



DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
4400 PGA BOULEVARD, SUITE 500
PALM BEACH GARDENS, FLORIDA 33410

REPLY TO
ATTENTION OF

August 17, 2020

Regulatory Division
South Permits Branch
Palm Beach Gardens Permits Section

PUBLIC NOTICE

Permit Application Number SAJ-1998-02437(SP-JKA)

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 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403) as described below:

APPLICANT: Donald West
St. Lucie County
2300 Virginia Avenue
Fort Pierce, FL 34982

WATERWAY AND LOCATION: The project would affect waters of the United States associated with Taylor Creek and the Indian River Lagoon. The project site is located between Old Dixie Highway and the Intracoastal Waterway within Taylor Creek, in Section 3, Township 35 South, Range 40 East, Fort Pierce, Saint Lucie County, Florida.

Directions to the site are as follows: Take Interstate 95 to Exit 131 and merge onto FL-68 east/Orange Avenue. Travel approximately 2.5 miles east and turn left onto North 25th Street. Travel 1.8 miles and turn right on Juanita Avenue. Travel 0.9 miles and turn right onto U.S. Highway 1. Travel 0.2 miles and turn left onto Florida A1A south (north Causeway) and turn right onto Harbortown Drive. Go to the end and project is located within Taylor Creek/Indian River Lagoon south of the Harbortown Marina.

APPROXIMATE CENTRAL COORDINATES: Latitude: 27.466592°
Longitude: -80.327225°

PROJECT PURPOSE:

Basic: Muck Removal

Overall: Enhance the aquatic ecosystem within Taylor Creek and Indian River Lagoon, in Fort Pierce, St. Lucie County, Florida

PERMIT HISTORY: The Corps issued an individual permit on February 23, 2004 to the applicant to hydraulically dredge 72,000 cubic yards of accumulated sediments within the Taylor Creek Navigation Channel. The dredged material was authorized to be pumped to a Dredge Material Management Area (DMMA) located south of the project

boundary. A second individual permit was issued to the applicant on July 18, 2013 to conduct the Taylor Creek Restoration Phase II Project by using a cutter head dredge to remove 126,350 cubic yards of sediment, including a one-foot overdraft allowance from 23.98 acres within an existing channel in Taylor Creek to depths ranging from minus 7.5 feet Mean Low Water (MLW) to minus 14.5 feet MLW. The Dredge Material will be pumped into the Taylor Creek DMMA. The July 2013 permit included dredge areas west of Old Dixie Highway and the Florida East Coast Railway and it included the dredge areas 1A and 1B identified in this application.

EXISTING CONDITIONS: The project is located within Taylor Creek and the Indian River Lagoon estuaries where Taylor Creek discharges to the Lagoon. The July 2013 permit included dredge areas 1A and 1B as proposed within this application, however the applicant never dredged within these areas. For the existing application the Corps will consider these areas as new dredging.

A recent seagrass survey has not been submitted to the Corps. The Corps does not anticipate any seagrass species or other benthic resources within the project footprint, since the purpose of the project is to remove accumulated muck and restore the area back to a sandy substrate. However, historically seagrass has been found adjacent to the proposed dredge footprint, specifically south of Dredge Area 1B within the Indian River Lagoon. The Corps has requested a benthic survey for the areas identified as 1A and 1B located outside the navigation channel for Taylor Creek and an additional 25 feet outside the proposed dredging boundary for the assessment of secondary impacts. The applicant is working on the survey and can be provided upon request once received.

PROPOSED WORK: The applicant seeks authorization to conduct a muck removal project within 12.17 acres of Taylor Creek and the Indian River Lagoon. The project includes dredging a total of 95,000 cubic yards of material within the 12.17-acre area. The Taylor Creek navigation channel will be dredged to a depth of minus 14.5 feet mean low water by hydraulic cutterhead dredge. Dredge Areas identified as 1A (north of the navigational channel) and 1B (south of the navigation channel) will be dredged to a depth of minus 9 feet mean low water using a hydraulic dredge pipeline. A section of dredge area 1A located north of the Taylor Creek and south of the adjacent Harbortown marina will be dredged mechanically and material will be offloaded at the marina and trucked to the upland Taylor Creek Dredge Material Management Area (DMMA), permitted under SAJ-1998-02437(NPR-LAO). All material dredged by hydraulic cutterhead dredge will be pumped by a 1.75-mile-long, 14-inch floating pipeline to the Taylor Creek DMMA. The pipeline will be anchored every 25 feet and with lit buoys at each anchor to assist in navigation.

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

“The project is to restore and enhance the aquatic environment by removing accumulated muck. If our survey reveals any resources within the proposed muck dredge areas, we will eliminate these areas from the dredge template and add up to 10 ft buffer and BMP measures to protect the resources. In the current plan set, we specify up to a 10 ft buffer around the mangroves that exist in the project area as was previously permitted. If the turbidity measurements raise concern at any point during construction, the contractor will be asked to install staked turbidity barriers around the resources as a secondary measure of protection. Our intent is to avoid and minimize all impacts to resources in this restoration dredging project to benefit water quality and protect the existing resources.”

Additional BMPs to be implemented include:

- Floating turbidity barriers will surround the dredge barge and will be maintained as the dredge moves to various locations
- Marine mammal/manatee observers with required equipment will be present
- Turbidity monitoring/measurements will be taken during construction to ensure NTUs do not exceed 29 NTUs above background levels. A log will be maintained and submitted to the agencies, if required. We propose that measurements will be made outside of the turbidity barrier surrounding the dredge based on tide and 200 feet away from the barge. Secondary turbidity curtains will be utilized, if needed.
- If any significant plume should be observed, all dredging activity will be stopped and additional turbidity barrier measures will be employed.
- The pipeline will be floated, anchored and placed such that sufficient depth is available for safe manatee passage and the pipeline will also be placed along the edge of an armored canal and will not impede manatee movement.
- The County will contract with a fulltime construction manager to ensure construction activities adhere to all environmental compliance criteria.

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

The purpose of the proposed project is to enhance the aquatic environment. The applicant is committed to avoid all impacts to resources and therefore no 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, if applicable, those federally recognized tribes with concerns in Florida and the Permit Area.

ENDANGERED SPECIES: The Corps has determined the proposed project may affect, but is not likely to adversely affect the West Indian manatee (*Trichechus manatus*) and its designated critical habitat; swimming sea turtles: (green sea turtle

(*Chelonia mydas*), Kemp's Ridley sea turtle (*Lepidochelys kempii*), and Loggerhead sea turtle (*Caretta caretta*); smalltooth sawfish (*Pristis pectinata*); Johnson's seagrass (*Halophila johnsonii*); and Eastern indigo snake (*Drymarchon couperi*). The Corps will request U.S. Fish and Wildlife/National Marine Fisheries Service concurrence with this determination pursuant to Section 7 of the Endangered Species Act.

The Corps has determined the proposal would have no effect on any other listed threatened or endangered species or designated critical habitat.

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 proposal would impact approximately 12.17 acres of mucky bottom utilized by various life stages of penaeid shrimp complex, reef fish, stone crab, spiny lobster, migratory/pelagic fish, and snapper/grouper complex. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries in the South Atlantic Region. 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 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 Palm Beach Gardens Permits Section, 4400 PGA Boulevard, Suite 500, Palm Beach Gardens, Florida 33410 within 15 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, Jerilyn Ashworth, in writing at the Palm Beach Gardens Permits Section, 4400 PGA Boulevard, Suite 500, Palm Beach Gardens, Florida 33410; by electronic mail at Jerilyn.Ashworth@usace.army.mil; or by telephone at (561)472-3516.

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, esthetics, 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.

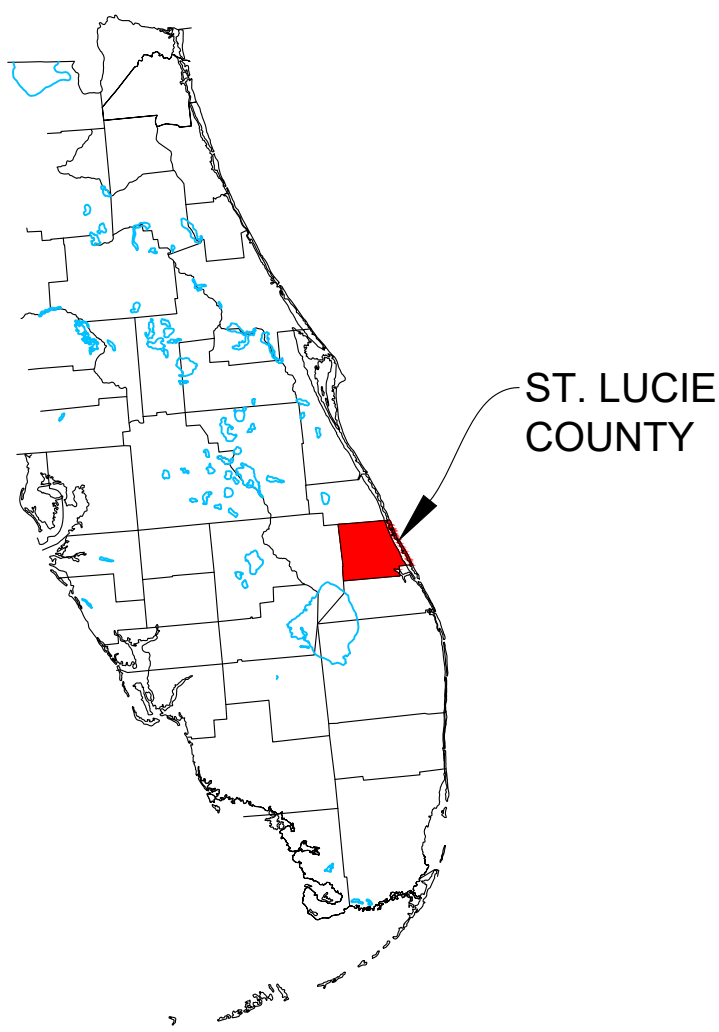
COASTAL ZONE MANAGEMENT CONSISTENCY: In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. In Puerto Rico, a Coastal Zone Management Consistency Concurrence is required from the Puerto Rico Planning Board. In the Virgin Islands, the Department of Planning and Natural Resources permit constitutes compliance with the 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.

CONSTRUCTION DRAWINGS

ST. LUCIE COUNTY TAYLOR CREEK RESTORATION DREDGING JULY 7, 2020

LOCATION MAP



COUNTY COMMISSIONERS

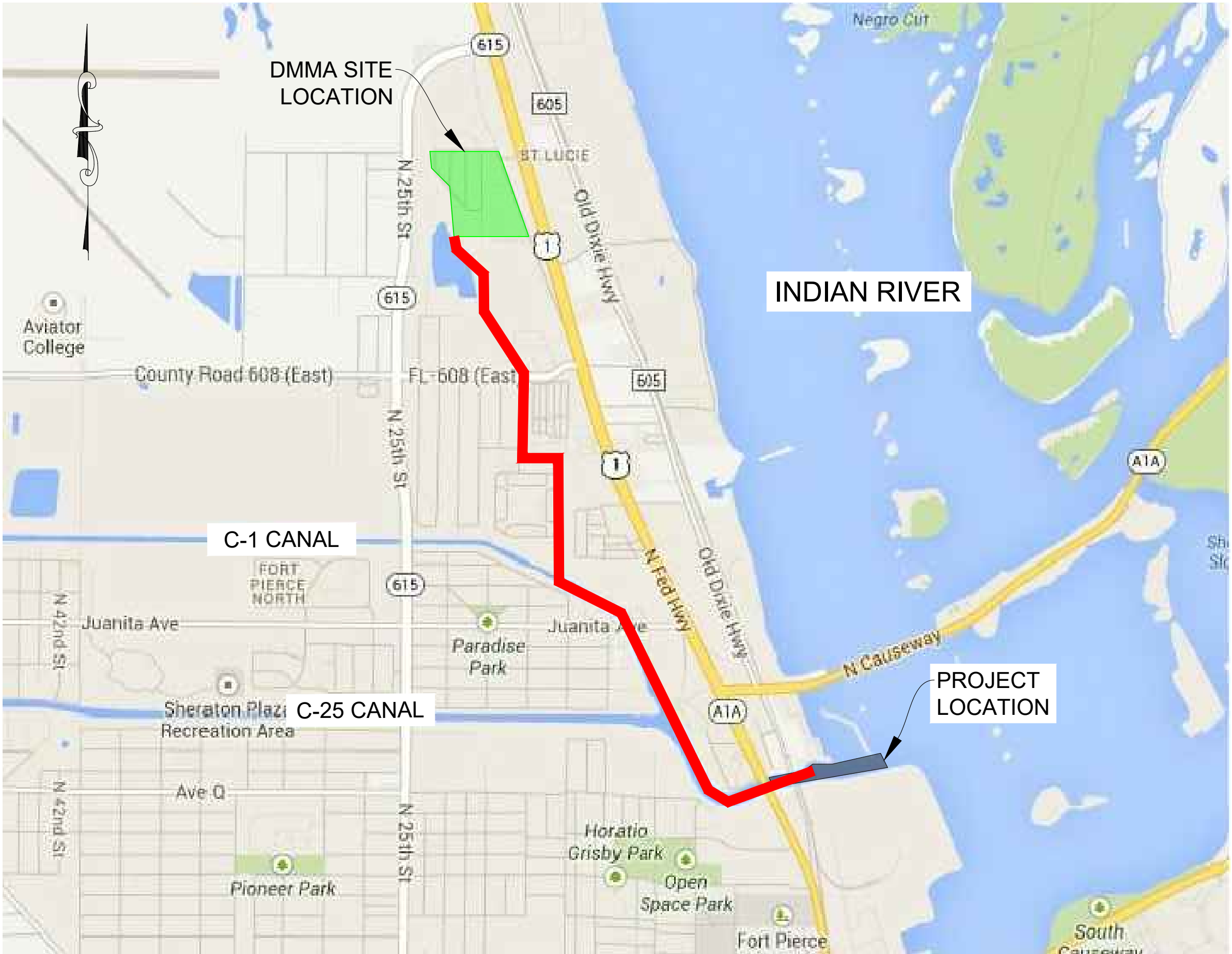
CHRIS DZADOVSKY	VICE CHAIR, DISTRICT 1
SEAN MITCHELL	DISTRICT 2
LINDA BARTZ	DISTRICT 3
FRANNIE HUTCHINSON	DISTRICT 4
CATHY TOWNSEND	CHAIR, DISTRICT 5

