U.S. COAST GUARD
CIVIL ENGINEERING
CEU PROVIDENCE

CG STA EATONS NECK
NORTHPORT, NEW YORK
10107427 MAJOR M&R WATERFRONT (FY21 CPOP)
SOUTH FLOATING DOCK AND SOUTH BULKHEAD

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PROJECT DESCRIPTION:

1. THE BASE BID ITEM (BBI) WORK INCLUDES THE FOLLOWING ITEMS AND INCIDENTAL RELATED WORK:

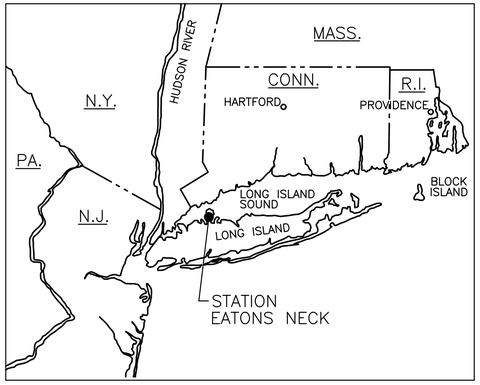
   BBI NO. 1:
   RPUID 9720: REPLACE THE SOUTH FLOATING DOCK AND GUIDE PILES WITH NEW CONCRETE FLOATS AND STEEL GUIDE PILES, REMOVE AND REINSTALL THE EXISTING SHORE TIES ON THE NEW CONCRETE FLOATS, REPLACE THE EXISTING SHORE TIE ELECTRICAL LINES, AND REMOVE AND REINSTALL OTHER MISCELLANEOUS ITEMS ASSOCIATED WITH THE FLOATING DOCKS (E.G., GANGWAY, LIFE RINGS, ETC.) AS SPECIFIED AND SHOWN IN THE CONTRACT DOCUMENTS.

2. THE OPTIONAL BID ITEM (OBI) WORK INCLUDES THE FOLLOWING ITEMS AND INCIDENTAL RELATED WORK:

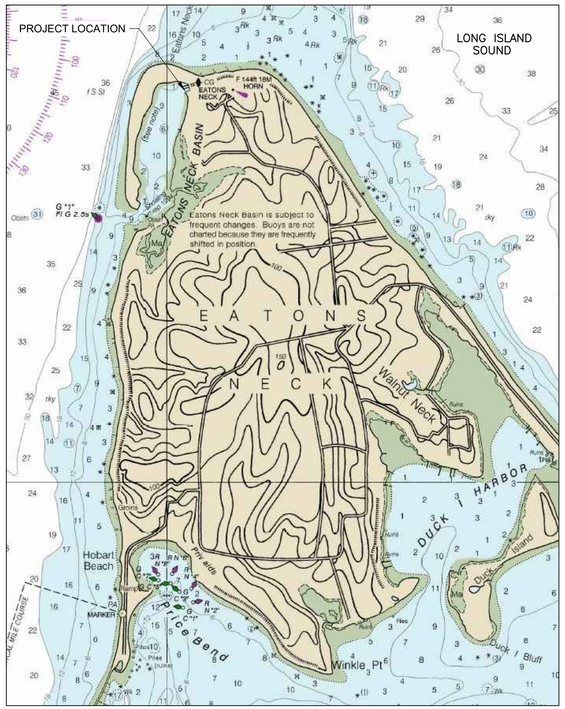
   OBI NO. 1:
   RPUID 9719: REPLACE THE SOUTH BULKHEAD, INCLUDING THE ANCHOR SYSTEM AND BULKHEAD RETURN, REMOVE AND REINSTALL THE EXISTING LIGHT POLES LOCATED BEHIND THE SOUTH BULKHEAD, AND REPLACE THE LIGHT POLES' UNDERGROUND ELECTRICAL CONDUIT WITHIN THE LIMITS OF WORK AS SPECIFIED AND SHOWN IN THE CONTRACT DOCUMENTS.

   OBI NO. 2:
   RPUID 9719: RECONSTRUCT THE RIPRAP REVETMENT AT THE SOUTH BULKHEAD RETURN AS SPECIFIED AND SHOWN IN THE CONTRACT DOCUMENTS.

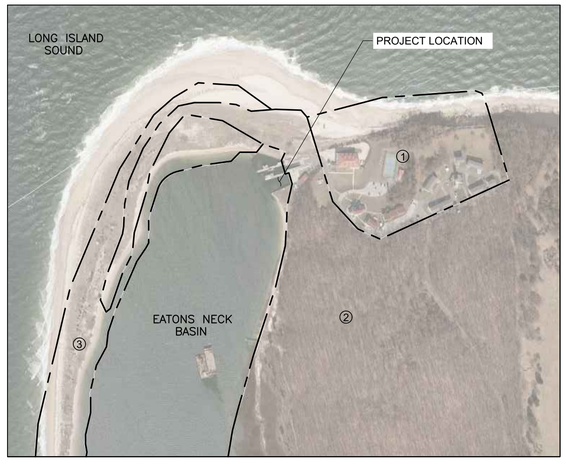
   OBI NO. 3:
   RPUID 854214: INSTALL NEW LED SHOE BOX LIGHT FIXTURES AND POLES ON THE SOUTH FLOATING DOCK AS SPECIFIED AND SHOWN IN THE CONTRACT DOCUMENTS.



VICINITY MAP
SCALE: NTS



LOCATION MAP
SCALE: NTS



ABUTTING PROPERTY DATA				
	PARCEL ID	PARCEL ADDRESS	OWNER	OWNER ADDRESS
①	0400-286.00-01.00-002.000	12 LIGHTHOUSE ROAD NORTHPORT, NY 11768	UNITED STATES OF AMERICA	12 LIGHTHOUSE ROAD NORTHPORT, NY 11768
②	0401-001.00-01.00-001.001	NOT LISTED	EATONS NECK, LLC	PO BOX 1052 MURRAY HILL STATION NEW YORK, NY 10156
③	0401-001.00-01.00-003.001	NOT LISTED	EATONS NECK, LLC	PO BOX 1052 MURRAY HILL STATION NEW YORK, NY 10156

NOTES:

1. THE AERIAL PHOTOGRAPHY SHOWN WAS OBTAINED FROM GOOGLE EARTH.
2. THE PROPERTY BOUNDARY DATA SHOWN WAS OBTAINED FROM THE SUFFOLK COUNTY, NY GIS VIEWER AND IS CONSIDERED APPROXIMATE.

ABUTTING PROPERTIES MAP
SCALE: NTS

Digitally signed by CAROSOTTO.MICHAEL.P.1021033398
Date: 2021.06.02 08:02:42 -04'00'

APPROVING OFFICER DATE

MICHAEL P. CAROSOTTO
TECHNICAL DIRECTOR

DAVID C. DILL
BRANCH CHIEF

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY 2021

PLOTTING SCALE:1:1 | SCALE: AS SHOWN

A/E COMPANY:
A/E PROJECT NO.:
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER: ARPIN, DAVID
DESIGNED BY: DJA
DRAWN BY:
EDITED BY: DJA
CHECKED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P101074276-001
USCG FILENAME P101074276-001.DWG
SHEET 01 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

GENERAL
COVER SHEET

SHEET ID
S FLOATING DOCK & S BULKHEAD
G-001

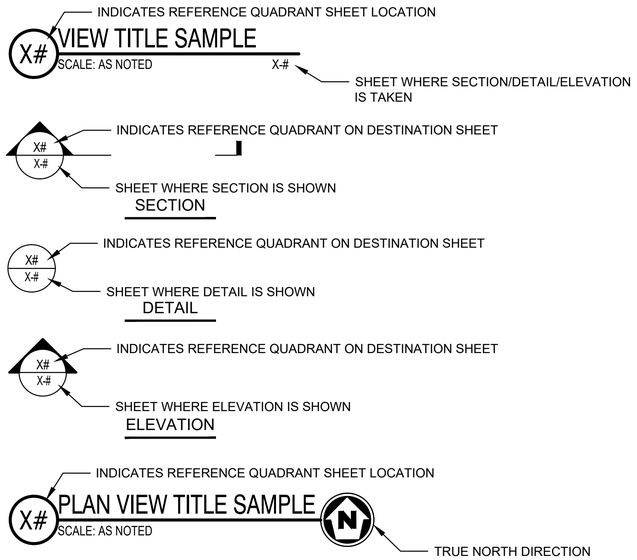
ABBREVIATIONS

AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
APPROX.	APPROXIMATE
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
AWPA	AMERICAN WOOD PRESERVES ASSOCIATION
AWS	AMERICAN WELDING SOCIETY
BMP	BEST MANAGEMENT PRACTICES
BTM	BOTTOM
BWTN	BETWEEN
CEU	CIVIL ENGINEERING UNIT
CL	CENTER LINE
CLR	CLEAR
COMM	COMMUNICATIONS
CONC	CONCRETE
CONT	CONTINUOUS
CONT'D	CONTINUED
COR	CONTRACTING OFFICER REPRESENTATIVE
DIA/Ø	DIAMETER
DIM	DIMENSION
DWG	DRAWING
E	EAST
EA	EACH
ELEV	ELEVATION
EQ	EQUAL
ES	EACH SIDE
EX	EXISTING
EXP	EXPANSION
F&I	FURNISH AND INSTALL
FNDN	FOUNDATION
FT	FOOT/FEET
FTG	FOOTING
GALV	GALVANIZED
HORIZ	HORIZONTAL
IBC	INTERNATIONAL BUILDING CODE
I.D.	INSIDE DIAMETER
IN	INCH(ES)
KO	CONTRACTING OFFICER
L	LENGTH
LBS	POUNDS
LF	LINEAR FEET
LG	LONG
LOD	LIMITS OF DISTURBANCE
MAX	MAXIMUM
MHW	MEAN HIGH WATER
MHHW	MEAN HIGHER HIGH WATER
MIN	MINIMUM
MLW	MEAN LOW WATER
MLLW	MEAN LOWER LOW WATER
MSL	MEAN SEA LEVEL
MTL	MEAN TIDE LEVEL
N	NORTH
NAD83	NORTH AMERICAN DATUM OF 1983
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
NDS	NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION
NE	NORTH EAST
NIC	NOT IN CONTRACT
NO.	NUMBER
NTS	NOT TO SCALE
NW	NORTH WEST
NYSDEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NYSDOS	NEW YORK STATE DEPARTMENT OF STATE
NYSDOT	NEW YORK STATE DEPARTMENT OF TRANSPORTATION
OC	ON CENTER
OBI	OPTIONAL BID ITEM
OD	OUTSIDE DIAMETER
PCF	POUNDS PER CUBIC FOOT
PIP	PROTECT IN PLACE
PL	PLATE
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
QTY	QUANTITY
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND REINSTALL
R&S	REMOVE AND STOCKPILE
REF	REFERENCE
REQ'D	REQUIRED
RPUID	REAL PROPERTY UNIQUE IDENTIFIER
S	SOUTH
SE	SOUTH EAST
SF	SQUARE FEET
SIM	SIMILAR
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	STAINLESS STEEL
STA	STATION
STD	STANDARD
STL	STEEL
SW	SOUTH WEST
T&B	TOP & BOTTOM
THK	THICK
TYP	TYPICAL
UHMW	ULTRA HIGH MOLECULAR WEIGHT POLYETHELENE
U.S.	UNITED STATES
USACE	UNITED STATES ARMY CORPS OF ENGINEERS
USCG	UNITED STATES COAST GUARD
UON	UNLESS OTHERWISE NOTED
UTIL	UTILITIES
W	WEST
w/	WITH

ABBREVIATIONS CONTINUED

&	AND
@	AT
'	FEET/FOOT
"	INCHES
<	LESS THAN
≥	GREATER THAN OR EQUAL
%	PERCENTAGE
±	PLUS/MINUS

CROSS-REFERENCE LEGEND



CIVIL LEGEND

PROPERTY LINE/EASEMENT

PROJECT BASELINE

LOD

EROSION CONTROL BARRIER

TURBIDITY BARRIER

ELECTRIC LINE

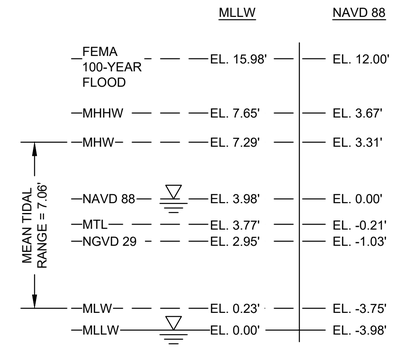
OVERHEAD LIGHT ELECTRIC LINE

OVERHEAD LIGHT AND POLE

TOPOGRAPHIC CONTOUR

SOIL BORING COMPLETED BY NELSON, POPE & VOORHIS ON OCTOBER 6, 2010

SOIL BORING COMPLETED BY GEI CONSULTING, INC. FOR TAYLOR ENGINEERING, INC. ON MAY 10 AND 11, 2021



NOTES:

1. THE ELEVATION DATA SHOWN ABOVE WAS OBTAINED FROM THE U.S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), ONLINE VERTICAL DATUM TRANSFORMATION PROGRAM WITH THE FOLLOWING LOCATION:

   LOCATION: NORTHPORT, NEW YORK
   LATITUDE: 40.95° N
   LONGITUDE: 73.40° W

E8 VERTICAL DATUM CONVERSION DIAGRAM

SCALE: NTS

REFERENCE DOCUMENTS:

1. THE FOLLOWING REFERENCE MATERIALS WERE USED FOR EXISTING CONDITIONS AND ARE AVAILABLE TO THE CONTRACTOR UPON REQUEST:

   a. DESIGN DRAWINGS: CONSTRUCTION OF WATERFRONT FACILITIES, EATONS NECK STA, NORTHPORT, L.I., NEW YORK; PREPARED BY CIVIL ENGINEERING, USCG 3RD DISTRICT, GOV. IS. NY; DATED APRIL 18, 1968.

   b. RECORD DRAWINGS: REBUILD STATION EATONS NECK BOAT RAMP & B/H REPAIR, USCG STA EATONS NECK, NY; PREPARED BY HASKELL ARCHITECTS AND ENGINEERS, NY FOR USCG FACILITIES DESIGN & CONSTRUCTION CENTER, NORFOLK, VA; DATED JANUARY 9, 2012.

   c. DESIGN DRAWINGS: INSTALLATION OF CONCRETE MOORING FLOAT, STA EATONS NECK, NORTHPORT, LI, NY; PREPARED BY CIVIL ENGINEERING, USCG 3RD DISTRICT, GOV. IS. NY; DATED JUNE 30, 1986.

   d. RECORD DRAWINGS: WATERFRONT REHABILITATION, STA EATONS NECK, NORTHPORT, NY; PREPARED BY USCG CIVIL ENGINEERING UNIT PROVIDENCE, RI; DATED SEPTEMBER 1995.

   e. WATERFRONT INSPECTION REPORT: USCG STA EATONS NECK, NORTHPORT, NY; PREPARED BY CHILDS ENGINEERING CORPORATION, BELLINGHAM, MA FOR USCG CIVIL ENGINEERING UNIT PROVIDENCE, WARWICK, RI; DATED AUGUST 2018.

   f. GEOTECHNICAL REPORT: USCG STA EATONS NECK, NORTHPORT, NY; PREPARED BY GEI CONSULTANTS, INC., NEW YORK, NY FOR TAYLOR ENGINEERING, INC., JACKSONVILLE, FL AND USCG CIVIL ENGINEERING UNIT PROVIDENCE, WARWICK, RI; FINAL REPORT DATED JUNE 2021.

2. THE REFERENCE MATERIALS LISTED ABOVE ARE NOT INTENDED TO SHOW ALL EXISTING CONDITIONS AND DETAILS FROM THE ORIGINAL CONSTRUCTION AND SUBSEQUENT REPAIR OR IMPROVEMENT CONTRACTS BUT ARE INTENDED TO SHOW BASIC ARRANGEMENT OF THE FACILITIES, GENERAL LOCATIONS OF REPAIRS, AND OTHER IMPROVEMENTS.

U.S.C.G. CE US COAST GUARD CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY, 2021

PLOTTING SCALE:1:1 | SCALE: AS SHOWN

A/E COMPANY: | A/E PROJECT NO.: | CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER:
ARPIN, DAVID

DRAWN BY: DJA
CHECKED BY: DJA
DESIGNED BY: DJA
DATED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427G-002
USCG FILENAME P10104427G-002.DWG
SHEET 02 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

GENERAL

LEGEND & ABBREVIATIONS

SHEET ID
S FLOATING DOCK & S BULKHEAD
G-002

GENERAL NOTES:

1. THE SITE IS LOCATED IN NORTHPORT, NEW YORK.

2. THESE DRAWINGS ARE NOT INTENDED TO REPLACE THE SPECIFICATIONS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THESE DRAWINGS AND SPECIFICATIONS.

3. UTILITY SIZES AND LOCATIONS, WHEN SHOWN ON THESE DRAWINGS, ARE CONSIDERED APPROXIMATE. THE ACTUAL SIZE AND LOCATION OF UTILITIES MAY VARY FROM THOSE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS OF ALL UTILITIES, GRADES, AND DIMENSIONS PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL NOTIFY THE COR OF ANY DISCREPANCIES, IN WRITING, PRIOR TO BEGINNING AFFECTED WORK. THE CONTRACTOR SHALL MAKE PROVISIONS TO ENSURE UTILITY LINES ARE PROTECTED AND REMAIN IN CONTINUOUS OPERATION, UNLESS OTHERWISE NOTED.

4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT DIG SAFELY NEW YORK AND THE USCG COR A MINIMUM OF 72 HOURS BEFORE COMMENCING WITH ANY EXCAVATION RELATED WORK, IN ORDER THAT ALL AFFECTED UTILITY COMPANIES ARE NOTIFIED.

5. EXISTING CONSTRUCTION, INCLUDING UTILITIES, DRAINAGE, AND OTHER MISCELLANEOUS WORK WHICH IS TO REMAIN, SHALL BE UNDISTURBED AND PROTECTED. HOWEVER, SOME UTILITIES MAY REQUIRE TEMPORARY REMOVAL TO PERFORM THE WORK. REINSTALL TEMPORARILY REMOVED UTILITIES OR REPLACE WITH NEW MATERIALS IN-KIND.

6. LIMITED WATER AND POWER ARE AVAILABLE ON SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONNECTIONS AS NEEDED IN COORDINATION WITH THE COR.

7. RIGHT-OF-WAY LINES, LEASE LINES, AND EASEMENT LINES, WHEN SHOWN ON THESE DRAWINGS, ARE CONSIDERED APPROXIMATE AND WERE OBTAINED FROM HISTORIC RECORDS.

8. CONSTRUCTION LIMITS COINCIDE WITH PROPERTY LINE AND/OR LEASE LIMITS AS SHOWN ON THE DRAWINGS.

9. THE USCG SHALL PROVIDE A STAGING AREA WITHIN THE PROPERTY FOR THE CONTRACTOR'S USE AS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL STORE SHEET PILES, PIPE PILES, AND OTHER CONSTRUCTION MATERIALS WITHIN ITS DESIGNATED STAGING AREA AND SHALL NOT STORE SUCH MATERIALS BEHIND THE EXISTING BULKHEADS.

10. THE FOLLOWING PERMITS ARE APPLICABLE TO THIS PROJECT:

10.1. USACE: AUTHORIZATION UNDER SECTION 10 OF THE RIVERS AND HARBORS ACT OF 1899 (33 US CODE 403), AND SECTION 404 OF THE CLEAN WATER ACT (US CODE 1344), (ISSUANCE OF PERMIT PENDING AS OF MAY 2021).

10.2. NYSDEC: WATER QUALITY CERTIFICATION UNDER SECTION 401 CLEAN WATER ACT, PERMIT ID 1-4726-00545/00023.

10.3. NYSDOS: CONCURRENCE WITH CONSISTENCY DETERMINATION, REF FILE NO. F-2021-0122(DA).

THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR ADHERING TO THE CONDITIONS PROVIDED WITHIN THESE DOCUMENTS, COPIES OF WHICH ARE PROVIDED IN THE SPECIFICATIONS OR WILL BE PROVIDED VIA ADDENDUM.

11. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. SAFETY PROVISIONS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS. THESE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.

12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DEVELOP ERECTION PROCEDURES AND SEQUENCING TO INSURE THE PROTECTION OF EXISTING AND PROPOSED STRUCTURES AND THE SAFETY AND PROTECTION OF STATION PERSONNEL, CONSTRUCTION PERSONNEL, AND THE PUBLIC, UNLESS OTHERWISE DIRECTED BY THE KO. THIS INCLUDES THE ADDITION OF NECESSARY TEMPORARY SUPPORTS (E.G., BRACING, SHORING, SHEETING, GUYS, TIEDOWNS, ETC.). SUCH TEMPORARY MATERIAL SHALL BE DESIGNED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

13. THE WORK SHALL BE CONDUCTED IN A MANNER THAT WILL MINIMIZE INTERRUPTIONS TO THE DAILY OPERATIONS OF THE USCG STA EATONS NECK OPERATIONS. REFER TO THE CONSTRUCTION SEQUENCING NOTES FOR ADDITIONAL REQUIREMENTS.

14. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD BEFORE ORDERING ANY MATERIAL, COMMENCING ANY FABRICATION, OR PERFORMING ANY WORK. THE CONTRACTOR SHALL NOTIFY THE USCG KO, IN WRITING, OF ANY CONDITIONS OR DIMENSIONS WHICH VARY FROM THOSE SHOWN ON THE DRAWINGS AND INCORPORATE SUCH VARIATIONS IN THE CONSTRUCTION AS APPROVED BY THE USCG.

15. WATER ELEVATIONS AT THE SITE ARE TIDAL AND WILL VARY.

16. THE PROPOSED WORK IS LOCATED WITHIN A FEMA ZONE AE FLOOD ZONE AND WILL BE INUNDATED DURING THE 100 YEAR FLOOD. THE 100 YEAR FLOOD ELEVATION IS ESTIMATED AT ABOUT EL. 12 FEET (NAVD 88) AS SHOWN ON THE VILLAGE OF ASHAROKEN, TOWN OF HUNTINGTON, SUFFOLK COUNTY, NEW YORK FLOOD INSURANCE RATE MAP NUMBER 36103C0309H, PANEL 309 OF 1026, MAP SUFFIX H, DATED SEPTEMBER 25, 2009.

17. ALL AREAS DISTURBED DURING DEMOLITION OR CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR, UNLESS OTHERWISE NOTED.

18. MATERIAL TO BE REMOVED SHALL BE LEGALLY DISPOSED OF OFFSITE BY THE CONTRACTOR DAILY IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.

19. THE CONTRACTOR SHALL OBTAIN, DAILY, A BURNING PERMIT FROM THE USCG FOR ALL WELDING AND TORCH CUTTING.

20. THE CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM, WHETHER SHOWN OR NOT ON THE DRAWINGS. ALL WORK SHALL BE COORDINATED BETWEEN GENERAL, CIVIL, DEMOLITION, STRUCTURAL, AND ELECTRICAL DRAWINGS.

21. THE GOVERNMENT MAY CHARGE THE CONTRACTOR FOR ANY ADDITIONAL COST ASSOCIATED WITH THIRD PARTY REINSPECTION OR RETEST WHEN PRIOR REJECTION MAKES REINSPECTION OR RETEST NECESSARY.

22. CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE COR FOR APPROVAL PRIOR TO FABRICATION AND CONSTRUCTION. PROPOSED CONTRACTOR CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

ENVIRONMENTAL PROTECTION PLAN:

1. IN ORDER TO PROTECT HUNTINGTON BAY/LONG ISLAND SOUND FROM HAZARDOUS MATERIALS RELEASES DURING THE COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING PREVENTATIVE MEASURES TO AVOID ANY ENVIRONMENTAL IMPACTS. THESE MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO:

1.1. ALL EQUIPMENT PROPOSED TO BE UTILIZED BY THE CONTRACTOR SHALL BE IN GOOD WORKING CONDITION AND INSPECTED DAILY FOR LEAKS.

1.2. A SPILL KIT, ABSORBENT MATERIALS, AND CONTAINMENT BERM SHALL BE ON SITE AT ALL TIMES DURING CONSTRUCTION OPERATIONS.

1.3. ALL FUEL TRANSFER OPERATIONS SHALL BE CONDUCTED IN AN EFFICIENT AND SAFE MANNER IN ACCORDANCE WITH THE CONTRACTOR'S OPERATIONS MANUAL AND THE REQUIREMENTS SPECIFIED. OIL ABSORBENT DIAPERS SHALL BE PLACED UNDER ALL EQUIPMENT DURING FUELING OPERATIONS.

1.4. ALL HYDRAULIC EQUIPMENT OPERATING ON SITE SHALL HAVE VEGETABLE BASED, NON-TOXIC, NON-POLLUTING, AND BIO-DEGRADABLE HYDRAULIC FLUID.

1.5. ALL EQUIPMENT SHALL BE PROPERLY MAINTAINED AND RECORDED IN WEEKLY LOGS AS TO REQUIREMENTS FOR AND ACTUAL MAINTENANCE COMPLETED.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CLEANUP AND REMEDIATION OF HAZARDOUS MATERIAL RELEASES.

LOAD LIMITATIONS:

1. SURCHARGE LOADS BEHIND THE EAST BULKHEAD (CIRCA 2011) SHALL BE LIMITED TO 250 PSF.

2. THE CONTRACTOR SHALL MAKE ITS OWN DETERMINATION AS THE THE CAPACITY AND CONDITION OF THE EXISTING SOUTH BULKHEAD (CIRCA 1968) FOR THE PERFORMANCE OF THIS WORK. IT SHOULD BE NOTED THAT THE JANUARY 2018 WATERFRONT INSPECTION REPORT FOR STA EATONS NECK IDENTIFIED THE BULKHEAD TO BE IN SERIOUS CONDITION AND RECOMMENDED RESTRICTING LIVE LOADING AND FACILITY USAGE BEHIND THE BULKHEAD.

DESIGN CRITERIA:

SOUTH FLOATING DOCK:

1. THE DESIGN OF THE SOUTH FLOATING DOCK AND GUIDE PILES IS THE RESPONSIBILITY OF THE CONTRACTOR. THE REQUIRED DESIGN CRITERIA FOR THE SOUTH FLOATING DOCK AND GUIDE PILES ARE PROVIDED IN SECTION 35 51 13.00 20, CONCRETE FLOATING PIER FOR SMALL CRAFT. GUIDE PILES SHALL BE OVERSIZED TO INCLUDE SACRIFICIAL STEEL FOR AN ASSUMED CORROSION RATE OF 5 MILS/YEAR OVER AN ASSUMED DESIGN LIFE OF 25 YEARS.

2. DESIGN VESSELS

DESIGN VESSEL SPECIFICATIONS				
VESSEL	LENGTH (FT)	BEAM (FT)	DRAFT (FT)	DISPLACEMENT (LB)
45' RESPONSE BOAT - MEDIUM	44.8	14.6	3.3	36,500
29' RESPONSE BOAT - SMALL II	28.7	8.4	1.7	8,300

SOUTH BULKHEAD:

1. THE NEW BULKHEAD HAS BEEN DESIGNED FOR THE LATERAL EARTH AND GROUNDWATER PRESSURE, H, THAT IS GENERATED DURING A MEAN LOW WATER CONDITION IN COMBINATION WITH A 3.5-FOOT TIDAL LAG BETWEEN THE FRONT AND BACK OF THE BULKHEAD.

2. THE LATERAL EARTH AND GROUNDWATER PRESSURES ARE BASED ON A FINAL GRADE OF +7.75 FEET, NAVD 88 BEHIND THE BULKHEAD AND A MAXIMUM FUTURE DREDGE DEPTH OF -14.75 FEET, NAVD 88 (-10.0 FEET, MLW) + 1 FOOT OVERDREDGE.

