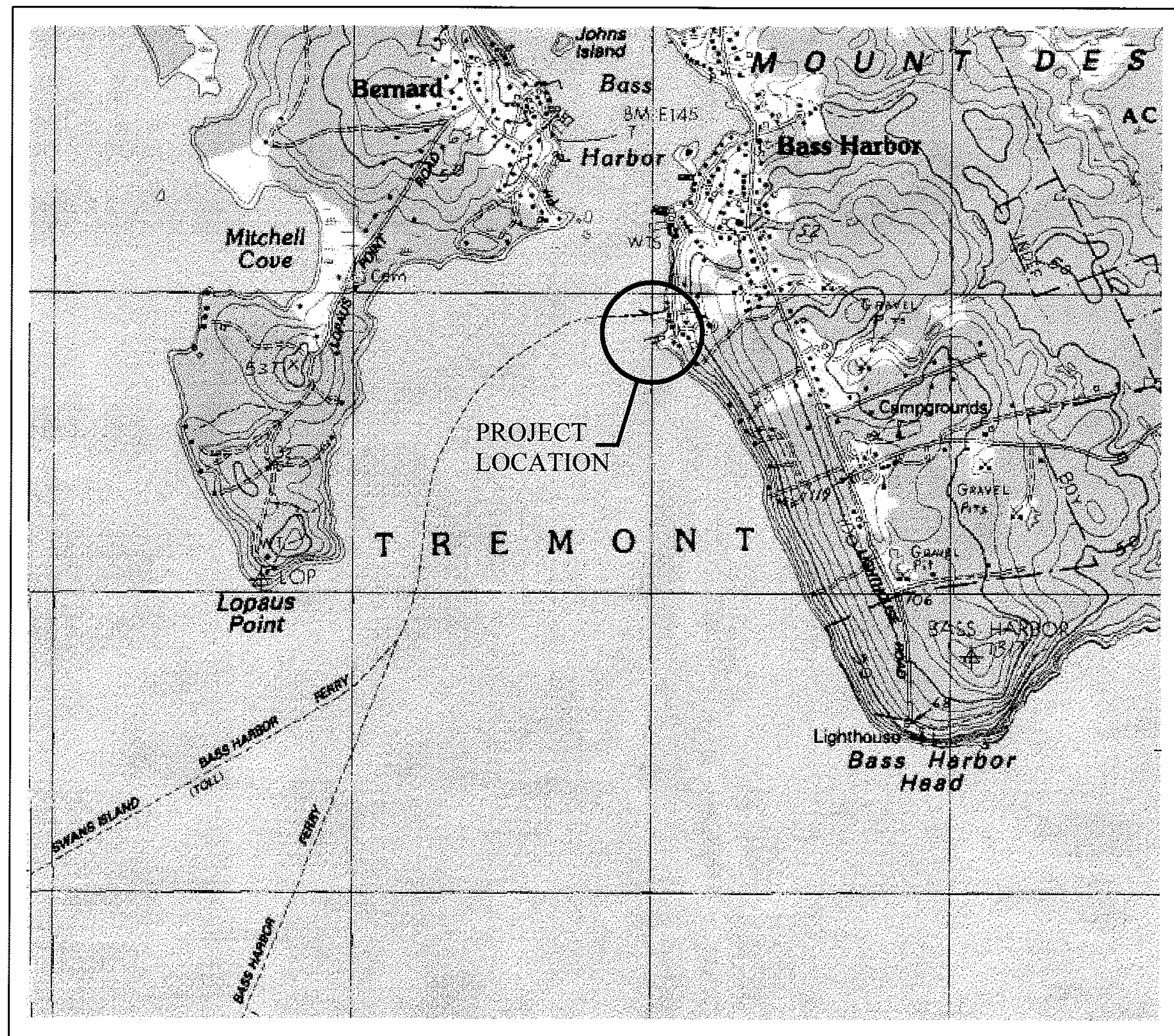


STATE OF MAINE DEPARTMENT OF TRANSPORTATION BASS HARBOR FERRY TERMINAL

PROJECT NO: PIN 017745.00

INDEX OF SHEETS

SHEET No.	TITLE
X-01	TITLE SHEET
X-02	BASS HARBOR TERMINAL EXISTING LAYOUT PLAN
X-03	BASS HARBOR TERMINAL SOIL BORING/ROCK CORE DATA TABLES
X-04	BASS HARBOR TERMINAL PROPOSED LAYOUT PLAN
X-05	BASS HARBOR TERMINAL EXISTING DOLPHIN REINFORCING DETAILS
X-06	BASS HARBOR TERMINAL EXISTING FENDER FRAME ASSEMBLY
X-07	BASS HARBOR TERMINAL EXISTING FENDER FACING DETAILS
X-08	BASS HARBOR TERMINAL EXISTING FENDER ATTACHMENT DETAILS
X-09	BASS HARBOR TERMINAL PROPOSED HEAD DOLPHIN MODIFICATIONS AND DETAILS
X-10	BASS HARBOR TERMINAL PROPOSED SIDE AND TURNING DOLPHIN MODIFICATIONS AND DETAILS
X-11	BASS HARBOR TERMINAL TOWER FOUNDATION EXISTING CONDITIONS