COUNTY ADMINISTRATION

HOWARD N. TIPTON
COUNTY ADMINISTRATOR

DESCRIPTION

INDEX & LOCATION MAP
DREDGE PLAN
CROSS-SECTION 1 OF 5
CROSS-SECTION 2 OF 5
CROSS-SECTION 3 OF 5
CROSS-SECTION 4 OF 5
CROSS-SECTION 5 OF 5
DREDGE MATERIAL DISPOSAL ROUTE
EXISTING CONDITIONS DISPOSAL SITE
PHASE I AND PHASE II STAGING AREAS
PIPELINE AND TURBIDITY BARRIER DETAILS
5 FOOT MANGROVE BUFFER DETAIL
ENVIRONMENTAL NOTES



SPECIFICATIONS ARE COMPLEMENTARY,
BE A REQUIREMENT OF THE OTHER. IT IS
TO EXAMINE THE DRAWINGS AND
REQUIREMENTS OF EACH DIVISION AND
SUBCONTRACTOR IS MAKING THE ALLOWANCES
A COMPLETE FACILITY, OPERATIONAL IN
SPECIFICALLY STATED IN THE DRAWINGS

RESPONSIBILITY TO NOTIFY THE ENGINEER OF
AMONG THE DIVISIONS OF THE DRAWING
BID DATE. NEITHER THE OWNER OR
ANY DEFICIENCIES OR DISCREPANCIES
ACCORDINGLY, IN LIGHT OF THESE
OBLIGATED TO INTERPRET THE DRAWINGS
WILL PROVIDE THE OWNER WITH A
COMPLETE, FUNCTIONING FACILITY FOR THE BID PRICE.

ENGINEER CERTIFICATION:

I HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL ENGINEER IN THE
STATE OF FLORIDA PRACTICING WITH DMC, DREDGING & MARINE
CONSULTANTS LLC, A CORPORATION, AUTHORIZED TO OPERATE AS AN
ENGINEERING BUSINESS, CERTIFICATE OF AUTHORIZATION # 9410, BY THE
STATE OF FLORIDA DEPARTMENT OF BUSINESS AND PROFESSIONAL
REGULATION, AND THAT I, OR OTHERS UNDER MY DIRECT SUPERVISION, HAVE
PREPARED OR APPROVED THE EVALUATIONS, FINDINGS, OPINIONS,
CALCULATIONS, CONCLUSIONS OR TECHNICAL ADVICE HEREBY REPRESENTED
BY THESE DRAWINGS.

STEPHEN J. KUHN, P.E.
FLORIDA LICENSE No. 67486

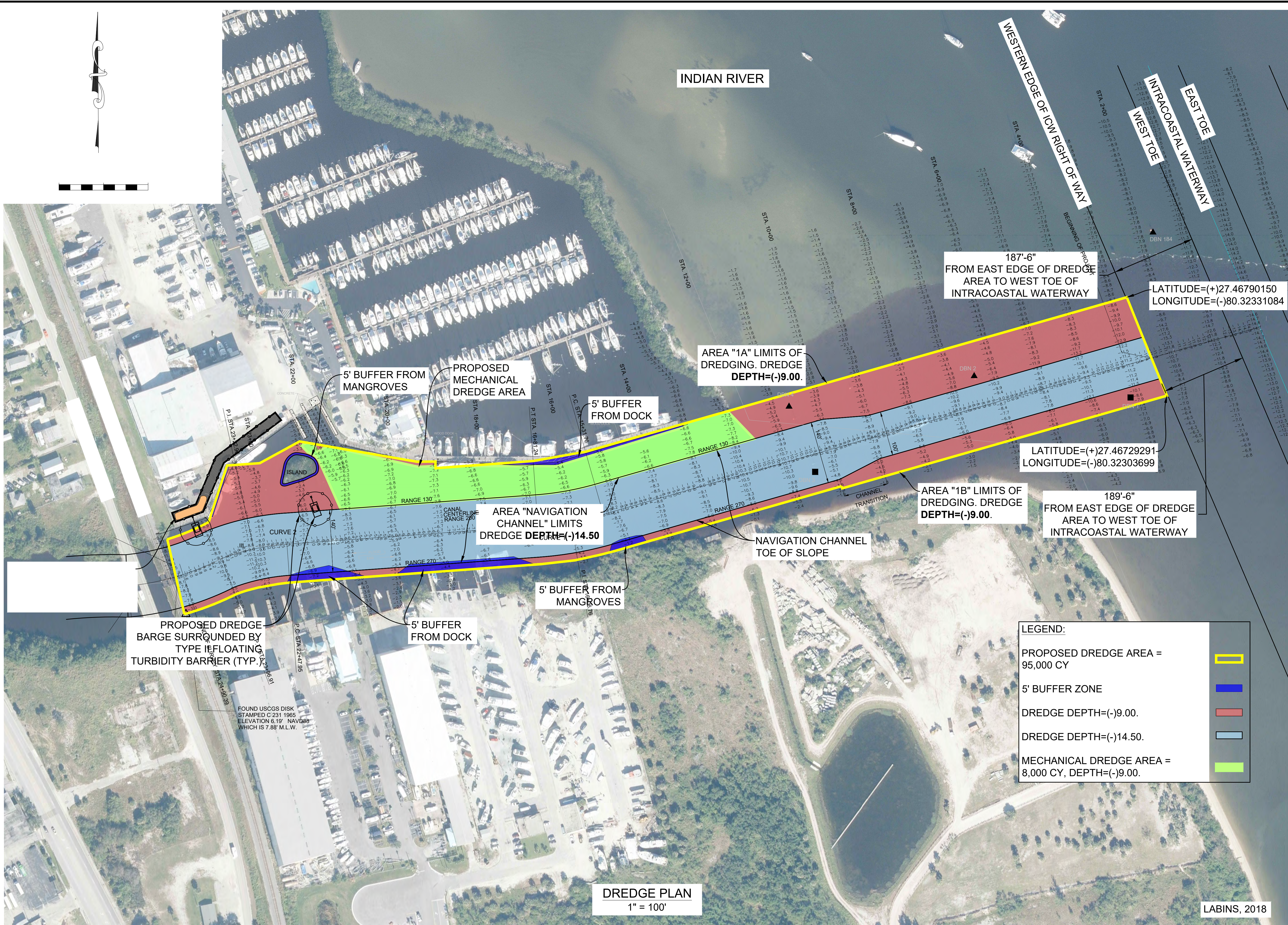


Know what's below.
Call before you dig.

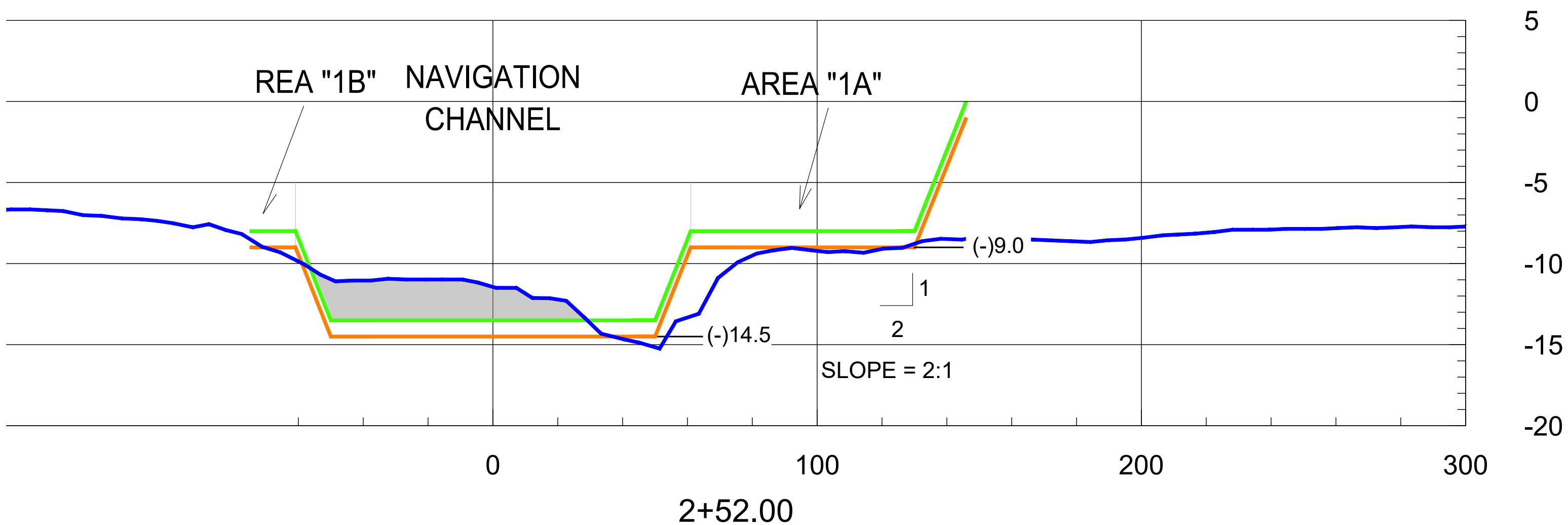
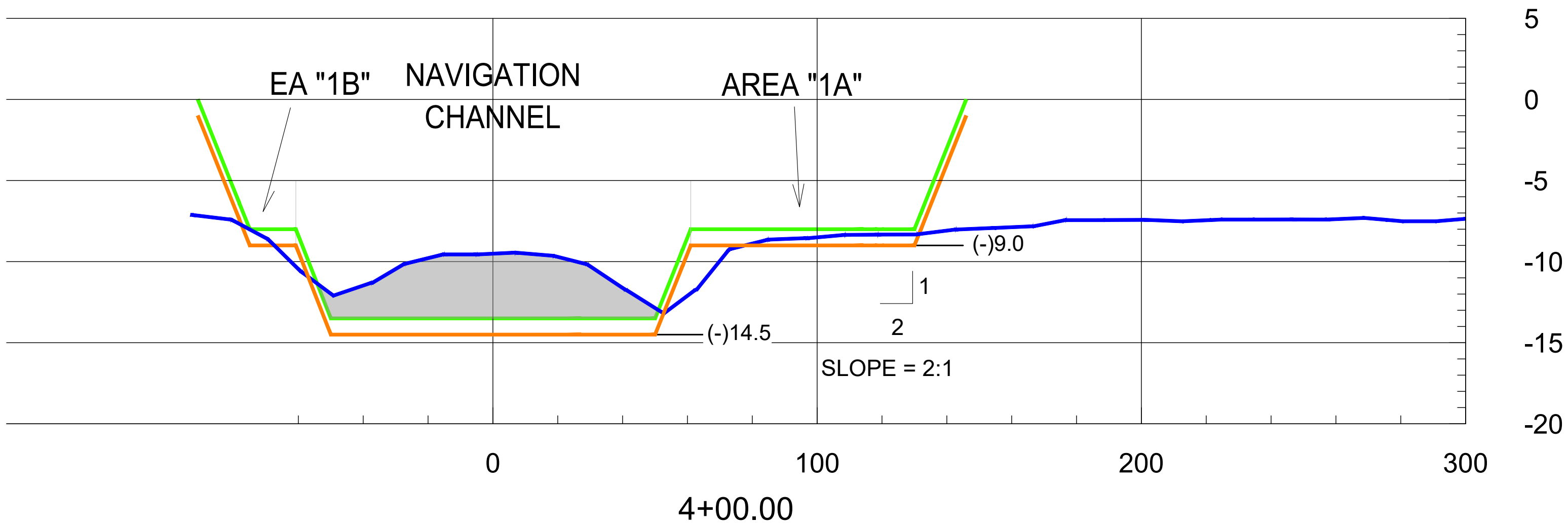
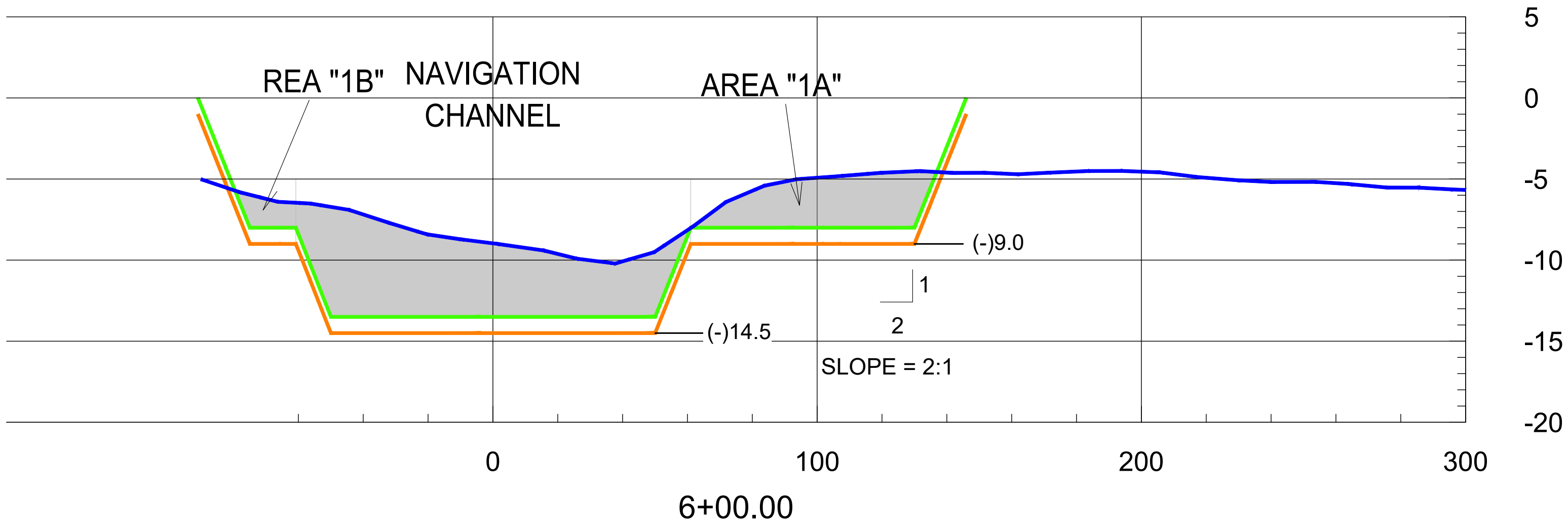
REPRODUCTION SCALE:
THESE PLANS SHALL BE PRINTED IN COLOR AND
SCALED TO ACCURATELY BE REPRODUCED ON
22X34 SIZED SHEETS. ALL OTHER SHEET SIZES ARE
NOT TO SCALE.

