



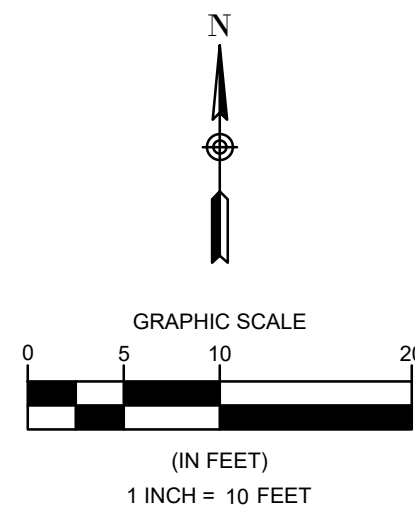
DEPARTMENT OF PUBLIC WORKS
 TOWN OF ORLEANS, MASSACHUSETTS
 ROCK HARBOR COMMERCIAL WHARF IMPROVEMENTS

REVISIONS		DATE	DESCRIPTION
NO.	BY	DATE	DESCRIPTION
1	JSD	08/22/2024	ADDENDUM #3

DATE OF PREPARATION		
SURVEYED	MEC/JAH	10/24/19 & 3/2/21
DRAWN	BAM	12/05/2023
DESIGNED	SRS	06/28/2021
CHECKED	PSR	12/24/2023

SHEET TITLE:
 DEMOLITION PLAN
 1 OF 2

ISSUANCE:
ISSUED FOR BID
 PROJECT NO: 00190004.10
 SHEET NUMBER
 C-102



- NOTE:
- ALL EXISTING PAVEMENT AND GRAVEL WITHIN LIMITS OF NEW FULL DEPTH PAVEMENT TO BE REMOVED.
 - R & D - REMOVE AND DISPOSAL.
 - R & R - REMOVE AND RESET.
 - EXISTING BACKFILL TO BE REMOVED/DREDGED TO ELEVATION -3.0 MLW WITH 1' OF ALLOWABLE OVERDIG/OVERDREDGE TO -4 MLW (± 2,300 CY). SEE MADEP 401WQC 22-WW08-0018-AAP FOR REUSE/DISPOSAL REQUIREMENTS.

DEPARTMENT OF PUBLIC WORKS
TOWN OF ORLEANS, MASSACHUSETTS
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NO.		

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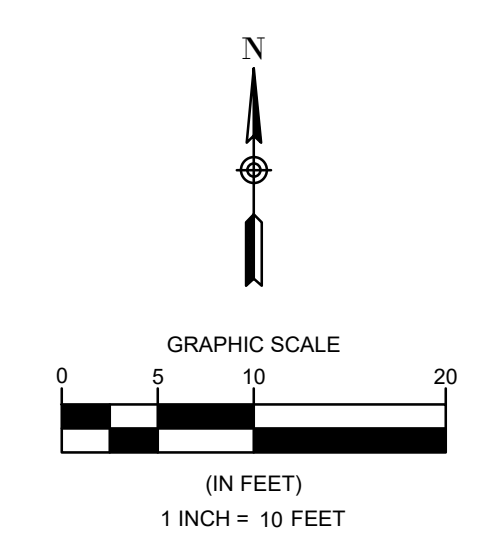
SHEET TITLE:

DEMOLITION PLAN
2 OF 2

ISSUANCE:
ISSUED FOR BID

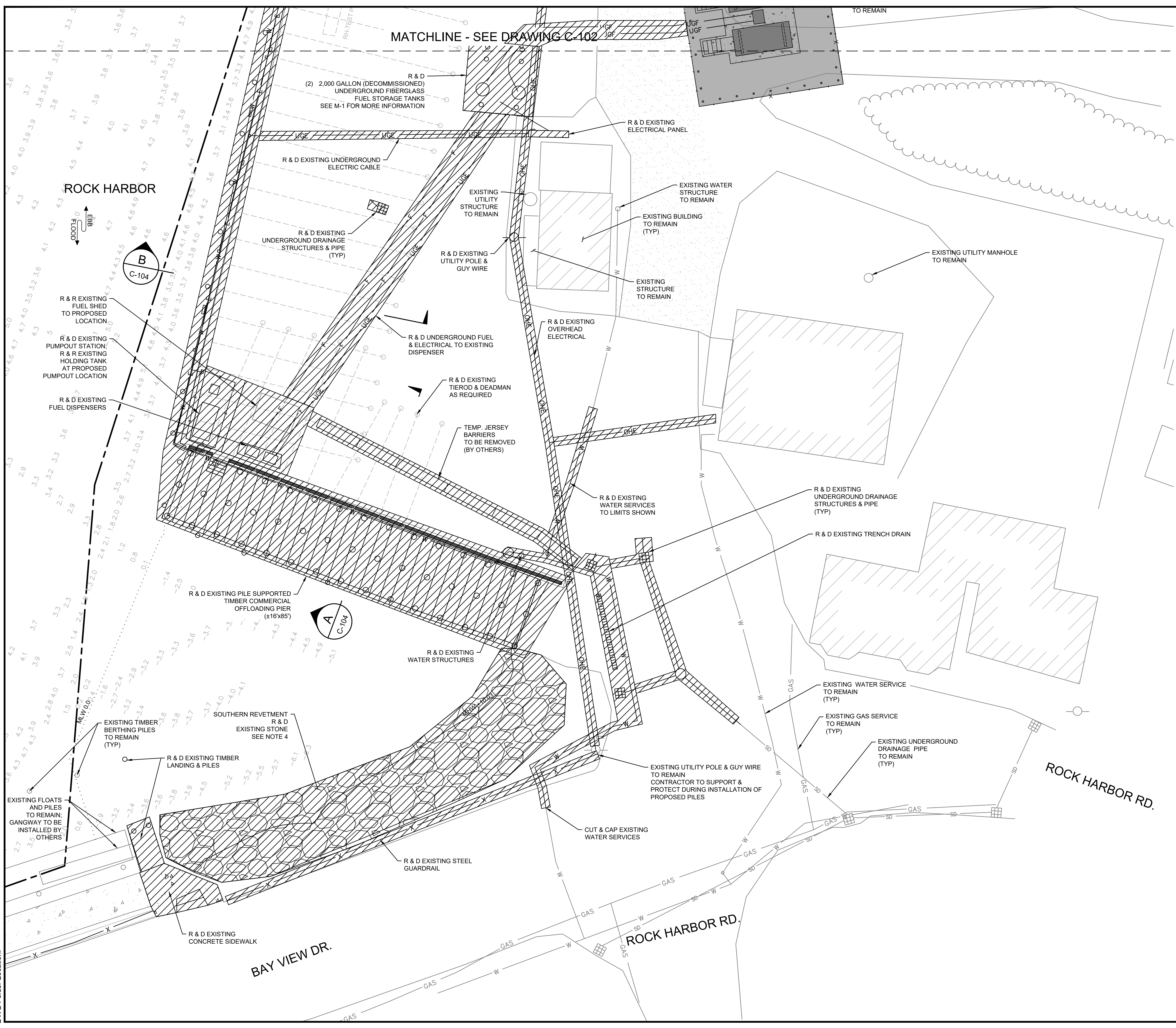
PROJECT NO: 00190004.10
SHEET NUMBER

C-103



NOTE:

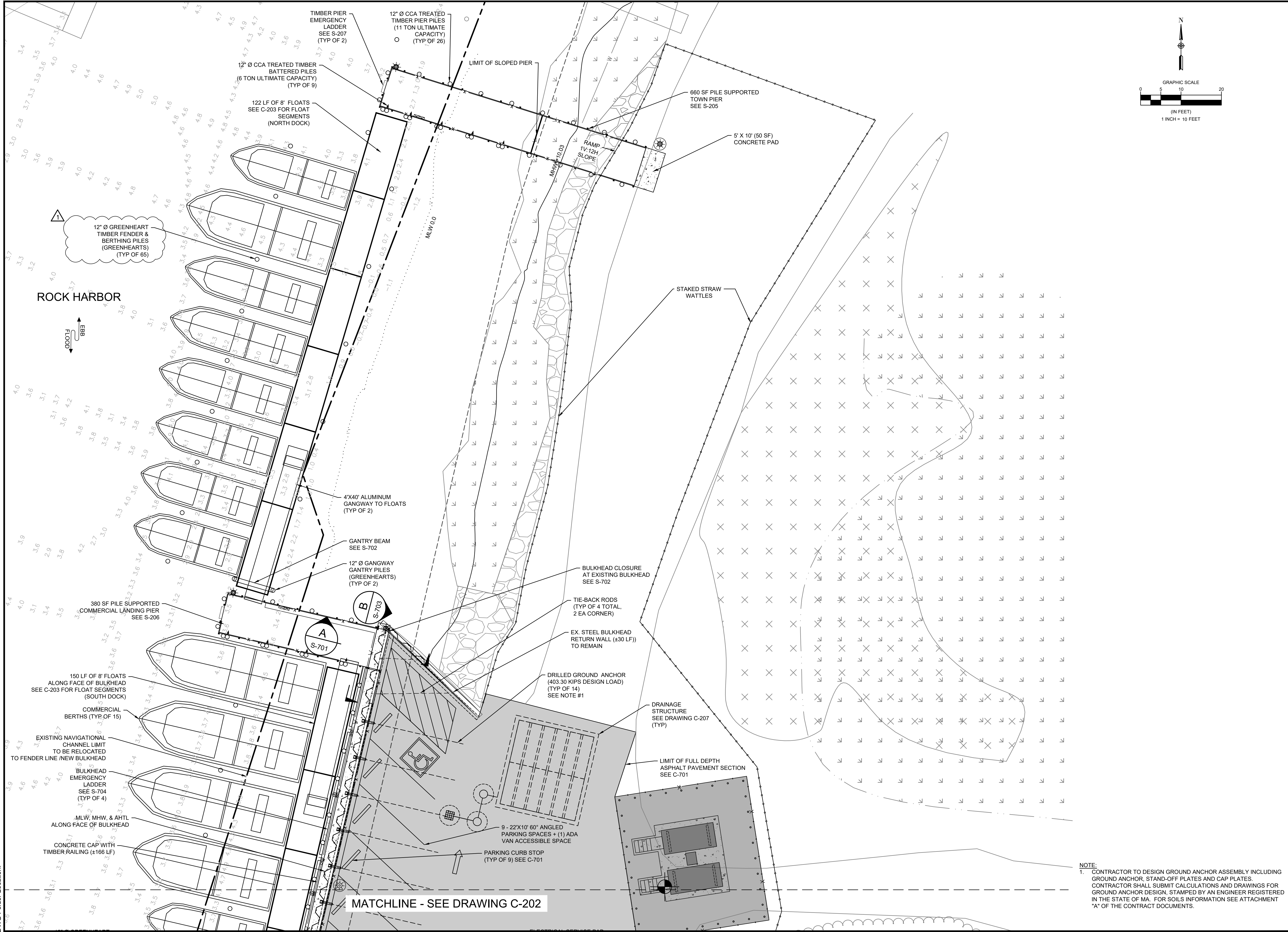
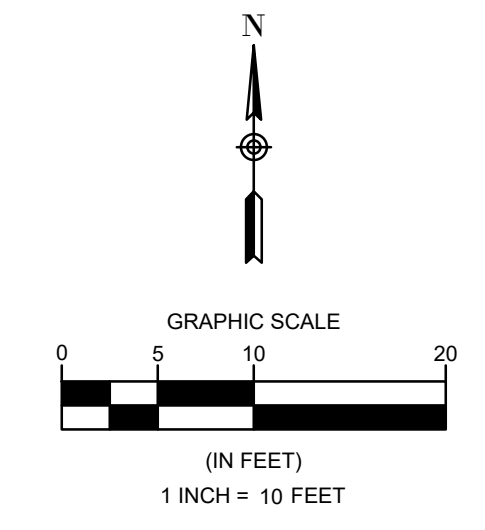
1. ALL EXISTING PAVEMENT AND GRAVEL WITHIN LIMITS OF NEW FULL DEPTH PAVEMENT TO BE REMOVED.
2. R & D - REMOVE AND DISPOSAL.
3. R & R - REMOVE AND RESET.
4. CONTRACTOR TO HAUL REMOVED EXISTING REVEMENT STONE TO THE TOWN DPW YARD. TOWN TO COORDINATE DISPOSAL LOCATION & HAUL ROUTE WITH CONTRACTOR POST AWARD. APPROXIMATE HAUL 5 MILE ROUND TRIP.



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1	ADDENDUM #3	JSD	03/22/2024
2			
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SURVEYED		MEC/JAH	10/24/19 & 3/2/21
DRAWN		BAM	12/05/2023
DESIGNED		SRS	06/28/2021
CHECKED		PSR	12/24/2023
SHEET TITLE:			
SITE PLAN 1 OF 2			
ISSUANCE:			
ISSUED FOR BID			
PROJECT NO:		00190004.10	
SHEET NUMBER			
C-201			



NOTE:
 1. CONTRACTOR TO DESIGN GROUND ANCHOR ASSEMBLY INCLUDING GROUND ANCHOR, STAND-OFF PLATES AND CAP PLATES. CONTRACTOR SHALL SUBMIT CALCULATIONS AND DRAWINGS FOR GROUND ANCHOR DESIGN, STAMPED BY AN ENGINEER REGISTERED IN THE STATE OF MA. FOR SOILS INFORMATION SEE ATTACHMENT "A" OF THE CONTRACT DOCUMENTS.

DEPARTMENT OF PUBLIC WORKS
TOWN OF ORLEANS, MASSACHUSETTS
ROCK HARBOR COMMERCIAL WHARF IMPROVEMENTS

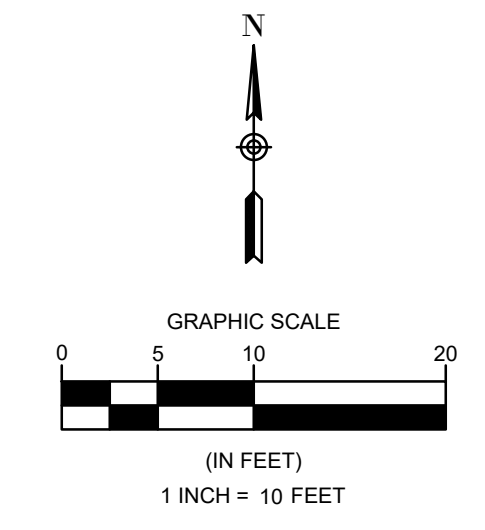
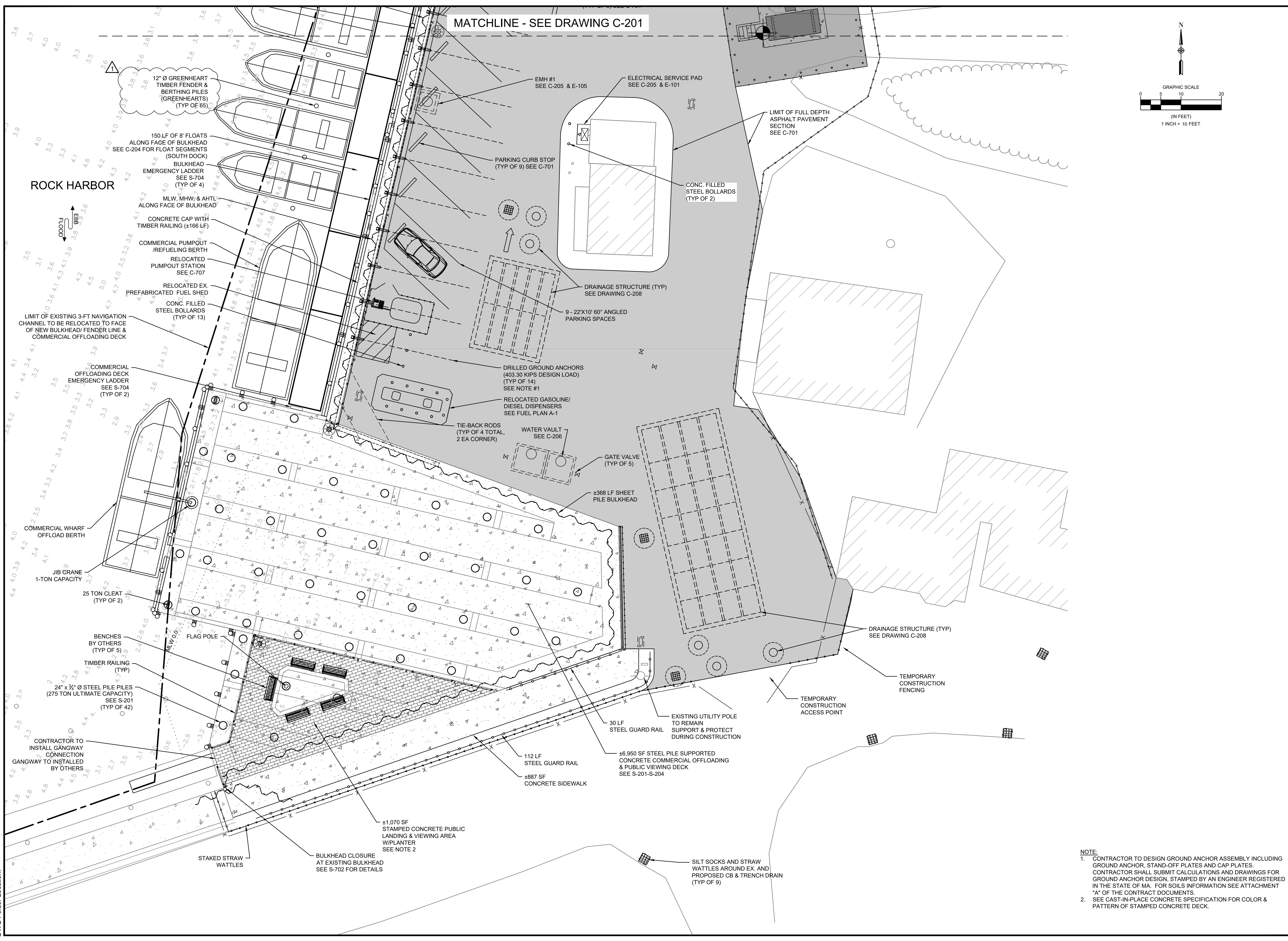
REVISIONS		DATE OF PREPARATION	
NO.	DESCRIPTION	BY	DATE
1	ADDITION #3	JSD	03/22/2024
2			
3			
4			
5			

