



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
9900 SW 107TH AVENUE, SUITE 203
MIAMI, FLORIDA 33176

July 28, 2020

Regulatory Division
South Permits Branch
Miami Permits Section

PUBLIC NOTICE

Permit Application Number SAJ-2006-06547(SP-MLC)

TO WHOM IT MAY CONCERN: The Jacksonville District of the U.S. Army Corps of Engineers (Corps) has received an application for a **10-year** 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: PortMiami
c/o Becky Hope, Chief, Planning and Property Development
1015 North America Way, Suite 200
Miami, Florida 33132

WATERWAY AND LOCATION: The project would affect waters of the United States associated with Biscayne Bay, the North Port Channel, and Government Cut. The project site is located on the north side of PortMiami (Dodge and Lummus Islands) in Miami, Section 37, Township 54 South, Range 42 East in Miami-Dade County, Florida (folio #01-4205-000-0010).

Directions to the site are as follows: From I-95, take SR 836, I-395 east to US-1 south to Port Boulevard east onto the Port of Miami. The Project is located on the north side of the Port.

LATITUDE & LONGITUDE: Latitude: 25.768056°
Longitude: - 80.1475°

PROJECT PURPOSE:

Basic: The basic project purpose is to provide new boating access.

Overall: The overall project purpose is to provide new boating access at an existing port in Miami-Dade County, FL.

PROPOSED WORK: The applicant seeks authorization to construct approximately 1,000 feet of bulkhead with a 95-ft return wall and a 155-ft toe wall. Excavation of Berth 10 above Mean High Water (MHW) will result in 90,000 ft² of submerged lands being created to a depth of -36.0 ft + 2 ft over dredge and 150,000 ft² of new dredge surface

area below MHW lands being created to a depth of -36.0 ft + 2 ft over dredge. Excavation and dredging will result in 251,000 yd³ removed during construction.

EXISTING CONDITIONS: The project area consists of a saltwater system. The intertidal area within the riprap of proposed Berth 10 contains two (2) small red mangroves (*Rhizophora mangle*). The area around the existing riprap was surveyed for seagrasses. A single species of seagrass, paddle grass (*H. decipiens*), was documented in the eastern portion of the survey area. The density was sparse (0-20% coverage) and the total estimated area of seagrass within the survey area was 0.06 acre.

A survey of the coral species was performed within the project area. The report is Appendix D of the permit application. The survey of Berth 10 riprap area methodology consisted of 10 survey transects, each four (4) meters (m) wide and 50 m long (covering approximately 16.5% of the Berth 10 survey area). A total of 505 coral colonies were observed, including seven (7) genera of octocoral and nine (9) genera of scleractinian coral. Octocoral and scleractinian coral comprised 34.1% and 65.9% of the corals observed, respectively. The white telesto (*Carijoa riisei*) and the mustard hill coral (*Porites astreoides*) were the two most commonly observed species. Other commonly observed species included the common sea fan (*Gorgonia ventalina*), clubtip finger coral (*Porites porites*), and massive starlet coral (*Siderastrea siderea*). The majority (~88%) of corals observed within the transects fell within the medium (10-30 centimeters (cm)) size class, with ~12% of corals in the large (31-60 cm) size class, and 0% in the extra-large (>60 cm) size class. Octocoral colonies were observed throughout the surveyed depth range from -5 to -40 ft. Most of the scleractinian coral colonies were observed at less than -7 ft. Extrapolating this to the total area of the Berth 10 survey area, it is estimated that there may be approximately 2,225 coral colonies within Berth 10, including 1,178 scleractinian coral colonies and 1,047 octocoral colonies.

Of note is the presence of two (2) colonies of *Orbicella faveolata* (mountainous star coral). The group of *Orbicella* spp., formerly *Montastraea faveolata*, were listed as threatened by the National Oceanic and Atmospheric Administration (NOAA) in September 2014. Using the transect data, it is estimated there could be five (5) colonies of *Orbicella faveolata on the hardbottom (riprap) in Berth 10*. A recovery plan has yet to be developed for *Orbicella* spp.

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:

“An Alternatives Analysis was provided that discusses those measures reviewed to design the project in a manner that causes the least environmental impacts while still meeting the safety requirements of the Port and the cruise industry. Mitigation for all phases includes endangered species protection within the construction area by compliance with the Corps/U.S. Fish and Wildlife Service (USFWS) *Standard Manatee Conditions for In-water Work* and compliance with the National Marine Fisheries Service (NMFS) *Sea Turtle and Smalltooth Sawfish Construction Conditions*. Project

construction monitoring will include observation by all personnel for manatees, sea turtles, and smalltooth sawfish. All in-water operations, including vessels, will be shut down if manatees, sea turtles, or smalltooth sawfish come within 50 ft of the operation. Activities will not resume until the manatee, sea turtle, or smalltooth sawfish has moved beyond the 50-ft radius of the project operation, or until 30 minutes elapses if the manatee, sea turtles, or smalltooth sawfish has not reappeared within 50 ft of the operation. Animals must not be herded away or harassed into leaving. Collisions with or injuries to manatee, sea turtle, or smalltooth sawfish will be reported to the agencies. Temporary signs concerning manatees will be posted prior to and during in-water project activities.

No blasting or explosives are expected to be used in the construction of the project (see Construction Methodology – Appendix A of the permit application). The 1000' of bulkhead and the 95-foot return wall will be installed on dry land resulting in little or no sound propagation into the water. During the installation of the 155-foot toe-wall, should the Contractor encounter very hard materials (i.e. dense limerock), he would be permitted to pre-drill the hard materials thereby, allowing the toe-wall to be installed without sustaining structural damage. The pre-drilling would be limited to one (1) foot above the specified toe-wall tip elevation.

Dispersal of suspended sediment and silt material will be minimized to the extent feasible by the use of silt curtains, including weighted turbidity skirts or pile-supported turbidity curtains. Turbidity from surface water runoff from upland work will be controlled using standard retention and filtering practices and equipment.

Additionally, monitoring of turbidity during dredging will be performed (see Turbidity Plan – Appendix A of the permit application). The project proposes to establish a mixing zone for the fill activities pursuant to Chapter 62-4.244, Florida Administrative Code (FAC), Mixing Zone Standards for Surface Waters. The mixing zone includes 150 meters from the proposed bulkhead. Pursuant to Chapter 62-4.244 FAC, water within and outside of the approved mixing zone will be monitored during construction to ensure that all relevant water quality standards are met.”

COMPENSATORY MITIGATION: The applicant has offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment:

“The construction will result in short term, temporary impacts to some organisms from the potential for turbidity in the water column. The short-term impacts from project construction would be the loss of the community of attached plants (e.g., algae) and invertebrates (e.g., sponges, bryozoans, oysters, tunicates, and soft and hard corals) on the riprap. The existing community on the riprap would be replaced by a new bulkhead for colonization by the same community. It has been estimated from past studies of the bulkheads that there is no difference in the communities of the older and new bulkheads after 5 years. That represents a five-year lag time for the existing community to be replaced by a new community.

The proposed project, as referenced above, will create new bay bottom during new berth creation. Therefore, no additional mitigation is being proposed for this work as there is no overall loss in Essential Fish Habitat (EFH)."

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:

A preliminary review the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service's Protected Resource Divisions (NMFS-PRD)'s list of Endangered and Threatened Species indicates the following listed species may occur in the project area:

West Indian Manatee: The Corps has determined the project "may affect, but is not likely to adversely affect" (MANLAA) the West Indian manatee (*Trichechus manatus*) or its designated critical habitat. The Corps will request U.S. Fish and Wildlife Service's concurrence with this determination pursuant to Section 7 of the Endangered Species Act by separate letter

Smalltooth Sawfish and Swimming Sea Turtles: The Corps has determined the proposed project "may affect, but is not likely to adversely affect" green sea turtles (*Chelonia mydas*), loggerhead sea turtles (*Caretta caretta*) and their critical habitat, hawksbill sea turtles (*Eretmochelys imbricata*), Kemp's ridley sea turtles (*Lepidochelys kempii*), leatherback sea turtles (*Dermochelys coriacea*), smalltooth sawfish (*Pristis pectinata*) and Nassau grouper (*Epinephelus striatus*). The Corps will request National Marine Fisheries Service's concurrence with this determination pursuant to Section 7 of the Endangered Species Act by separate letter.

Federally Listed Corals: The Corps has determined the project will have "No effect" on elkhorn and staghorn corals (*Acropora palmata*, *Acropora cervicornis*) and their designated critical habitat. However, the proposed project "may affect but is not likely to adversely affect" the 5 listed coral species found in Dade-County: pillar coral (*Dendrogyra cylindrus*), lobed star coral (*Orbicella annularis*), mountainous star coral (*Orbicella faveolata*), knobby star coral (*Orbicella franksi*), and rough cactus coral (*Mycetophyllia ferox*). The Corps will request National Marine Fisheries Service's concurrence pursuant to Section 7 of the Endangered Species Act by separate letter.

Johnson's Seagrass: The Corps has determined that the project will have "no effect" on Johnson's seagrass (*Halophila johnsonii*) designated critical habitat and would have "no effect" on Johnson's seagrass (*Halophila johnsonii*).

This notice serves as request for information from the U.S. Fish and Wildlife Service, the National Marine Fisheries Service's Protected Resource Division, and any other interested party, on whether any species listed or proposed for listing may be present in the area.

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 short-term impact from project construction would be the loss of the community of attached plants (e.g., algae) and invertebrates (e.g., sponges, bryozoans, oysters, tunicates, and soft and hard corals) on the riprap. The proposal would impact approximately 0.75 acres of riprap utilized by various life stages of invertebrates and fishes that may use those areas. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries in Biscayne Bay. 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 application should be submitted in writing to the District Engineer at the above address within 30 days from the date of this notice.

If you have any questions concerning this application, you may contact Megan L. Clouser at the letterhead address, by electronic mail at Megan.L.Clouser@usace.army.mil, by fax at 305-526-7184, or by telephone at 305-526-7182.

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.

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 decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act 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.

PORTMIAMI
BERTH 10 ENVIRONMENTAL PERMIT DRAWINGS
1015 NORTH AMERICA WAY
MIAMI, FL. 33132
PORTMIAMI PROJECT NO. 2020-021
ATKINS PROJECT NO. 100069656
MAY 08, 2020



CORPORATE OFFICE:
4030 W. BOY SCOUT BLVD.
TAMPA, FL 33607
FBPR CERTIFICATE OF
AUTHORIZATION NO.24



LOCAL OFFICE:
800 WATERFORD WAY, SUITE 700
MIAMI, FL 33126
TEL. 305.592.7275
FAX. 407.806.4500

WWW.ATKINSGLOBAL.COM



PORTMIAMI



Delivering Excellence Every Day

Honorable Carlos A. Gimenez
Mayor

BOARD OF COUNTY COMMISSIONERS

Honorable Audrey M. Edmonson, Chairman
District 3

Honorable Rebeca Sosa, Vice-Chairwoman
District 6

Honorable Barbara J. Jordan
District 1

Honorable Jean Monestime
District 2

Honorable Audrey M. Edmonson
District 3

Honorable Sally A. Heyman
District 4

Honorable Eileen Higgins
District 5

Honorable Rebeca Sosa
District 6

Honorable Xavier L. Suarez
District 7

Honorable Daniella Levine Cava
District 8

Honorable Dennis C. Moss
District 9

Honorable Javier D. Souto
District 10

Honorable Joe A. Martinez
District 11

Honorable Jose "Pepe" Diaz
District 12

Honorable Esteban Bovo, Jr.
District 13

JUAN M KURLA
Port Director

ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION

\\watkins.com\Project\UST\LA\Civil\Coastal Engineering\Projects\PORTS\Port of Miami - E18-SEA-01\Projects\WO#03-Env Permit Mooring Berth 10\05 Drawings\00 USACE Permit Drawings\01 C-000 Coversheet.dwg 05/08/2020 12:04:40 PM by CAPO5788

\\watkins.com\Project\USTLA\Civil\Coastal Engineering\Projects\PORTS\Port of Miami - E18-SEA-01\Projects\WO#03-Env Permit Mooring Berth 10\05 Drawings\00 USACE Permit Drawings\02 G-001 General Notes.dwg, 5/8/2020 12:06:30 PM, DWG To PDF.p3

BERTH 10 AREAS			
DESCRIPTION	EXISTING	PROPOSED	
BULKHEAD LENGTH	0	1,000 FT	
RETURN WALL LENGTH	0	95 FT	
TOE WALL LENGTH	0	155 FT	
FILLED SUBMERGED LANDS	N/A	N/A	N/A
MAINTENANCE DREDGE SURFACE AREA	N/A	N/A	N/A
NEW DREDGE AREA	N/A	150,000 SQ. FT.	3.444 ACRES
SUBMERGED LAND CREATED	N/A	90,000 SQ FT	2.066 ACRES
BERTH 10 DREDGE VOLUME	N/A	251,000 CY	

NOTE: BERTH 10 HAS A TOTAL LENGTH OF 1,000 FT. THE BULKHEAD LENGTH IN THE TABLE REPRESENTS THE TOTAL BULKHEAD LENGTH FOR BERTH 10, EXCLUDING RETURN WALL AND TOE WALL. RETURN WALL AND TOE WALL HAVE SEPARATE VALUE IN TABLE.

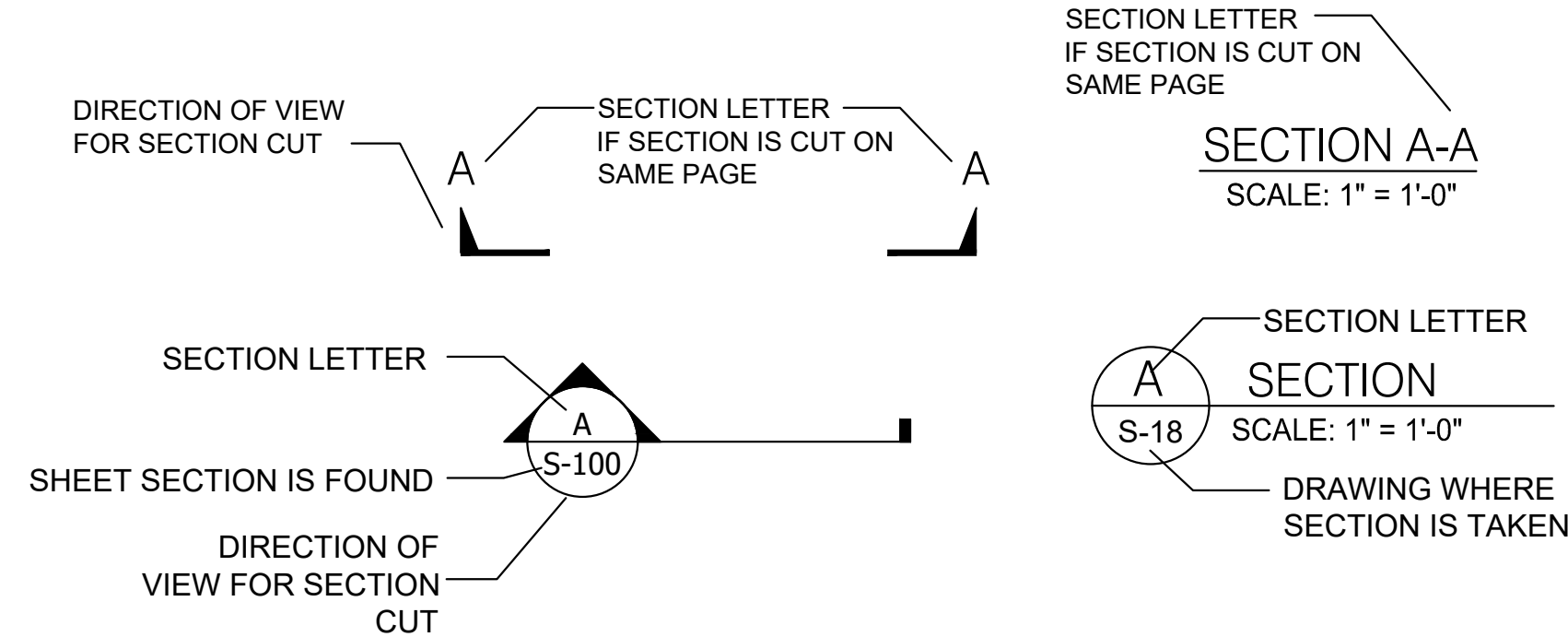
INDEX OF DRAWINGS

DWG #	SHEET	DESCRIPTION
1	COVER	COVER SHEET
2	G-001	GENERAL NOTES AND INDEX
3	G-002	BERTH 10 SITE LOCATION PLAN
4	S-100	OVERALL PROPOSED SITE PLAN
5	S-101	ENLARGED BERTH 10 PLAN 1
6	S-102	ENLARGED BERTH 10 PLAN 2
7	S-103	ENLARGED BERTH 10 PLAN 3
8	S-200	PROPOSED SECTIONS
9	S-300	BOLLARD DETAILS
10	S-400	FENDER DETAILS
11	S-500	WATER STATION DETAILS
12	S-600	CURB AND MANATEE GRATE DETAILS
13	D-100	DEMOLITION SECTION
14	D-200	DEMOLITION SECTION
15	C-100	OVERALL DRAINAGE PLAN
16	C-101	ENLARGED DRAINAGE PLAN 1
17	C-102	ENLARGED DRAINAGE PLAN 2
18	C-103	ENLARGED DRAINAGE PLAN 3
19	C-200	DRAINAGE DETAILS
20	DR-100	BERTH 10 OVERALL DREDGE PLAN
21	DR-101	BERTH 10 ENLARGED DREDGE PLAN

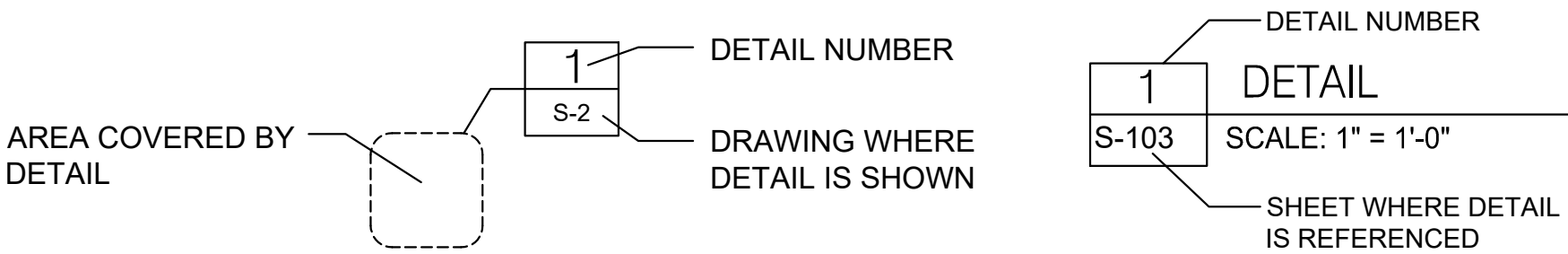
ABBREVIATIONS:

Ø - DIAMETER	GALV. - GALVANIZED
ALT. - ALTERNATE	HP - HIGH POINT
B/ - BOTTOM	LP - LOW POINT
BOT - BOTTOM	MAX. - MAXIMUM
BLDG. - BUILDING	MIN. - MINIMUM
COV. - COVER	NTS - NOT TO SCALE
CL - CENTER LINE	O.C. - ON CENTER
CONC. - CONCRETE	P.L. - PLATE
C.I.P. - CAST IN PLACE	P.S.F. - POUND PER SQUARE FOOT
C.J. - CONSTRUCTION JOINT	P.S.I. - POUND PER SQUARE INCH
CLR. - CLEAR COVER	REF. - REFERENCE
DET.(S) - DETAIL(S)	REQ'D. - REQUIRED
DIA. - DIAMETER	SECT. - SECTION
DIR. - DIRECTION	SHT. - SHEET
DWGS. - DRAWINGS	SPECS. - SPECIFICATIONS
EA. - EACH	S.S. - STAINLESS STEEL
E.F. - EACH FACE	SSP - STEEL SHEET PILING
E.W. - EACH WAY	T&B - TOP AND BOTTOM
EL. - ELEVATION	T/ - TOP OF
E.O.R. - ENGINEER OF RECORD	TYP. - TYPICAL
EQ. SP. - EQUAL SPACED	U.O.N. - UNLESS OTHERWISE NOTED
E.J. - EXPANSION JOINT	W/ - WITH
EXIST. - EXISTING	
FIN. GR. - FINISH GRADE	

DRAWING SYMBOLS



SECTION SYMBOLS



DETAIL SYMBOLS

ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION

PORTMIAMI BERTH 10
ENVIRONMENTAL PERMIT DRAWINGS
PORTMIAMI PROJECT NO. 2020-021

GENERAL NOTES AND INDEX

SHEET
NAME

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY

RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS

No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

PROJ. No. : 100069656

FILE NAME: NOTES AND INDEX

DATE: 05-08-20 SCALE:AS NOTED

SHEET G-001

DWG. No. 2 of 21

\\watkins.com\Project\USTLA\Civil\Coastal Engineering\Projects\PORTS\Port of Miami - E18-SEA-01\Projects\WO#03-Env Permit Mooring Berth 10\05 Drawings\00 USACE Permit Drawings\03 G-002 Location Plan.dwg, 5/8/2020 12:13:27 PM, DWG to PDF.pc3

May 08, 2020 - 12:13pm CAP05788 \\watkins.com\Project\USTLA\Civil\Coastal Engineering\Projects\PORTS\Port of Miami - E18-SEA-01\Projects\WO#03-Env Permit Mooring Berth 10\05 Drawings\00 USACE Permit Drawings\03 G-002 Location Plan.dwg



SITE LOCATION PLAN
SCALE: 1" = 500'

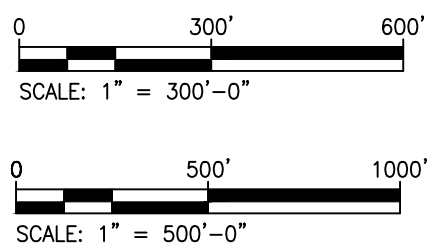


PROJECT LOCATION



AERIAL VIEW
SCALE: 1" = 300'

ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION



WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY

RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS

No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

PROJ. No. : 100069656

FILE NAME: BERTH 10 SITE
LOCATION PLAN

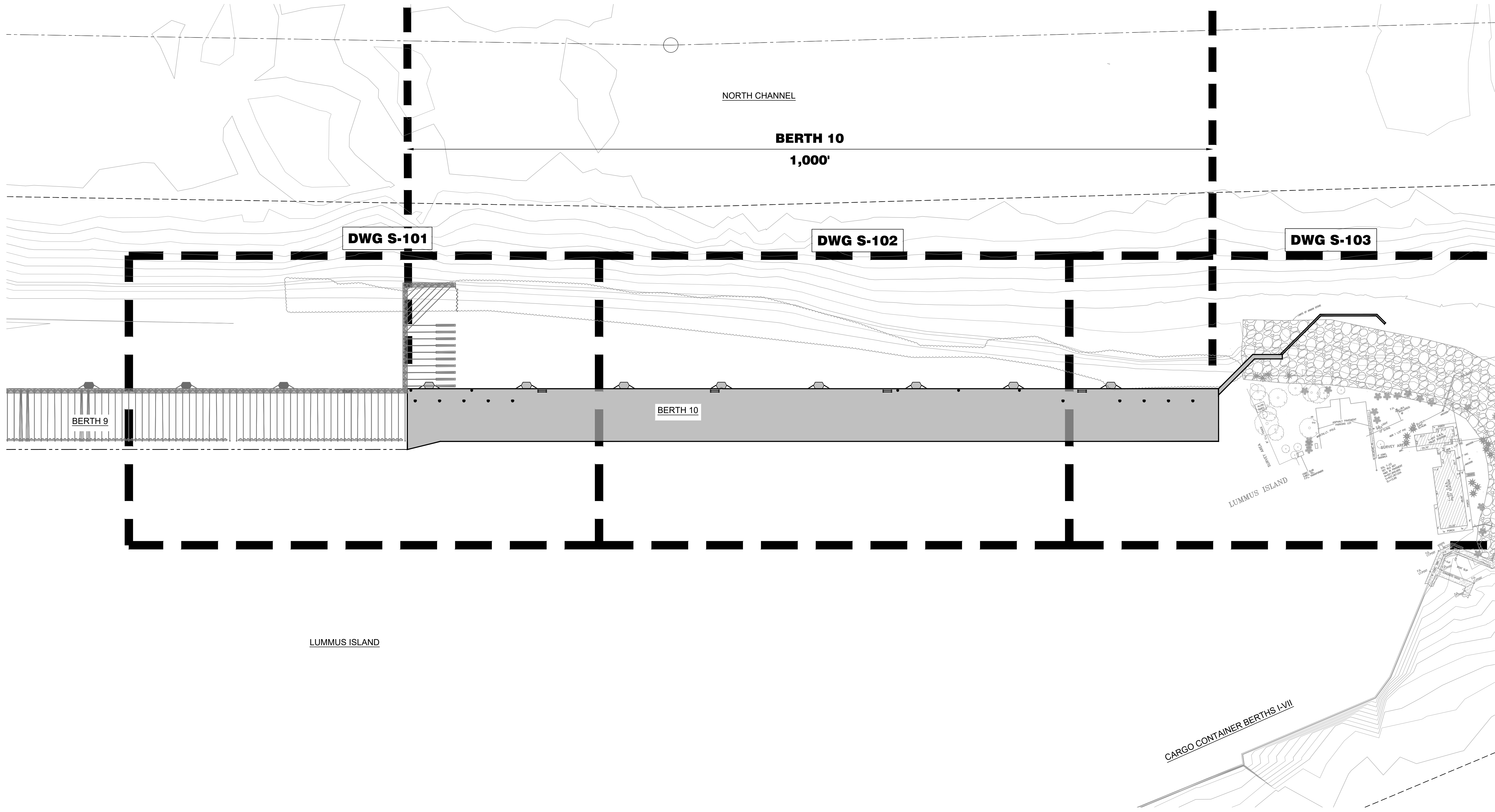
DATE: 05-08-20 SCALE: AS NOTED

SHEET G-002

DWG. No. 3 of 21

\\watkins.com\Project\USTLA\Civil\Coastal Engineering\Projects\PORTS\Port of Miami - E18-SEA-01\Projects\WO#03-Env Permit Mooring Berth 10\05 Drawings\00 USACE Permit Drawings\05 S-100 Overall Site Plan.dwg, 5/8/2020 12:32:48 PM, DWG To PDF.pc3

May 08, 2020 - 12:33pm CAP05788 \\watkins.com\Project\USTLA\Civil\Coastal Engineering\Projects\PORTS\Port of Miami - E18-SEA-01\Projects\WO#03-Env Permit Mooring Berth 10\05 Drawings\00 USACE Permit Drawings\05 S-100 Overall Site Plan.dwg



OVERALL PROPOSED SITE PLAN
SCALE 1" = 60'-0"

ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND
OTHER UPLAND STRUCTURES SHOWN ARE
GENERIC FOR THE FUTURE CONSTRUCTION OF
THE BERTH. DETAILS AND QUANTITIES TO BE
FINALIZED DURING FINAL DESIGN.