X-12	BASS HARBOR TERMINAL TOWER FOUNDATION REPAIR DETAILS
X-13	BASS HARBOR TERMINAL WAVE FENCE AND DETAILS
E-01	BASS HARBOR TERMINAL PROPOSED ELECTRICAL DEMOLITION PLAN
E-02	BASS HARBOR TERMINAL PROPOSED ELECTRICAL SITE PLAN
E-03	BASS HARBOR TERMINAL PROPOSED ELECTRICAL LAYOUT PLAN
E-04	BASS HARBOR TERMINAL PROPOSED ELECTRICAL GENERATOR LAYOUT PLAN

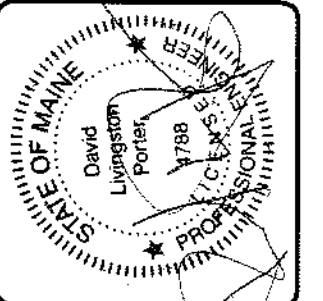


STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED: _____ DATE: 10/14/10

Commissioner: _____
Chief Engineer: _____

CHILD'S ENGINEERING CORPORATION
BOX 333 WEDFIELD, MASSACHUSETTS 02052 U.S.A.
Phone: (508) 359-8945 Fax: (508) 359-2751
E-mail: me@childseng.com



Mark	Description	Date	Appr.

Designed by: RGF	Date: 09/20/10	Drawn by: APL	Sheet No.: 221610-X-01
Checked by: RGF	Project Scale: NONE	Reviewed by: RGF	

