



**US Army Corps  
of Engineers** •  
New England District  
696 Virginia Road  
Concord, MA 01742-2751

# PUBLIC NOTICE

**Comment Period Begins: March 28, 2017**  
**Comment Period Ends: April 28, 2017**  
**File Number: NAE-2012-440**  
**In Reply Refer To: Paul Sneeringer**  
**Phone: (978) 318-8491**  
**E-mail: paul.j.sneeringer@usace.army.mil**

The District Engineer has received a permit application to conduct work in waters of the United States from the Massachusetts Port Authority (Massport), One Harborside Drive, Suite 200S, East Boston, Massachusetts. This work is proposed in the Reserved Channel at the Conley Container Terminal, East First Street, South Boston, Massachusetts. The site coordinates are: Latitude 42.3420 °N, Longitude -71.0253 °W. The purpose for this project is to construct a new wharf and to establish two deep water berths at the Conley Container Terminal with minimum depths of at least -50 feet mean lower low water (MLLW) that can support larger container vessels.

This project includes removing the maritime facilities associated with the former Coastal Oil terminal property; installing a new 1,278 linear foot pile-supported concrete wharf at Berth #10; and mechanically dredging 175-foot wide slips at Berths #10 and #11 to a depth of -50 feet MLLW plus dedicated overdredge. The new wharf at Conley Terminal – Berth #10 has been designed in order to service vessels with up to a **10,000** twenty-foot- equivalent- units (TEU) capacity. This wharf will support three larger Ship-to-Shore (STS) container cranes, which are necessary to load and unload containers from the bigger and taller container vessels.

Approximately 912 steel piles will be installed as part of the construction of the Berth #10 wharf. A steel sheet bulkhead will be constructed at the landward edge of this wharf. Massport will fill approximately **23,500** square feet of waters of the United States and to emplace/upgrade riprap side slopes on **132,100** square feet of waters of the United States to realign the shoreline and to armor the slope below the proposed Berth #10 wharf.

Massport proposes to mechanically dredge approximately **13.0** acres of waters of the United States, in order to construct the new wharf and to dredge the proposed 175-foot wide slips at Conley Terminal Berths #10 and #11 (970 feet long) to a depth of -50 feet MLLW plus two feet, or four feet in areas where rock is located, of dedicated overdredge. Massport estimates that there could be approximately an additional **8,500** cubic yards of rock removal. This may require blasting. Massport proposed to recycle or to dispose the approximately **32,500** cubic yards of oil impacted soils at an upland site; to dispose of approximately **111,200** cubic yards of the historic fill material at a Boston Harbor Confined Aquatic Disposal cell; and to dispose of approximately **213,900** cubic yards of the improvement dredged material at the Massachusetts Bay Disposal Site (MBDS). Massport also proposes to deauthorize portions of the existing Reserved Channel Federal Navigation Project in order to incorporate it into the deepwater Berths #10 and #11 slips.

The work is described on the attached plans entitled “MASSPORT – BERTH 10 CONSTRUCTION,” on a total of 19 sheets, and dated “12/22/16” and revised “02/28/17” as well as “Figure 7:Riprap area changes for Berth 10 Project” from Massport’s Essential Fish Habitat Assessment, dated “February 17, 2017”.



Through the development of this project, the applicant has attempted to avoid and minimize direct impacts to waters of the United States. As part of the construction of the new wharf, there will be a net gain of approximately 14,700 square feet of restored intertidal and subtidal areas [38,200 square feet of restored intertidal/subtidal habitat minus 23,500 square feet of filled intertidal and subtidal areas]. The Corps continues to work with the applicant to minimize temporary construction impacts (noise and turbidity impacts) to Waters of the United States.

#### **AUTHORITY**

Permits are required pursuant to:

- XX Section 10 of the Rivers and Harbors Act of 1899
- XX Section 404 of the Clean Water Act
- XX Section 103 of the Marine Protection, Research and Sanctuaries Act.

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably 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 the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The Corps of Engineers 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 of Engineers 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 also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Where the activity involves the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposing it in ocean waters, the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act, and/or Section 103 of the Marine Protection Research and Sanctuaries Act of 1972, as amended.

#### **Dredged Material Disposal Mitigation Discussion:**

The alternatives considered in the dredged material disposal analysis fall into four general categories: beneficial use, upland disposal, confined disposal, and open-water disposal. The feasibility of disposal alternatives was analysed relative to the physical and chemical quality of the dredged material, the volume of material to be dredged, the availability of suitable disposal and beneficial use sites, and the cost of disposal. When applicable, the biological quality of the disposal of the material at the disposal site was also used to evaluate the feasibility of the open-water disposal alternative.

Based on the characteristics of the dredged material, the lack of suitable alternate disposal or beneficial use sites and costs, the most feasible, practical, cost-effective and environmentally acceptable alternative for the disposal of dredged materials from the proposed dredging is disposal at the requested disposal sites.

### **Testing Information**

The dredged material has undergone physical analysis and has satisfied Part 227.13(b) of exclusionary criteria of the Ocean Dumping Act regulations regarding biological testing. It is our preliminary determination that the material is acceptable for disposal at this disposal site.

Any permit issued for this project will include special conditions requiring scows to come to a complete stop when disposing of the material at the disposal site. There will also be a time of year restriction included as a special condition which prohibits dredging during ecologically sensitive times of years.

### **Massachusetts Bay Disposal Site**

The Massachusetts Bay Disposal Site is frequently used for disposal of bottom sediments from various harbors in the Boston area. Approximately 300,000 cubic yards of suitable sediments (the suitability was determined with a project-specific evaluation with an established interagency review process) are deposited at this site annually. The site is monitored through the Corps Disposal Area Monitoring System (DAMOS) program. The DAMOS studies show that the site is a low energy environment such that sediments deposited at this location will remain within the site's boundaries. The DAMOS monitoring has also shown that distinct dredged material mounds have been formed at the site. Levels of metals and organics in the sediments within the disposal site are generally above background levels, indicative of the industrial nature of the areas dredged that utilize the site. Sediment deposited at the disposal site has not been found to affect areas outside the disposal site. The U.S. Environmental Protection Agency has designated the Massachusetts Bay Disposal Site usable for disposal of dredged sediments.

### **ESSENTIAL FISH HABITAT**

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The Conley Terminal Berths #10 and #11 Improvement Project will have an adverse effect on to approximately **13.5** acres of on-site Essential Fish Habitat (EFH) for all life stages of winter flounder, windowpane flounder, white hake, Atlantic Tomcod, and Cunner as well as Tautog (eggs and larvae life stages) etc. This habitat consists mainly of soft bottom (sandy/silty mud) subtidal areas. Loss of this habitat may adversely affect any of the above mentioned species. Massport has provided a more detailed discussion of all EFH impacts associated with this project in their Essential Fish Habitat Assessment, dated February 16, 2017, which is available upon request. In this assessment, Massport states that certain site-specific impacts, such as pile driving operations, bulkhead and riprap revetment construction may have substantial impacts on EFH.

Dredged material disposal for this project is proposed at a Boston Harbor Confined Aquatic Disposal cell and at the Massachusetts Bay Disposal Site. These are both open water sites. Habitat at these sites can be described as



estuarine or marine open water. Massport's EFH Assessment provides a detailed description of species that could be affected by the proposed disposal activities. This EFH Assessment is available upon request. The District Engineer has made a preliminary determination that the site specific adverse effects associated with dredge disposal operations will not be substantial.

The Corps is continuing consultation with the National Marine Fisheries Service regarding EFH Conservation recommendations for this project. The Corps will coordinate with the applicant regarding implementation of any EFH Conservation recommendations. The EFH consultation process will be concluded prior to our final permit decision.

## **NATIONAL HISTORIC PRESERVATION ACT**

Based on his initial review, the District Engineer has determined that the proposed work may impact properties listed in, or eligible for listing in, the National Register of Historic Places. Additional review and consultation to fulfil requirements under Section 106 of the National Historic Preservation Act of 1966, as amended, will be ongoing as part of the permit review process.

## **ENDANGERED SPECIES CONSULTATION**

The New England District, Army Corps of Engineers has reviewed the list of species protected under the Endangered Species Act of 1973, as amended, which might occur at the project site. It is our preliminary determination that the proposed activity for which authorization is being sought is designed, situated or will be operated/used in such a manner that it is not likely to adversely affect any Federally listed endangered or threatened species or their designated critical habitat. By this Public Notice, we are requesting that the appropriate Federal Agency concur with our determination.

## **COASTAL ZONE MANAGEMENT**

The States of Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island have approved **Coastal Zone Management Programs**. Where applicable, the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management Program. By this Public Notice, we are requesting the State concurrence or objection to the applicant's consistency statement.

The following authorizations have been applied for, or have been, or will be obtained:

- (XX) Permit, License or Assent from State.
- (XX) Permit from Local Wetland Agency or Conservation Commission.
- (XX) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. Comments should be submitted in writing by the above date. If you have any questions,

**CENAE-R**  
**FILE NO. NAE-2012-0440**

please contact **Paul Sneeringer** at (978) 318-8491, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

**THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.**



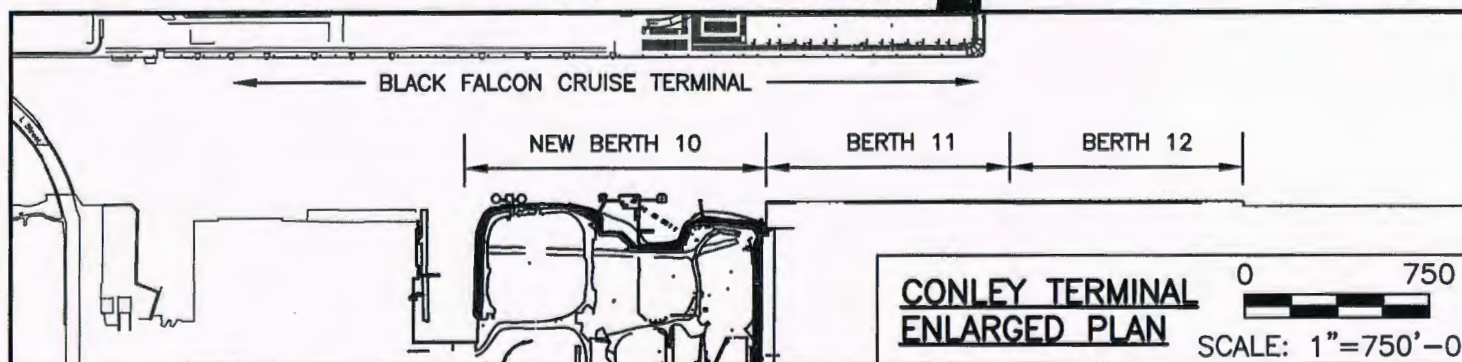
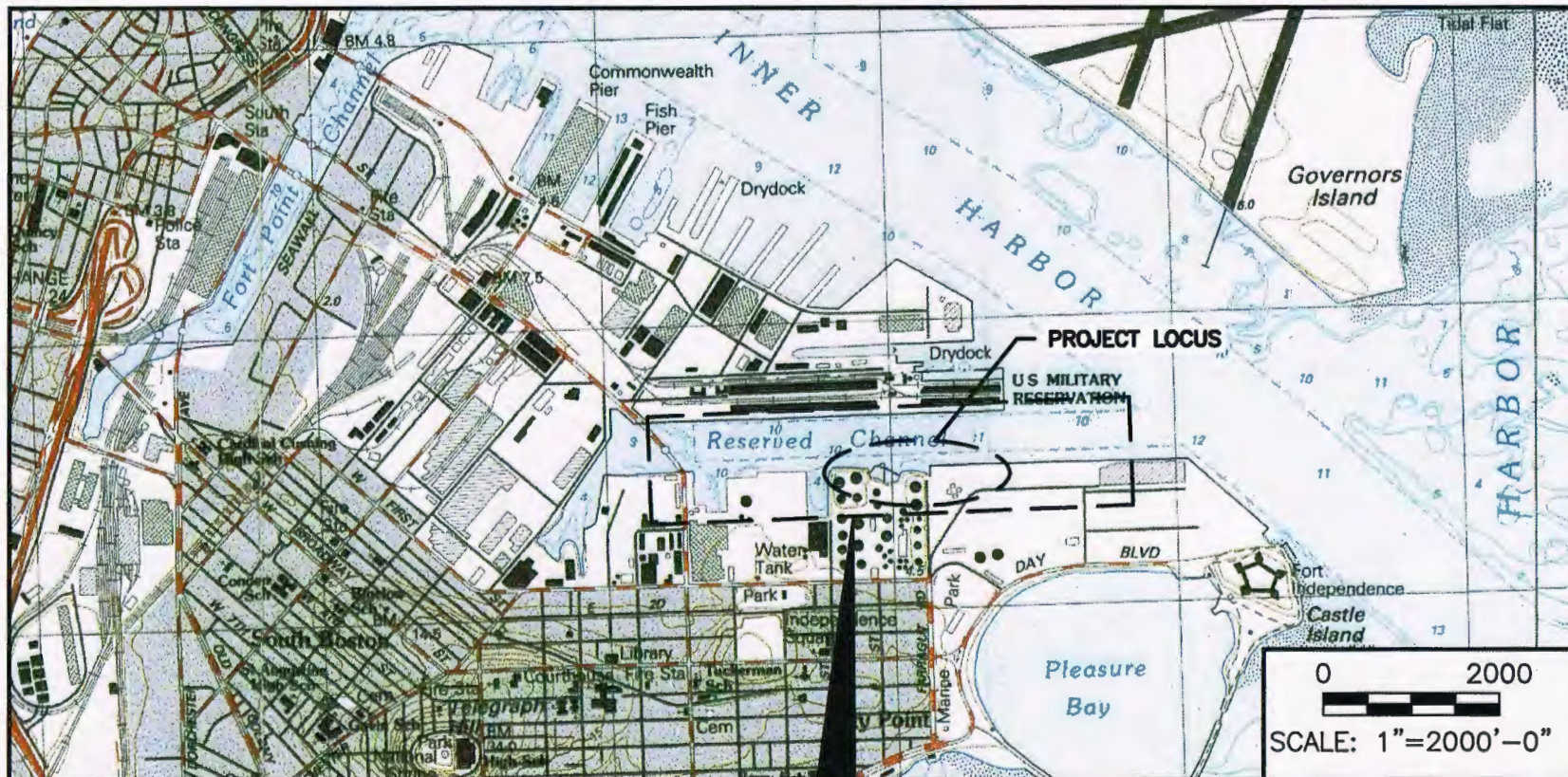
**Barbara H. Newman**  
**Chief, Permits and Enforcement Branch**  
**Regulatory Division**