PORTMIAMI BERTH 10
ENVIRONMENTAL PERMIT DRAWINGS
PORTMIAMI PROJECT NO. 2020-021

OVERALL PROPOSED SITE PLAN

SHEET
NAME

WARNING!

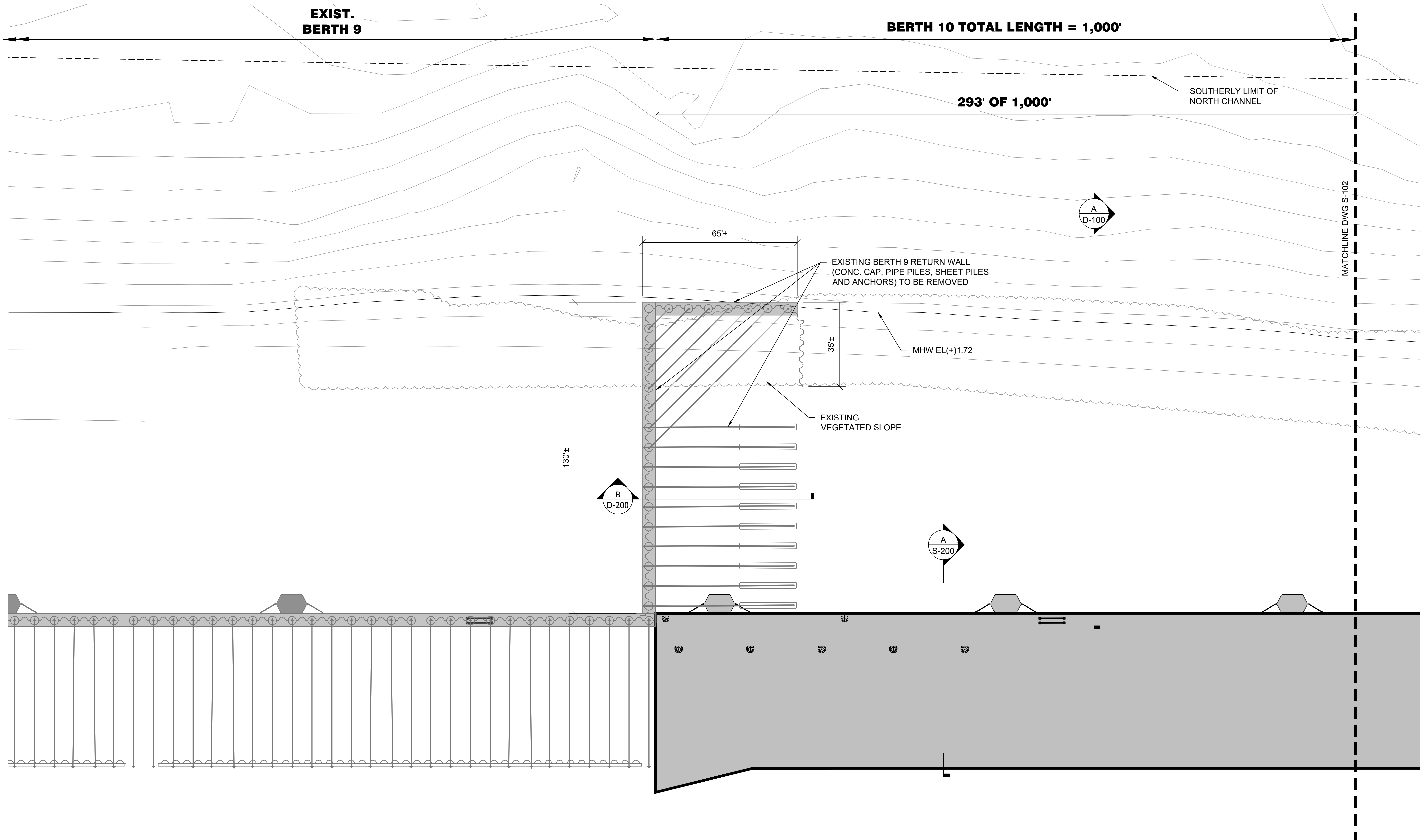
This record contains Sensitive
Security Information that is
controlled under 49 CFR Part
1520. No part of this record may
be disclosed to persons without
"need to know", as identified in 49
CFR 1520.5, except with the
written permission of the Secretary
of Homeland Security.
Unauthorized release may result in
civil penalty or other action. For
U.S. Government agencies, public
disclosure is governed by U.S.C.
552 and 49 CFR 1520.

DRAWING HISTORY		
RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS		
No.	DESCRIPTION	DATE
1		

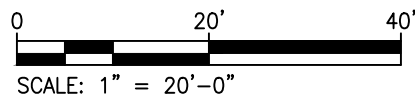
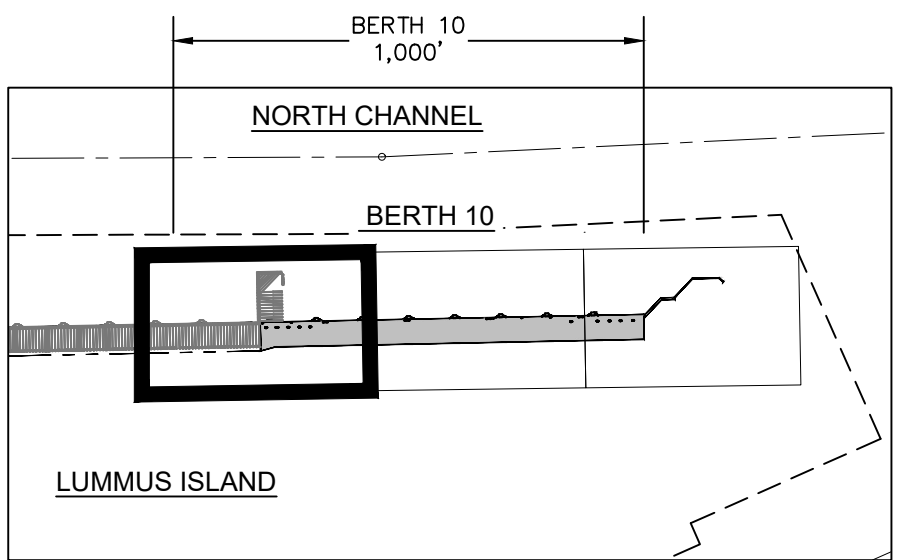
ATKINS ENGINEER OF RECORD	
DESIDERIO M. MALDONADO P.E. NO. 72978	
PROJ. No. : 100069656	
FILE NAME: OVERALL SITE PLAN	
DATE: 05-08-20	SCALE: AS NOTED
SHEET S-100	
DWG. No. 4	of 21

May 08, 2020 - 1:02pm CAPO5788 C:\Users\capo5788\AppData\Local\Temp\AcPublish_23840\ 06 S-101 - S103 Enlarged Berth Plans.dwg



ENLARGED BERTH 10 PLAN 1
SCALE 1" = 20'-0"

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.



**ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION**

PORTMIAMI BERTH 10 ENVIRONMENTAL PERMIT DRAWINGS PORTMIAMI PROJECT NO. 2020-021	
ENLARGED BERTH 10 PLAN 1	
SHEET NAME	

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY		
RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS		
No.	DESCRIPTION	DATE
1		

ATKINS ENGINEER OF RECORD	
DESIDERIO M. MALDONADO P.E. NO. 72978	
PROJ. No. : 100069656	
FILE NAME: ENLARGED BERTH 10 PLAN 1	
DATE: 05-08-20	SCALE: AS NOTED
SHEET	S-101
DWG. No. 5	of 21

PORTMIAMI BERTH 10
ENVIRONMENTAL PERMIT DRAWINGS
PORTMIAMI PROJECT NO. 2020-021

ENLARGED BERTH 10 PLAN 2

SHEET

WARNING

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY

RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS

No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

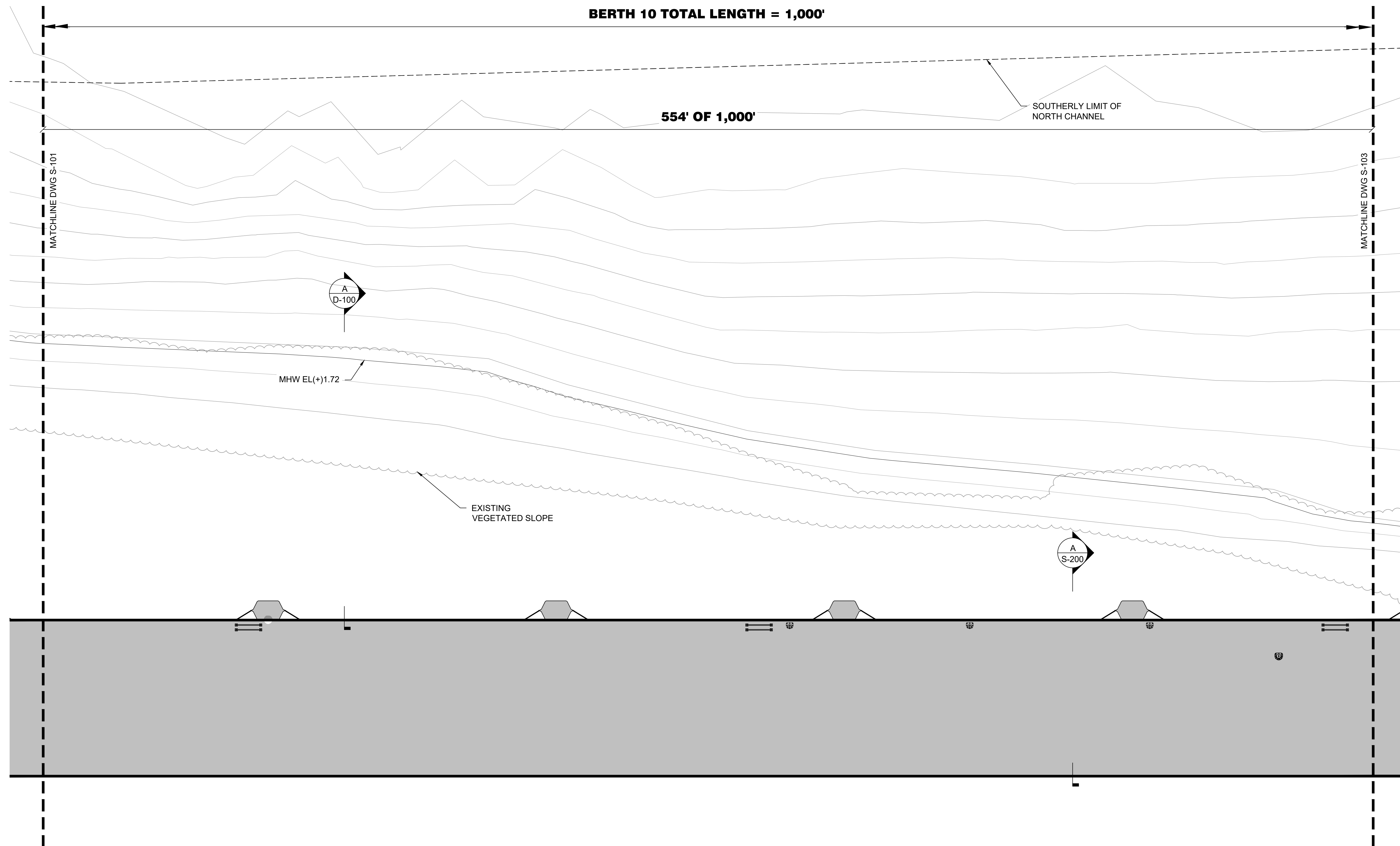
DESIDERIO M. MALDONADO
P.E. NO. 72978

PROJ. No. : 100069656

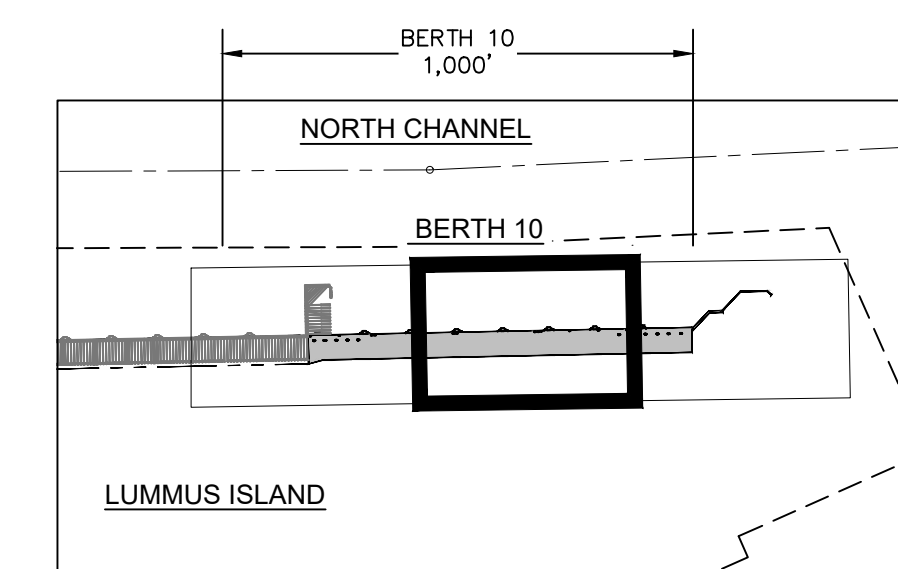
FILE NAME: ENLARGED BERTH 10
PLAN 2

DATE: 05-08-20	SCALE:AS NOTED
----------------	----------------

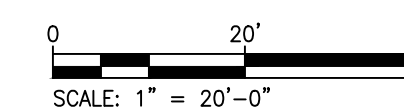
SHEET	S-102		
DWG. No.	6	of	21



ENLARGED BERTH 10 PLAN 2
SCALE 1" = 20'-0"



KEY MAP
N.T.S.

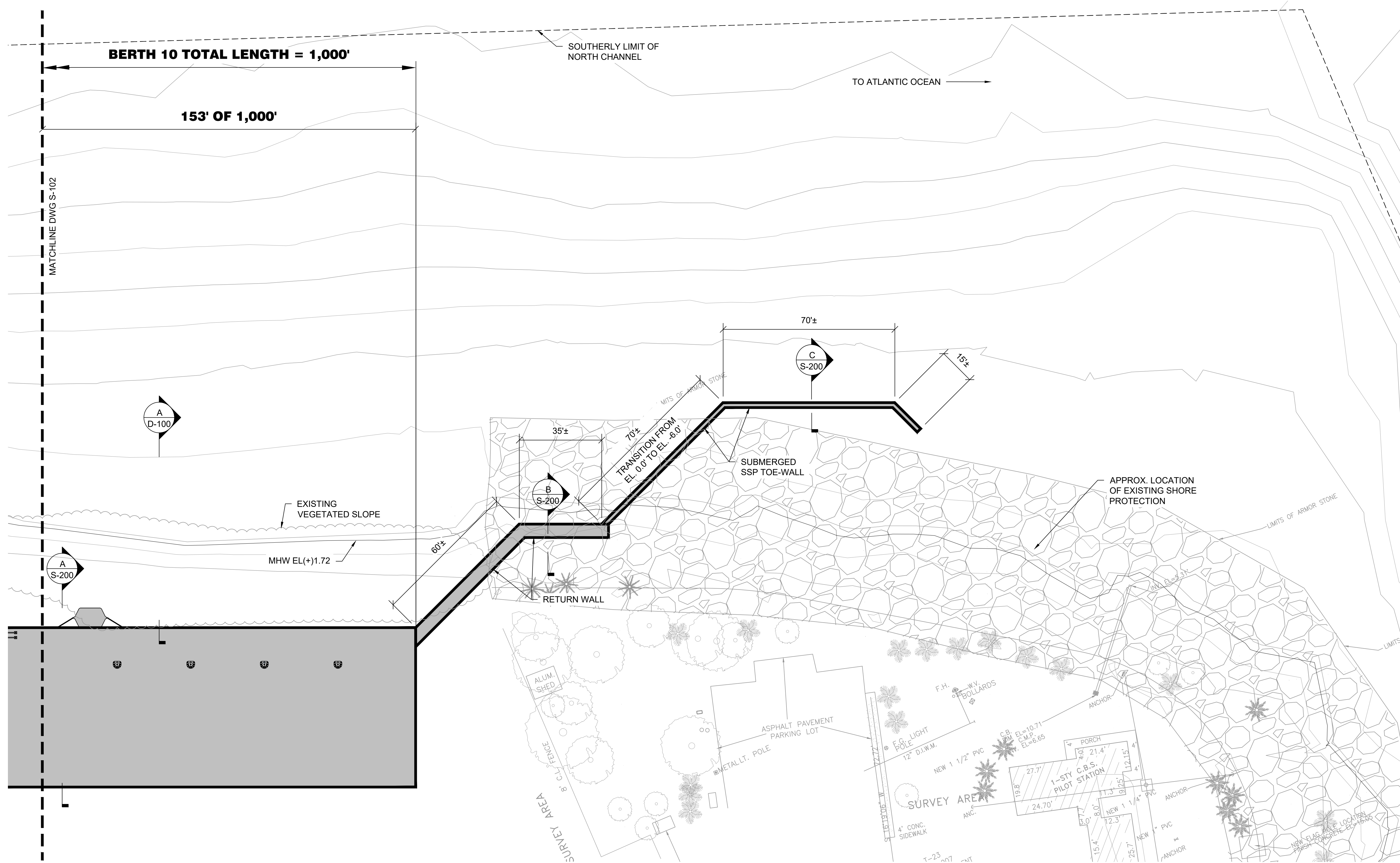


ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.

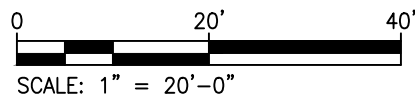
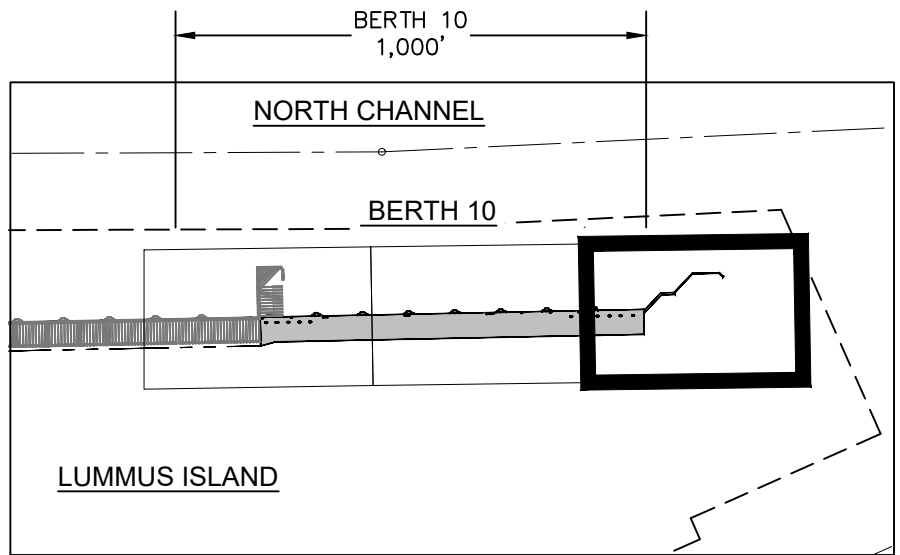
May 08, 2020 - 1:02pm CAPO5788 C:\Users\capo5788\AppData\Local\Temp\AcPublish_23840\ 06 S-101 - S103 Enlarged Berth Plans.dwg

ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION



ENLARGED BERTH 10 PLAN 3
SCALE 1" = 20'-0"

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.



PORTMIAMI BERTH 10 ENVIRONMENTAL PERMIT DRAWINGS PORTMIAMI PROJECT NO. 2020-021	
SHEET NAME	ENLARGED BERTH 10 PLAN 3

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY		
RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

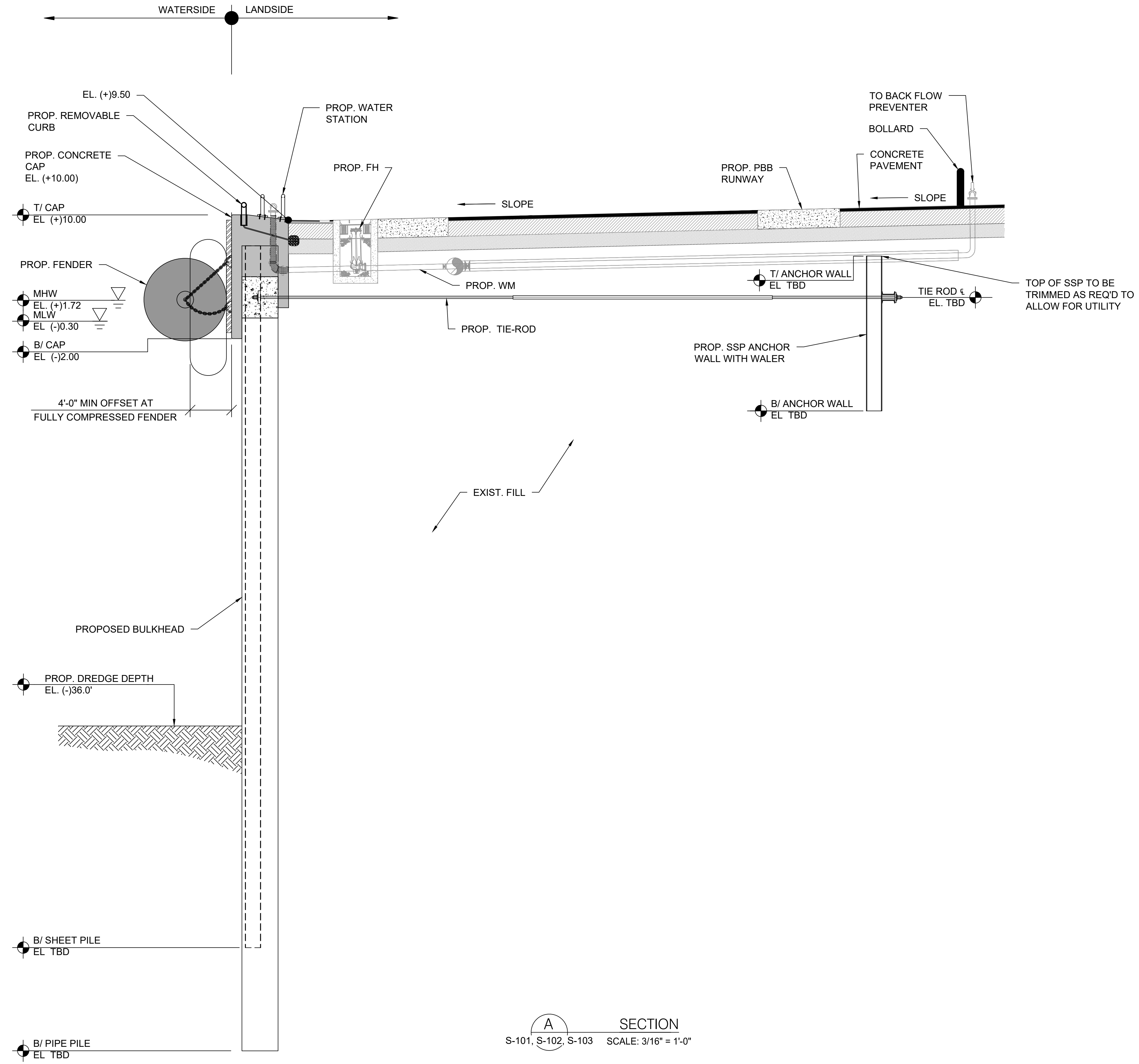
REVISIONS		
No.	DESCRIPTION	DATE
1		

ATKINS ENGINEER OF RECORD	
DESIDERIO M. MALDONADO P.E. NO. 72978	
PROJ. No. : 100069656	
FILE NAME: ENLARGED BERTH 10 PLAN 3	
DATE: 05-08-20 SCALE: AS NOTED	
SHEET	S-103
DWG. No.	7 of 21