MAINE STATE FERRY SERVICE
MAINE DEPARTMENT OF TRANSPORTATION

TITLE SHEET

Sheet reference number:
X-01

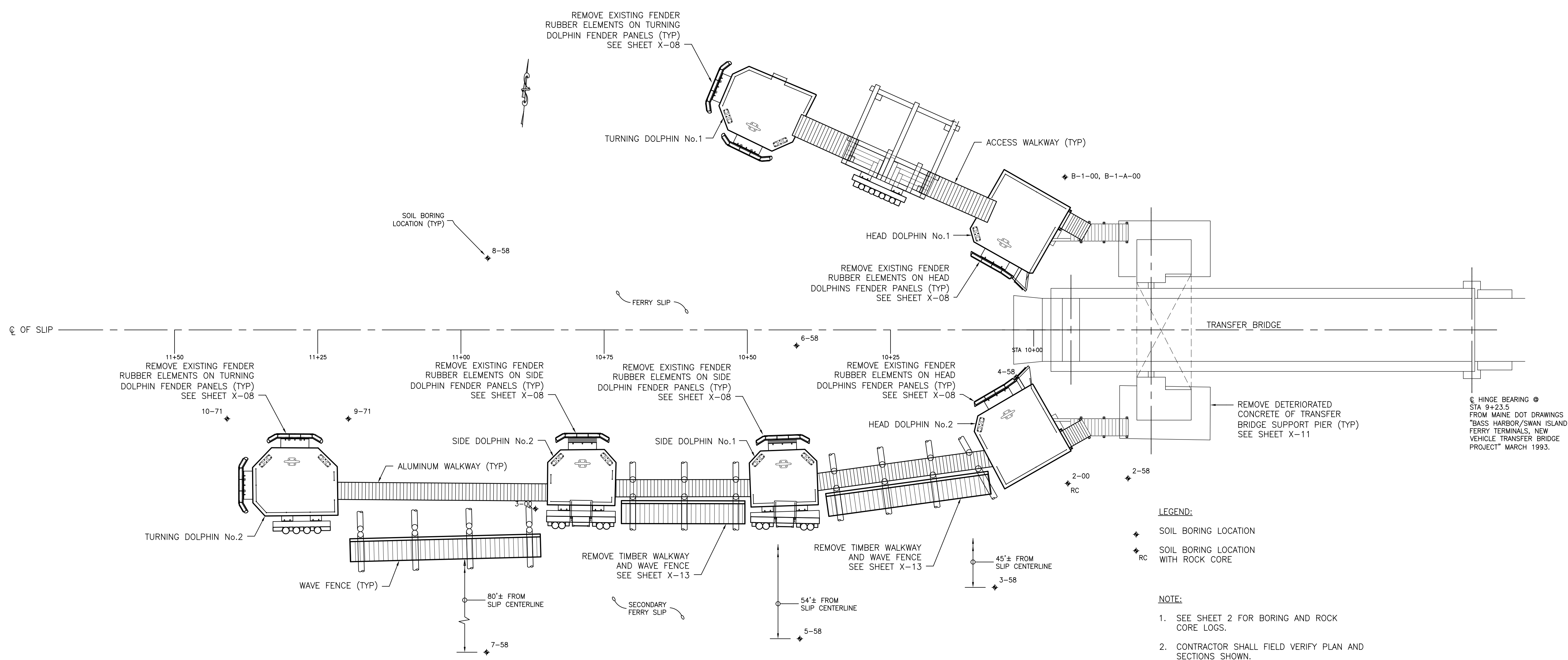
Sheet 1 of 17

D

C

B

A



EXISTING BASS HARBOR TERMINAL PLAN
SCALE: 1"=10'-0"

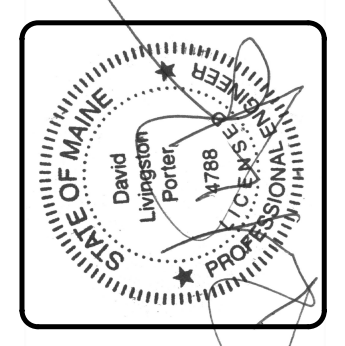
LEGEND:

- ◆ SOIL BORING LOCATION
- ◆ RC SOIL BORING LOCATION WITH ROCK CORE

NOTE:

1. SEE SHEET 2 FOR BORING AND ROCK CORE LOGS.
2. CONTRACTOR SHALL FIELD VERIFY PLAN AND SECTIONS SHOWN.
3. SEE SHEET X-05 THROUGH X-08 FOR ORIGINAL CONSTRUCTION DRAWINGS. MEMBERS AND DIMENSIONS SHALL BE FIELD VERIFIED.

CHILDS ENGINEERING CORPORATION
 BOX 333 MEDFIELD, MASSACHUSETTS 02052 U.S.A.
 Phone: (508) 359-8945 Fax: (508) 359-2751
 E-mail: mail@childsend.com



Date	Appr.	Description	Mark

Designed by:	RGF	Date:	09/20/10
Drawn by:	APL	Design file no.:	221610-X-02
Checked by:	RGF	Plot Scale:	1"=0'-1"
Reviewed by:	RGF		