DATE OF PREPARATION	
BY	DATE
MEC/JAH	10/24/19 & 3/2/21
BAM	12/05/2023
SRS	06/28/2021
PSR	12/24/2023

SHEET TITLE:
SITE PLAN 2 OF 2

ISSUANCE:
ISSUED FOR BID

PROJECT NO: 00190004.10
SHEET NUMBER



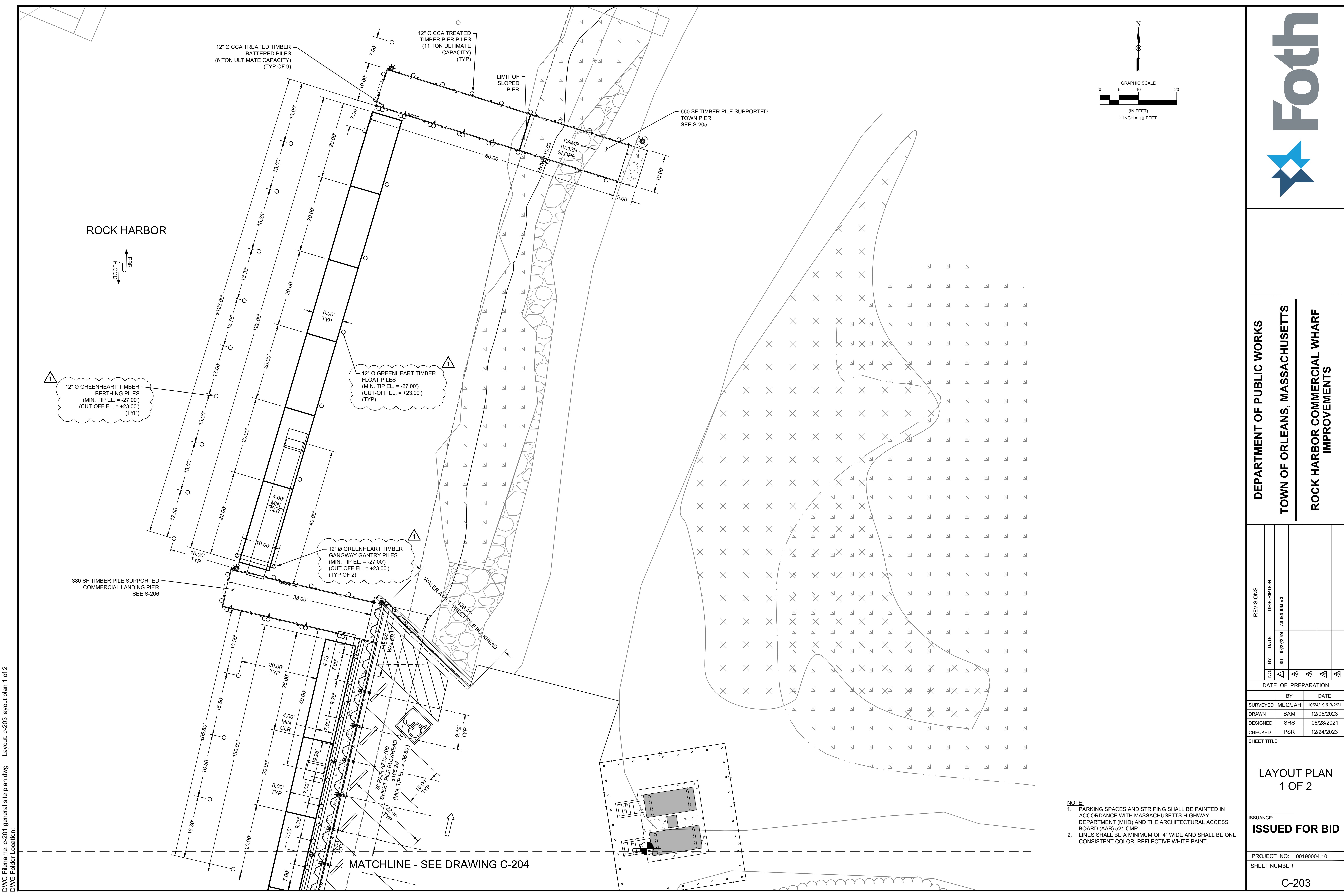
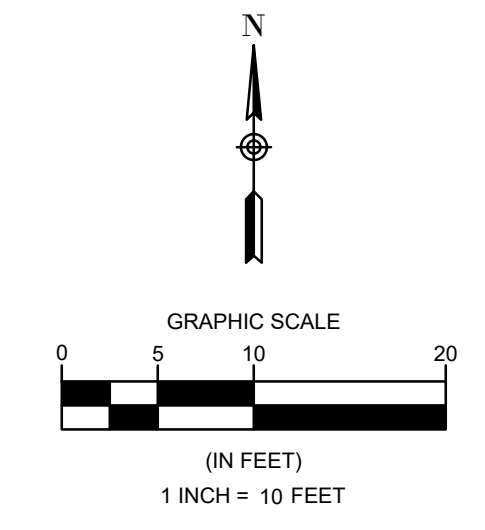
NOTE:

- CONTRACTOR TO DESIGN GROUND ANCHOR ASSEMBLY INCLUDING GROUND ANCHOR, STAND-OFF PLATES AND CAP PLATES. CONTRACTOR SHALL SUBMIT CALCULATIONS AND DRAWINGS FOR GROUND ANCHOR DESIGN, STAMPED BY AN ENGINEER REGISTERED IN THE STATE OF MA. FOR SOILS INFORMATION SEE ATTACHMENT "A" OF THE CONTRACT DOCUMENTS.
- SEE CAST-IN-PLACE CONCRETE SPECIFICATION FOR COLOR & PATTERN OF STAMPED CONCRETE DECK.

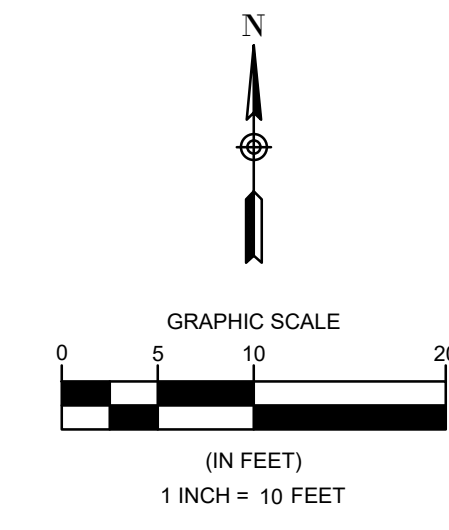
DEPARTMENT OF PUBLIC WORKS
 TOWN OF ORLEANS, MASSACHUSETTS
 ROCK HARBOR COMMERCIAL WHARF
 IMPROVEMENTS

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MEC/JAH	10/24/19 & 3/22/21
DRAWN	BAM 12/05/2023
DESIGNED	SRS 06/28/2021
CHECKED	PSR 12/24/2023
SHEET TITLE:	
LAYOUT PLAN 1 OF 2	
ISSUANCE:	
ISSUED FOR BID	
PROJECT NO: 00190004.10	
SHEET NUMBER	
C-203	

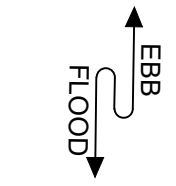


NOTE:
 1. PARKING SPACES AND STRIPING SHALL BE PAINTED IN ACCORDANCE WITH MASSACHUSETTS HIGHWAY DEPARTMENT (MHD) AND THE ARCHITECTURAL ACCESS BOARD (AAB) 521 CMR.
 2. LINES SHALL BE A MINIMUM OF 4" WIDE AND SHALL BE ONE CONSISTENT COLOR, REFLECTIVE WHITE PAINT.



MATCHLINE - SEE DRAWING C-203

ROCK HARBOR



12" Ø GREENHEART TIMBER BERTHING PILES
(MIN. TIP EL. = -27.00')
(CUT-OFF EL. = +23.00')
(TYP)

12" Ø GREENHEART TIMBER FENDER PILES
(MIN. TIP EL. = -23.70')
(CUT-OFF EL. = +17.50')
(TYP)

12" Ø GREENHEART TIMBER FENDER PILES
(MIN. TIP EL. = -23.70')
(CUT-OFF EL. = +16.30')
(TYP)

±6,950 SF PILE SUPPORTED CONCRETE COMMERCIAL OFFLOADING & PUBLIC VIEWING DECK
SEE S-201-S-204

24" x 3/4" Ø STEEL PILE PILES
(275 TON ULTIMATE CAPACITY)
SEE S-201
(TYP OF 42)

6 PAIR AZ19-700 SHEET PILE BULKHEAD
±27.54'
(MIN. TIP EL. = -28.75')

9 PAIR AZ14-770 SHEET PILE BULKHEAD
±45.45'
(MIN. TIP EL. = -28.75')

5.5 PAIR AZ14-770 SHEET PILE BULKHEAD
±27.78'
(MIN. TIP EL. = -28.75')

20 PAIR AZ14-770 SHEET PILE BULKHEAD
±101.00'
(MIN. TIP EL. = -28.75')

SEE FUEL DRAWING A-1 FOR ISLAND DIMENSIONS

- NOTE:
- PARKING SPACES AND STRIPING SHALL BE PAINTED IN ACCORDANCE WITH MASSACHUSETTS HIGHWAY DEPARTMENT (MHD) AND THE ARCHITECTURAL ACCESS BOARD (AAB) 521 CMR.
 - LINES SHALL BE A MINIMUM OF 4" WIDE AND SHALL BE ONE CONSISTENT COLOR, REFLECTIVE WHITE PAINT.

DEPARTMENT OF PUBLIC WORKS
TOWN OF ORLEANS, MASSACHUSETTS
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REVISIONS		DESCRIPTION	
NO.	DATE	BY	APPENDIX #3
1	03/22/2024	JSD	
2			
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DATE OF PREPARATION

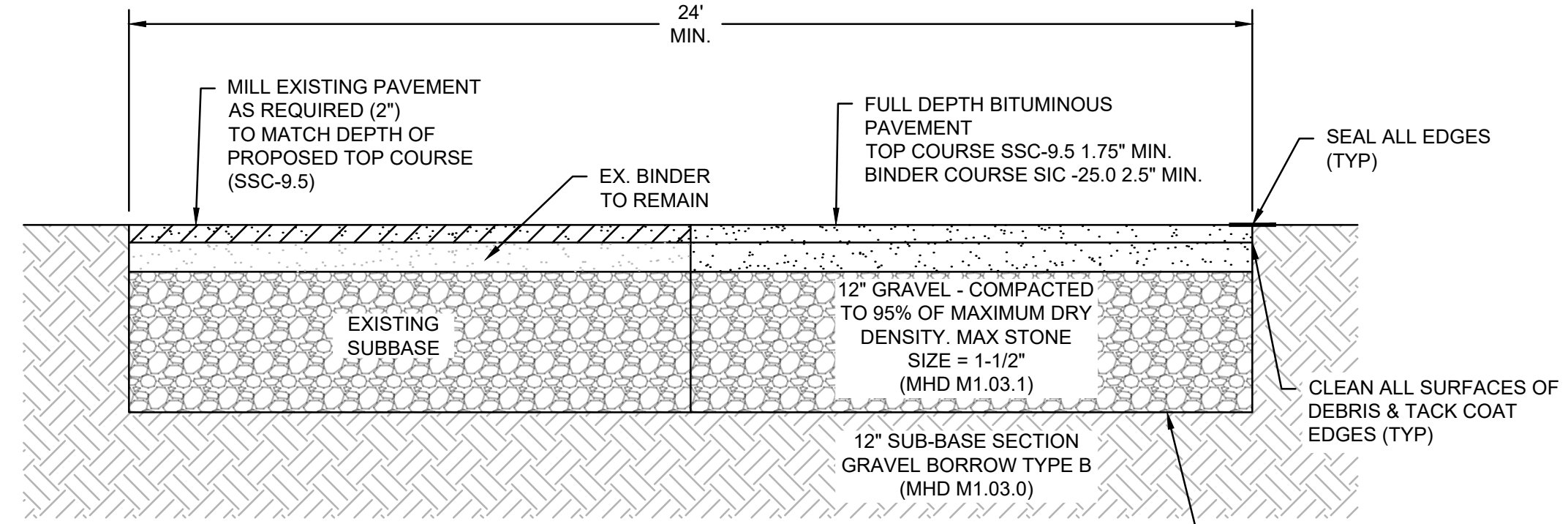
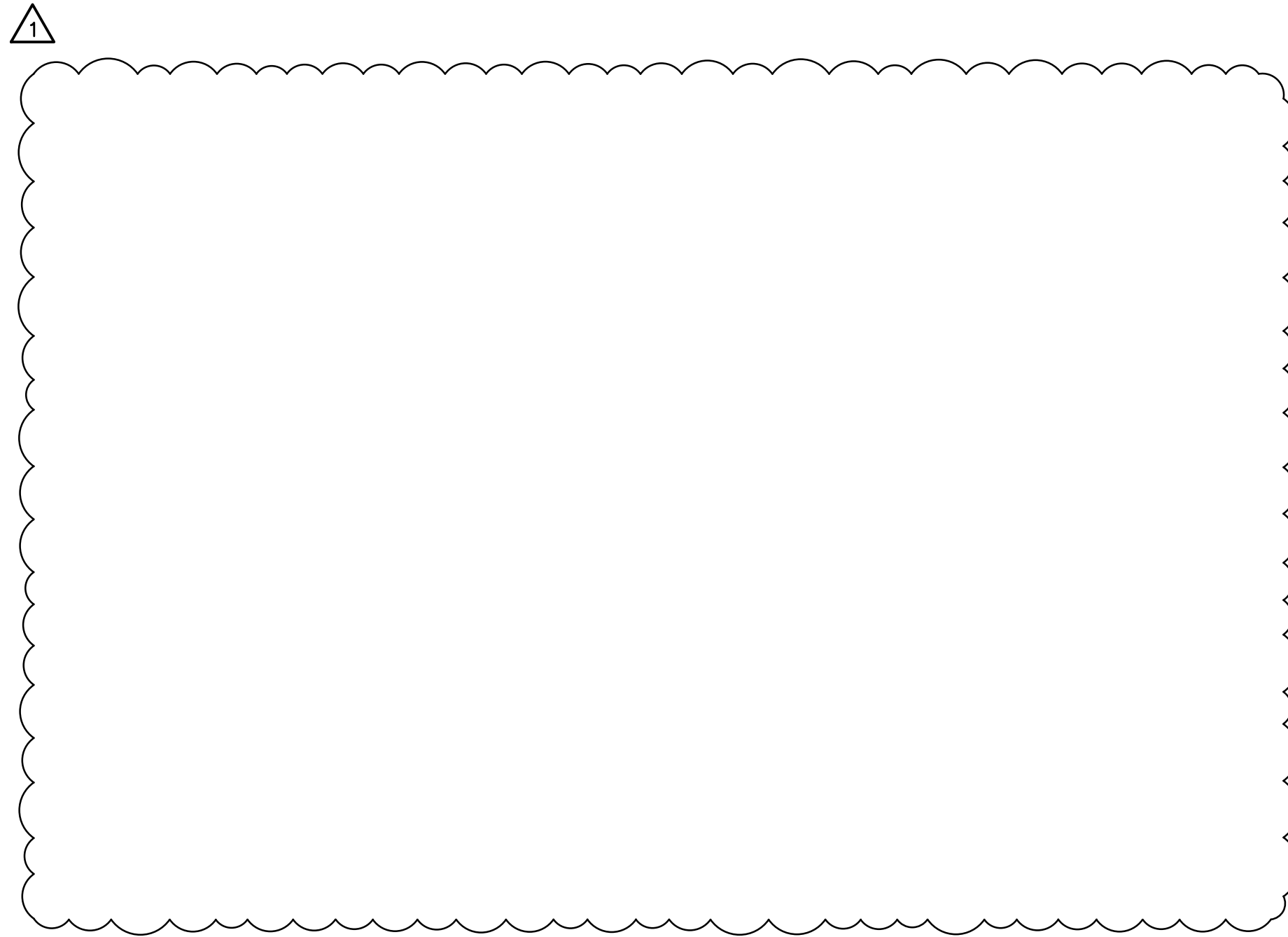
SURVEYED	BY	DATE
MEC/JAH		10/24/19 & 3/2/21
DRAWN	BY	DATE
BAM		12/05/2023
DESIGNED	BY	DATE
SRS		06/28/2021
CHECKED	BY	DATE
PSR		12/24/2023

SHEET TITLE:

LAYOUT PLAN
2 OF 2

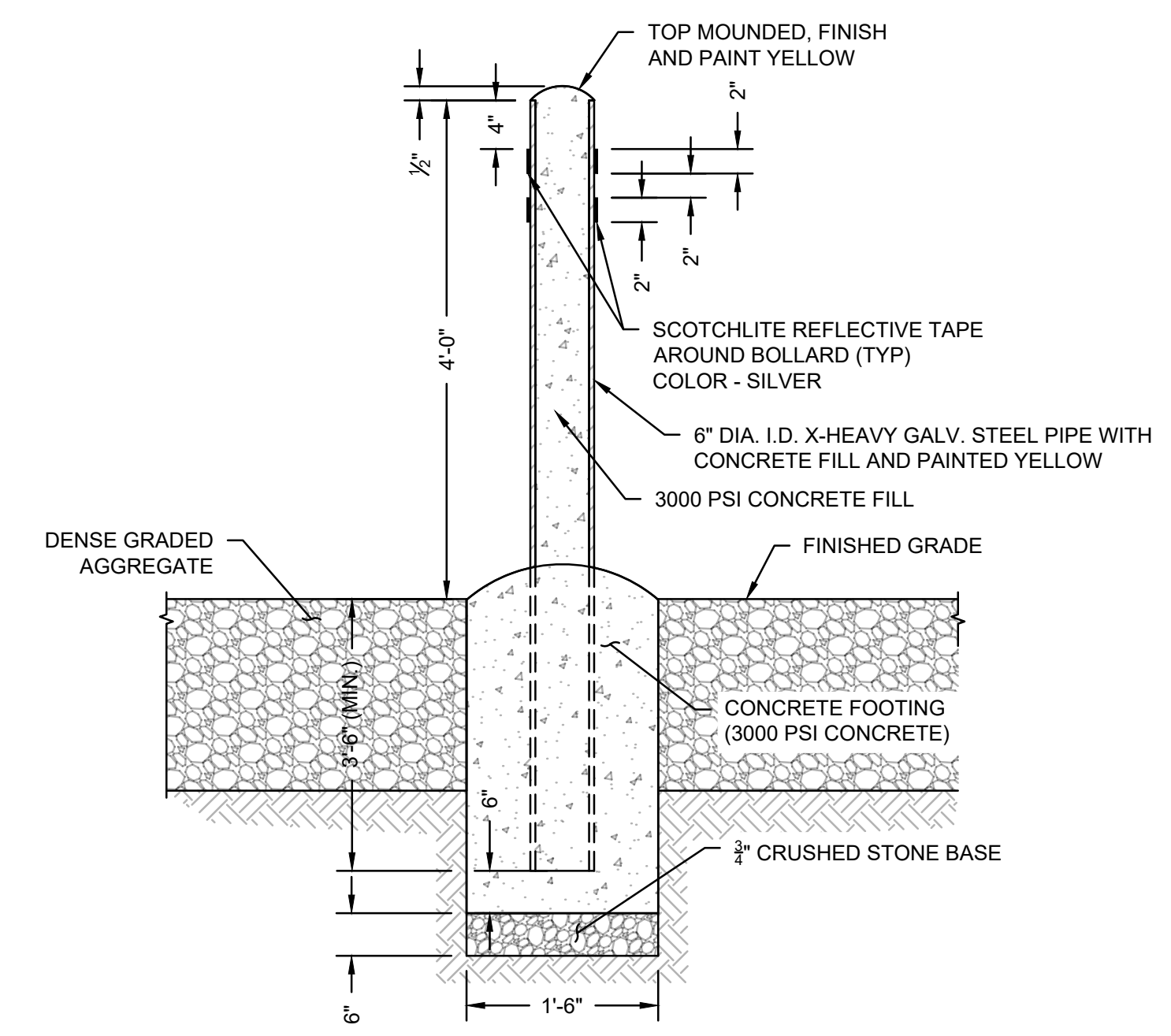
ISSUANCE:
ISSUED FOR BID

PROJECT NO: 00190004.10
SHEET NUMBER
C-204

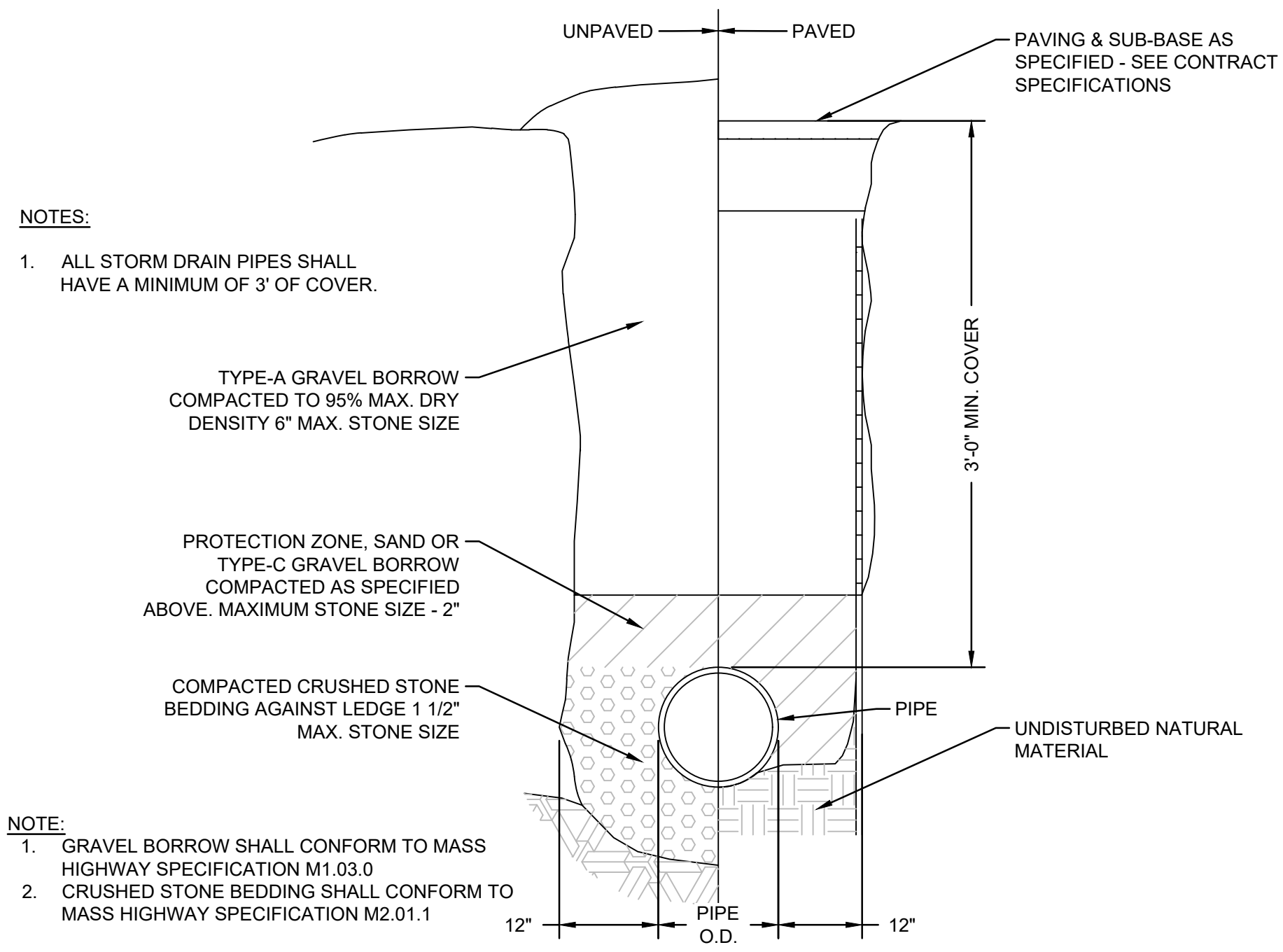


- NOTES:**
1. NEW BASE COURSE - PROVIDE BASE COURSE MATERIAL IN LIFTS NOT EXCEEDING 8" AFTER COMPACTION. COMPACT TO A MODIFIED PROCTOR DENSITY OF 95% OR GREATER.
 2. TACK COAT - PROVIDE FULL TACK COAT COVERAGE ON ALL VERTICAL SURFACES AT A RATE OF 0.06 TO 0.08 GALLONS PER SQUARE YARD PER MASSDOT STANDARD SPECIFICATIONS SECTION 450.3 (G).
 3. NEW ASPHALT PAVEMENT PER MASSDOT STANDARD SPECIFICATION SECTION 460. COMPACT THE NEW PAVEMENT TO 95% OF LABORATORY DENSITY OR 94% OF MAXIMUM THEORETICAL DENSITY.

TYPICAL FULL DEPTH PAVEMENT DETAIL
SCALE: N.T.S.



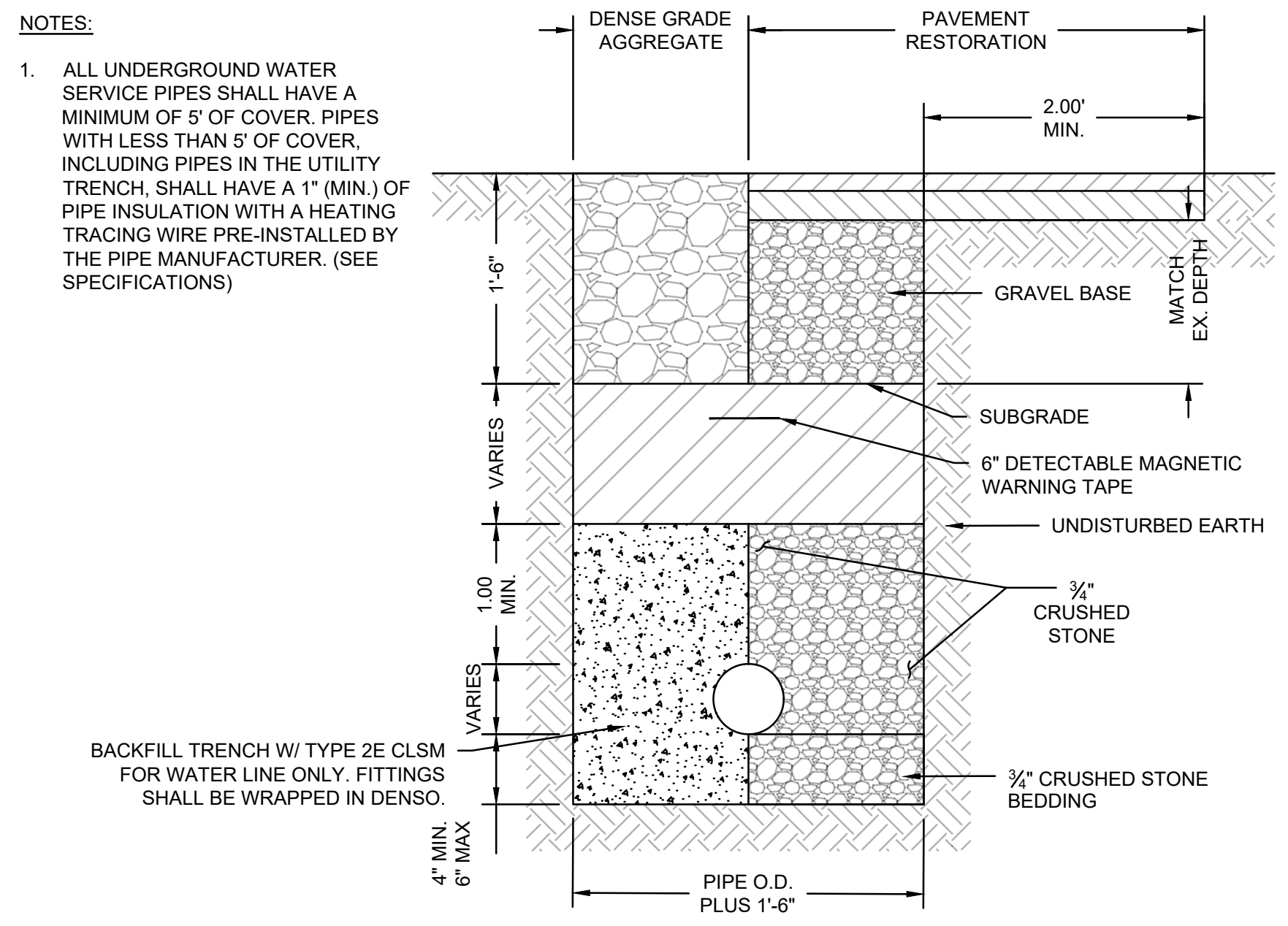
STEEL BOLLARD DETAIL
SCALE: N.T.S.



- NOTES:**
1. ALL STORM DRAIN PIPES SHALL HAVE A MINIMUM OF 3' OF COVER.

- NOTE:**
1. GRAVEL BORROW SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M1.03.0
 2. CRUSHED STONE BEDDING SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M2.01.1

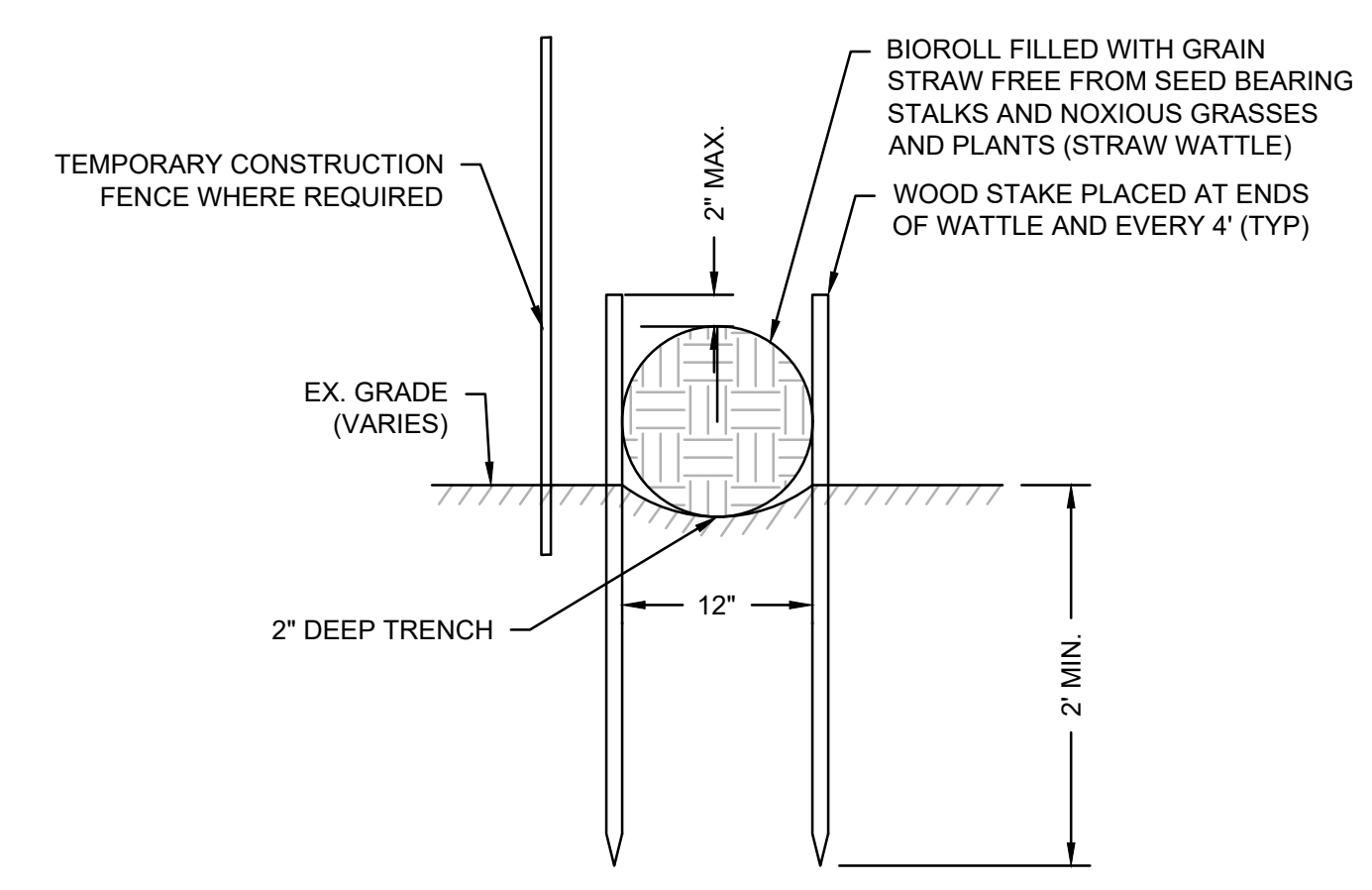
TYPICAL STORM DRAIN TRENCH DETAIL
SCALE: N.T.S.