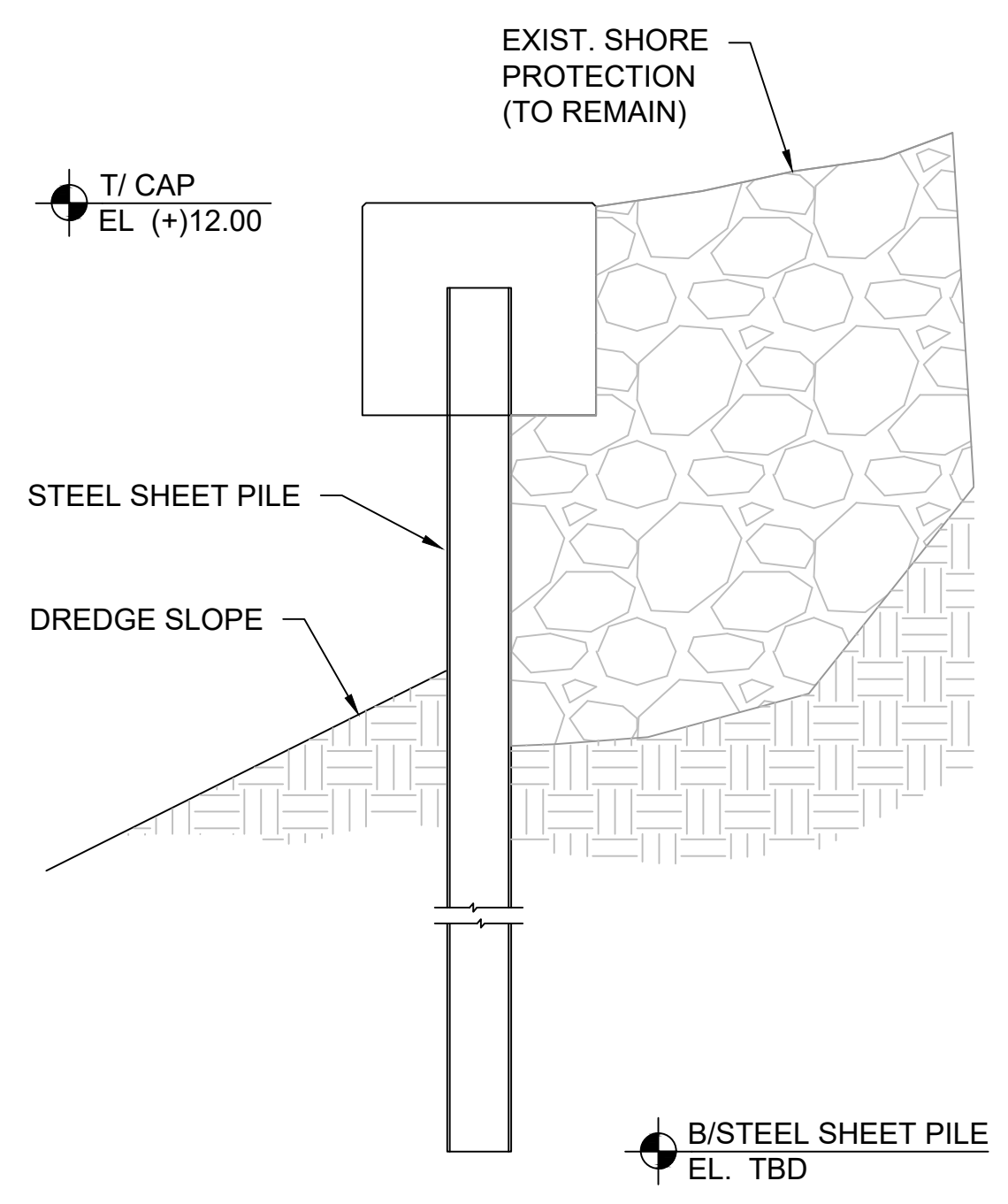
\\watkins.com\Project\USTLA\Civil\Coastal Engineering\Projects\PORTS\Port of Miami - E18-SEA-01\Projects\WO#03-Env Permit Mooring Berth 10\05 Drawings\00 USACE Permit Drawings\07 S-200 Sections.dwg, 5/8/2020 12:52:35 PM, DWG To PDF.p3

May 08, 2020 - 12:52pm CAP05788 \\watkins.com\Project\USTLA\Civil\Coastal Engineering\Projects\PORTS\Port of Miami - E18-SEA-01\Projects\WO#03-Env Permit Mooring Berth 10\05 Drawings\00 USACE Permit Drawings\07 S-200 Sections.dwg

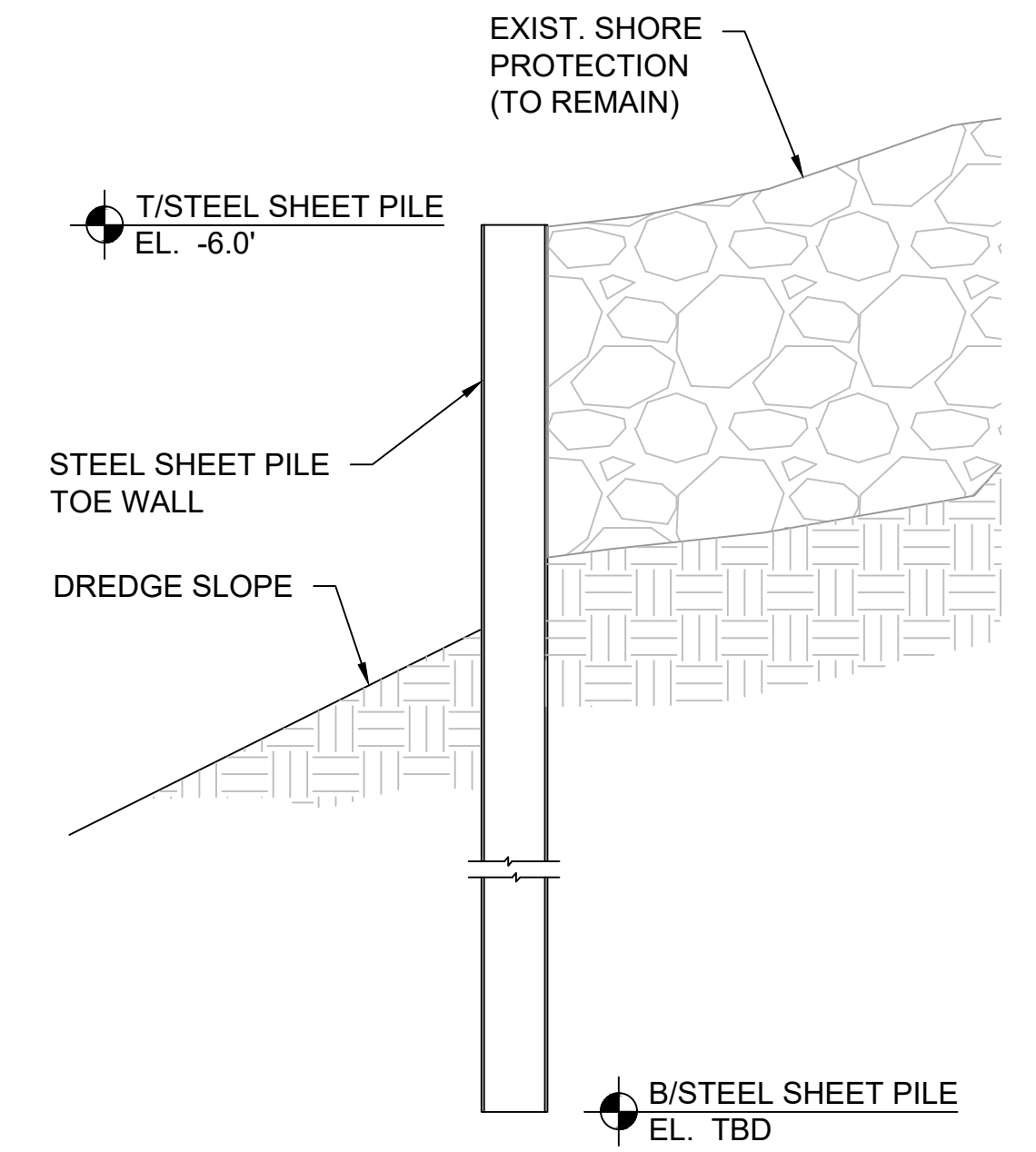
ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION



A SECTION
S-101, S-102, S-103 SCALE: 3/16" = 1'-0"

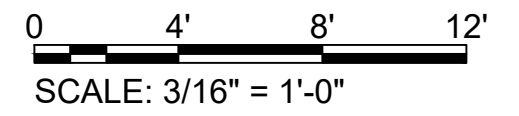


B SECTION
S-103 N.T.S.



C SECTION
S-103 N.T.S.

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.



PORTMIAMI BERTH 10
ENVIRONMENTAL PERMIT DRAWINGS
PORTMIAMI PROJECT NO. 2020-021

SHEET
NAME

PROPOSED SECTIONS

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY		
RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS		
No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

PROJ. No. : 100069656

FILE NAME: PROPOSED SECTIONS

DATE: 05-08-20 SCALE: AS NOTED

SHEET S-200

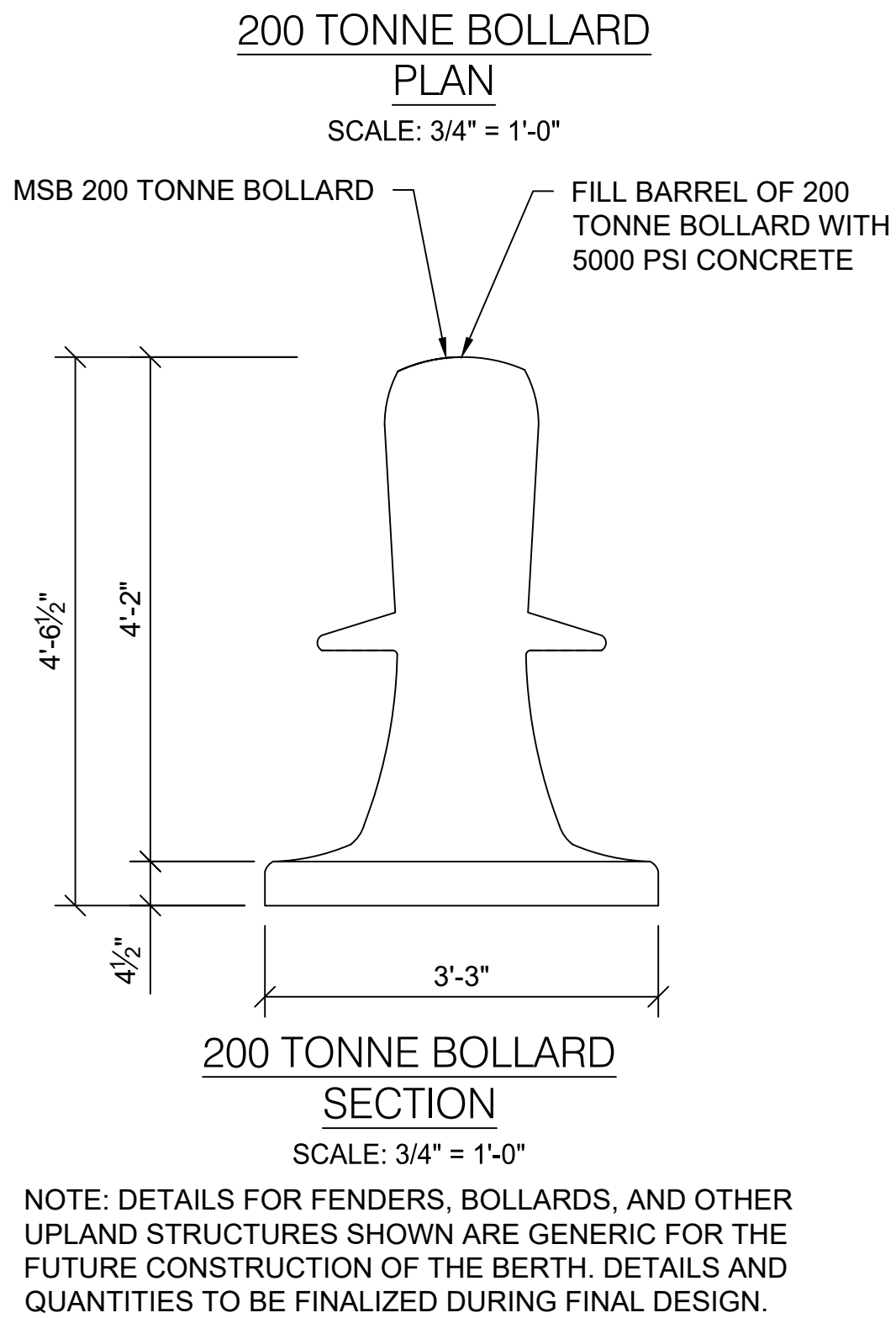
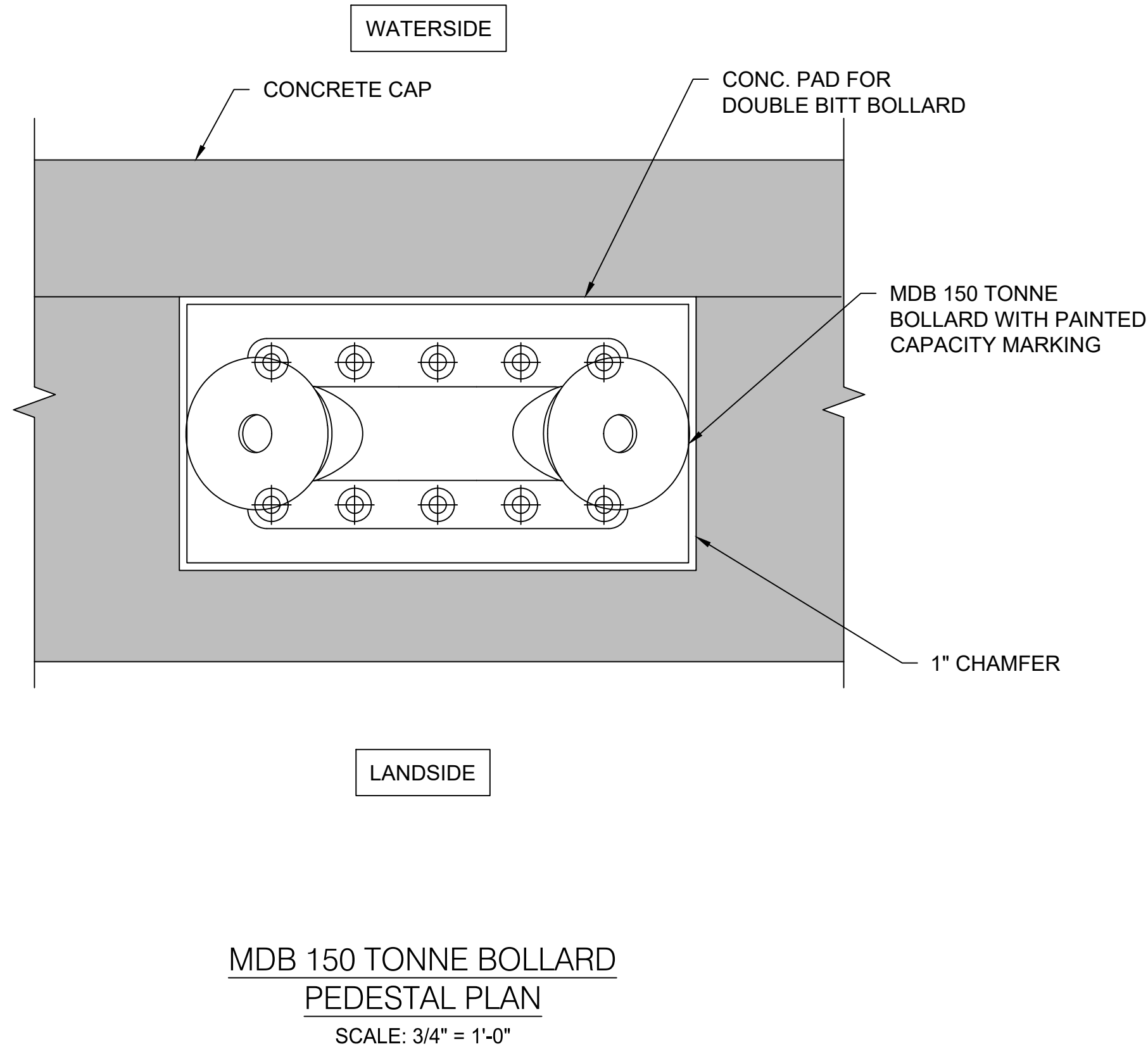
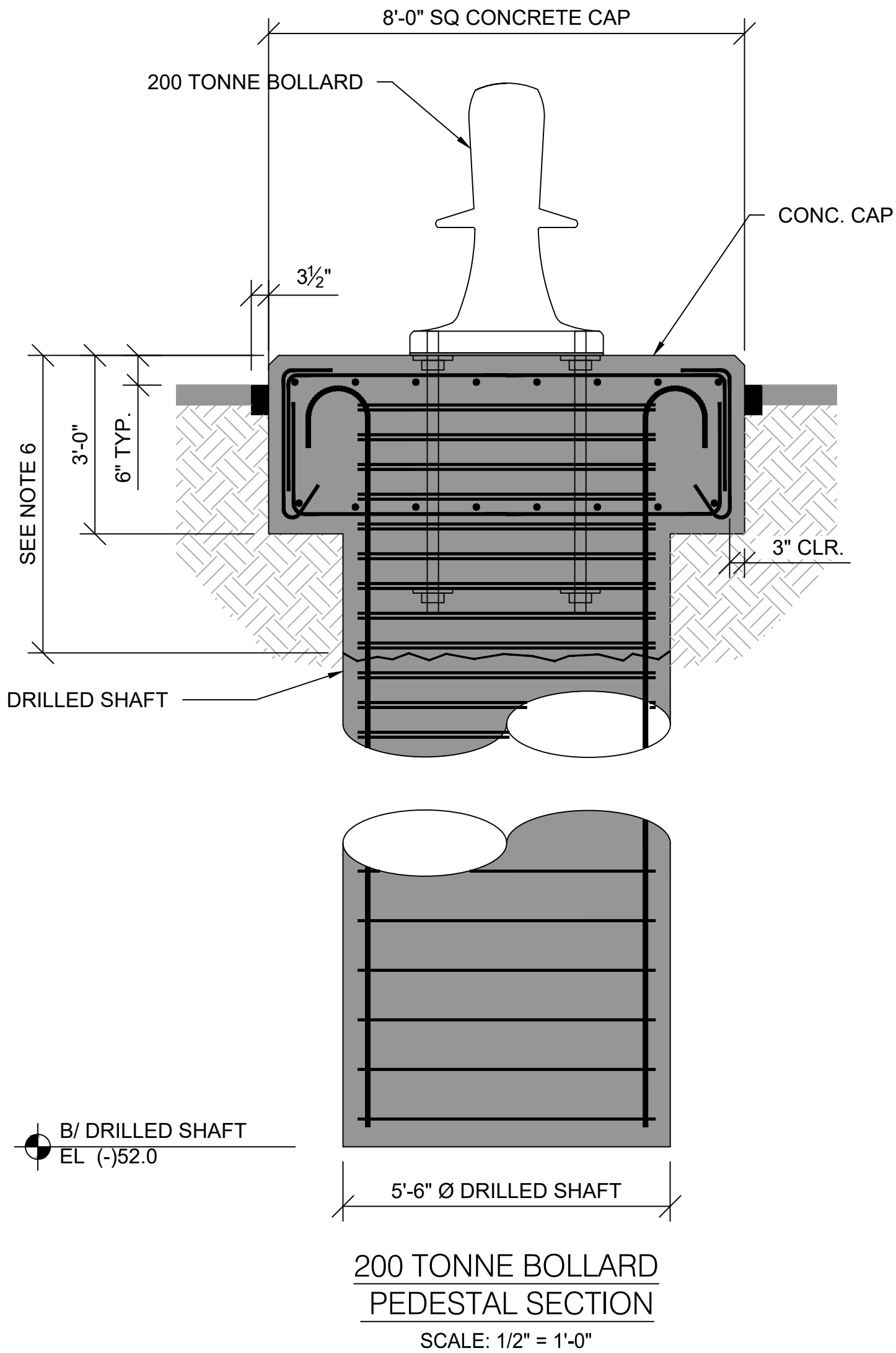
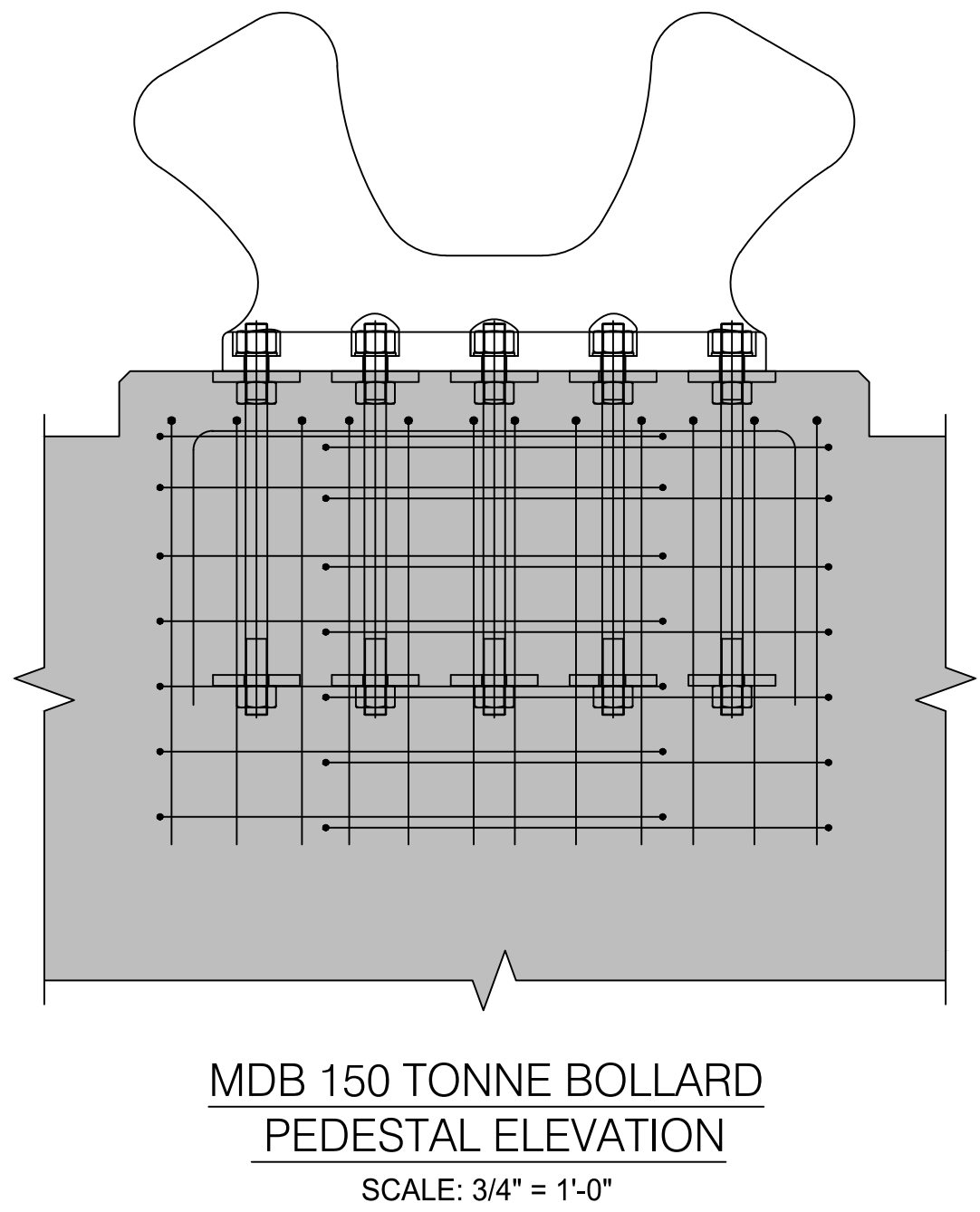
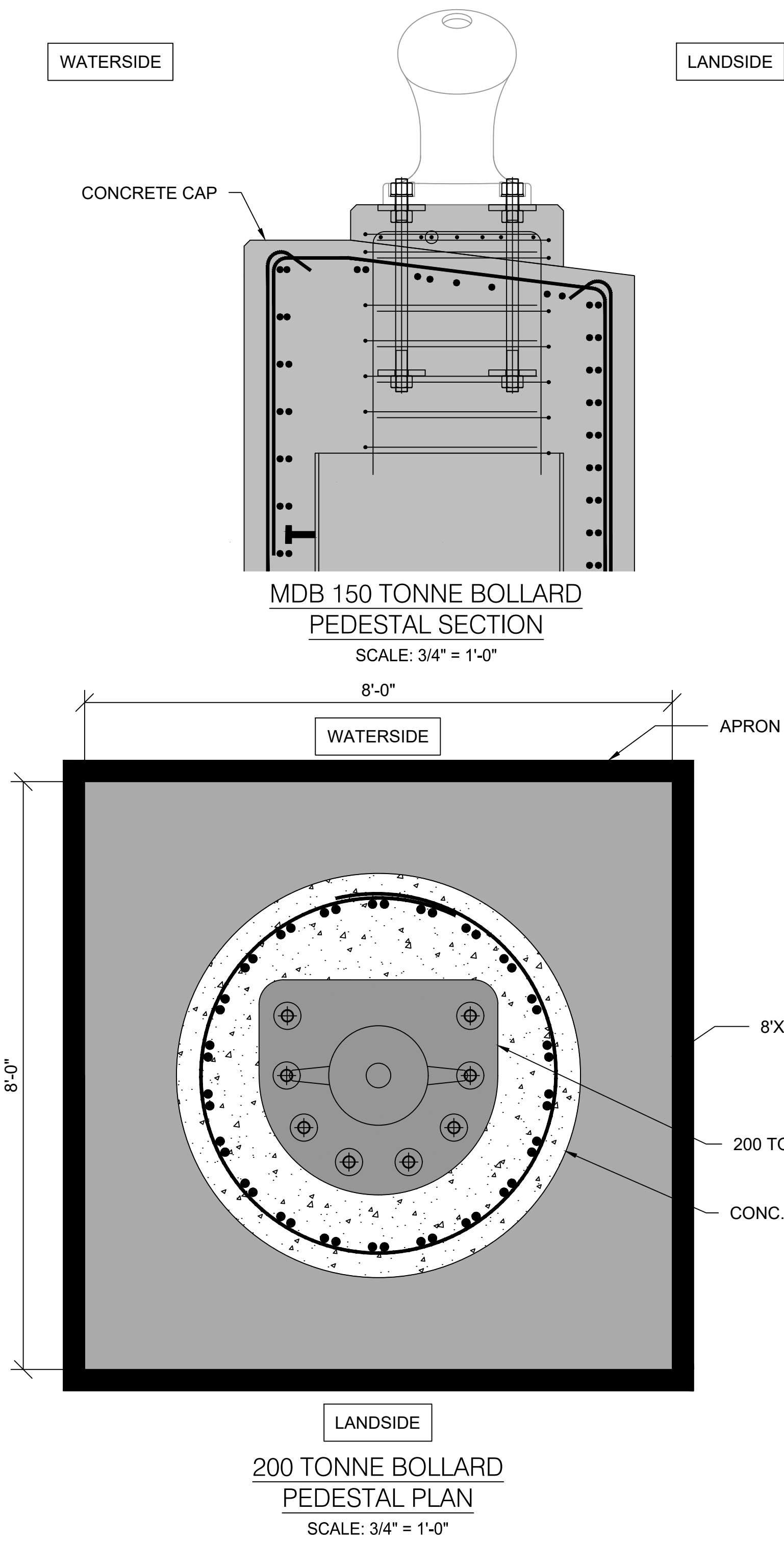
DWG. No. 8 of 21

May 08, 2020 - 1:08pm C:\Users\capo5788\AppData\Local\Temp\AcPublish_23840\08 S-300 - S-600 Misc. Struct. Details.dwg

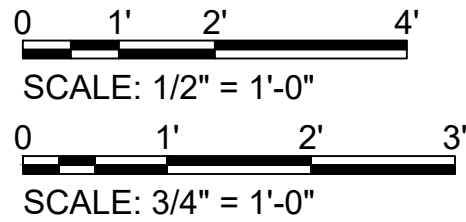
NOTES:

- MDB - DOUBLE BITT MOORING BOLLARD
- MSB - SINGLE BITT MOORING BOLLARD
- MBD LOADING = 330.7KIPS (150 METRIC TONNES) AT LINE ANGLES RANGING FROM 0 TO 60 DEGREES VERTICAL AND 0 TO 180 DEGREES HORIZONTAL
- MSB LOADING = 440.9KIPS (200 METRIC TONNES) AT LINE ANGLES RANGING FROM 0 TO 60 DEGREES VERTICAL AND 0 TO 180 DEGREES HORIZONTAL
- GROUT BED UNDER EACH BOLLARD TO ENSURE BOLLARD IS PROPERLY INSTALLED FLUSH, SEE MANUFACTURER INSTALLATION PROCEDURE FOR MINIMUM THICKNESS.
- CONSTRUCTION JOINT APPROX. 5 FEET FROM TOP OF CONCRETE CAP, ROUGHEN SURFACE 1/4" MINIMUM AMPLITUDE, TYPICAL. APPLY BONDING AGENT TO SURFACE PRIOR TO POUR.

ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION



NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.



PORTMIAMI BERTH 10
ENVIRONMENTAL PERMIT DRAWINGS
PORTMIAMI PROJECT NO. 2020-021

BOLLARD DETAILS

SHEET
NAME

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY

RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS

No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

PROJ. No. : 100069656

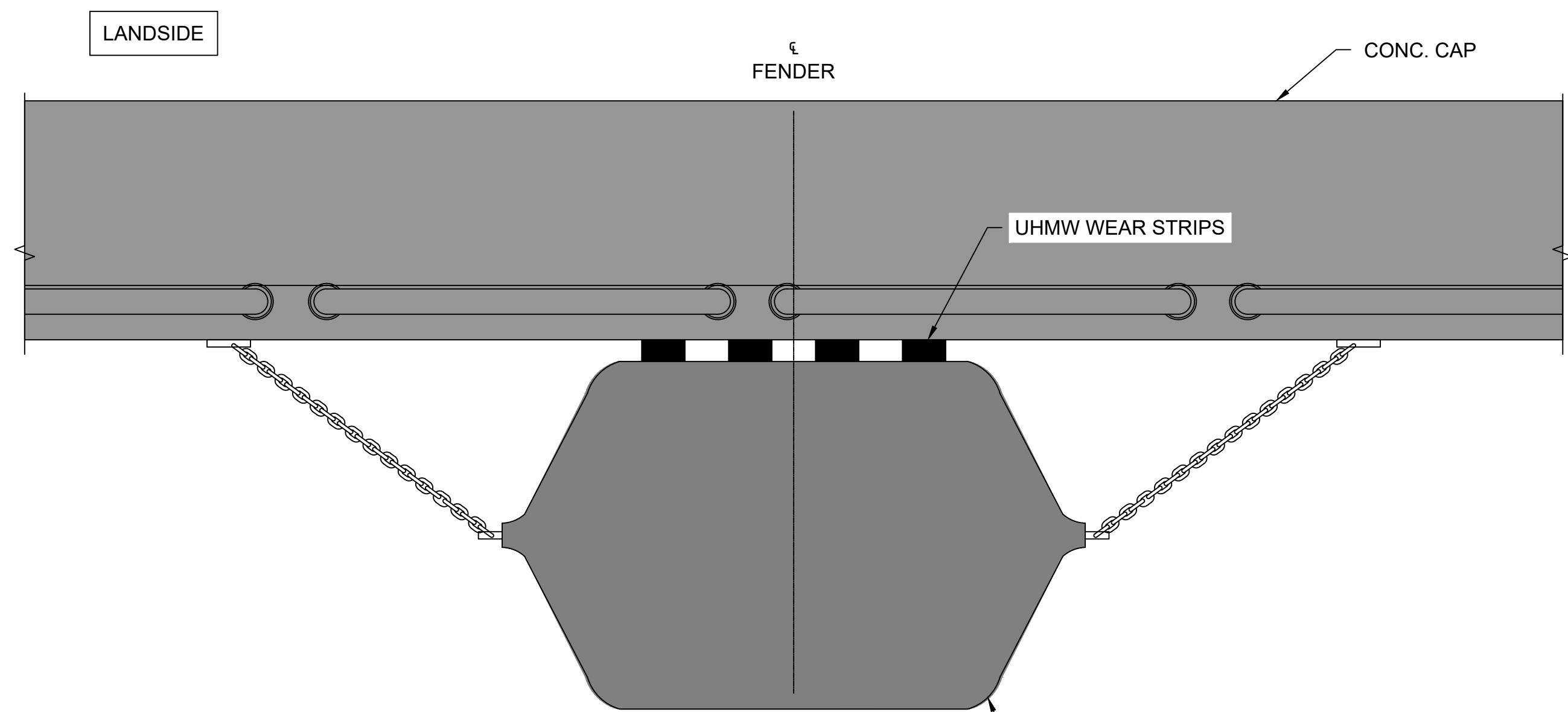
FILE NAME: BOLLARD DETAILS

DATE: 05-08-20 SCALE: AS NOTED

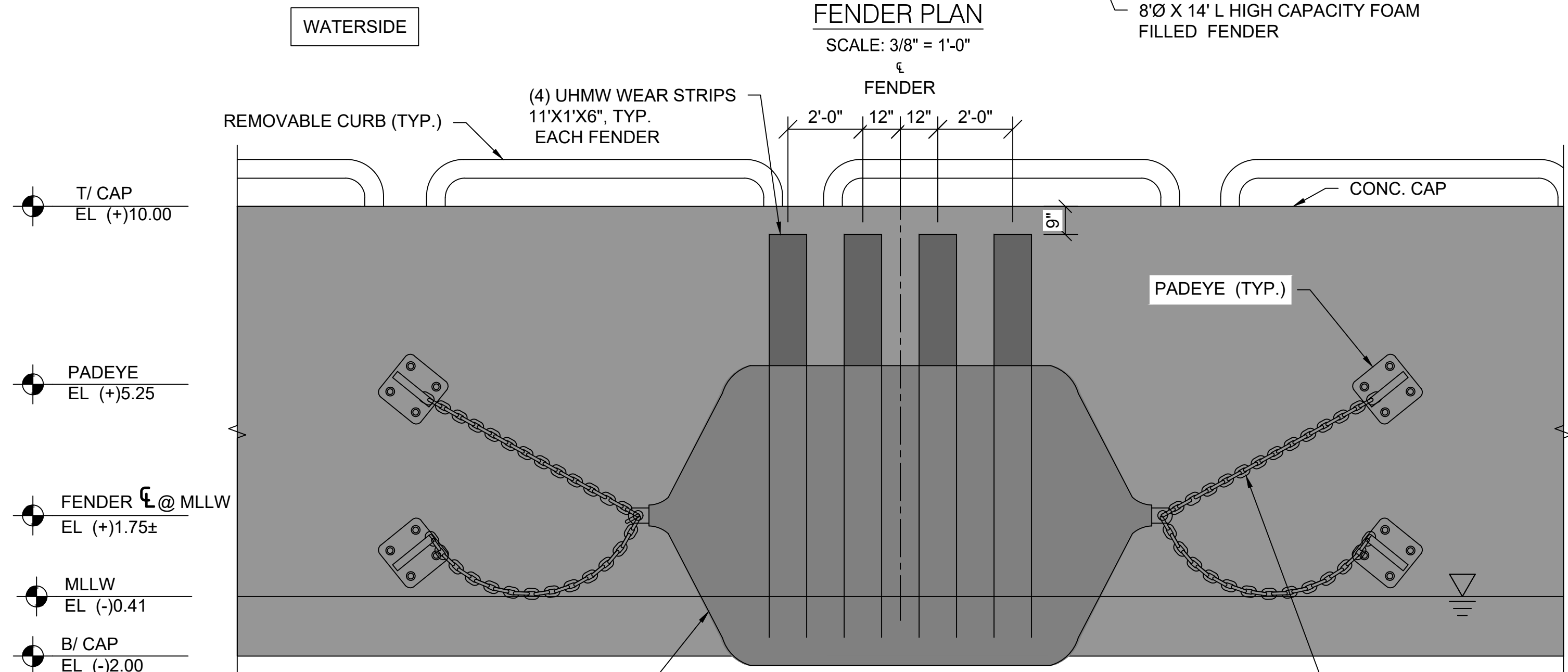
SHEET S-300

DWG. No. 9 of 21

May 08, 2020 - 1:09pm CAPO5788 C:\Users\capo5788\AppData\Local\Temp\AcPublish_23840\ 08 S-300 - S-600 Misc. Struct. Details.dwg



FENDER PLAN
SCALE: 3/8" = 1'-0"



FENDER ELEVATION
SCALE: 3/8" = 1'-0"

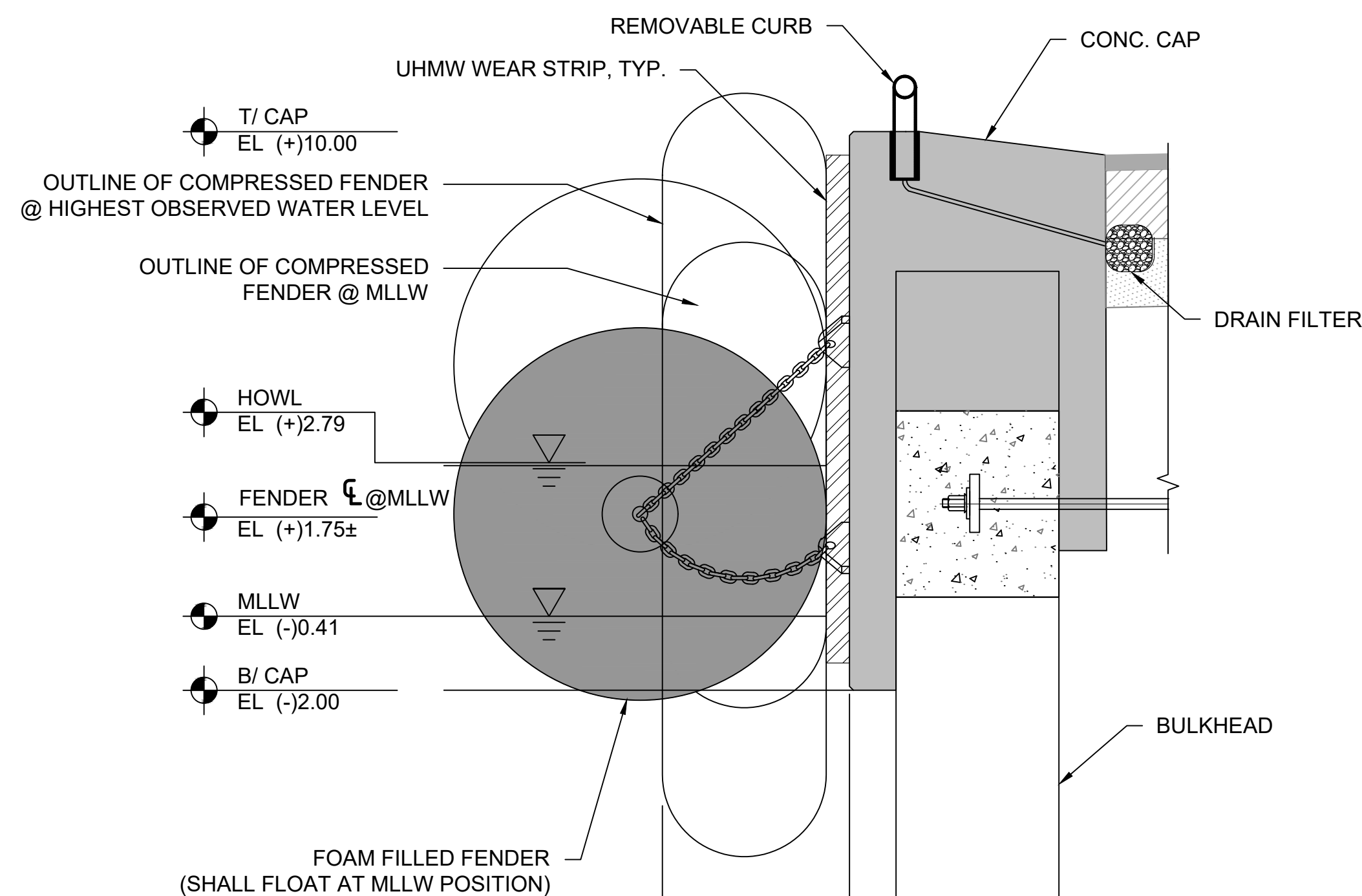
FENDER NOTES:

- FENDERS ARE HIGH CAPACITY FOAM FILLED FENDERS.
- FENDER CHAINS AND PADEYES PER FENDER MANUFACTURER RECOMMENDATIONS.
- CHAIN LENGTH TO BE DETERMINED TO ENSURE FOAM FILLED FENDERS FLOAT AT MLLW POSITION.
- ASTM 316 STAINLESS STEEL U-ANCHOR MAY BE USED INSTEAD OF FABRICATED PADEYE.

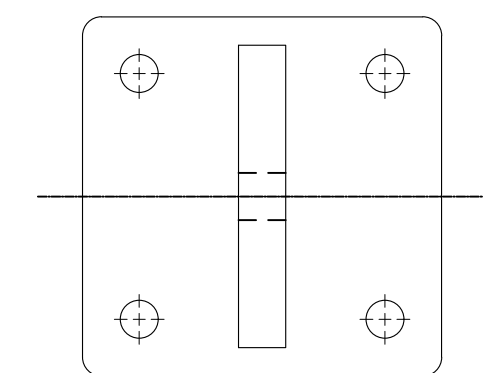
UHMW-PE WEARSTRIP NOTES:

- INSTALLATION INSTRUCTIONS ARE GENERIC. FOLLOW SPECIFIC INSTALLATION INSTRUCTIONS PER FINAL UHMW-PE WEAR STRIP MANUFACTURER.
- EXPANSION ANCHOR BOLTS AND WASHERS ARE TO BE ASTM 316 STAINLESS STEEL OR EQUIVALENT, WITH STAINLESS STEEL INSERT SLEEVE.
- USE LOCTITE 2047 OR EQUIVALENT FOR STAINLESS STEEL BOLTS, REQUIRED AT ALL FASTENERS, TYPICAL.

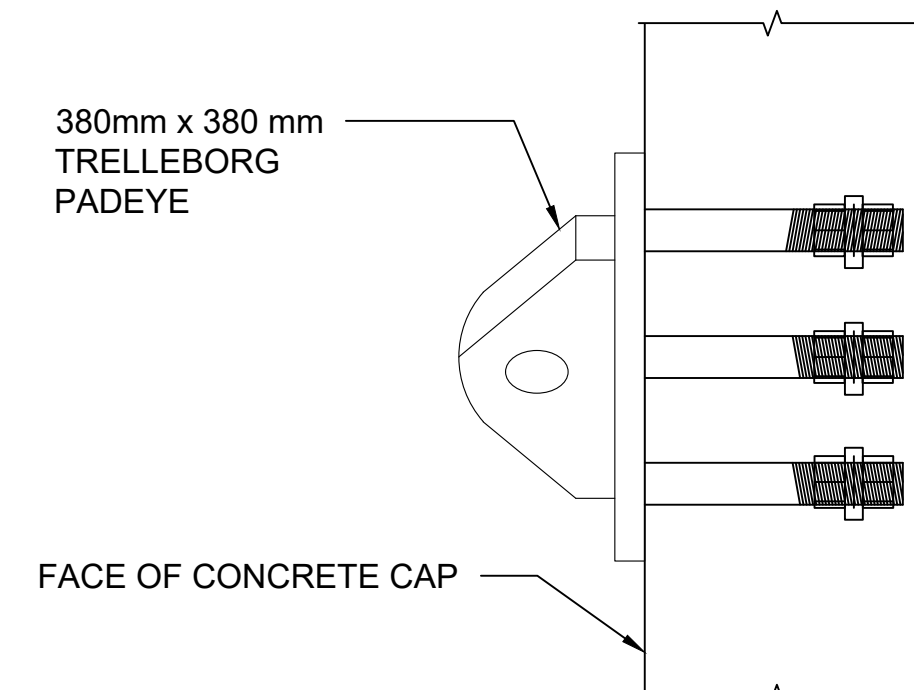
ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION



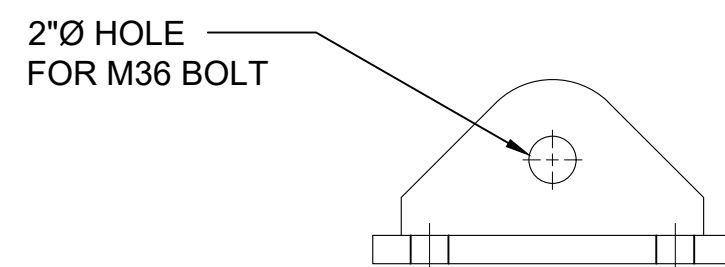
FENDER SECTION
SCALE: 3/8" = 1'-0"



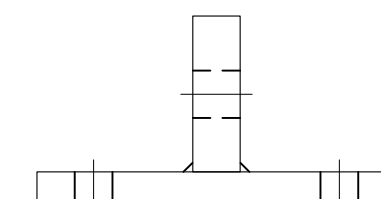
CAST-IN PADEYE DETAIL
SCALE: 1 1/2" = 1'-0"



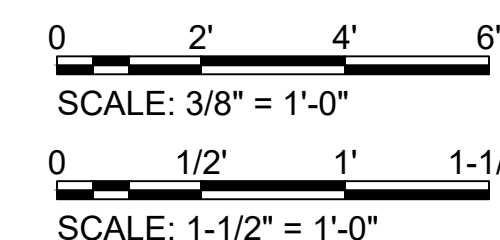
CAST-IN PLACE ANCHORAGE DETAIL
SCALE: 1 1/2" = 1'-0"



CAST-IN PADEYE SECTION
SCALE: 1 1/2" = 1'-0"



CAST-IN PADEYE SECTION
SCALE: 1 1/2" = 1'-0"



NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY

RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS

No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

PROJ. No. : 100069656

FILE NAME: FENDER DETAILS

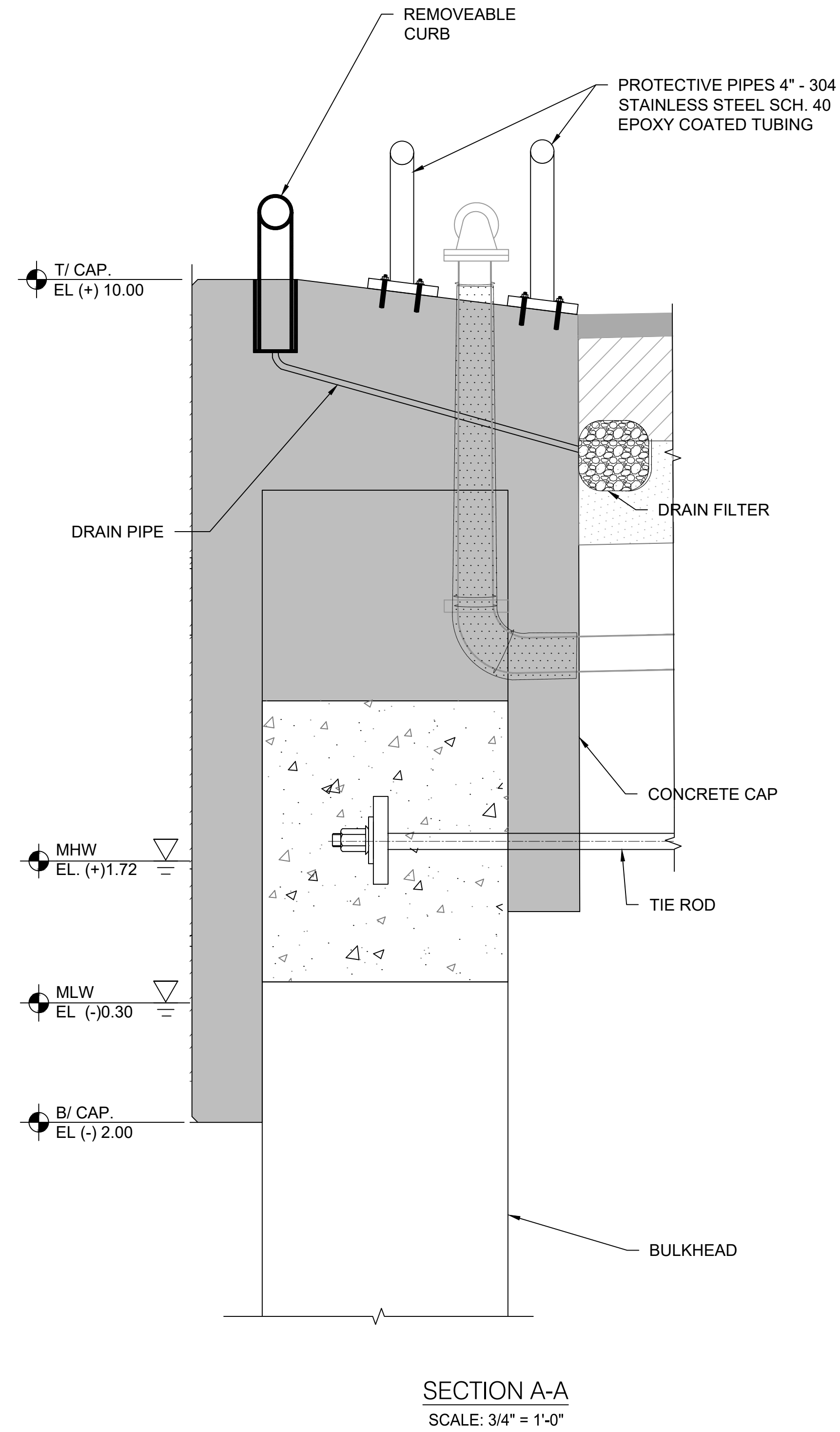
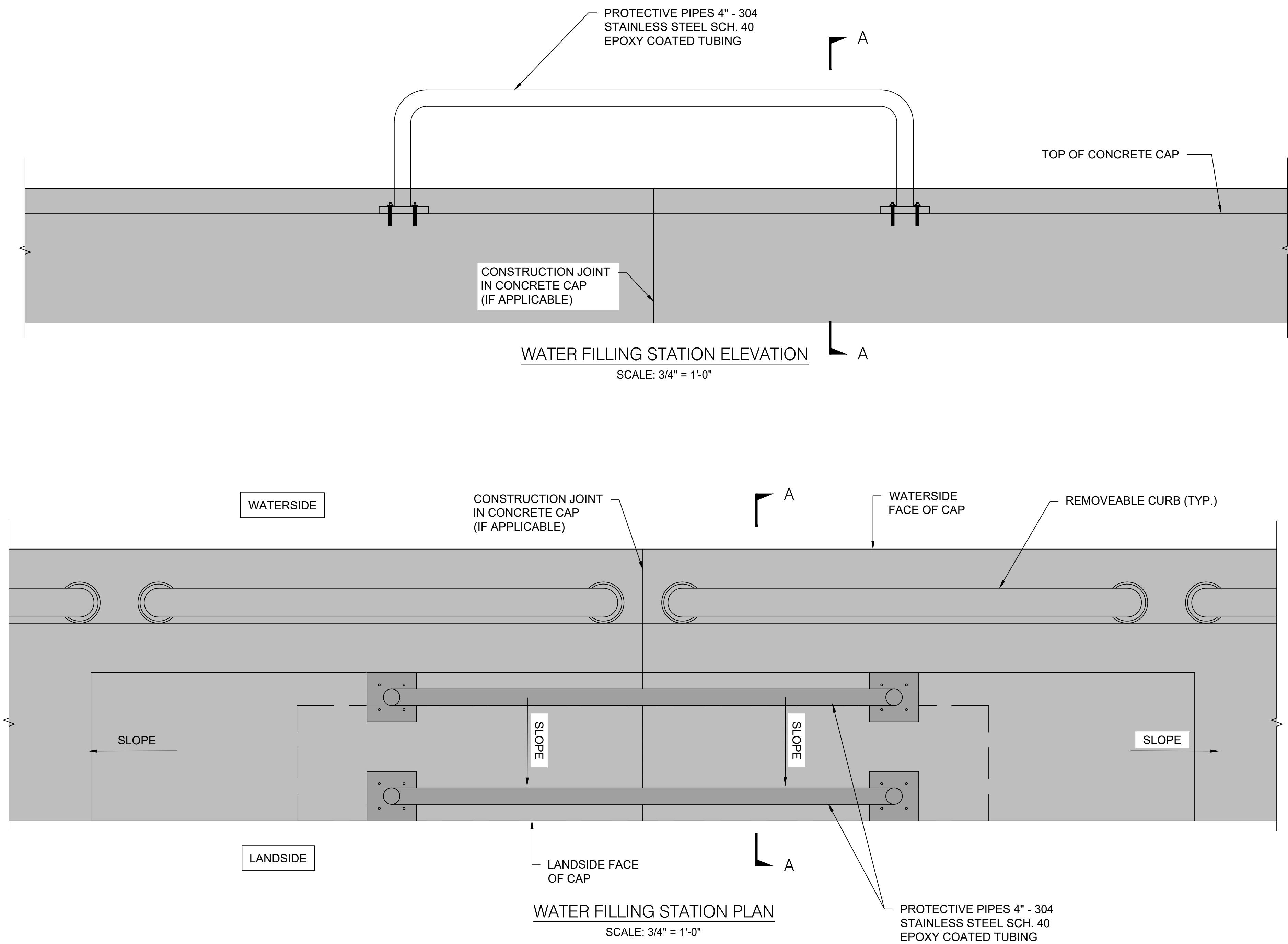
DATE: 05-08-20 SCALE: AS NOTED

SHEET S-400

DWG. No. 10 of 21

May 08, 2020 - 1:09pm CAPO5788 C:\Users\capo5788\AppData\Local\Temp\AcPublish_23840\08 S-300 - S-600 Misc. Struct. Details.dwg

ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION



NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.