MAINE STATE FERRY SERVICE
 MAINE DEPARTMENT
 OF TRANSPORTATION
**BASS HARBOR TERMINAL
 EXISTING LAYOUT PLAN**

Sheet
 reference
 number:
X-02
 Sheet 2 OF 17

MAINE TEST BORINGS, INC. BREWER, MAINE 04412		CLIENT CHILD'S ENGINEERING		SHEET 1 OF 1	
PROJECT NAME FERRY TERMINALS BORINGS		LOCATION BASS HARBOR, MAINE		HOLE NO. B-1	
DRILLER MARK GUNNING		JOB NUMBER 00-258		DATE START 11/07/00	
DATE FINISH 12/10/00		LINE & STATION		OFFSET	
GROUND WATER OBSERVATIONS		CASING		SAMPLER	
AT	FT. AFTER HOURS	TYPE NW 3"	NOZ 2"	DATE	FINISH
AT	FT. AFTER HOURS	SIZE I.D. HAMMER WT. HAMMER FALL	NOZ 2"	11/07/00	12/10/00
AT	FT. AFTER HOURS	NOZ 2"	NOZ 2"	SURFACE ELEVATION	
SAMPLE		BLOWS PER 6" ON SAMPLER		DEPTH	
CASING BLOW NO.	O.D. PEN. REC.	DEPTH @ BOT.	NO. OF BLOWS	DEPTH	DEPTH
2	10 24	2.0	1 2 2 1	1.5	BLACK F-M SAND & SHELLS
4				3.0	BROWN F-M SAND
13				6.5	GRAY F-C SAND & GRAVEL
28	20 24	32	113	10.3	GRAY F-C SAND & GRAVEL & COBBLES
53					
141					
DRILL HEAD					
D	2 4	10.3	75		
1R	3 2.0	1.4	12.3	70%	
2R	3 1.3	1.2	13.6	62%	
3R	3 0.9	0.8	14.5	67%	
4R	3 0.8	0.8	15.3	70%	
5R	3 1.0	0.8	16.3	80%	
6R	3 1.4	1.1	17.7	70%	
7R	3 0.8	0.8	18.3	100%	
8R	3 0.7	0.8	18.0	114%	
9R	3 0.9	1.3	19.9	144%	
10R	3 2.8	2.8	22.7	100%	
11R	3 0.4	0.3	23.1	75%	
SOIL CLASSIFIED BY: DRILLER VISUALLY					
REMARKS: 23.4' MID LINE TO NEW CONCRETE					
MUDLINE ELEV. = -8.4 FT ±					
HOLE NO. B-1					

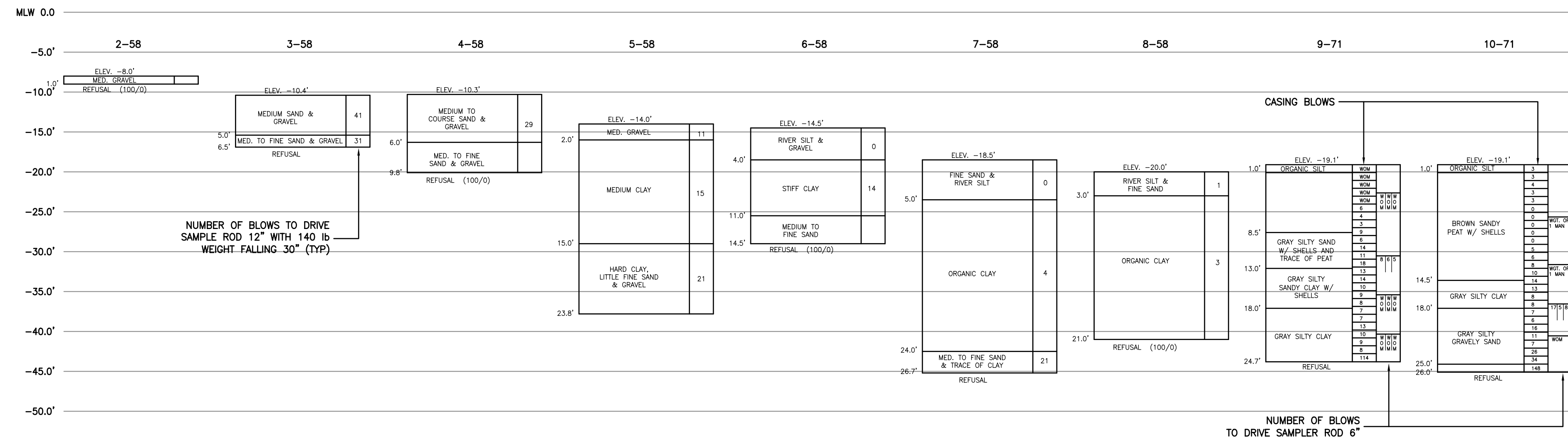
MAINE TEST BORINGS, INC. BREWER, MAINE 04412		CLIENT CHILD'S ENGINEERING		SHEET 1 OF 1	
PROJECT NAME FERRY TERMINALS BORINGS		LOCATION BASS HARBOR, MAINE		HOLE NO. B-1-A	
DRILLER MARK GUNNING		JOB NUMBER 00-258		DATE START 12/05/00	
DATE FINISH 12/07/00		LINE & STATION		OFFSET	
GROUND WATER OBSERVATIONS		CASING		SAMPLER	
AT	FT. AFTER HOURS	TYPE NW 4"	NOZ 2"	DATE	FINISH
AT	FT. AFTER HOURS	SIZE I.D. HAMMER WT. HAMMER FALL	NOZ 2"	12/05/00	12/07/00
AT	FT. AFTER HOURS	NOZ 2"	NOZ 2"	SURFACE ELEVATION	
SAMPLE		BLOWS PER 6" ON SAMPLER		DEPTH	
CASING BLOW NO.	O.D. PEN. REC.	DEPTH @ BOT.	NO. OF BLOWS	DEPTH	DEPTH
1R	3 1.3	1.3	14.0	100%	
2R	3 1.8	1.8	15.9	95%	
3R	3 3.4	2.4	19.3	71%	
4R	3 5.0	5.0	24.3	100%	
5R	3 4.6	4.6	26.9	100%	
SOIL CLASSIFIED BY: DRILLER VISUALLY					
REMARKS: 23.7' MID LINE TO CEMENT					
MUDLINE ELEV. = -8.4 FT ±					
HOLE NO. B-1-A					