If you would prefer not to continue receiving Public Notices by email, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at [bettina.m.chaisson@usace.army.mil](mailto:bettina.m.chaisson@usace.army.mil). You may also check here ( ) and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
PHONE: \_\_\_\_\_



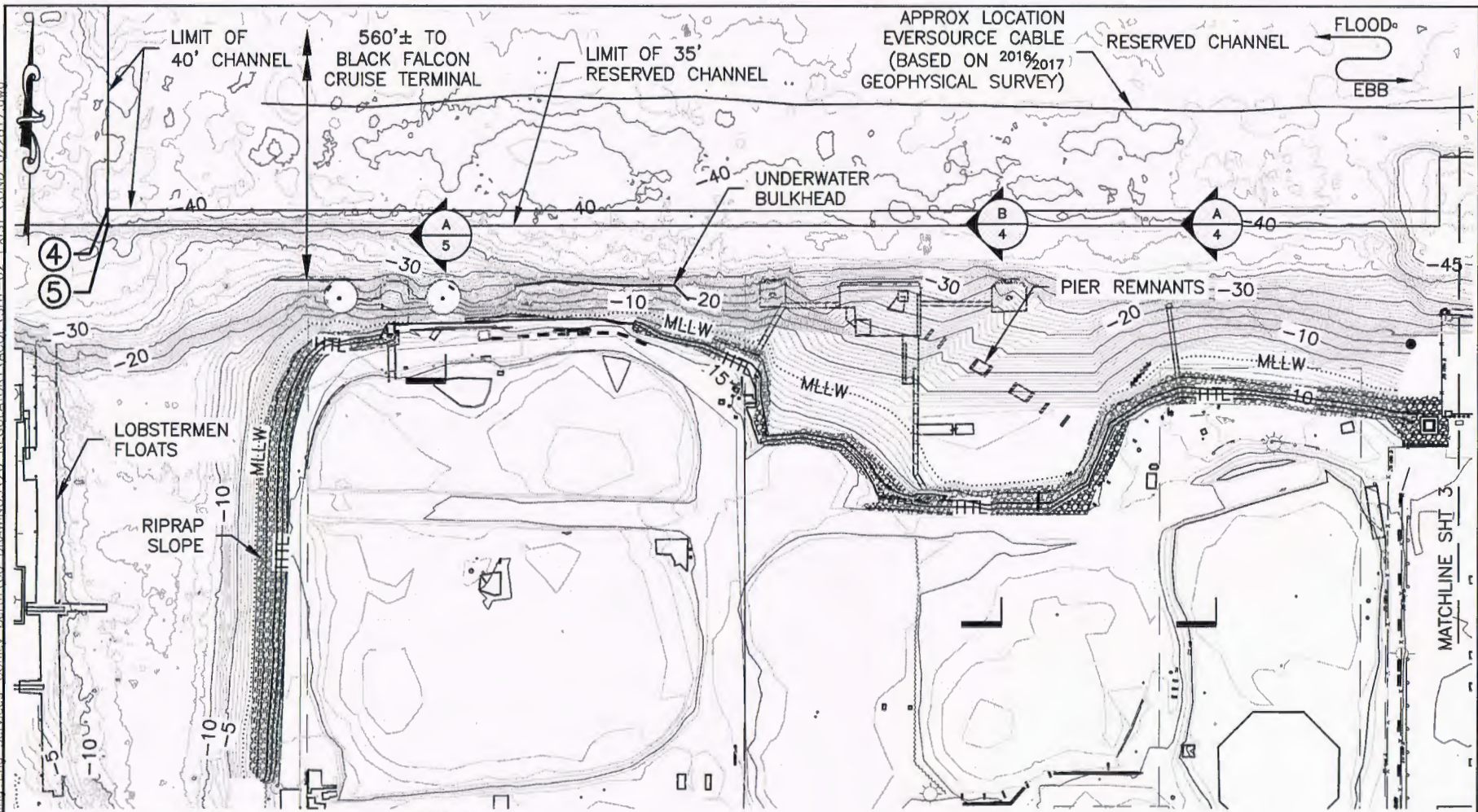
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100 YR FLOOD HTL +12.50 MHW +9.83 VARIES NGVD +4.70 MLW +0.34 MLLW 0.0	TITLE: <b>LOCUS PLAN</b>	IN: <b>BOSTON HARBOR</b> AT: <b>RESERVED CHANNEL</b> COUNTY: <b>SUFFOLK</b> STATE: <b>MA</b>
 <b>Bourne Consulting Engineering</b> <small>A Division of GE Consulting, Inc.          3 Bent Street, Franklin, MA 02039          TEL: (508) 533-6000</small>	PURPOSE: <b>BERTH 10 CONSTRUCTION</b>	APPLICATION BY: <b>MASSPORT</b> SHEET <b>1</b> OF <b>19</b> DATE: <b>12/22/16</b> REV: <b>02/08/17</b>



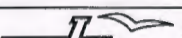
File: B:\Working\MASSEPOT\1607991 Dredging\_Eng Services-Corley\_Berth\60 DRAWINGS\20 REGULATORY\ACOE\SH1-02 EXIST COND 022817.dwg



RESERVED CHANNEL COORDINATES (MA STATE PLANE NAD 83)			
4	N	2950022.47	E 783210.73
5	N	2950007.48	E 783211.15

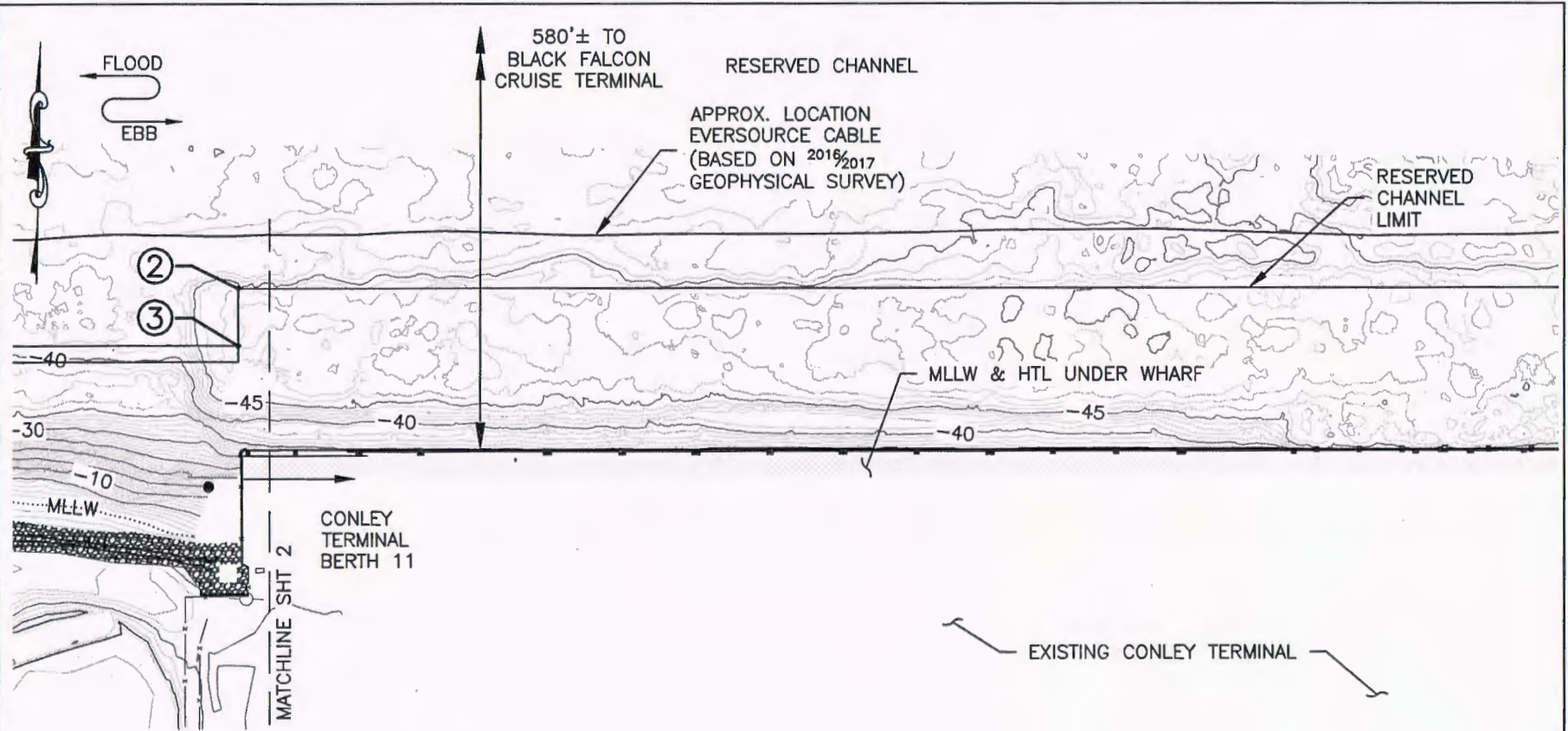
**LEGEND**  
 -RESERVED CHANNEL COORDINATES FROM USACE SURVEY SEPT 2012  
NUMBERING MATCHES USACE SURVEY

0 150  
SCALE: 1"=150'-0"

100 YR FLOOD HTL MHW	VARIABLES +12.50 +9.83	NGVD MLW MLLW	+4.70 +0.34 0.0	TITLE:  EXISTING CONDITIONS-1	IN: BOSTON HARBOR AT: RESERVED CHANNEL COUNTY: SUFFOLK STATE: MA
 <b>Bourne Consulting Engineering</b> <small>A Division of C&amp;I Consultants, Inc. 3 Best Street, Franklin, MA 02038 TEL (508) 533-6666</small>				PURPOSE:  BERTH 10 CONSTRUCTION	APPLICATION BY:  MASSPORT
				SHEET 2 OF 19 DATE: 12/22/16 REV: 02/28/17	