0 1' 2' 3'
SCALE: 3/4" = 1'-0"

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY

RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS

No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

PROJ. No. : 100069656

FILE NAME: WATER STATION
DETAILS

DATE: 05-08-20 SCALE: AS NOTED

SHEET S-500

DWG. No. 11 of 21

May 08, 2020 - 1:09pm C:\Users\CAPO5788 - C:\Users\CAPO5788\AppData\Local\Temp\AcPublish_23840\08 S-300 - S-600 Misc. Struct. Details.dwg

PORTMIAMI BERTH 10
ENVIRONMENTAL PERMIT DRAWINGS
PORTMIAMI PROJECT NO. 2020-021

CURB AND MANATEE GRATE DETAILS

SHEET
NAME

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY

RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS

No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

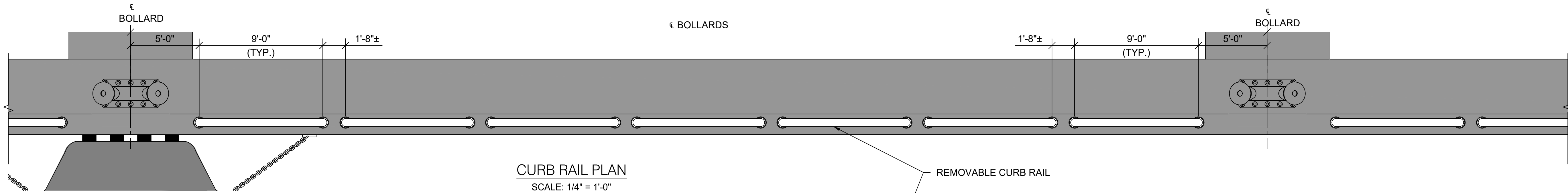
PROJ. No. : 100069656

FILE NAME: CURB AND MANATEE
GRATE DETAILS

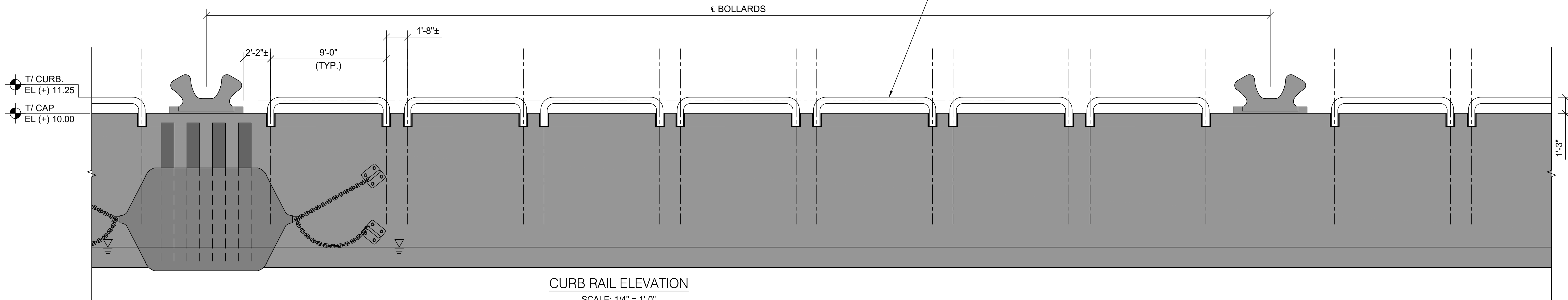
DATE: 05-08-20 SCALE: AS NOTED

SHEET S-600

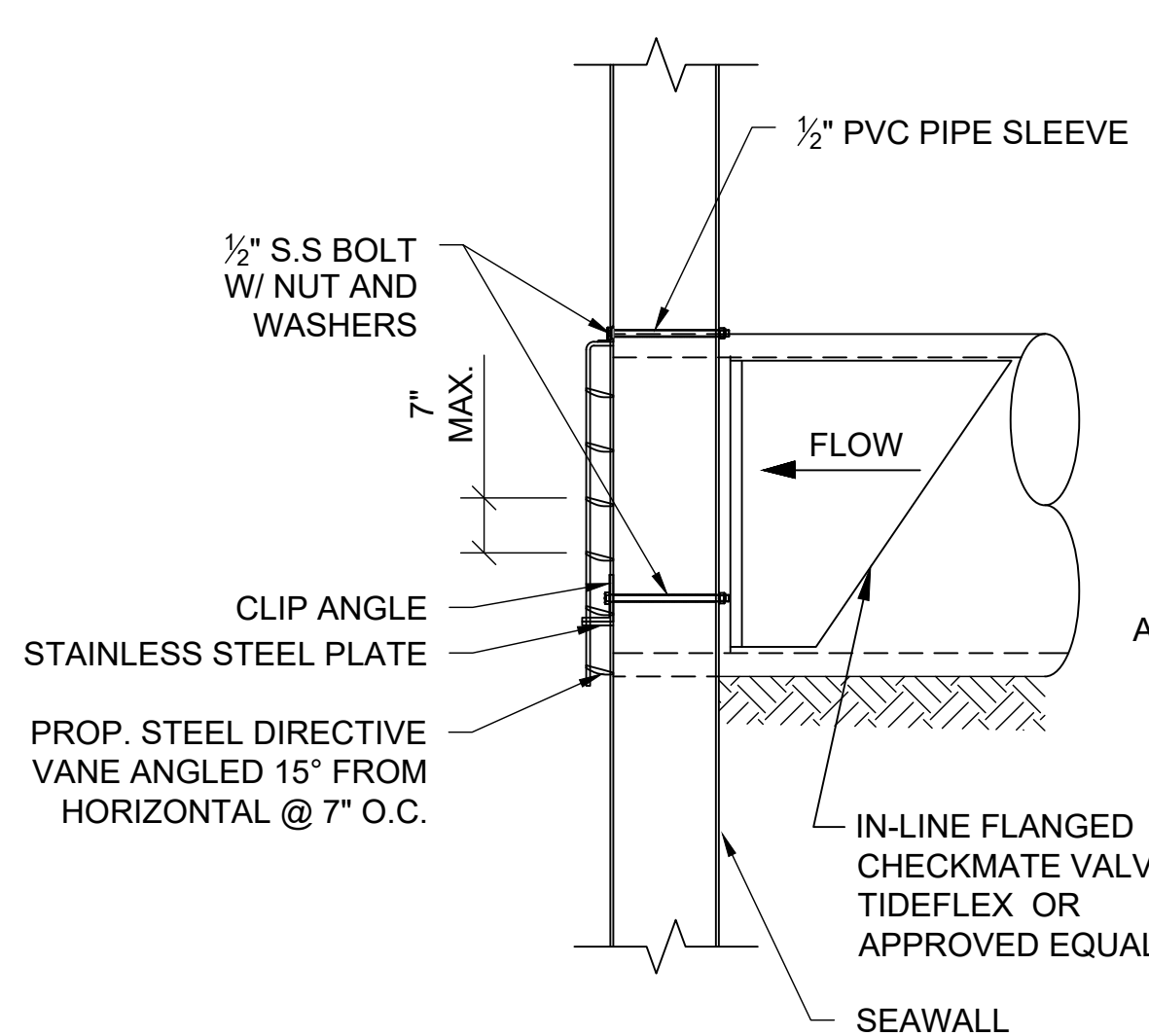
DWG. No. 12 of 21



CURB RAIL PLAN
SCALE: 1/4" = 1'-0"

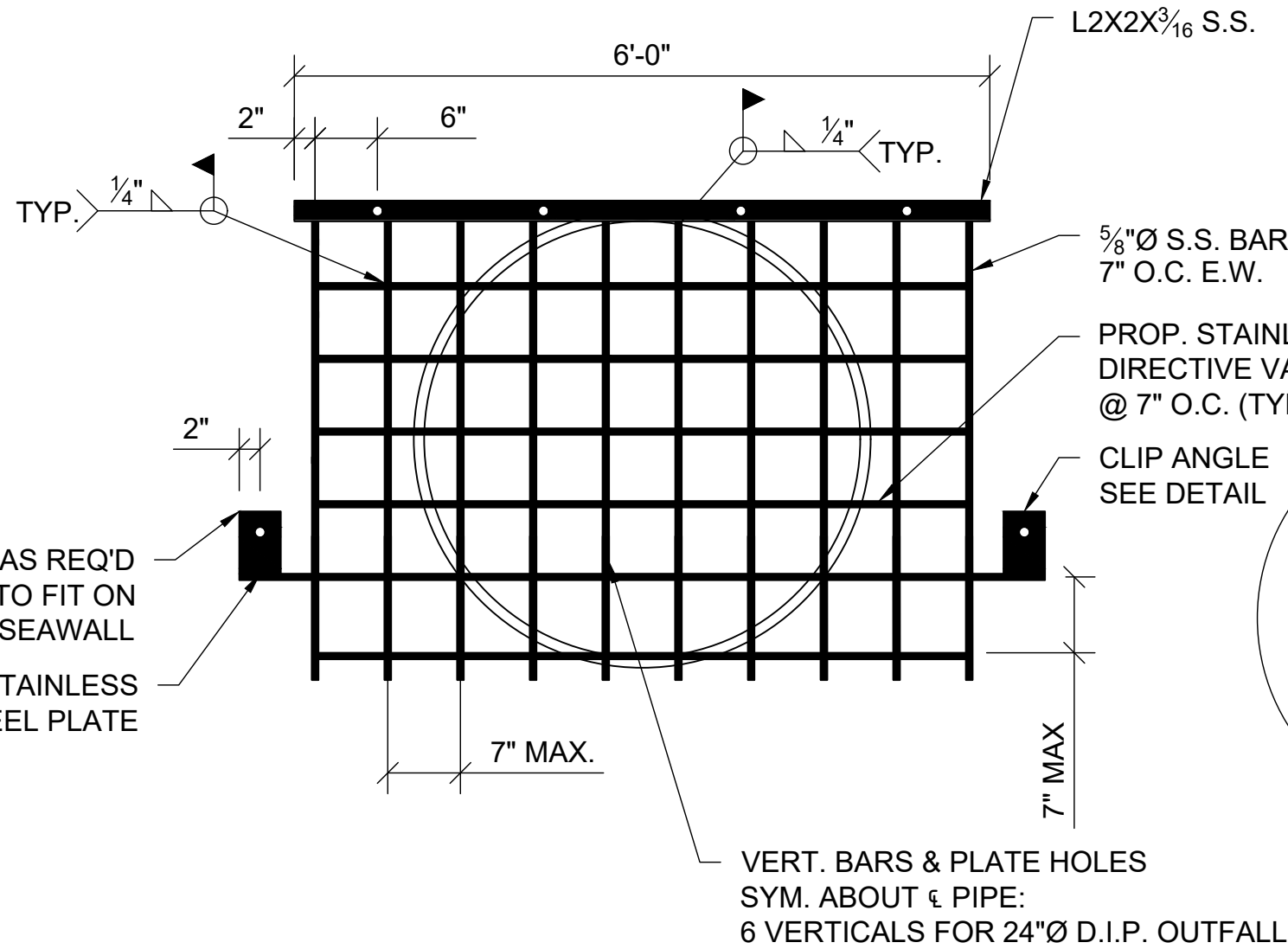


CURB RAIL ELEVATION
SCALE: 1/4" = 1'-0"

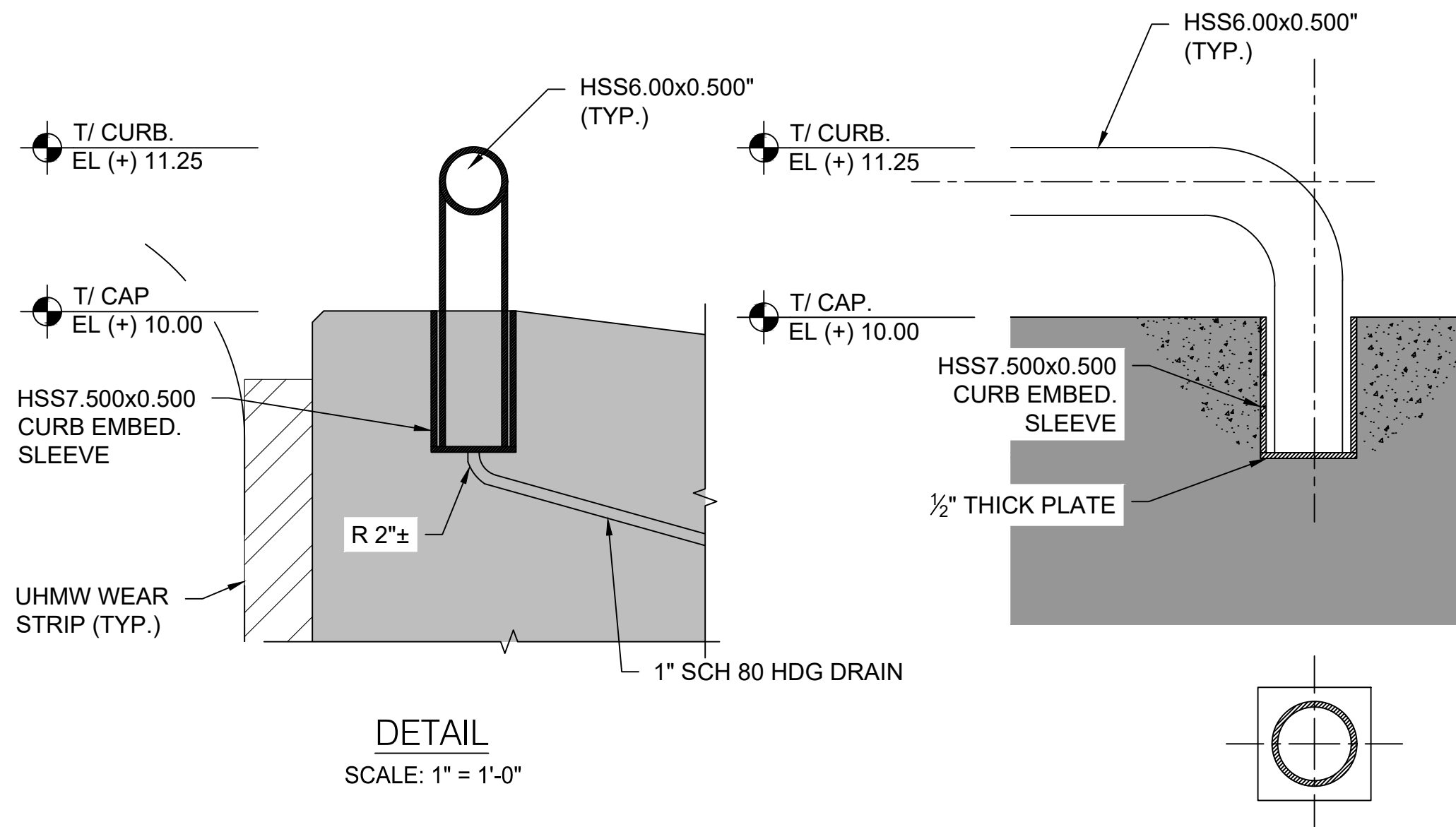


MANATEE GRATE
DETAIL
SCALE: 1/2" = 1'-0"

- NOTES
1. STAINLESS STEEL BARS, PLATES, CLIPS, BOLTS AND NUTS SHALL BE EITHER A308 OR A316.

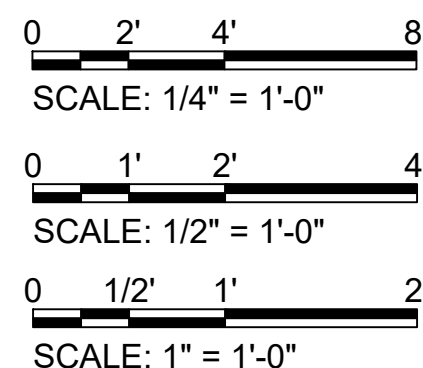


MANATEE GRATE
DETAILS
SCALE: 1/2" = 1'-0"



DETAIL
SCALE: 1" = 1'-0"

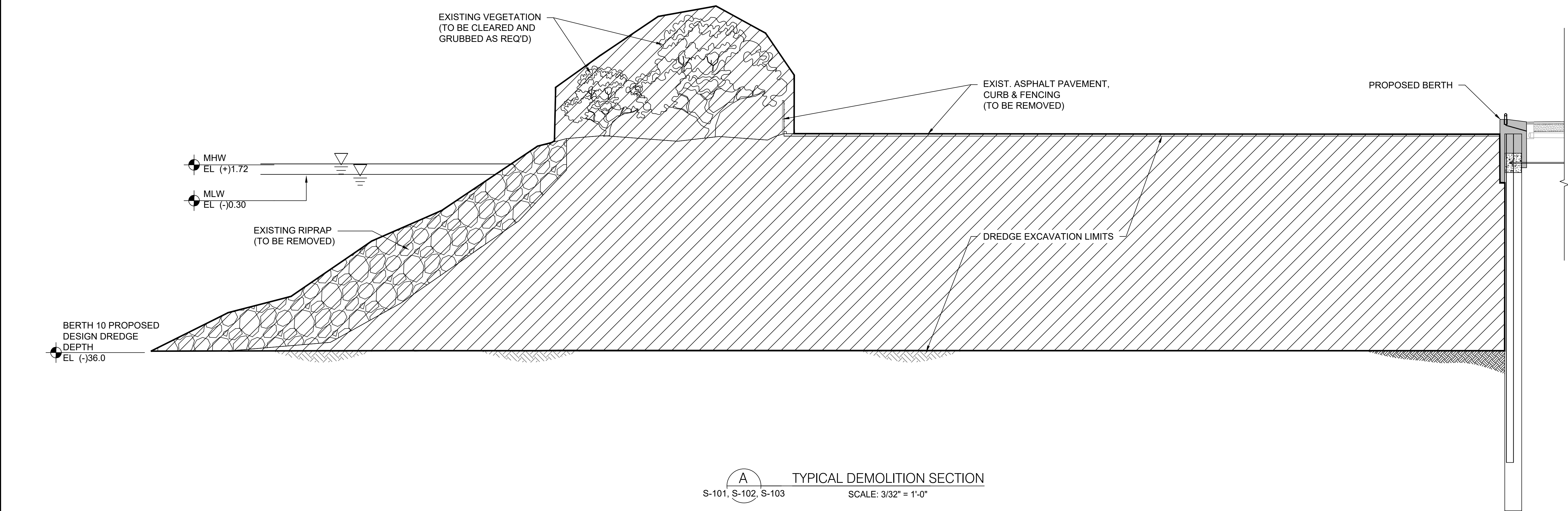
PIPE CURB BEND AND
EMBED SLEEVE
SCALE: 1" = 1'-0"



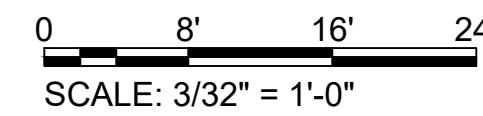
ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.

May 08, 2020 - 1:13pm CAPO5788 C:\Users\capo5788\AppData\Local\Temp\AcPublish_23840\ 04 D-100 Demo Section.dwg



ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION



800 WATERFORD WAY, SUITE 700
MIAMI, FLORIDA 33126
(305) 592-7275
LB NO. 0000024

PORTMIAMI BERTH 10
ENVIRONMENTAL PERMIT DRAWINGS
PORTMIAMI PROJECT NO. 2020-021

SHEET NAME
DEMOLITION SECTION

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY		
RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS		
No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

PROJ. No. : 100069656

FILE NAME: DEMOLITION SECTION

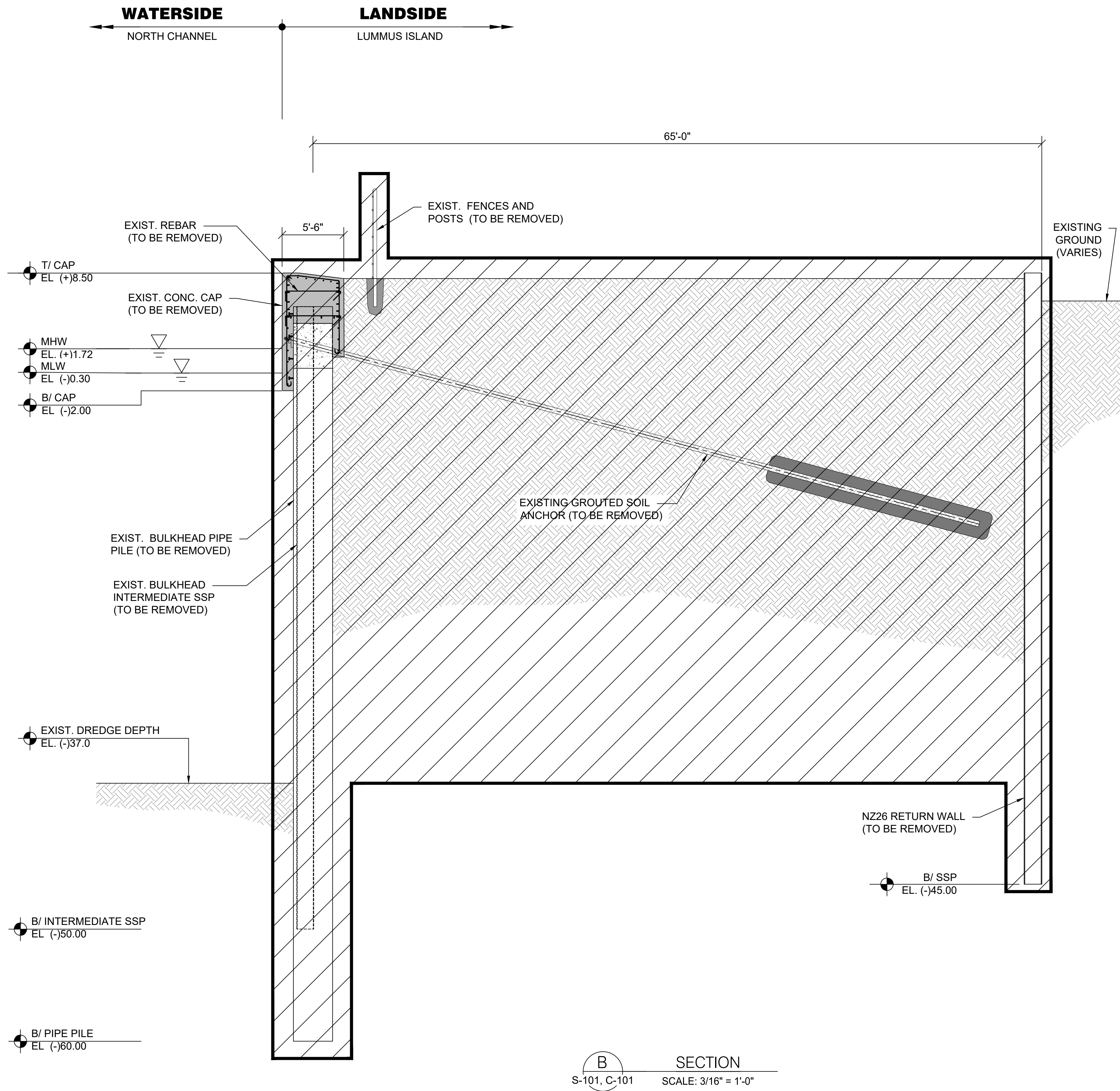
DATE: 05-08-20SCALE:AS NOTED

SHEET D-100

DWG. No. 13 of 21

May 08, 2020 - 1:13pm CAPO5788 C:\Users\capo5788\AppData\Local\Temp\AcPublish_23840\ 04 D-100 Demo Section.dwg

ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION



PORTMIAMI BERTH 10 ENVIRONMENTAL PERMIT DRAWINGS PORTMIAMI PROJECT NO. 2020-021	
SHEET NAME	DEMOLITION SECTION

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

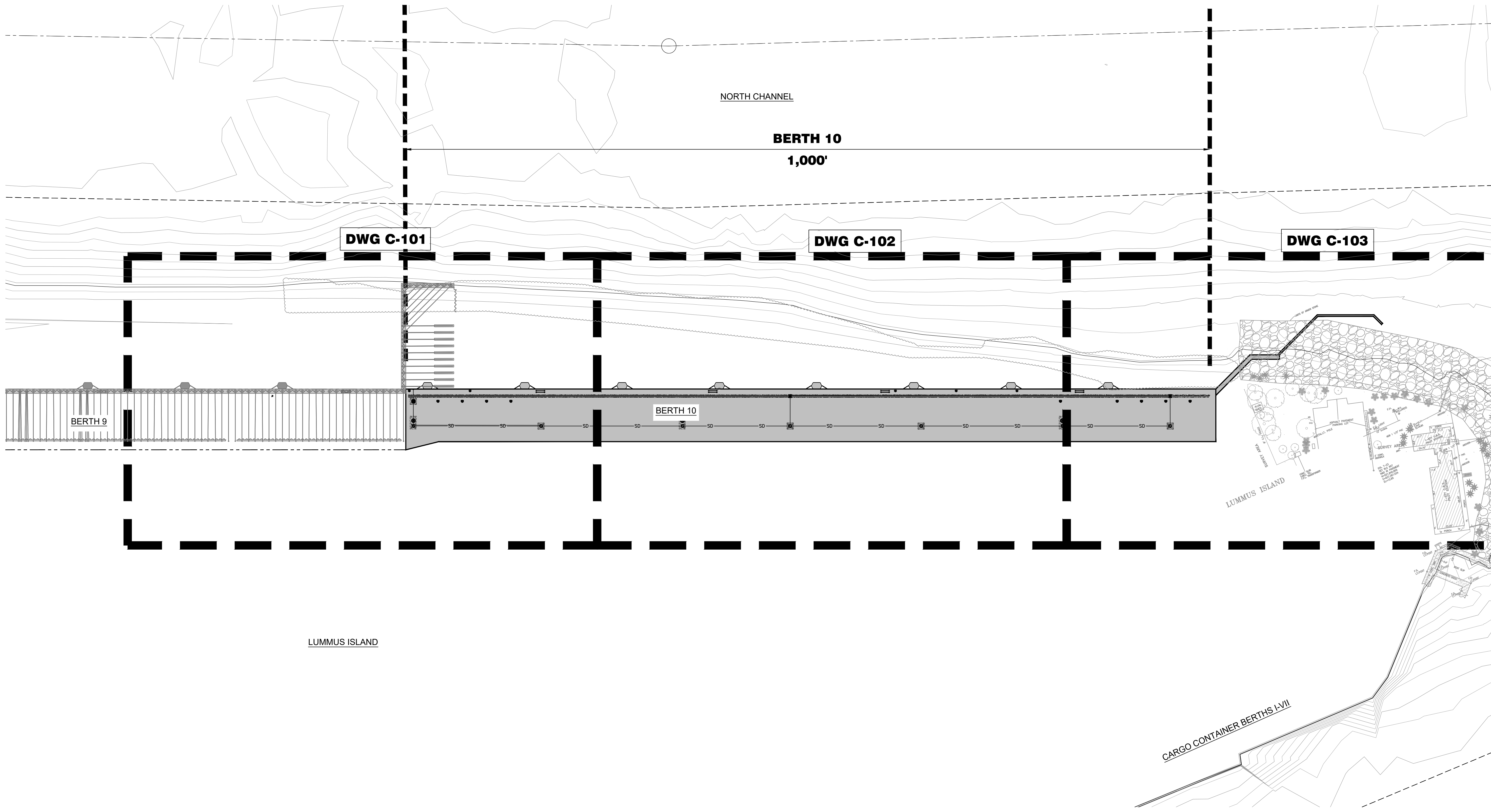
DRAWING HISTORY		
RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS		
No.	DESCRIPTION	DATE
1		

ATKINS ENGINEER OF RECORD	
DESIDERIO M. MALDONADO P.E. NO. 72978	
PROJ. No. : 100069656	
FILE NAME: DEMOLITION SECTION	
DATE: 05-08-20	SCALE: AS NOTED
SHEET D-200	
DWG. No. 14	of 21

\\watkins.com\Project\USTLA\Civil\Coastal Engineering\Projects\PORTS\Port of Miami - E18-SEA-01\Projects\WO#03-Env Permit Mooring Berth 10\05 Drawings\00 USACE Permit Drawings\09 C-100 Overall Drainage Plan.dwg, 5/8/2020 12:26:22 PM, DWG To PDF.p3

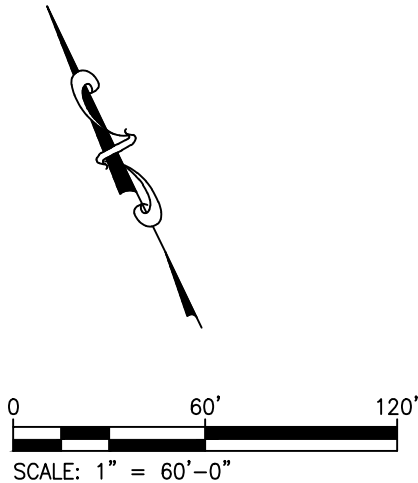
May 08, 2020 - 1:26pm CAPO5788 \\watkins.com\Project\USTLA\Civil\Coastal Engineering\Projects\PORTS\Port of Miami - E18-SEA-01\Projects\WO#03-Env Permit Mooring Berth 10\05 Drawings\00 USACE Permit Drawings\09 C-100 Overall Drainage Plan.dwg



OVERALL DRAINAGE PLAN
SCALE 1" = 60'-0"

ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.



PORTMIAMI BERTH 10
ENVIRONMENTAL PERMIT DRAWINGS
PORTMIAMI PROJECT NO. 2020-021

OVERALL DRAINAGE PLAN

SHEET
NAME

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY		
RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS		
No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

PROJ. No. : 100069656

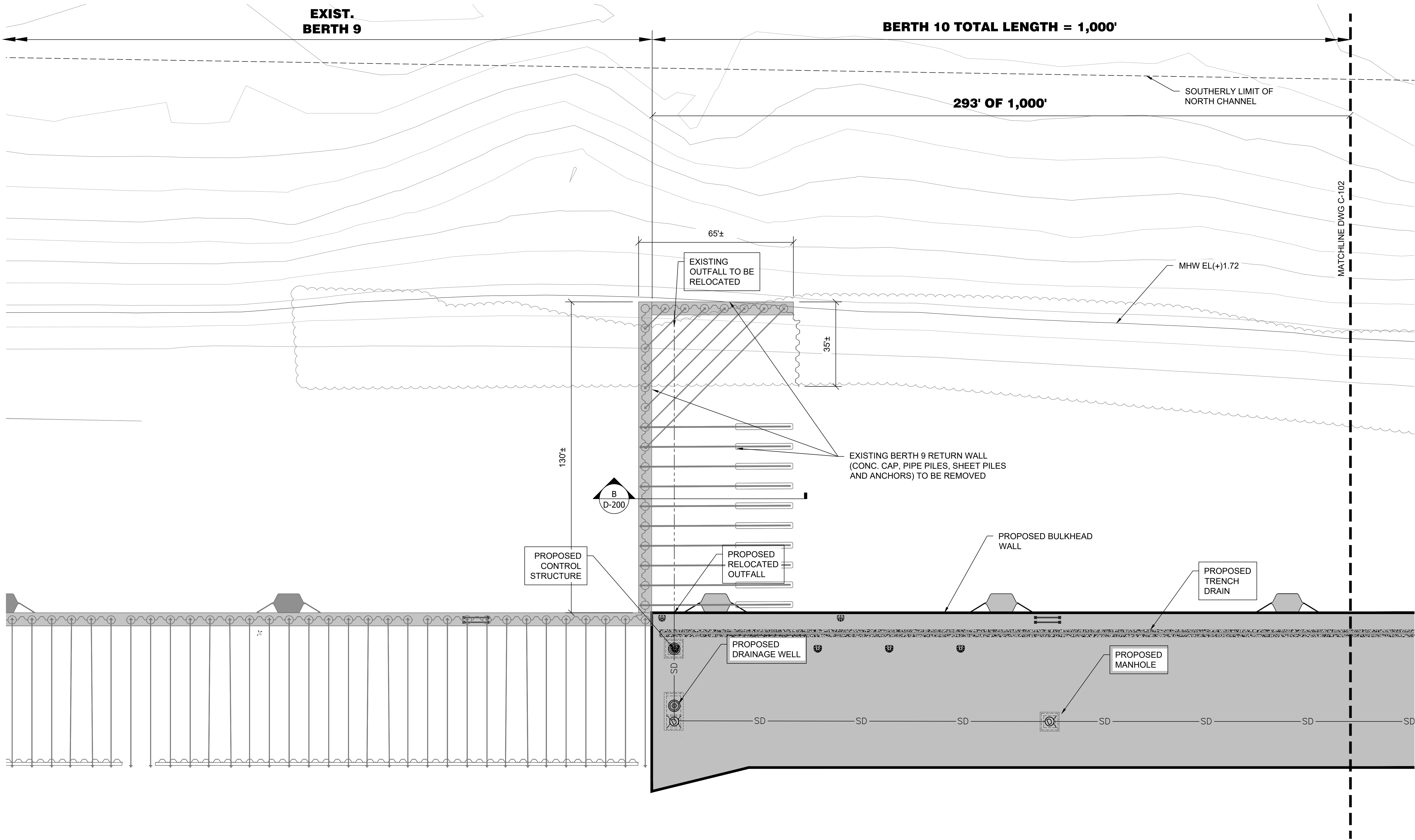
FILE NAME: OVERALL DRAINAGE PLAN

DATE: 05-08-20 SCALE: AS NOTED

SHEET C-100

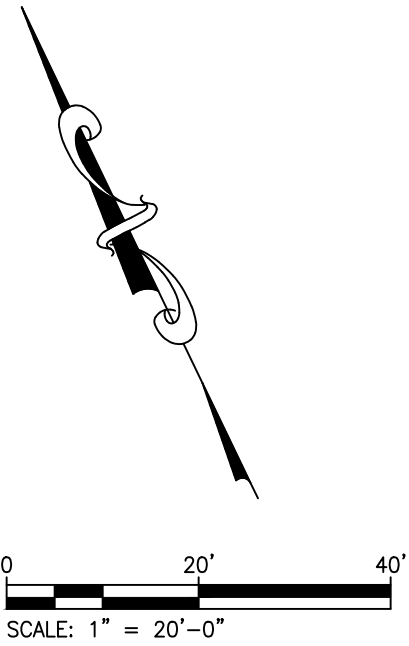
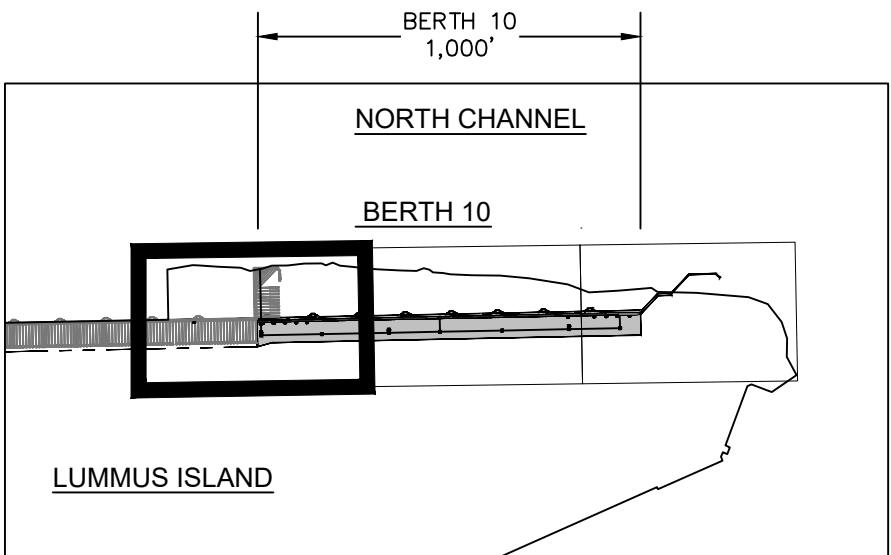
DWG. No. 15 of 21

May 08, 2020 - 1:43pm CAPO5788 C:\Users\capo5788\AppData\Local\Temp\AcPublish_23840\ 09 C-101 - C-103 Drainage Plans.dwg



ENLARGED DRAINAGE PLAN 1
SCALE 1" = 20'-0"

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.



ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION

PORTMIAMI BERTH 10
ENVIRONMENTAL PERMIT DRAWINGS
PORTMIAMI PROJECT NO. 2020-021

ENLARGED DRAINAGE PLAN 1

SHEET
NAME

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY		
RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS		
No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

PROJ. No. : 100069656

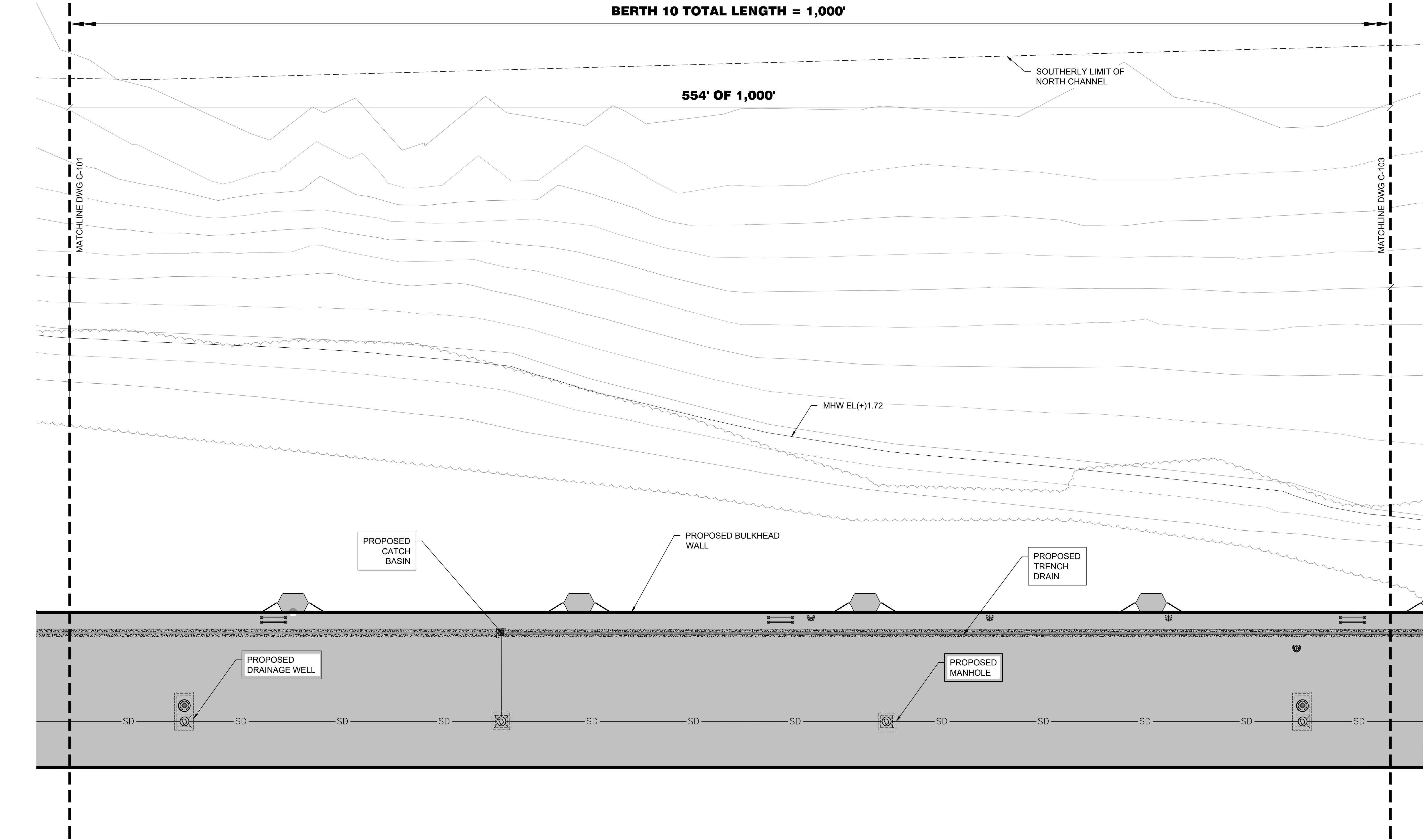
FILE NAME: ENLARGED DRAINAGE PLAN 1

DATE: 05-08-20 SCALE: AS NOTED

SHEET C-101

DWG. No. 16 of 21

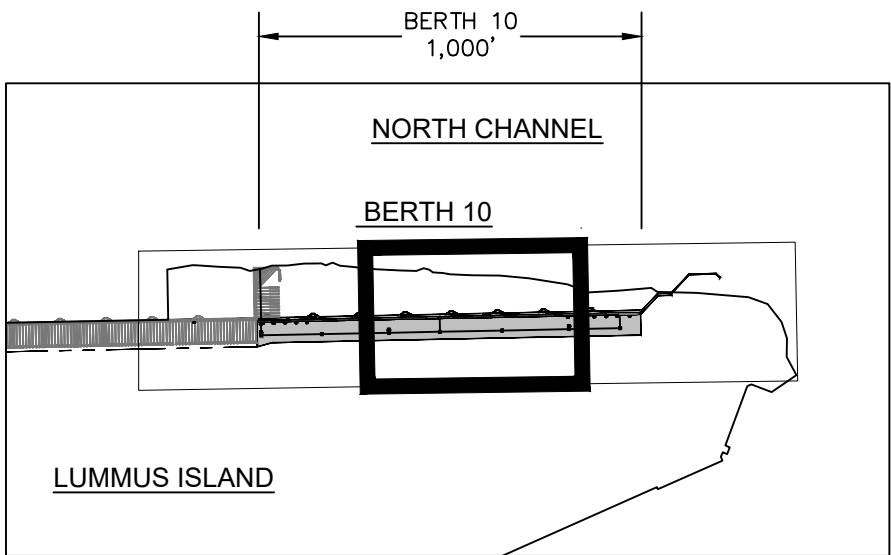
May 08, 2020 - 1:44pm C:\Users\CAPO5788\Documents\Projects\PortMiami\Bert10\Bert10.dwg - C-103 Drainage Plans.dwg



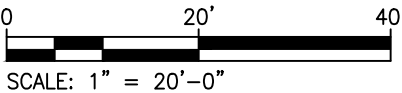
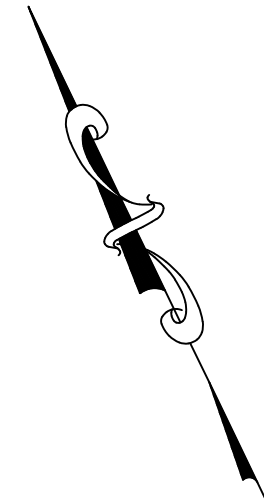
ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION

ENLARGED DRAINAGE PLAN 2
SCALE 1" = 20'-0"

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.



KEY MAP
N.T.S.



PORTMIAMI BERTH 10
ENVIRONMENTAL PERMIT DRAWINGS
PORTMIAMI PROJECT NO. 2020-021

SHEET
NAME

ENLARGED DRAINAGE PLAN 2

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY		
RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS		
No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

PROJ. No. : 100069656

FILE NAME: ENLARGED DRAINAGE PLAN 2

DATE: 05-08-20 SCALE: AS NOTED

SHEET C-102

DWG. No. 17 of 21

PORTMIAMI BERTH 10
ENVIRONMENTAL PERMIT DRAWINGS
PORTMIAMI PROJECT NO. 2020-021

ENLARGED DRAINAGE PLAN 3

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY

RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS

No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

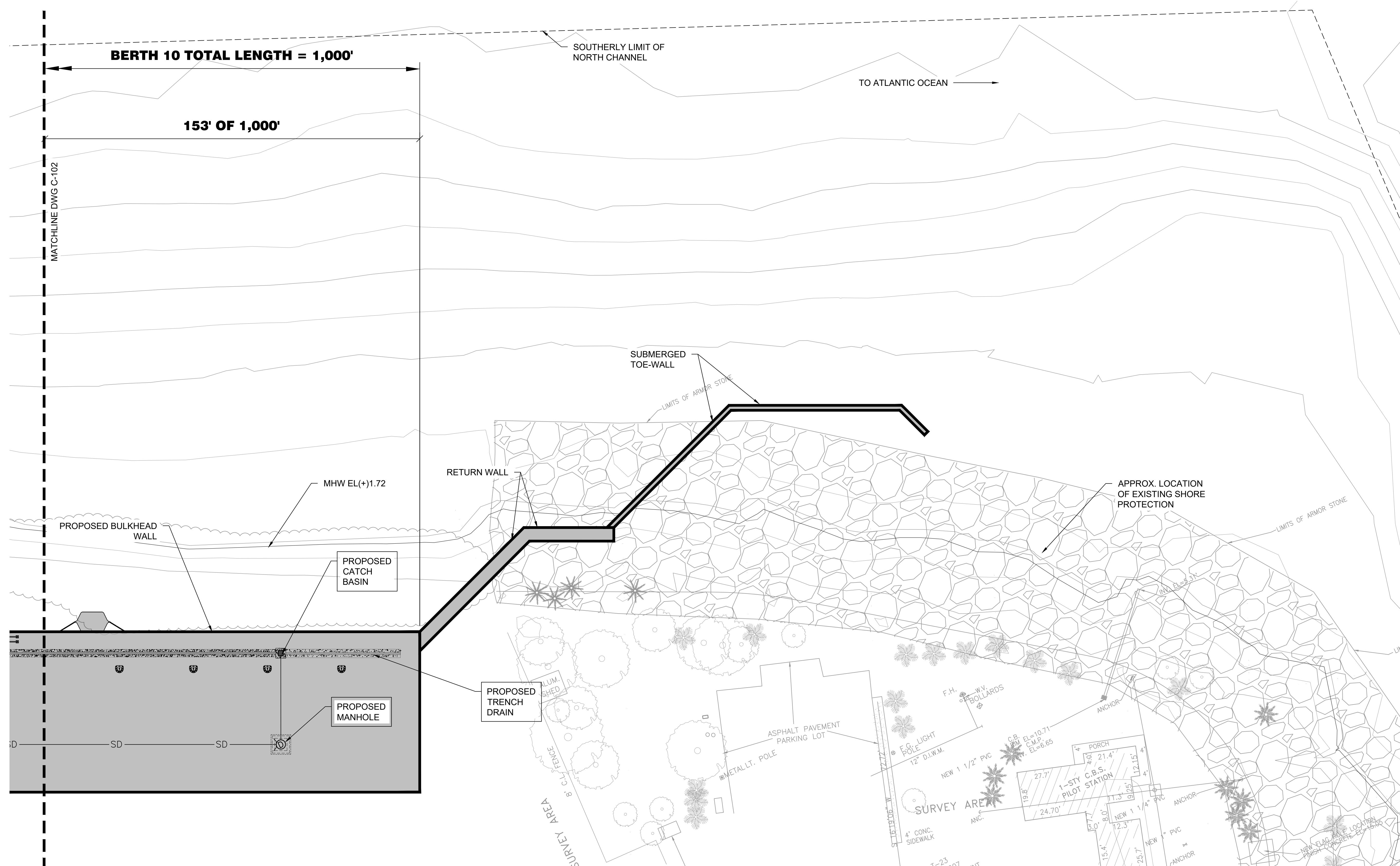
PROJ. No. : 100069656

FILE NAME: ENLARGED DRAINAGE PL

DATE: 05-08-20	SCALE:AS NOTED
----------------	----------------

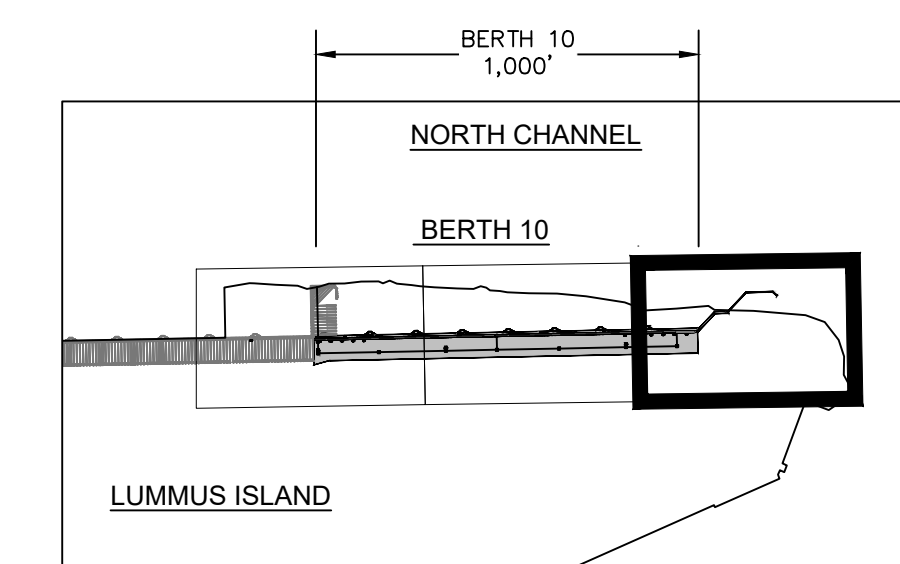
SHEET	C-103
-------	-------

DWG. No. 18 of 21

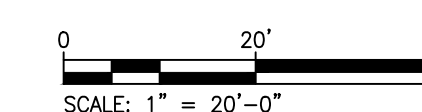
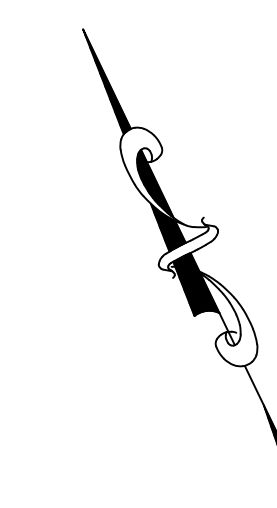


ENLARGED DRAINAGE PLAN 3
SCALE 1" = 20'-0"

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.