3. THE NEW BULKHEAD HAS BEEN DESIGNED FOR A MAXIMUM UNIFORM LIVE LOAD, L, OF 250 PSF.

4. THE NEW BULKHEAD WAS DESIGNED TO ACCOUNT FOR AN ASSUMED CORROSION RATE OF 5 MILS/YEAR OVER AN ASSUMED DESIGN LIFE OF 25 YEARS.

5. BASIC LOAD COMBINATIONS WERE EVALUATED IN ACCORDANCE WITH ASCE 7-10 AND THE CONTROLLING LOAD CASES WERE UTILIZED TO DESIGN THE NEW BULKHEAD.

REQUIRED DESIGN CODES:

1. 2020 BUILDING CODE OF NEW YORK STATE

2. INTERNATIONAL BUILDING CODE 2018 (IBC 2018)

3. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, AMERICAN SOCIETY OF CIVIL ENGINEERS, ASCE 7-16

4. UNITED FACILITIES DESIGN, UFC 4-152-01 DESIGN: PIERS AND WHARVES

5. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

6. BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, AMERICAN CONCRETE INSTITUTE, ACI 318-19

7. PCI RECOMMENDED PRACTICE FOR DESIGN, MANUFACTURE, AND INSTALLATION OF PRESTRESSED ELEMENTS

8. AMERICAN INSTITUTE OF STEEL CONSTRUCTION, STEEL CONSTRUCTION MANUAL, AISC 15TH EDITION

9. AMERICAN WELDING SOCIETY, AWS D1.1

10. NATIONAL DESIGN STANDARD (NDS) FOR WOOD CONSTRUCTION.

LAYOUT:

1. THE HORIZONTAL CONTROL DATUM FOR THIS PROJECT IS THE NEW YORK STATE PLANE COORDINATE SYSTEM, LONG ISLAND ZONE .

2. THE VERTICAL CONTROL DATUM FOR THIS PROJECT IS NAVD 88.

3. LANDSIDE CONTOURS AND SPOT ELEVATIONS SHOWN ON THESE PLANS ARE REFERENCED TO NAVD 88, UNLESS NOTED OTHERWISE. WATERSIDE CONTOURS SHOWN ON THESE PLANS ARE REFERENCED TO MLW, UNLESS OTHERWISE NOTED.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING ALL LAYOUT WORK SHOWN FROM THE CONTROL MONUMENTATION PROVIDED.

5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SURVEY CONTROL THROUGHOUT CONSTRUCTION TO ESTABLISH AND MAINTAIN ALL LINES AND ELEVATIONS.

AVAILABLE SUBSURFACE INFORMATION:

1. GEOTECHNICAL INFORMATION, AS INCLUDED AND SHOWN IN THE CONTRACT DOCUMENTS, WAS OBTAINED FROM SOIL BORINGS COMPLETED BY THE USCG IN 2010 AND 2021 FOR USE IN THE COLLECTION OF GENERAL SITE INFORMATION RELATIVE TO SUBSURFACE CONDITIONS.

2. IT IS INTENDED THAT SUBSURFACE INFORMATION, AS NOTED ABOVE, BE USED ONLY AS AN INDICATION OF POSSIBLE SUBSURFACE CONDITIONS, AND THAT UPON THE CONTRACTOR'S REVIEW, FURTHER SUBSURFACE EXPLORATIONS MAY BE WARRANTED. SUCH EXPLORATIONS SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.

3. THE CONTRACTOR SHALL USE THE INFORMATION PROVIDED AT ITS OWN RISK AND SHALL COMPLETELY HOLD HARMLESS THE USCG FROM ALL CONSEQUENCES AND/OR FAULT ARISING FROM ITS USE.

DEMOLITION AND DECONSTRUCTION:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 02 41 00, DEMOLITION AND DECONSTRUCTION.

CIVIL WORKS FABRICATION:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 05 50 15, CIVIL WORKS FABRICATION.

FINISHES:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 09 97 13.26, COATING OF STEEL WATERFRONT STRUCTURES.

ELECTRICAL:

1. COORDINATE WITH THESE DRAWINGS AND SECTIONS 26 00 00.00 20, BASIC ELECTRICAL MATERIALS AND METHODS; 26 05 19.00 10, INSULATED WIRE AND CABLE; AND 26 27 29, MARINA ELECTRICAL WORK.

EARTHWORK:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 31 00 00, EARTHWORK.

2. EXCAVATED SLOPE GEOMETRY AND THE PROTECTION OF EXISTING STRUCTURES AND UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY.

STOCKPILE MANAGEMENT:

1. EXCAVATED MATERIAL GENERATED DURING THE EXECUTION OF THIS WORK SHALL BE TEMPORARILY STOCKPILED.

2. THE CONTRACTOR SHALL MAINTAIN THE STOCKPILES AND THE AREAS AROUND THEM SO THAT ARE GRADED TO DRAIN. THE CONTRACTOR SHALL ALSO TAKE ALL NECESSARY PRECAUTIONS TO MINIMIZE EROSION FROM THE STOCKPILES INCLUDING, BUT NOT LIMITED TO THE INSTALLATION OF STRAW BALES OR SILT FENCES.

3. EXCESS MATERIAL THAT DOES NOT MEET THE SPECIFIED GRADATION REQUIREMENTS AND/OR EXCAVATED MATERIAL IN EXCESS OF THAT REQUIRED FOR COMPLETING THIS PROJECT SHALL BE REMOVED AND DISPOSED OF OFFSITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.

U.S.C.G.
CE
US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY 2021

PLOTTING SCALE:1:1 | SCALE: AS SHOWN

A/E COMPANY:
A/E PROJECT NO.:
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER:
ARPIN, DAVID

DESIGNED BY: DJA | DRAWN BY: DJA | CHECKED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427G-003
USCG FILENAME P10107427G-003.DWG
SHEET 03 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

GENERAL

GENERAL NOTES - 1

SHEET ID
S FLOATING DOCK & S BULKHEAD
G-003

GEOTEXTILE:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 31 05 19, GEOTEXTILE.

METAL SHEET PILING:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 31 41 16, METAL SHEET PILING.

STEEL PIPE PILES:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 31 62 16.16, STEEL PIPE PILES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RETAINING A FLOATING DOCK MANUFACTURER FOR THE DESIGN OF THE FLOATING DOCK GUIDE PILES. THE DESIGN SHALL BE STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE UNITED STATES.

SEEDING:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 32 92 19, SEEDING.

CONCRETE FLOATING PIER FOR SMALL CRAFT:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 35 51 13.00 20, CONCRETE FLOATING PIER FOR SMALL CRAFT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RETAINING A FLOATING DOCK MANUFACTURER FOR THE DESIGN AND FABRICATION OF THE FLOATING DOCKS. THE DESIGN SHALL BE STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE UNITED STATES.

TEMPORARY ENVIRONMENTAL CONTROLS:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 01 57 20.00 10, ENVIRONMENTAL PROTECTION.
2. TURBIDITY BARRIERS SHALL BE DEPLOYED AROUND AND/OR IMMEDIATELY ADJACENT TO THE WORK AREA THAT COULD POTENTIALLY PRODUCE TURBIDITY IN THE WATER (E.G., OBSTRUCTION REMOVAL, DEMOLITION OF EXISTING BULKHEAD, ON SITE EXCAVATION, POWER WASHING EXISTING BULKHEAD, ETC.). TURBIDITY BARRIERS WILL NOT BE REQUIRED DURING SHEET PILE INSTALLATION AS IT IS NOT ANTICIPATED TO CAUSE APPRECIABLE TURBIDITY OR MUDLINE DISTURBANCE.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE, AND MUNICIPAL REGULATIONS AND PERMITS. ENVIRONMENTAL CONTROLS SHALL INCLUDE, BUT NOT BE LIMITED TO SEDIMENTATION, TURBIDITY, AND DUST.
4. THE PROJECT REQUIRES THE IMPLEMENTATION OF BEST MANAGEMENT PRACTICES (BMP) DURING CONSTRUCTION WORK TO PREVENT/MINIMIZE ENVIRONMENTAL IMPACTS DURING THE CONSTRUCTION ACTIVITY. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO:
   A. NO DEBRIS SHALL BE ALLOWED TO ENTER THE WATER. THE CONTRACTOR SHALL PROVIDE A TEMPORARY PLATFORM OR OTHER SUITABLE POSITIVE MEANS OF CAPTURING DEBRIS FROM CONSTRUCTION AND DEMOLITION OPERATIONS. THESE FACILITIES SHALL BE IN PLACE AND APPROVED BY THE COR BEFORE STARTING ANY DEMOLITION WORK.
5. THE CONTRACTOR SHALL PLACE CONSTRUCTION DEBRIS CONTROL DEVICES, BOOMS, TARPAULINS, FLOATS, STAGING AND OTHER DEVICES NECESSARY TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING THE WATER AND AIRBORNE MATERIALS FROM LEAVING THE IMMEDIATE VICINITY OF THE SITE.
6. DEMOLITION DEBRIS FALLING INTO THE WATER SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. UNDERWATER INSPECTIONS MAY BE CONDUCTED BY THE USCG TO VERIFY THAT THE CONTRACTOR HAS REMOVED ALL DEMOLITION AND CONSTRUCTION DEBRIS FROM THE MUDLINE.

DEWATERING:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 31 00 00, EARTHWORK.
2. WATER ELEVATIONS AT THE SITE ARE TIDAL AND WILL VARY. SUMPS AND PUMPS ARE EXPECTED TO BE ADEQUATE TO CONTROL INFLOWS AND/OR THE ACCUMULATION OF PONDED WATER DUE TO SURFACE WATER RUNOFF.
3. THE CONTRACTOR SHALL ROUTE ALL PUMPED WATER TO DEWATERING BASINS OR OTHER SUITABLE DEVICES (E.G., DEWATERING BAGS) PRIOR TO ALLOWING THE PUMPED WATER TO FLOW OVERLAND.

CONSTRUCTION SEQUENCING:

1. CONTRACTOR CONSTRAINTS TO SEQUENCING ARE AS FOLLOWS:
   A. STA EATONS NECK IS AN ACTIVE USCG INSTALLATION AND WILL MAINTAIN CONTINUOUS OPERATION THROUGHOUT THE COMPLETION OF THIS PROJECT. ACCORDINGLY, THE CONTRACTOR SHALL NOT INTERFERE WITH STATION OPERATIONS OR IMPEDE UPLAND OR WATER BASED ACCESS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING APPROVAL TO BEGIN EACH PHASE OF WORK IN COORDINATION WITH THE COR AND STA EATONS NECK OFFICER IN CHARGE.
   B. DESIGN, APPROVAL, FABRICATION, AND DELIVERY OF THE FLOATING DOCK, GUIDE PILES, AND ALL ASSOCIATED ITEMS SHALL BE COMPLETED BY THE CONTRACTOR PRIOR TO BEGINNING ANY WORK ON THE SOUTH FLOATING DOCK REPLACEMENT IN ORDER TO MINIMIZE THE AMOUNT OF TIME THAT THE SOUTH FLOATING DOCK IS OUT OF SERVICE.
   C. STA EATONS NECK VESSELS WILL TEMPORARILY MOOR AT THE NORTH FLOATING DOCK DURING THE SOUTH FLOATING DOCK REPLACEMENT WORK. THE CONTRACTOR SHALL MAINTAIN OPEN ACCESS FOR STA EATONS NECK VESSELS FROM THE NORTH FLOATING DOCK TO THE ENTRANCE CHANNEL AT ALL TIMES IN ORDER TO PREVENT ANY IMPACT TO STATION OPERATIONS.
   D. STA EATONS NECK VESSEL REFUELING OPERATIONS WILL OCCUR AT THE EAST BULKHEAD WHILE THE SOUTH FLOATING DOCK IS UNDER CONSTRUCTION. THE CONTRACTOR SHALL ALLOW ACCESS TO THE EAST BULKHEAD AT ALL TIMES WHILE THE SOUTH FLOATING DOCK IS OUT OF SERVICE.
   E. THE PROPOSED SOUTH BULKHEAD WORK IS ADJACENT TO THE STA EATONS NECK BOAT RAMP. THE CONTRACTOR SHALL COORDINATE WITH THE COR AND STA EATONS NECK OFFICER IN CHARGE ON WORK IN THIS AREA THAT MAY IMPEDE THE USE OF THE BOAT RAMP.
2. AREAS OF THE FACILITY NOT UNDER CONSTRUCTION SHALL REMAIN IN OPERATION DURING CONSTRUCTION. KEEP ALL CONSTRUCTION ACTIVITIES AND PERSONNEL CLEAR OF FACILITY OPERATIONS.

U.S.C.G.
US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY, 2021

PLOTTING SCALE:1:1 | SCALE: AS SHOWN

A/E COMPANY:
A/E PROJECT NO.:
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER:
ARPIN, DAVID

DESIGNED BY: DJA
DRAWN BY: DJA
EDITED BY: DJA
CHECKED BY: DJA

USCG PROJECT NO.
10107427

USCG DRAWING NO.
P10107427G-004

USCG FILENAME
P10104427G-004.DWG

SHEET 04 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

GENERAL
GENERAL NOTES - 2

SHEET ID
FLOATING DOCK & S BULKHEAD
G-004

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SOIL BORING LOG

Page 1 of 2

BORING I.D.	PROJECT NO.	PROJECT NAME		
B-5	NPV# 10160	Eatons Neck Coast Guard Station		
LOGGED BY	APPROVED BY	LOCATION		
Eric Arnesen	Eric Arnesen	Eatons Neck, New York		
DRILLING CONTRACTOR	DRILLER			
East Coast Geoservices, LLC	Steven J. McGinn			
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	BORING LOCATION DESCRIPTION		
2.5 inch/Hollow Stem Auger	4 inch	East side of softball field		
LAND SURFACE ELEVATION	COORDINATES	DRILLING EQUIPMENT/METHOD		SAMPLING METHOD
~21 feet	NA	Power Probe 9600		Split Spoon
DEPTH OF BORING	DEPTH TO WATER	START/FINISH DATE		BACKFILL
27 feet	~ 20 feet	10/06/10 to 10/06/10		Cuttings

Sample Depth (feet)	Sample Interval (feet)	Visual Description	Group Symbol	Blow Counts	PID (ppm)	Remarks
	0-2	Top 0.25 feet brown sandy loam. Bottom 1.0 feet reddish brown fine sand, trace gravel. Dry	SP	4-5-4-2	NA	1.25 feet recovered
2						
	2-4	Virtually no recovery. Mixture of brown fine sand, gravel and what appears to be pressboard. Likely part of former leach field.	SW	3-3-3-4	NA	0.5 feet recovered
4						
	4-6	No recovery. Stone in bottom of spoon. Likely gravel at the bottom of former leach field.		1-2-2-2	NA	No recovery
6						
	6-8	All red fine to coarse sand. Dry	SP	3-4-3-5	NA	0.8 feet recovered Sample submitted for sieve analysis
8						
	8-10	Top 0.5 feet red fine to coarse sand. Mid 0.3 feet light reddish brown fine to coarse sand and gravel. Bottom 0.2 feet light red sandy clay, trace gravel. Dry	SP SW SC	6-7-7-5	NA	1.0 feet recovered Sample submitted for sieve analysis and modified proctor test
10						
		All light red fine to medium sand, trace gravel.	SP	3-8-12-13	NA	1.0 feet recovered
12						
14						
	15-17	Top 1.2 feet light red clayey sand, trace gravel. Mid 0.3 feet light red sandy clay, trace gravel. Bottom 0.2 feet pinkish white clay.	SC SC CL	4-8-11-9	NA	1.7 feet recovered
16						
		Dry				
18						
20						
	20-22	All pinkish white fine to coarse sand and gravel, trace clay. Wet	SW	4-7-10-12	NA	1.0 feet recovered Depth to Water @ ~ 20 feet
22						
24						
	25 to 27	All pinkish white fine sand, tace gravel. Wet	SP	4-8-9-10	NA	0.5 feet recovered Boring Complete
26						
28						
30						
32						
34						
36						
38						
40						
42						
44						
46						
48						

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SOIL BORING LOG

Page 1 of 2

BORING I.D.	PROJECT NO.	PROJECT NAME		
B-6	NPV# 10160	Eatons Neck Coast Guard Station		
LOGGED BY	APPROVED BY	LOCATION		
Eric Arnesen	Eric Arnesen	Eatons Neck, New York		
DRILLING CONTRACTOR	DRILLER			
East Coast Geoservices, LLC	Steven J. McGinn			
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	BORING LOCATION DESCRIPTION		
2.5 inch/Hollow Stem Auger	4 inch	West side of softball field		
LAND SURFACE ELEVATION	COORDINATES	DRILLING EQUIPMENT/METHOD		SAMPLING METHOD
~20 feet	NA	Power Probe 9600		Split Spoon
DEPTH OF BORING	DEPTH TO WATER	START/FINISH DATE		BACKFILL
27 feet	~ 20 feet	10/06/10 to 10/06/10		Cuttings

Sample Depth (feet)	Sample Interval (feet)	Visual Description	Group Symbol	Blow Counts	PID (ppm)	Remarks
	0-2	Top 0.25 feet brown sandy loam. Bottom 1.0 feet reddish brown silty sand, trace gravel. Dry	SM	2-6-7-5	NA	1.25 feet recovered
2						
	2-4	Top 0.5 feet reddish brown silty sand, trace gravel. Mid 0.5 feet reddish brown fine sand, trace gravel. Bottom 0.5 feet dark brown silty sand, trace gravel. Dry	SM SP SM	8-12-8-7	NA	1.5 feet recovered
4						
	4-6	All brown to reddish brown fine to medium sand, trace coarse sand, trace silt.	SP	4-4-5-3	NA	1.7 feet recovered Sample submitted for sieve analysis and CBR
6						
	6-8	All brown to light brown fine sand. Dry	SP	Weight of Rods	NA	1.7 feet recovered
8						
	8-10	Top 1.5 feet strong brown fine sand. Bottom 0.25 feet red fine to coarse sand, trace silt.	SP SW	2 for 12 3-7	NA	1.75 feet recovered Sample submitted for sieve analysis and modified protor test
10						
		Top 1.0 feet light red fine to coarse sand and gravel, trace silt. Bottom 0.8 feet pink fine to coarse sand and gravel. Dry	SW SW	10-13-16-19	NA	1.8 feet recovered
12						
14						
	15-17	All pink fine to coarse sand and gravel. Dry		5-20-26-28	NA	1.0 feet recovered
16						
18						
20						
	20-22	All light red fine to coarse sand and gravel, trace clay. Wet	SW	8-16-19-16	NA	1.0 feet recovered Depth to Water @ ~ 20 feet
22						
24						
	25 to 27	All light red fine to medium sand and gravel. Wet	SW	5-11-18-32	NA	1.0 feet recovered Boring Complete
26						
28						
30						
32						
34						
36						
38						
40						
42						
44						
46						
48						

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SOIL BORING LOG

Page 1 of 1

BORING I.D.	PROJECT NO.	PROJECT NAME		
B-7	ECG# 03416	Eatons Neck Coast Guard Station		
LOGGED BY	APPROVED BY	LOCATION		
Eric Arnesen	Eric Arnesen	Eatons Neck, New York		
DRILLING CONTRACTOR	DRILLER			
East Coast Geoservices, LLC	Steven J. McGinn			
DRILL BIT DIAMETER/TYPE	BOREHOLE DIAMETER	BORING LOCATION DESCRIPTION		
2.5 inch/Hollow Stem Auger	4 inch	West of boat dock		
LAND SURFACE ELEVATION	COORDINATES	DRILLING EQUIPMENT/METHOD		SAMPLING METHOD
~10 feet	NA	Power Probe 9600		Split Spoon
DEPTH OF BORING	DEPTH TO WATER	START/FINISH DATE		BACKFILL
37 feet	~ 5 feet	10/06/10 to 10/06/10		Cuttings

Sample Depth (feet)	Sample Interval (feet)	Visual Description	Group Symbol	Blow Counts	PID (ppm)	Remarks
5						
	5 to 7	All brown medium to coarse sand and gravel. Wet	SW	6-6-5-4	NA	0.8 feet recovered
10						
	10 to 12	All brownish gray fine to coarse sand. Wet	SW	3-3-3-2	NA	1.0 feet recovered Sample submitted for sieve analysis
15						
	15 to 17	Top 0.5 feet brownish gray fine sand. Bottom 0.5 feet yellow coarse sand and gravel. Wet	SP SW	2-2-3-4	NA	1.0 feet recovered Sample submitted for sieve analysis
20						
	20 to 22	Top 0.5 feet light brown fine sand. Bottom 0.5 feet brown fine to coarse sand and gravel, trace clay. Wet	SP SW	15-6-4-15	NA	1.0 feet recovered Sample submitted for sieve analysis
25						
	25 to 27	Top 0.8 feet light red fine to medium sand, trace clay. Bottom 0.95 feet pinkish white fine to medium sand, trace gavel, trace clay. Wet	SP SP	7-6-12-21		1.75 feet recovered
30						
	30 to 32	Top 1.3 feet light red fine sand. Bottom 0.7 feet pinish white fine to medium sand, trace gravel, trace clay. Wet	SP SW	15-15-20-25	NA	2.0 feet recovered
35						
	35 to 37	All pinish white fine to medium sand, trace gravel. Wet	SP	18-24-24-31		1.5 feet recovered Boring Complete
40						
45						
50						

SOIL NOTES

1. SOIL BORING DATA BY NELSON, POPE, & VOORHIS, LLC, OCTOBER 2010.
2. SOIL BORING DATA SHOWN IS INCLUDED FOR INFORMATION ONLY. THESE BORINGS ARE INCLUDED TO INFORM THE BIDDER OF THE TYPE AND CHARACTER OF THE MATERIALS TO BE ENCOUNTERED.
3. SOIL BORING LOCATIONS ARE SHOWN ON SHEET C-101.
4. WATER LEVEL OBSERVATIONS WERE MADE AT THE TIME OF THE SUBSURFACE INVESTIGATIONS AND DO NOT NECESSARILY REPRESENT GROUNDWATER ELEVATIONS AT THE TIME OF CONSTRUCTION. GROUNDWATER LEVELS MAY FLUCTUATE WITH SEASON, TEMPERATURE, RAINFALL, AND TIDE.

U.S.C.G.
US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY, 2021

SCALE: AS SHOWN
PLOTTING SCALE 1:1

A/E COMPANY:
A/E PROJECT NO.:
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
ARPIN, DAVID
DESIGNED BY: DJA
DRAWN BY: DJA
CHECKED BY: DJA
EDITED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427B-001
USCG FILENAME P10104427B-001.DWG
SHEET 05 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK NY
NORTHPORT
GEOTECHNICAL
BORING LOGS – 1

SHEET ID
S FLOATING DOCK & S BULKHEAD
B–001

BORING CG-SB-01 — PAGE 1 of 3

BORING INFORMATION

NORTHING (ft): 287370.7 | EASTING (ft): 1150351.3
GROUND SURFACE EL. (ft): 8.2 | DATE START/END: 5/10/2021 - 5/10/2021
VERT./HORIZ. DATUMS: NAVD88/NAD 1983 | DRILLING COMPANY: Craig Test Boring
TOTAL DEPTH (ft): 82.0 | DRILLER NAME: Nick Beehler
LOGGED BY: J. Passno | RIG TYPE: CME 55 ATV

DRILLING INFORMATION

HAMMER TYPE: Automatic | CASING I.D./O.D.: 4 inch/ 4.5 inch | CORE BARREL TYPE: NA
AUGER I.D./O.D.: NA / NA | DRILL ROD O.D.: 2.5 inch | CORE BARREL I.D./O.D.: NA / NA
DRILLING METHOD: Mud Rotary with Casing
WATER LEVEL DEPTHS (ft): ▽ 4.0 5/10/2021

ABBREVIATIONS: Pen. = Penetration Length; Rec. = Recovery Length; RQD = Rock Quality Designation = Length of Sound Cores>4 in / Pen.,%; WOR = Weight of Rods; WOH = Weight of Hammer; S = Split-Spoon Sample; C = Core Sample; U = Undisturbed Sample; SC = Sonic Core; DP = Direct Push Sample; HSA = Hollow-Stem Auger; Qp = Pocket Penetrometer Strength; Sv = Pocket Torvane Shear Strength; LL = Liquid Limit; PL = Plasticity Limit; PID = Photoionization Detector; I.D./O.D. = Inside Diameter/Outside Diameter; NA, NM = Not Applicable, Not Measured; Blows per 6 in.: 140-lb hammer falling 30 inches to drive a 2-inch-O.D. split spoon sampler.

ELEV. FT. / DEPTH FT.	TYPE and NO.	DEPTH FT.	PEN/REC IN./IN.	BLOWS /6 in. or RQD	FIELD TEST DATA	GRAPHIC LOG	VISUAL IMPACTS	ODOR	REMARKS	MATERIAL DESCRIPTION
										STRATUM I -GRANULAR FILL at ~0 ft / El. 8.2
	S1	0 to 2	24/12	2-5-7-12						S1 (0-8"): NARROWLY GRADED SAND (SP); ~85% fine to medium sand; ~10% fine subrounded gravel up to 0.5in; ~5% nonplastic fines; tan; dry. S1 (8"-12"): Asphalt fragments.
	S2	2 to 4	24/1	19-9-6-6						S2: Asphalt fragments.
										STRATUM II - UPPER BEACH DEPOSITS at ~4 ft / El. 4.2
	S3	4 to 6	24/5	6-9-11-11					Drive 5ft of casing. Roller bit to 4ft.	S3: NARROWLY GRADED SAND WITH GRAVEL (SW); ~80% fine to coarse sand; ~15% gravel rounded up to 0.75in; ~5% nonplastic fines; light brown; moist.
	S4	6 to 8	24/18	11-8-6-8						S4: NARROWLY GRADED SAND WITH GRAVEL (SP); 49% fine to coarse sand; 47% fine gravel sub-rounded to rounded, up to 1.0in; 4% nonplastic fines; light brown; wet. [GRAIN SIZE TEST PERFORMED]
	S5	8 to 10	24/5	3-2-2-3					Drive 5ft of casing (10ft). Roller bit to 8ft. Chatter and resistance at 6 to 8ft	S5: NARROWLY GRADED GRAVEL WITH SAND (GP); ~55% fine to medium rounded gravel up to 0.5in; ~40% fine to coarse sand; ~5% nonplastic fines; light brown; wet.
	S6	10 to 12	24/7	3-2-2-3						S6: NARROWLY GRADED GRAVEL WITH SAND (GP); Similar to S5.
	S7	15 to 15	0/0						Mix quikgel. Drive 5ft of casing (15ft). Casing refusal at 12.5ft. Roller bit to 15ft. Chatter and resistance to 15ft. Rock fragments observed in drill cuttings. Remove 5ft section of casing add 4ft of casing (14ft). Roller bit to 20ft. Chatter and resistance to 20ft.	S7: No penetration with sampler, likely boulder.
	S8	20 to 20	0/0						Roller bit to 25ft. Clear obstruction at 21ft.	S8: No penetration with sampler, likely boulder.
										STRATUM II - LOWER BEACH DEPOSITS at ~21 ft / El. -12.8

NOTES:

PROJECT NAME: USCG Eaton's Neck
CITY/STATE: Eaton's Neck, New York
GEI PROJECT NUMBER: 2101531

BORING CG-SB-01 — PAGE 2 of 3

NORTHING (ft): 287370.7 | EASTING (ft): 1150351.3
GROUND SURFACE EL. (ft): 8.2 | DATE START/END: 5/10/2021 - 5/10/2021
VERT./HORIZ. DATUMS: NAVD88/NAD 1983 | DRILLING COMPANY: Craig Test Boring

ELEV. FT. / DEPTH FT.	TYPE and NO.	DEPTH FT.	PEN/REC IN./IN.	BLOWS /6 in. or RQD	FIELD TEST DATA	GRAPHIC LOG	VISUAL IMPACTS	ODOR	REMARKS	MATERIAL DESCRIPTION
	S9	25 to 27	24/0	16-13-14-11						S9: No recovery.
									Roller bit to 30ft.	
	S10	30 to 32	24/5	8-8-12-9						S10: SILTY GRAVEL WITH SAND (GM); ~50% fine to medium sub-angular to sub-rounded gravel up to 0.75-in; ~30% fine to coarse sand; ~20% nonplastic to low plasticity fines; tan; wet.
									Roller bit to 35ft.	
	S11	35 to 37	24/8	13-17-13-15						S11: SILTY SAND WITH GRAVEL (SM); ~50% fine to coarse sand; ~30% fine to medium sub-angular to sub-rounded gravel up to 0.75-in; ~20% nonplastic to low plasticity fines; tan; wet.
									Roller bit to 40ft.	
	S12	40 to 42	24/1	7-13-16-20						S12: No recovery; gravel wash.
									Roller bit to 45ft. Drill string clogged with gravel.	
	S13	45 to 47	24/12	5-11-9-11						S13: CLAYEY SAND (SC); 64.7% fine to medium sand; 35.3% low to medium plasticity fines, slow dilatancy; low dry strength; white; wet. [GRAIN SIZE TEST PERFORMED]
									Roller bit to 50ft.	
	S14	50 to 52	24/4	9-4-14-14						**STARTUM IV - GLACIAL DEPOSITS at ~50 ft / El. -41.8** S14: NARROWLY GRADED GRAVEL WITH SILT (GP); ~60% fine to medium sub-rounded to rounded gravel up to 0.75in; ~20% low plasticity fines; white; wet.
									Roller bit to 55ft. Loss of drilling fluid.	