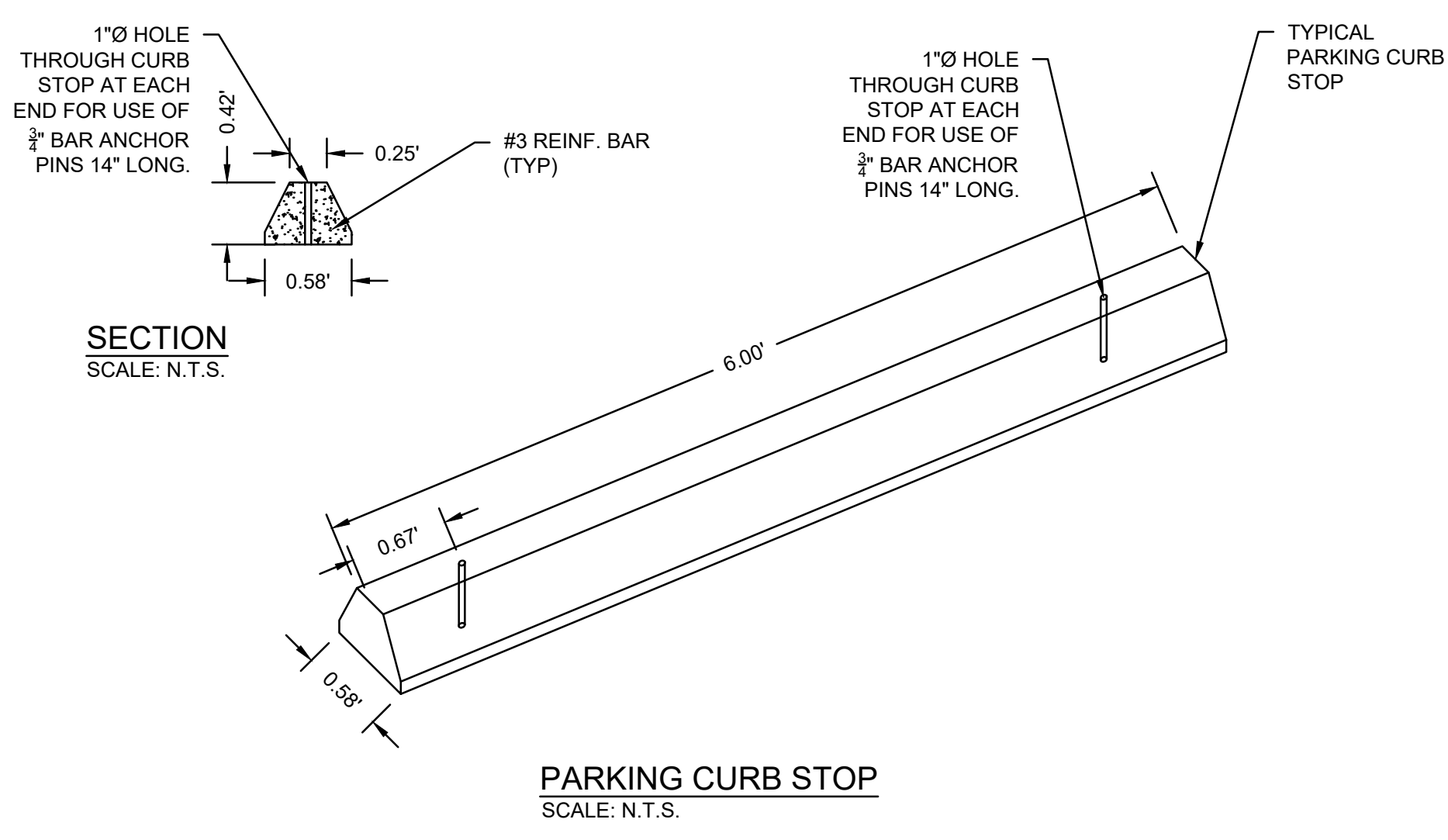
- NOTES:**
1. ALL UNDERGROUND WATER SERVICE PIPES SHALL HAVE A MINIMUM OF 5' OF COVER. PIPES WITH LESS THAN 5' OF COVER, INCLUDING PIPES IN THE UTILITY TRENCH, SHALL HAVE A 1" (MIN.) OF PIPE INSULATION WITH A HEATING TRACING WIRE PRE-INSTALLED BY THE PIPE MANUFACTURER. (SEE SPECIFICATIONS)

BACKFILL TRENCH W/ TYPE 2E CLSM FOR WATER LINE ONLY. FITTINGS SHALL BE WRAPPED IN DENSO.

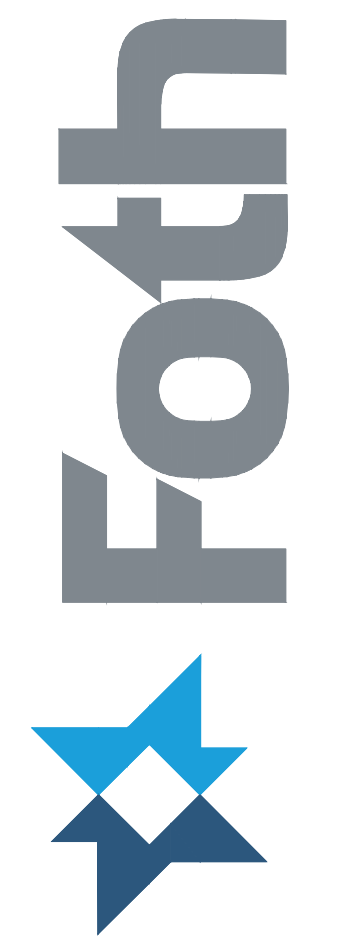
TYPICAL WATER TRENCH DETAIL
SCALE: N.T.S.



STRAW WATTLE DETAIL
SCALE: N.T.S.



PARKING CURB STOP
SCALE: N.T.S.



DEPARTMENT OF PUBLIC WORKS
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ROCK HARBOR COMMERCIAL WHARF IMPROVEMENTS

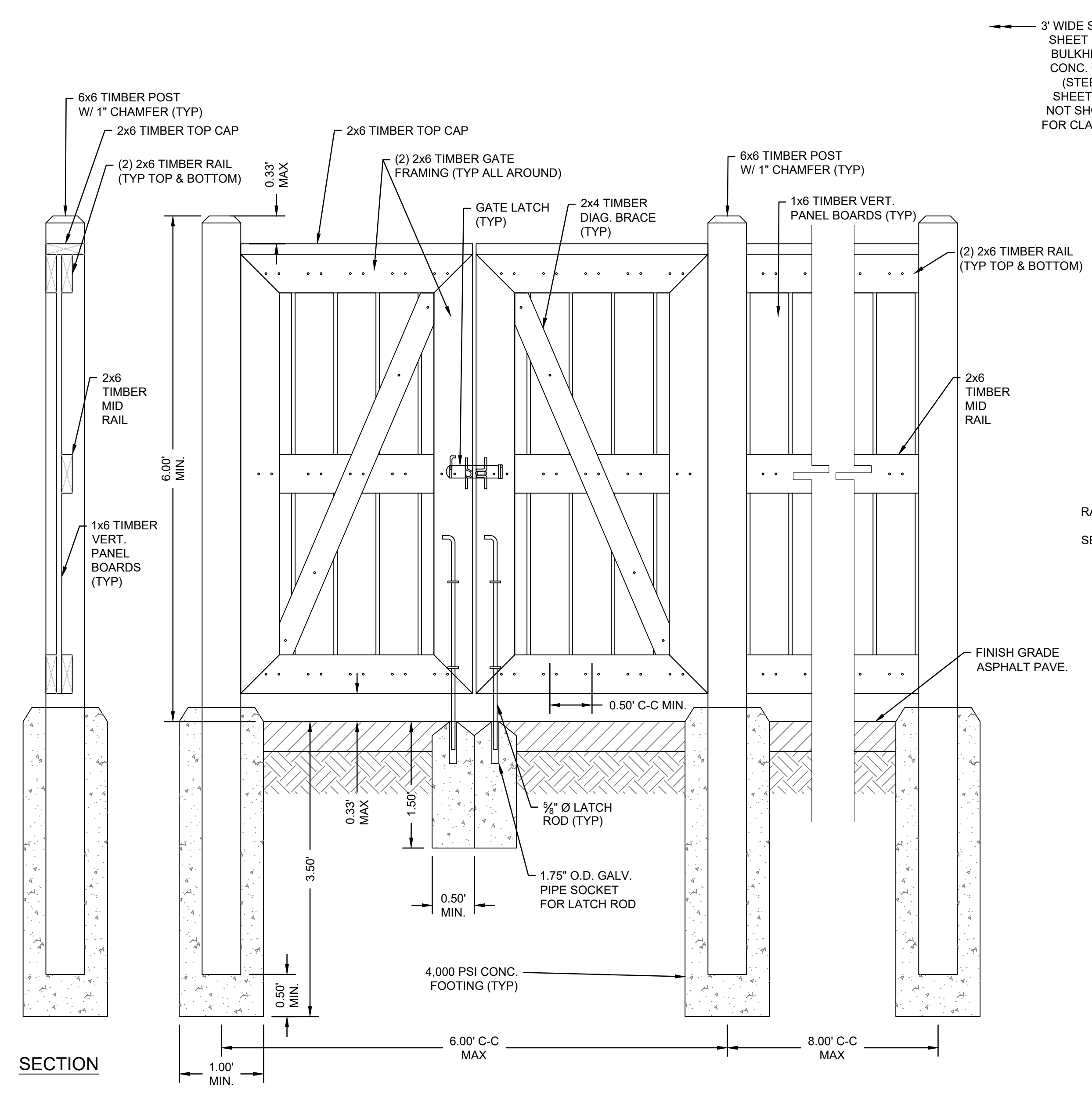
NO.	DATE	BY	DESCRIPTION
1	03/22/2024	JSD	ADDENDUM #3

DATE OF PREPARATION	
BY	DATE
MEC/JAH	10/24/19 & 3/2/21
BAM	12/05/2023
SRS	06/28/2021
PSR	12/24/2023

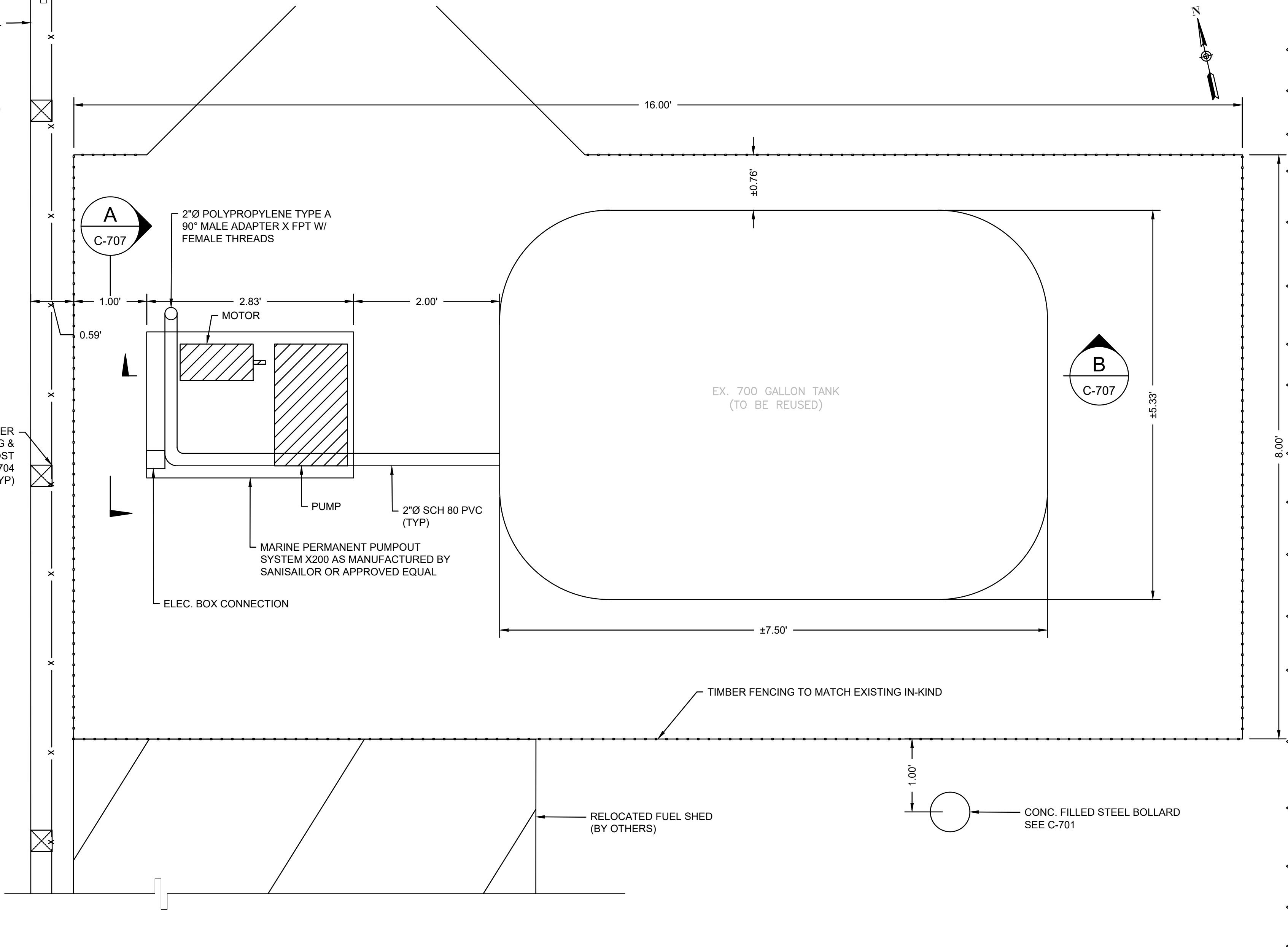
SHEET TITLE:
STANDARD CIVIL DETAILS

ISSUANCE:
ISSUED FOR BID

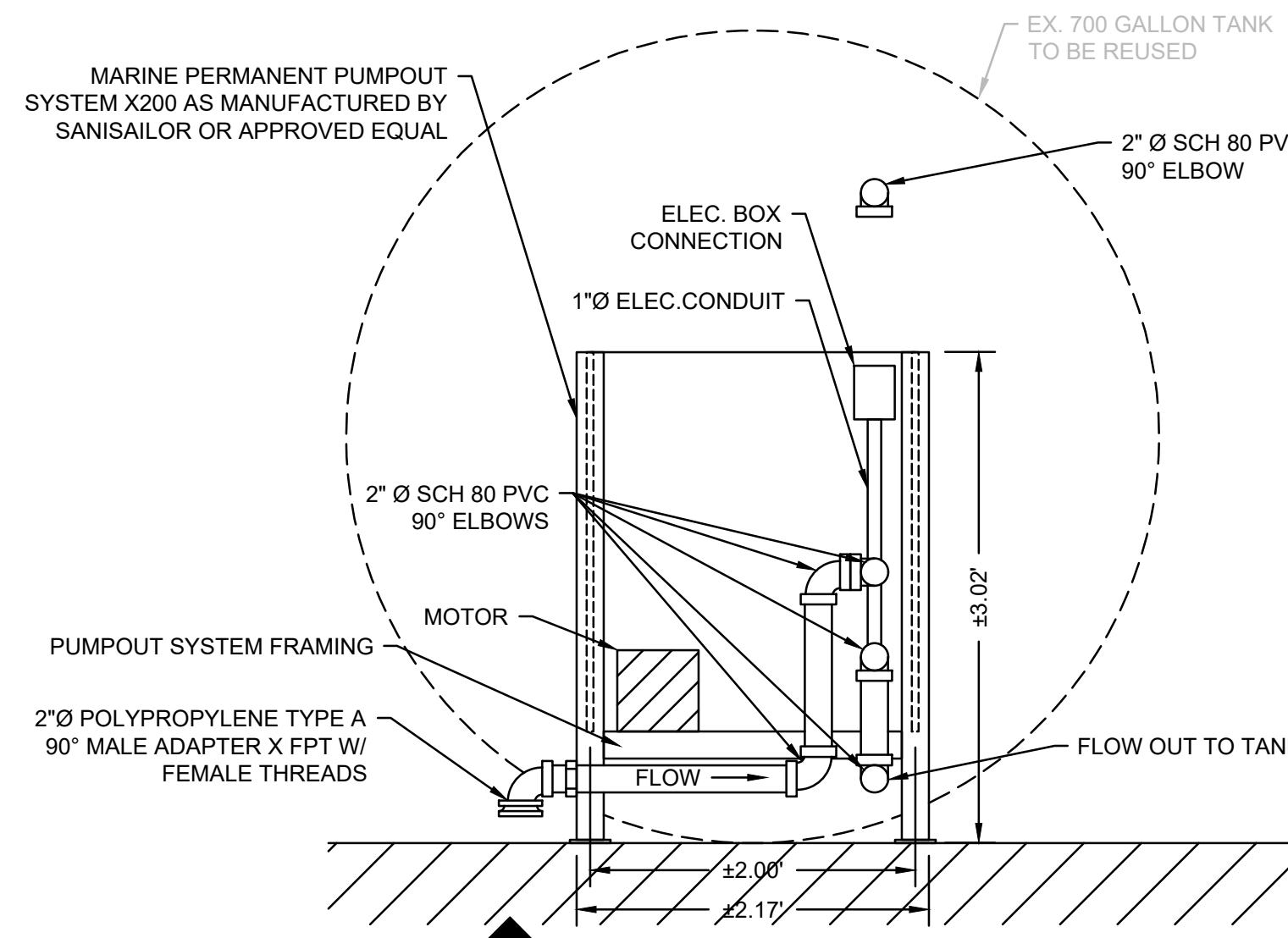
PROJECT NO: 00190004.10
SHEET NUMBER



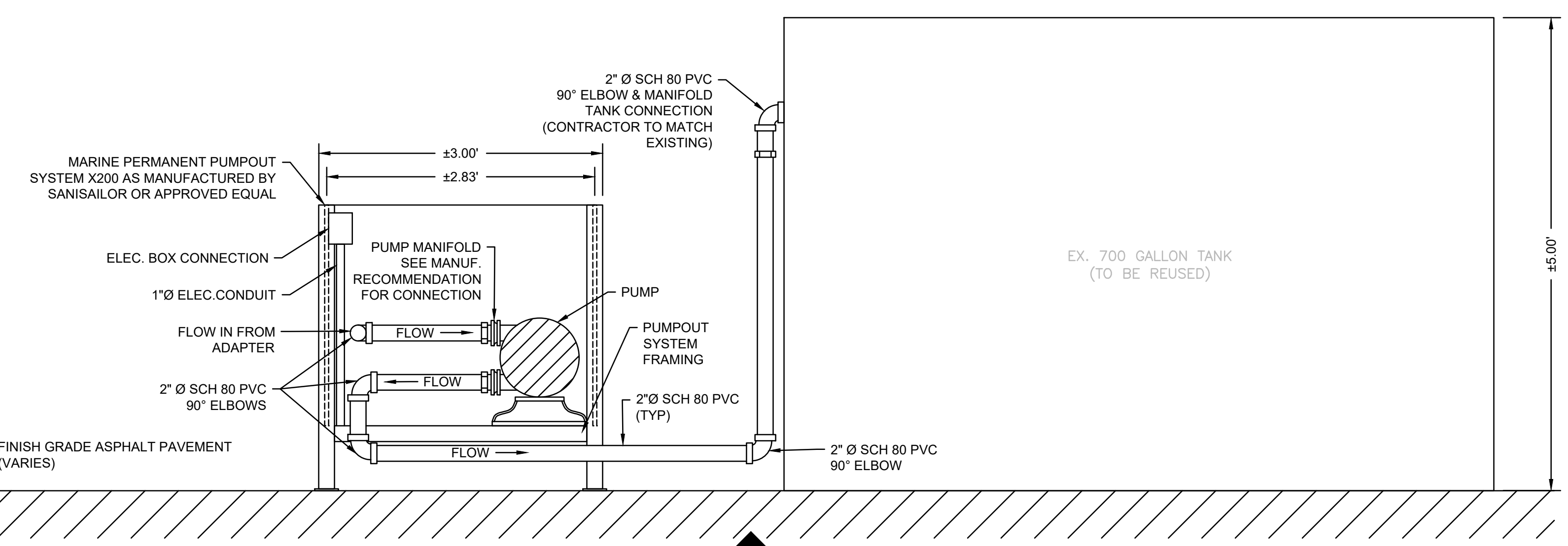
PUMPOUT STATION FENCE
SCALE: 1" = 1'
NOTE:
1. TIMBER SHALL BE NO. 1 GRADE CEDAR AND FREE OF EXCESSIVE CHIPS, CRACKS, WARPS OR KNOTS.
2. CONTRACTOR TO INSTALL HEAVY DUTY HINGES FOR THE SWING GATE.
3. ALL FASTENERS & HARDWARE SHALL BE HOT DIPPED GALVANIZED.