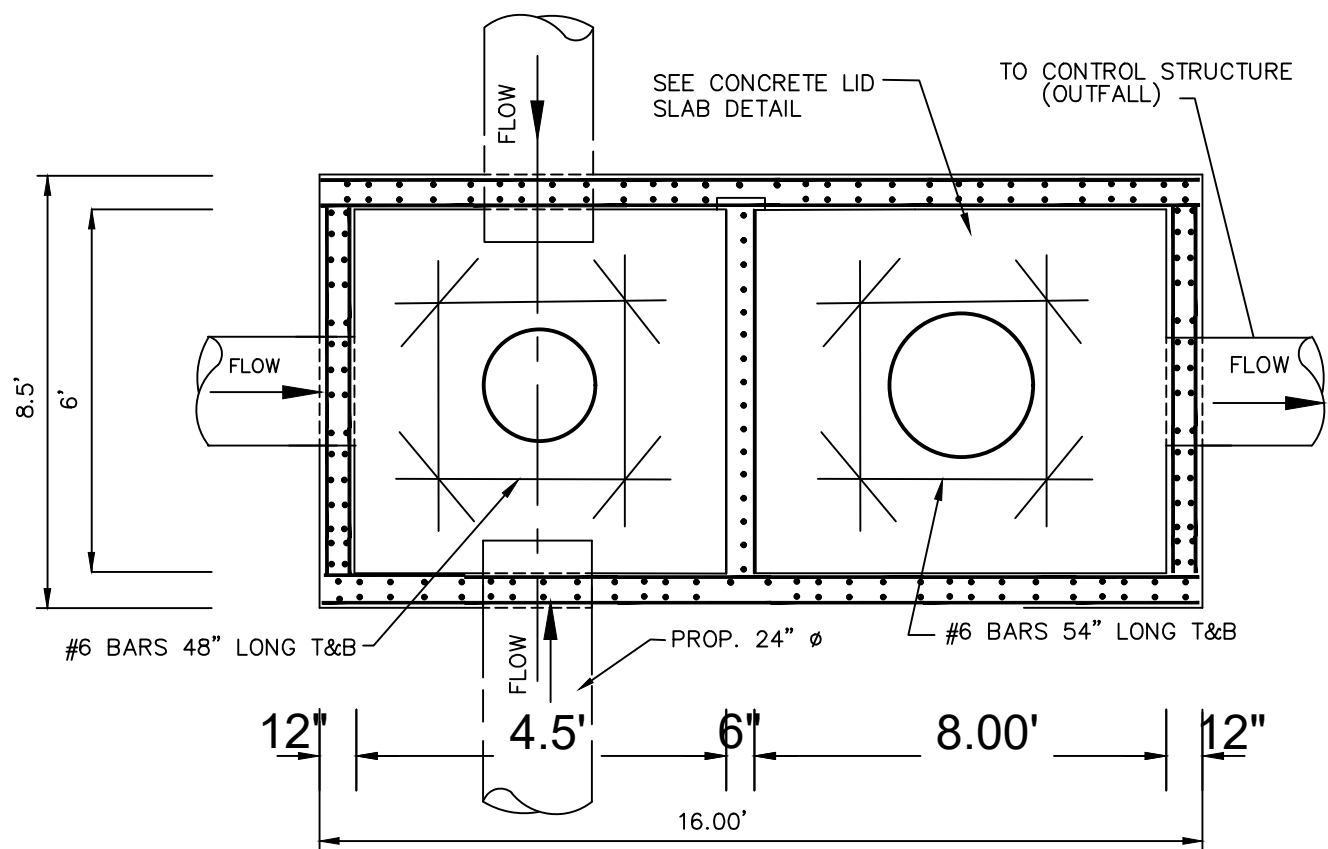


KEY MAP
N.T.S.

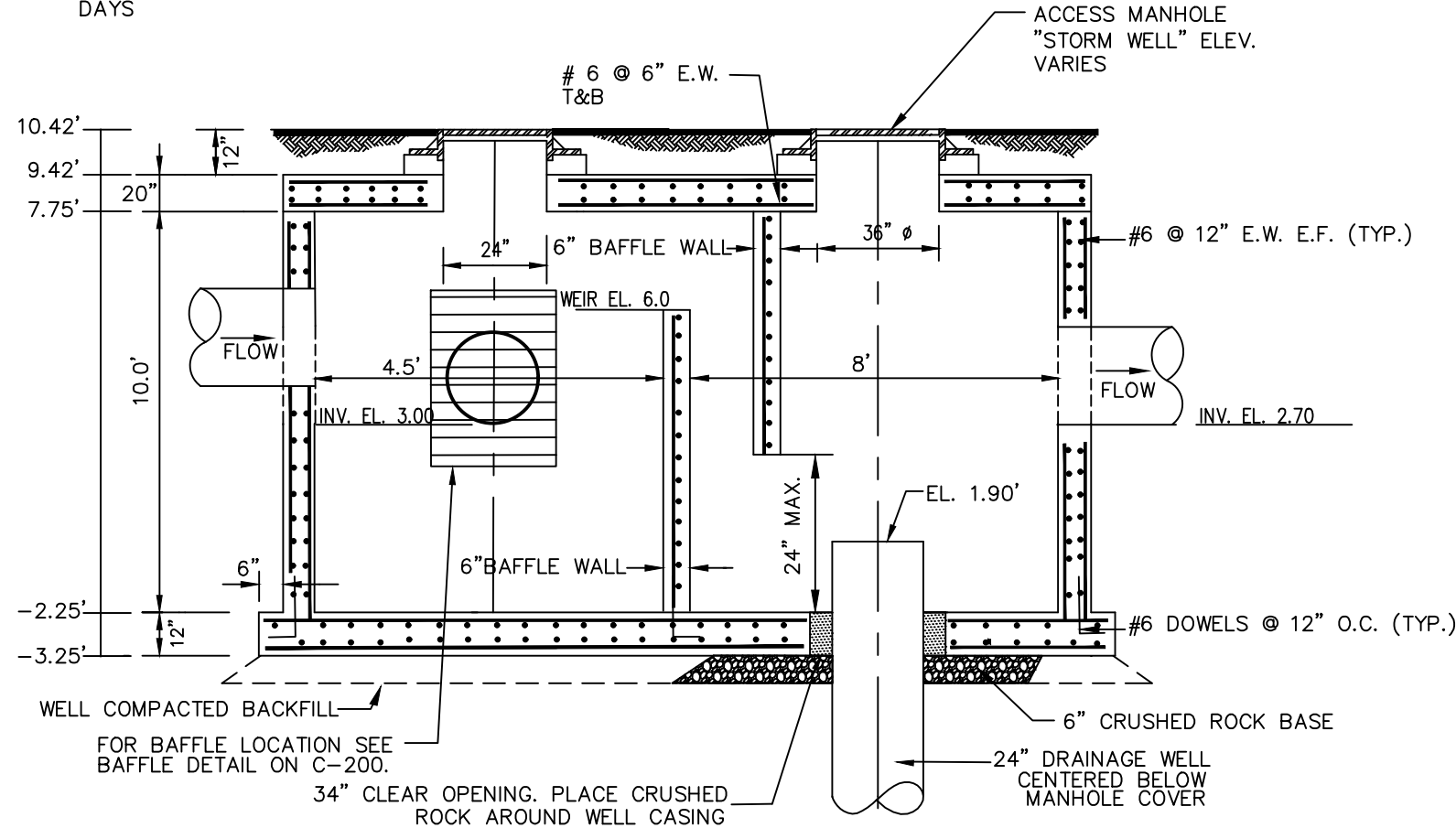


ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION

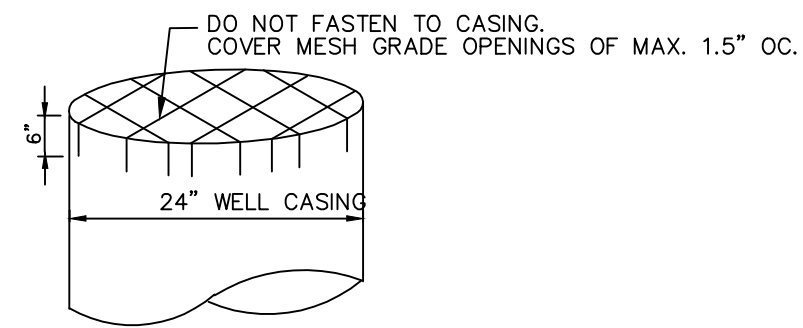
\\watkins.com\Project\UST\A\Civil\Coastal Engineering\Projects\PORTS\Port of Miami - E18-SEA-01\Projects\W03-Env Permit Mooring Berth 10\05 Drawings\00 USACE Permit Drawings\09 C-200 Civil Details.dwg, 5/8/2020 1:29:09 PM, DWG To PDF.pc3



NOTE:
REBAR GRADE 60,
CONCRETE 4000 PSI @28
DAYS



DRAINAGE WELL
SCALE: NTS



WELL COVER DETAIL
SCALE: NTS

DRAINAGE WELL SPECIFICATION:

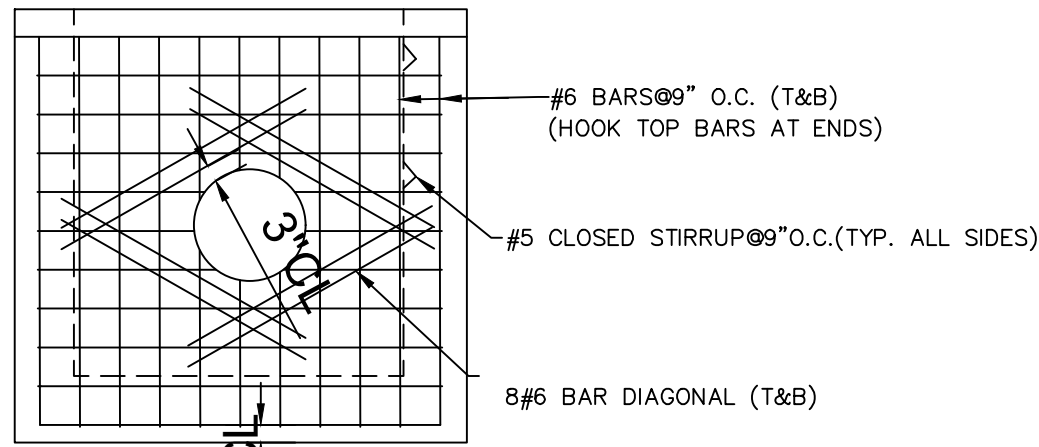
- WELL SHALL BE CONSTRUCTED BY A STATE OF FLORIDA LICENSED WATER WELL CONTRACTOR. CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR THE CONSTRUCTION OF THE DRAINAGE WELL. UPON COMPLETION OF THE WELL THE CONTRACTOR SHALL SUBMIT ALL NECESSARY DOCUMENT TO THE APPROPRIATE REGULATORY AGENCY AND OBTAIN AN AUTHORIZATION OF USE.
- WELL CASING SHALL BE PLAIN END, STANDARD WEIGHT 3/8" MINIMUM WALL THICKNESS, NEW BLACK STEEL PIPE CONFORMING TO ASTM A53. JOIN LENGTHS OF CASING BY WELDING OR THREADED COUPLINGS WHICH SHALL MEET THE STRENGTH REQUIREMENTS OF THE CASING. FIELD WELDS SHALL CONFORM TO THE REQUIREMENTS OF AWWA C 206. ALL JOINTS SHALL BE MADE WATERTIGHT.
- INSTALL DRAINAGE WELL CASING AS SHOWN ON THE DRAWING. WELL CASING SHALL EITHER BE DRIVEN OR PLACED IN A DRILLED HOLE WHICH WILL ALLOW A MINIMUM OF 2 INCHES OF CEMENT GROUT AROUND THE OUTSIDE OF CASING. EXTEND THE CASING TO THE DEPTH AT WHICH THE GROUNDWATER CONTAINS NOT LESS THAN 10,000 PPM TOTAL DISSOLVED SOLIDS, AND 1500 PPM CHLORIDE. THE OPEN HOLE BELOW THE CASING TIP SHALL EXTEND A MINIMUM OF 10 FT. WHERE THE CASING IS PLACED IN A DRILLED HOLE, GROUT THE FULL LENGTH OF CASING.
- DRILL THE WELL IN THE LOCATIONS INDICATED ON THE DRAWINGS. PROVIDE SUITABLE TANKS AND TRUCKS TO IMMEDIATELY REMOVE ALL DRILLING AND WELL WATER FROM THE SITE AND TO KEEP THE DRILLING AREA AS CLEAN AND FREE OF UNSIGHTLY DEBRIS AS POSSIBLE.
- THE REQUIRED DISCHARGE CAPACITIES FOR THE WELLS SHALL BE 750 GPM PER FOOT OF HYDRAULIC HEAD, TOTAL MINIMUM DISCHARGE CAPACITY SHALL BE 2100 GPM WITH THE WATER COLUMN AT ELEVATION 2.3 FEET NGVD BASED IN A GROUND WATER LEVEL OF 2.0 FEET NGVD. AT THE LOSS OF DRILLING FLUID, THE CONTRACTOR SHALL TEST THE WELL FOR CAPACITY AND SHALL CONTINUE TO DRILL UNTIL AN ADEQUATE STRATUM IS FOUND.
- GROUT CASINGS IN THE PRESENCE OF THE ENGINEER OR HIS REPRESENTATIVE, IN ONE CONTINUOUS OPERATION, FILLING COMPLETELY THE ANNULAR SPACE BETWEEN HOLE AND CASING FROM THE BOTTOM OF THE CASING UP TO THE TOP OF THE GROUND. UNLESS OTHERWISE SPECIFIED, THE METHOD USED SHALL BE ONE OF THOSE DESCRIBED IN AWWA A100, SECTION A1-8.4 - "GROUTING OF ANNULAR SPACE SURROUNDING PROTECTIVE CASING" PROVIDED THERE IS NO CONFLICT WITH REQUIREMENTS OF THESE SPECIFICATIONS. AFTER CEMENTING, THE CASING AND WELL, MUST REMAIN UNDISTURBED FOR AT LEAST 48 HOURS FOR SETTING UP OF THE CEMENT.

DRAINAGE WELL SPECIFICATIONS
SCALE: NTS

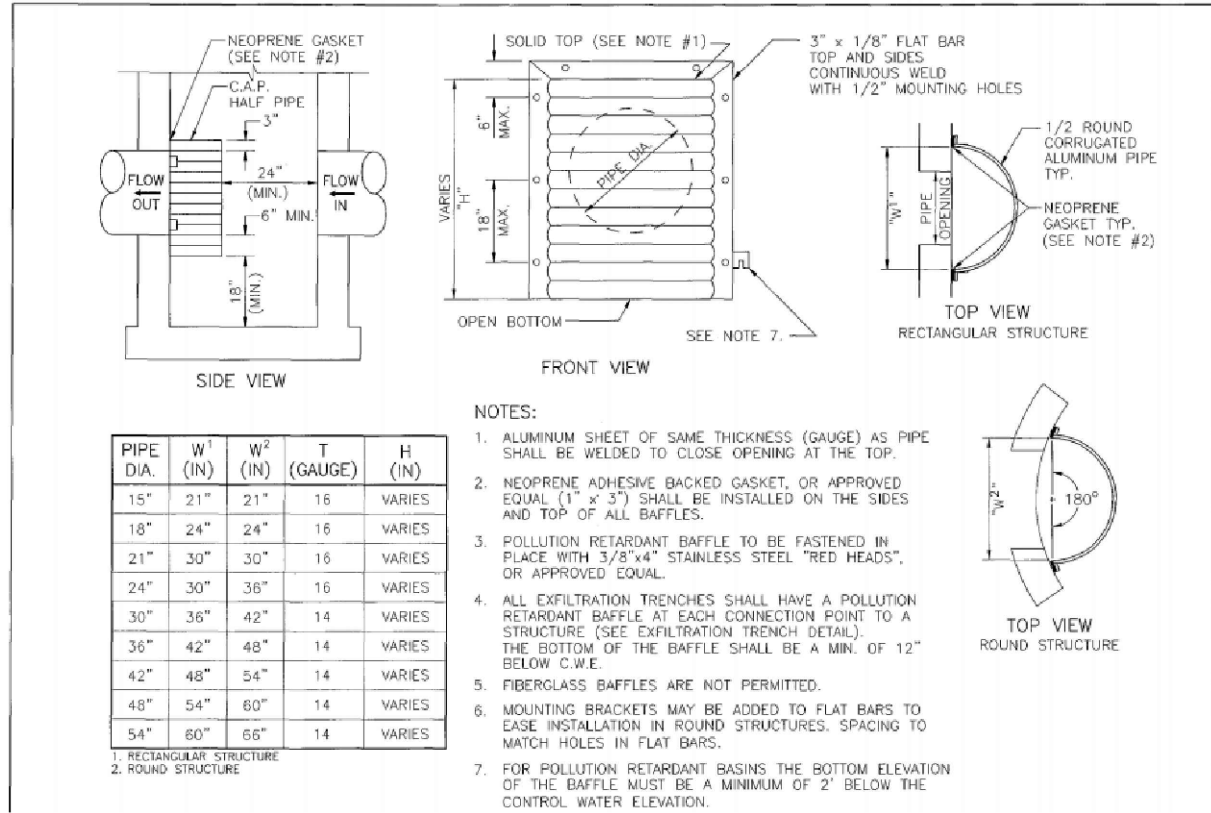
DRAINAGE WELL NOTES:

- THE FINISHED GRADE AND SLOPE OF THE INLET TOPS ARE TO CONFORM WITH THE FINISHED CROSS SLOPE AND GRADE OF THE PROPOSED SIDEWALK AND/OR PARKWAY.
- WHEN INLETS AREA TO BE CONSTRUCTED ON A CURVE, REFER TO THE PLANS TO DETERMINE THE RADIUS AND, WHERE NECESSARY, MODIFY THE INLET DETAILS ACCORDINGLY. BEND STEEL WHEN NECESSARY.
- ALL REINFORCING STEEL SHALL HAVE 1/2" MINIMUM COVER UNLESS OTHERWISE SHOWN. INLET TOPS SHALL BE EITHER CAST-IN-PLACE OR PRECAST CONCRETE.
- PRECASTING OF THIS INLET TOP WILL BE PERMITTED. PRECAST UNITS SHALL CONFORM TO THE DIMENSIONS SHOWN OR IN ACCORDANCE WITH APPROVED SHOP DRAWINGS. REQUEST FOR SHOP DRAWINGS APPROVAL SHALL BE DIRECTED TO THE STATE DRAINAGE ENGINEER.
- CONCRETE MEETING THE REQUIREMENTS OF A.S.T.M. C478 (4,000 PSI) MAY BE USED IN LIEU OF CLASS I CONCRETE FOR PRECAST UNITS, MANUFACTURED IN PLANS WHICH ARE UNDER THE STANDARD OPERATING PROCEDURES FOR THE INSPECTION OF PRECAST DRAINAGE PRODUCTS.
- THE CORNER FILLETS SHOWN FOR RECTANGULAR THROATS AREA NECESSARY ONLY WHEN THROATS ARE TO BE USED IN CONJUNCTION WITH CIRCULAR INLET BOTTOMS OR WHEN USED ON SKEW WITH RECTANGULAR INLET BOXES.
- ALL STEEL USED FOR FRAME AND COVER SHALL MEET THE REQUIREMENTS OF ASTM A36/A36M
- EITHER CAST IRON COVER OR STEEL COVERS MAY USED. IRON COVERS SHALL BE CLASS No. 30 CASTING IN ACCORDANCE WITH ASTM A48.

