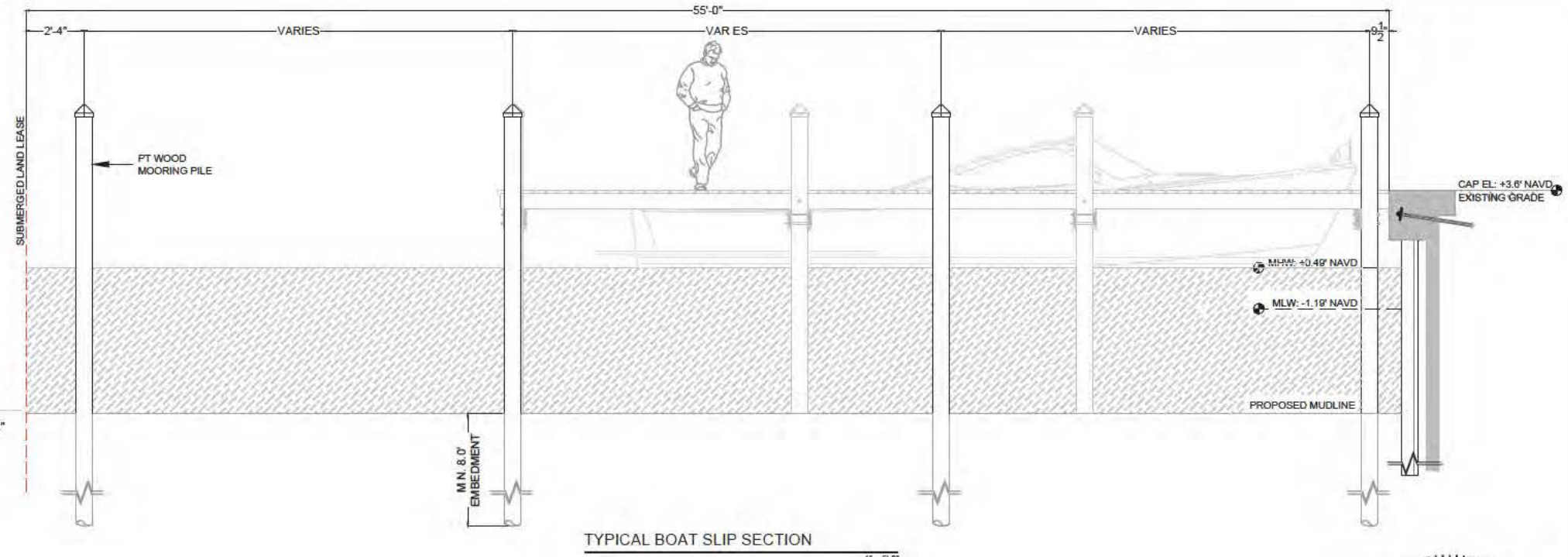
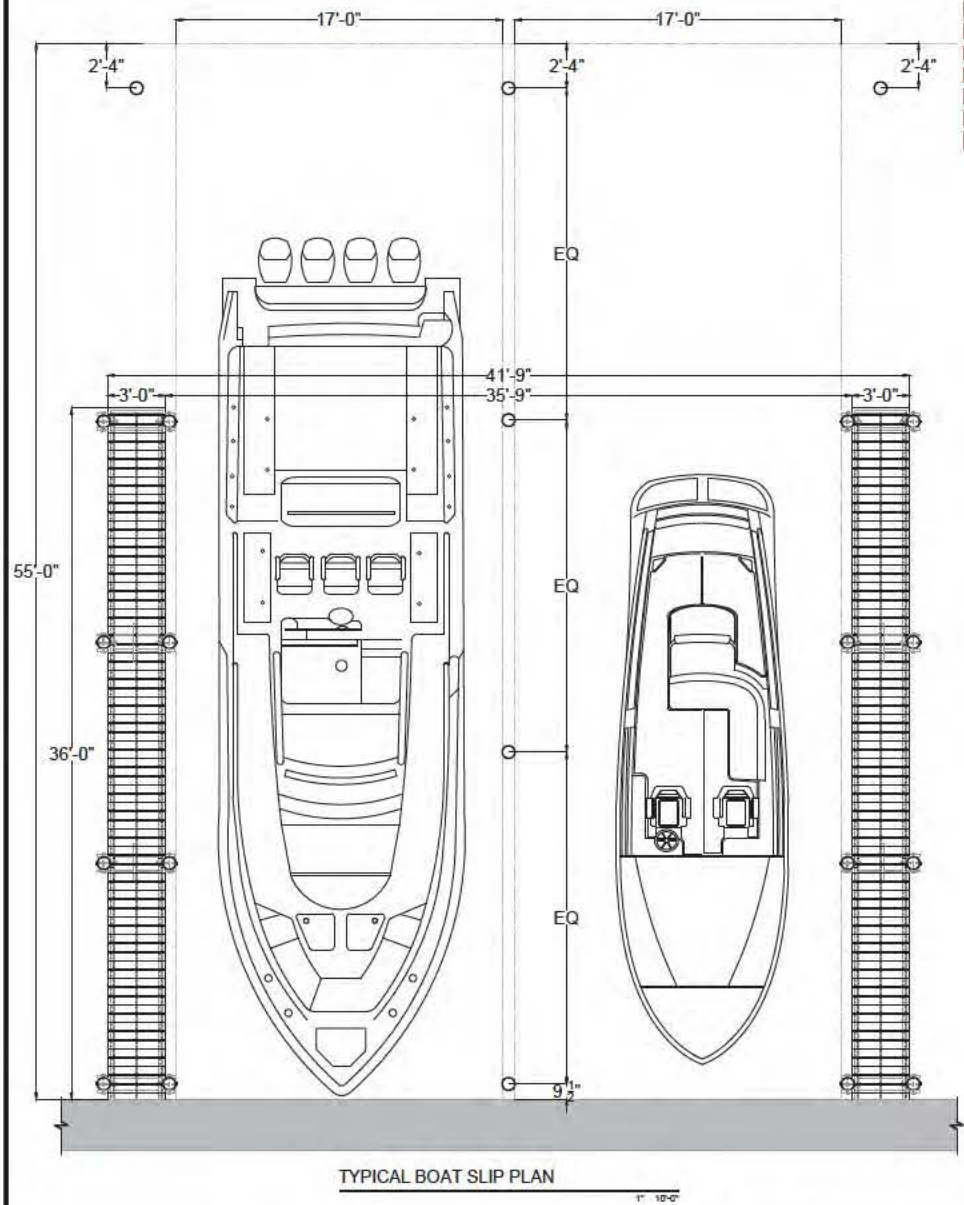
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DRAWN BY: NSN  
CHKD BY: JTF  
SCALE: AS NOTED  
FILE NAME: 41718  
SHEET: 10 OF 13  
REVI:

202 150TH AVENUE,  
MADEIRA BEACH, FL



TYPICAL BOAT SLIP DETAILS  
(17.0' X 55.0' SLIP)

NOTE: ALL FINGER DOCKS ARE TO BE 3' WIDE X 36' LONG  
PRESSURE TREATED TIMBER FRAME WITH EXTERIOR PILES. ALL  
SLIP DIMENSIONS REPRESENT THE CLEAR SPAN DISTANCE FOR  
EACH SLIP.



BOAT SLIP  
DETAILS (TYPICAL)

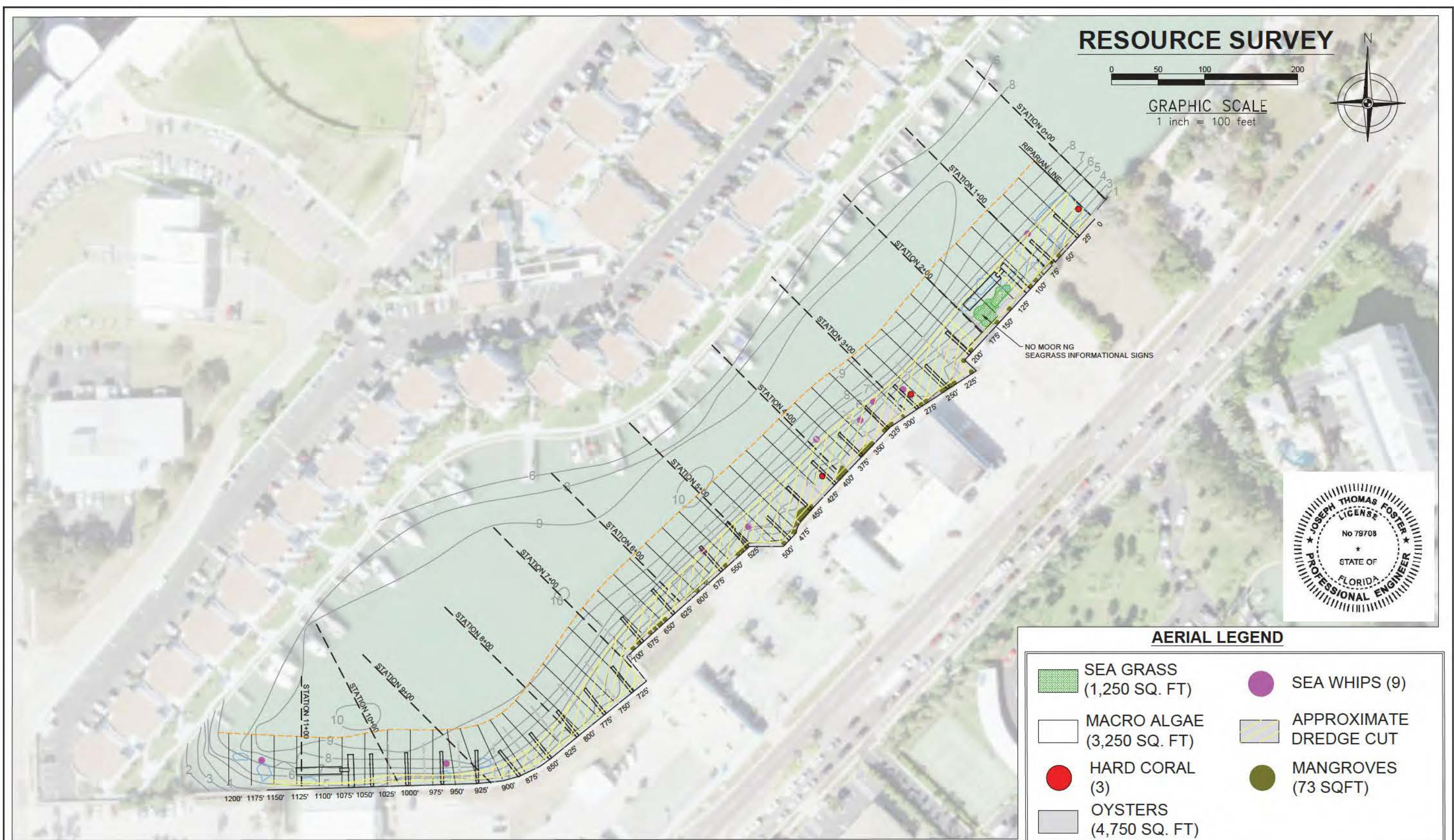


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P: (727) 821-1949  
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DATE:	10-17-19	FILE NAME:	41718
DRAWN BY:	NSN	SHEET:	11 OF 13
CHKD BY:	JTF	REVI:	
SCALE:	AS NOTED		

202 150TH AVENUE,  
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RESOURCE SURVEY