Dredging & Marine Consultants 4643 S. Clyde Morris Blvd
Unit 302
Port Orange, FL 32129
Phone:(386) 304-6505
Fax:(386) 304-6506
www.dmc.es.com

DMC
ENGINEERS • SCIENTISTS

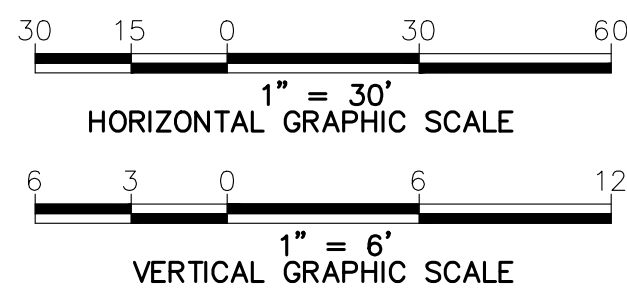


DRAWING: DREDGE PLAN		PROJECT NAME: TAYLOR CREEK RESTORATION DREDGING PHASE I		CLIENT: ST. LUCIE COUNTY	
DMC JOB NO. 20-002-44		DRAWN AS CAD		SHEET NO. C-01	
CHECKED AR		SCALE AS SHOWN		DATE 07-07-20	
APPROVED SKP		ST. LUCIE COUNTY		STEPHEN J. KUHN, P.E. FLORIDA LICENSE No. 87496	
Dredging & Marine Consultants		4643 S. Clyde Morris Blvd Unit 302 Port Orange, FL 32129 Phone: (386) 304-6505 Fax: (386) 304-6506 www.dmcscs.com		ENGINEERS • SCIENTISTS	
St. Lucie County BOCC 2300 Virginia Ave. Fort Pierce, FL 34982 772-462-1100		LABINS, 2018			

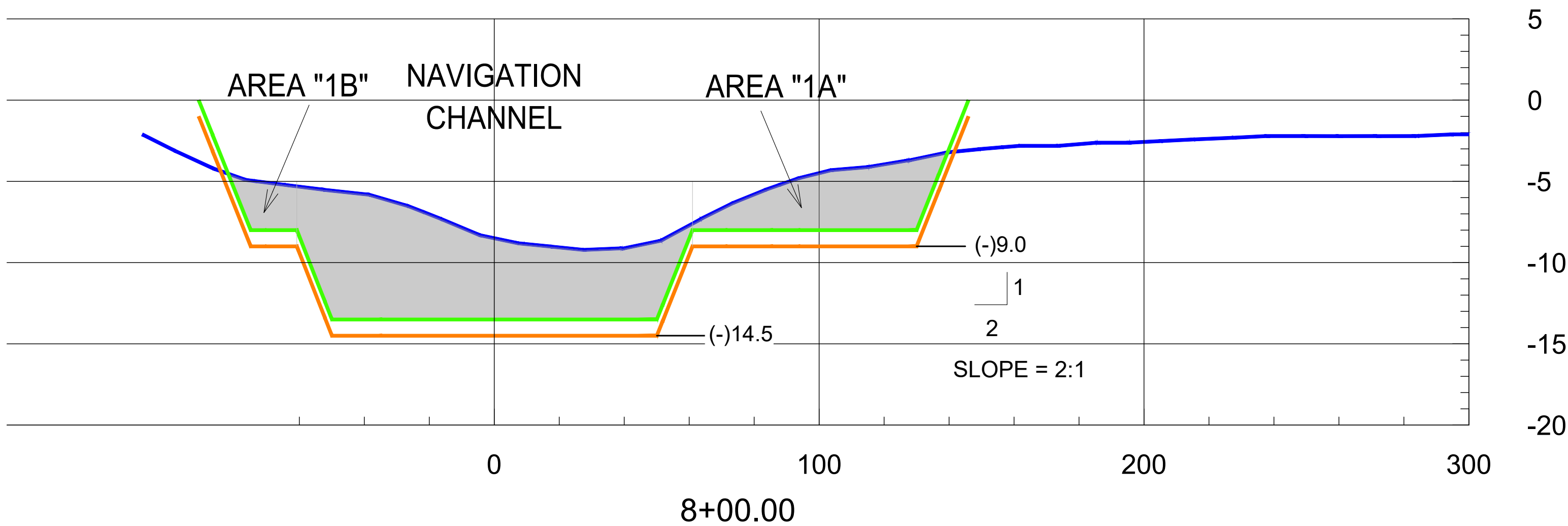
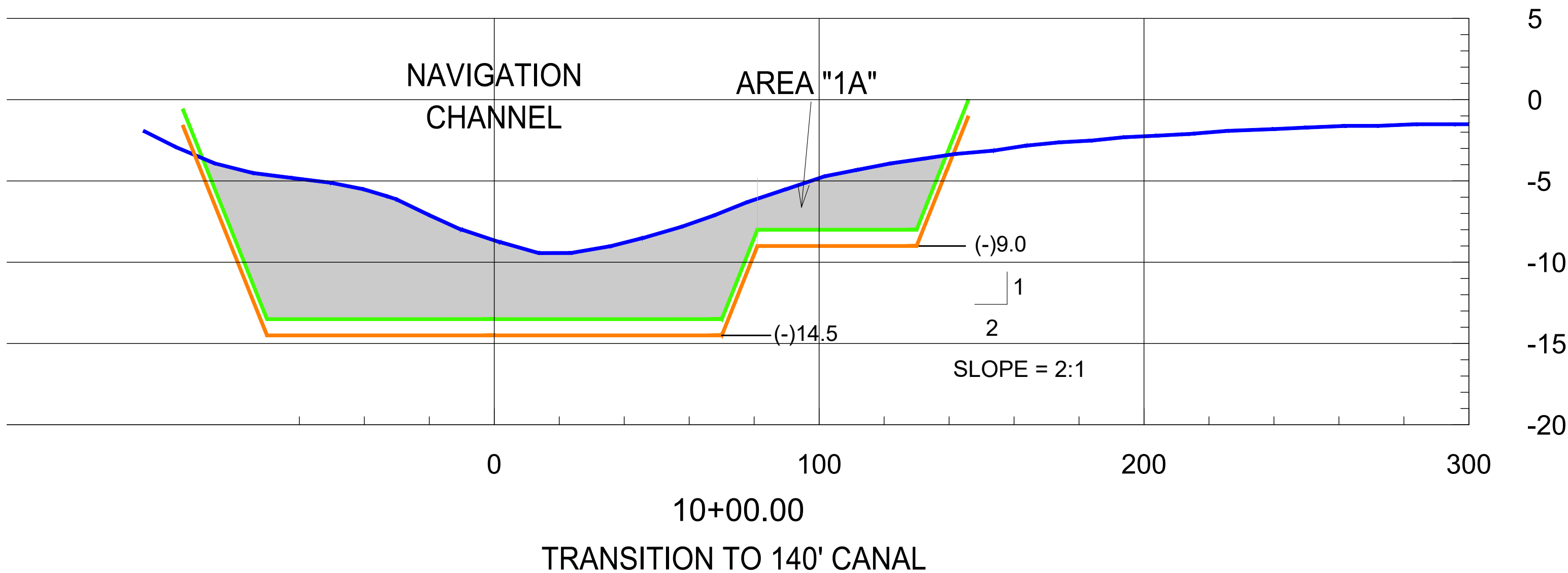
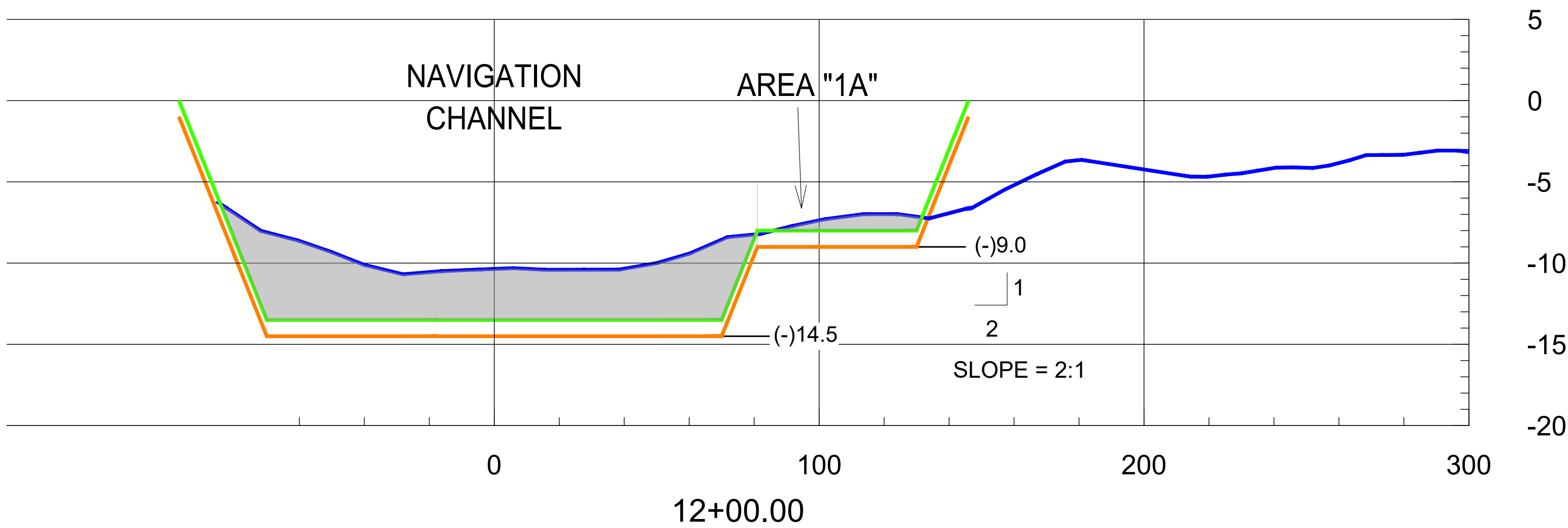


LEGEND/ABBREVIATIONS:

- MLW MEAN LOW WATER
- MARCH 2, 2020 SURVEY
- DREDGE TEMPLATE
- 1' ALLOWABLE OVERDEPTH

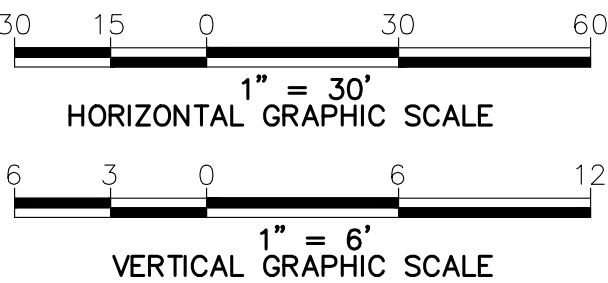


DRAWING: CROSS-SECTION 1 OF 5	PROJECT NAME: TAYLOR CREEK RESTORATION DREDGING PHASE I		CLIENT: ST. LUCIE COUNTY
	DMC JOB NO. 20-002-44	SHEET NO. C-02	
DRAWN AS CAD		CHECKED AR SCALE AS SHOWN	DATE 07-07-20
DREDGING & MARINE CONSULTANTS 4643 S. Clyde Morris Blvd Unit 302 Port Orange, FL 32129 Phone: (386) 304-6505 Fax: (386) 304-6506 www.dmcscs.com		ENGINEERS • SCIENTISTS	
St. Lucie County BOCC 2300 Virginia Ave. Fort Pierce, FL 34982 772-462-1100		FLORIDA	