PUMPOUT STATION PLAN VIEW
SCALE: 1" = 1'



PUMPOUT STATION DETAIL
SCALE: 1" = 1'



PUMPOUT STATION SECTION
SCALE: 1" = 1'

NOTE:
1. NEW PUMPOUT STATION CONFIGURATION TO MATCH EXISTING SETUP.
2. PUMPOUT LINE TO BOATS APPROX. 50'-0" LONG.

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PSR	12/24/2023

PUMPOUT STATION DETAILS

ISSUANCE:
ISSUED FOR BID

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SHEET NUMBER

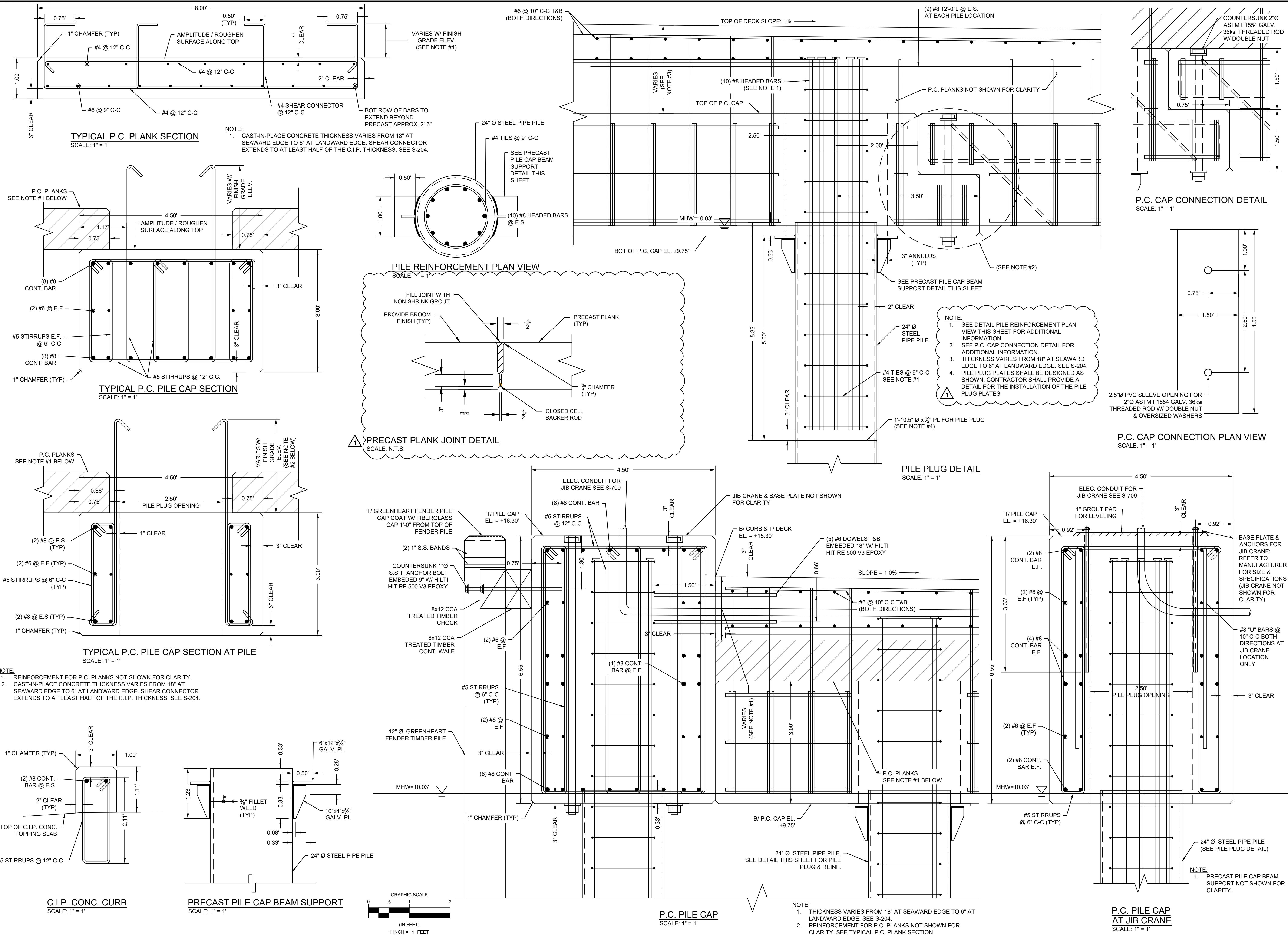
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NO.	BY	DATE	DESCRIPTION
1	JSD	04/22/2024	ADDITION #3

DATE OF PREPARATION	
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SURVEYED	MEC/JAH 10/24/19 & 3/2/21
DRAWN	BAM 12/05/2023
DESIGNED	SRS 06/28/2021
CHECKED	PSR 12/24/2023

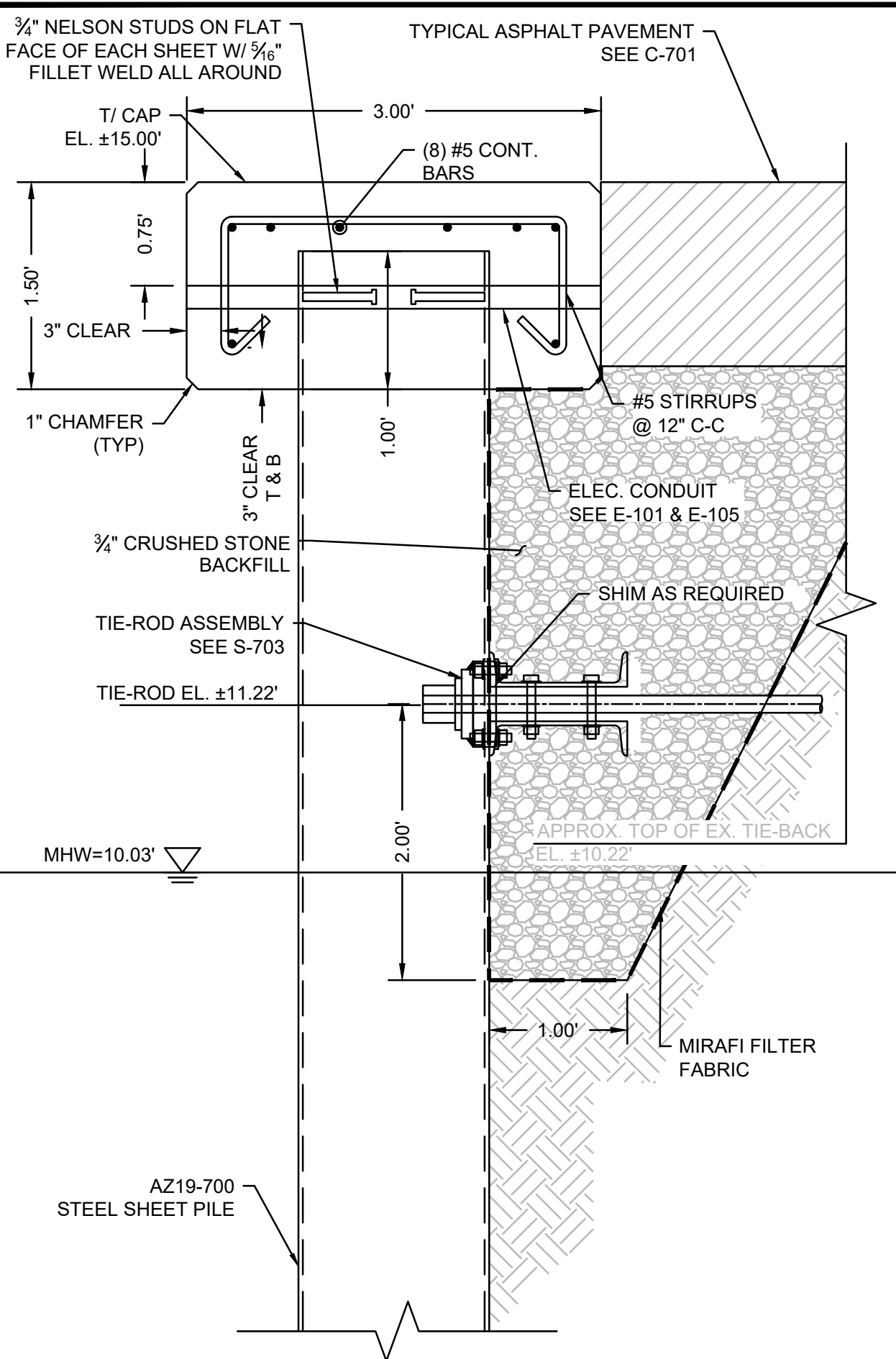
SHEET TITLE:
SECTION VIEWS 4 OF 4

ISSUANCE:
ISSUED FOR BID

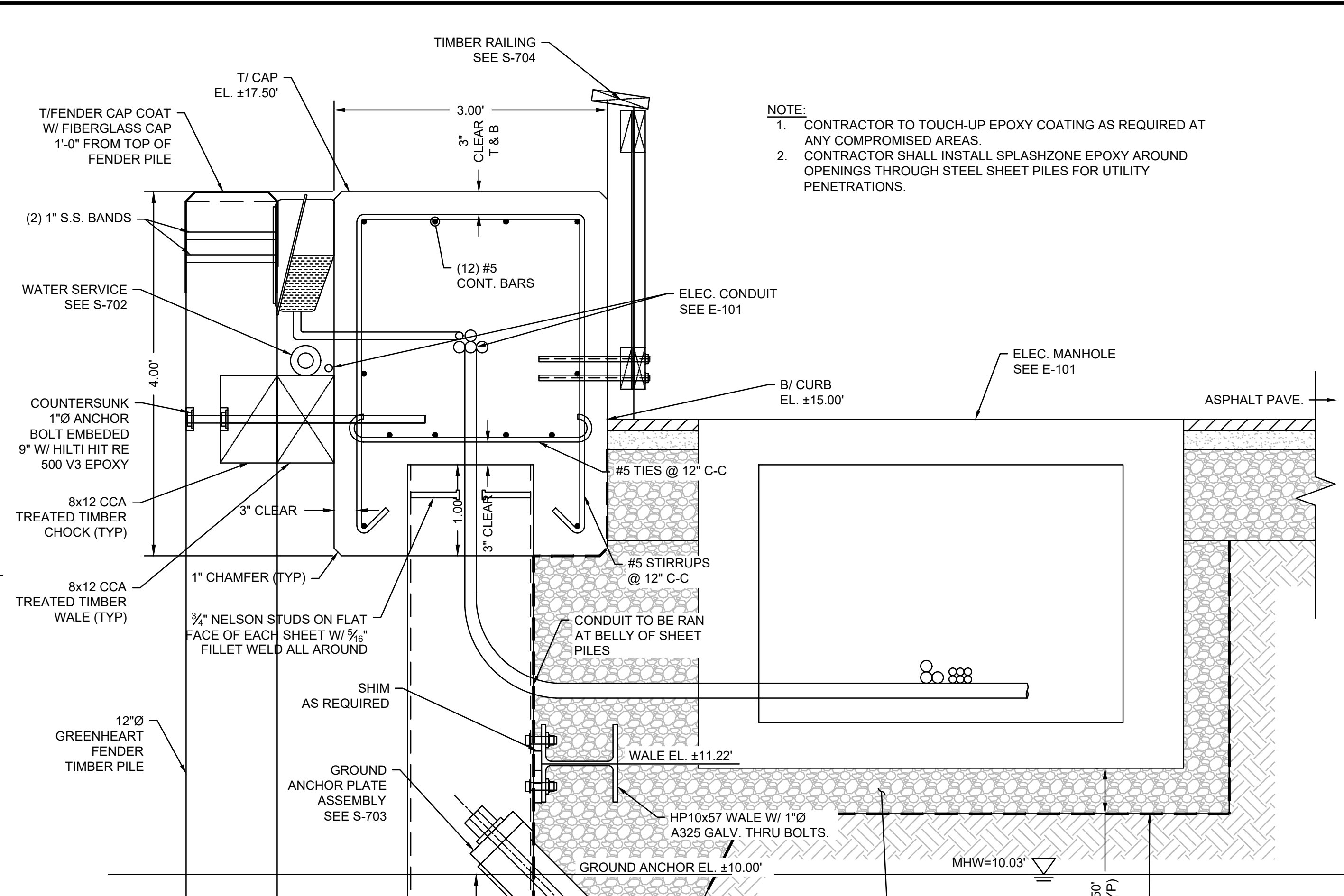
PROJECT NO: 00190004.10
SHEET NUMBER



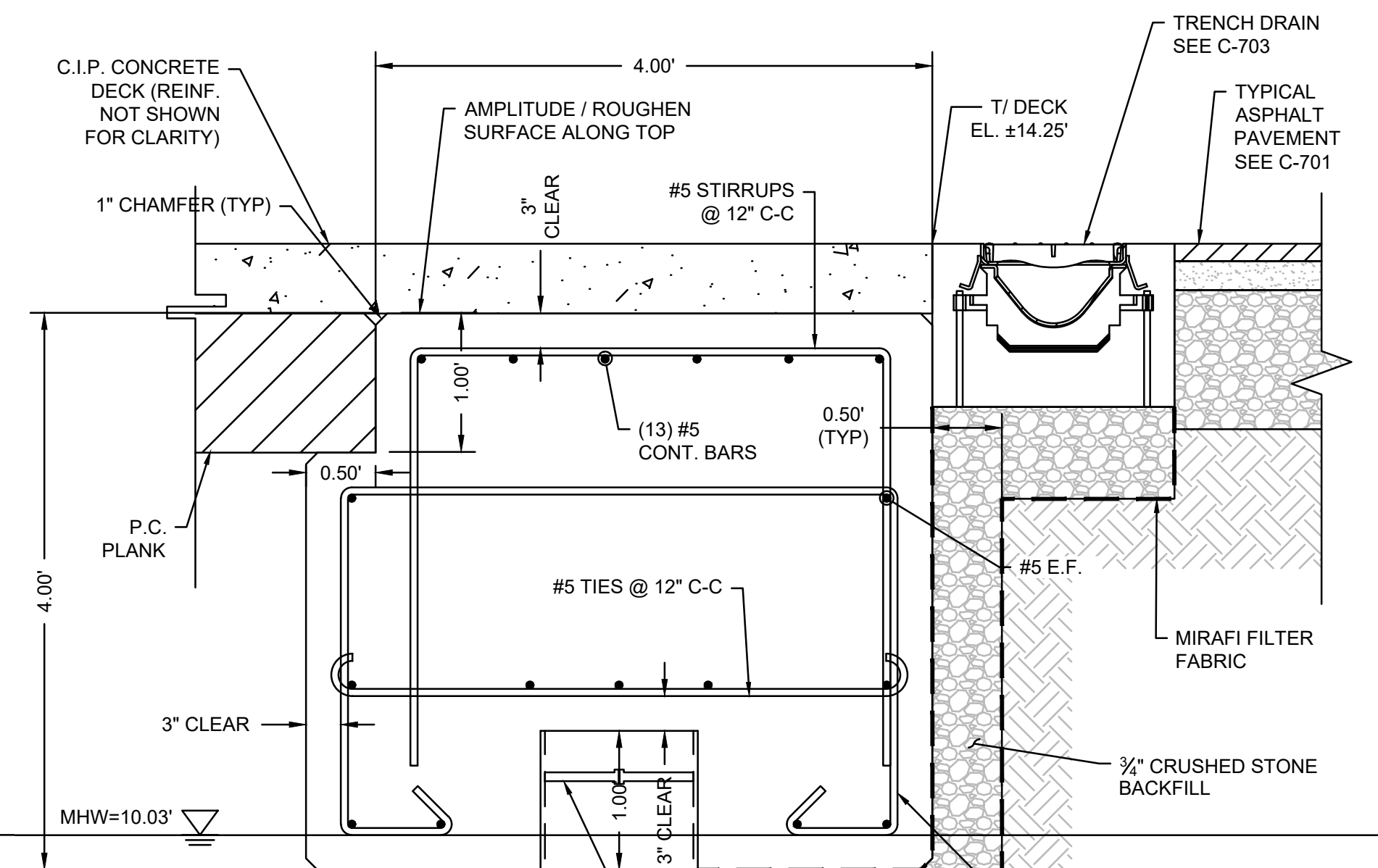
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Layout: s-504 section views 4
DWG Folder Location:



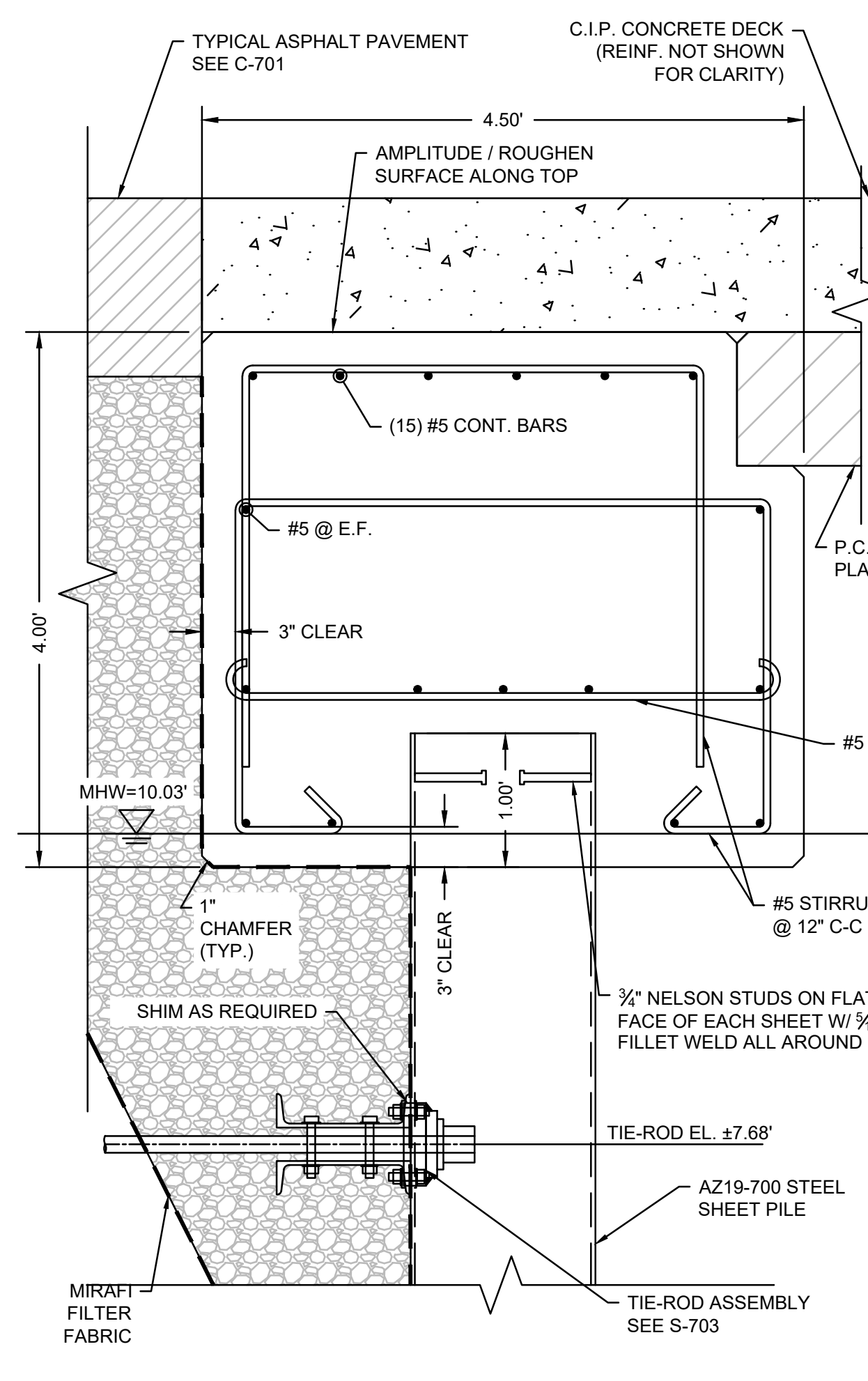
A SHEET PILE BULKHEAD SECTION AT COMMERCIAL LANDING PIER
SCALE: 1" = 1'



B SHEET PILE BULKHEAD TYPICAL SECTION
SCALE: 1" = 1'



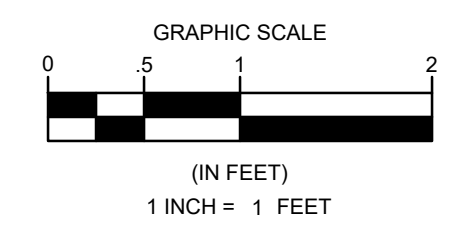
F SHEET PILE BULKHEAD SECTION AT TRENCH DRAIN
SCALE: 1" = 1'



G SHEET PILE BULKHEAD SECTION AT LOWER WALE
SCALE: 1" = 1'

NOTE:
1. CONTRACTOR TO TOUCH-UP EPOXY COATING AS REQUIRED AT ANY COMPROMISED AREAS.
2. CONTRACTOR SHALL INSTALL SPLASHZONE EPOXY AROUND OPENINGS THROUGH STEEL SHEET PILES FOR UTILITY PENETRATIONS.

NOTE:
1. CONTRACTOR TO DESIGN GROUND ANCHOR ASSEMBLY INCLUDING GROUND ANCHOR, STAND-OFF PLATES AND CAP PLATES. CONTRACTOR SHALL SUBMIT CALCULATIONS AND DRAWINGS FOR GROUND ANCHOR DESIGN, STAMPED BY AN ENGINEER REGISTERED IN THE STATE OF MA. FOR SOILS INFORMATION SEE ATTACHMENT "A" OF THE CONTRACT DOCUMENTS.



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DRAWN	BY	DATE
BAM		12/05/2023
DESIGNED	BY	DATE
SRS		06/28/2021
CHECKED	BY	DATE
PSR		12/24/2023

SHEET TITLE: _____

STRUCTURAL DETAILS 1 OF 8

ISSUED FOR BID

PROJECT NO: 00190004.10
SHEET NUMBER

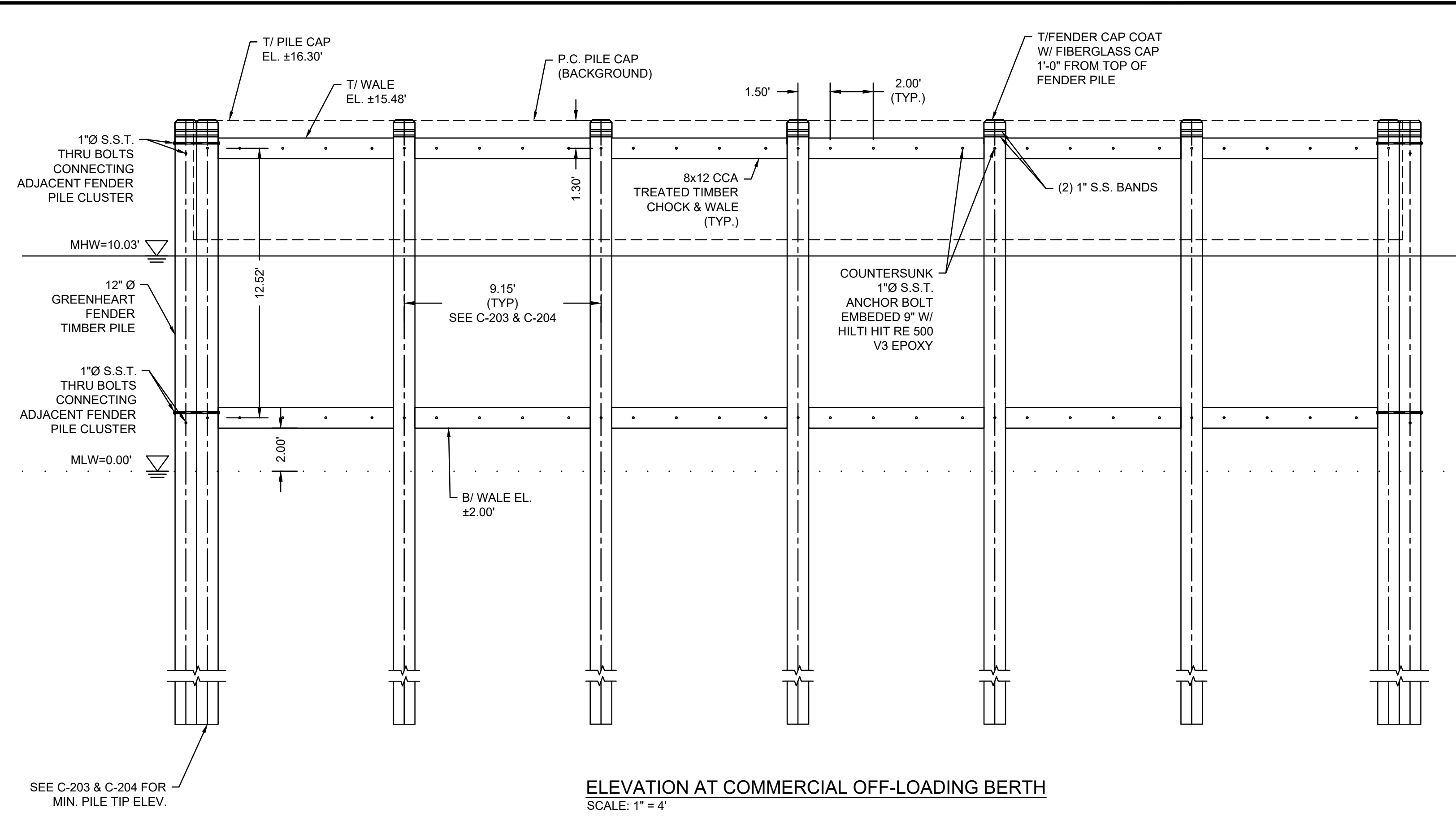
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NO.	DATE	DESCRIPTION	DATE	BY	APPENDIX #3
1	03/22/2024			JSD	
2					
3					
4					
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DATE OF PREPARATION	
BY	DATE
MEC/JAH	10/24/19 & 3/2/21
BAM	12/05/2023
SRS	06/28/2021
PSR	12/24/2023

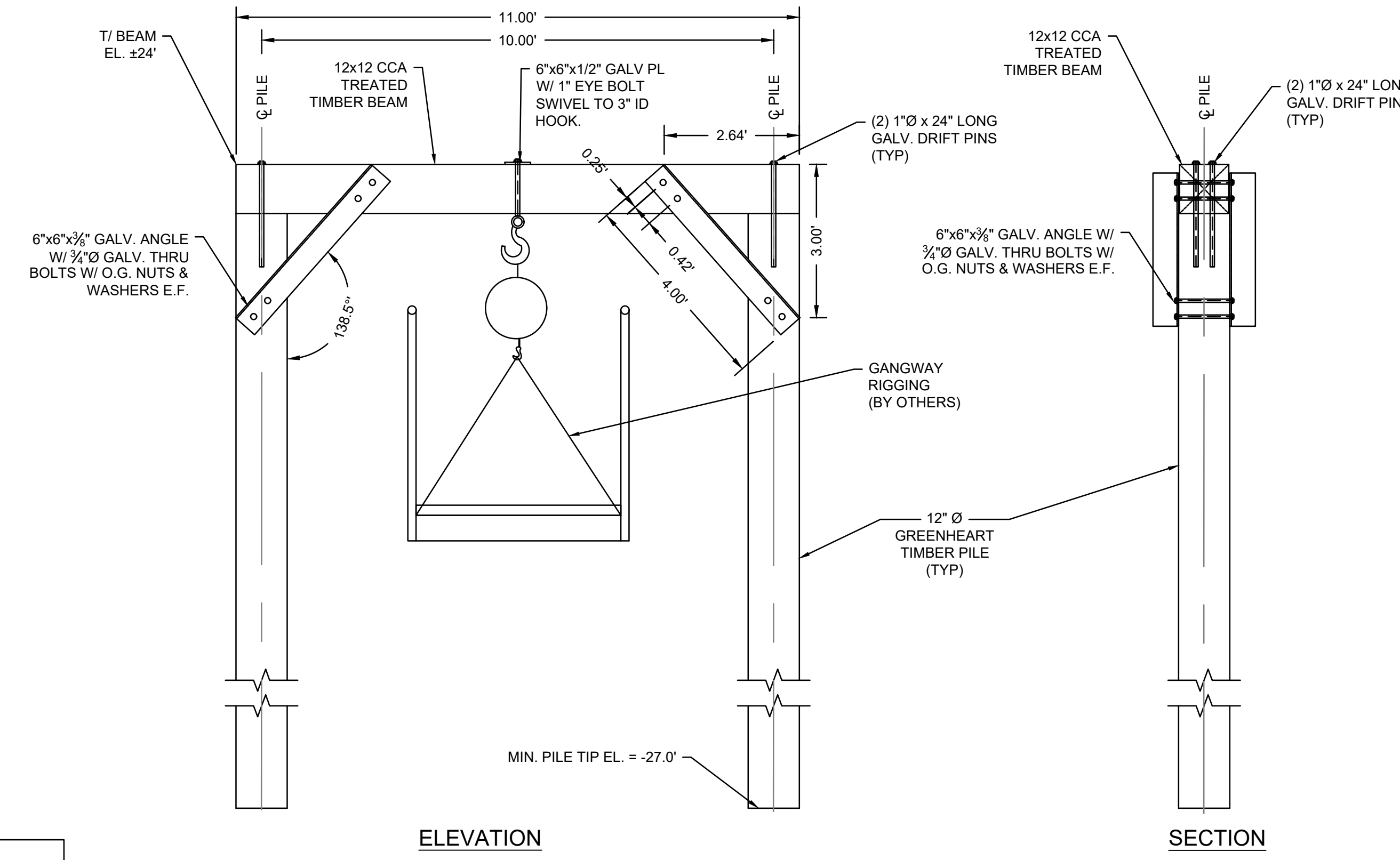
SHEET TITLE:
STRUCTURAL DETAILS 2 OF 8

ISSUANCE:
ISSUED FOR BID

PROJECT NO: 00190004.10
SHEET NUMBER



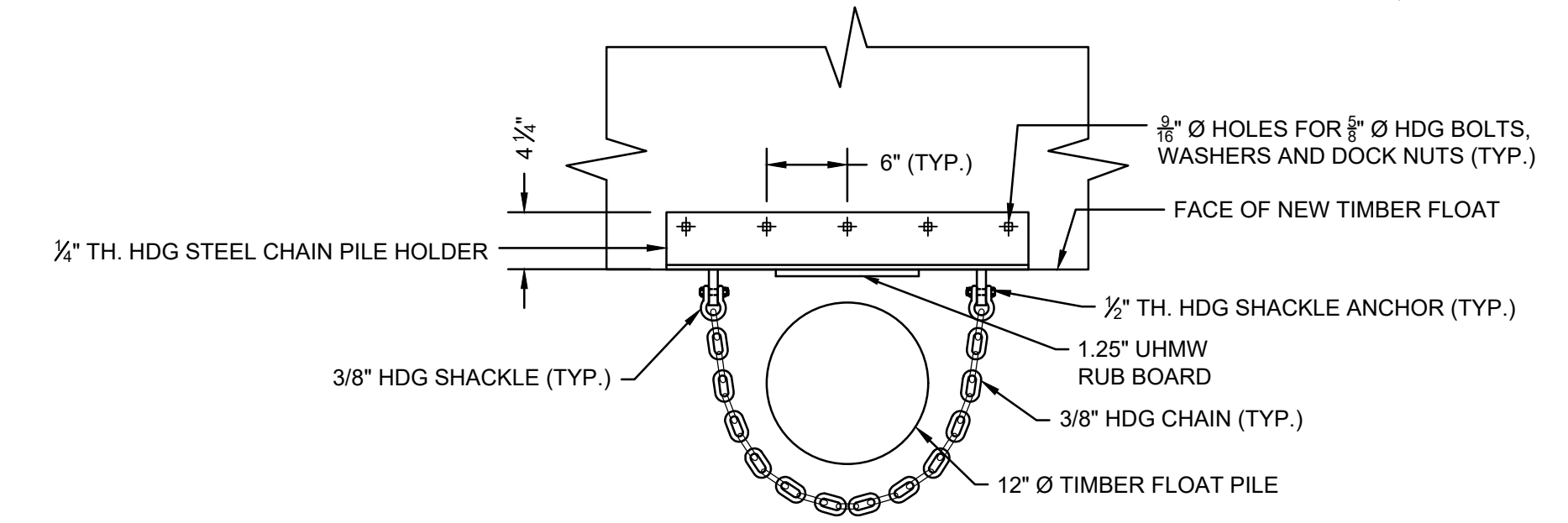
ELEVATION AT COMMERCIAL OFF-LOADING BERTH
SCALE: 1" = 4"