MAINE TEST BORINGS, INC. BREWER, MAINE 04412		CLIENT CHILD'S ENGINEERING		SHEET 1 OF 1	
PROJECT NAME FERRY TERMINALS BORINGS		LOCATION BASS HARBOR, MAINE		HOLE NO. 2	
DRILLER MARK GUNNING		JOB NUMBER 00-258		DATE START 11/13/00	
DATE FINISH 11/13/00		LINE & STATION		OFFSET	
GROUND WATER OBSERVATIONS		CASING		SAMPLER	
AT	FT. AFTER HOURS	TYPE NW 5"	NOZ 2"	DATE	FINISH
AT	FT. AFTER HOURS	SIZE I.D. HAMMER WT. HAMMER FALL	NOZ 2"	11/13/00	11/13/00
AT	FT. AFTER HOURS	NOZ 2"	NOZ 2"	SURFACE ELEVATION	
SAMPLE		BLOWS PER 6" ON SAMPLER		DEPTH	
CASING BLOW NO.	O.D. PEN. REC.	DEPTH @ BOT.	NO. OF BLOWS	DEPTH	DEPTH
3	10 24	2.0	2 4 4 5	4.0	BLACK F-M SAND, SOME ORGANIC SILT, SOME SHELLS
7				4.0	
13				8.0	GRAY F-C SAND & COBBLES
41					
42					
43					
44					
45					
1R	3 3.5	3.2	11.5	91%	
2R	3 1.5	1.1	13.0	73%	
3R	3 5.0	5.2	18.0	100%	
SOIL CLASSIFIED BY: DRILLER VISUALLY					
REMARKS: 23.7' FROM MUD LINE TO NEW CONCRETE					
MUDLINE ELEV. = -8.7 FT ±					
HOLE NO. 2					