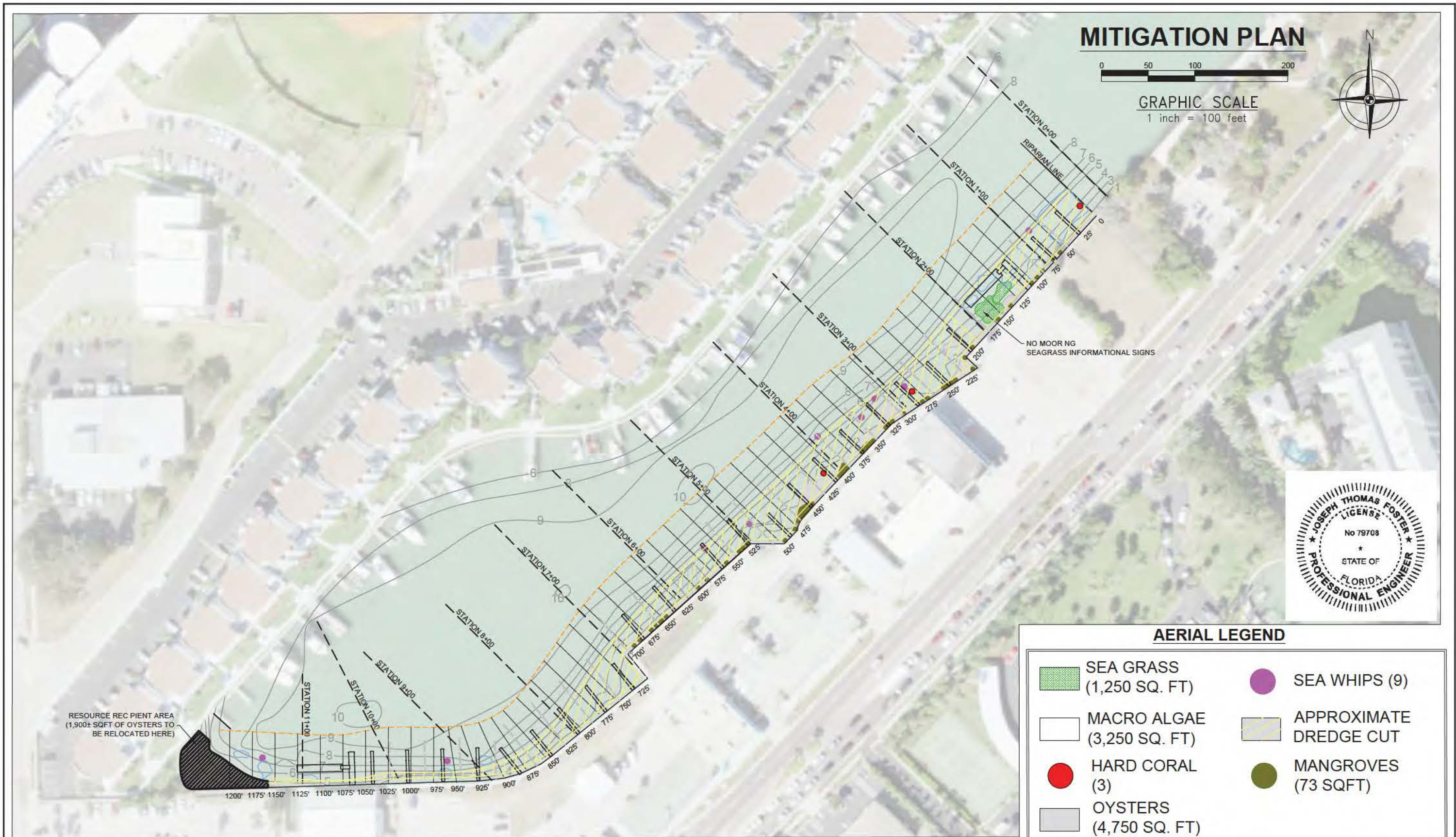


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DATE: 10-17-19  
DRAWN BY: SMJ  
CHKD BY: JTF  
SCALE: 1"=100'  
FILE NAME: 41718  
SHEET: 12 OF 13  
REVI:

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MADEIRA BEACH, FL





MITIGATION PLAN



**FOSTER CONSULTING**

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DATE:  
10-17-19

DRAWN BY:  
SMJ

CHKD BY:  
JTF

SCALE:  
1"=100'

FILE NAME:  
41718

SHEET:  
13 OF 13

REVI:

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