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RESERVED CHANNEL COORDINATES  
(MA STATE PLANE NAD 83)


2 N 2950113.83 E 784544.62  
3 N 2950059.86 E 784546.13

**LEGEND**

(X) -RESERVED CHANNEL COORDINATES  
FROM USACE SURVEY SEPT 2012  
NUMBERING MATCHES USACE SURVEY

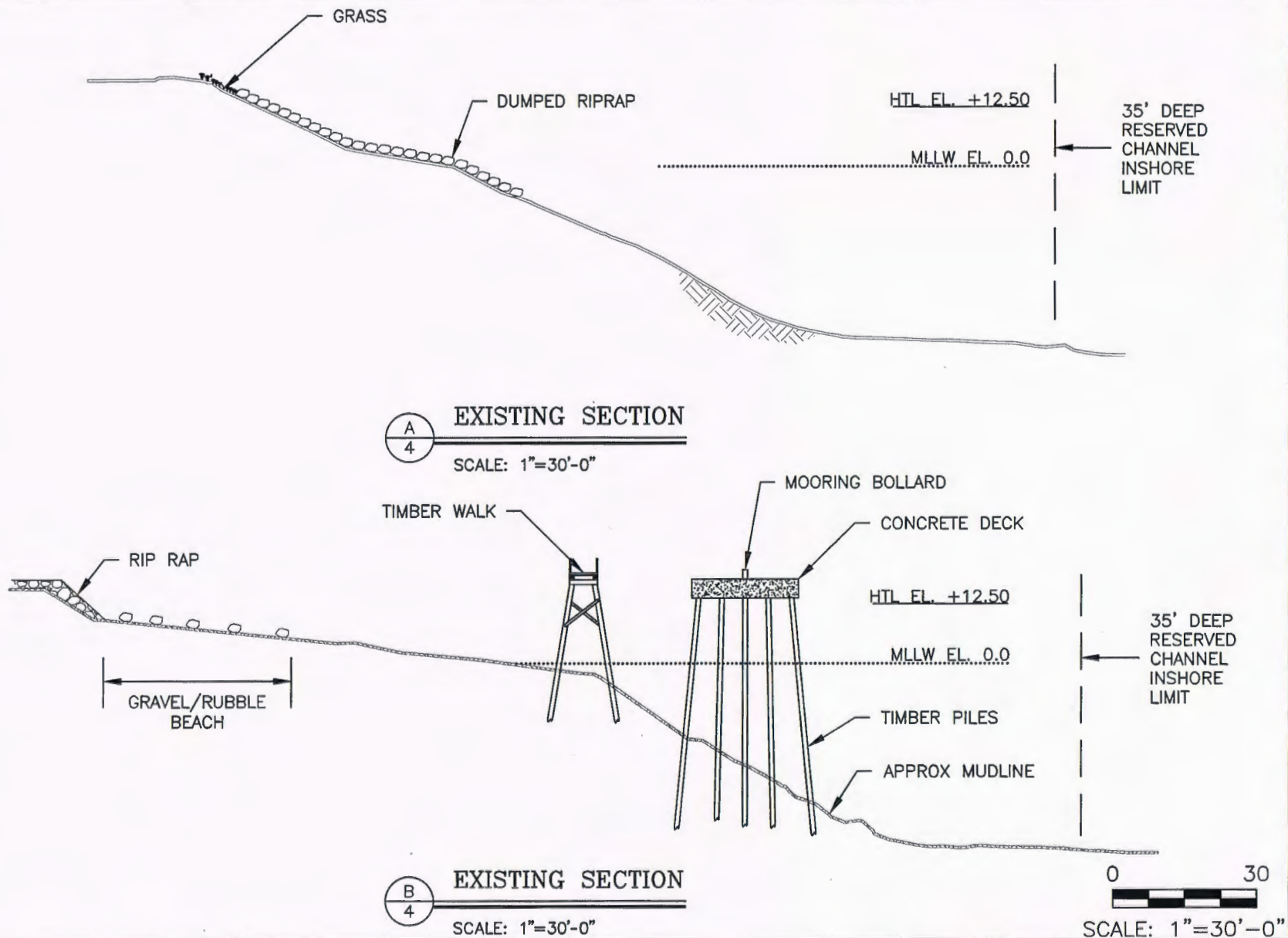



SCALE: 1"=150'-0"

100 YR FLOOD VARIES NGVD +4.70 HTL +12.50 MLW +0.34 MHW +9.83 MLLW 0.0	<b>TITLE:</b> <b>EXISTING CONDITIONS-2</b>		<b>IN: BOSTON HARBOR</b> <b>AT: RESERVED CHANNEL</b> <b>COUNTY: SUFFOLK STATE: MA</b>
 <b>Bourne Consulting Engineering</b> <small>A Division of GRI Consultants, Inc. 3 Bent Street, Franklin, MA 02039 TEL: (608) 633-6666</small>	<b>PURPOSE:</b> <b>BERTH 10 CONSTRUCTION</b>	<b>APPLICATION BY:</b> <b>MASSPORT</b>	<b>SHEET 3 OF 19</b> <b>DATE: 12/22/16 REV: 02/28/17</b>



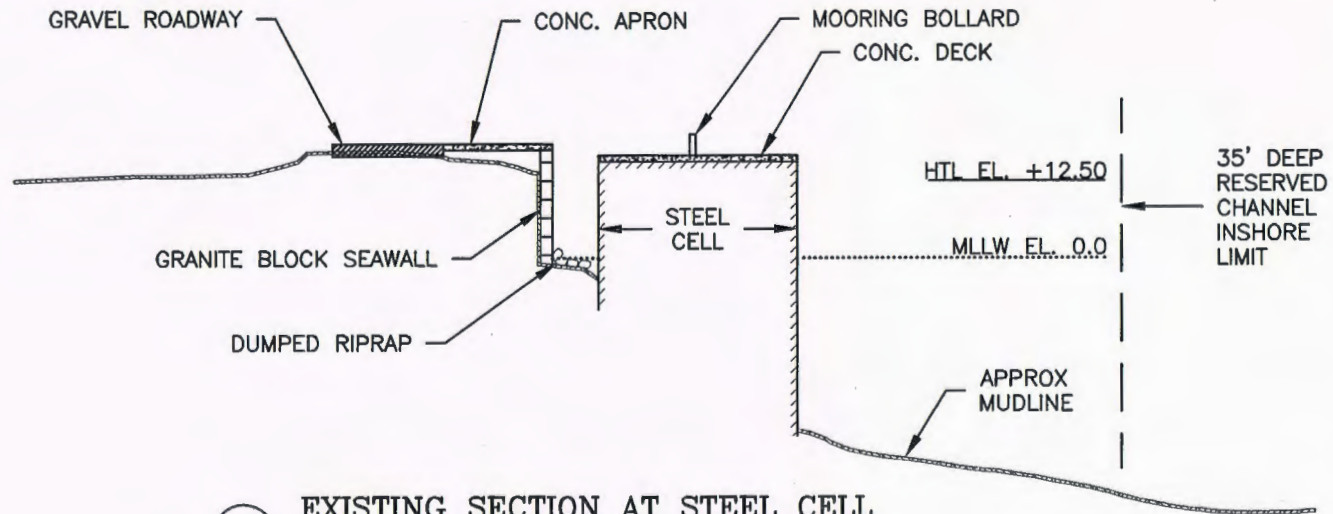
File: P:\Working\WASSPORT\1607991 Dredging Eng Services-Conley Berth\60 DRAWINGS\20 REGULATORY\ACOE\SH-04 EXIST SECTIONS 020817.dwg



100 YR FLOOD	VARIES	NGVD	+4.70	TITLE:	EXISTING SECTIONS AT SHORELINE	IN: BOSTON HARBOR
HTL	+12.50	MLW	+0.34			AT: RESERVED CHANNEL
MHW	+9.83	MLLW	0.0			COUNTY: SUFFOLK STATE: MA
 <b>Bourne Consulting Engineering</b> <small>A Division of GRI Consultants, Inc.  3 Bent Street, Franklin, MA 02033  TEL: (508) 633-6666</small>				PURPOSE:	APPLICATION BY:	SHEET 4 OF 19
				BERTH 10 CONSTRUCTION	MASSPORT	DATE: 12/22/16 REV: 02/08/17



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**EXISTING SECTION AT STEEL CELL**

SCALE: 1"=30'-0"



SCALE: 1"=30'-0"

100 YR FLOOD	VARIES	NGVD	+4.70
HTL	+12.50	MLW	+0.34
MHW	+9.83	MLLW	0.0

TITLE: **EXISTING SECTIONS AT SHORELINE**

IN: **BOSTON HARBOR**  
 AT: **RESERVED CHANNEL**  
 COUNTY: **SUFFOLK** STATE: **MA**



PURPOSE: **BERTH 10 CONSTRUCTION**

APPLICATION BY: **MASSPORT**

SHEET **5** OF **19**  
 DATE: **12/22/16** REV: **02/08/17**



NOTE:  
FACILITY WILL INCLUDE THREE NEW STS CRANES,  
RTG CRANES AND CONTAINER STACKS FOR TERMINAL OPERATIONS.

WHARF IS PILE SUPPORTED:  
366 30"Ø PIPE PILES  
428 26"Ø PIPE PILES  
118 26"Ø BATTER PIPE PILES

APPROX. LOCATION  
EVERSOURCE CABLE  
(BASED ON 2016/2017  
GEOPHYSICAL SURVEY)

PROPOSED MASSPORT BERTH LIMIT MIN. DEPTH  
-50 MLLW (W 2' OVERDREDGE)  
SEE SHEETS 7 & 8

EXISTING 40' CHANNEL LIMIT

EXISTING 35' CHANNEL LIMIT

FENDER (TYP.)

A  
10

B  
9

A  
9

1278'

250'

PILECAP (TYP.)

PILE (TYP.)

RIPRAP BELOW  
WHARF

SHEETPILE BULKHEAD

LIGHTING (TYP.)

PAVEMENT

# LEGEND



-WHARF WITH RIP RAP BELOW



-WHARF NO RIP RAP



-UPLAND PAVEMENT



-DREDGING FOOTPRINT OUTSIDE RESERVED CHANNEL



-AREA TO BE DEAUTHORIZED

PROPOSED WHARF COORDINATES  
(MA STATE PLANE NAD 83)

A N 2949961.66 E 784556.61  
B N 2949925.32 E 783279.13  
C N 2949675.42 E 783286.24

NOTE: SEE SHEET 7 FOR BERTH COORDINATES

0 150

SCALE: 1"=150'-0"

100 YR FLOOD	VARIABLE	NGVD	+4.70
HTL	+12.50	MLW	+0.34
MHW	+9.83	MLLW	0.0

TITLE:

PROPOSED  
NEW BERTH 10

IN: BOSTON HARBOR  
AT: RESERVED CHANNEL  
COUNTY: SUFFOLK STATE: MA

PURPOSE:

BERTH 10 CONSTRUCTION

APPLICATION BY:

MASSPORT

SHEET 6 OF 19

DATE: 01/06/17 REV: 02/28/17



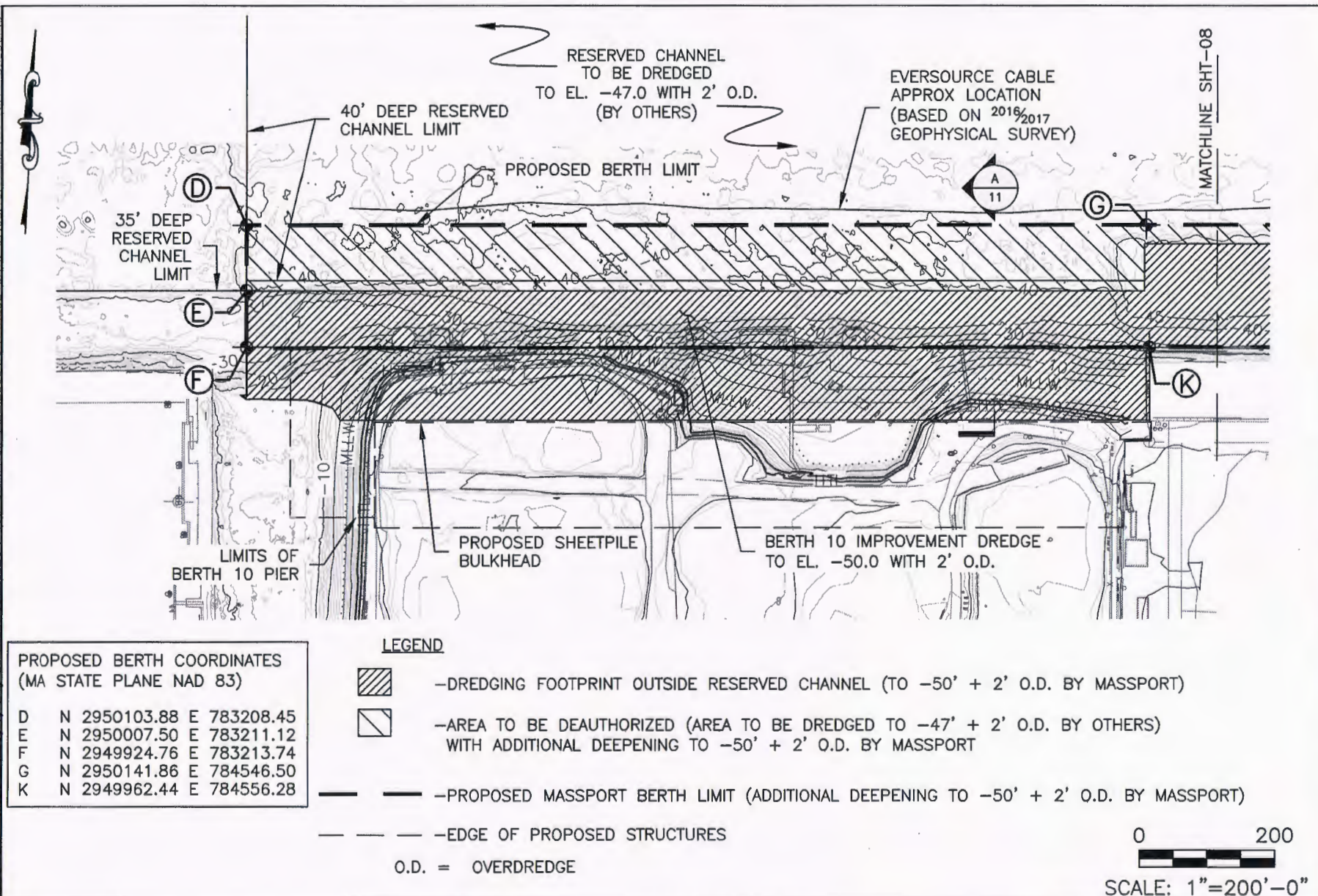
A Division of GSI Consultants, Inc.  
3 Bent Street, Franklin, MA 02039  
TEL: (508) 633-6666

File: B:\Working\MASSPORT\1607991 Dredging, Eg. Services-Canary Benth.60 DRAWINGS\20 REGULATORY\ACOE\SH1-06 PROP. COND. 022817.dwg

MATCHLINE SH1-08




File: B:\Working\MASSPORT\1607991 Dredging, Ego Services-Conley\_Berth\60 DRAWINGS\20 REGULATORY\ACOF\SHTS 07.08.10.11 BERTH 10.11 DREDGING



100 YR FLOOD	VARIABLE	NGVD	+4.70	TITLE: <b>PROPOSED BERTH 10 DREDGE PLAN</b>	IN: BOSTON HARBOR AT: RESERVED CHANNEL COUNTY: SUFFOLK STATE: MA
HTL	+12.50	MLW	+0.34		
MHW	+9.83	MLLW	0.0		
<b>Bourne Consulting Engineering</b> <small>A Division of GRI Consultants, Inc.  3 Bent Street, Franklin, MA 02039  TEL: (508) 535-8888</small>				PURPOSE: <b>BERTH 10 CONSTRUCTION</b>	APPLICATION BY: <b>MASSPORT</b>
					SHEET 7 OF 19 DATE: 12/22/16 REV: 02/28/17

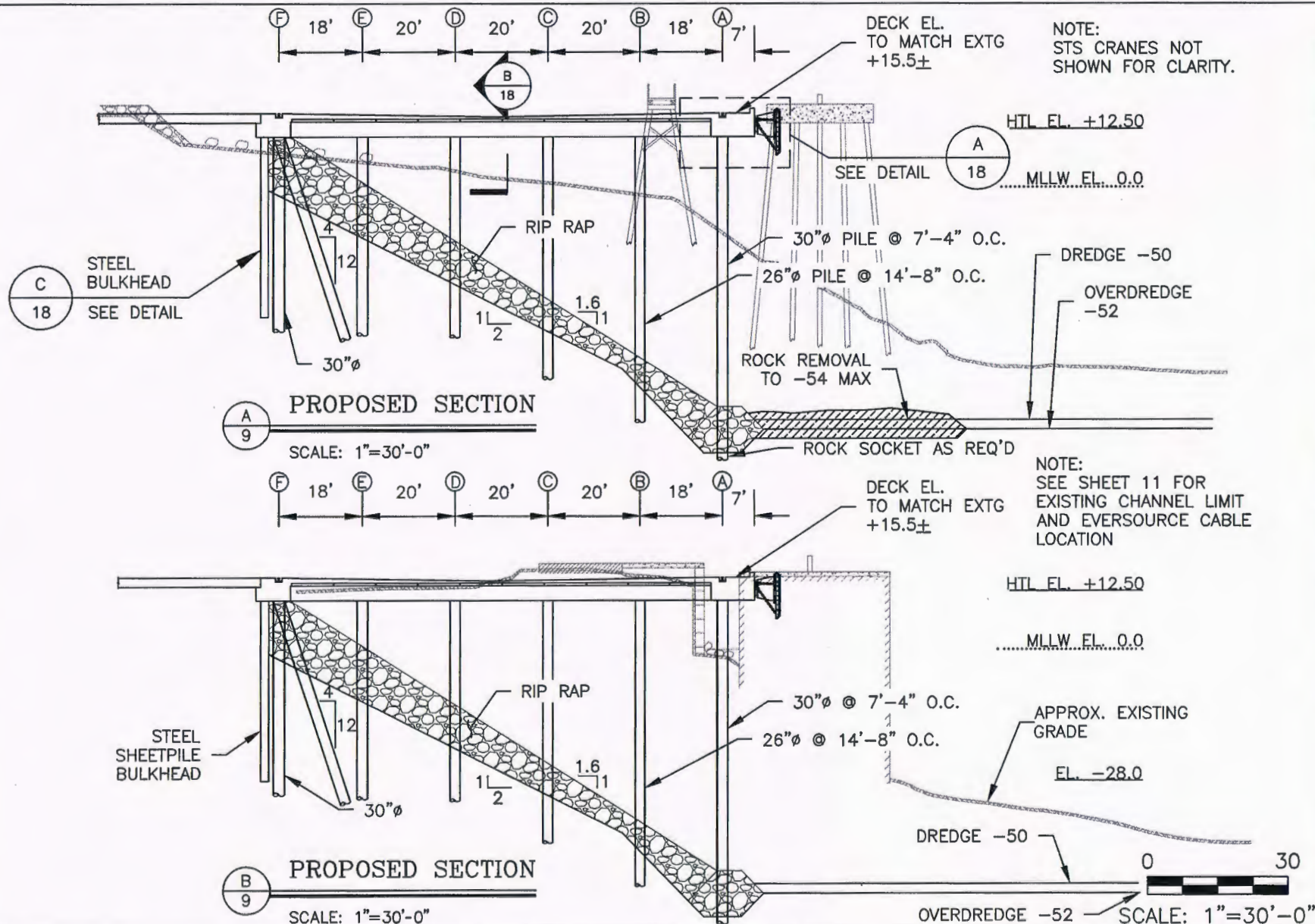


SCALE: 1"=200'-0"

100 YR FLOOD	VARIABLE	NGVD	+4.70	TITLE: <b>PROPOSED BERTH 11 DREDGE PLAN</b>	IN: <b>BOSTON HARBOR</b> AT: <b>RESERVED CHANNEL</b> COUNTY: <b>SUFFOLK</b> STATE: <b>MA</b>
HTL	+12.50	MLW	+0.34		
MHW	+9.83	MLLW	0.0		
 <b>Bourne Consulting Engineering</b> <small>A Division of GRI Consultants, Inc.          5 Bent Street, Franklin, MA 02039          TEL: (508) 633-8800</small>				PURPOSE: <b>BERTH 10 CONSTRUCTION</b>	APPLICATION BY: <b>MASSPORT</b>
					SHEET <b>8</b> OF <b>19</b> DATE: <b>12/22/16</b> REV: <b>02/28/17</b>



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100 YR FLOOD	VARIABLE	NGVD	+4.70
HTL	+12.50	MLW	+0.34
MHW	+9.83	MLLW	0.0

TITLE:

## PROPOSED WHARF SECTIONS

IN: BOSTON HARBOR  
AT: RESERVED CHANNEL  
COUNTY: SUFFOLK STATE: MA

PURPOSE:

BERTH 10 CONSTRUCTION

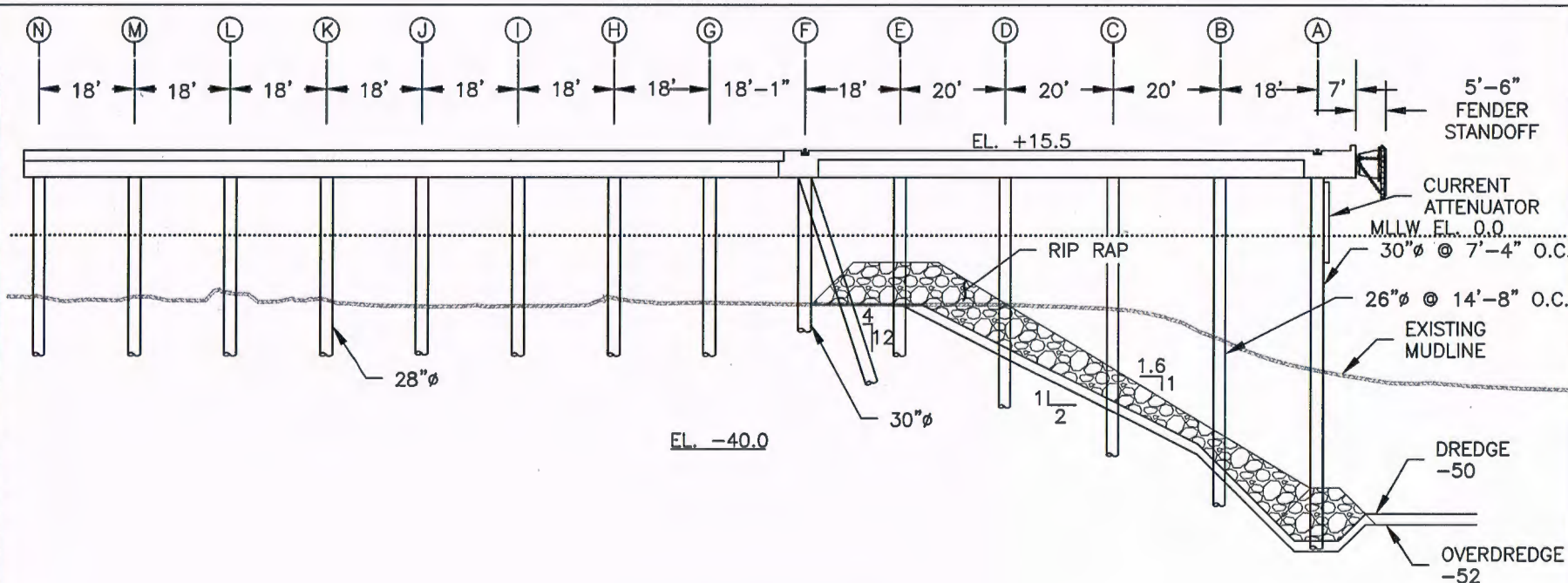
APPLICATION BY:

MASSPORT

SHEET 9 OF 19

DATE: 12/22/16 REV: 02/08/17

File: B:\Work\MASSPORT\1607991 Dredging Eng Services-Corley Berth\60 DRAWINGS\20 REGULATORY\ACOE\SHI-09 PROP SECTION 020817.dwg



**PROPOSED SECTION**  
 A  
 10  
 SCALE: 1"=30'-0"

NOTE:  
 SEE SHEET 11 FOR EXISTING CHANNEL LIMIT

0 30  
 SCALE: 1"=30'-0"

100 YR FLOOD	VARIES	NGVD	+4.70
HTL	+12.50	MLW	+0.34
MHW	+9.83	MLLW	0.0

**BCE** Bourne Consulting Engineering  
 A Division of CBE Consultants, Inc.  
 3 Beant Street, Franklin, MA 02038  
 TEL: (508) 533-6666

TITLE: **PROPOSED WHARF SECTIONS**

PURPOSE:  
**BERTH 10 CONSTRUCTION**

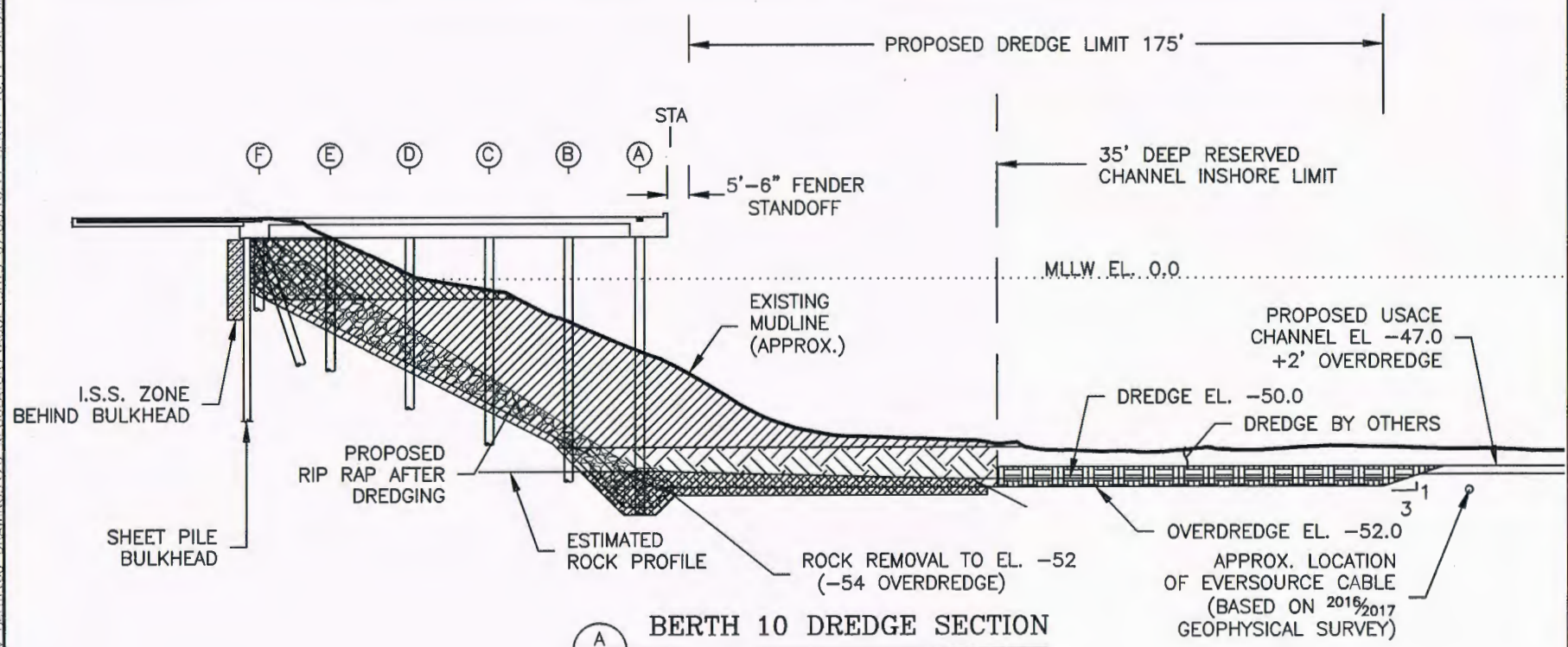
APPLICATION BY:  
**MASSPORT**

IN: **BOSTON HARBOR**  
 AT: **RESERVED CHANNEL**  
 COUNTY: **SUFFOLK** STATE: **MA**

SHEET **10** OF **19**  
 DATE: **12/22/16** REV: **02/08/17**



File: B:\Working\MASSEPCT\1607991 Dredging Eng Services-Cocley Berth 60 DRAWINGS\20 REGULATORY\ACOF\SHS 07.08.10.11 BERTH 10.11 DREDGING



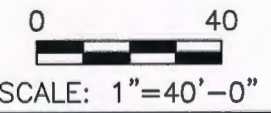
**BERTH 10 DREDGE SECTION**  
 SCALE: 1"=40'-0"

**LEGEND**

- OIL IMPACTED SOIL
- HISTORIC FILL/ HARBOR SEDIMENT
- IMPROVEMENT DREDGING BY MASSPORT
- IMPROVEMENT DREDGING BY MASSPORT BELOW DREDGING BY OTHERS
- ROCK REMOVAL

**BERTH 10 VOLUMES**

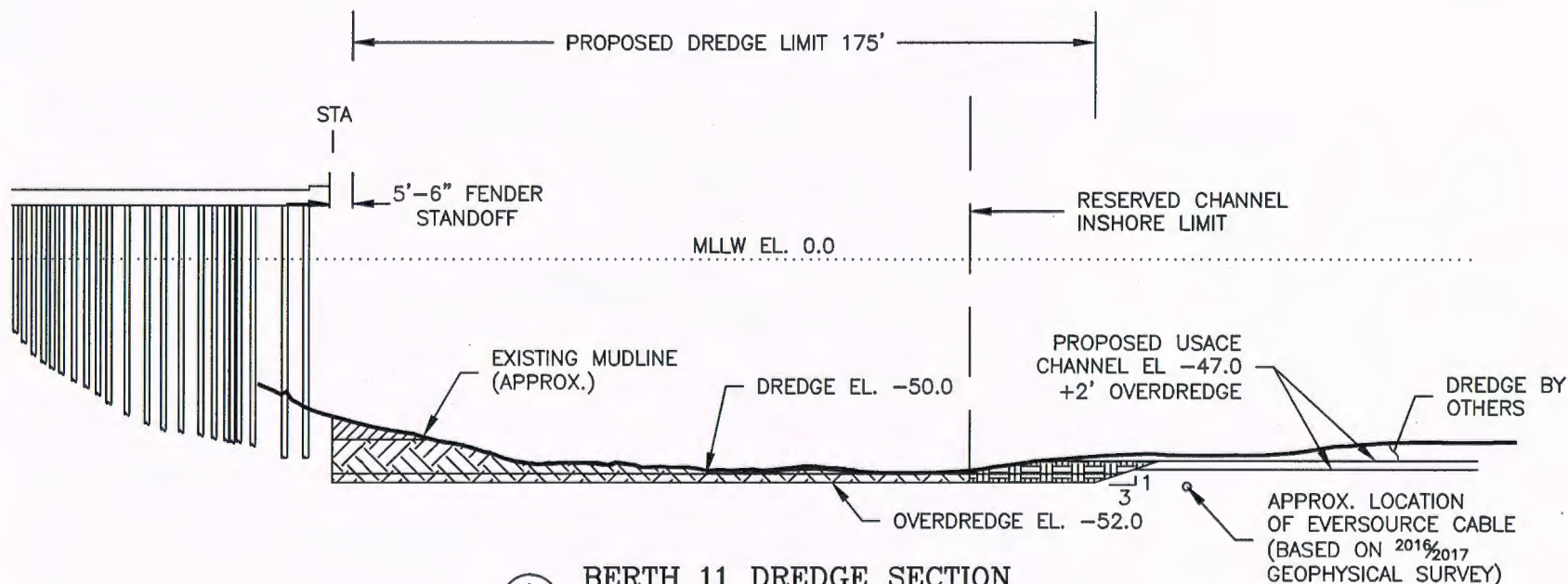
- 32,500 CY
- 100,100 CY
- 91,100 CY
- 44,900 CY
- 8,000 CY



100 YR FLOOD VARIES NGVD +4.70 HTL +12.50 MLW +0.34 MHW +9.83 MLLW 0.0				<b>TITLE: PROPOSED BERTH 10 DREDGE SECTION</b>		IN: <b>BOSTON HARBOR</b> AT: <b>RESERVED CHANNEL</b> COUNTY: <b>SUFFOLK</b> STATE: <b>MA</b>	
<b>Bourne Consulting Engineering</b> <small>A Division of GRI Consultants, Inc.          3 Dent Street, Franklin, MA 02039          TEL. (608) 533-9666</small>				<b>PURPOSE:</b> BERTH 10 CONSTRUCTION	<b>APPLICATION BY:</b> MASSPORT	SHEET <b>11 OF 19</b> DATE: <b>12/22/16</b> REV: <b>02/28/17</b>	



File: B:\Work\MASSPORT\1607991 Dredging, Eng. Services-Corley, Berth 11, DRAWINGS\20. REGULATORY\ACOF\SHS\_07.08.10.11\_BERTH\_10.11\_DREDGING



A  
12

### BERTH 11 DREDGE SECTION

SCALE: 1"=40'-0"

#### LEGEND



HISTORIC FILL/ HARBOR SEDIMENT

IMPROVEMENT DREDGING BY MASSPORT

IMPROVEMENT DREDGING BY MASSPORT  
BELOW DREDGING BY OTHERS

ROCK REMOVAL

#### BERTH 11 VOLUMES

11,100 CY

56,400 CY

21,500 CY

500 CY



SCALE: 1"=40'-0"

100 YR FLOOD	VARIABLE	NGVD	+4.70
HTL	+12.50	MLW	+0.34
MHW	+9.83	MLLW	0.0

TITLE:

PROPOSED BERTH 11  
DREDGE SECTION

IN: BOSTON HARBOR  
AT: RESERVED CHANNEL  
COUNTY: SUFFOLK STATE: MA



PURPOSE:

BERTH 10 CONSTRUCTION

APPLICATION BY:

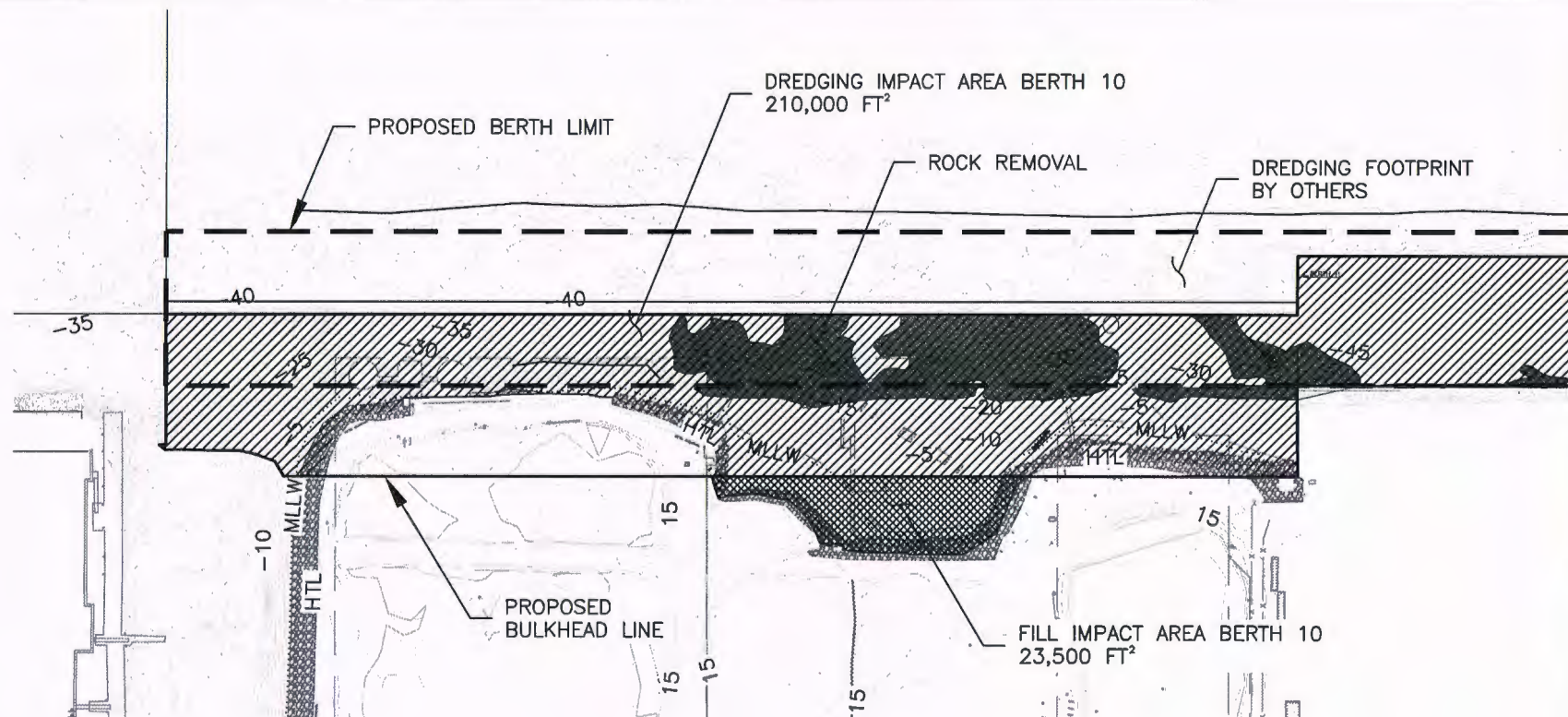
MASSPORT

SHEET 12 OF 19




DATE: 12/22/16 REV: 02/28/17



File: B:\Work\WASSPORT\1607991 Dredging, Filling, Eas Services-Conley, Berth\60 DRAWINGS\20 REGULATORY\ACOF\SHTS 13.14 RESOURCE AREAS 020817.dwg



# LEGEND

-  - FILL
-  - DREDGING
-  - ROCK REMOVAL



SCALE: 1"=200'-0"

100 YR FLOOD	VARIABLE	NGVD	+4.70
HTL	+12.50	MLW	+0.34
MHW	+9.83	MLLW	0.0

TITLE **RESOURCE AREA IMPACTS & ROCK REMOVAL  
BERTH 10**

IN: **BOSTON HARBOR**  
AT: **RESERVED CHANNEL**  
COUNTY: **SUFFOLK** STATE: **MA**



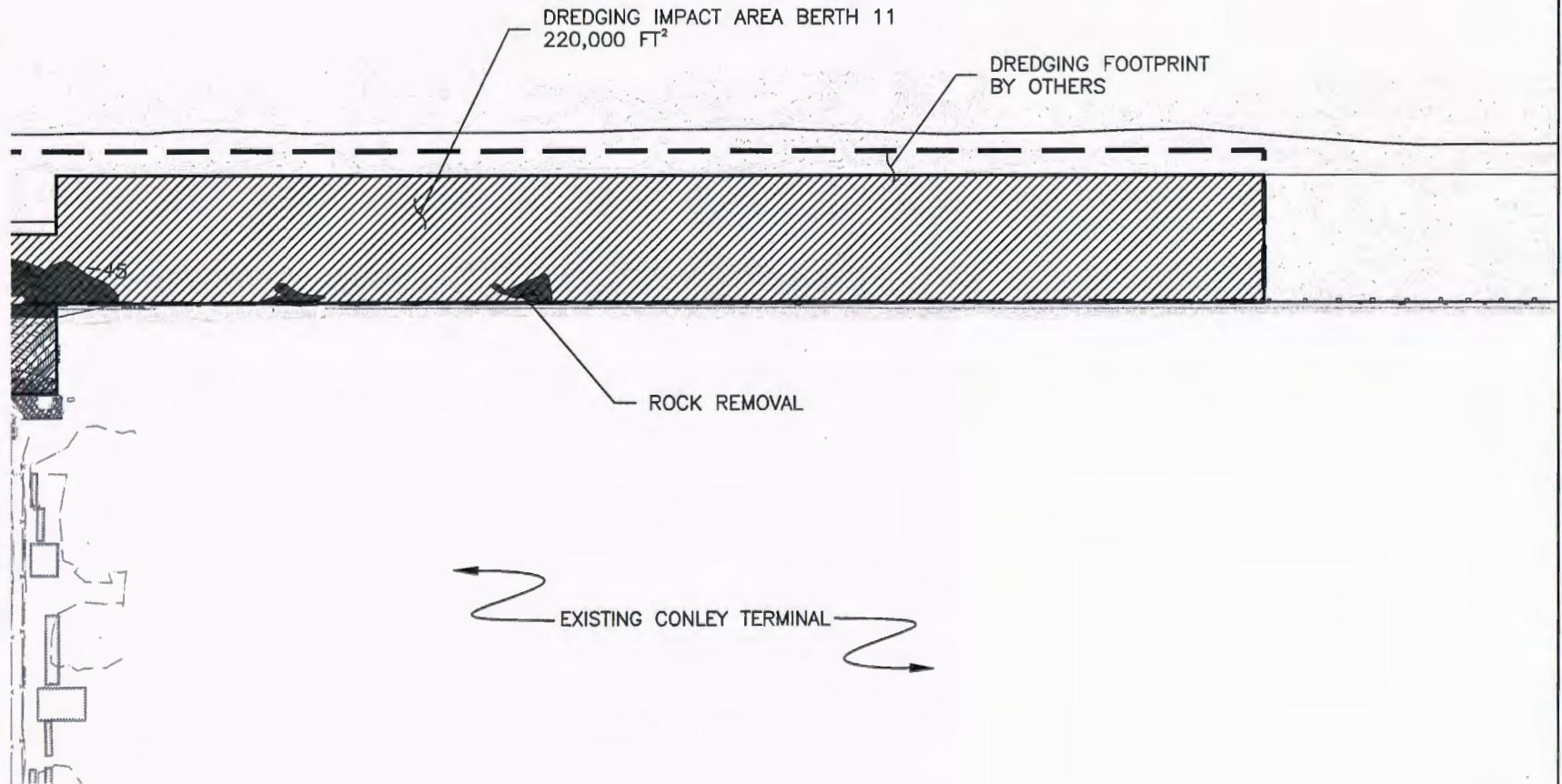
PURPOSE:  
**BERTH 10 CONSTRUCTION**

APPLICATION BY:  
**MASSPORT**

SHEET **13 OF 19**  
DATE: **12/22/16** REV: **02/28/17**

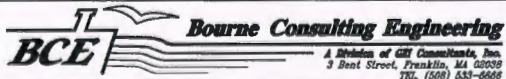


File: E:\Working\MASSPORT\1607991 Dredging, Eng Services-Conley Berth\60 DRAWINGS\20 REGULATORY\ACOE\SHS 13.14 RESOURCE AREAS\_020817.dwg



SCALE: 1"=200'-0"

100 YR FLOOD	VARIABLE	NGVD	+4.70
HTL	+12.50	MLW	+0.34
MHW	+9.83	MLLW	0.0



TITLE **RESOURCE AREA IMPACTS & ROCK REMOVAL  
BERTH 11**

PURPOSE:  
**BERTH 10 CONSTRUCTION**

APPLICATION BY:  
**MASSPORT**

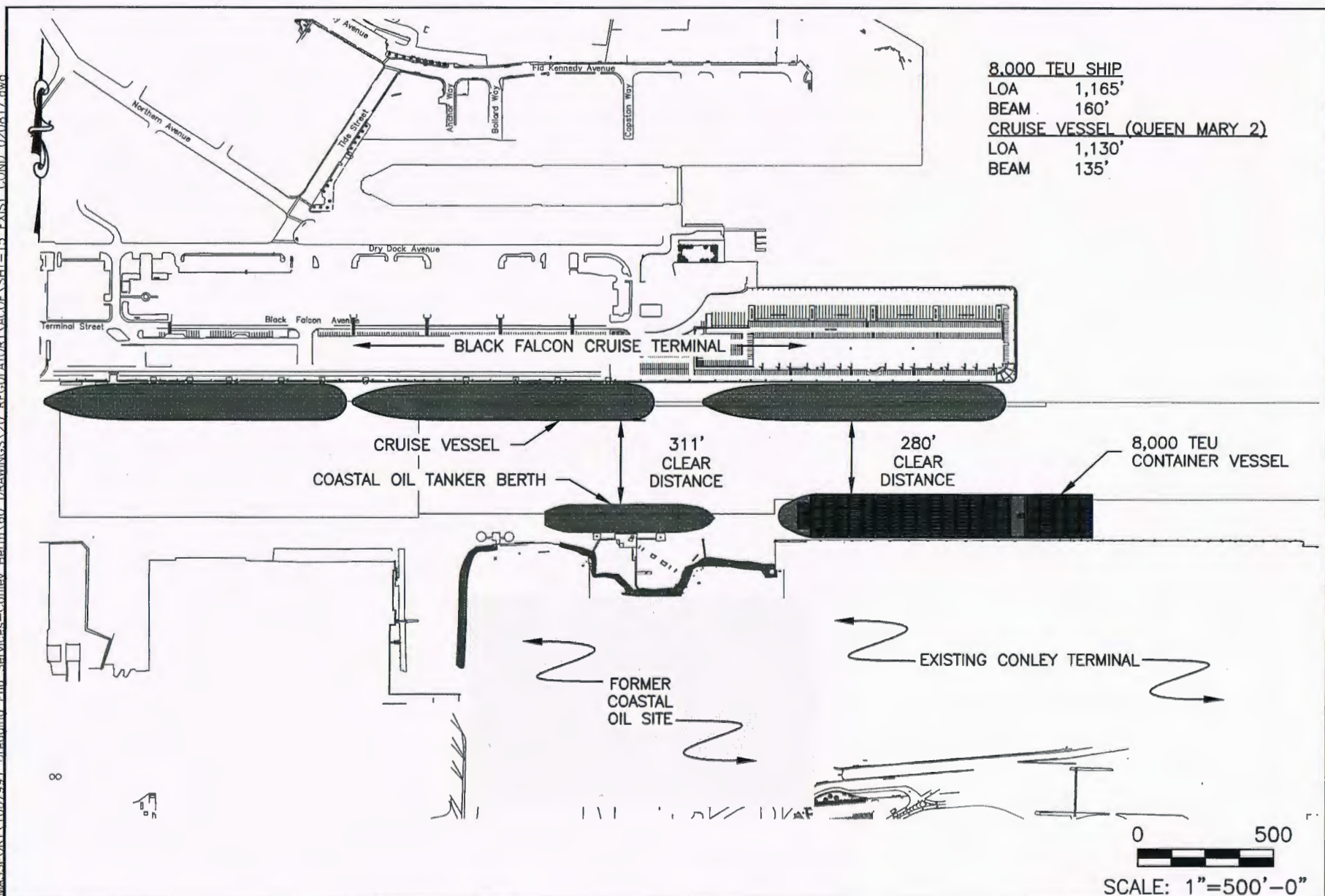
IN: **BOSTON HARBOR**  
AT: **RESERVED CHANNEL**  
COUNTY: **SUFFOLK** STATE: **MA**

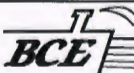
SHEET **14** OF **19**  
DATE: **12/22/16** REV: **02/28/17**



File: B:\Working\MASPORT\1607991 Dredging, Fmo Services-Conley Berth\60 DRAWINGS\20 REGULAR\ACOF\SH1-15 EXIST COND 020817.dwg