MAINE TEST BORINGS, INC. BREWER, MAINE 04412		CLIENT CHILD'S ENGINEERING		SHEET 1 OF 1	
PROJECT NAME FERRY TERMINALS BORINGS		LOCATION BASS HARBOR, MAINE		HOLE NO. 3	
DRILLER MARK GUNNING		JOB NUMBER 00-258		DATE START 11/14/00	
DATE FINISH 11/14/00		LINE & STATION		OFFSET	
GROUND WATER OBSERVATIONS		CASING		SAMPLER	
AT	FT. AFTER HOURS	TYPE NW 3"	NOZ 2"	DATE	FINISH
AT	FT. AFTER HOURS	SIZE I.D. HAMMER WT. HAMMER FALL	NOZ 2"	11/14/00	11/14/00
AT	FT. AFTER HOURS	NOZ 2"	NOZ 2"	SURFACE ELEVATION	
SAMPLE		BLOWS PER 6" ON SAMPLER		DEPTH	
CASING BLOW NO.	O.D. PEN. REC.	DEPTH @ BOT.	NO. OF BLOWS	DEPTH	DEPTH
1	10 24	2.0	WOR WOR WOR WOR	0.3	BLACK ORGANIC SILTY SAND, SOME SHELLS
2					
4					GRAY FINE SILTY SAND, SOME SHELLS, T-GRAVEL
11					
13	20 24	7.0	4 6 8 8	9.0	
14					
15					
17	30 24	17.0	5 7 8 8	14.5	GRAY F-M SILTY SAND, SOME GRAVEL, SOME SHELLS
18					
19					
20	40 24	17.0	WOR WOR WOR WOR	23.0	GRAY SILTY CLAY, T-GRAVEL
21					
22					
13	50 24	22.0	WOR WOR WOR WOR	28.0	GRAY SILTY SANDY GRAVELLY CLAY
17					
24					
80	0 24	27.0	15 21 24 30	28.0	GRAY F-C SAND, SOME GRAVEL
41					
56					
15					
1R	3 5.0	4.8	34.1	98%	
2R	3 5.0	5.1	38.1	102%	
SOIL CLASSIFIED BY: DRILLER VISUALLY					
REMARKS: 28.9' FROM MUD LINE TO NEW CONCRETE					
MUDLINE ELEV. = -13 FT ±					
HOLE NO. 3					

SOIL BORING / ROCK CORES

BORINGS / ROCK CORES BY MAINE TEST BORING, NOVEMBER 2000.



HISTORIC BORING DATA

BORINGS 2-58 TO 8-58 TAKEN FROM MAINE PORT AUTHORITY MCKINLEY TERMINAL PROJECT, CONTRACT 59-2, JAN. 1959.
BORING 9-71 & 10-71 TAKEN FROM MAINE PORT AUTHORITY BASS HARBOR TERMINAL NEW DOLPHIN PROJECT, CONTRACT 71-3, NOV. 1971.