ELEVATION

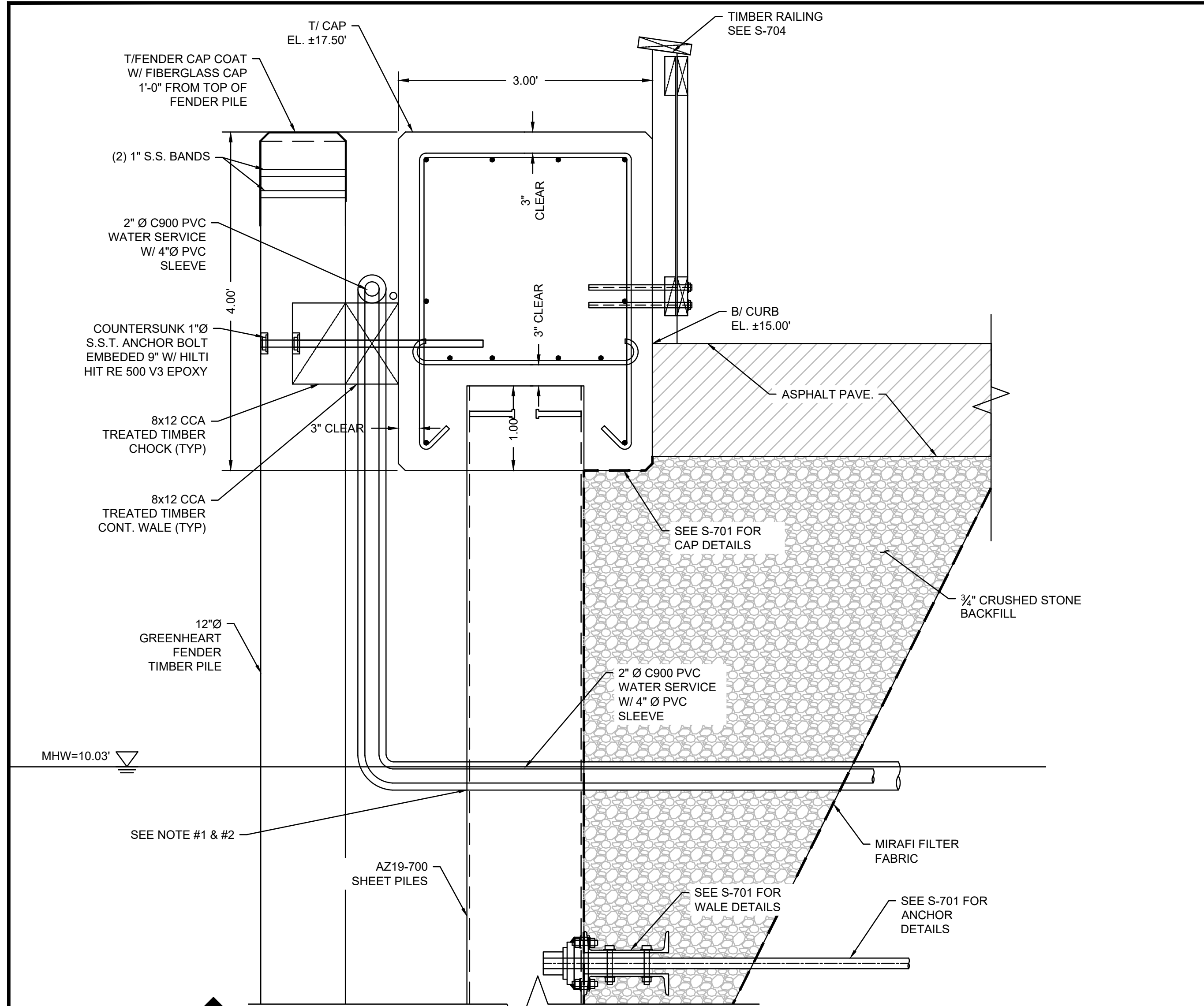
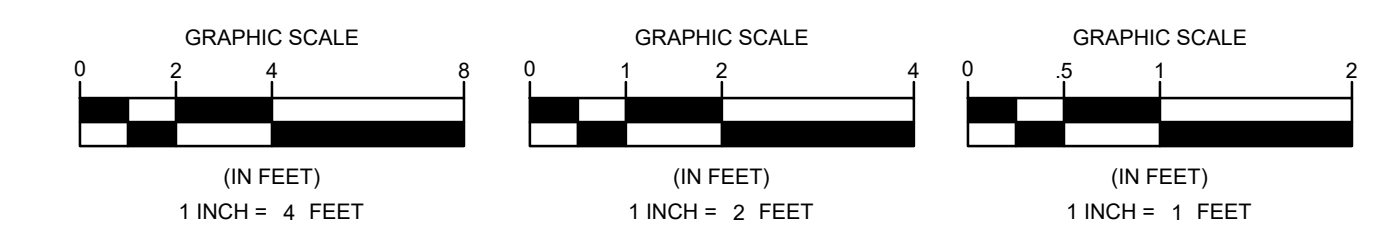
GANTRY BEAM DETAIL
SCALE: 1" = 2"

SECTION



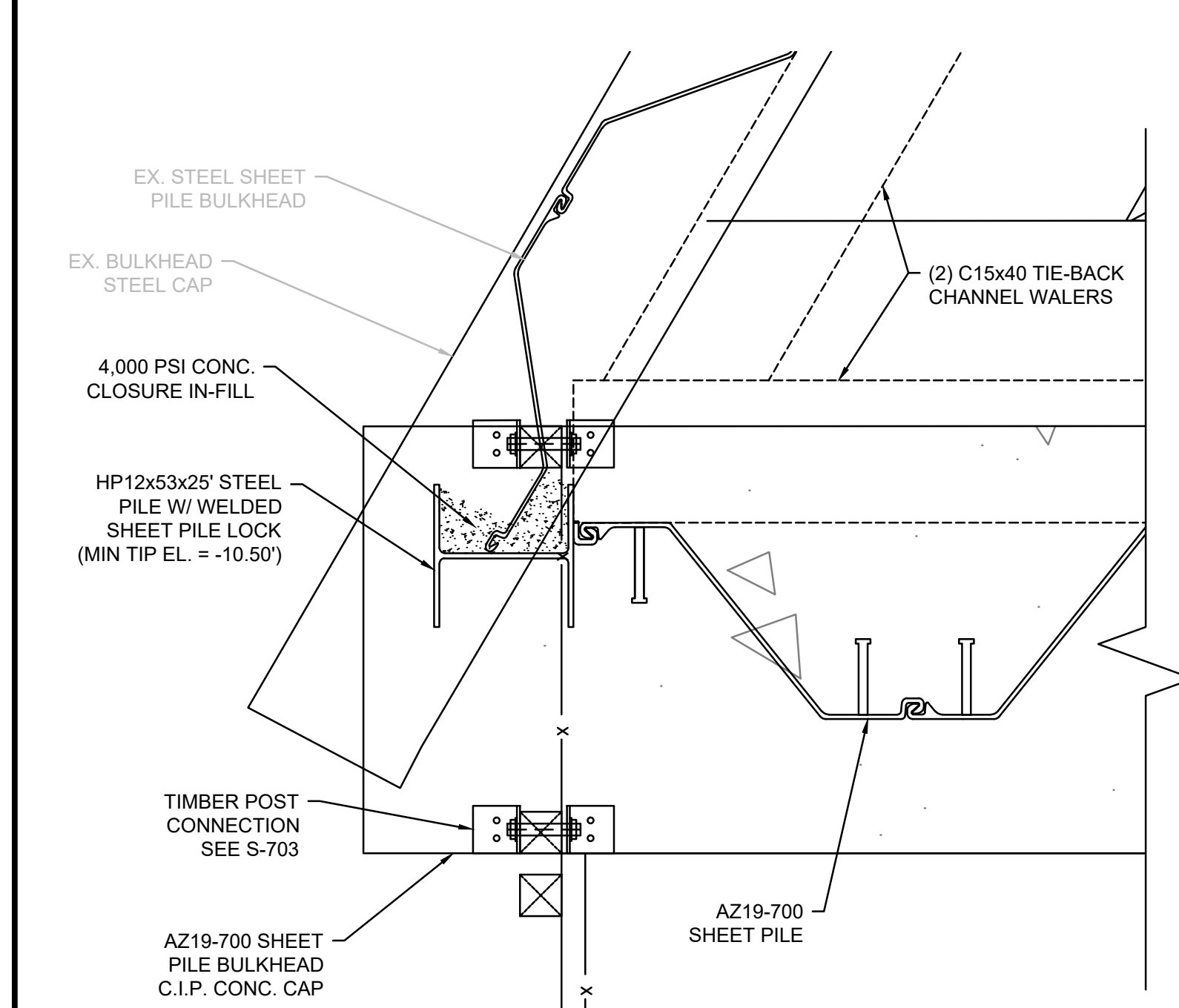
NOTE:
CONTRACTOR SHALL INSTALL SECTIONS OF 2" SCH 40 PVC PIPE ALONG CHAIN TO PREVENT BINDING OF CHAIN AND CHAFFING OF STEEL PILE.

FLOAT PILE GUIDE DETAIL
SCALE: 1" = 1"



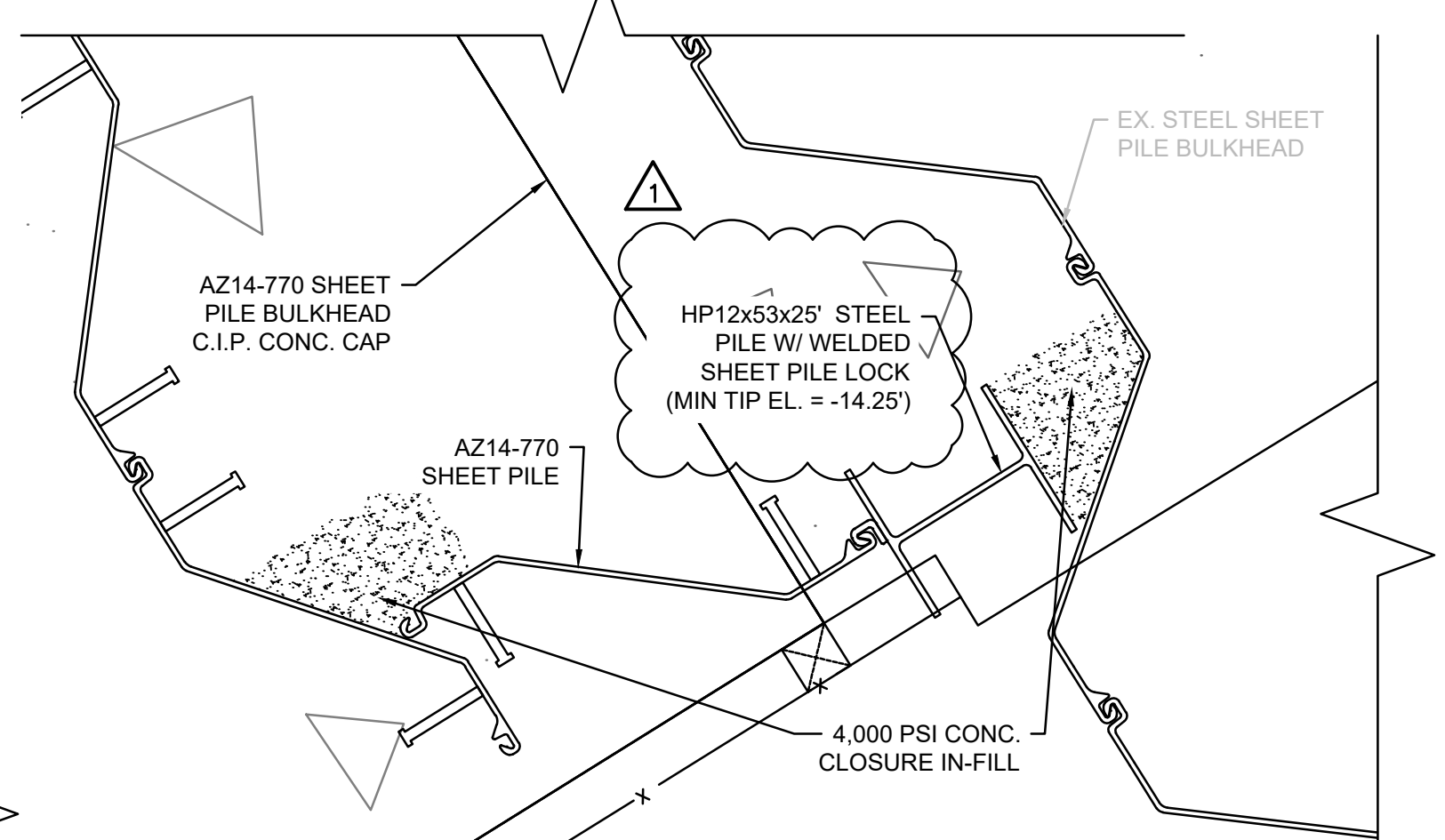
A
WATER SERVICE DETAIL THROUGH SHEETPILE
SCALE: 1" = 1"

NOTE:
1. CONTRACTOR TO TOUCH-UP EPOXY COATING AS REQUIRED AT ANY COMPROMISED AREAS.
2. CONTRACTOR SHALL INSTALL SPLASHZONE EPOXY AROUND OPENINGS THROUGH STEEL SHEET PILES FOR UTILITY PENETRATIONS.



NORTHERN SHEET PILE BULKHEAD CLOSURE DETAIL
SCALE: 1" = 1"

NOTE:
1. LIGHT POLE & CONNECTION NOT SHOWN FOR CLARITY.



SOUTHERN SHEET PILE BULKHEAD CLOSURE DETAIL
SCALE: 1" = 1"