NOTES:

PROJECT NAME: USCG Eaton's Neck
CITY/STATE: Eaton's Neck, New York
GEI PROJECT NUMBER: 2101531

BORING CG-SB-01 — PAGE 3 of 3

NORTHING (ft): 287370.7 | EASTING (ft): 1150351.3
GROUND SURFACE EL. (ft): 8.2 | DATE START/END: 5/10/2021 - 5/10/2021
VERT./HORIZ. DATUMS: NAVD88/NAD 1983 | DRILLING COMPANY: Craig Test Boring

ELEV. FT. / DEPTH FT.	TYPE and NO.	DEPTH FT.	PEN/REC IN./IN.	BLOWS /6 in. or RQD	FIELD TEST DATA	GRAPHIC LOG	VISUAL IMPACTS	ODOR	REMARKS	MATERIAL DESCRIPTION
	S15	55 to 57	24/12	18-22-17-18						S15: SILTY GRAVEL WITH SAND (GM); ~55% fine to medium sub-angular to sub-rounded gravel up to 0.75-in; ~25% fine to coarse sand; ~20% low plasticity fines; tan to white; wet.
									Roller bit to 60ft.	
	S16	60 to 62	24/16	18-20-24-23						S16: WIDELY GRADED SAND WITH SILT (SW-SM); 83% fine to coarse sand; 9% fine subrounded gravel up to 0.75in; 8% nonplastic fines; tan; wet. Coarser sand with gravel towards bottom of sample. [GRAIN SIZE TEST PROFORMED]
									Roller bit to 65ft.	
	S17	65 to 67	24/16	25-26-27-25						S17: NARROWLY GRADED GRAVEL WITH SAND AND SILT (GP-GM); ~60% fine to medium sub-rounded to rounded gravel up to 1.0in; ~30% fine to coarse sand; 10% nonplastic fines; white to tan; wet.
									Roller bit to 70ft. Hole collapse before S18. Re-drill to 70ft.	
	S18	70 to 70.4	5/0	100/5"						S18: NO RECOVERY; rock in spoon tip.
									Roller bit to 75ft. Loss of drilling fluid.	
	S19	75 to 77	24/19	18-22-22-25						S19: NARROWLY GRADED SAND WITH SILT (SP-SM); ~90% fine to medium sand; ~10% nonplastic to low plasticity fines; white to tan; wet.
									Roller bit to 80ft.	
	S20	80 to 82	24/22	25-25-39-38						S20: NARROWLY GRADED SAND WITH SILT (SP-SM); ~90% fine to medium sand; ~10% nonplastic to low plasticity fines; white to tan to red to gray; wet.
										Bottom of boring at depth 82 ft. Backfilled with drill spoils.

NOTES:

PROJECT NAME: USCG Eaton's Neck
CITY/STATE: Eaton's Neck, New York
GEI PROJECT NUMBER: 2101531

BORING CG-SB-02 — PAGE 1 of 3

BORING INFORMATION

NORTHING (ft): 28739.3 | EASTING (ft): 1150395.2
GROUND SURFACE EL. (ft): 7.8 | DATE START/END: 5/11/2021 - 5/11/2021
VERT./HORIZ. DATUMS: NAVD88/NAD 1983 | DRILLING COMPANY: Craig Test Boring
TOTAL DEPTH (ft): 80.0 | DRILLER NAME: Nick Beehler
LOGGED BY: J. Passno | RIG TYPE: CME 55 ATV

DRILLING INFORMATION

HAMMER TYPE: Automatic | CASING I.D./O.D.: 4 inch/ 4.5 inch | CORE BARREL TYPE: NA
AUGER I.D./O.D.: NA / NA | DRILL ROD O.D.: 2.5 inch | CORE BARREL I.D./O.D.: NA / NA
DRILLING METHOD: Mud Rotary with Casing
WATER LEVEL DEPTHS (ft): Not measured

ABBREVIATIONS: Pen. = Penetration Length; Rec. = Recovery Length; RQD = Rock Quality Designation = Length of Sound Cores>4 in / Pen.,%; WOR = Weight of Rods; WOH = Weight of Hammer; S = Split-Spoon Sample; C = Core Sample; U = Undisturbed Sample; SC = Sonic Core; DP = Direct Push Sample; HSA = Hollow-Stem Auger; Qp = Pocket Penetrometer Strength; Sv = Pocket Torvane Shear Strength; LL = Liquid Limit; PL = Plasticity Limit; PID = Photoionization Detector; I.D./O.D. = Inside Diameter/Outside Diameter; NA, NM = Not Applicable, Not Measured; Blows per 6 in.: 140-lb hammer falling 30 inches to drive a 2-inch-O.D. split spoon sampler.

ELEV. FT. / DEPTH FT.	TYPE and NO.	DEPTH FT.	PEN/REC IN./IN.	BLOWS /6 in. or RQD	FIELD TEST DATA	GRAPHIC LOG	VISUAL IMPACTS	ODOR	REMARKS	MATERIAL DESCRIPTION
										STRATUM I - GRANULAR FILL at ~0 ft / El. 7.8
	S1	0 to 2	24/12	6-16-10-9						S1: NARROWLY GRADED SAND WITH GRAVEL AND SILT (SP-SM); ~70% fine to medium sand; ~20% fine subrounded to rounded gravel up to 0.75in; ~10% nonplastic fines; brown, black and tan; dry. Asphalt fragments.
	S2	2 to 4	24/16	8-9-7-6						S2: NARROWLY GRADED SAND WITH GRAVEL (SP); ~70% fine to medium sand; ~25% fine subrounded to rounded gravel up to 0.75in; ~5% nonplastic fines; light brown, dry.
										STRATUM II - UPPER BEACH DEPOSITS at ~4 ft / El. 3.8
	S3	4 to 6	24/0	6-6-5-7					Drive 5ft of casing. Roller bit to 4ft.	S3: NO RECOVERY; rock stuck in spoon tip.
	S4	6 to 8	24/15	8-7-6-7						S4: WIDELY GRADED SAND WITH GRAVEL (SW); ~70% fine to coarse sand; ~25% fine subrounded to rounded gravel up to 1.0in; ~5% nonplastic fine; light brown; wet.
	S5	8 to 10	24/6	4-6-5-3					Mix polymer slurry. Roller bit to 8ft.	S5: NARROWLY GRADED SAND WITH GRAVEL AND SILT (SP-SM); ~70% fine to medium sand; ~20% fine subrounded to rounded gravel up to 0.75in; ~10% nonplastic fines; brown, wet.
	S6	10 to 12	24/6	2-3-3-3						S6: NARROWLY GRADED SAND WITH GRAVEL (SP); ~75% fine to medium sand; ~20% fine subrounded to rounded gravel up to 0.5in; ~5% nonplastic fines; light brown to tan at bottom; wet.
									Roller bit to 15ft.	
	S7	15 to 17	24/6	7-7-6-7					Drive 10ft casing (15ft). Roller bit to 20ft. Chatter and resistance between 17 to 18ft. Loss of drilling fluid.	S7: WIDELY GRADED SAND WITH GRAVEL (SW); ~85% fine to coarse sand; ~10% fine sub-rounded to rounded gravel up to 0.5in; ~5% nonplastic fines; tan; wet.
										STRATUM III - LOWER BEACH DEPOSITS at ~20 ft / El. -12.2
	S8	20 to 22	24/14	13-18-21-20					Roller bit to 25ft. Hole collapse prior to roller bit.	S8: SILTY SAND WITH GRAVEL (SM); 67% fine to coarse sand; 15% fine to medium sub-angular to sub-rounded gravel up to 1.0-in; 18% nonplastic to low plasticity fines; tan to white varves; wet. [GRAIN SIZE TEST PERFORMED].

NOTES:

PROJECT NAME: USCG Eaton's Neck
CITY/STATE: Eaton's Neck, New York
GEI PROJECT NUMBER: 2101531

BORING CG-SB-02 — PAGE 2 of 3

NORTHING (ft): 28739.3 | EASTING (ft): 1150395.2
GROUND SURFACE EL. (ft): 7.8 | DATE START/END: 5/11/2021 - 5/11/2021
VERT./HORIZ. DATUMS: NAVD88/NAD 1983 | DRILLING COMPANY: Craig Test Boring

ELEV. FT. / DEPTH FT.	TYPE and NO.	DEPTH FT.	PEN/REC IN./IN.	BLOWS /6 in. or RQD	FIELD TEST DATA	GRAPHIC LOG	VISUAL IMPACTS	ODOR	REMARKS	MATERIAL DESCRIPTION
	S9	25 to 27	24/14	12-20-23-23						S9: NARROWLY GRADED SAND WITH GRAVEL (SP); ~85% fine to medium sand; ~10% nonplastic fines; ~5% fine subrounded to rounded gravel up to 0.5in; tan to white; wet.
									Drive 5ft of casing (20ft). Roller bit to 30ft.	
	S10	30 to 32	24/15	32-27-21-21						S10: NARROWLY GRADED SAND WITH GRAVEL (SP); ~70% fine to medium sand; ~25% fine subrounded to rounded gravel up to 1.5in; ~5% nonplastic fines; white-tan; wet.
									Roller bit to 35ft.	
	S11	35 to 37	24/14	23-21-18-20						S11: NARROWLY GRADED SAND WITH SILT AND GRAVEL (SP-SM); 56% fine to coarse sand; 33% fine subrounded to rounded gravel up to 0.75in; 11% nonplastic fines; white to tan; wet. [GRAIN SIZE TEST PERFORMED].
									Roller bit to 40ft.	
	S12	40 to 42	24/12	17-15-20-15						S12: WIDELY GRADED SAND WITH GRAVEL (SW); ~65% fine to coarse sand; ~30% fine sub-rounded to rounded gravel up to 1.0in; ~5% nonplastic fines; tan and white; wet.
									Roller bit to 45ft. Hole collapse prior to roller bit.	
	S13	45 to 47	24/24	8-14-18-21						S13: SILTY SAND (SM); 71.2% fine sand; 28.3% nonplastic to low plasticity fines; 0.5% fine gravel; light gray; wet.
									Roller bit to 50ft. Drill string clogged.	
										STRATUM IV - GLACIAL DEPOSITS at ~50 ft / El. -42.2
	S14	50 to 52	24/17	22-25-23-21						S14: WIDELY GRADED SAND WITH GRAVEL (SW); ~70% fine to coarse sand; ~25% fine sub-rounded to rounded gravel up to 0.75in; ~5% nonplastic fines; tan to white; wet.
									Roller bit to 55ft. Hole collapse prior to roller bit.	

NOTES:

PROJECT NAME: USCG Eaton's Neck
CITY/STATE: Eaton's Neck, New York
GEI PROJECT NUMBER: 2101531

BORING CG-SB-02 — PAGE 3 of 3

NORTHING (ft): 28739.3 | EASTING (ft): 1150395.2
GROUND SURFACE EL. (ft): 7.8 | DATE START/END: 5/11/2021 - 5/11/2021
VERT./HORIZ. DATUMS: NAVD88/NAD 1983 | DRILLING COMPANY: Craig Test Boring

ELEV. FT. / DEPTH FT.	TYPE and NO.	DEPTH FT.	PEN/REC IN./IN.	BLOWS /6 in. or RQD	FIELD TEST DATA	GRAPHIC LOG	VISUAL IMPACTS	ODOR	REMARKS	MATERIAL DESCRIPTION
	S15	55 to 57	24/17	20-21-27-24						S15: WIDELY GRADED SAND WITH GRAVEL (SW); ~60% fine to coarse sand; ~35% fine sub-rounded to rounded gravel up to 1.0in; ~5% nonplastic fines; tan to white; wet.
									Roller bit to 60ft. Hole collapse prior to roller bit. Loss of drilling fluid.	
	S16	60 to 62	24/16	12-20-23-20						S16: NARROWLY GRADED SAND WITH GRAVEL (SP); ~85% fine to medium sand; ~10% fine subrounded gravel up to 0.5in; ~5% nonplastic fines; tan; wet.
									Roller bit to 65ft. Drill rods stuck in borehole. Drive 25ft of casing (45ft). Roller bit to 65ft.	
	S17	65 to 67	24/14	16-19-22-20						S17: WIDELY GRADED SAND WITH GRAVEL (SW); ~55% fine to coarse sand; ~40% fine sub-rounded to rounded gravel up to 1.0in; ~5% nonplastic fines; tan; wet.
									Roller bit to 70ft.	
	S18	70 to 72	24/16	22-23-22-26						S18: WIDELY GRADED SAND WITH GRAVEL (SW); ~50% fine to coarse sand; ~45% fine sub-rounded to rounded gravel up to 1.0in; ~5% nonplastic fines; tan; wet.
									Roller bit to 75ft. Loss of drilling fluid. Driller indicated clay layer between 73 and 74ft.	
	S19	75 to 77	24/22	21-26-27-27						S19: SILTY SAND (SM); ~75% fine to medium sand; ~25% nonplastic to low plasticity fines; white; wet.
									Roller bit to 78ft.	
	S20	78 to 80	24/22	9-17-18-24						S20: NARROWLY GRADED SAND WITH SILT (SP-SM); ~90% fine to medium sand; ~10% nonplastic to low plasticity fines; white to tan to red; wet.
										STRATUM III - LOWER BEACH DEPOSITS at ~81 ft / El. -73.2
										Bottom of boring at depth 80 ft. Backfilled with drill spoils.

NOTES:

PROJECT NAME: USCG Eaton's Neck
CITY/STATE: Eaton's Neck, New York
GEI PROJECT NUMBER: 2101531

SOIL NOTES

1. SOIL BORING DATA BY GEI CONSULTANTS, MAY 2021.
2. SOIL BORING DATA SHOWN IS INCLUDED FOR INFORMATION ONLY. THESE BORINGS ARE INCLUDED TO INFORM THE BIDDER OF THE TYPE AND CHARACTER OF THE MATERIALS TO BE ENCOUNTERED.
3. SOIL BORING LOCATIONS ARE SHOWN ON SHEET C-101.
4. WATER LEVEL OBSERVATIONS WERE MADE AT THE TIME OF THE SUBSURFACE INVESTIGATIONS AND DO NOT NECESSARILY REPRESENT GROUNDWATER ELEVATIONS AT THE TIME OF CONSTRUCTION. GROUNDWATER LEVELS MAY FLUCTUATE WITH SEASON, TEMPERATURE, RAINFALL, AND TIDE.

U.S.C.G.
US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY, 2021

PLOTTING SCALE:1:1 | SCALE: AS SHOWN

A/E COMPANY:
A/E PROJECT NO.:
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

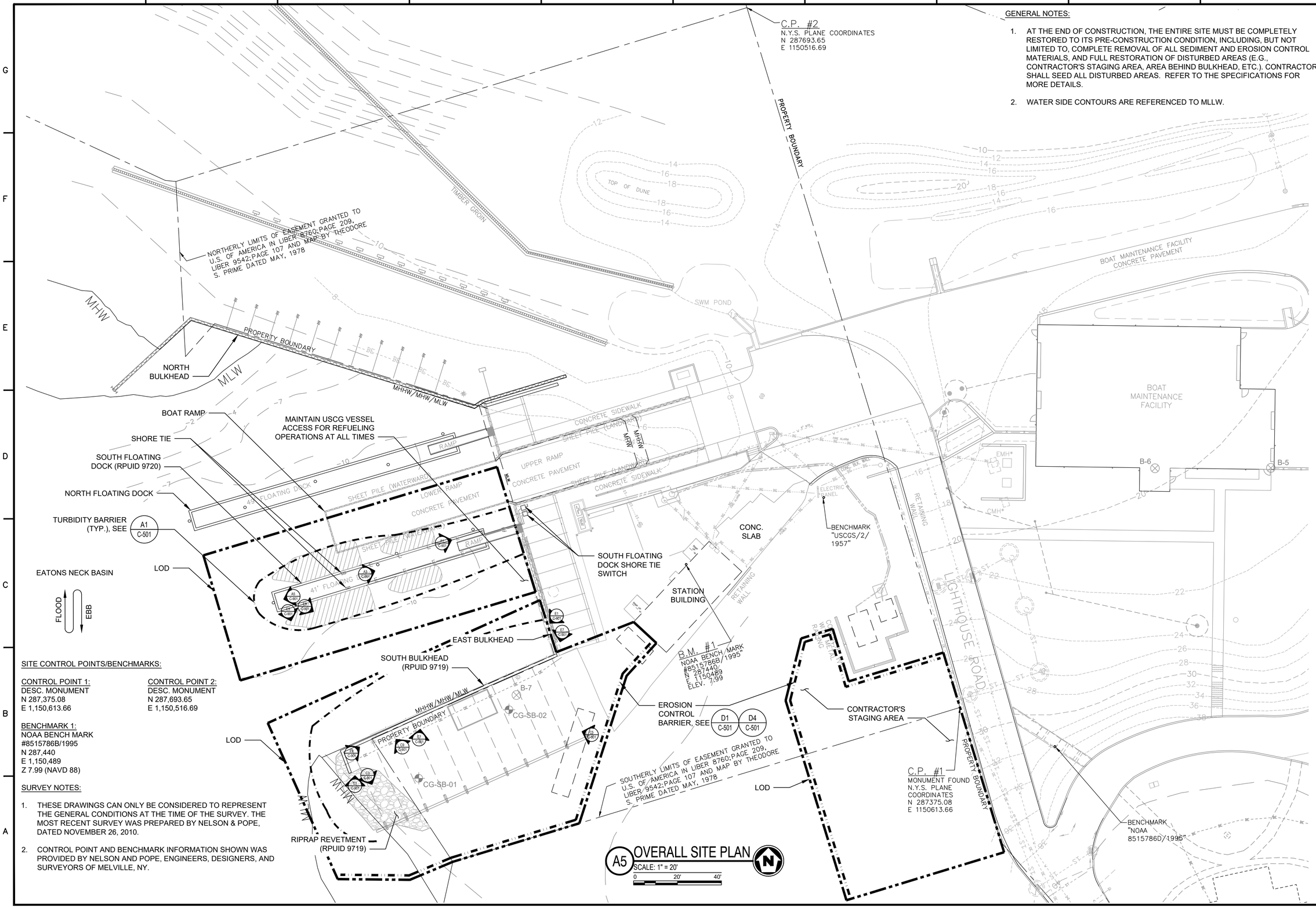
PROJECT ENGINEER:
ARPIN, DAVID
DESIGNED BY: DJA | DRAWN BY: DJA
EDITED BY: DJA | CHECKED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427B-002
USCG FILENAME P10107427B-002.DWG
SHEET 06 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

GEOTECHNICAL
BORING LOGS – 2

SHEET ID
S FLOATING DOCK & S BULKHEAD
B–002



A5 OVERALL SITE PLAN
SCALE: 1" = 20'
0 20' 40'

GENERAL NOTES:

1. AT THE END OF CONSTRUCTION, THE ENTIRE SITE MUST BE COMPLETELY RESTORED TO ITS PRE-CONSTRUCTION CONDITION, INCLUDING, BUT NOT LIMITED TO, COMPLETE REMOVAL OF ALL SEDIMENT AND EROSION CONTROL MATERIALS, AND FULL RESTORATION OF DISTURBED AREAS (E.G., CONTRACTOR'S STAGING AREA, AREA BEHIND BULKHEAD, ETC.). CONTRACTOR SHALL SEED ALL DISTURBED AREAS. REFER TO THE SPECIFICATIONS FOR MORE DETAILS.
2. WATER SIDE CONTOURS ARE REFERENCED TO MLLW.

SITE CONTROL POINTS/BENCHMARKS:

CONTROL POINT 1:
DESC. MONUMENT
N 287,375.08
E 1,150,613.66

CONTROL POINT 2:
DESC. MONUMENT
N 287,693.65
E 1,150,516.69

BENCHMARK 1:
NOAA BENCH MARK
#8515786B/1995
N 287,440
E 1,150,489
Z 7.99 (NAVD 88)

SURVEY NOTES:

1. THESE DRAWINGS CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITIONS AT THE TIME OF THE SURVEY. THE MOST RECENT SURVEY WAS PREPARED BY NELSON & POPE, DATED NOVEMBER 26, 2010.
2. CONTROL POINT AND BENCHMARK INFORMATION SHOWN WAS PROVIDED BY NELSON AND POPE, ENGINEERS, DESIGNERS, AND SURVEYORS OF MELVILLE, NY.

U.S.C.G.
US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY, 2021

PLOTTING SCALE:1:1 | SCALE: AS SHOWN

A/E COMPANY:
A/E PROJECT NO.:
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER:
ARPIN, DAVID

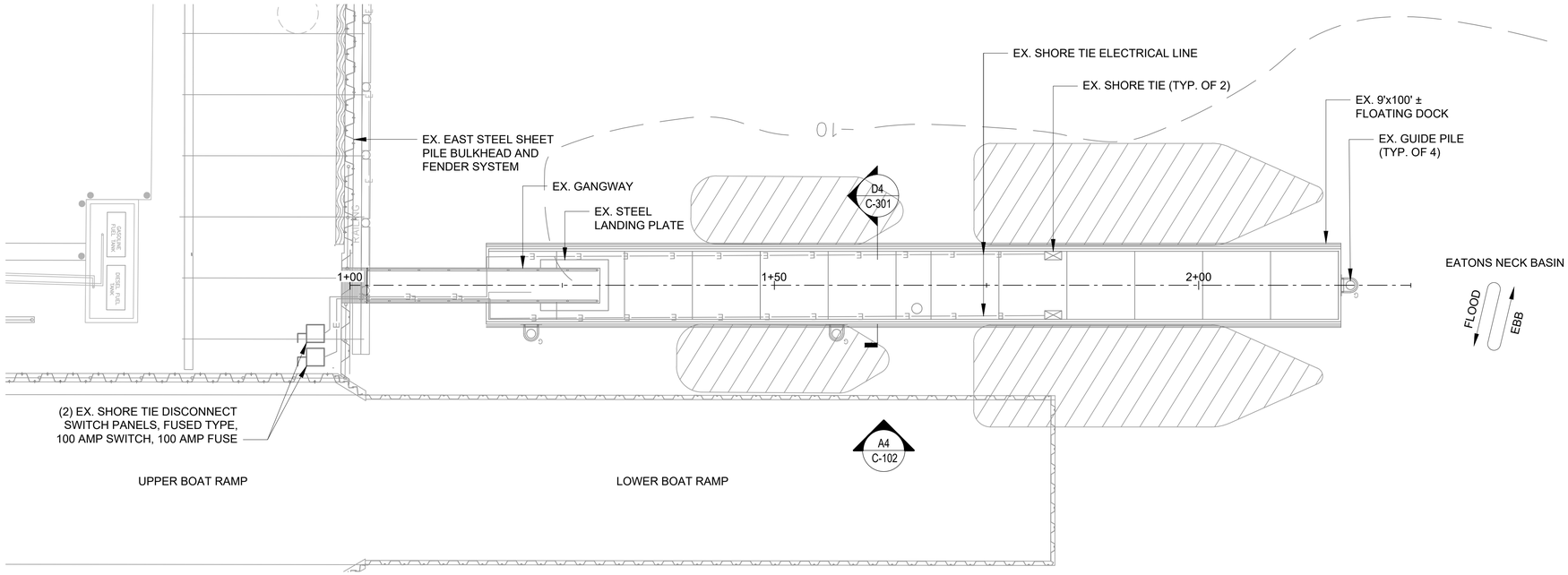
DESIGNED BY: DJA | DRAWN BY:
EDITED BY: DJA | CHECKED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427C-101
USCG FILENAME P10104427C-101.DWG
SHEET 07 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

CIVIL
OVERALL SITE PLAN

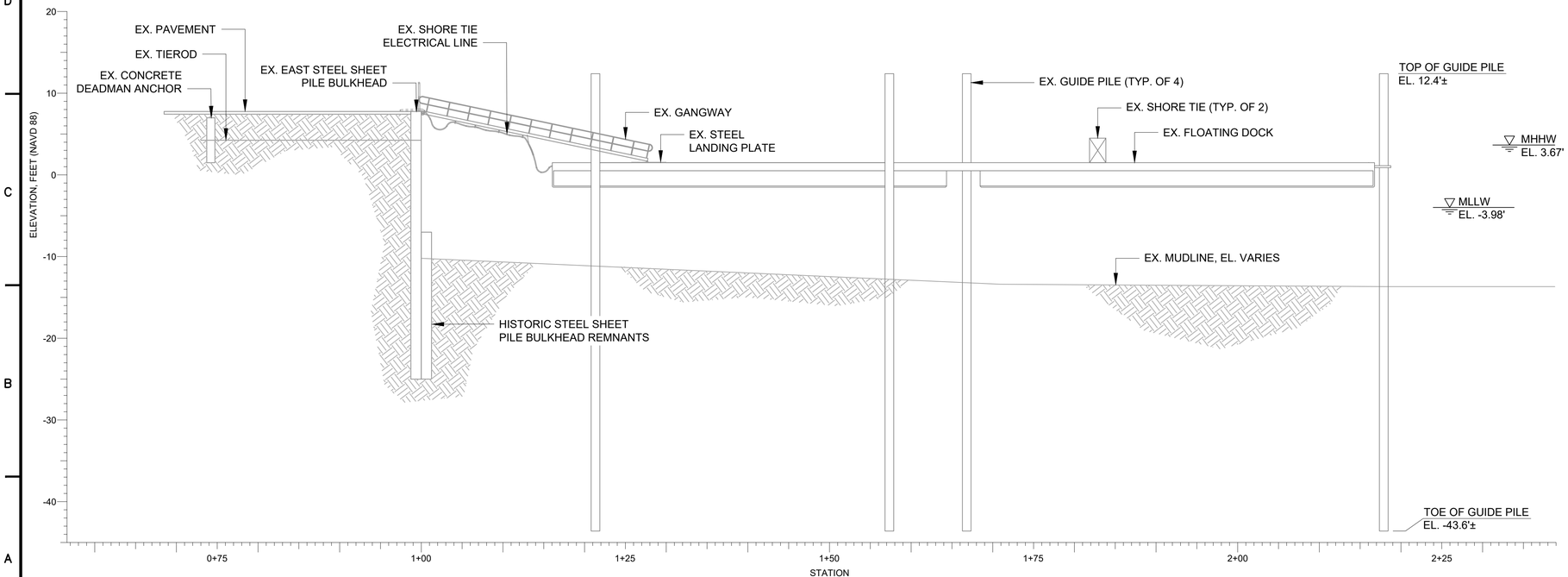
SHEET ID
S FLOATING DOCK & S BULKHEAD
C–101