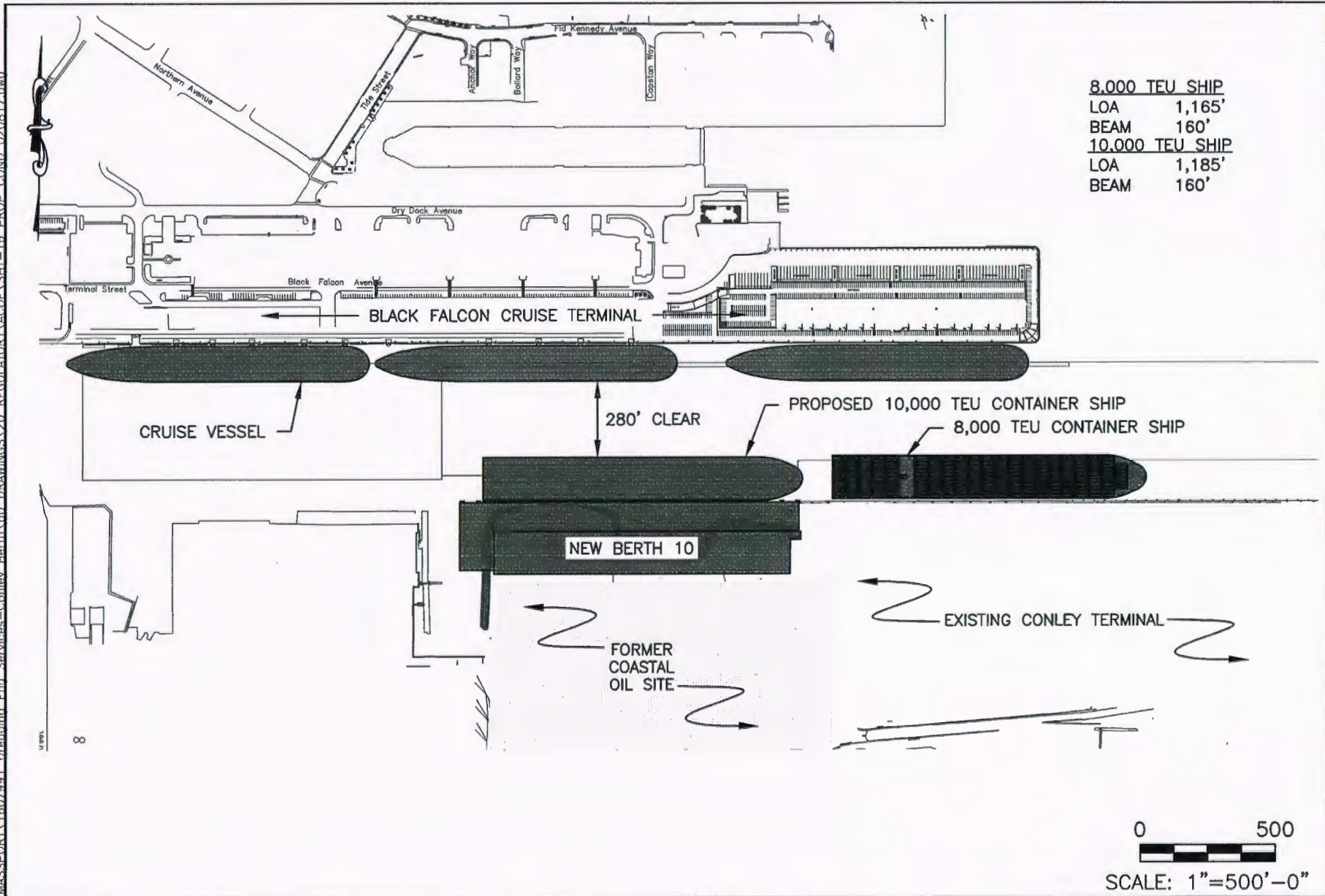
8,000 TEU SHIP  
LOA 1,165'  
BEAM 160'  
CRUISE VESSEL (QUEEN MARY 2)  
LOA 1,130'  
BEAM 135'




100 YR FLOOD VARIES NGVD +4.70 HTL +12.50 MLW +0.34 MHW +9.83 MLLW 0.0				TITLE: EXISTING NAVIGATION CONDITIONS		IN: BOSTON HARBOR AT: RESERVED CHANNEL COUNTY: SUFFOLK STATE: MA	
 <b>Bourne Consulting Engineering</b> <small>A Division of GRI Consultants, Inc. 3 Dent Street, Franklin, MA 02039 TEL: (508) 533-8666</small>				PURPOSE: BERTH 10 CONSTRUCTION	APPLICATION BY: MASSPORT	SHEET 15 OF 19 DATE: 12/22/16 REV: 02/08/17	



File: B:\Working\MASSPORT\1607991 Dredging Eng Services-Conley Berth\60 DRAWINGS\20 REGULATORY\ACOF\SH1-16 PROP COND 020817.dwg



100 YR FLOOD HTL MHW	VARIABLES +12.50 +9.83	NGVD MLW MLLW	+4.70 +0.34 0.0	TITLE: <b>PROPOSED NAVIGATION CONDITIONS</b>	IN: <b>BOSTON HARBOR</b> AT: <b>RESERVED CHANNEL</b> COUNTY: <b>SUFFOLK</b> STATE: <b>MA</b>
 <b>Bourne Consulting Engineering</b> <small>A Division of CH2M Hill Construction, Inc. 3 Bent Street, Franklin, MA 02039 TEL: (508) 633-6068</small>				PURPOSE: <b>BERTH 10 CONSTRUCTION</b>	APPLICATION BY: <b>MASSPORT</b>
				SHEET <b>16 OF 18</b> DATE: <b>12/22/16</b> REV: <b>02/08/17</b>	

**NOTES:**

1. TOPOGRAPHIC DATA SHOWN HEREON WAS COLLECTED BETWEEN DECEMBER 16, 2015 AND FEBRUARY 12, 2016 BY NITSCH ENGINEERING AND CAN ONLY REFLECT CONDITIONS AS THEY EXISTED DURING THE TIME OF THE SURVEY.
2. HYDROGRAPHIC DATA SHOWN HEREON WAS COLLECTED ON NOVEMBER 10, 2015 AND CAN ONLY REFLECT CONDITIONS AS THEY EXISTED DURING THE TIME OF THE SURVEY. CONTOURS SHOWN ARE BASED ON 3X3 MINIMUM DATA.
3. COORDINATES ARE BASED ON MASSACHUSETTS MAINLAND 2001 STATE PLANE COORDINATE SYSTEM NAD88 AND ARE EXPRESSED IN FEET.
4. SOUNDINGS AND ELEVATIONS ARE SHOWN IN FEET AND TENTHS BASED ON A MEAN LOWER LOW WATER (MLLW) DATUM. POSITIVE VALUES REPRESENT HEIGHT ABOVE THAT SAME PLANE.
5. EVERSOURCE CABLE LOCATION IS APPROXIMATE AND WAS OBTAINED FROM HALEY & ALDRICH PLAN TITLED " SITE AND SUBSURFACE EXPLORATION LOCATION PLAN AND SUBSURFACE PROFILES A-A AND B-B" DATED NOVEMBER 2006.

**DREDGING AREAS & VOLUMES:**

<u>BERTH 10</u>	210,000 SF	276,600 CY
<u>BERTH 11</u>	220,000 SF	89,500 CY

**FILL AREAS & VOLUMES:**

<u>BERTH 10</u>	23,500 SF	14,000 CY FILL	52,500 CY RIPRAP
<u>BERTH 11</u>	0 SF	0 CY	

**ROCK REMOVAL AREA & VOLUME:  
(INCLUDED WITHIN TOTALS ABOVE)**

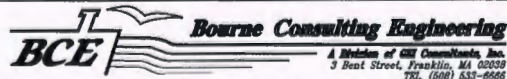
65,000 SF	8,500 CY
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100 YR FLOOD	VARIES	NGVD	+4.70
HTL	+12.50	MLW	+0.34
MHW	+9.83	MLLW	0.0

TITLE:

**GENERAL NOTES**

IN: **BOSTON HARBOR**  
AT: **RESERVED CHANNEL**  
COUNTY: **SUFFOLK** STATE: **MA**



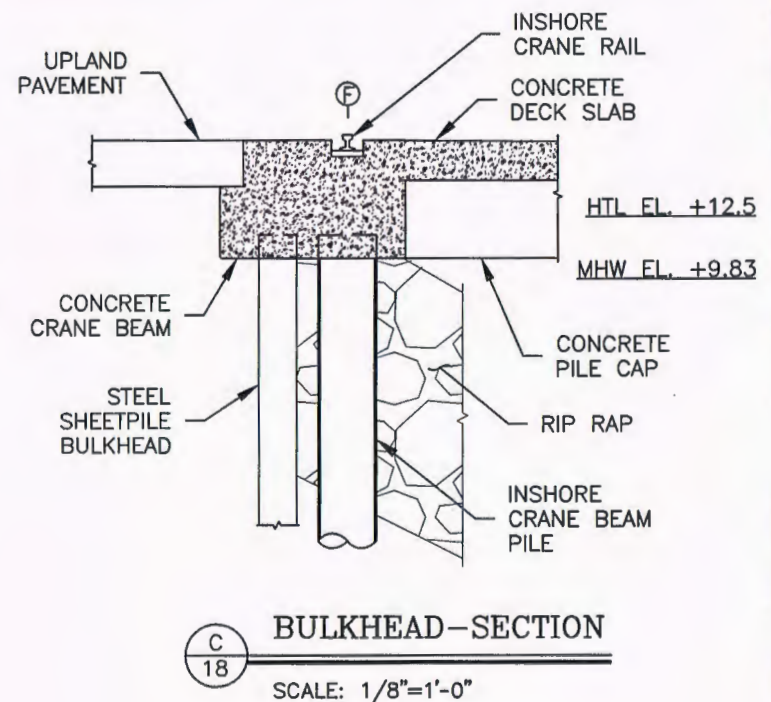
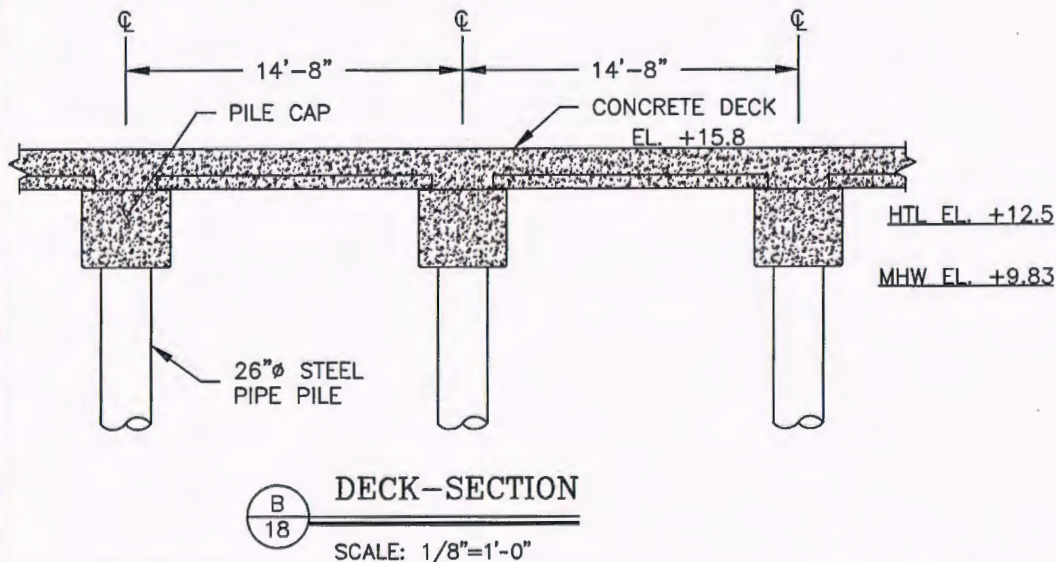
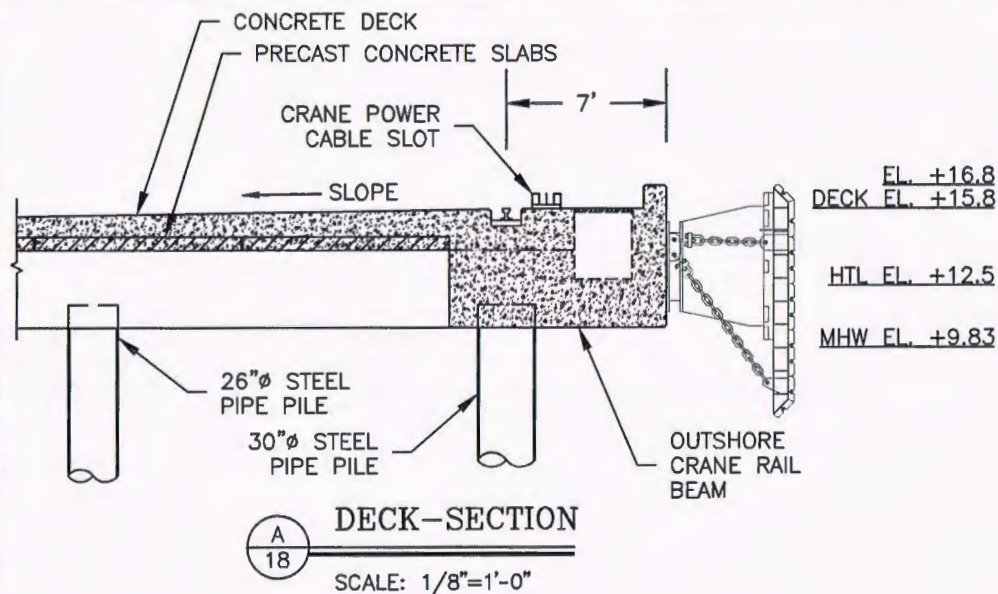
PURPOSE:  
**BERTH 10 CONSTRUCTION**