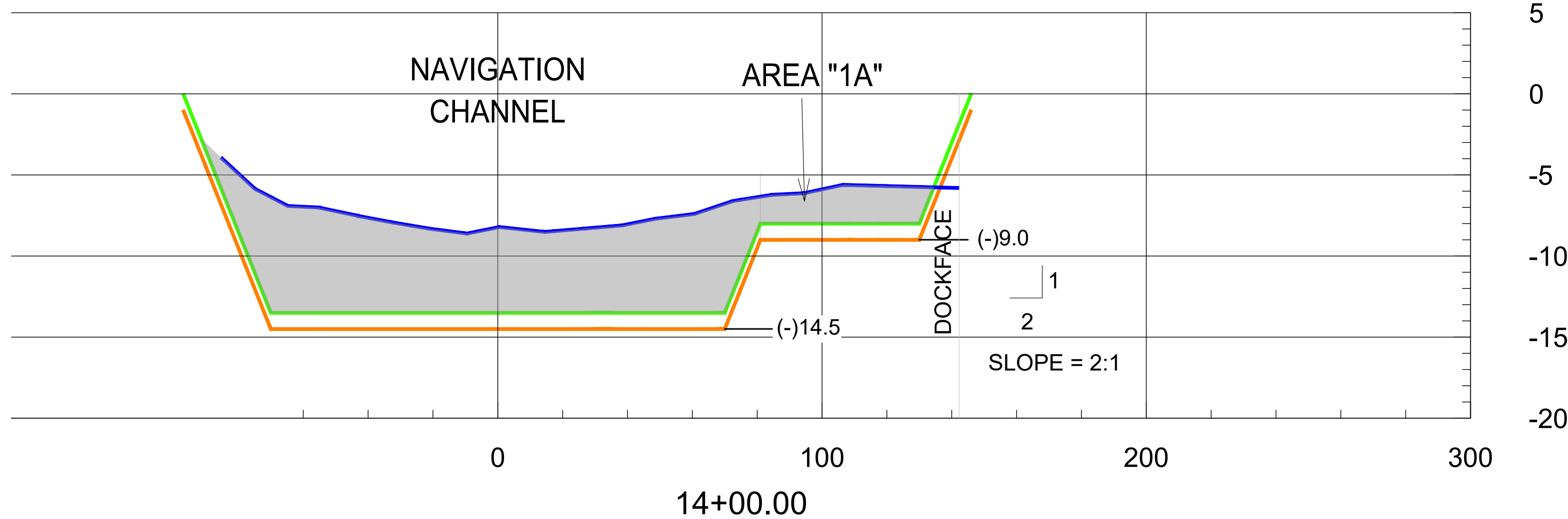
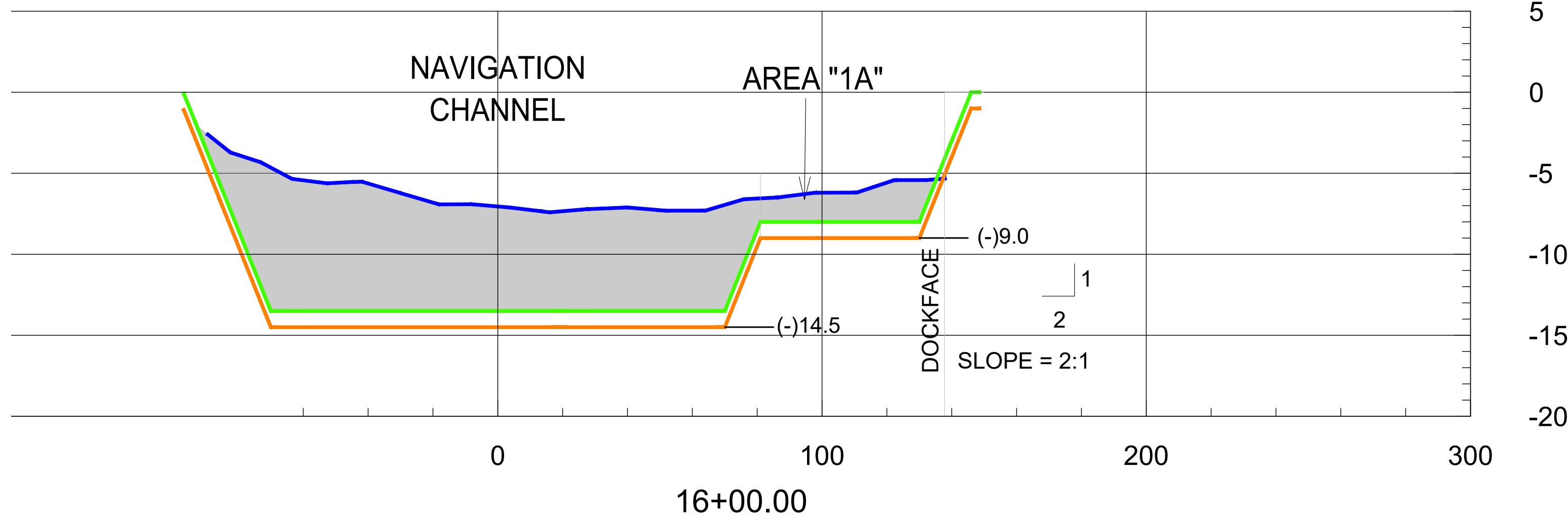
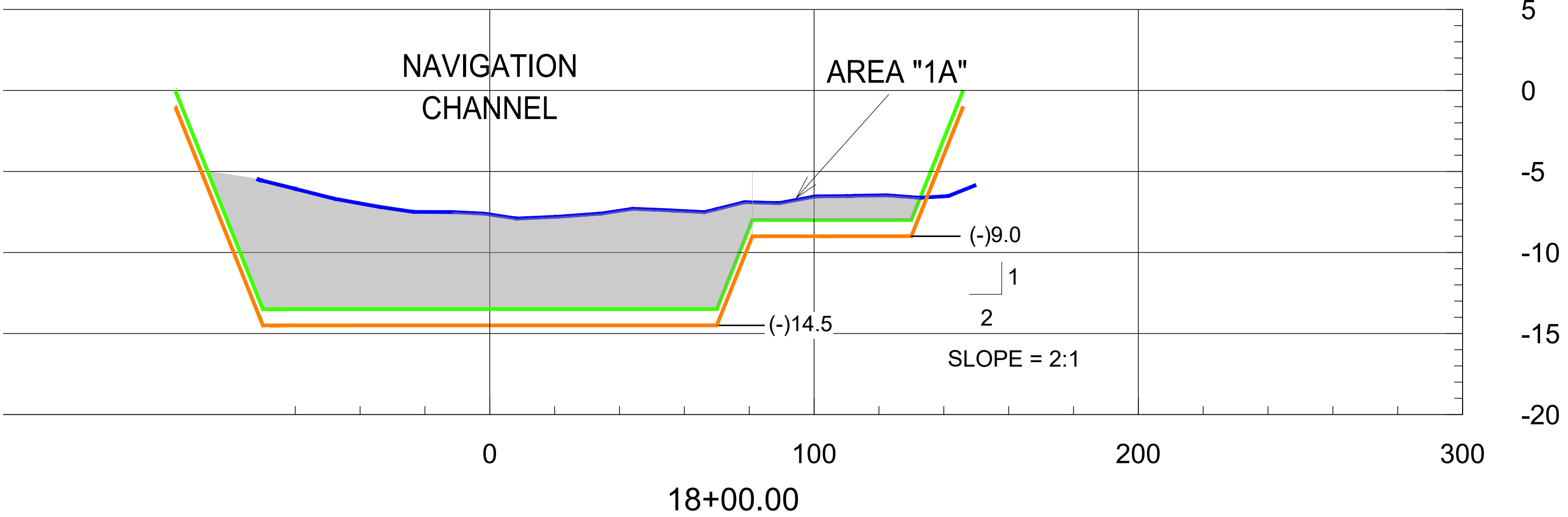


LEGEND/ABBREVIATIONS:

- MLW MEAN LOW WATER
MARCH 2, 2020 SURVEY
DREDGE TEMPLATE
1' ALLOWABLE OVERDEPTH

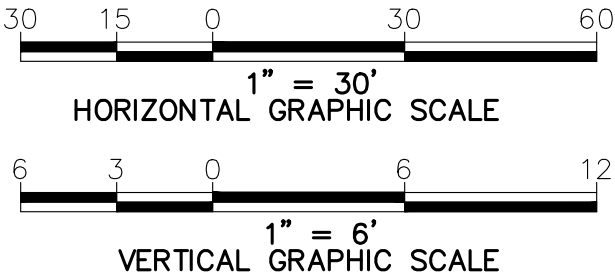


DRAWING: CROSS-SECTION 2 OF 5	PROJECT NAME: TAYLOR CREEK RESTORATION DREDGING PHASE I		CLIENT: ST. LUCIE COUNTY
	DMC JOB NO. 20-002-44	SHEET NO. C-03	
DRAWN AS	CAD C3D	CHECKED AR	SCALE AS SHOWN DATE 07-07-20
4643 S. Clyde Morris Blvd Unit 302 Port Orange, FL 32129 Phone: (386) 304-6505 Fax: (386) 304-6506 www.dmcscs.com		STEPHEN J. KUHN, P.E. FLORIDA LICENSE No. 67486	
St. Lucie County BOCC 2300 Virginia Ave. Fort Pierce, FL 34982 772-462-1100		St. Lucie County FLORIDA	



LEGEND/ABBREVIATIONS:

- MLW MEAN LOW WATER
- MARCH 2, 2020 SURVEY
- DREDGE TEMPLATE
- 1' ALLOWABLE OVERDEPTH



DRAWING: CROSS-SECTION 3 OF 5			
DMC JOB NO. 20-002-44		SHEET NO. C-04	
DRAWN AS	CAD	C3D	SCALE AS SHOWN
CHECKED AR	DATE	07-07-20	
APPROVED SKP			

PROJECT NAME: TAYLOR CREEK RESTORATION DREDGING PHASE I		CLIENT: ST. LUCIE COUNTY

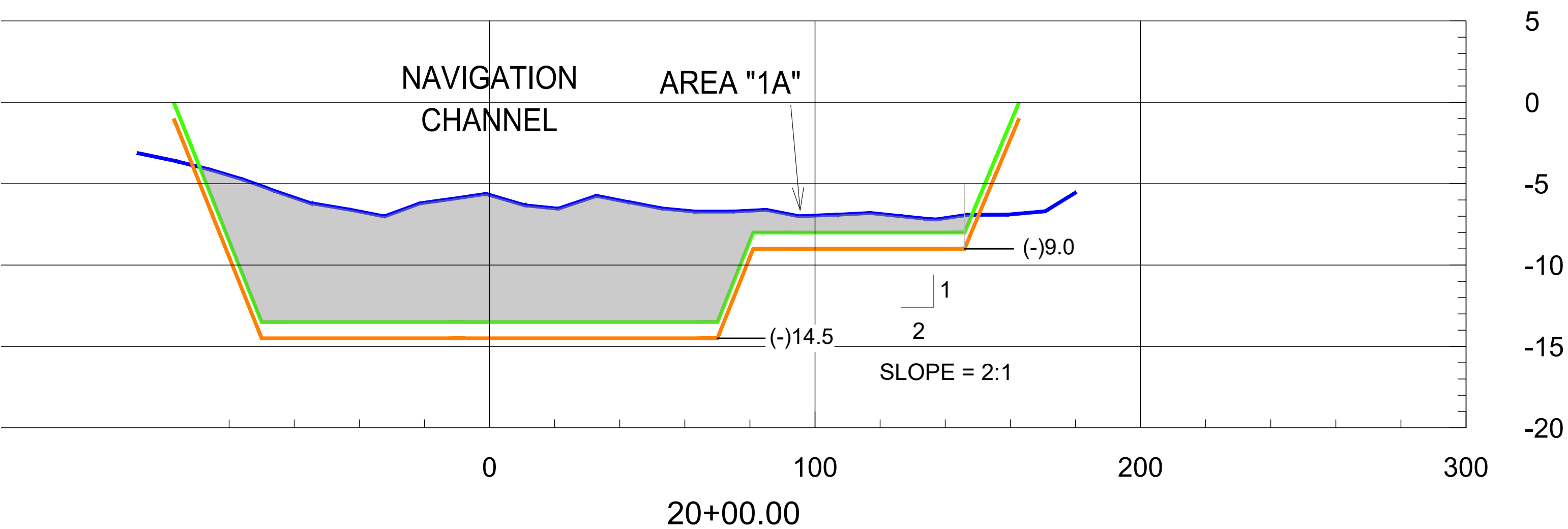
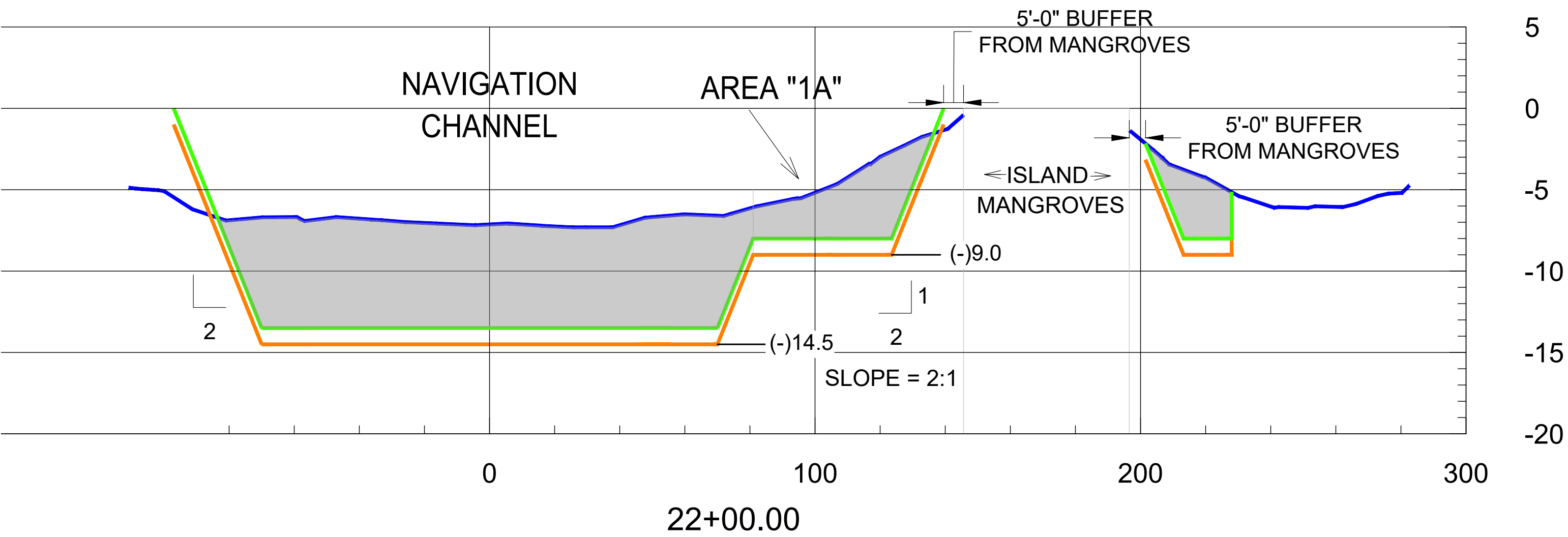
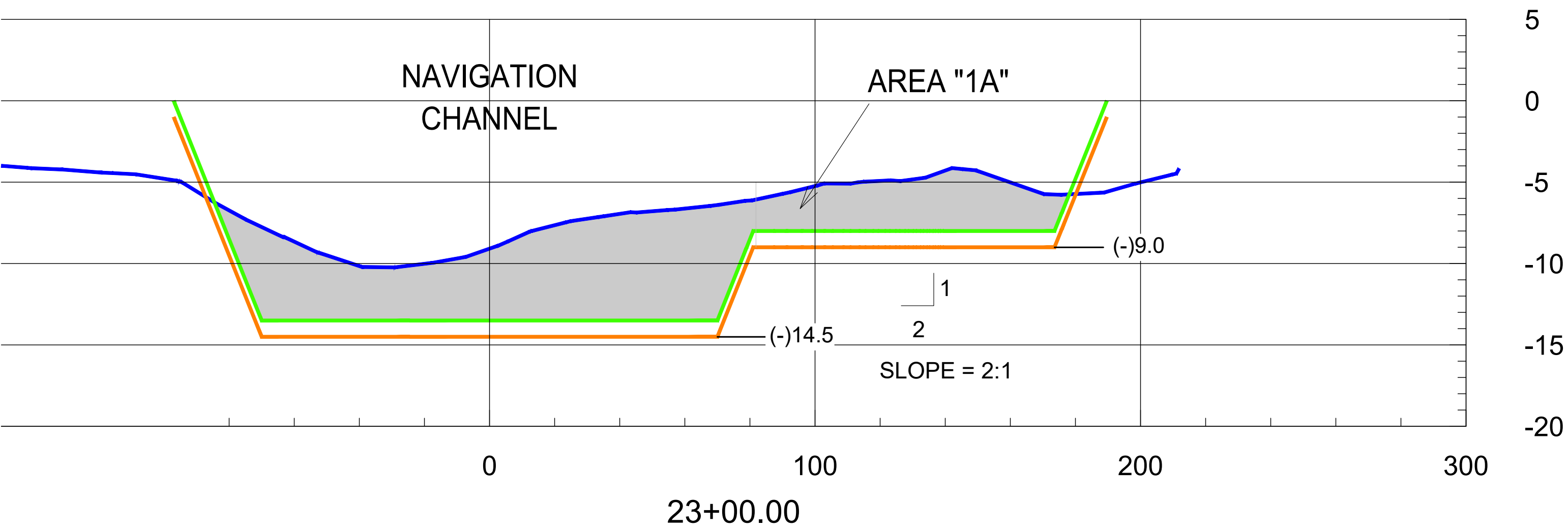
STEPHEN J. KUHN, P.E. FLORIDA LICENSE No. 67486	
--	--