D4 EXISTING SOUTH FLOATING DOCK PLAN

SCALE: 1/8" = 1'

0 8' 16'



A4 EXISTING SOUTH FLOATING DOCK ELEVATION

C-102

SCALE: 1/8" = 1'

0 8' 16'

US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY. 2021

PLOTTING SCALE:1:1 | SCALE: AS SHOWN

A/E COMPANY: | A/E PROJECT NO.: | CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

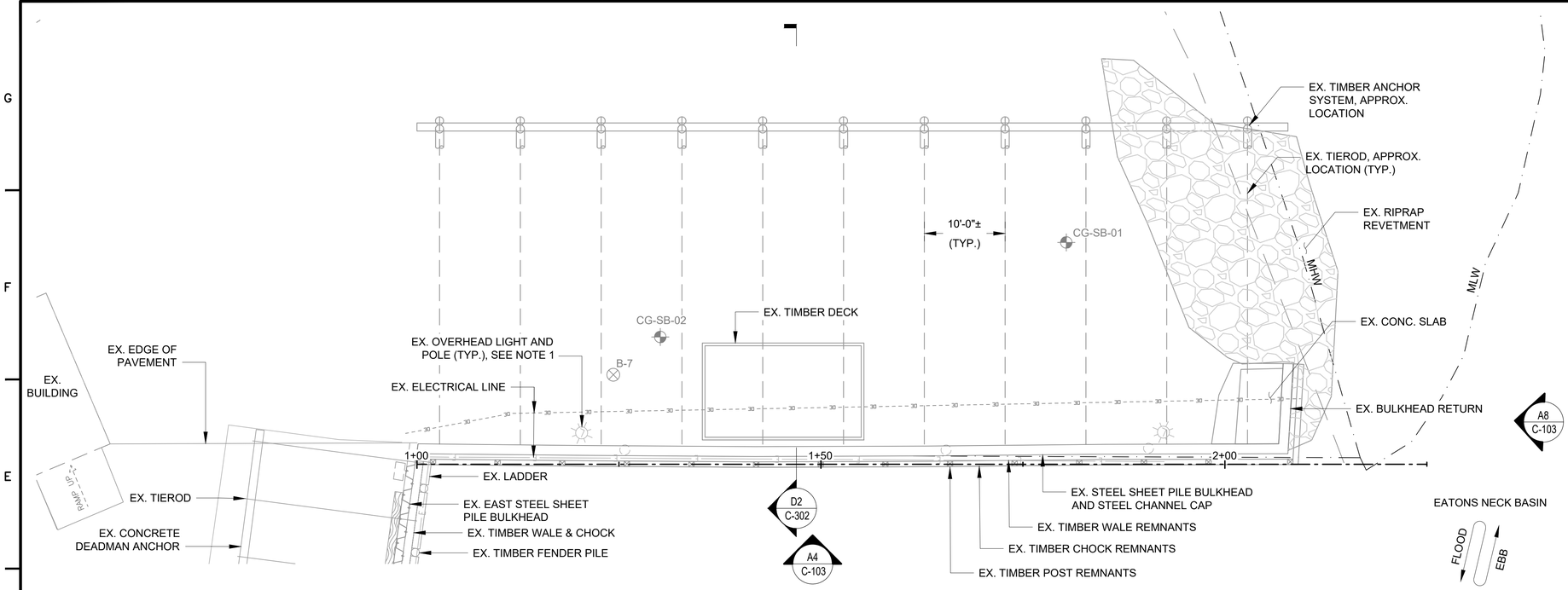
PROJECT ENGINEER: ARPIN, DAVID
DESIGNED BY: DJA
DRAWN BY: DJA
CHECKED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427C-102
USCG FILENAME P10104427C-102.DWG
SHEET 08 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

CIVIL
EXISTING SOUTH FLOATING DOCK PLAN AND ELEVATION

SHEET ID
S FLOATING DOCK
C–102



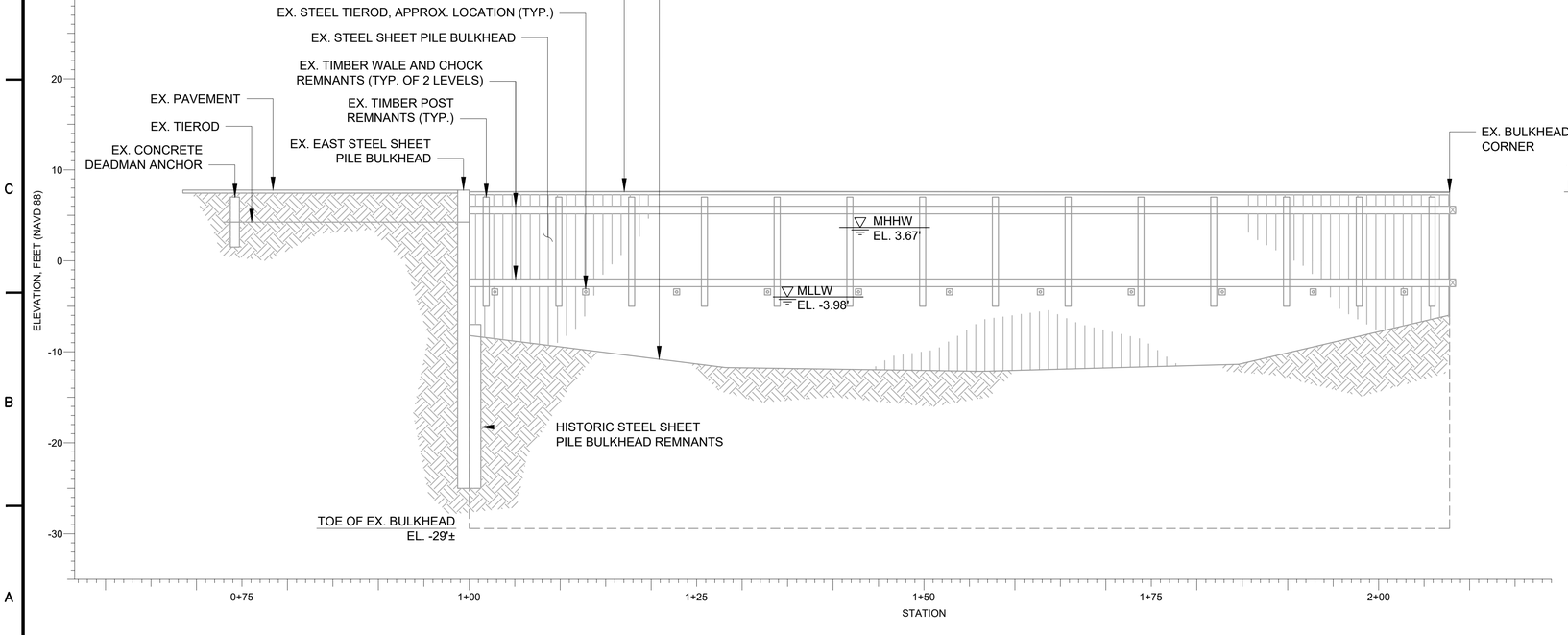
D4 EXISTING SOUTH BULKHEAD PLAN

SCALE: 1/8" = 1'

0 8' 16'

NOTE:

1. THE EX. OVERHEAD LIGHT POLES ARE A SELF-LOWERING TYPE. LIGHTS ARE CONTROLLED BY A TIMER AT THE PANEL LOCATED WITHIN THE BOAT MAINTENANCE FACILITY BOILER ROOM.

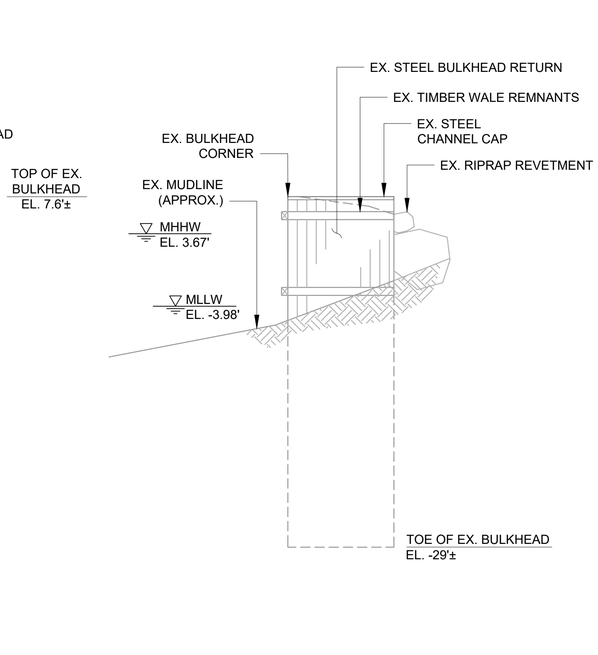


A4 EXISTING SOUTH BULKHEAD ELEVATION

SCALE: 1/8" = 1'

0 8' 16'

C-103



A8 EXISTING SOUTH BULKHEAD RETURN ELEVATION

SCALE: 1/8" = 1'

0 8' 16'

C-103

US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY, 2021

PLOTTING SCALE: 1:1
SCALE: AS SHOWN

A/E COMPANY:
A/E PROJECT NO.:
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER:
ARPIN, DAVID

DRAWN BY: DJA
DESIGNED BY: DJA
CHECKED BY: DJA
EDITED BY: DJA

USCG PROJECT NO.
10107427

USCG DRAWING NO.
P10107427C-103

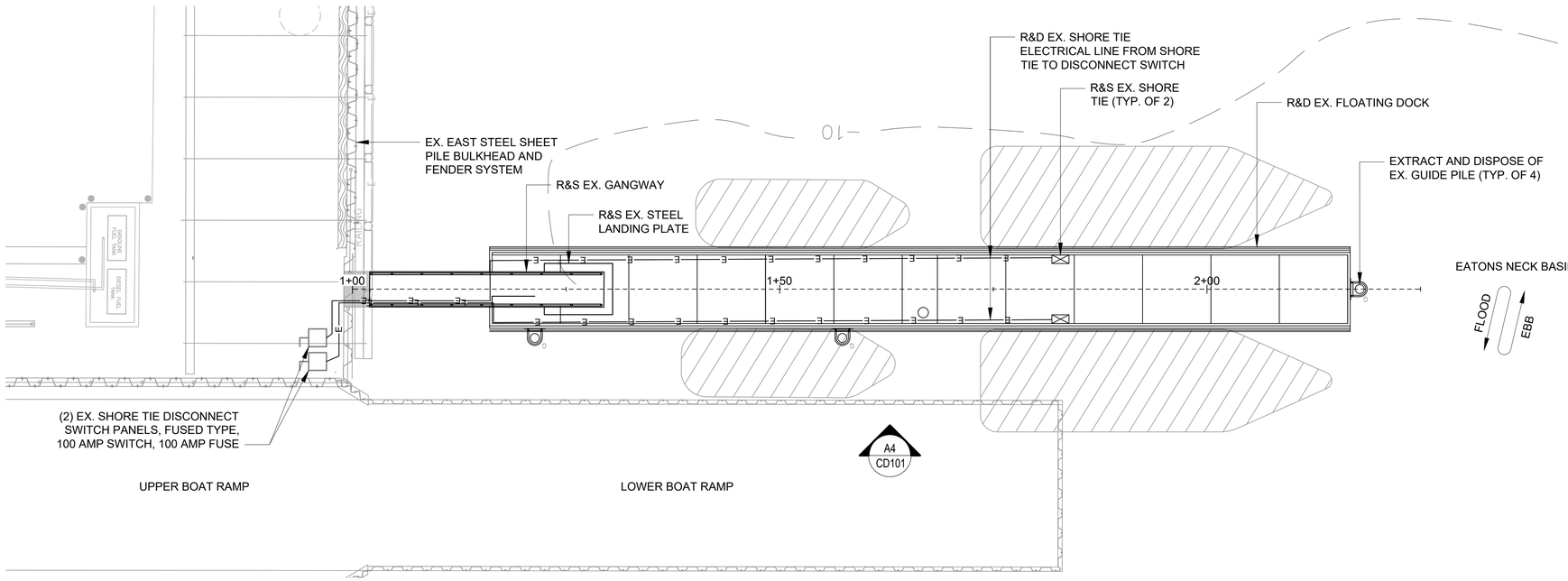
USCG FILENAME
P10104427C-103.DWG

SHEET 09 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

CIVIL
EXISTING SOUTH BULKHEAD PLAN AND ELEVATION

SHEET ID
S BULKHEAD
C-103



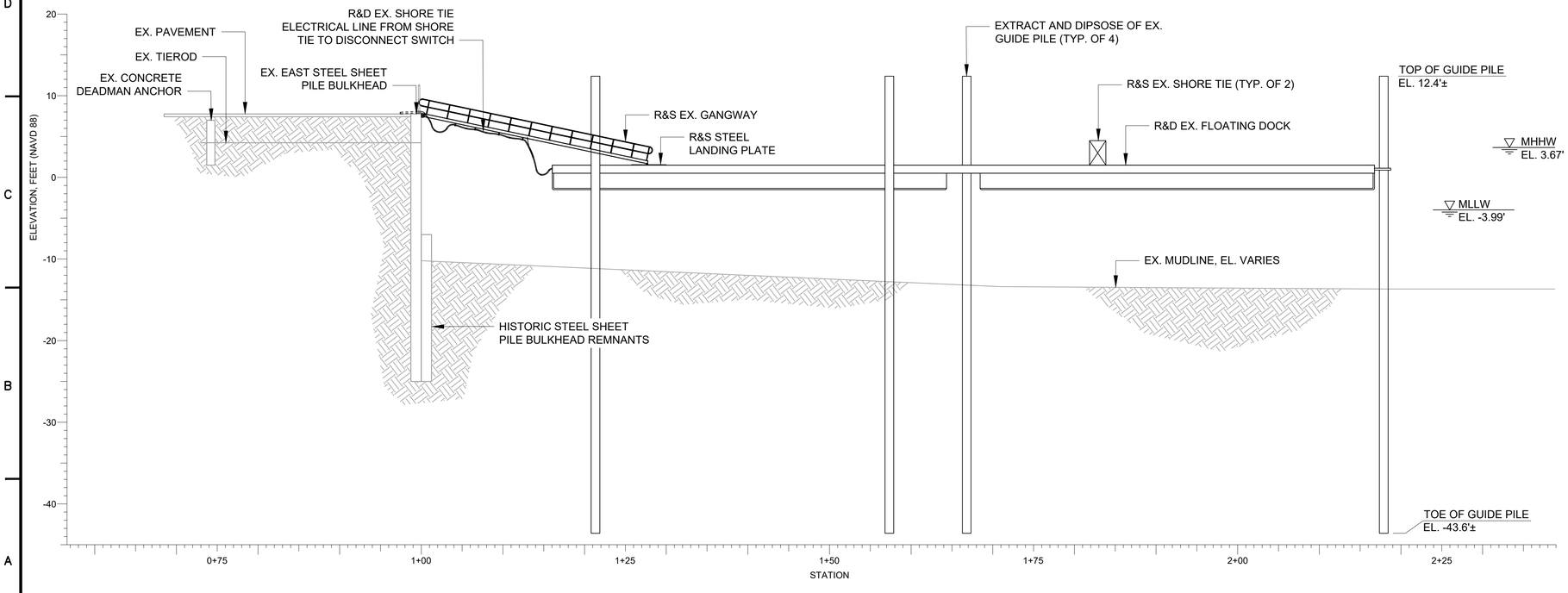
D4 BBI NO. 1: DEMO SOUTH FLOATING DOCK PLAN

SCALE: 1/8" = 1'

0 8' 16'

FLOATING DOCK DEMOLITION NOTES:

1. THE CONTRACTOR SHALL REMOVE, SALVAGE, AND SECURELY STORE THE FOLLOWING DURING CONSTRUCTION:
   - 1.1. GANGWAY
   - 1.2. GANGWAY LANDING PLATE
   - 1.3. SHORE-TIES
   - 1.4. DOCK BOXES
   - 1.5. SPILL KITS
   - 1.6. FUEL LINE
   - 1.7. WATER LINE
   - 1.8. HOSE REELS
   - 1.9. AERATOR
   - 1.10. LIFE RINGS, RESCUE LINE, & RACK
   - 1.11. MOORING LINES
   - 1.12. MATS ON DOCKS



A4 BBI NO. 1: DEMO SOUTH FLOATING DOCK ELEVATION

SCALE: 1/8" = 1'

CD101

0 8' 16'

U.S.C.G.
US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY, 2021

PLOTTING SCALE:1:1 | SCALE: AS SHOWN

A/E COMPANY:
A/E PROJECT NO.:
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER:
ARPIN, DAVID

DESIGNED BY: DJA
DRAWN BY: DJA
CHECKED BY: DJA

USCG PROJECT NO.
10107427

USCG DRAWING NO.
P10107427CD101

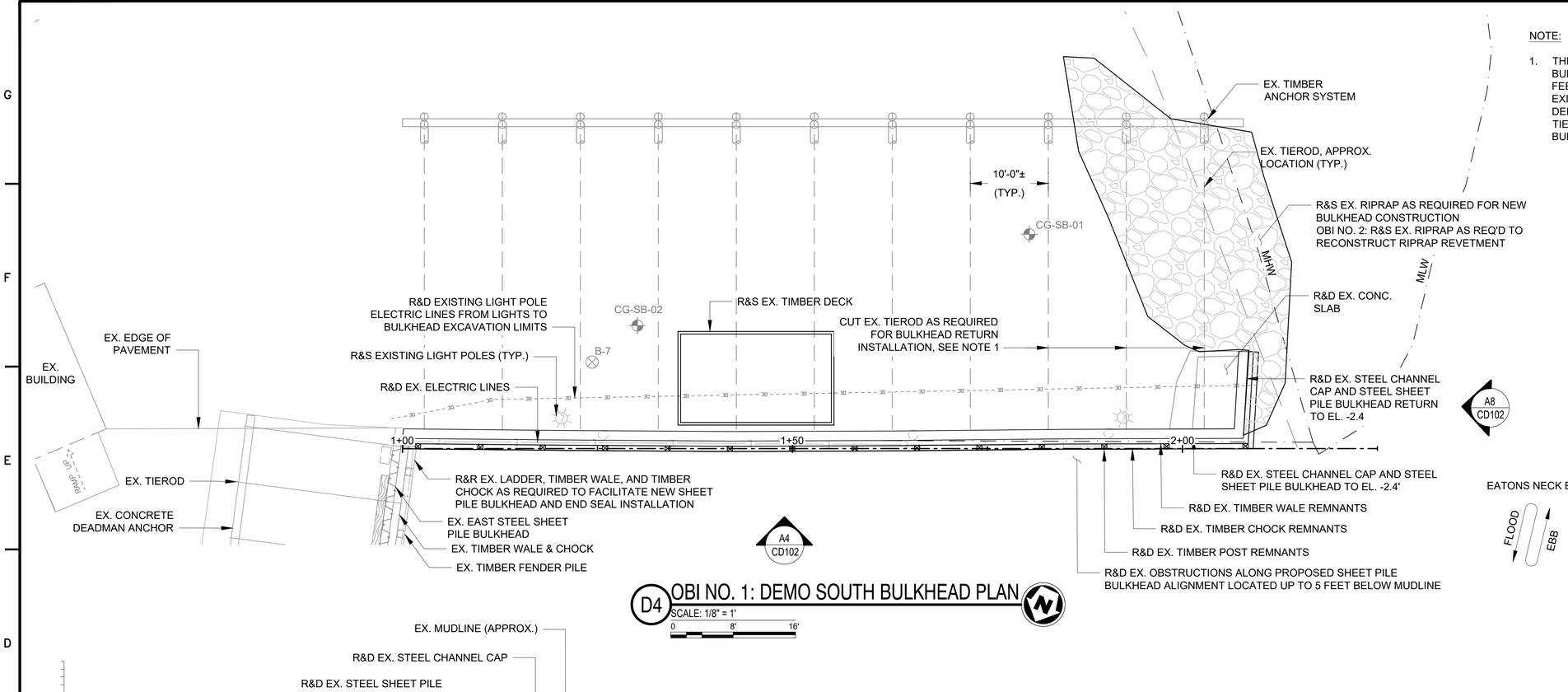
USCG FILENAME
P10104427CD101.DWG

SHEET 10 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

CIVIL DEMOLITION
SOUTH FLOATING DOCK DEMOLITION & REMOVAL PLAN AND ELEVATION

SHEET ID
S FLOATING DOCK
CD101



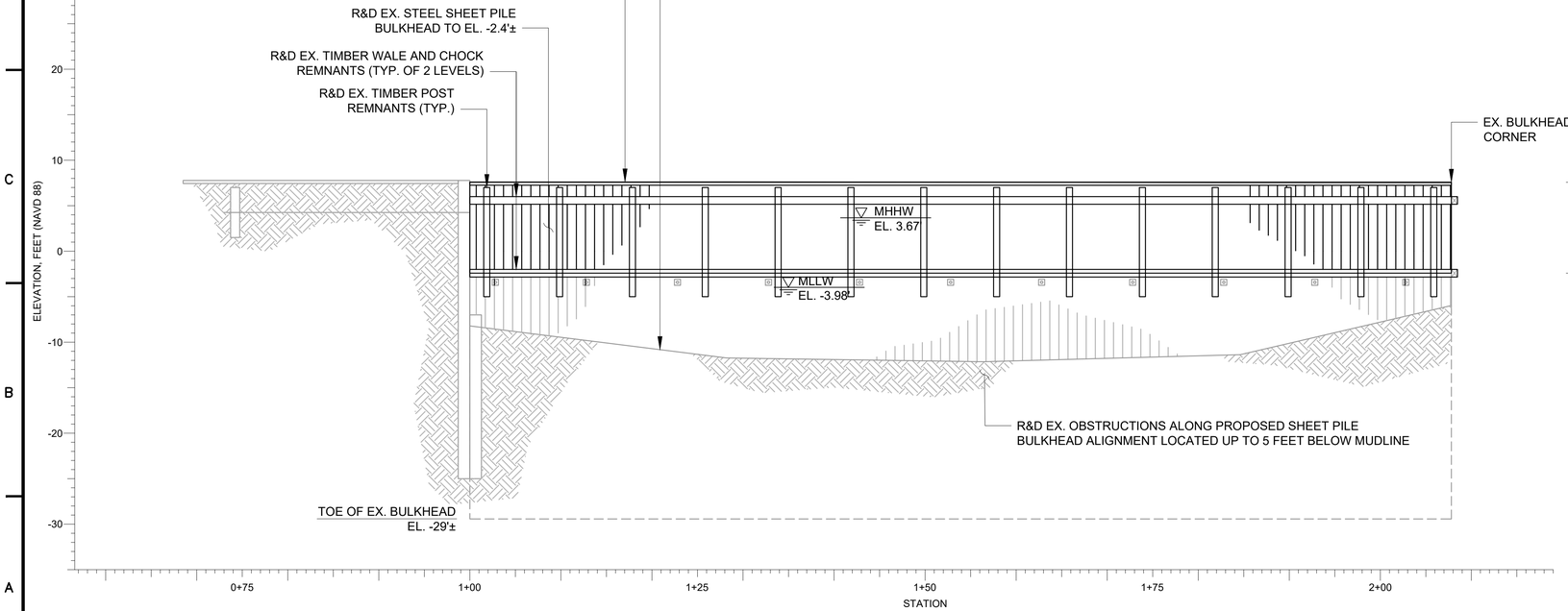
D4 OBI NO. 1: DEMO SOUTH BULKHEAD PLAN

SCALE: 1/8" = 1'

0 8' 16'

NOTE:

1. THE BACKFILL BEHIND THE EXISTING BULKHEAD SHALL BE REMOVED TO 2 FEET (MIN) BELOW THE SPECIFIED EXISTING SHEET PILE BULKHEAD CUT DEPTH PRIOR TO CUTTING ANY EXISTING TIERODS IN ORDER TO UNLOAD THE BULKHEAD.