APPLICATION BY:  
**MASSPORT**

SHEET **17** OF **19**  
DATE: **12/22/16** REV: **02/08/17**



File: P:\Working\MASSPORT\1607991 Dredging For Services-Centley Berth\60 DRAWINGS\20 REGULATORY\ACOE\SHI-18 PIER DETAILS\_013017.dwg



100 YR FLOOD	VARIABLE	NGVD	+4.70
HTL	+12.50	MLW	+0.34
MHW	+9.83	MLLW	0.0

TITLE:

PIER DETAILS

IN: BOSTON HARBOR  
AT: RESERVED CHANNEL  
COUNTY: SUFFOLK STATE: MA



PURPOSE:

BERTH 10 CONSTRUCTION

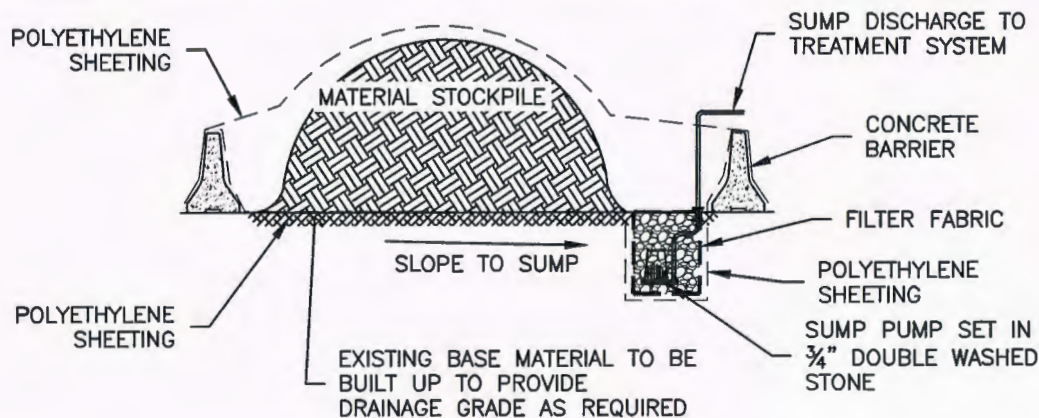
APPLICATION BY:

MASSPORT

SHEET 18 OF 19

DATE: 12/22/16 REV: 02/08/17

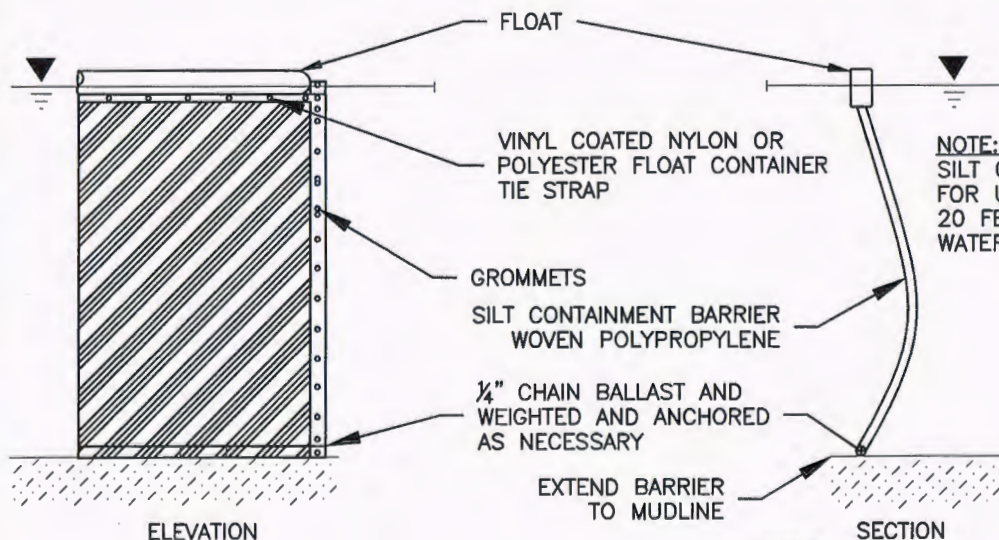
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A  
19

### DEWATERING DETAIL

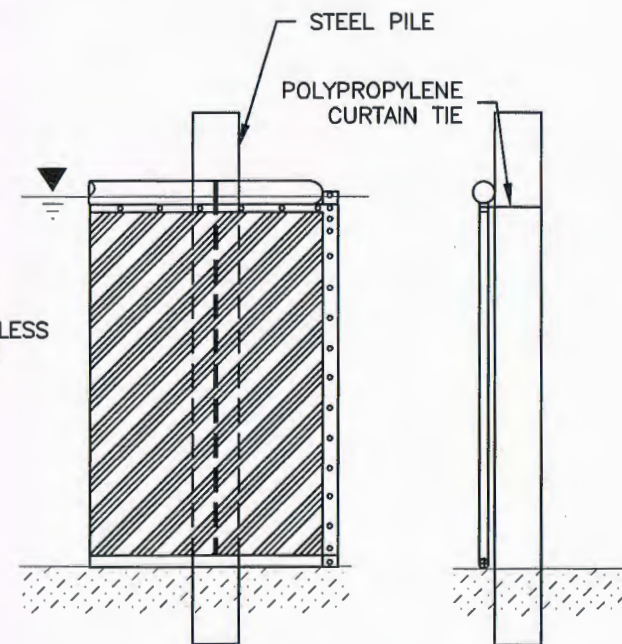
SCALE: NOT TO SCALE



B  
19

### SILT CURTAIN

SCALE: NOT TO SCALE



NOTE:  
SILT CURTAIN  
FOR USE IN  
20 FEET OR LESS  
WATER DEPTH

100 YR FLOOD	VARIES	NGVD	+4.70
HTL	+12.50	MLW	+0.34
MHW	+9.83	MLLW	0.0

**BCE** Bourne Consulting Engineering  
A Division of GSI Consultants, Inc.  
3 Bent Street, Franklin, MA 02038  
TEL: (508) 533-6666

TITLE: MISC. DETAILS

PURPOSE:  
BERTH 10 CONSTRUCTION

APPLICATION BY:  
MASSPORT

IN: BOSTON HARBOR  
AT: RESERVED CHANNEL  
COUNTY: SUFFOLK STATE: MA

SHEET 19 OF 19

DATE: 12/22/16 REV: 02/08/17



area of 23,500 SF (shown on Sheet 13, Attachment C) with a net gain of tidal/sub-tidal riprap habitat (38,200 - 23,500) of approximately 14,700 SF.

It is expected that the riprap will gradually fill in and be overlaid with silt as occurred at nearby Conley Berth 12. Berth 12 construction was completed in 1995 and included a riprap slope similar to that proposed for Berth 11. Although no surveys were done to measure the depth of new siltation, a dive inspection in 2014 of Conley Terminal Berth 12 found that the riprap was buried in silt and could not be reached by hand probing. Silt thickness over riprap was estimated to be in excess of 12 inches.

Increased levels of turbidity and suspended sediments may occur during the removal of existing riprap depending on the level of silty sediment that is between and underneath the riprap. There are no data available for turbidity levels for this type of activity, however, the levels are expected to be minimal.

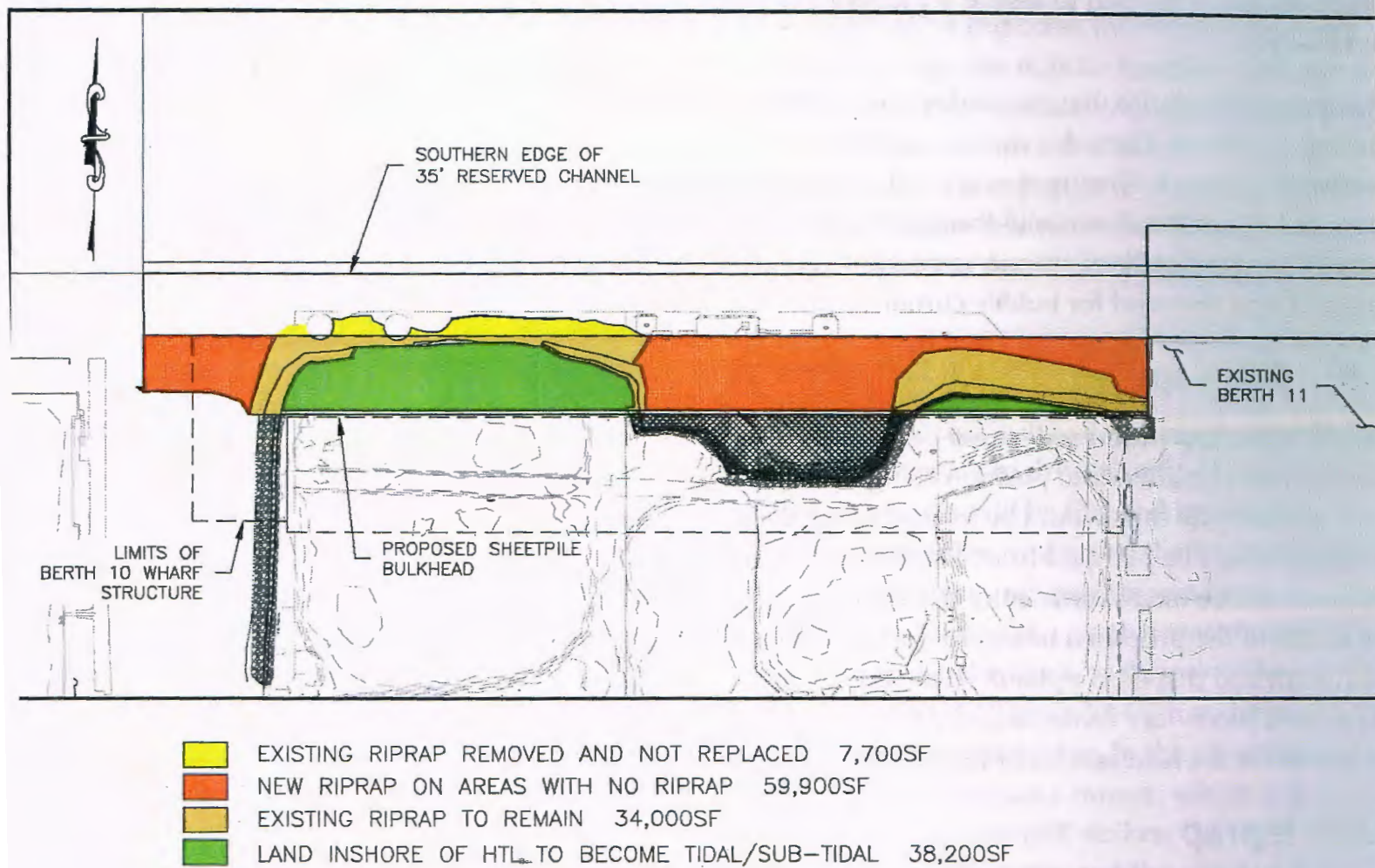


Figure 7. Riprap area changes for the Berth 10 Project.

Yellow = existing riprap that will be removed during dredging and not be replaced (7,700 SF). Orange area = new riprap on areas which do not currently have riprap (59,900 SF). Brown area = existing riprap which will remain riprap in the