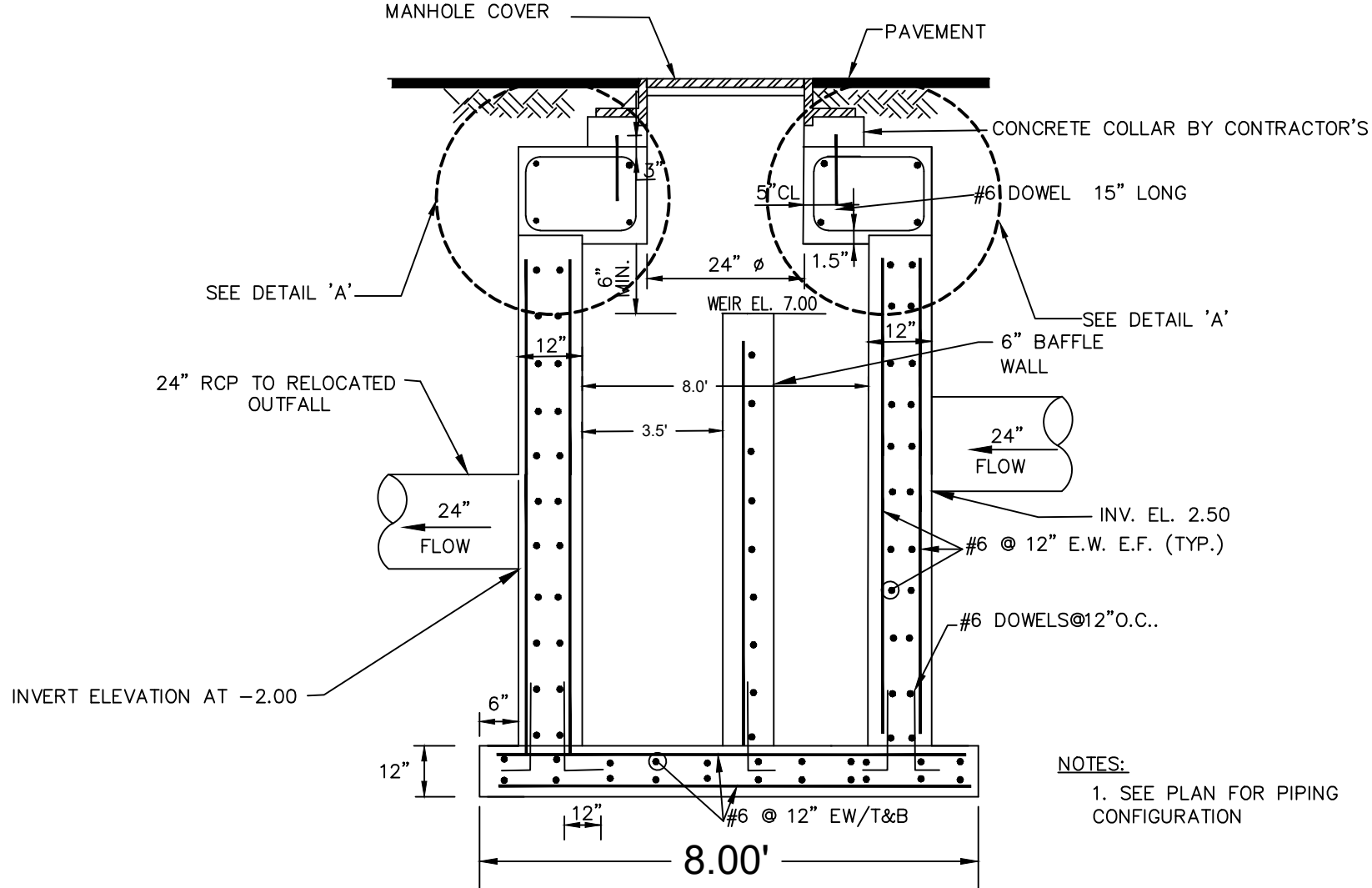
DRAINAGE WELL NOTES
SCALE: NTS



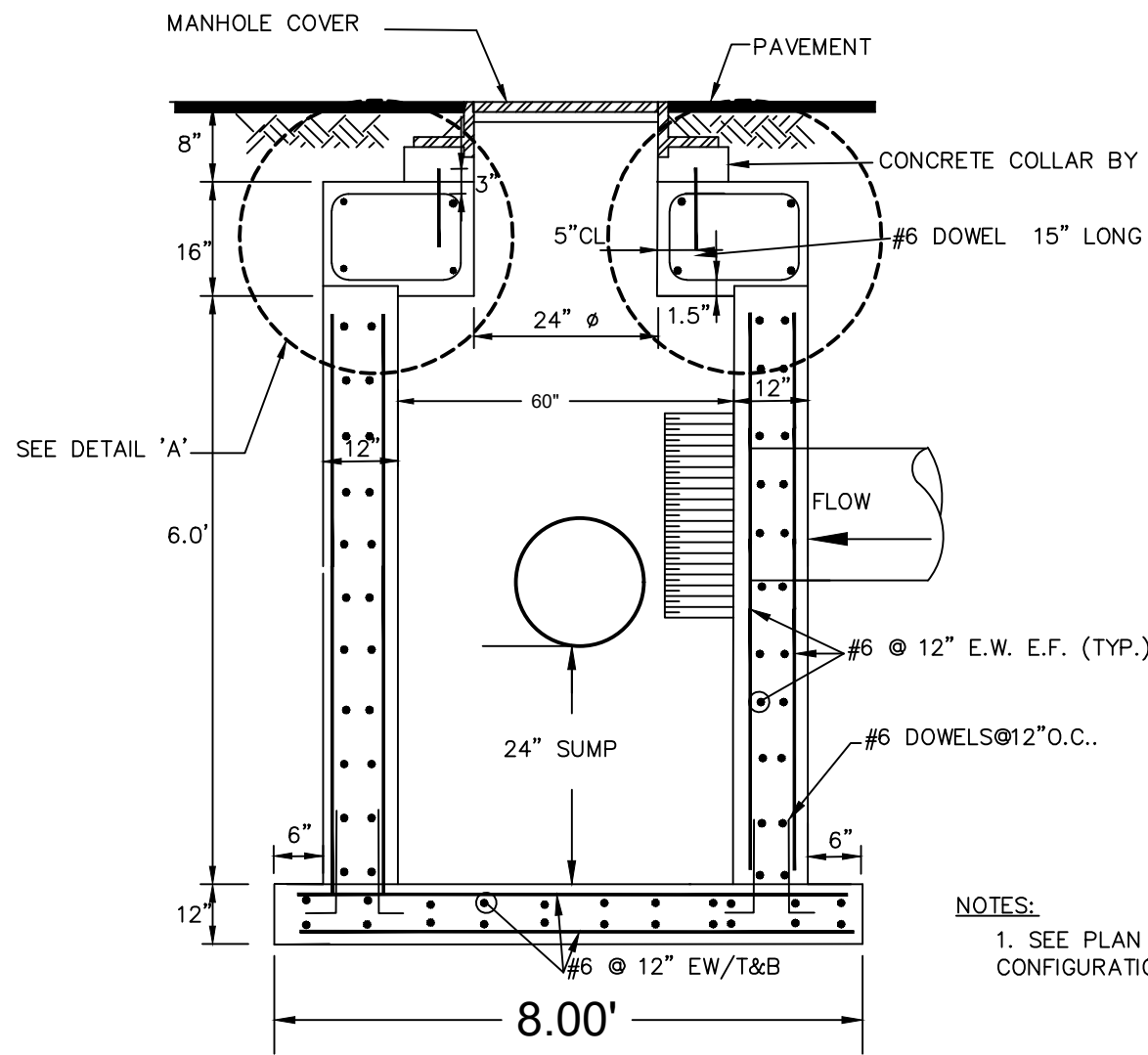
CONCRETE LID SLAB
SCALE: NTS



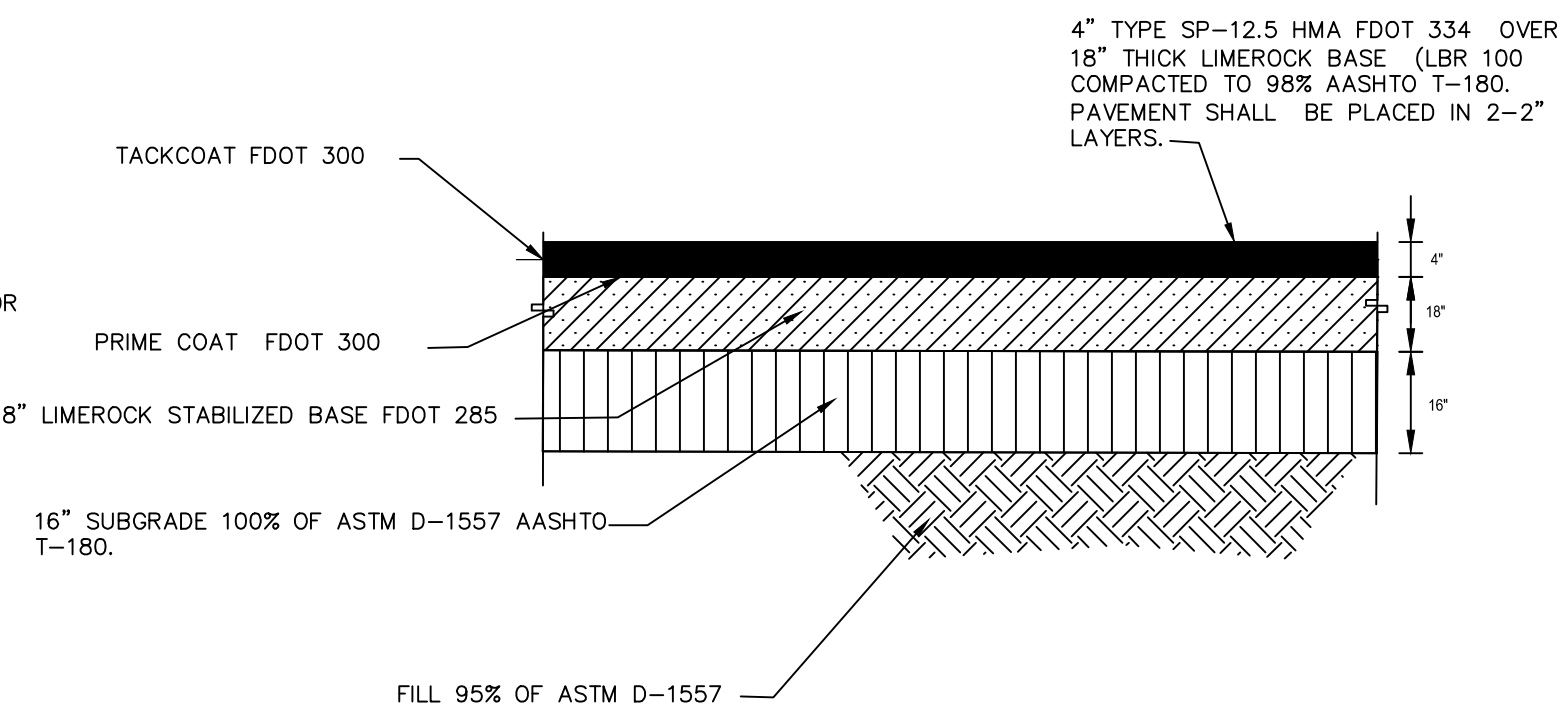
BAFFLE DETAIL
SCALE: NTS



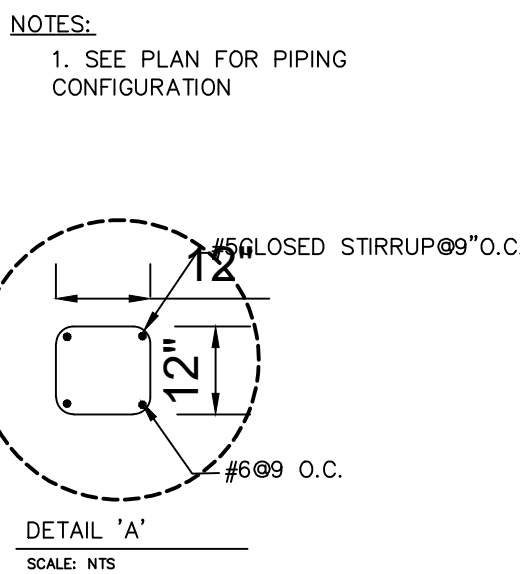
CONTROL STRUCTURE
SCALE: NTS



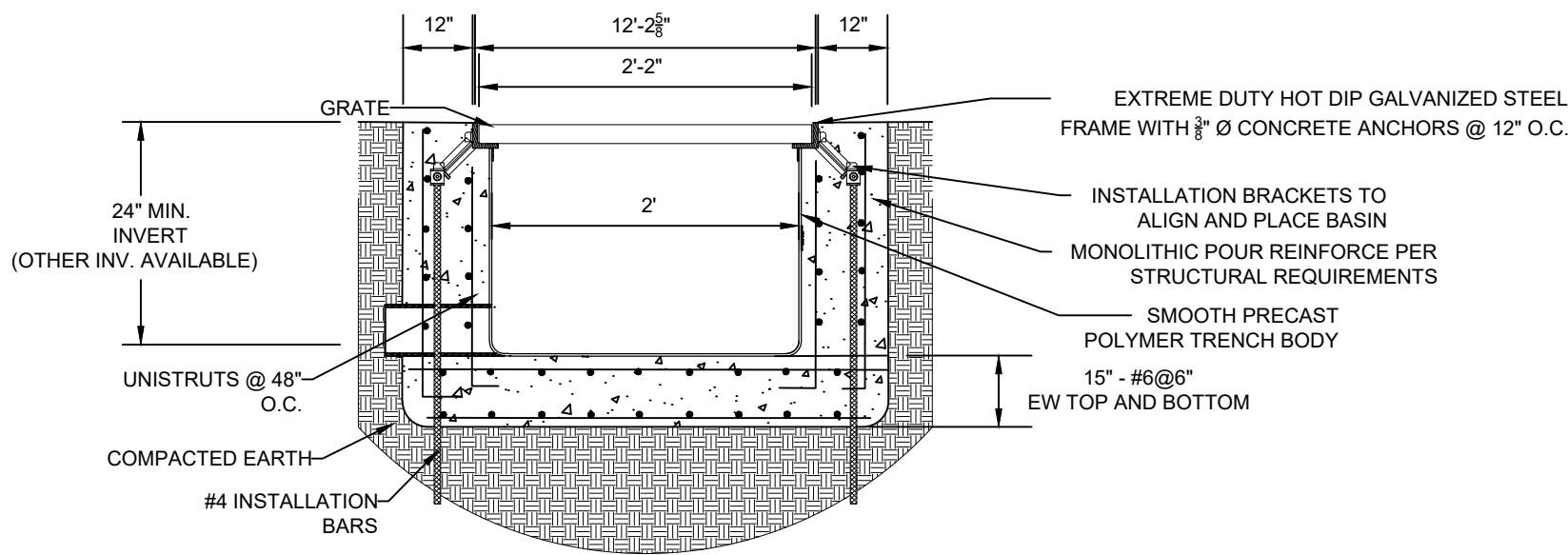
MANHOLE STRUCTURE
SCALE: NTS



HEAVY DUTY PAVEMENT DETAIL
SCALE: NTS

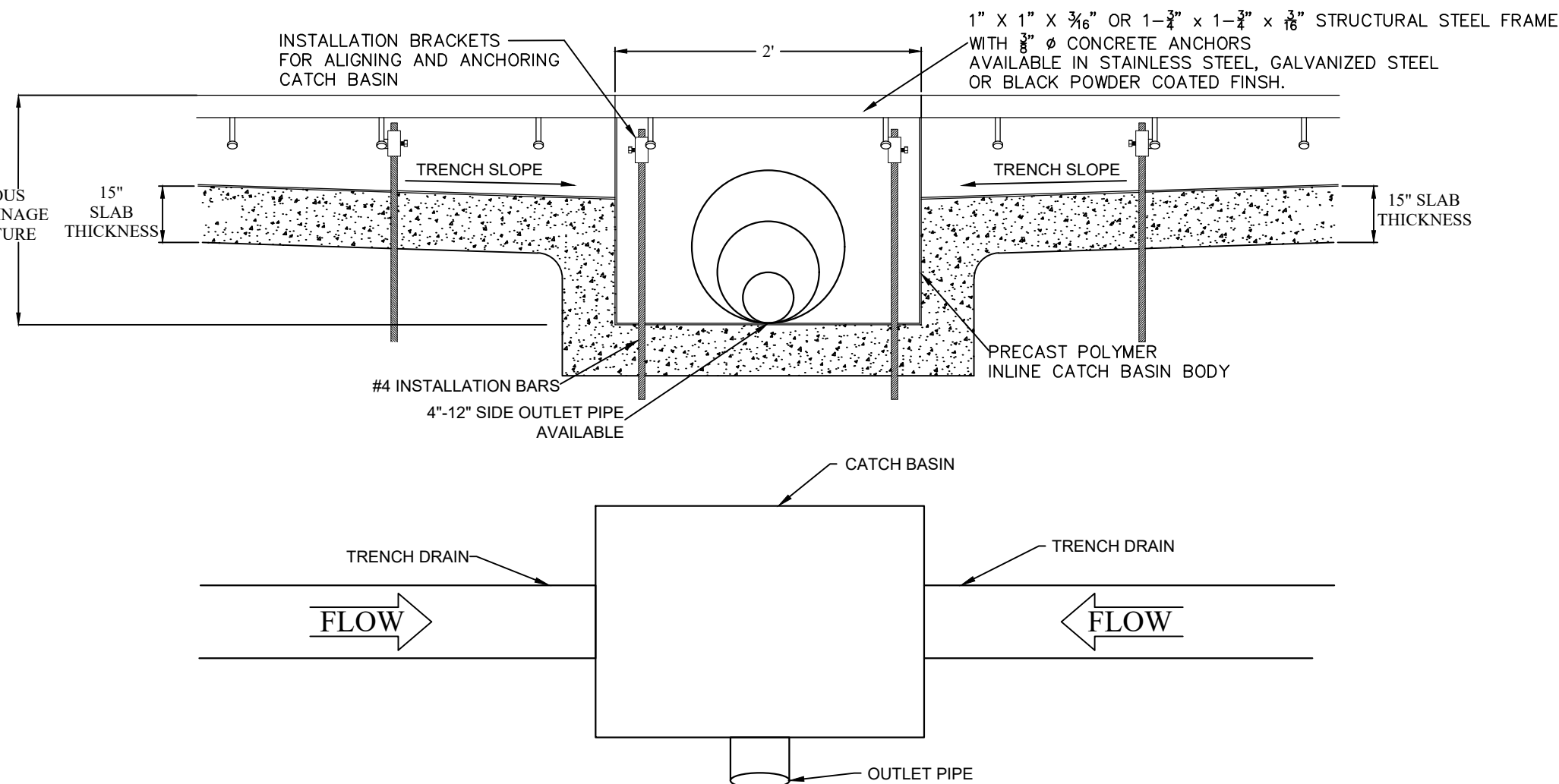


NOTES:
1. SEE PLAN FOR PIPING
CONFIGURATION



- NOTES:
- REINFORCE ACCORDING TO STRUCTURAL REQUIREMENTS
 - CATCH BASIN MUST BE 1/8" BELOW FINISHED CONCRETE GRADE

TYPICAL DTPF12-EXGS15TEA CATCH BASIN SECTION
SCALE: NTS



TYPICAL CATCH BASINS DETAIL
SCALE: NTS

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.

ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY

RELEASED FOR	DATE	BY

PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A

REVISIONS

No.	DESCRIPTION	DATE
1		

ATKINS
ENGINEER OF RECORD

DESIDERIO M. MALDONADO
P.E. NO. 72978

PROJ. No. : 100069656

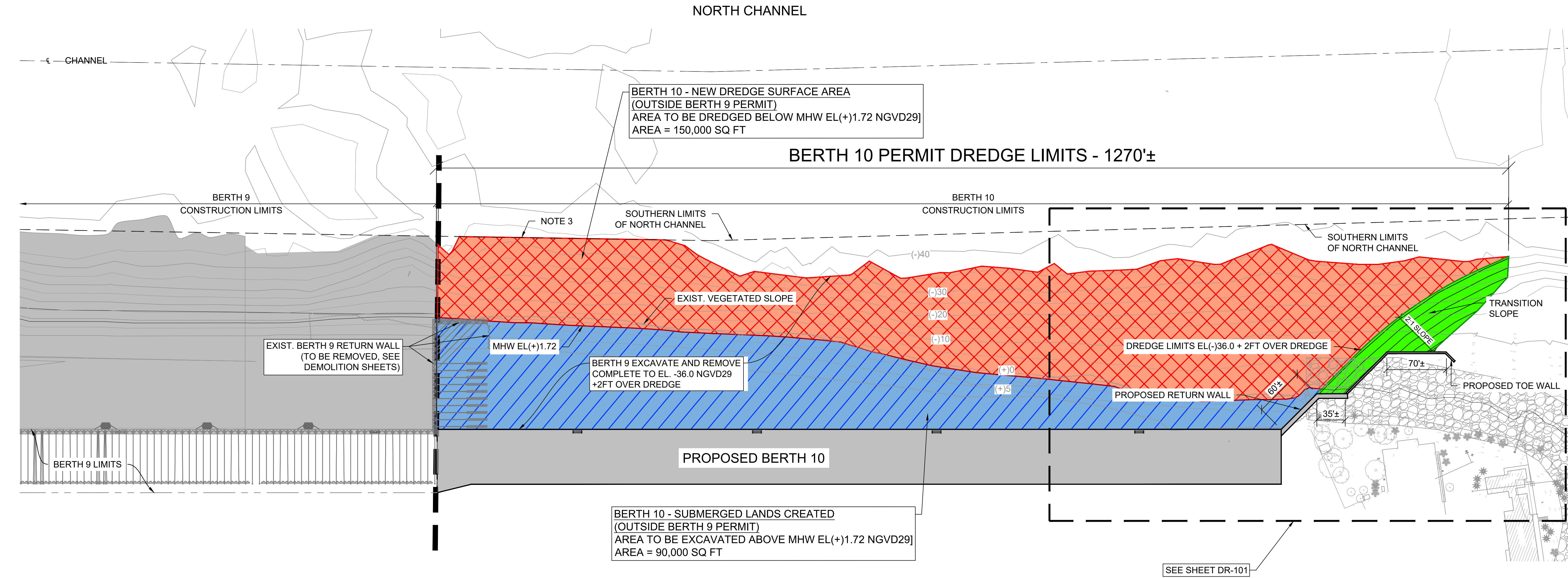
FILE NAME: DRAINAGE DETAILS

DATE: 05-08-20 SCALE: AS NOTED

SHEET C-200

DWG. No. 19 of 21

May 08, 2020 -- 1:36pm CAP05788 C:\Users\cap05788\AppData\Local\Temp\AcPublish_23840\ 10 DR-100 -- DR101 -- Dredge Site Plan.dwg



- NOTES:
- BATHYMETRIC DATA DEPICTED IN THIS SHEET WERE TAKEN FROM USACE EHYDRO SITE, SURVEY NUMBER 2018-125 DATED APRIL 5, 2018. DOCUMENT NAME MH_01_MIH_20180405_CS_2018_125_02, REVISION NUMBER 3.162-20180601.
 - NO DREDGING TO OCCUR WITHIN NORTH CHANNEL LIMITS AS PART OF BERTH 10 PROJECT.
 - SEE QUANTITIES TABLE ON SHEET G-001.

ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.

PORTMIAMI BERTH 10 ENVIRONMENTAL PERMIT DRAWINGS PORTMIAMI PROJECT NO. 2020-021	
SHEET NAME	BERTH 10 OVERALL DREDGE PLAN

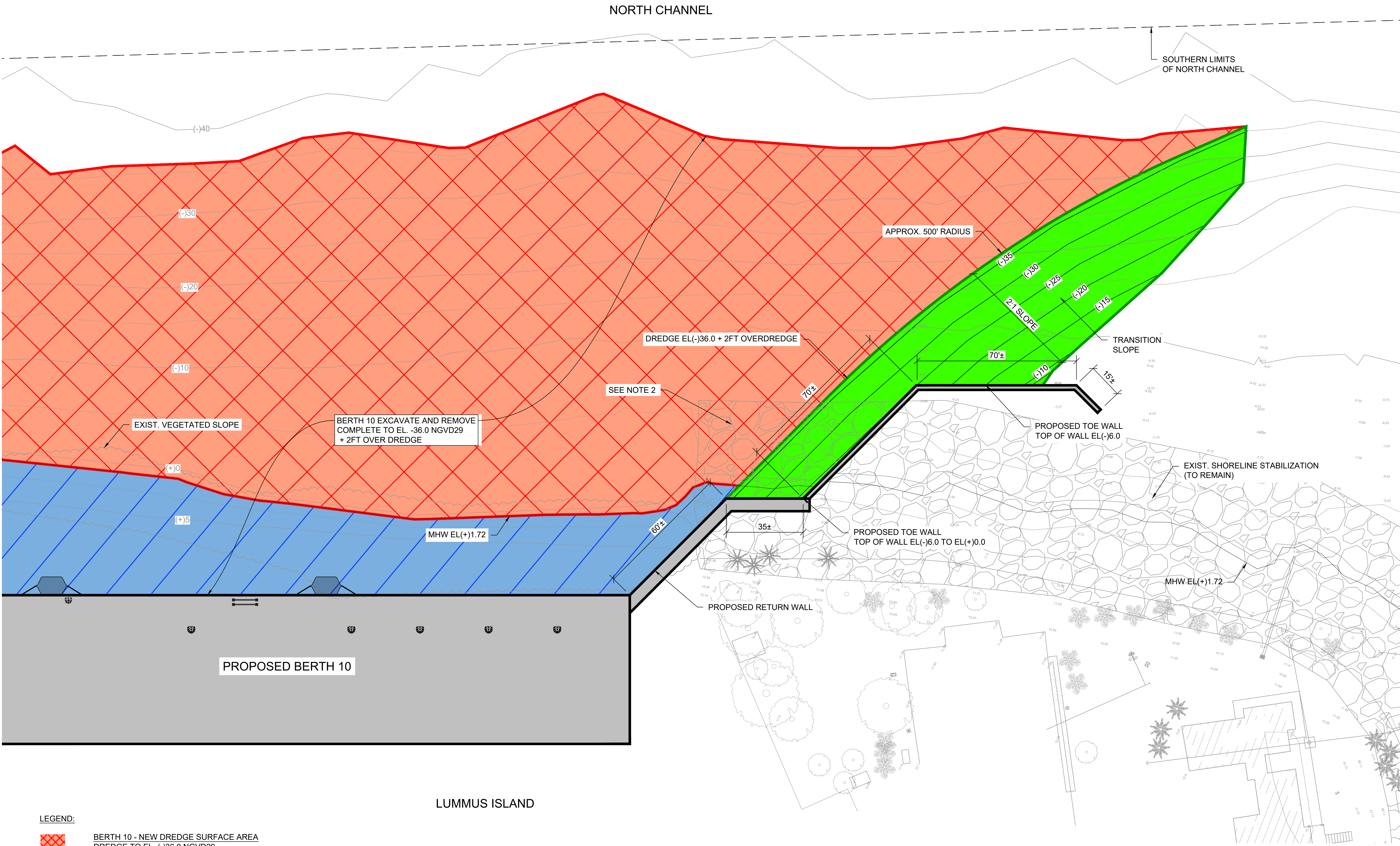
WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY		
RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A
REVISIONS		
No.	DESCRIPTION	DATE
1		

ATKINS ENGINEER OF RECORD	
DESIDERIO M. MALDONADO P.E. NO. 72978	
PROJ. No.: 100069656	
FILE NAME: BERTH 10 DREDGE PLAN 1	
DATE: 05-08-20	SCALE: AS NOTED
SHEET DR-100	
DWG. No. 20	of 21

May 08, 2020 - 1:36pm CAPO5788 C:\Users\capo5788\AppData\Local\Temp\AcPublish_23840\ 10 DR-100 - DRT01 - Dredge Site Plan.dwg



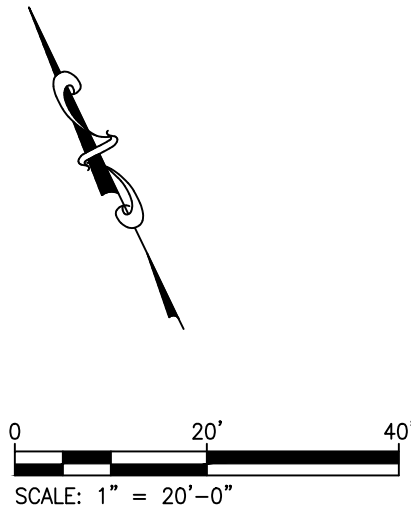
- LEGEND:
- BERTH 10 - NEW DREDGE SURFACE AREA DREDGE TO EL. (-)36.0 NGVD29
 - BERTH 10 - SUBMERGED LANDS CREATED DREDGE TO EL. (-)36.0 NGVD29
 - BERTH 10 DREDGE SIDE SLOPE
 - DENOTES EXISTING CONTOUR ELEVATIONS (IN FEET NGVD29)

- NOTES:
- BATHYMETRIC DATA DEPICTED IN THIS SHEET WERE TAKEN FROM USACE EHYDRO SITE, SURVEY NUMBER 2018-125 DATED APRIL 5, 2018. DOCUMENT NAME MH_01_MIH_20180405_CS_2018_125_02, REVISION NUMBER 3.162-20180601.
 - STONE REMOVED FOR INSTALLATION OF TOE WALL AND RETURN WALL SHALL BE PLACED LANDSIDE OF RETURN AND TOE WALL AFTER EACH WALL IS CONSTRUCTED.
 - CONTRACTOR TO TAKE CARE AND ENSURE THAT ANY STONES WITH MARINE ORGANISMS WILL BE PLACED UPRIGHT AND SUBMERGED BEHIND THE PROPOSED TOE WALL.

ENVIRONMENTAL PERMIT DRAWINGS
NOT FOR CONSTRUCTION

BERTH 10 ENLARGED DREDGE PLAN
SCALE 1" = 20'-0"

NOTE: DETAILS FOR FENDERS, BOLLARDS, AND OTHER UPLAND STRUCTURES SHOWN ARE GENERIC FOR THE FUTURE CONSTRUCTION OF THE BERTH. DETAILS AND QUANTITIES TO BE FINALIZED DURING FINAL DESIGN.



PORTMIAMI BERTH 10 ENVIRONMENTAL PERMIT DRAWINGS PORTMIAMI PROJECT NO. 2020-021	
SHEET NAME	BERTH 10 ENLARGED DREDGE PLAN

WARNING!

This record contains Sensitive Security Information that is controlled under 49 CFR Part 1520. No part of this record may be disclosed to persons without "need to know", as identified in 49 CFR 1520.5, except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public disclosure is governed by U.S.C. 552 and 49 CFR 1520.

DRAWING HISTORY		
RELEASED FOR	DATE	BY
PERMIT 100%	05/08/2020	N/A
REVIEW 100%	05/01/2020	N/A
REVISIONS		
No.	DESCRIPTION	DATE
1		

ATKINS ENGINEER OF RECORD	
DESIDERIO M. MALDONADO P.E. NO. 72978	
PROJ. No. : 100069656	
FILE NAME: BERTH 10 DREDGE PLAN 2	
DATE: 05-08-20	SCALE: AS NOTED
SHEET DR-101	
DWG. No. 21	of 21