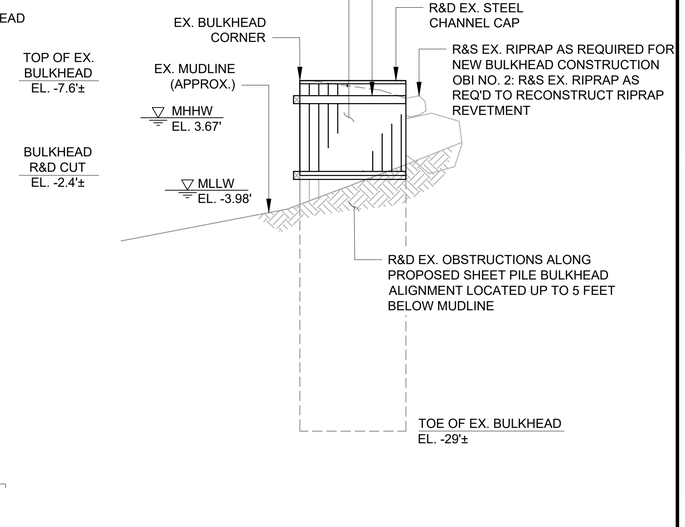


A4 OBI NO. 1: DEMO SOUTH BULKHEAD ELEVATION

SCALE: 1/8" = 1'

CD102

0 8' 16'



A8 OBI NO. 1: DEMO SOUTH BULKHEAD RETURN ELEVATION

SCALE: 1/8" = 1'

CD102

0 8' 16'

US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY, 2021

PLOTTING SCALE: 1:1 | SCALE: AS SHOWN

A/E COMPANY:

A/E PROJECT NO.:

CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER: ARPIN, DAVID

DRAWN BY: DJA
DESIGNED BY: DJA
CHECKED BY: DJA
EDITED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427CD102
USCG FILENAME P10104427CD102.DWG
SHEET 11 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

CIVIL DEMOLITION
SOUTH BULKHEAD DEMOLITION & REMOVAL PLAN AND ELEVATION

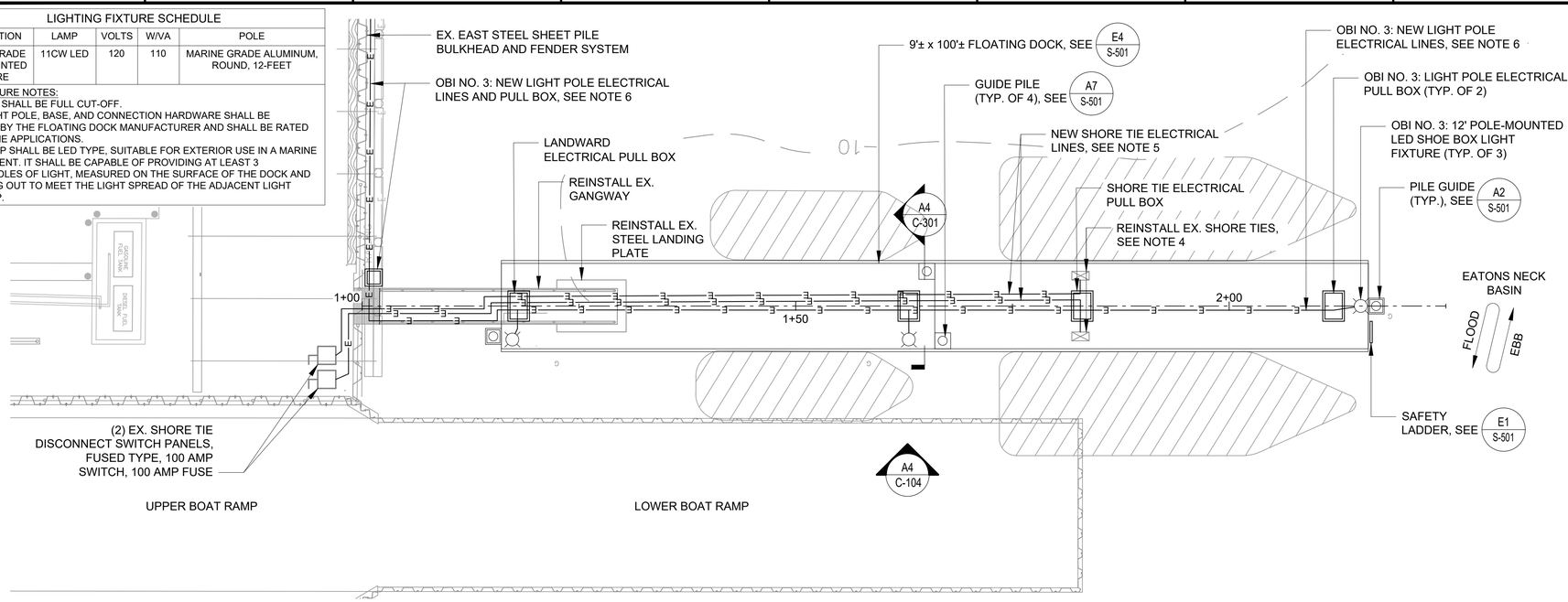
SHEET ID

S BULKHEAD

CD102

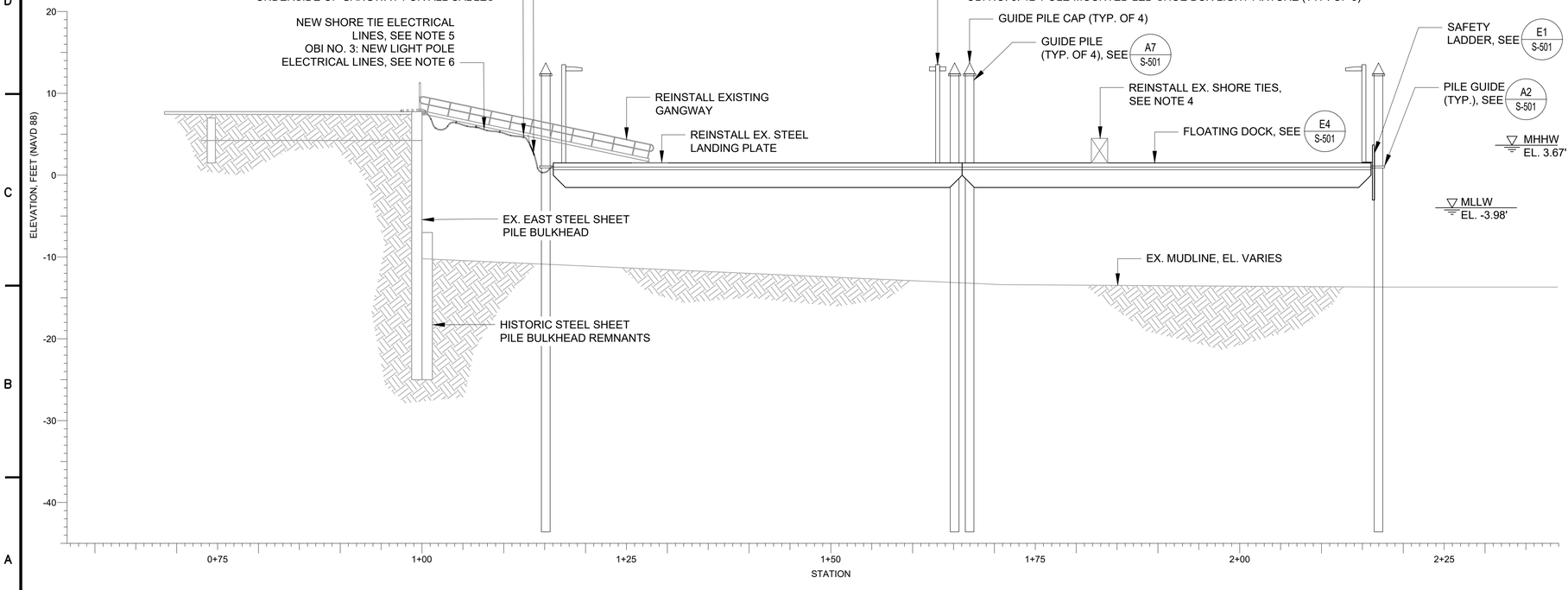
LIGHTING FIXTURE SCHEDULE				
DESCRIPTION	LAMP	VOLTS	W/VA	POLE
MARINE GRADE POLE MOUNTED FIXTURE	11CW LED	120	110	MARINE GRADE ALUMINUM, ROUND, 12-FEET

LIGHT FIXTURE NOTES:
1. FIXTURE SHALL BE FULL CUT-OFF.
2. THE LIGHT POLE, BASE, AND CONNECTION HARDWARE SHALL BE DESIGNED BY THE FLOATING DOCK MANUFACTURER AND SHALL BE RATED FOR MARINE APPLICATIONS.
3. THE LAMP SHALL BE LED TYPE, SUITABLE FOR EXTERIOR USE IN A MARINE ENVIRONMENT. IT SHALL BE CAPABLE OF PROVIDING AT LEAST 3 FOOT-CANDLES OF LIGHT, MEASURED ON THE SURFACE OF THE DOCK AND EXTENDING OUT TO MEET THE LIGHT SPREAD OF THE ADJACENT LIGHT POLE/LAMP.



D4 BBI NO. 1: PROPOSED SOUTH FLOATING DOCK PLAN

SCALE: 1/8" = 1'
0 8' 16'



A4 BBI NO. 1: PROPOSED SOUTH FLOATING DOCK ELEVATION

SCALE: 1/8" = 1'
0 8' 16'

C-104

FLOATING DOCK NOTES:

1. THE FLOATING DOCK MANUFACTURER SHALL COORDINATE JUNCTION BOXES, CONDUIT PENETRATIONS, SUPPORTS, AND ANCHOR BOLT INSTALLATIONS WITH THE ELECTRICAL CONTRACTOR PRIOR TO FABRICATION OF FLOATING DOCKS.
2. CONTRACTOR SHALL CONSULT WITH COR ON SITE FOR FINAL PLACEMENT OF SALVAGED ITEMS AS LISTED ON SHEET CD101.
3. REFER TO SECTION 35 51 13.00 20, CONCRETE FLOATING PIER FOR SMALL CRAFT FOR FLOATING DOCK AND GUIDE PILE DESIGN CRITERIA, PERFORMANCE REQUIREMENTS, AND MATERIAL SPECIFICATIONS FOR DOCKS AND AMENITIES.
4. THE EXISTING SHORE TIES SHALL BE REINSTALLED ON THE NEW FLOATING DOCKS AND SHALL BE SECURED TO THE DECK WITH DRILLED AND GROUTED ANCHORS DESIGNED BY THE FLOATING DOCK MANUFACTURER. EXISTING SHORE TIES ARE RUSSELLSTOLL MAXGARD INTERLOCKED RECEPTACLE DBRS 1116-100.
5. F&I NEW SHORE TIE ELECTRICAL LINES IN ACCORDANCE WITH THE FOLLOWING:
   - 5.1. THE NEW ELECTRICAL LINE SHALL BE CONTINUOUS (I.E., NO SPLICES). PROVIDE SUBMERSIBLE BUS CONNECTORS FOR ALL POWER LINES AT THE LANDWARD PULL BOX IN THE FLOATING DOCK.
   - 5.2. EACH ELECTRICAL SHORE-TIE RECEPTACLE BRANCH CIRCUIT SHALL BE "HOME-RUN" BACK TO THEIR RESPECTIVE CIRCUIT BREAKERS IN THE SHORE TIE SWITCH PANEL.
   - 5.3. NEW ELECTRICAL LINES SHALL BE MARINE GRADE 2/C#1+G, TYPE G.
   - 5.4. PULL BOXES SHALL BE MARINE GRADE, WATER TIGHT, AND CORROSION RESISTANT.
   - 5.5. NEW ELECTRICAL LINES SHALL BE INSTALLED THROUGH THE INTERNAL UTILITY CHASE OF THE NEW FLOATING DOCK.
   - 5.6. WHERE ELECTRICAL LINES ARE SUPPORTED BY THE GANGWAY, PROVIDE SUFFICIENT SLACK IN THE LINES TO ALLOW FOR THE MOVEMENT OF THE FLOATING DOCK AND GANGWAY WITH THE TIDES.
   - 5.7. AFTER INSTALLATION, COMPLETE THE ELECTRICAL CONNECTIONS REQUIRED TO RESTORE THE FUNCTION OF THE SHORE TIES.
6. OBI NO. 3: F&I NEW FLOATING DOCK LIGHT POLE ELECTRICAL LINES IN ACCORDANCE WITH THE FOLLOWING:
   - 6.1. THE NEW ELECTRICAL LINE SHALL BE CONTINUOUS (I.E., NO SPLICES). PROVIDE SUBMERSIBLE BUS CONNECTORS FOR ALL POWER LINES AT THE LANDWARD PULL BOX IN THE FLOATING DOCK.
   - 6.2. THE NEW ELECTRICAL LINES SHALL BE 12 AWG MARINE GRADE AND SHALL EXTEND FROM THE FLOATING DOCK, TO BELOW THE GANGWAY, TO BELOW THE EAST BULKHEAD TIMBER FENDER WALE, PENETRATE THE SOUTH BULKHEAD, AND SPLICE INTO THE SOUTH BULKHEAD LIGHT POLE UNDERGROUND ELECTRICAL LINE AS SHOWN ON THIS SHEET AND C-105.
   - 6.3. WHERE ELECTRICAL LINES ARE SUPPORTED BY THE GANGWAY, PROVIDE SUFFICIENT SLACK IN THE LINES TO ALLOW FOR THE MOVEMENT OF THE FLOATING DOCK AND GANGWAY WITH THE TIDES.
   - 6.4. PROVIDE A PULL BOX FOR THE ELECTRICAL LINE AT THE TRANSITION FROM THE GANGWAY TO THE EAST BULKHEAD TIMBER FENDER WALE. MOUNT THE PULL BOX TO THE TIMBER FENDER WALE.
   - 6.5. PROVIDE TRAFFIC RATED HAND HOLES AT THE BULKHEAD PENETRATION AND AT THE TIE IN TO THE SOUTH BULKHEAD LIGHT POLE UNDERGROUND ELECTRICAL LINE.
   - 6.6. PULL BOXES AND HAND HOLES SHALL BE MARINE GRADE, WATER TIGHT, AND CORROSION RESISTANT.
   - 6.7. WHERE EXTENDING OVER WATER, THE NEW ELECTRICAL LINE SHALL BE ENCASED IN $\frac{3}{4}$" FIBERGLASS CONDUIT AND SECURED TO THE UNDERSIDE OF THE GANGWAY AND TIMBER FENDER WALE.
   - 6.8. WHERE EXTENDING UNDERGROUND, THE NEW ELECTRICAL LINE SHALL BE ENCASED IN $\frac{3}{4}$" PVC CONDUIT AND BURIED A MINIMUM OF 24" BELOW GRADE.
   - 6.9. AFTER INSTALLATION, COMPLETE THE ELECTRICAL CONNECTIONS SUCH THAT THE NEW FLOATING DOCK LIGHT POLES AND SOUTH BULKHEAD LIGHT POLES ARE OPERATED BY THE SAME SWITCH (LOCATED IN THE BOAT MAINTENANCE FACILITY BOILER ROOM).

U.S.C.G.
US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
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SCALE: AS SHOWN

A/E COMPANY:
A/E PROJECT NO.:
CONSULTING A/E:

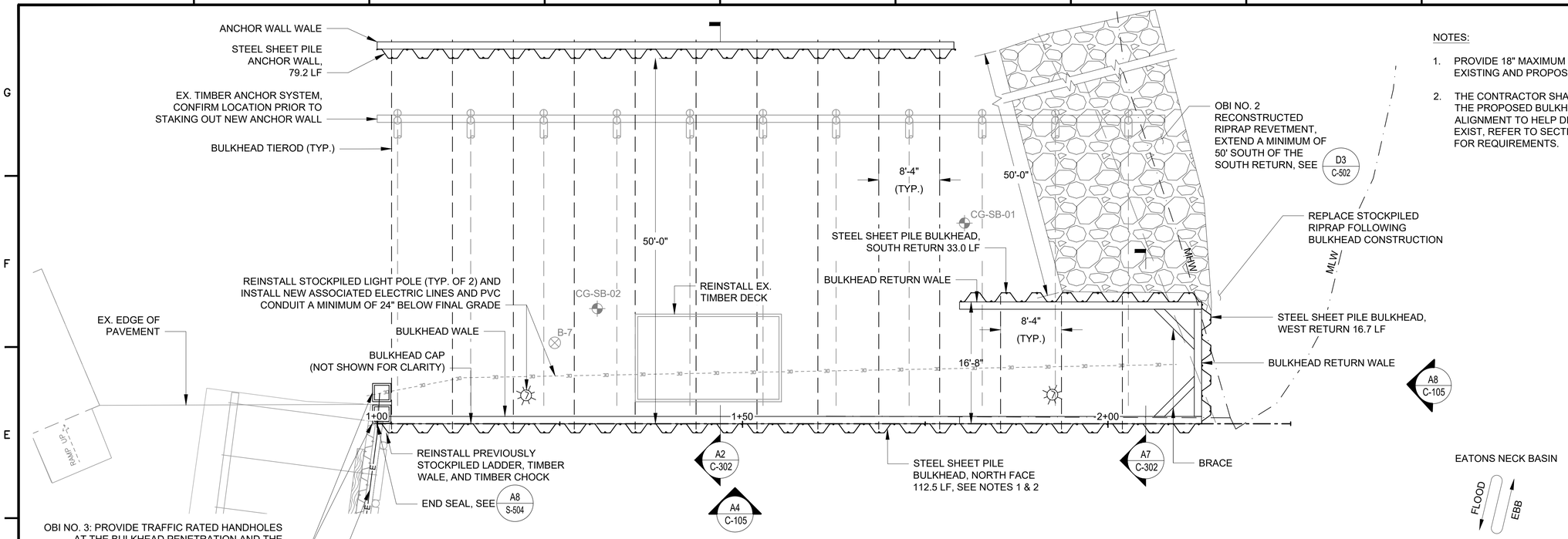
CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
ARPIN, DAVID
DESIGNED BY: DJA
DRAWN BY: DJA
CHECKED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427C-104
USCG FILENAME P10107427C-104.DWG
SHEET 12 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

CIVIL
SOUTH FLOATING DOCK REPLACEMENT
PLAN AND ELEVATION

SHEET ID
S FLOATING DOCK
C–104



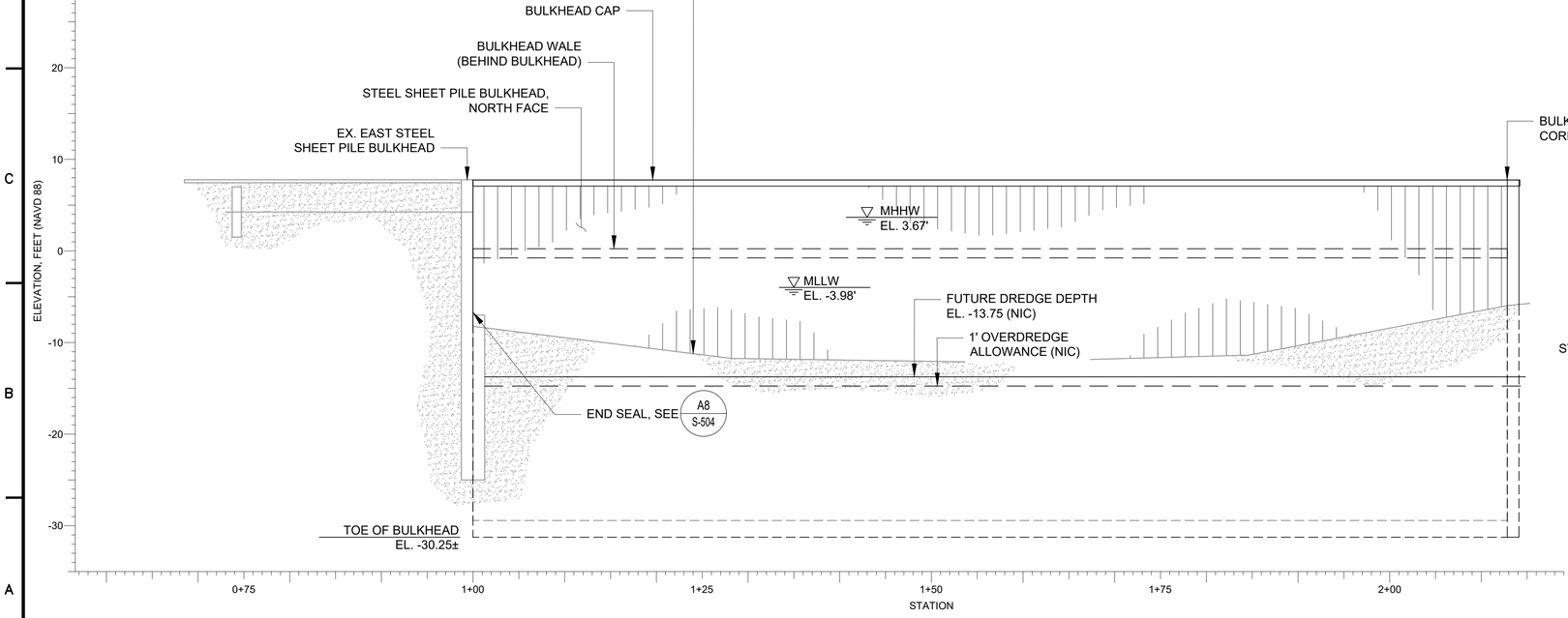
D4 OBI NO. 1: PROPOSED SOUTH BULKHEAD PLAN

SCALE: 1/8" = 1'

0 8' 16'

NOTES:

1. PROVIDE 18" MAXIMUM CLEAR DISTANCE BETWEEN THE EXISTING AND PROPOSED BULKHEADS.
2. THE CONTRACTOR SHALL PERFORM SPUDDING ALONG THE PROPOSED BULKHEAD AND BULKHEAD RETURN ALIGNMENT TO HELP DETERMINE IF OBSTRUCTIONS EXIST, REFER TO SECTION 31 41 16, METAL SHEET PILING FOR REQUIREMENTS.

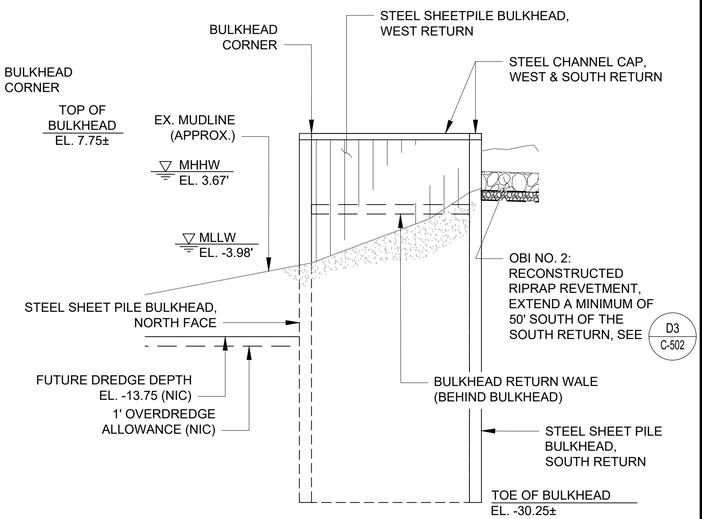


A4 OBI NO. 1: PROPOSED SOUTH BULKHEAD ELEVATION

SCALE: 1/8" = 1'

C-105

0 8' 16'



A8 OBI NO. 1: PROPOSED SOUTH BULKHEAD RETURN ELEVATION

SCALE: 1/8" = 1'

C-105

0 8' 16'

U.S.C.G. CE US COAST GUARD CIVIL ENGINEERING

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CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER: ARPIN, DAVID

DESIGNED BY: DJA | DRAWN BY: DJA | CHECKED BY: DJA | EDITED BY: DJA

USCG PROJECT NO. 10107427

USCG DRAWING NO. P10107427C-105

USCG FILENAME P10104270-105.DWG

SHEET 13 OF 25

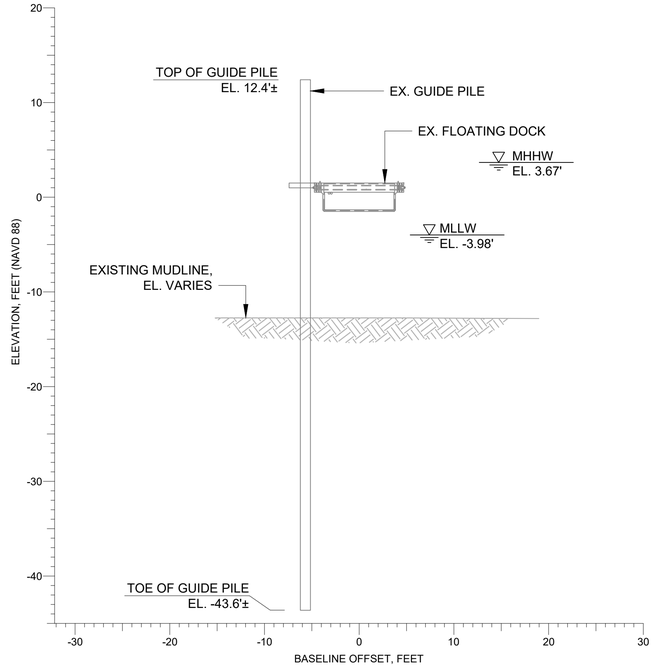
MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

CIVIL
SOUTH BULKHEAD REPLACEMENT PLAN AND ELEVATION

SHEET ID

S BULKHEAD

C–105

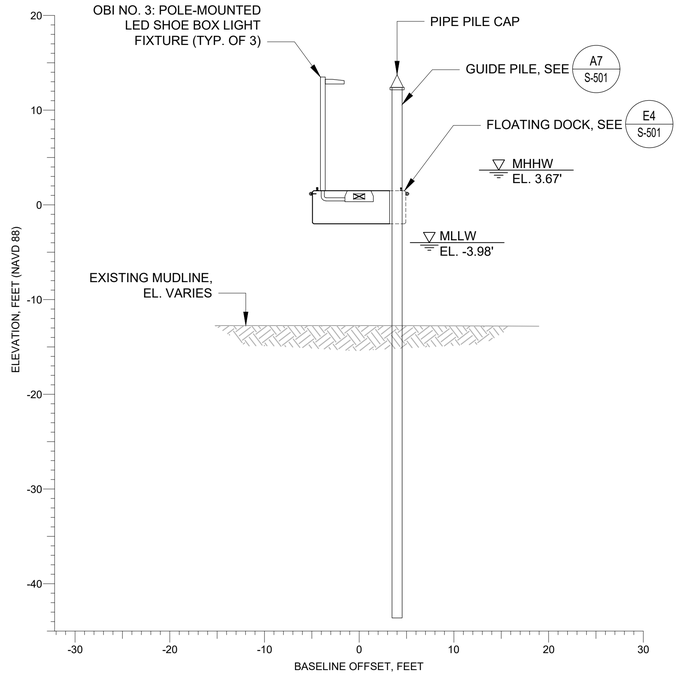


D4 EXISTING SOUTH FLOATING DOCK SECTION

SCALE: 1/8" = 1'

0 8' 16'

C-102



A4 BBI NO. 1: PROPOSED SOUTH FLOATING DOCK SECTION

SCALE: 1/8" = 1'

0 8' 16'

C-104

U.S.C.G.
US COAST GUARD
CIVIL ENGINEERING

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475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER:
ARPIN, DAVID

DESIGNED BY: DJA | DRAWN BY: DJA | CHECKED BY: DJA

USCG PROJECT NO.
10107427

USCG DRAWING NO.
P10107427C-301

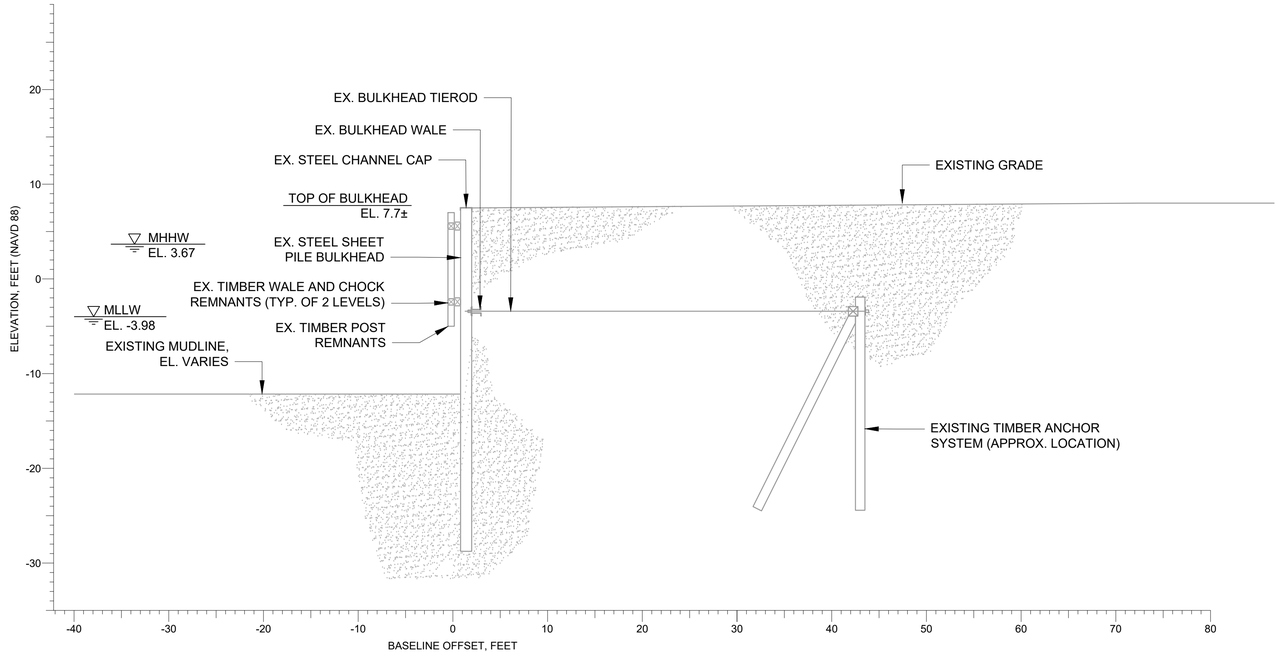
USCG FILENAME
P10104427C-301.DWG

SHEET 14 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

CIVIL
SOUTH FLOATING DOCK REPLACEMENT SECTIONS

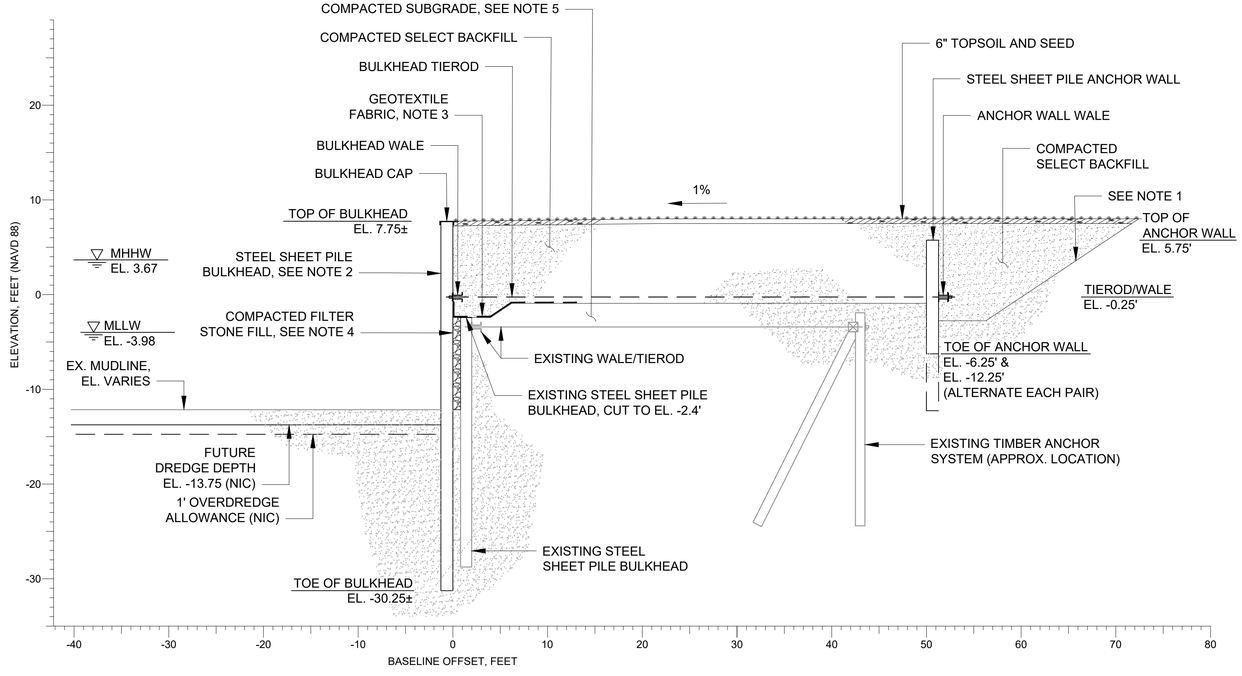
SHEET ID
S FLOATING DOCK
C-301



D2 EXISTING SOUTH BULKHEAD SECTION

SCALE: 1/8" = 1' C-103

0 8' 16'