4643 S. Clyde Morris Blvd
Unit 302
Port Orange, FL 32129
Phone: (386) 304-6505
Fax: (386) 304-6506
www.dmcscs.com

DMC
ENGINEERS • SCIENTISTS

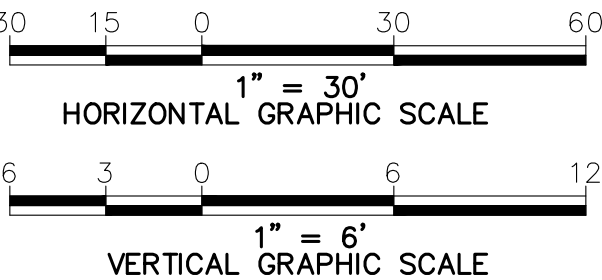
St. Lucie County BOCC
2300 Virginia Ave.
Fort Pierce, FL 34982
772-462-1100

ST. LUCIE COUNTY
FLORIDA

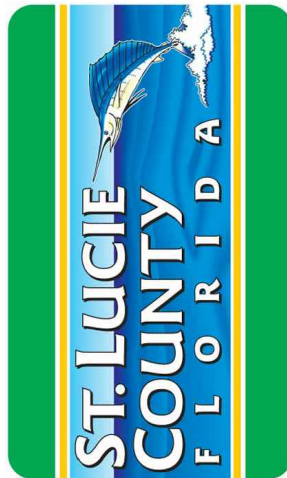


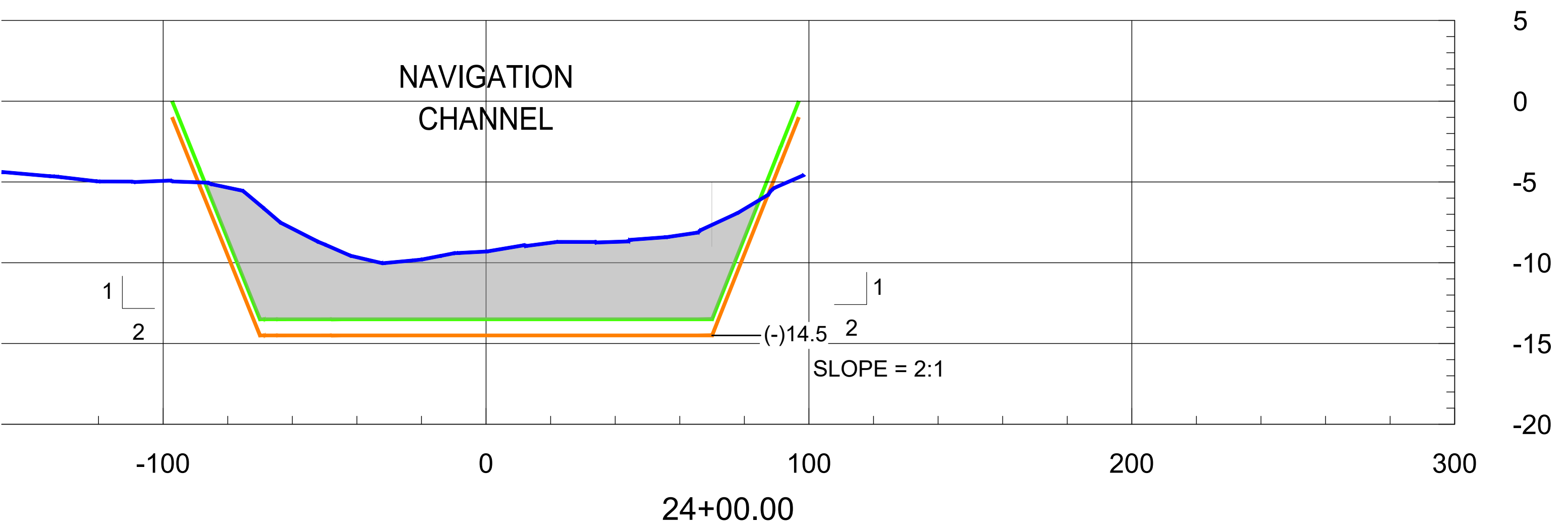
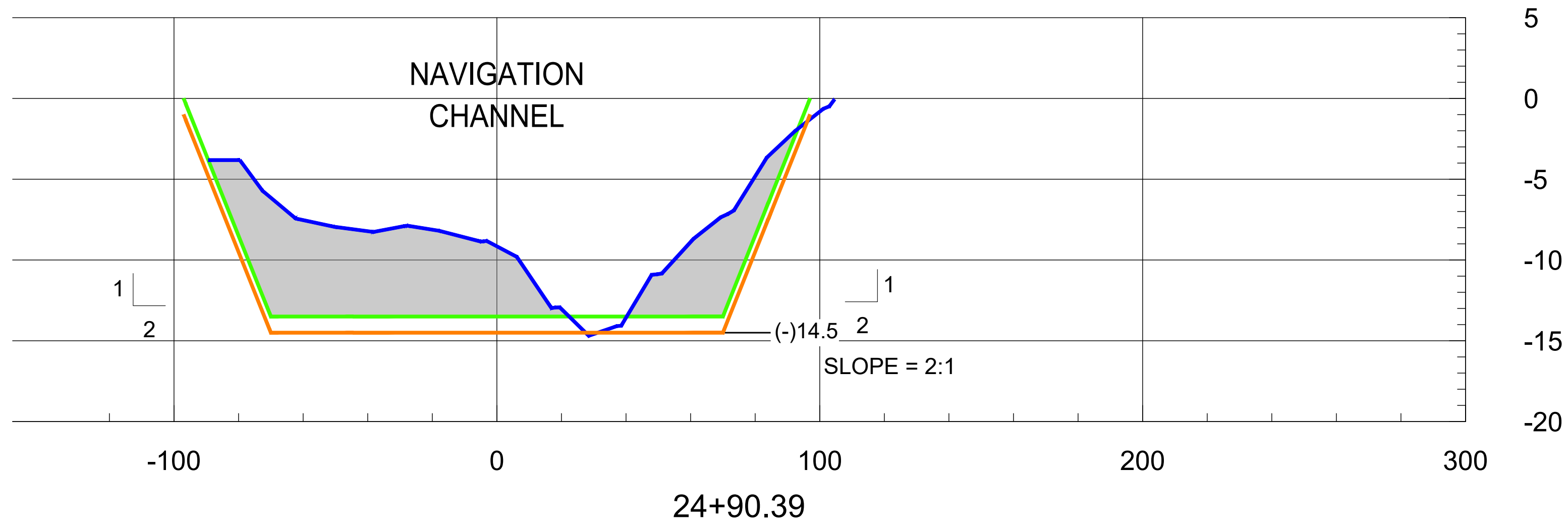
LEGEND/ABBREVIATIONS:

- MLW MEAN LOW WATER
- MARCH 2, 2020 SURVEY
- DREDGE TEMPLATE
- 1' ALLOWABLE OVERDEPTH



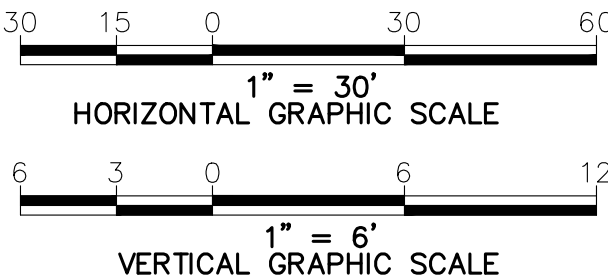
DRAWING: CROSS-SECTION 4 OF 5	DMC JOB NO. 20-002-44	DRAWN AS CAD	CHECKED AR SCALE AS SHOWN	SHEET NO. C-05
PROJECT NAME: TAYLOR CREEK RESTORATION DREDGING PHASE I		CLIENT: ST. LUCIE COUNTY		
4643 S. Clyde Morris Blvd Unit 302 Port Orange, FL 32129 Phone: (386) 304-6505 Fax: (386) 304-6506 www.dmcsc.com		STEPHEN J. KUHN, P.E. FLORIDA LICENSE No. 67486		
Dredging & Marine Consultants DMC ENGINEERS • SCIENTISTS		St. Lucie County BOCC 2300 Virginia Ave. Fort Pierce, FL 34982 772-462-1100		





LEGEND/ABBREVIATIONS:

- MLW MEAN LOW WATER
- MARCH 2, 2020 SURVEY
- DREDGE TEMPLATE
- 1' ALLOWABLE OVERDEPTH



St. Lucie County BOCC
2300 Virginia Ave.
Fort Pierce, FL 34982
772-462-1100

Dredging & Marine Consultants
DMC
ENGINEERS • SCIENTISTS

4643 S. Clyde Morris Blvd
Unit 302
Port Orange, FL 32129
Phone: (386) 304-6505
Fax: (386) 304-6506
www.dmcscs.com

STEPHEN J. KUHN, P.E.
FLORIDA LICENSE No. 67486

PROJECT NAME:
TAYLOR CREEK RESTORATION
DREDGING PHASE I

CLIENT:
ST. LUCIE COUNTY

DRAWING:
CROSS-SECTION 5 OF 5

DMC JOB NO.
20-002-44

DRAWN
AS

CAD

C3D

CHECKED
AR

SCALE AS SHOWN

APPROVED SKP

DATE
07-07-20

SHEET NO.
C-06



St. Lucie County BOCC
2300 Virginia Ave.
Fort Pierce, FL 34982
772-462-1100



4643 S. Clyde Morris Blvd
Unit 302
Port Orange, FL 32129
Phone: (386) 304-6505
Fax: (386) 304-6506
www.dmc-es.com

STEPHEN J. KUHN, P.E.
FLORIDA LICENSE No. 67486

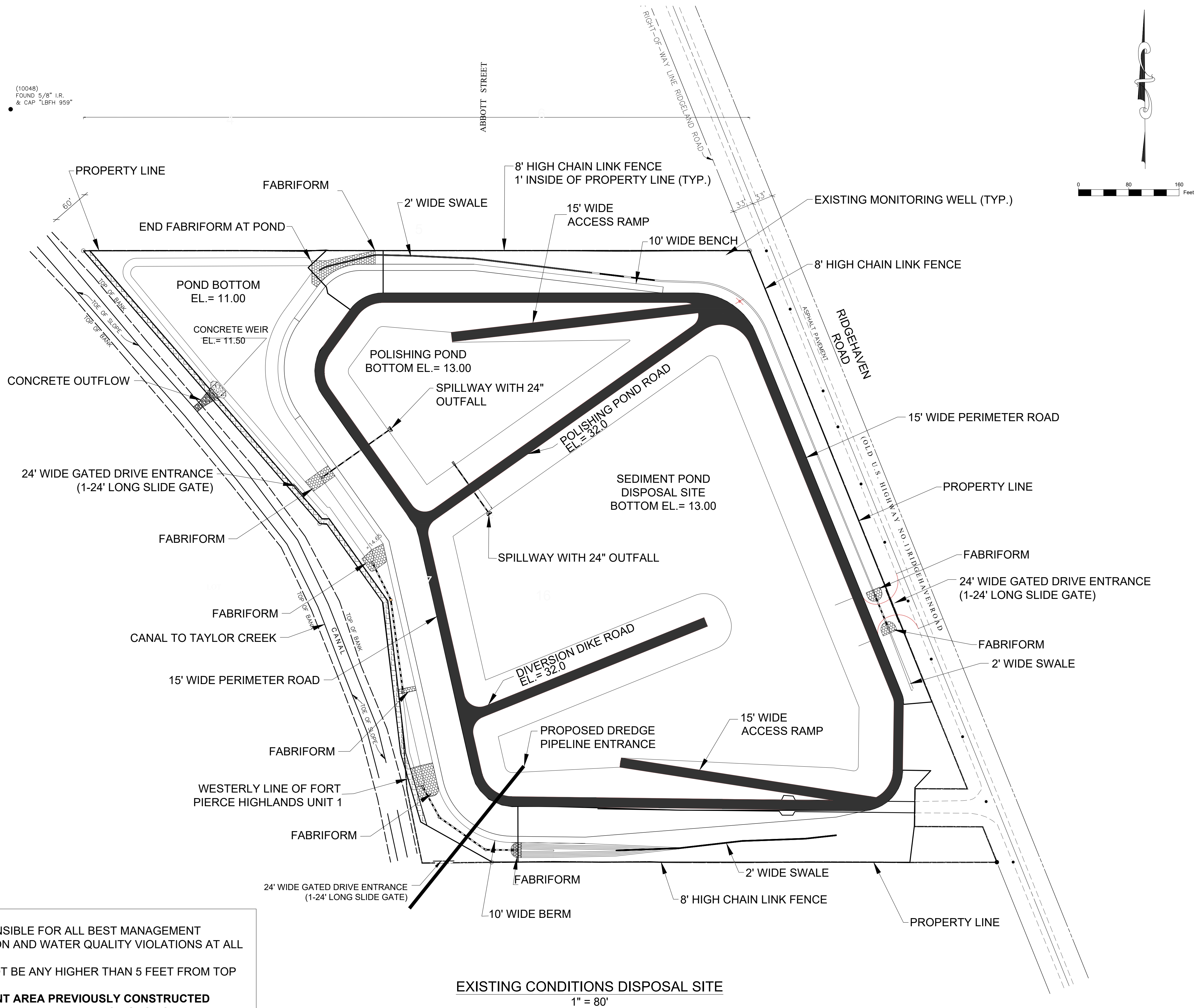
PROJECT NAME:
TAYLOR CREEK RESTORATION
DREDGING PHASE I

CLIENT:
ST. LUCIE COUNTY

DRAWING: DREDGE
MATERIAL DISPOSAL ROUTE

DMC JOB NO. 20-002-44

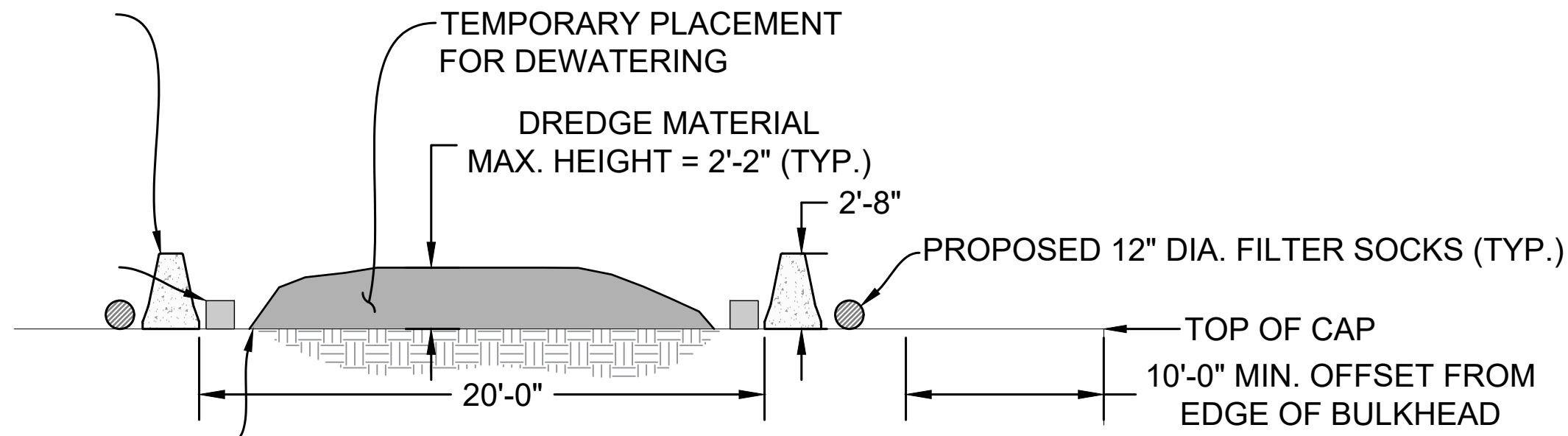
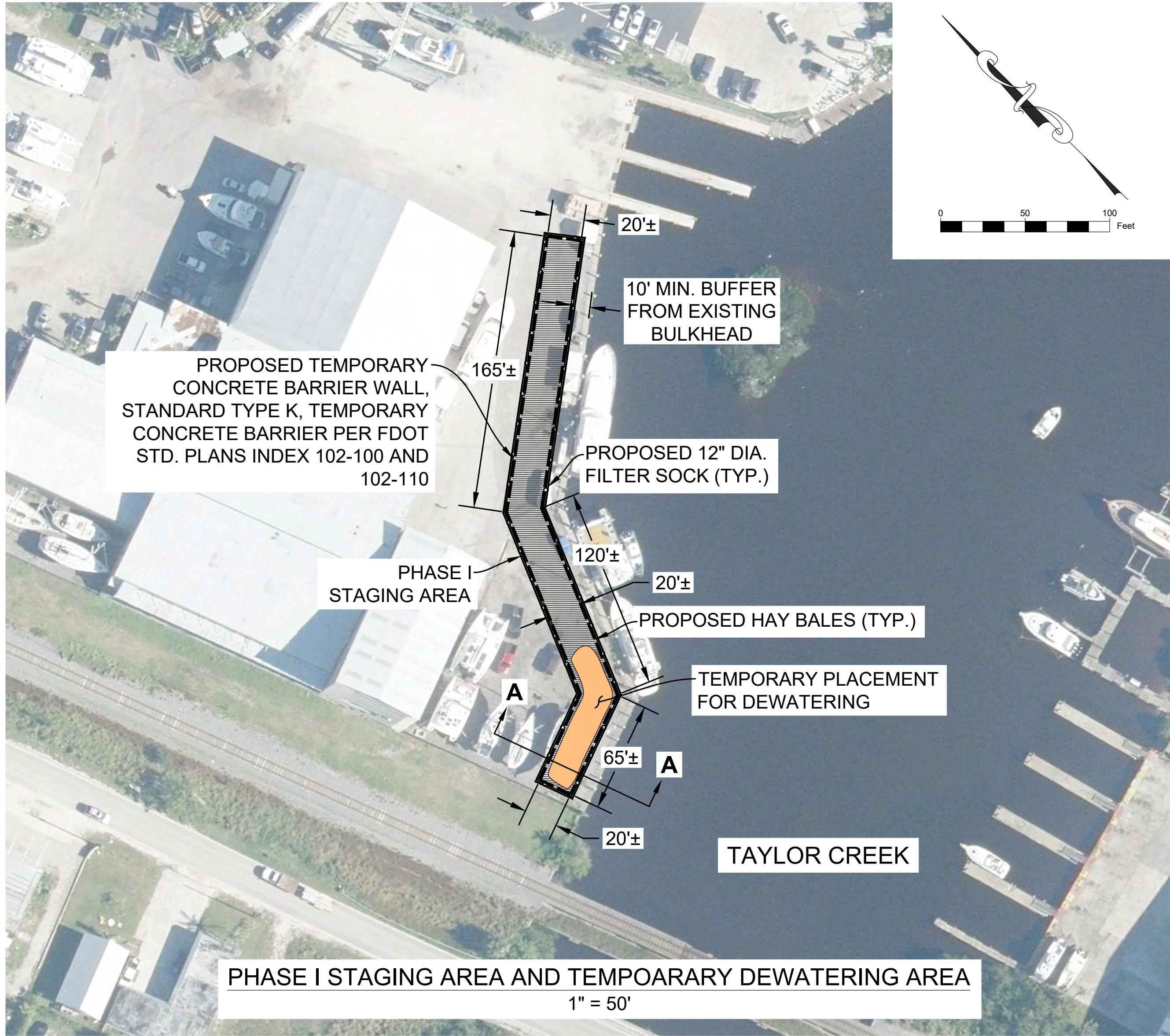
DRAWN	AS	CAD	C3D	SHEET NO.
CHECKED	AR	SCALE AS SHOWN		C-07
APPROVED	SKP	DATE	07-07-20	