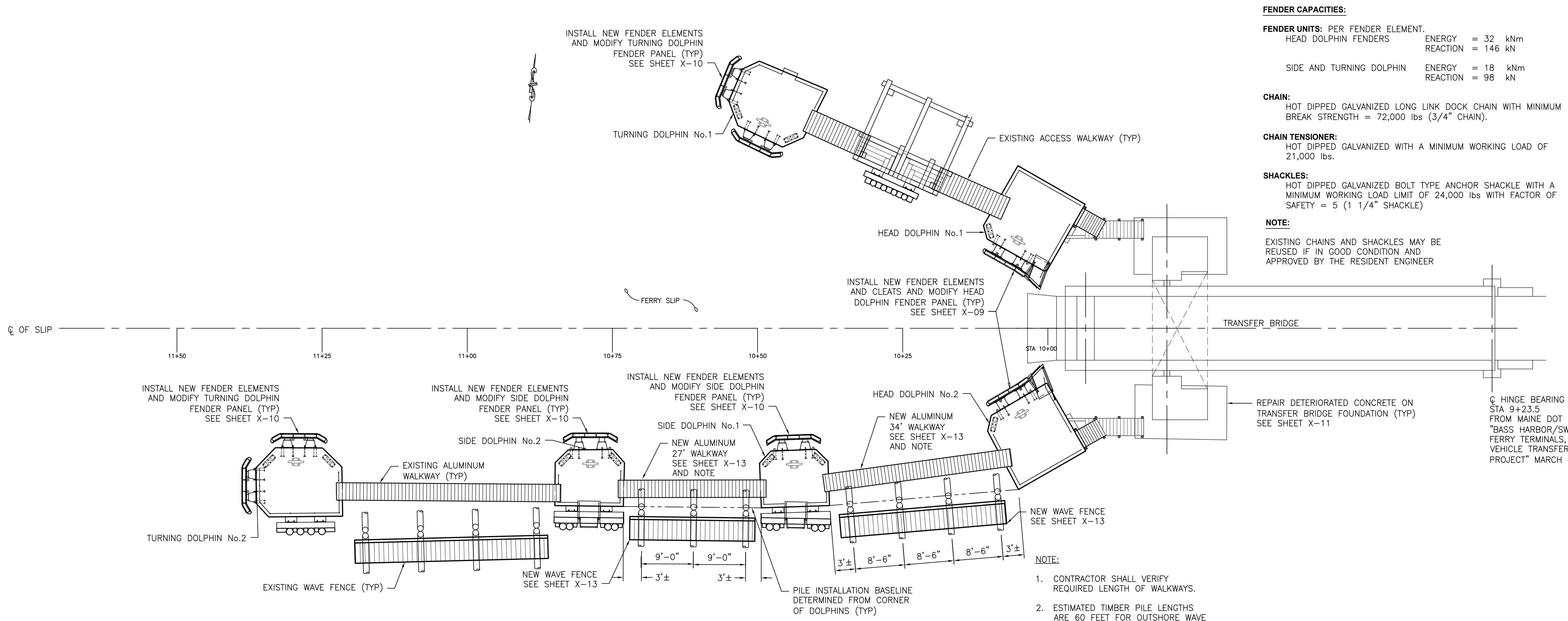
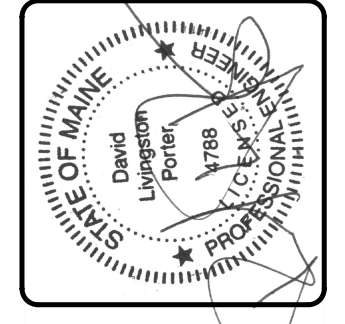
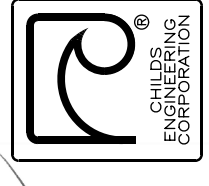
CHILD'S ENGINEERING CORPORATION
BOX 333 MEDFIELD, MASSACHUSETTS 02052 U.S.A.
Phone: (608) 359-8945 Fax: (608) 359-2751
E-mail: mot@childseng.com

MAINE STATE FERRY SERVICE
MAINE DEPARTMENT
OF TRANSPORTATION
BASS HARBOR TERMINAL
SOIL BORING/ROCK CORE
DATA TABLES

Designed by: RGF
Checked by: RGF
Drawn by: APL
Reviewed by: RGF

Date: 09/20/10
Design file no.: 221610-X-03
Plot Scale: 1"=0'-1"

Sheet reference number:
X-03
Sheet 3 OF 17



FENDER CAPACITIES:

FENDER UNITS: PER FENDER ELEMENT.
 HEAD DOLPHIN FENDERS ENERGY = 32 kNm
 REACTION = 146 kN
 SIDE AND TURNING DOLPHIN ENERGY = 18 kNm
 REACTION = 98 kN

CHAIN:
 HOT DIPPED GALVANIZED LONG LINK DOCK CHAIN WITH MINIMUM BREAK STRENGTH = 72,000 lbs (3/4" CHAIN).

CHAIN TENSIONER:
 HOT DIPPED GALVANIZED WITH A MINIMUM WORKING LOAD OF 21,000 lbs.

SHACKLES:
 HOT DIPPED GALVANIZED BOLT TYPE ANCHOR SHACKLE WITH A MINIMUM WORKING LOAD LIMIT OF 24,000 lbs WITH FACTOR OF SAFETY = 5 (1 1/4" SHACKLE)

NOTE:
 EXISTING CHAINS AND SHACKLES MAY BE REUSED IF IN GOOD CONDITION AND APPROVED BY THE RESIDENT ENGINEER

NOTE:

1. CONTRACTOR SHALL VERIFY REQUIRED LENGTH OF WALKWAYS.
2. ESTIMATED TIMBER PILE LENGTHS ARE 60 FEET FOR OUTSHORE WAVE FENCE.
3. CONTRACTOR SHALL ASSUME 7 EXISTING TIMBER PILES CAN BE REUSED FOR BIDDING PURPOSES.