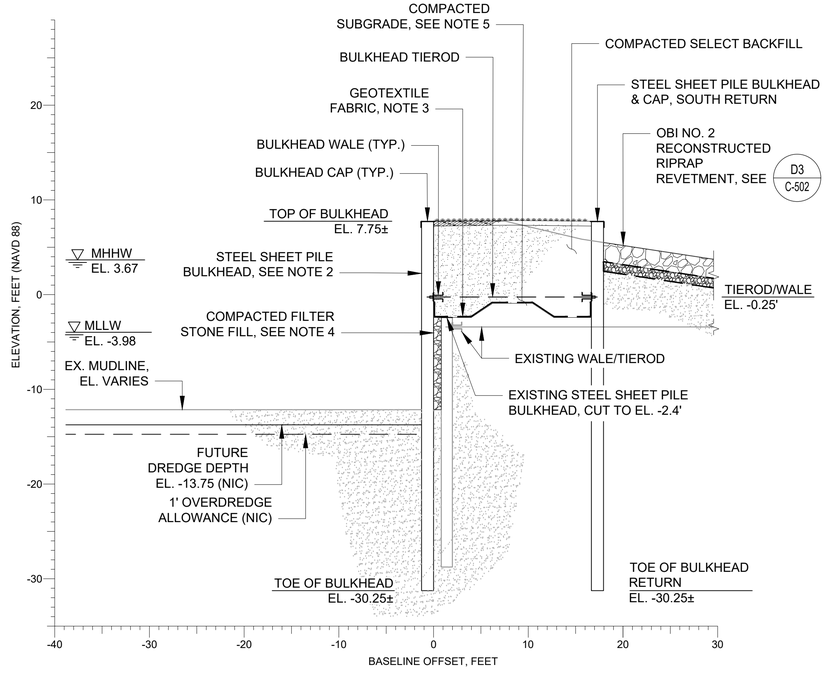
A2 OBI NO. 1: PROPOSED SOUTH BULKHEAD SECTION

SCALE: 1/8" = 1' C-105

0 8' 16'

NOTES:

1. SLOPE STABILITY AND THE PROTECTION OF EXISTING STRUCTURES AND UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY.
2. PROVIDE 18" MAXIMUM CLEAR DISTANCE BETWEEN THE EXISTING AND PROPOSED BULKHEADS.
3. PROVIDE 20' WIDE GEOTEXTILE FABRIC. EXTEND A MINIMUM OF 2 FEET UP THE BACK FACE OF THE BULKHEAD AND SECURE WITH GROUT.
4. FILTER STONE SHALL BE VIBRO COMPACTED IN ACCORDANCE WITH SECTION 31 00 00, EARTHWORK.
5. TIERODS SHALL BE INSTALLED LEVEL AND SHALL BE FULLY SUPPORTED ALONG THEIR ENTIRE LENGTH BY SUBGRADE AND SELECT BACKFILL, BOTH COMPACTED TO 95% OF THE LABORATORY MAXIMUM DENSITY.



A7 OBI NO. 1: PROPOSED SOUTH BULKHEAD RETURN SECTION

SCALE: 1/8" = 1' C-105

0 8' 16'

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US COAST GUARD
CIVIL ENGINEERING

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CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
ARPIN, DAVID

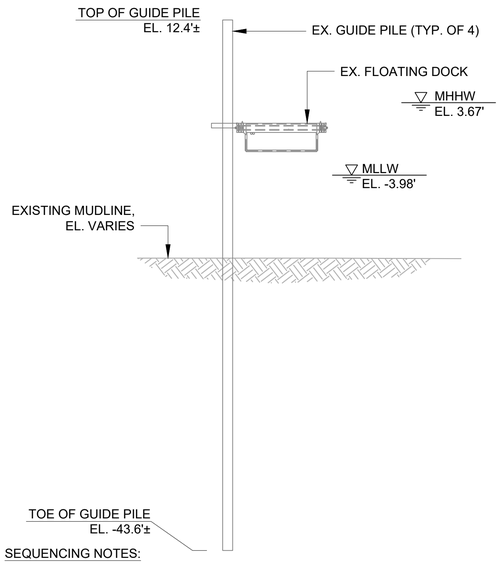
DESIGNED BY: DJA | DRAWN BY: DJA | CHECKED BY: DJA | EDITED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427C-302
USCG FILENAME P10107427C-302.DWG
SHEET 15 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

CIVIL
SOUTH BULKHEAD REPLACEMENT SECTIONS

SHEET ID
S BULKHEAD
C–302



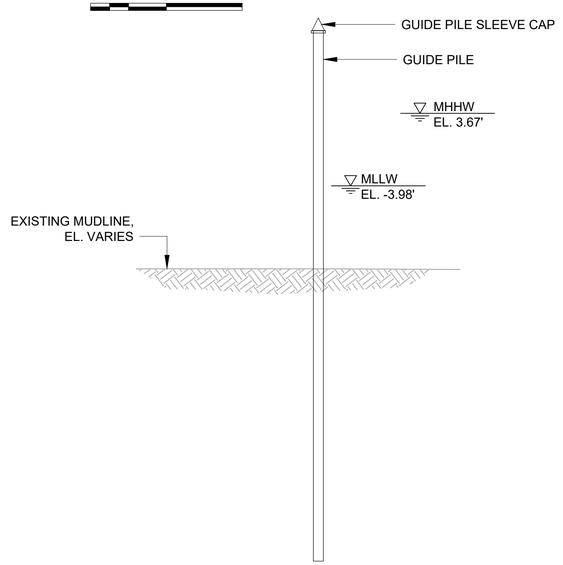
SEQUENCING NOTES:

1. COORDINATE WITH USCG FOR SCHEDULING DEMOLITION AND CONSTRUCTION.
2. COMPLETE ALL PRE-CONSTRUCTION REGULATORY NOTIFICATIONS REQUIRED BY THE PERMITS.
3. CALL DIG SAFELY NEW YORK A MINIMUM OF 72 HOURS PRIOR TO BEGINNING WORK.
4. MOBILIZE EQUIPMENT, MATERIALS, AND PERSONNEL TO THE SITE.
5. LOCATE AND MARK UTILITIES.
6. MOBILIZE ALL SOUTH FLOATING DOCK CONSTRUCTION MATERIALS TO THE SITE, INCLUDING BUT NOT LIMITED TO THE GUIDE PILES AND FLOATS.
7. PREPARE FOR DEMOLITION AND CONSTRUCTION.

D2 BBI NO. 1: STEP 1 FLOATING DOCK SECTION

SCALE: 1/8" = 1'

0 8' 16'



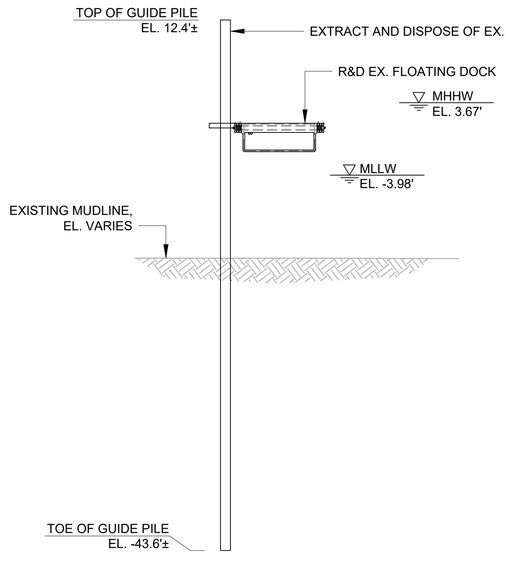
SEQUENCING NOTES:

1. F&I GUIDE PILES.
2. F&I GUIDE PILE CAPS.

A2 BBI NO. 1: STEP 3 FLOATING DOCK SECTION

SCALE: 1/8" = 1'

0 8' 16'



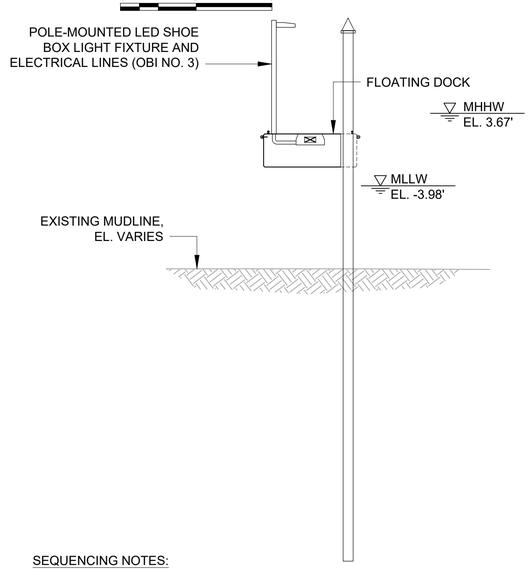
SEQUENCING NOTES:

1. R&S EXISTING GANGWAY, SHORE TIES, SHORE TIE ELECTRICAL LINES, AND OTHER SPECIFIED ITEMS (NOT SHOWN FOR CLARITY).
2. R&D EXISTING FLOATING DOCKS.
3. EXTRACT AND DISPOSE OF EXISTING GUIDE PILES.

D7 BBI NO. 1: STEP 2 FLOATING DOCK SECTION

SCALE: 1/8" = 1'

0 8' 16'



SEQUENCING NOTES:

1. F&I FLOATING DOCKS.
2. REINSTALL PREVIOUSLY STOCKPILED GANGWAY, SHORE TIES, AND OTHER SPECIFIED STOCKPILED ITEMS (NOT SHOWN FOR CLARITY).
3. FURNISH AND INSTALL NEW SHORE TIE ELECTRICAL LINES.
4. FURNISH AND INSTALL NEW POLE-MOUNTED LED SHOE BOX LIGHT FIXTURES AND ELECTRICAL LINES (OBI NO. 3).
5. COMPLETE ALL POST-CONSTRUCTION REGULATORY NOTIFICATIONS REQUIRED BY THE PERMITS.

A7 BBI NO. 1: STEP 4 FLOATING DOCK SECTION

SCALE: 1/8" = 1'

0 8' 16'

U.S.C.G.
CE
US COAST GUARD
CIVIL ENGINEERING

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475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER:
ARPIN, DAVID

DESIGNED BY: DJA | DRAWN BY: DJA

ENTERED BY: DJA | CHECKED BY: DJA

USCG PROJECT NO. 10107427

USCG DRAWING NO. P10107427C-401

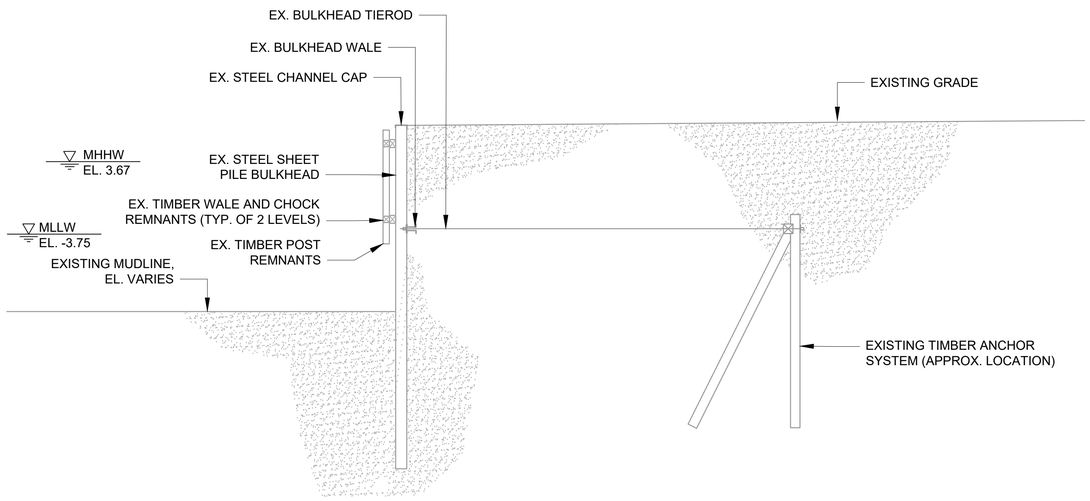
USCG FILENAME P10104427C-401.DWG

SHEET 16 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

CIVIL
SOUTH FLOATING DOCK REPLACEMENT
SUGGESTED CONSTRUCTION SEQUENCING

SHEET ID
S FLOATING DOCK
C-401



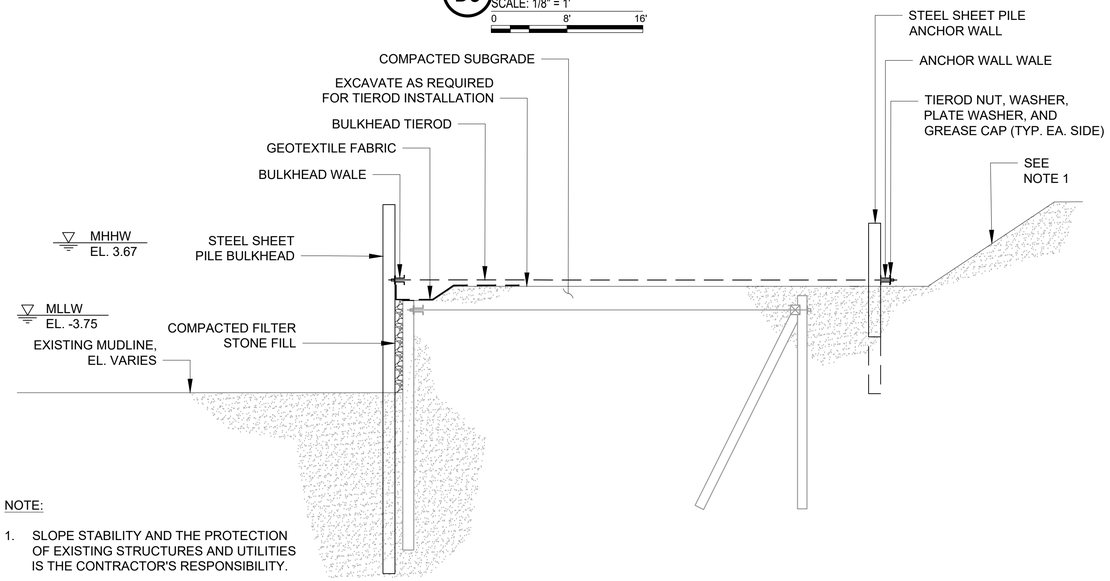
SEQUENCING NOTES:

1. COORDINATE WITH USCG FOR SCHEDULING DEMOLITION AND CONSTRUCTION.
2. COMPLETE ALL PRE-CONSTRUCTION REGULATORY NOTIFICATIONS REQUIRED BY THE PERMITS.
3. CALL DIG SAFELY NEW YORK A MINIMUM OF 72 HOURS PRIOR TO BEGINNING WORK.
4. MOBILIZE EQUIPMENT, MATERIALS, AND PERSONNEL TO THE SITE.
5. LOCATE AND MARK UTILITIES.
6. INSTALL SEDIMENT AND EROSION CONTROL DEVICES AS REQUIRED.
7. PREPARE FOR DEMOLITION AND CONSTRUCTION.

D3 OBI NO. 1: STEP 1 BULKHEAD SECTION

SCALE: 1/8" = 1'

0 8' 16'



NOTE:

1. SLOPE STABILITY AND THE PROTECTION OF EXISTING STRUCTURES AND UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY.

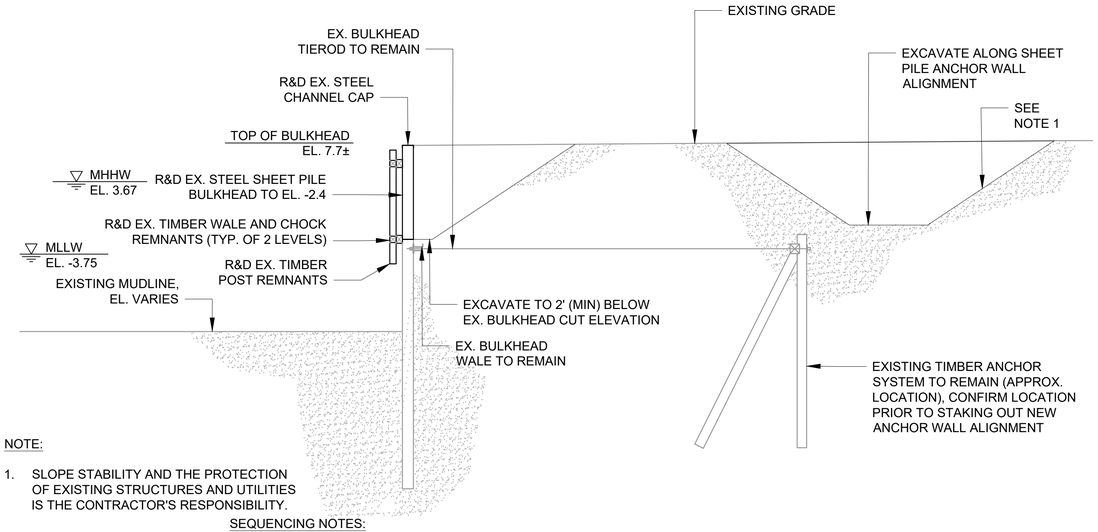
SEQUENCING NOTES:

1. DRIVE NEW STEEL SHEET PILE BULKHEAD, STEEL SHEET PILE ANCHOR WALL, AND STEEL SHEET PILE RETURNS.
2. BACKFILL BETWEEN THE REMAINING PORTION OF THE EXISTING STEEL SHEET PILE BULKHEAD AND THE NEW BULKHEAD WITH FILTER STONE AND VIBRO-COMPACT, SEE SECTION 31 00 00, EARTHWORK.
3. EXCAVATE AS REQUIRED FOR TIEROD INSTALLATION AND COMPACT SUBGRADE.
4. INSTALL GEOTEXTILE FABRIC AND ANCHOR SYSTEM.

A3 OBI NO. 1: STEP 3 BULKHEAD SECTION

SCALE: 1/8" = 1'

0 8' 16'



NOTE:

1. SLOPE STABILITY AND THE PROTECTION OF EXISTING STRUCTURES AND UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY.

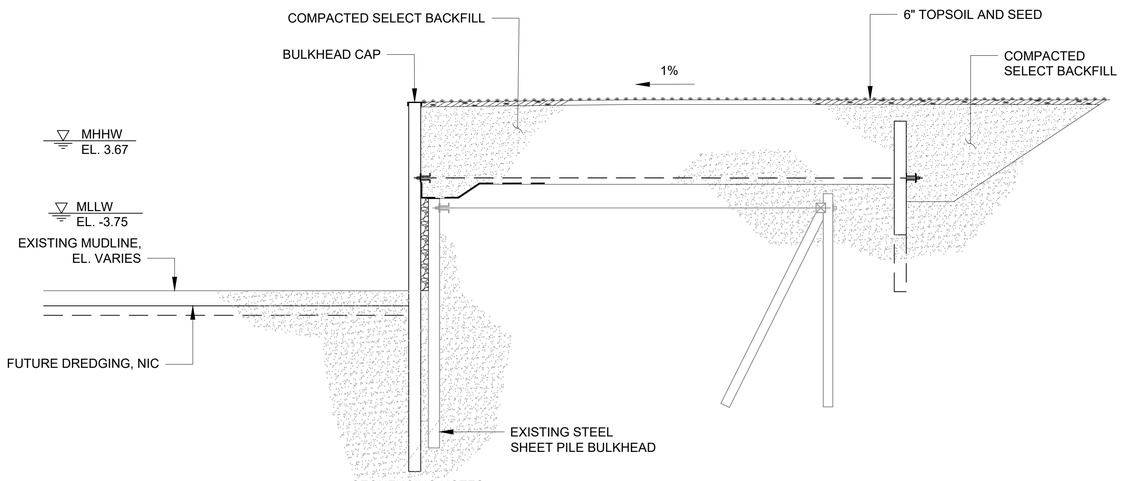
SEQUENCING NOTES:

1. R&D EXISTING FENDER SYSTEM INCLUDING THE TIMBER POSTS, CHOCKS, AND WALE REMNANTS.
2. R&S THE EXISTING OVERHEAD LIGHTS AND ASSOCIATED ELECTRICAL LINES.
3. EXECUTE PILE SPUDDING ALONG THE NEW BULKHEAD ALIGNMENT IN ACCORDANCE WITH 31 41 16, METAL SHEET PILES.
4. REMOVE OBSTRUCTIONS ALONG THE NEW BULKHEAD ALIGNMENT AS REQUIRED.
5. EXCAVATE BEHIND THE EXISTING BULKHEAD TO 2' (MIN) BELOW THE BULKHEAD CUT ELEVATION.
6. R&D THE STEEL SHEET PILE BULKHEAD TO EL. -2.4'.
7. CONFIRM THE EXISTING TIMBER ANCHOR SYSTEM LOCATION AND EXCAVATE ALONG THE SHEET PILE ANCHOR WALL ALIGNMENT.
8. CUT THE EXISTING TIERODS AS REQUIRED FOR THE BULKHEAD RETURN INSTALLATION.

D8 OBI NO. 1: STEP 2 BULKHEAD SECTION

SCALE: 1/8" = 1'

0 8' 16'



SEQUENCING NOTES:

1. BACKFILL THE STEEL SHEET PILE BULKHEAD, ANCHOR WALL, AND RETURNS WITH COMPACTED SELECT BACKFILL.
2. REINSTALL THE OVERHEAD LIGHTS AND NEW ASSOCIATED ELECTRICAL LINES AND CONDUIT.
3. REPLACE RIPRAP DISPLACED FOR THE BULKHEAD INSTALLATION.
4. RECONSTRUCT THE RIPRAP REVETMENT (OBI NO. 2).
5. INSTALL THE BULKHEAD CAP.
6. INSTALL TOPSOIL AND SEED AND COMPLETE FINAL GRADING.
7. COMPLETE ALL POST-CONSTRUCTION REGULATORY NOTIFICATIONS REQUIRED BY THE PERMITS.

A8 OBI NO. 1: STEP 4 BULKHEAD SECTION

SCALE: 1/8" = 1'

0 8' 16'

US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY 2021

PLOTTING SCALE:1:1 | SCALE: AS SHOWN

A/E COMPANY:
A/E PROJECT NO.:
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER:
ARPIN, DAVID

DESIGNED BY: DJA
DRAWN BY: DJA
CHECKED BY: DJA
EDITED BY: DJA

USCG PROJECT NO.
10107427

USCG DRAWING NO.
P10107427C-402

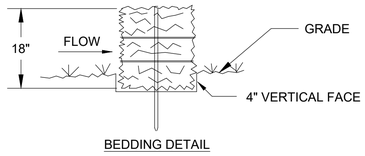
USCG FILENAME
P10104270-402.DWG

SHEET 17 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

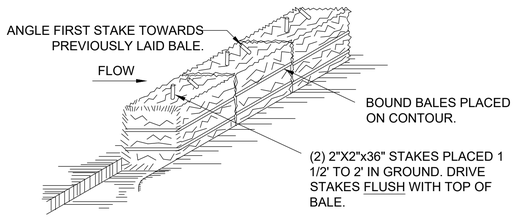
CIVIL
SOUTH BULKHEAD REPLACEMENT
SUGGESTED CONSTRUCTION SEQUENCING

SHEET ID
S BULKHEAD
C-402



BEDDING DETAIL

DRAINAGE AREA NO MORE THAN 1/4 ACRE PER 100 FEET OF STRAW BALE DIKE FOR SLOPES LESS THAN 25%.