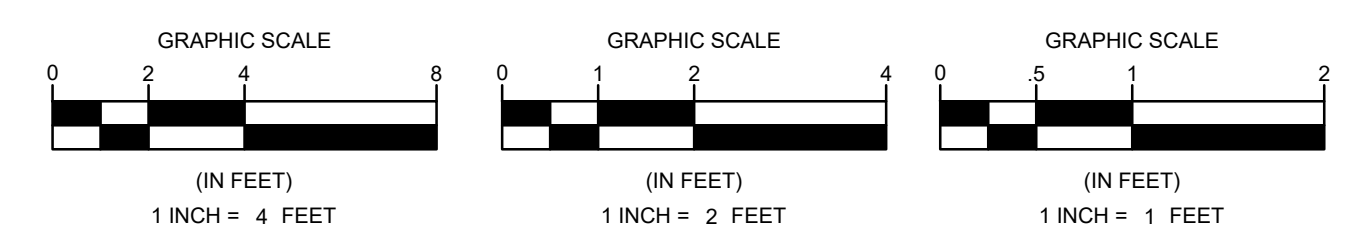
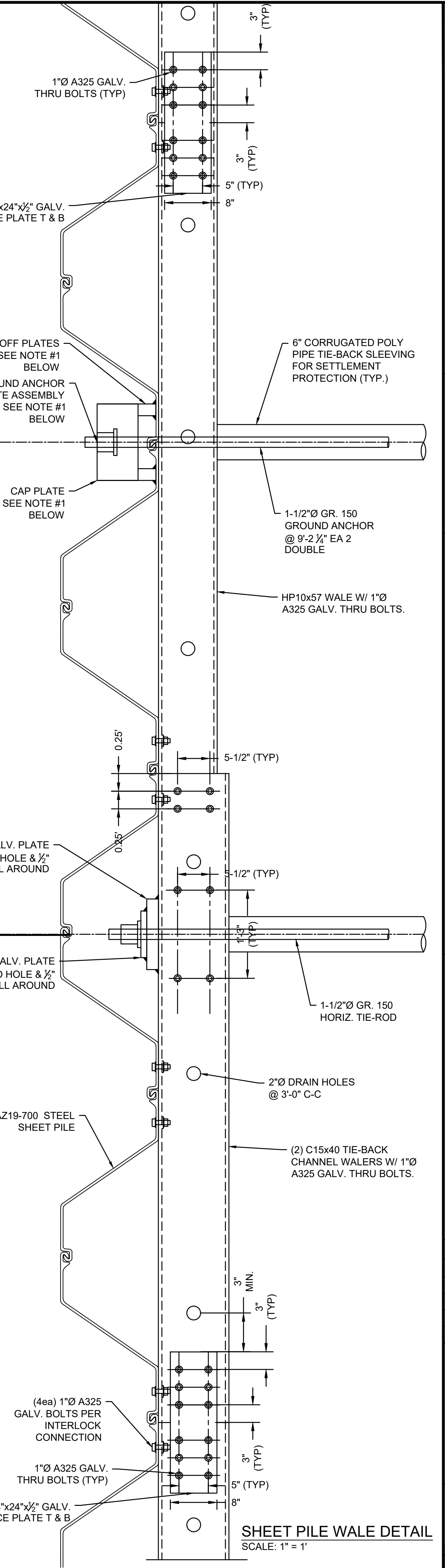
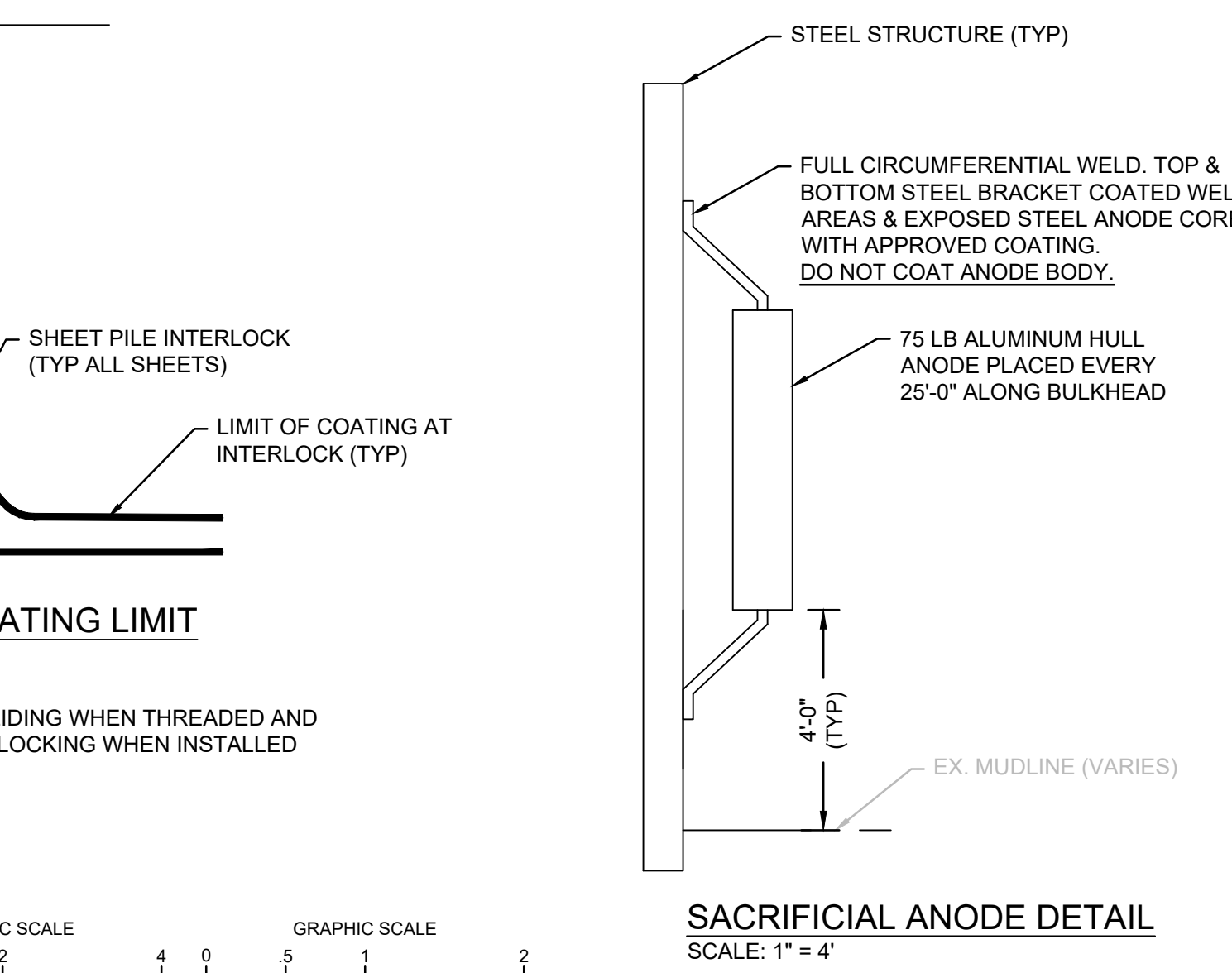
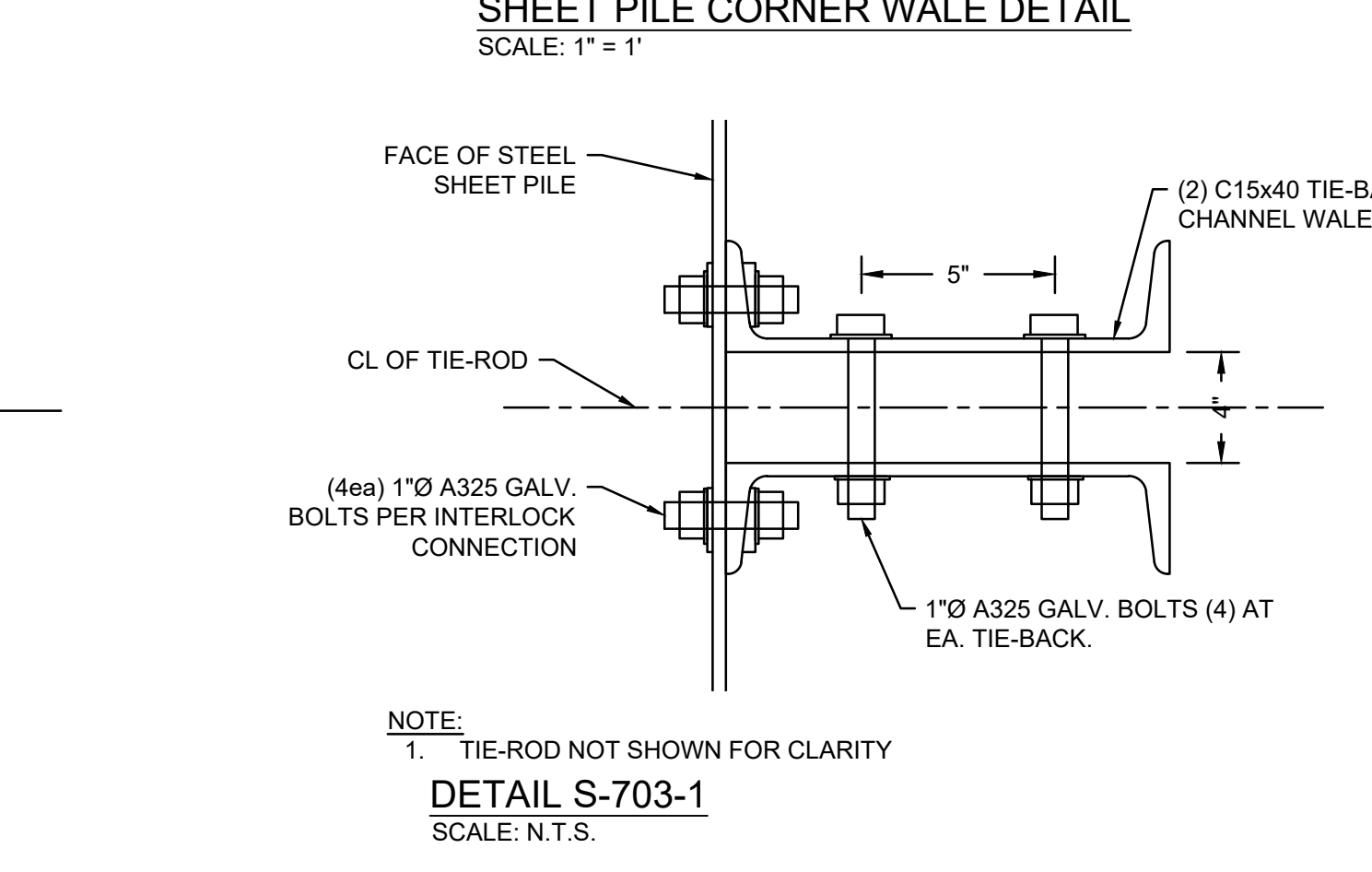
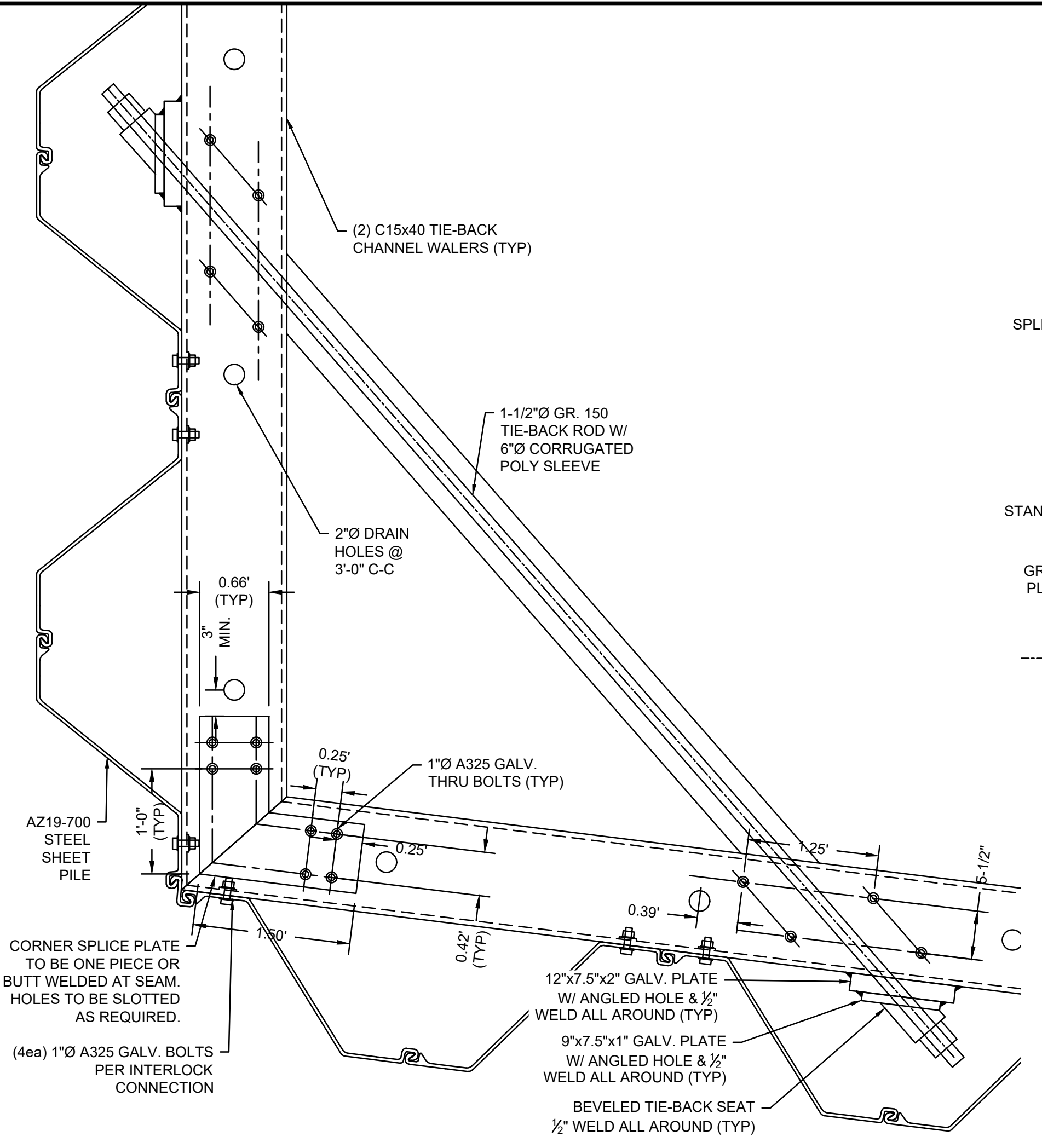
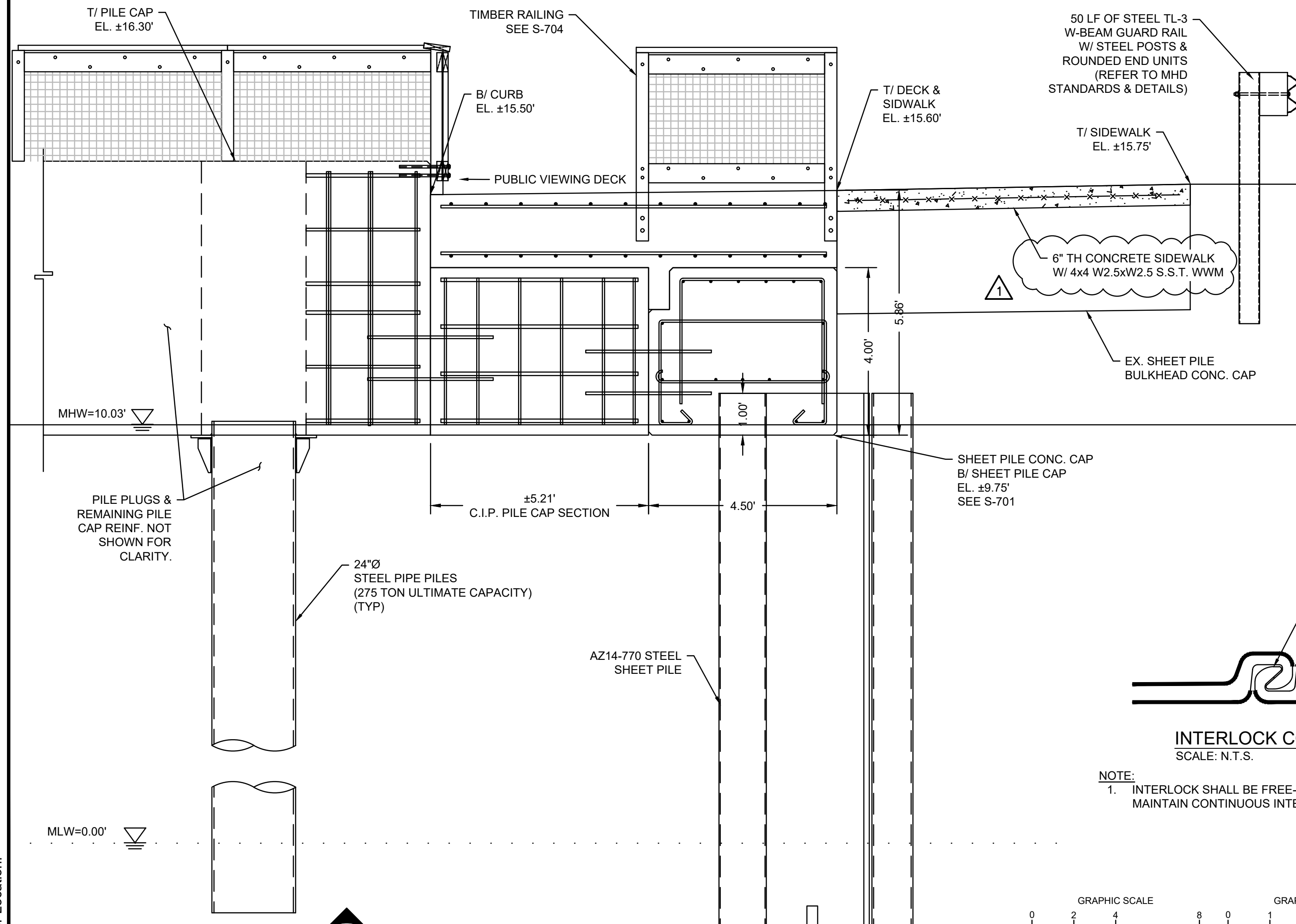
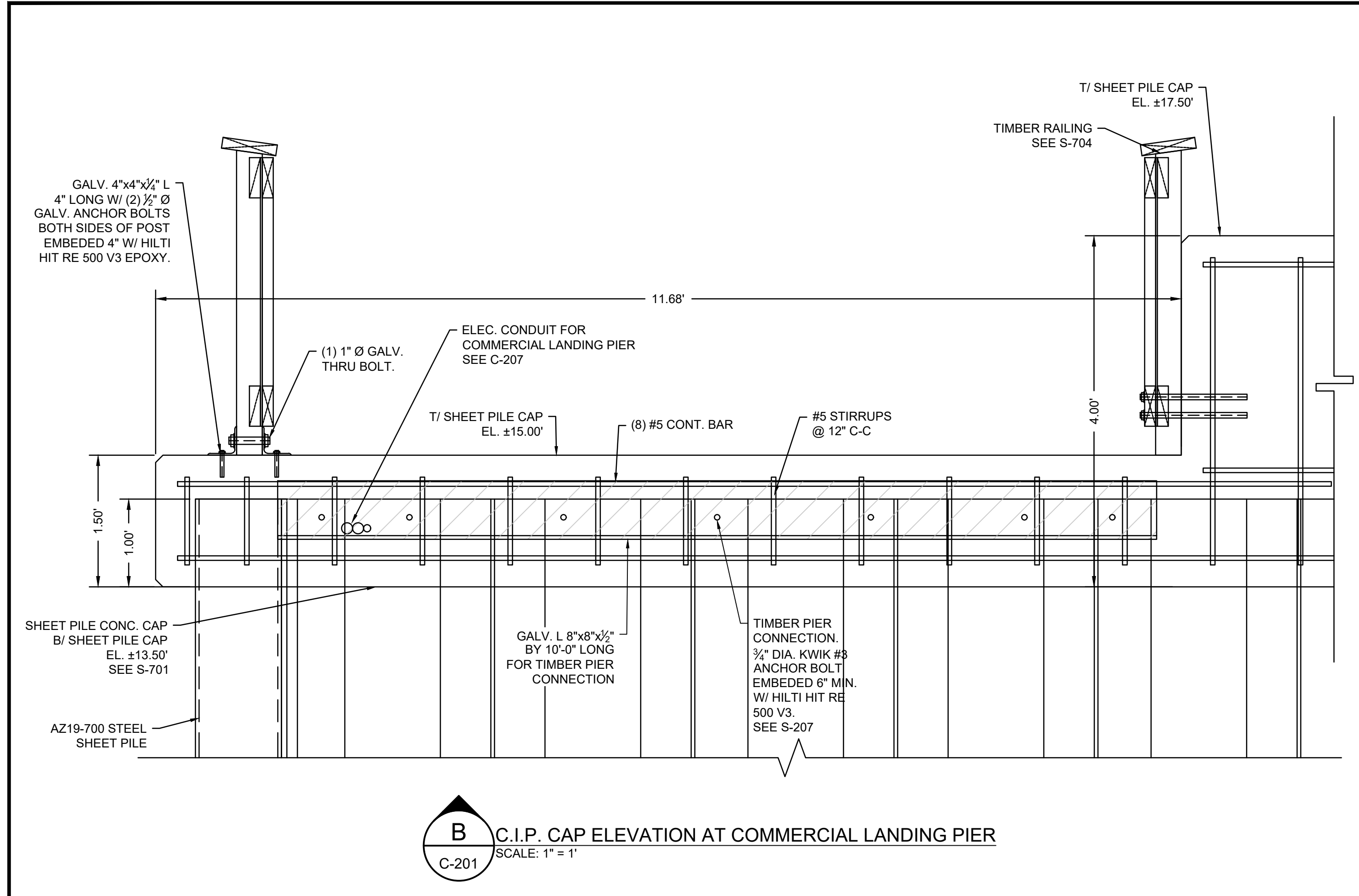
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1	03/22/2024			JSD	

DATE OF PREPARATION		
SURVEYED	BY	DATE
MEC/JAH		10/24/19 & 3/22/21
DRAWN	BY	DATE
BAM		12/05/2023
DESIGNED	BY	DATE
SRS		06/28/2021
CHECKED	BY	DATE
PSR		12/24/2023

SHEET TITLE:
STRUCTURAL DETAILS 3 OF 8

ISSUANCE:
ISSUED FOR BID

PROJECT NO: 00190004.10
SHEET NUMBER



Thursday, March 21, 2024 1:57:43 PM
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Layout: s-703 structural details 3 of 8
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