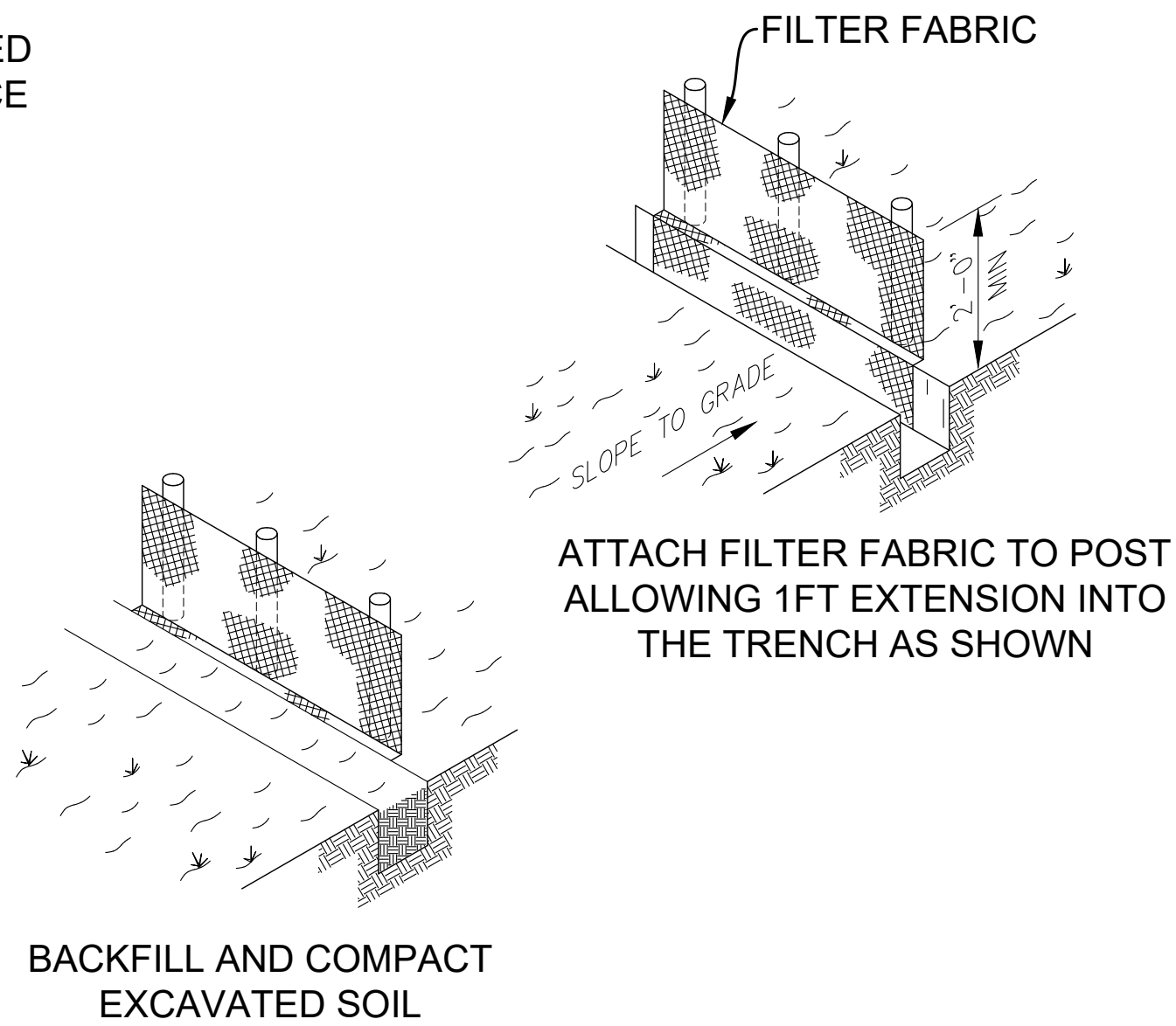
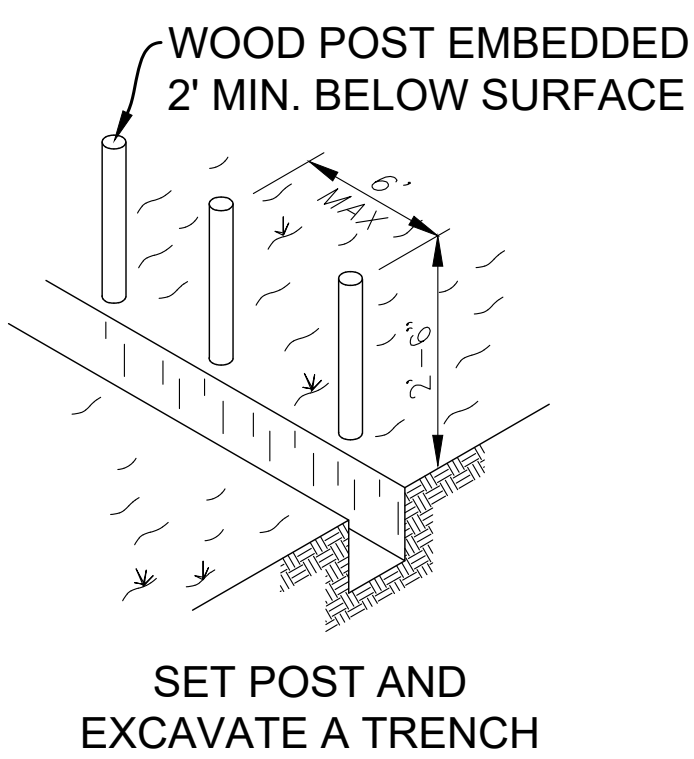
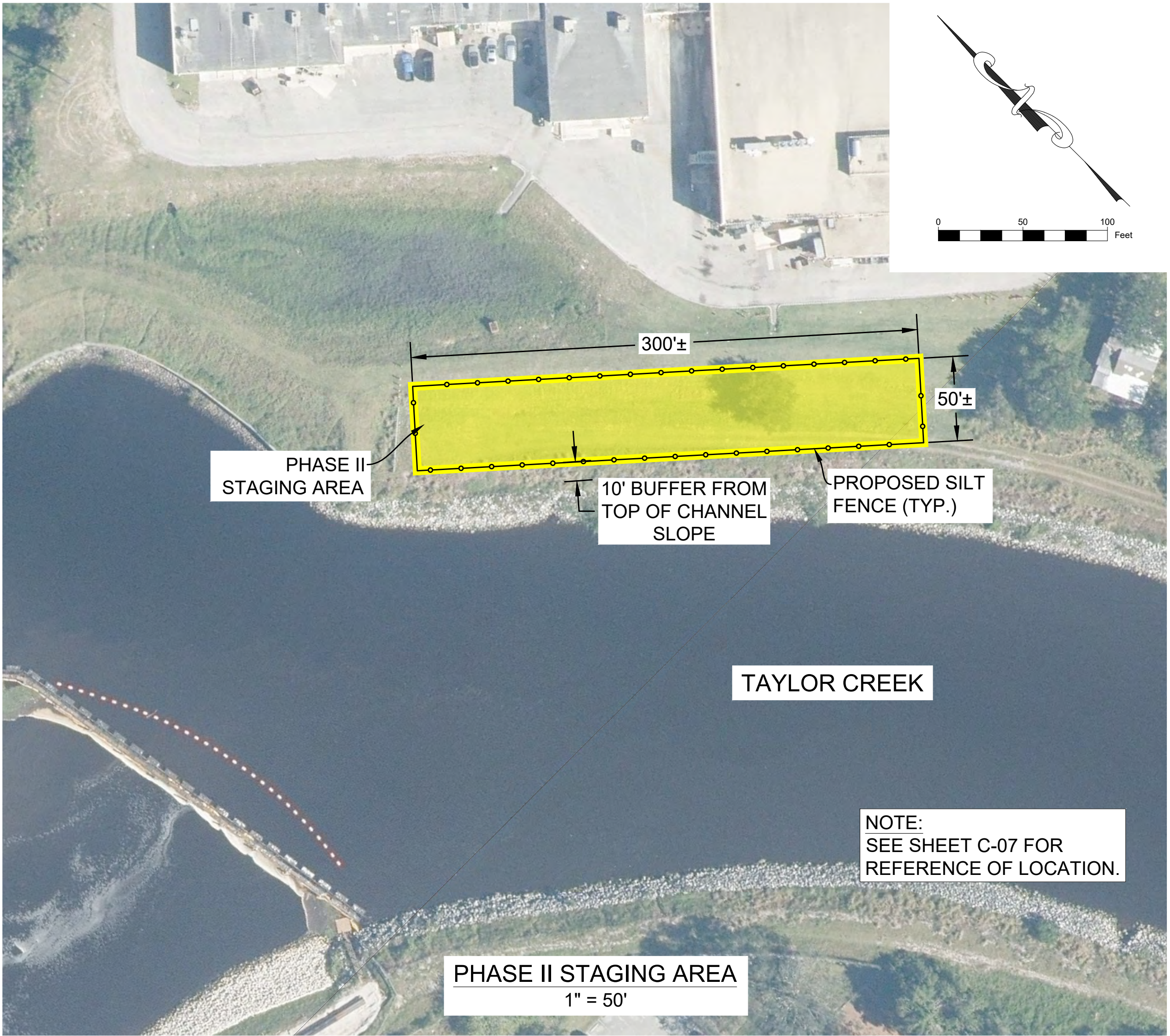
CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BEST MANAGEMENT PRACTICES TO PREVENT EROSION AND WATER QUALITY VIOLATIONS AT ALL WATER ELEVATIONS SHOULD NOT BE ANY HIGHER THAN 5 FEET FROM TOP

DREDGE MATERIAL MANAGEMENT AREA PREVIOUSLY CONSTRUCTED UNDER PERMIT NUMBERS: FDEP No. 56-0214474-008 & USACE SAJ 1998-02437.



DRAWING: EXISTING CONDITIONS DISPOSAL SITE	DMC JOB NO. 20-002-44		SHEET NO. C-08	
	DRAWN AS	CAD C3D	CHECKED AR	SCALE AS SHOWN
PROJECT NAME: TAYLOR CREEK RESTORATION DREDGING PHASE I		CLIENT: ST. LUCIE COUNTY		
Dredging & Marine Consultants DMC Unit 302 Port Orange, FL 32129 Phone: (386) 304-6505 Fax: (386) 304-6506 www.dmcscs.com		St. Lucie County BOCC 2300 Virginia Ave. Fort Pierce, FL 34982 772-462-1100		
FLORIDA LICENSE No. 67486 STEPHEN J. KUHN, P.E.		ENGINEERS • SCIENTISTS		

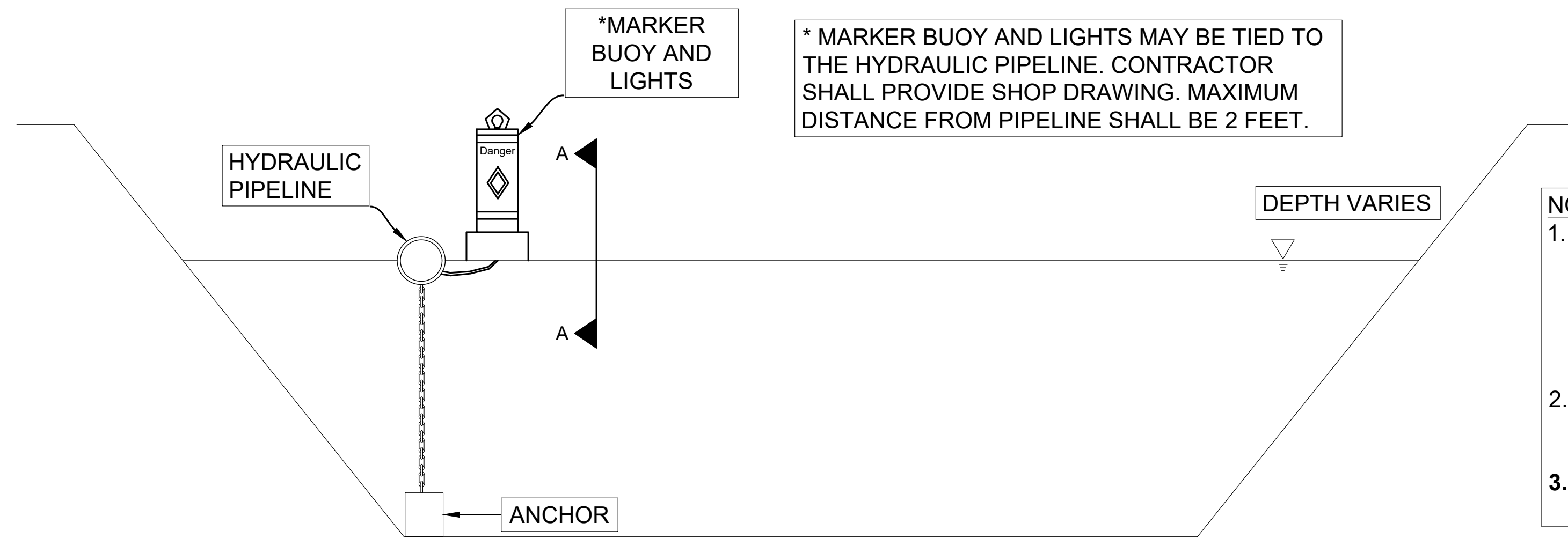


CROSS-SECTION A-A
1" = 5'



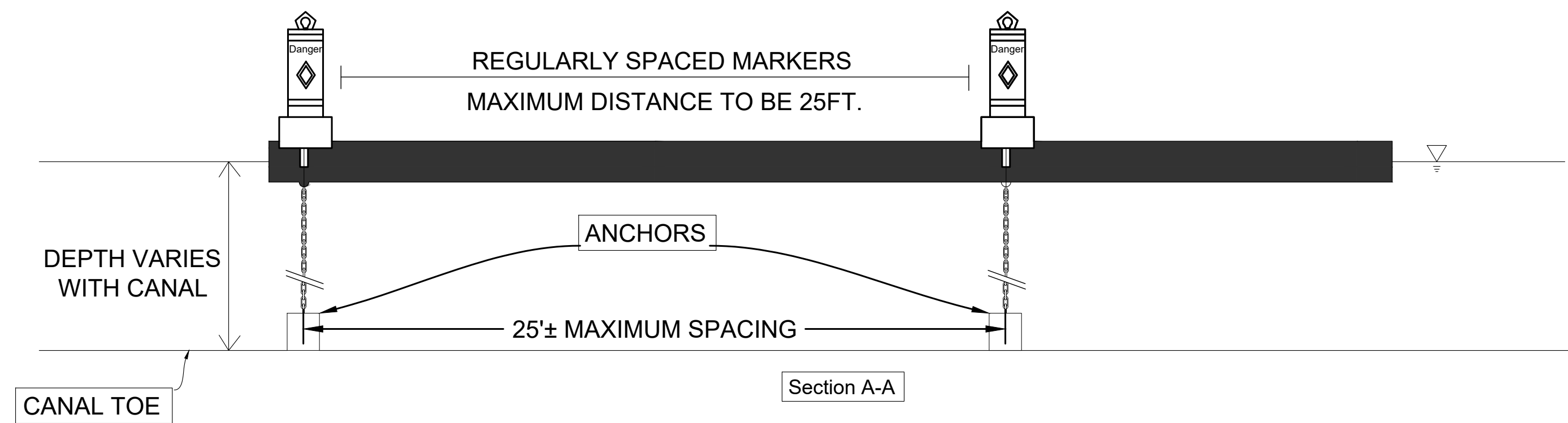
SILT FENCE DETAIL FDOT INDEX 102
N.T.S.