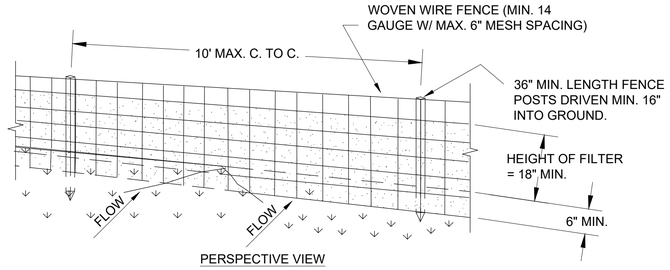


ANCHORING DETAIL

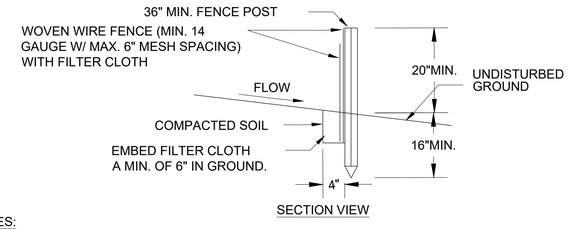
NOTES:

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

D1 STRAW BALE DIKE DETAIL
SCALE: NTS C-101



PERSPECTIVE VIEW

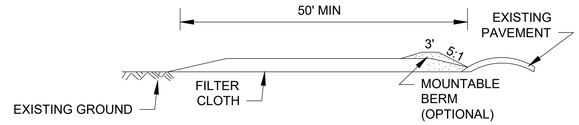


SECTION VIEW

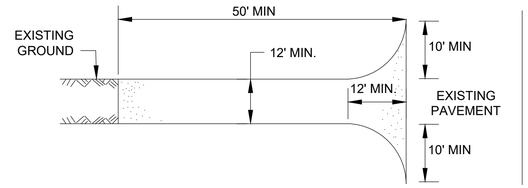
NOTES:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

D4 REINFORCED SILT FENCE DETAIL
SCALE: NTS C-101



PROFILE

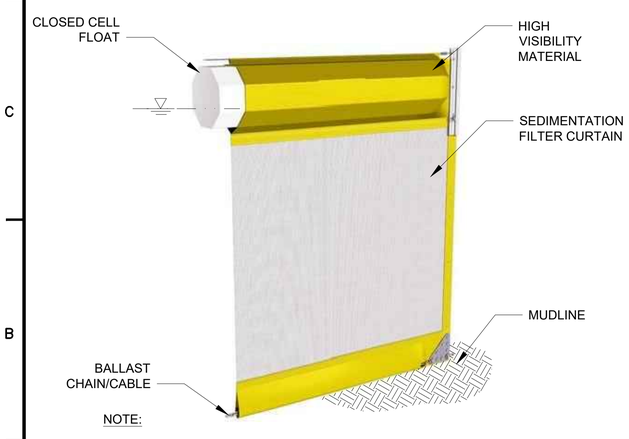


PLAN VIEW

NOTES:

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS, TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC OR GOVERNMENT RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

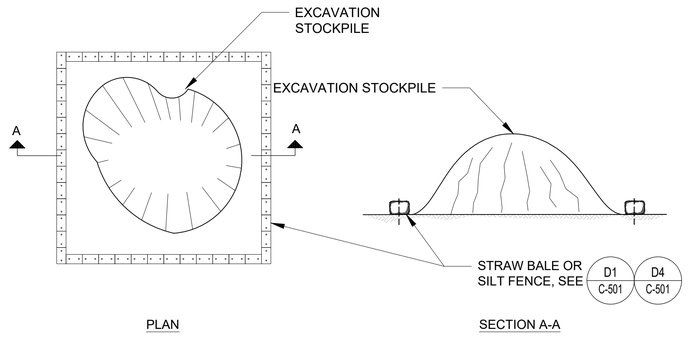
D8 CONSTRUCTION ENTRANCE DETAIL
SCALE: NTS



NOTE:

1. REFER TO THE TEMPORARY ENVIRONMENTAL CONTROL NOTES ON SHEET G-004 FOR TURBIDITY BARRIER REQUIREMENTS.

A1 TURBIDITY BARRIER DETAIL
SCALE: NTS C-101

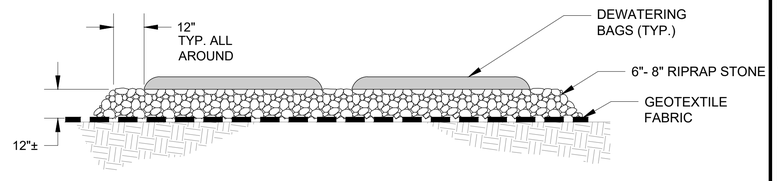


PLAN SECTION A-A

NOTE:

1. THE STOCKPILE DETAIL SHOWN IS CONSIDERED TYPICAL AND MAY VARY.
2. REMOVE STOCKPILE AND STRAW BALE/SILT FENCE IN THEIR ENTIRETY AT COMPLETION.

A5 STOCKPILE DETAIL
SCALE: NTS



NOTES:

1. THE SIZE AND QUANTITY OF DEWATERING BAGS TO BE DETERMINED IN FIELD BASED ON THE ACTUAL DEWATERING REQUIREMENTS ENCOUNTERED.
2. REMOVE DEWATERING BAGS, RIP-RAP, AND GEOTEXTILE FABRIC IN THEIR ENTIRETY AT COMPLETION.

A8 DEWATERING BAG DETAIL
SCALE: NTS

U.S.C.G. CE US COAST GUARD CIVIL ENGINEERING

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A/E COMPANY: CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

A/E PROJECT NO.:

CONSULTING A/E:

PROJECT ENGINEER: ARPIN, DAVID

DESIGNED BY: DJA

DRAWN BY:

CHECKED BY: DJA

EDITED BY: DJA

USCG PROJECT NO. 10107427

USCG DRAWING NO. P10107427C-501

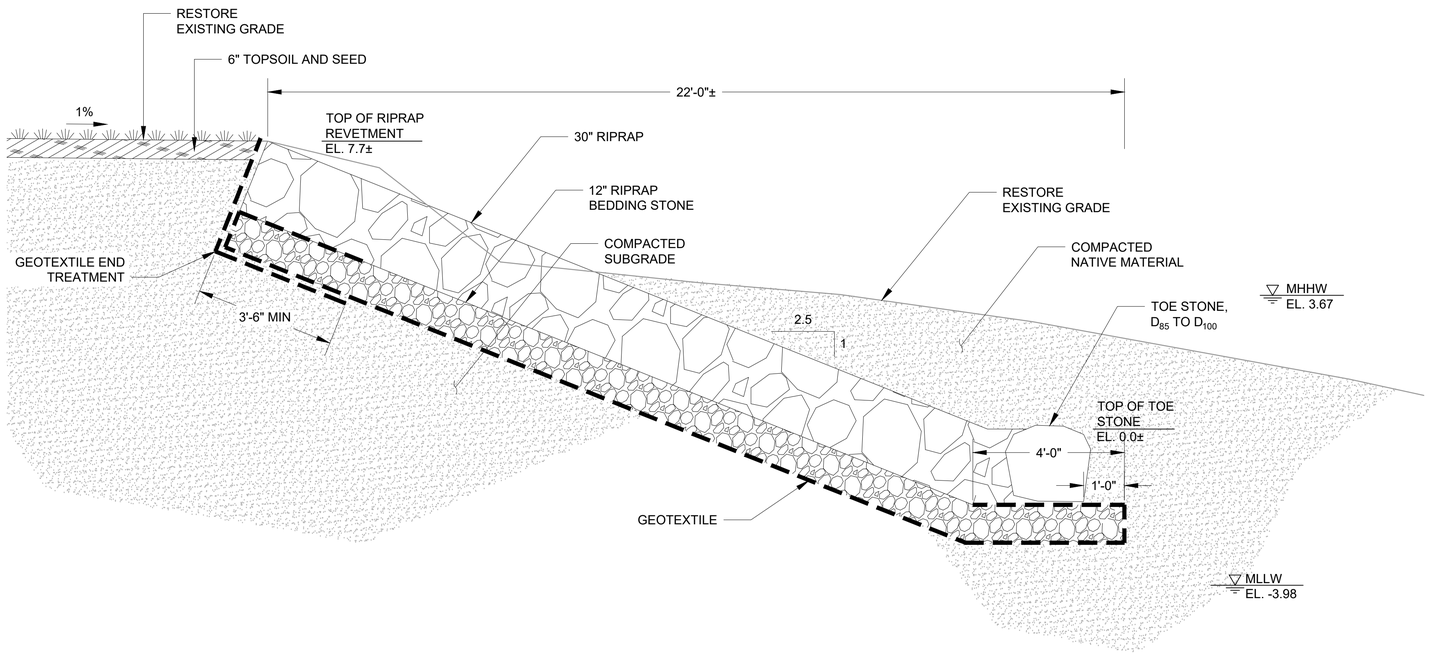
USCG FILENAME P10107427C-501.DWG

SHEET 18 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

CIVIL
EROSION AND SEDIMENT CONTROL DETAILS

SHEET ID
S FLOATING DOCK & S BULKHEAD
C-501



D3 OBI NO. 2: RIPRAP REVETMENT RECONSTRUCTION DETAIL

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

0 2' 4'

C-105

U.S.C.G.
US COAST GUARD
CIVIL ENGINEERING

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CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER:
ARPIN, DAVID

DESIGNED BY: DJA | DRAWN BY: DJA
EDITED BY: DJA | CHECKED BY: DJA

USCG PROJECT NO.
10107427

USCG DRAWING NO.
P10107427C-502

USCG FILENAME
P10104427C-502.DWG

SHEET 19 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

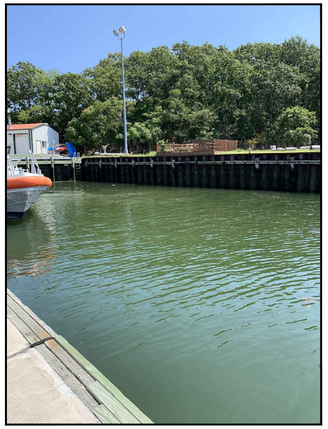
CIVIL
RIPRAP REVETMENT
RECONSTRUCTION DETAILS

SHEET ID

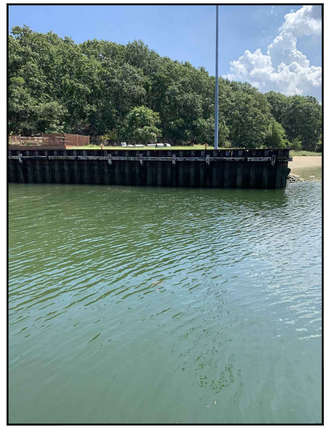
S BULKHEAD

C-502

E1 SOUTH BULKHEAD
SOUTHWEST, AUG 24, 2020



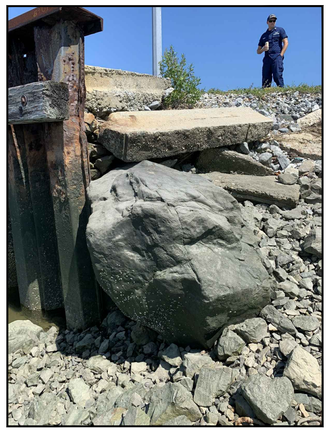
E3 SOUTH BULKHEAD
SOUTHEAST, AUG 24, 2020



E5 SOUTH BULKHEAD
SOUTHEAST, AUG 24, 2020

E7 SOUTH & EAST BULKHEADS
SOUTH, AUG 24, 2020

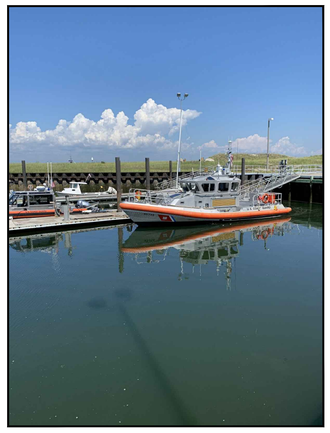
E9 SOUTH & EAST BULKHEADS
NORTHEAST, AUG 24, 2020



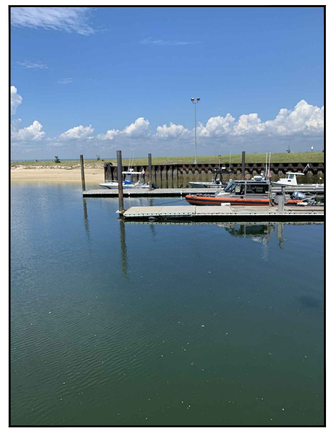
C1 SOUTH BULKHEAD RETURN
NORTH, AUG 24, 2020

C3 SOUTH BULKHEAD RIPRAP
NORTHWEST, AUG 24, 2020

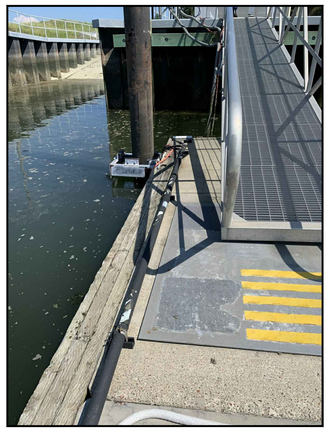
C5 SOUTH BULKHEAD (BEHIND)
NORTHWEST, AUG 24, 2020



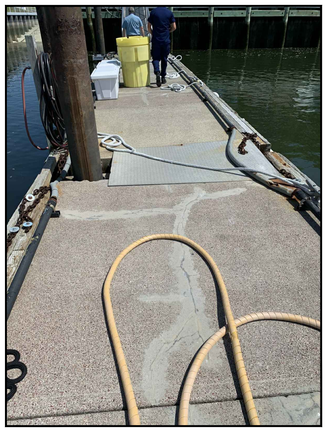
C7 SOUTH FLOATING DOCK
NORTH, AUG 24, 2020



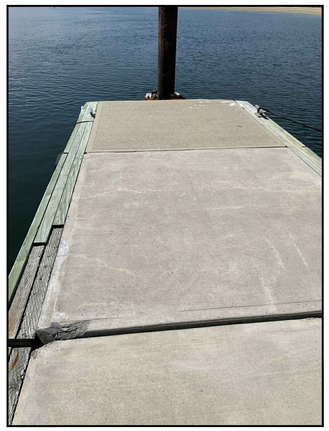
C9 SOUTH FLOATING DOCK
NORTH, AUG 24, 2020



A1 GANGWAY & GUIDE PILE
NORTHEAST, AUG 24, 2020



A3 FLOATING DOCK & GUIDE PILE
NORTHEAST, AUG 24, 2020



A5 FLOATING DOCK & GUIDE PILE
WEST, AUG 24, 2020

PHOTO TITLE LEGEND

INDICATES REFERENCE QUADRANT SHEET LOCATION

INDICATES PHOTO DESCRIPTION

X# VIEW TITLE SAMPLE
ORITENTATION, DATE

INDICATES DIRECTION AND DATE PHOTO WAS TAKEN

U.S.C.G.
CE
US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY, 2021

PLOTTING SCALE:1:1 | SCALE: AS SHOWN

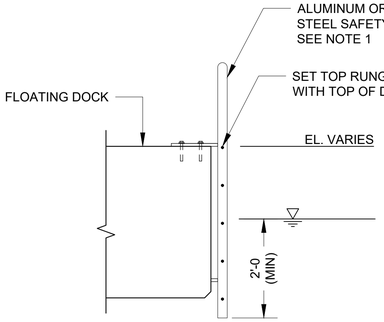
A/E COMPANY:
A/E PROJECT NO.:
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
ARPIN, DAVID
DESIGNED BY: DJA
DRAWN BY: DJA
CHECKED BY: DJA
EDITED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427C-901
USCG FILENAME P10104427C-901.DWG
SHEET 20 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY
CIVIL
SITE PHOTOGRAPHS

SHEET ID
S FLOATING DOCK & S BULKHEAD
C-901

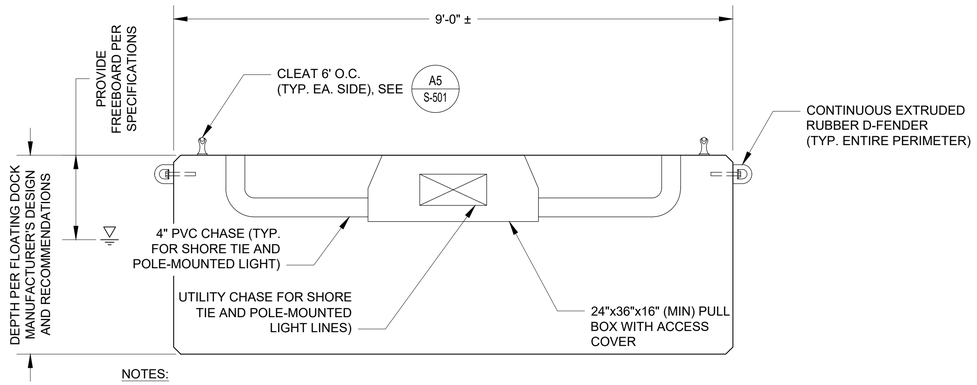


NOTE:

1. THE LADDER AND LADDER TO FLOATING DOCK CONNECTION SHALL BE DESIGNED AND DETAILED BY THE FLOATING DOCK MANUFACTURER.

E1 SAFETY LADDER DETAIL

SCALE: NTS C-104



NOTES:

1. REFER TO SHEET C-104 FOR PULL BOX LOCATIONS AND UTILITY ROUTING.
2. THE DOCK MODULE CONNECTION SYSTEM SHALL BE DESIGNED AND DETAILED BY THE FLOATING DOCK MANUFACTURER IN ACCORDANCE WITH SECTION 35 51 13.00 20, CONCRETE FLOATING PIER FOR SMALL CRAFT.
3. REFER TO SECTION 35 51 13.00 20, CONCRETE FLOATING PIER FOR SMALL CRAFT FOR THE MINIMUM CONCRETE THICKNESS AND REINFORCEMENT COVER REQUIREMENTS.
4. PULL BOXES SHALL BE MARINE GRADE, WATER TIGHT, AND CORROSION RESISTANT.

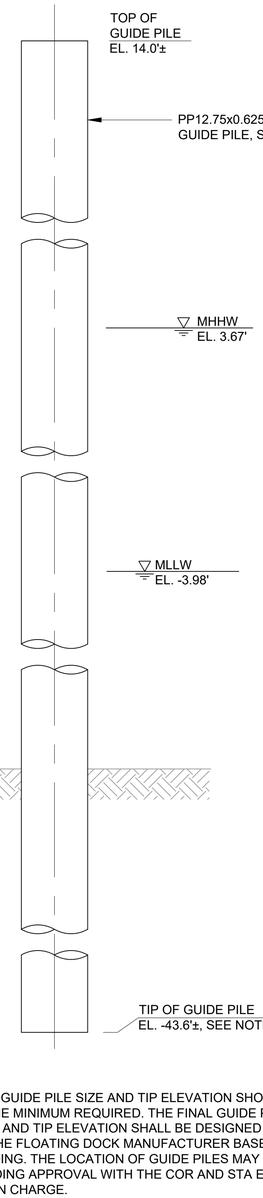
E4 TYPICAL FLOATING DOCK SECTION

SCALE: NTS C-104

NOTES:

1. THE GUIDE PILE COATING REQUIREMENTS ARE SPECIFIED IN SECTION 09 97 13.26, COATING OF STEEL WATERFRONT STRUCTURES.
2. COATINGS THAT ARE DAMAGED PRIOR TO DELIVERY OR IN THE FIELD DURING CONSTRUCTION SHALL BE REPAIRED AS SPECIFIED IN SECTION 09 97 13.26, COATING OF STEEL WATERFRONT STRUCTURES.

COATING SCHEDULE			
COMPONENT	COATING TYPE	POINT OF APPLICATION	LIMITS
STEEL GUIDE PILES	COAL TAR EPOXY-POLYAMIDE, SEE SECTION 09 97 13.26, COATING OF STEEL WATERFRONT STRUCTURES	FACTORY	ENTIRE EXTERIOR SURFACE

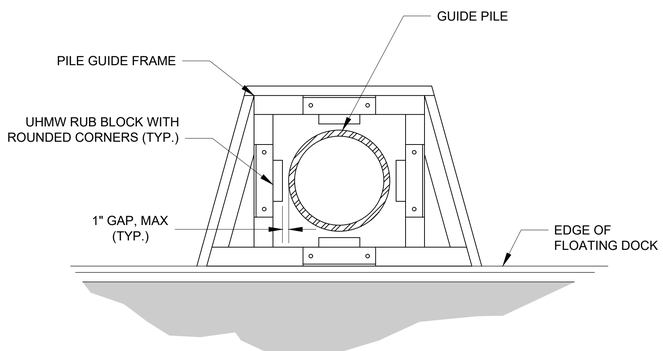


NOTES:

1. THE PROPOSED GUIDE PILE SIZE AND TIP ELEVATION SHOWN ARE CONSIDERED THE MINIMUM REQUIRED. THE FINAL GUIDE PILE QUANTITY, SIZE, AND TIP ELEVATION SHALL BE DESIGNED AND SPECIFIED BY THE FLOATING DOCK MANUFACTURER BASED ON THE REQUIRED LOADING. THE LOCATION OF GUIDE PILES MAY BE ADJUSTED PENDING APPROVAL WITH THE COR AND STA EATONS NECK OFFICER IN CHARGE.

A7 GUIDE PILE DETAIL

SCALE: NTS C-104

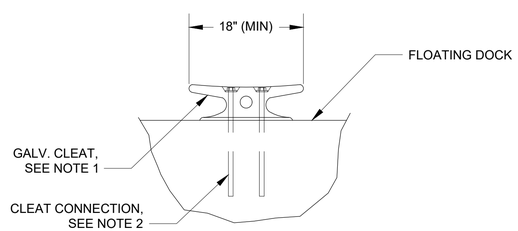


NOTES:

1. PILE GUIDE FRAME SHALL BE DESIGNED AND DETAILED BY THE FLOATING DOCK MANUFACTURER.
2. A TYPICAL EXTERNAL PILE GUIDE CONFIGURATION IS SHOWN. THE INTERNAL PILE GUIDE CONFIGURATION SHALL BE SIMILAR.

A2 PILE GUIDE DETAIL

SCALE: NTS C-104



NOTES:

1. GALV. CLEAT SHALL BE MOUNTED ON THE DOCK PER THE FLOATING DOCK MANUFACTURER'S DESIGN AND RECOMMENDATIONS.
2. GALV. CLEAT CONNECTION SHALL BE DESIGNED AND DETAILED BY THE FLOATING DOCK MANUFACTURER.

A5 CLEAT DETAIL

SCALE: NTS S-501

U.S.C.G. CE US COAST GUARD CIVIL ENGINEERING

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PLOTTING SCALE 1:1

A/E COMPANY:
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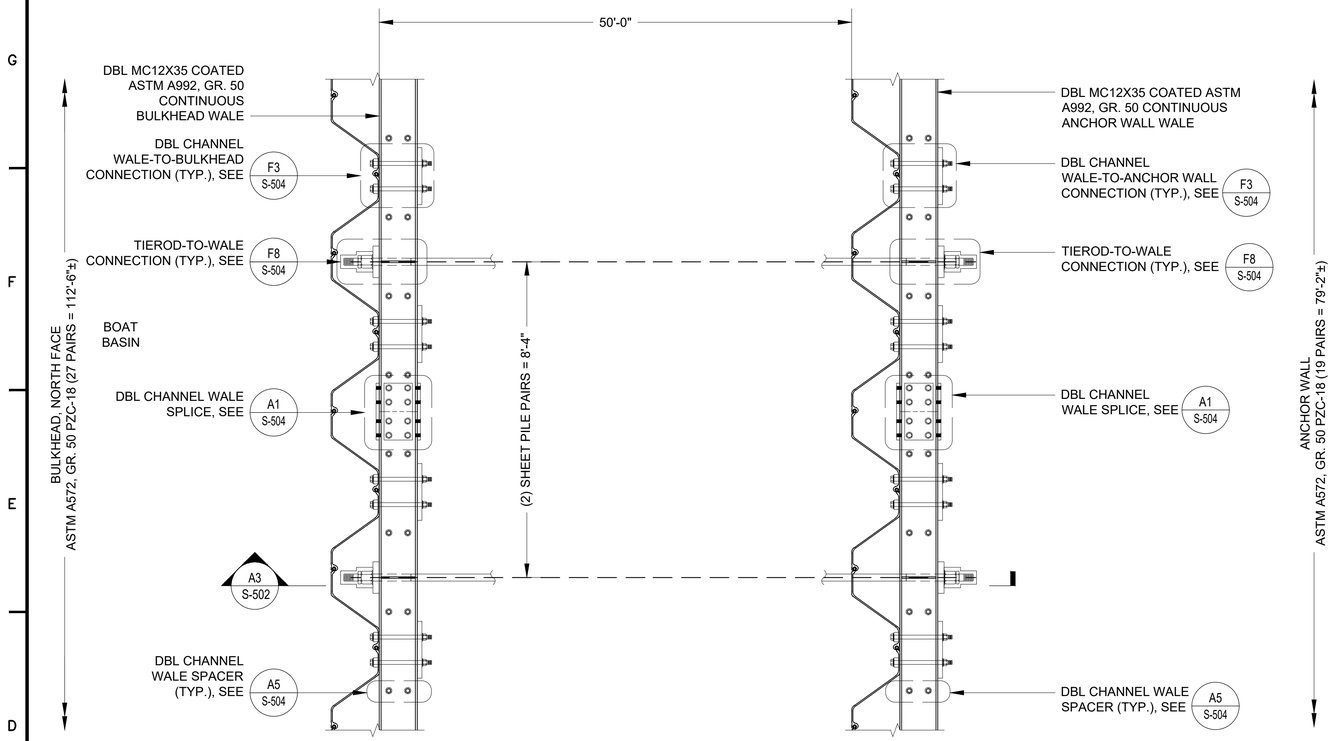
CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
ARPIN, DAVID
DESIGNED BY: DJA
DRAWN BY: DJA
EDITED BY: DJA
CHECKED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427S-501
USCG FILENAME P10107427S-501.DWG
SHEET 21 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY
STRUCTURAL
SOUTH FLOATING DOCK REPLACEMENT
DETAILS

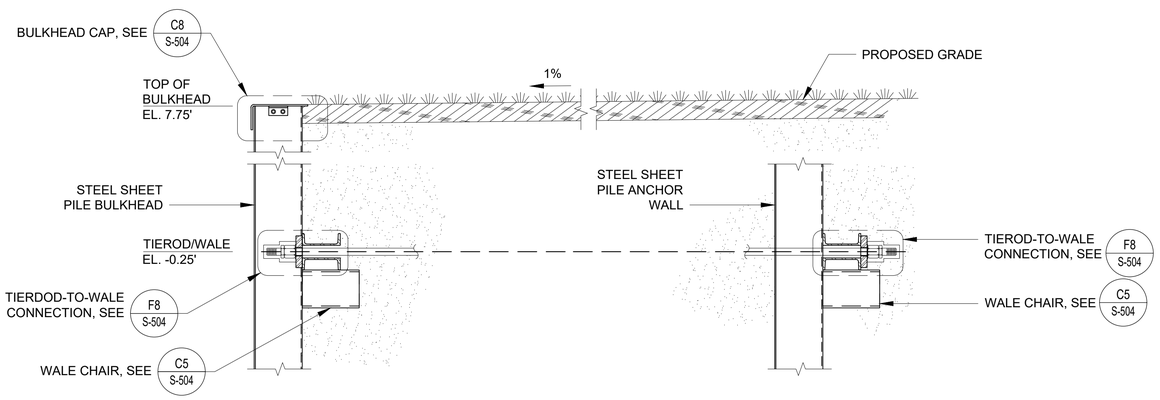
SHEET ID
S FLOATING DOCK
S-501



C3 ANCHOR SYSTEM LAYOUT

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

0 2' 4'



A3 ANCHOR SYSTEM SECTION

SCALE: 1/2" = 1'-0" S-502

0 2' 4'

NOTES:

1. THE SOUTH BULKHEAD COATING REQUIREMENTS ARE SPECIFIED IN SECTIONS 05 50 15, CIVIL WORKS FABRICATION AND 09 97 13.26, COATING OF WATERFRONT STEEL STRUCTURES.
2. COATINGS THAT ARE DAMAGED PRIOR TO DELIVERY OR IN THE FIELD DURING CONSTRUCTION SHALL BE REPAIRED AS SPECIFIED IN SECTION 09 97 13.26, COATING OF WATERFRONT STEEL STRUCTURES.
3. TIERODS SHALL NOT PENETRATE THROUGH STEEL SHEET PILE INTERLOCKS.
4. ALL HOLES IN THE STEEL SHEET PILE FOR TIERODS SHALL BE $2\frac{5}{8}$"Ø UNLESS NOTED OTHERWISE. ALL HOLES SHALL BE MAG DRILLED IN THE FIELD. NO TORCH CUTTING SHALL BE ALLOWED.

COATING SCHEDULE			
COMPONENT	COATING TYPE	POINT OF APPLICATION	LIMITS
STEEL SHEET PILES (BULKHEAD)	COAL TAR EPOXY-POLYAMIDE, SEE SECTION 09 97 13.26, COATING OF STEEL WATERFRONT STRUCTURES	FACTORY	ENTIRE SEAWARD SURFACE
STEEL SHEET PILES (ANCHOR WALL)	NONE	-	-
STEEL END SEAL ANGLE	COAL TAR EPOXY-POLYAMIDE, SEE SECTION 09 97 13.26, COATING OF STEEL WATERFRONT STRUCTURES	FACTORY	ENTIRE SURFACE
WALES, WALE CHAIRS, STEEL BEARING PLATES, STEEL SPLICE PLATES, STEEL SHIM PLATES, STEEL STIFFENER PLATES & STEEL SPACER SLEEVES	COAL TAR EPOXY-POLYAMIDE, SEE SECTION 09 97 13.26, COATING OF STEEL WATERFRONT STRUCTURES	FACTORY	ENTIRE SURFACE
TIEROD	FUSION BONDED EPOXY, SEE SECTION 05 50 15, CIVIL WORKS FABRICATION	FACTORY	ENTIRE SURFACE
STEEL CAP, BOLTS, NUTS, AND WASHERS	GALVANIZED, SEE SECTION 05 50 15, CIVIL WORKS FABRICATION	FACTORY	ENTIRE SURFACE

US COAST GUARD
CIVIL ENGINEERING

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A/E COMPANY:
A/E PROJECT NO.:
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

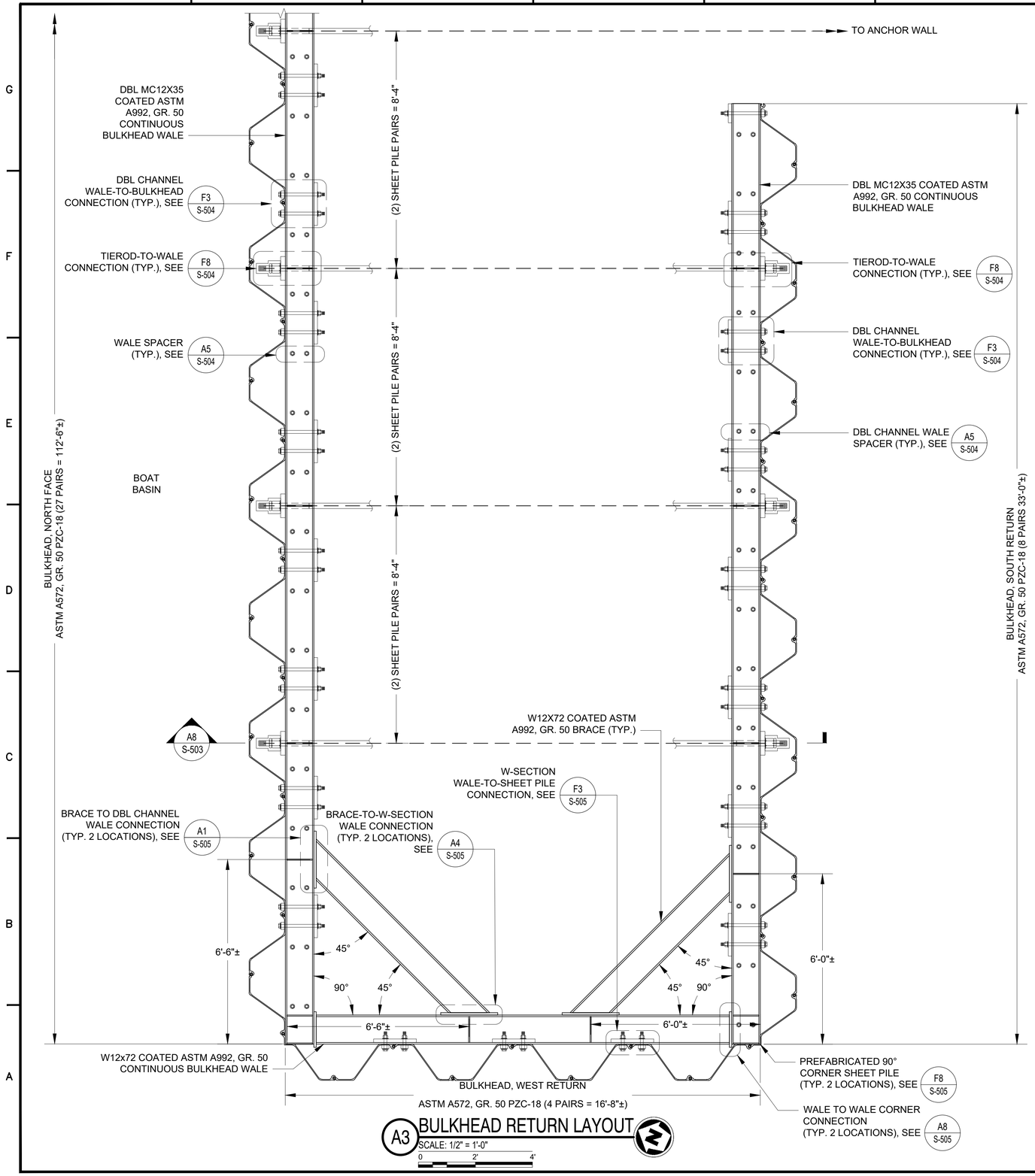
PROJECT ENGINEER: ARPIN, DAVID
DESIGNED BY: DJA
DRAWN BY: DJA
CHECKED BY: DJA
EDITED BY: DJA

USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427S-502
USCG FILENAME P10104275-502.DWG
SHEET 22 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

STRUCTURAL
SOUTH BULKHEAD ANCHOR SYSTEM LAYOUT DETAILS

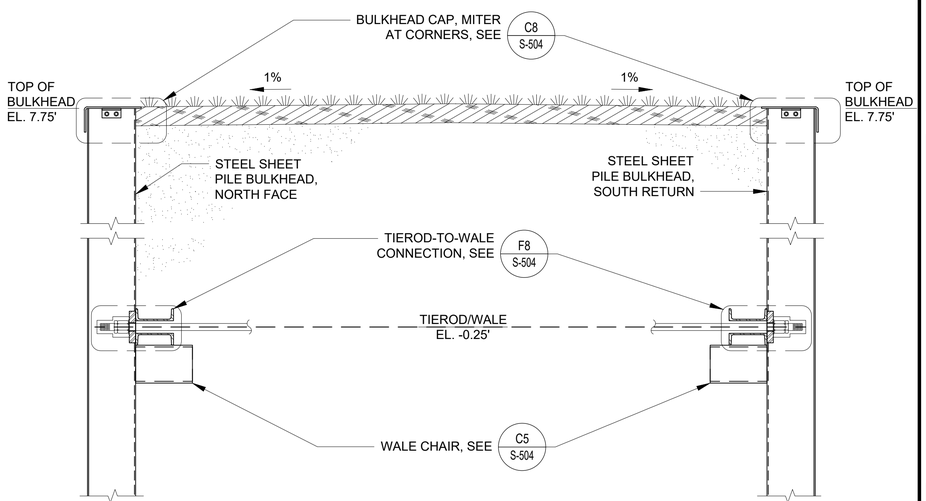
SHEET ID
S BULKHEAD
S-502



A3 BULKHEAD RETURN LAYOUT

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

0 2' 4'



A8 BULKHEAD RETURN SECTION

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

S-503

0 2' 4'

U.S.C.G.
US COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	MAY, 2021

PLOTTING SCALE:1:1 | SCALE: AS SHOWN

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WARWICK, RI 02886

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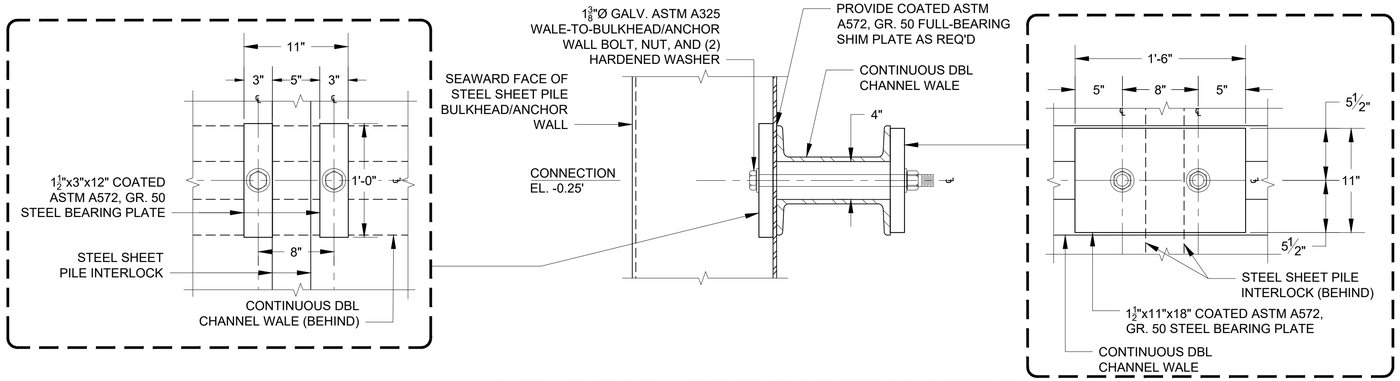
USCG PROJECT NO. 10107427
USCG DRAWING NO. P10107427S-503
USCG FILENAME P10104275-503.DWG
SHEET 23 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

STRUCTURAL
SOUTH BULKHEAD RETURN
LAYOUT DETAILS

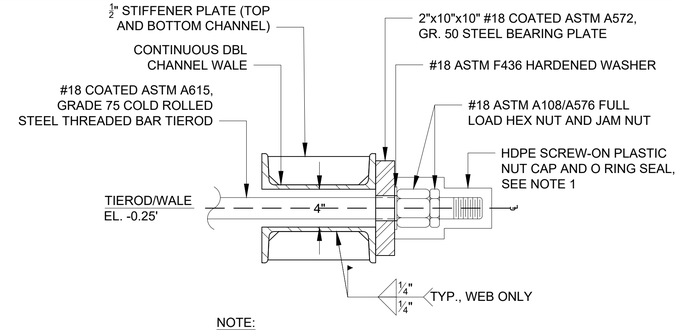
SHEET ID
S BULKHEAD
S-503



F3 DBL CHANNEL WALE-TO-BULKHEAD CONNECTION DETAIL

SCALE: 1-1/2" = 1'-0" S-502, S-503

0 1' 2'



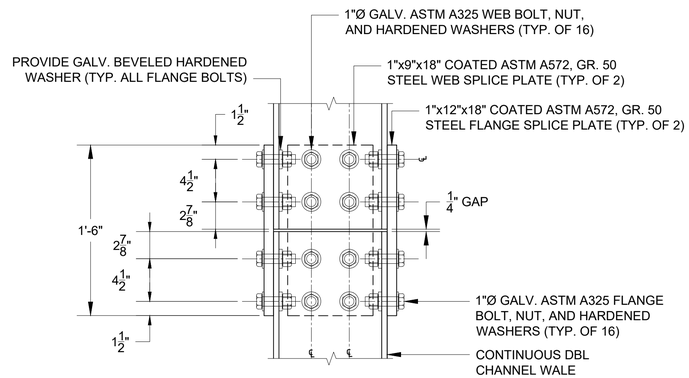
NOTE:

1. PACK PLASTIC NUT WITH CORROSION INHIBITING GREASE.

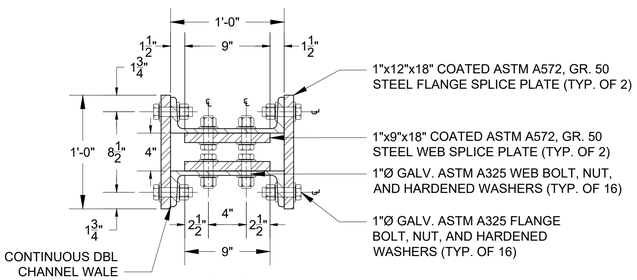
F8 TIEROD-TO-WALE CONNECTION DETAIL

SCALE: 1-1/2" = 1'-0" S-502, S-503

0 1' 2'



PLAN



SECTION

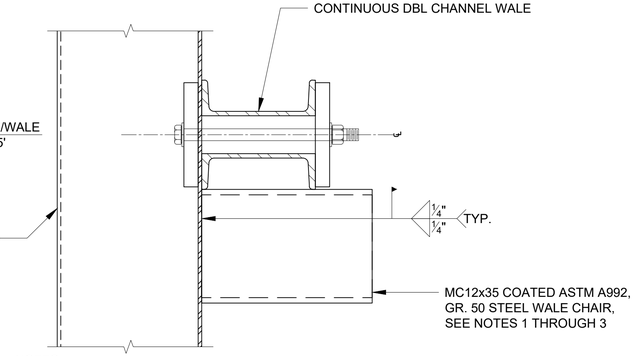
NOTES:

1. THIS DETAIL IS APPLICABLE TO WALE SPLICES LOCATED AT THE STEEL SHEET PILE BULKHEAD AND ANCHOR WALL.
2. ALL HOLES IN THE WALE AND SPLICE PLATES SHALL BE STANDARD SIZE UNLESS NOTED OTHERWISE. ALL HOLES SHALL BE FACTORY DRILLED OR MAG DRILLED IN THE FIELD. NO TORCH CUTTING SHALL BE ALLOWED.
3. THE SPACING OF THE WALE SPLICE ALONG THE LENGTH OF THE WALE SHALL BE CONSISTENT WITH THE STEEL SHEET PILE BULKHEAD/ANCHOR WALL INTERLOCK SPACING IN ORDER TO AVOID CONFLICTS.
4. WALE SPLICES SHALL BE LOCATED A MINIMUM OF ONE SHEET PILE PAIR (4.17') FROM THE TIERODS.

A1 DBL CHANNEL WALE SPLICE DETAIL

SCALE: 1-1/2" = 1'-0" S-502

0 1' 2'



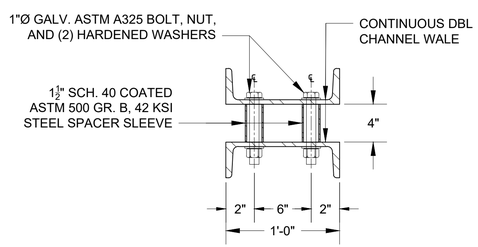
NOTES:

1. PROVIDE WALE CHAIRS ON THE STEEL SHEET PILE BULKHEAD AND ANCHOR WALL EVERY THIRD SHEET PILE PAIR (12'-6" O.C.).
2. THIS DETAIL IS ALSO APPLICABLE TO THE W-SECTION WALE ON THE BULKHEAD WEST RETURN.
3. ALL STEEL COATING DAMAGED DURING WELDING SHALL BE REPAIRED WITH A FIELD TOUCH-UP KIT TO THE SPECIFIED COATING THICKNESS.

C5 WALE CHAIR DETAIL

SCALE: 1-1/2" = 1'-0" S-502, S-503

0 1' 2'



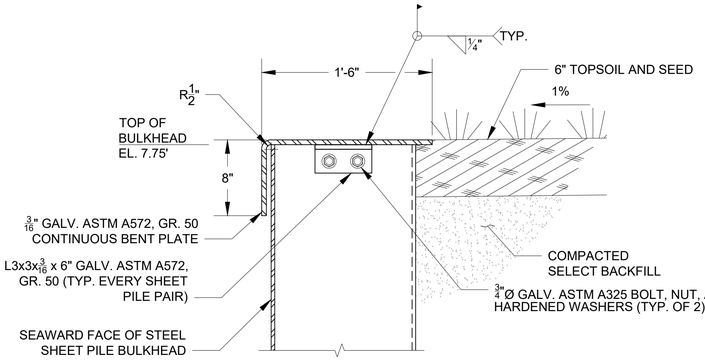
NOTE:

1. THE WALE SPACERS SHOWN SHALL BE PROVIDED AT 2'-1" O.C. ALONG THE LENGTH OF THE WALE (I.E., 2 PAIRS OF SPACERS PER SHEET PILE PAIR).

A5 DBL CHANNEL WALE SPACER DETAIL

SCALE: 1-1/2" = 1'-0" S-502, S-503

0 1' 2'



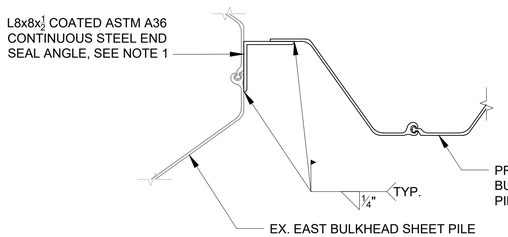
NOTES:

1. ALL GALV. COATING DAMAGED DURING WELDING SHALL BE REPAIRED WITH A FIELD TOUCH-UP KIT TO THE SPECIFIED COATING THICKNESS.

C8 BULKHEAD CAP DETAIL

SCALE: 1-1/2" = 1'-0" S-502, S-503

0 1' 2'



NOTES:

1. THE END SEAL ANGLE SHALL BE INSTALLED FROM THE TOP OF BULKHEAD ELEVATION TO 2' (MIN) BELOW THE FUTURE DREDGED MUDLINE DEPTH. THIS DETAIL IS APPLICABLE TO BOTH THE EXISTING (CIRCA 2011) AND HISTORIC (CIRCA 1969) EAST BULKHEAD SHEET PILES WHERE THEY ARE EXPOSED.
2. PORTIONS OF THE EXISTING EAST BULKHEAD TO ACCEPT THE END SEAL ANGLE SHALL BE POWER WASHED OF ALL RUST, SCALE, LOOSE COATING, AND MARINE GROWTH PRIOR TO WELDING.
3. ALL COATING DAMAGED DURING WELDING SHALL BE REPAIRED WITH A FIELD TOUCH-UP KIT TO THE SPECIFIED COATING THICKNESS OR COATED WITH UNDERWATER TWO-PART MASTIC.

A8 END SEAL DETAIL

SCALE: 1" = 1'-0" C-105

0 1' 2'

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CE
US COAST GUARD CIVIL ENGINEERING

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A/E COMPANY: A/E PROJECT NO.: CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

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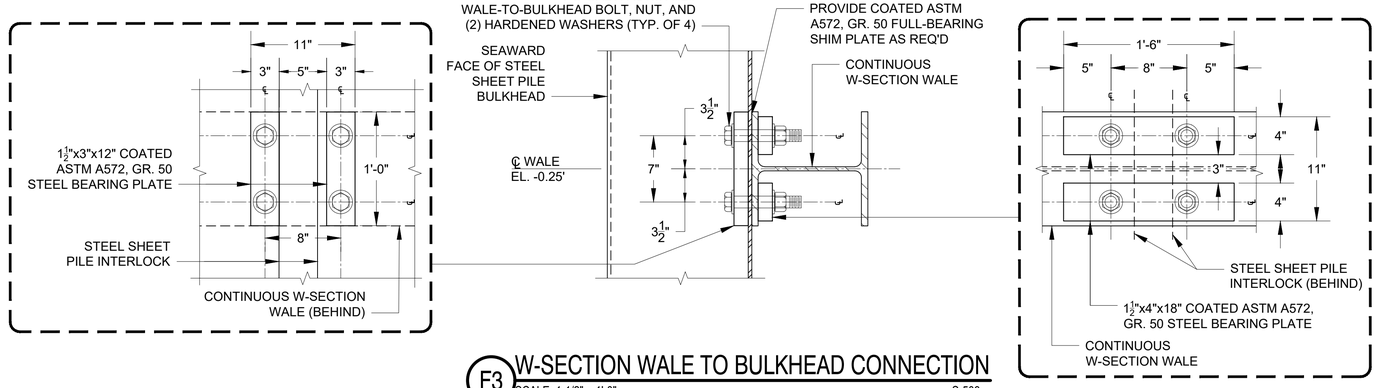
USCG PROJECT NO. 1010427
USCG DRAWING NO. P1010427S-504
USCG FILENAME P1010427S-504.DWG
SHEET 24 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK
NORTHPORT NY

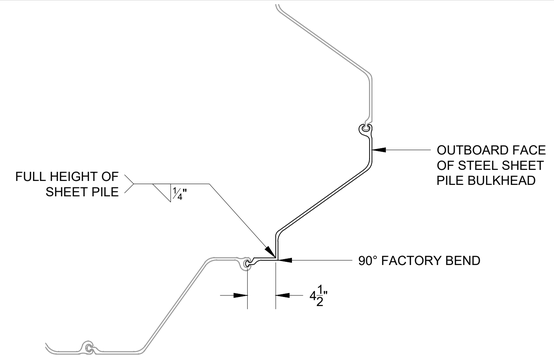
STRUCTURAL
SOUTH BULKHEAD
MISCELLANEOUS DETAILS – 1

SHEET ID
S BULKHEAD
S–504



F3 W-SECTION WALE TO BULKHEAD CONNECTION

SCALE: 1-1/2" = 1'-0" S-503

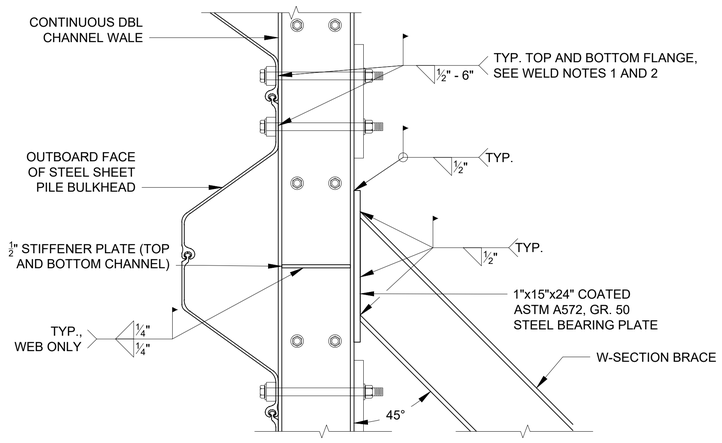


F8 PRE-FABRICATED 90° CORNER SHEET PILE DETAIL

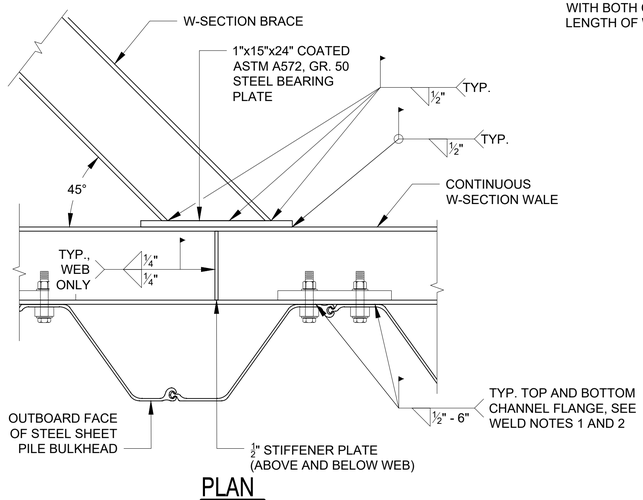
SCALE: 1" = 1'-0" S-503

WELD NOTES:

1. IF REQUIRED, SHIM PLATES SHALL, AT A MINIMUM, COVER THE ENTIRE BEARING AREA BETWEEN THE SHEET PILE AND WALE. IN ADDITION, SHIMS SHALL BE WELDED TO BOTH THE SHEET PILE AND THE WALE, WITH BOTH CONNECTIONS PROVIDING THE SIZE AND LENGTH OF WELD CALLED OUT.
2. WELDED WALE TO SHEET PILE CONNECTIONS SHALL BE PROVIDED AT THE TWO SHEET PILE FLANGES IMMEDIATELY ADJACENT TO STRUTS AND AT THE BULKHEAD CORNERS.
3. ALL STEEL COATING DAMAGED DURING WELDING SHALL BE REPAIRED WITH A FIELD TOUCH-UP KIT TO THE SPECIFIED COATING THICKNESS.



PLAN



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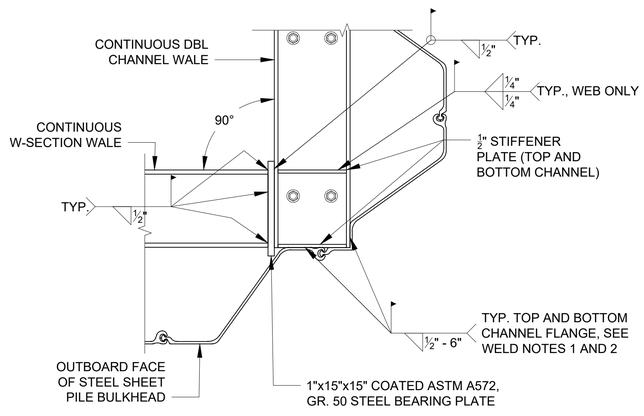

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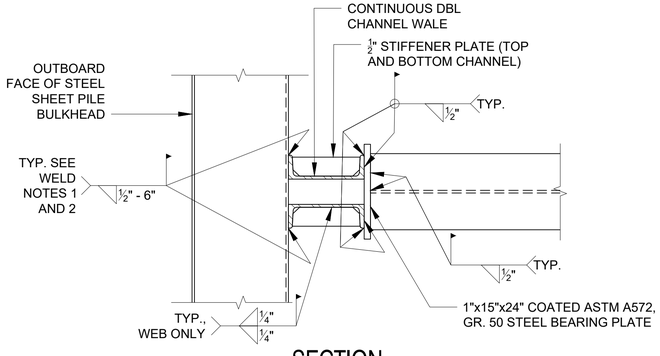
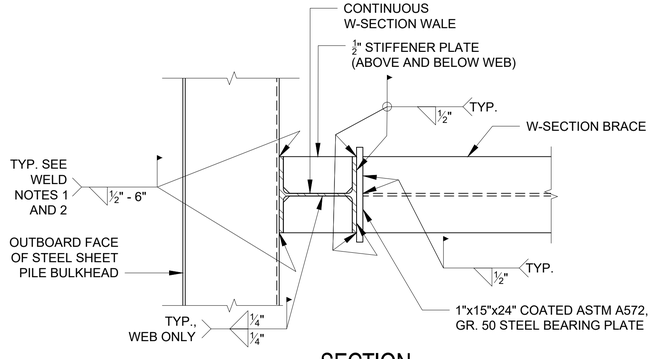


SECTION

A1 BRACE-TO-DBL CHANNEL WALE CONNECTION

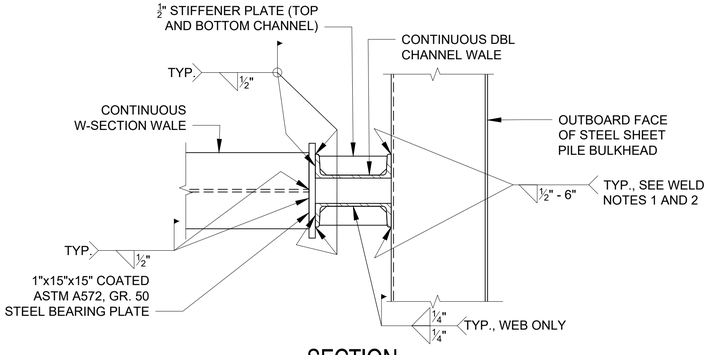
SCALE: 1" = 1'-0" S-503



SECTION

A4 BRACE-TO-W-SECTION WALE CONNECTION

SCALE: 1" = 1'-0" S-503



SECTION

A8 WALE-TO-WALE CORNER CONNECTION

SCALE: 1" = 1'-0" S-503

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SHEET 25 OF 25

MAJOR M&R WATERFRONT
CG STA EATONS NECK NY
NORTHPORT

STRUCTURAL
SOUTH BULKHEAD
MISCELLANEOUS DETAILS – 2

SHEET ID
S BULKHEAD
S–505