 St. Lucie County BOCC 2300 Virginia Ave. Fort Pierce, FL 34982 772-462-1100	Dredging & Marine Consultants  ENGINEERS • SCIENTISTS	4643 S. Clyde Morris Blvd Unit 302 Port Orange, FL 32129 Phone: (386) 304-6505 Fax: (386) 304-6506 www.dmcscs.com	PROJECT NAME:		DRAWING: PHASE I AND PHASE II STAGING AREAS					
			TAYLOR CREEK RESTORATION DREDGING PHASE I		DMC JOB NO. 20-002-44					
			CLIENT:		DRAWN	AS	CAD	C3D	SHEET NO.	
			ST. LUCIE COUNTY		CHECKED	AR	SCALE AS SHOWN		C-09	
		STEPHEN J. KUHN, P.E. FLORIDA LICENSE No. 67486		APPROVED		SKP	DATE	07-07-20		

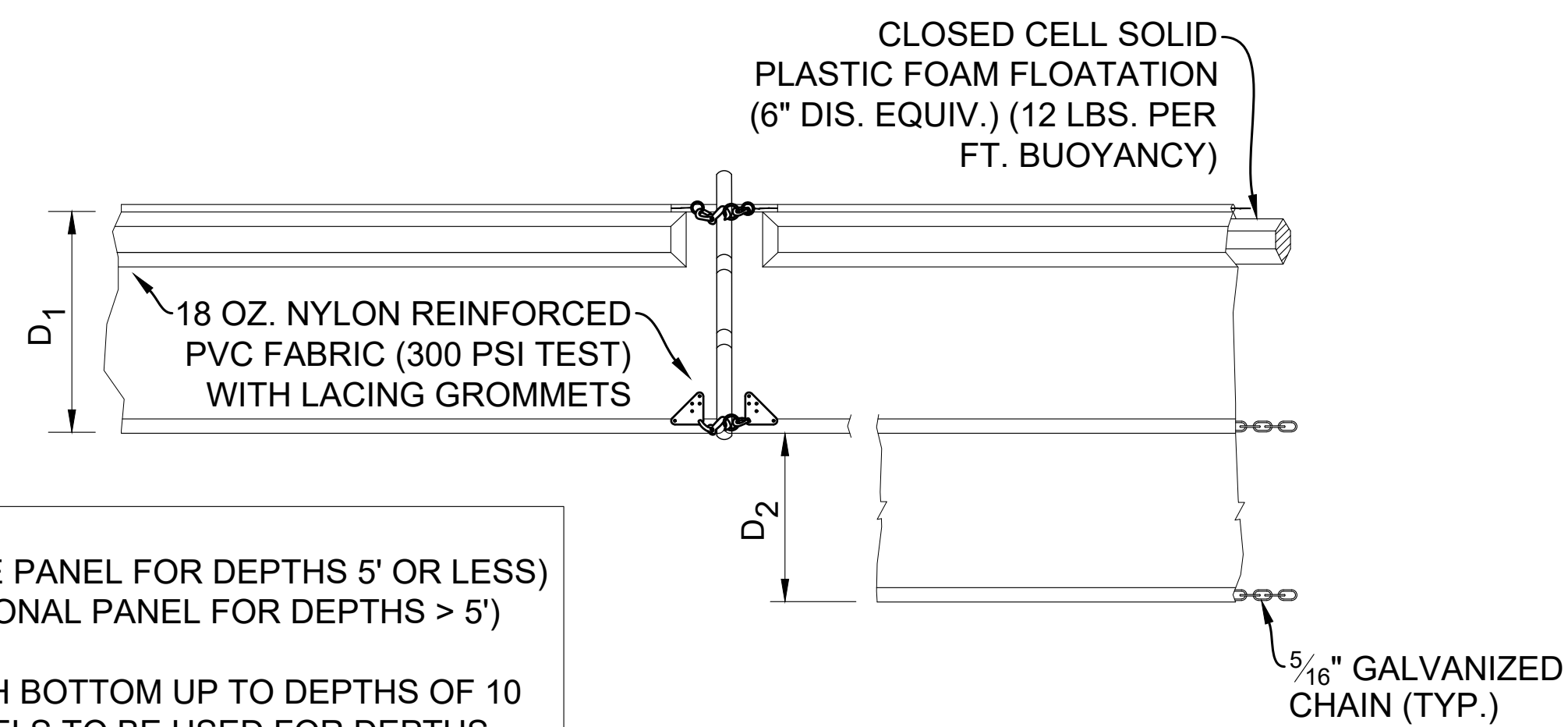


NOTE:

1. PIPELINE THAT OCCUPIES NAVIGABLE WATERWAYS WILL BE EQUIPPED WITH MARKER BUOYS AND LIGHTS IN BMP SO PIPELINE FOR BOATER SAFETY. ALL PIPELINE WILL BE SECURED PROPERLY AWAY FROM THE SHORELINE BANK AND POSITIONED ONTO THE EASTERN SIDE OF THE WATERWAYS AT DEPTH TO ALLOW MANATEES TO SWIM.
2. ANCHOR PLACEMENT WILL BE AT DEPTHS SUFFICIENT TO AVOID IMPACTS TO WETLANDS AND OTHER RESOURCES, INCLUDING MANATEES.
3. **FLOATING PIPELINE WILL BE ANCHORED AS PREVIOUSLY PERMITTED.**



PIPELINE DETAIL
N.T.S.





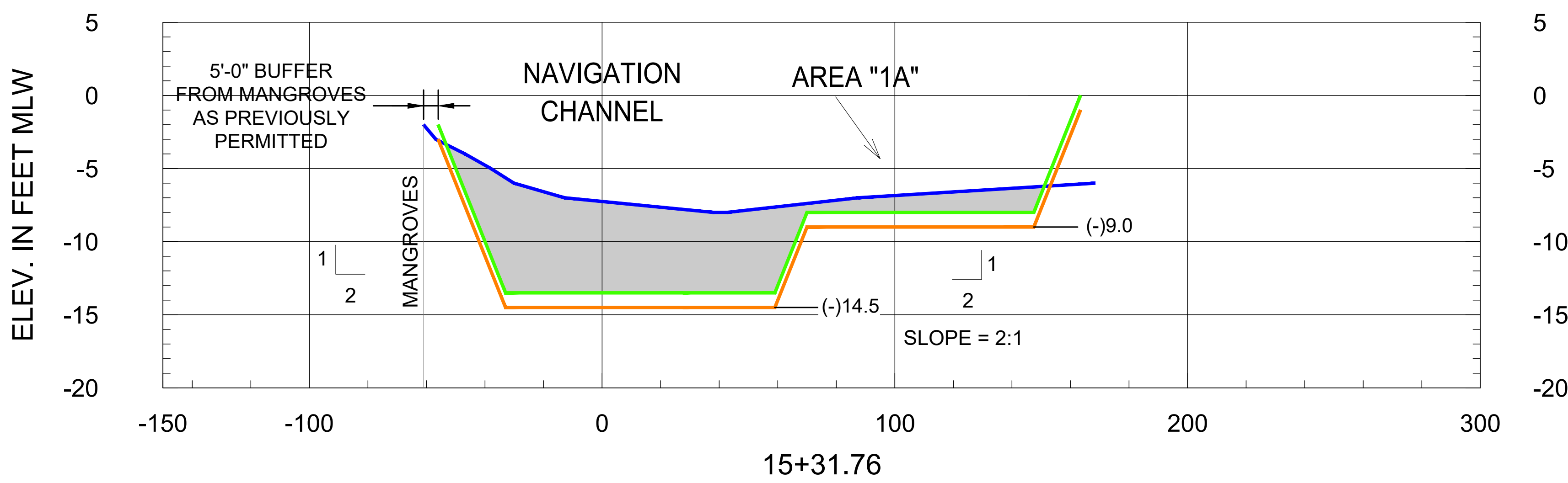
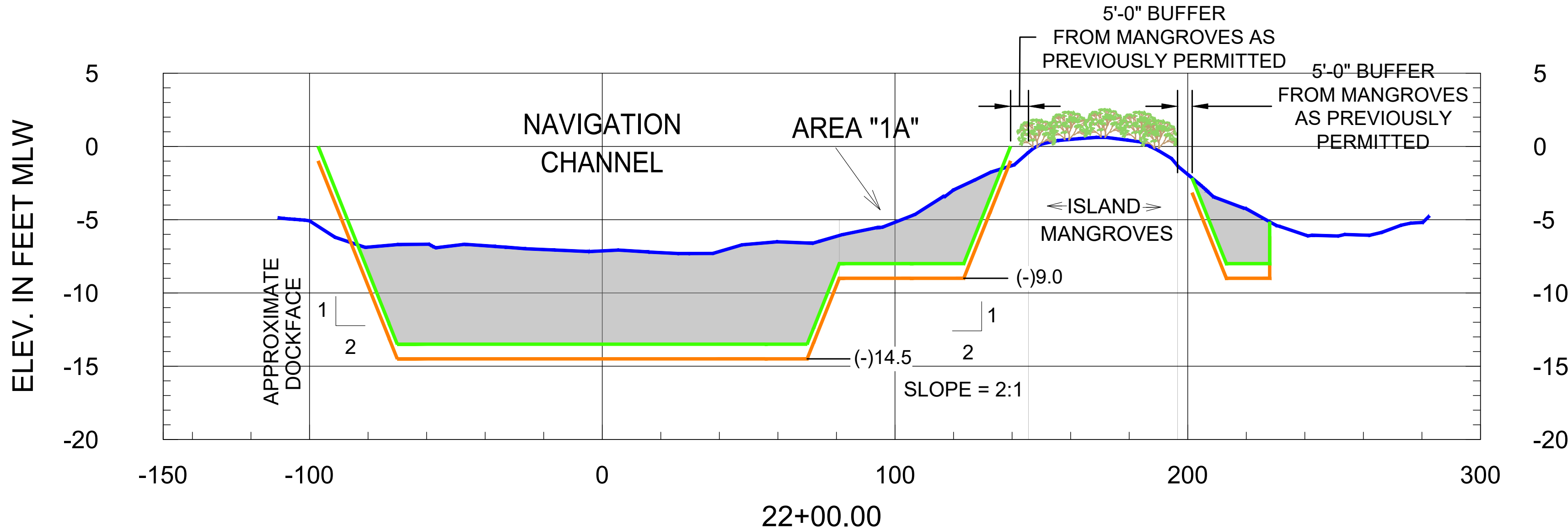
NOTES:

D₁ = 5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS)
D₂ = 5' STD. (ADDITIONAL PANEL FOR DEPTHS > 5')

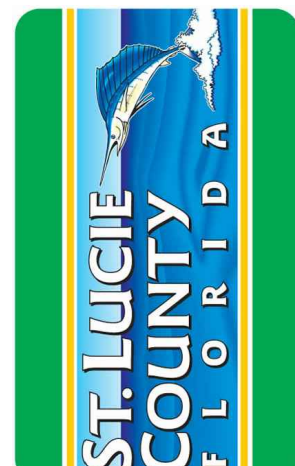
CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET. TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

TYPE II FLOATING TURBIDITY BARRIER FDOT INDEX 103
N.T.S.


		<p>St. Lucie County BOCC 2300 Virginia Ave. Fort Pierce, FL 34982 772-462-1100</p>		<p>Dredging & Marine Consultants</p>  <p>ENGINEERS • SCIENTISTS</p>		<p>4643 S. Clyde Morris Blvd Unit 302 Port Orange, FL 32129 Phone: (386) 304-6505 Fax: (386) 304-6506 www.dmcscs.com</p>		<p>PROJECT NAME: TAYLOR CREEK RESTORATION DREDGING PHASE I</p>		<p>DRAWING: PIPELINE AND TURBIDITY BARRIER DETAILS</p>	
								<p>DMC JOB NO. 20-002-44</p>			
								<p>DRAWN AS</p>		<p>CAD C3D</p>	
								<p>CHECKED AR</p>		<p>SCALE AS SHOWN</p>	
								<p>APPROVED SKP</p>		<p>DATE 07-07-20</p>	
								<p>SHEET NO. C-10</p>			
						<p>CLIENT: ST. LUCIE COUNTY</p>					
						<p>STEPHEN J. KUHN, P.E. FLORIDA LICENSE No. 67486</p>					



LEGEND/ABBREVIATIONS:	
MLW	MEAN LOW WATER
—	MARCH 2, 2020 SURVEY
—	DREDGE TEMPLATE
—	1' ALLOWABLE OVERDEPTH



St. Lucie County BOCC
2300 Virginia Ave.
Fort Pierce, FL 34982
772-462-1100



Dredging & Marine Consultants
4643 S. Clyde Morris Blvd
Unit 302
Port Orange, FL 32129
Phone: (386) 304-6505
Fax: (386) 304-6506
www.dmcscs.com

ENGINEERS • SCIENTISTS

PROJECT NAME:

TAYLOR CREEK RESTORATION
DREDGING PHASE I

CLIENT:

ST. LUCIE COUNTY

DRAWING:

5 FOOT
MANGROVE BUFFER DETAIL

DMC JOB NO.

20-002-44

DRAWN	AS	CAD	C3D
CHECKED	AR	SCALE AS SHOWN	
APPROVED SKP	DATE	07-07-20	

SHEET NO.

C-11

Drawing Name: E:\My_ShareSync\DMC Projects\002 -St. Lucie County\20-002-44 Taylor Creek Restoration Dredging Phase I\Drawings\Taylor Creek USACE - AS.dwg By: DMC Tab: ENV NOTES 7/07/2020

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK
2011

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

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

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

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

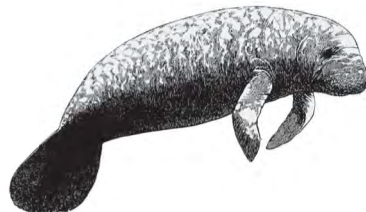
SHUT DOWN

Report any collision with or injury to a manatee:

Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC





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

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS


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

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

Revised: March 23, 2006
O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc



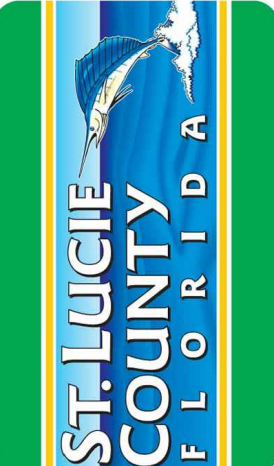
Dredging & Marine Consultants



4643 S. Clyde Morris Blvd
Unit 302
Port Orange, FL 32129
Phone: (386) 304-6505
Fax: (386) 304-6506
www.dmcsc.com

ENGINEERS • SCIENTISTS

St. Lucie County BOCC
2300 Virginia Ave.
Fort Pierce, FL 34982
772-462-1100



DRAWING: ENVIRONMENTAL NOTES

DMC JOB NO. 20-002-44

DRAWN AS CAD C3D

CHECKED AR

APPROVED SKP

SHEET NO. C-12

PROJECT NAME: TAYLOR CREEK RESTORATION DREDGING PHASE I

CLIENT: ST. LUCIE COUNTY