PROPOSED BASS HARBOR TERMINAL PLAN

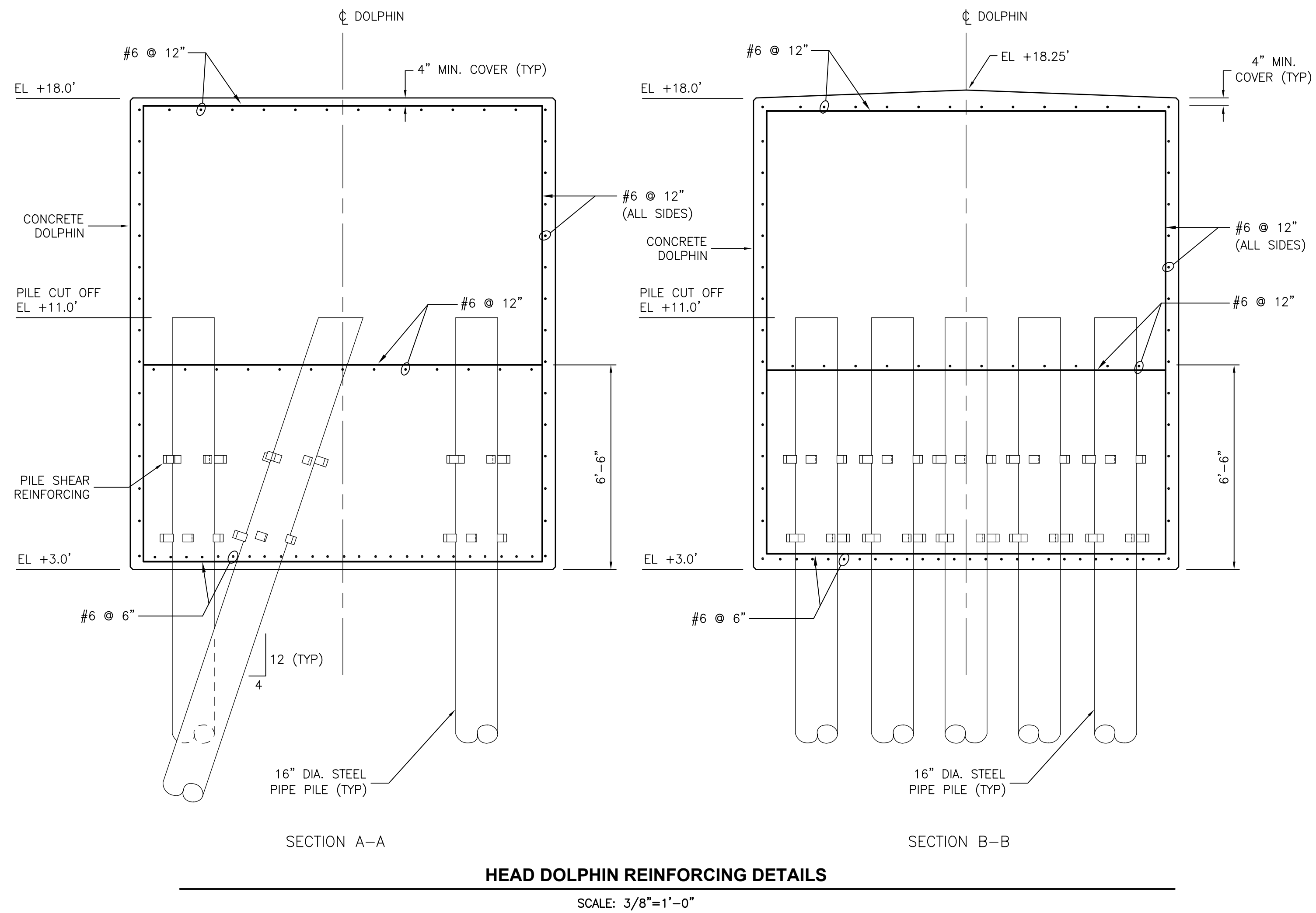
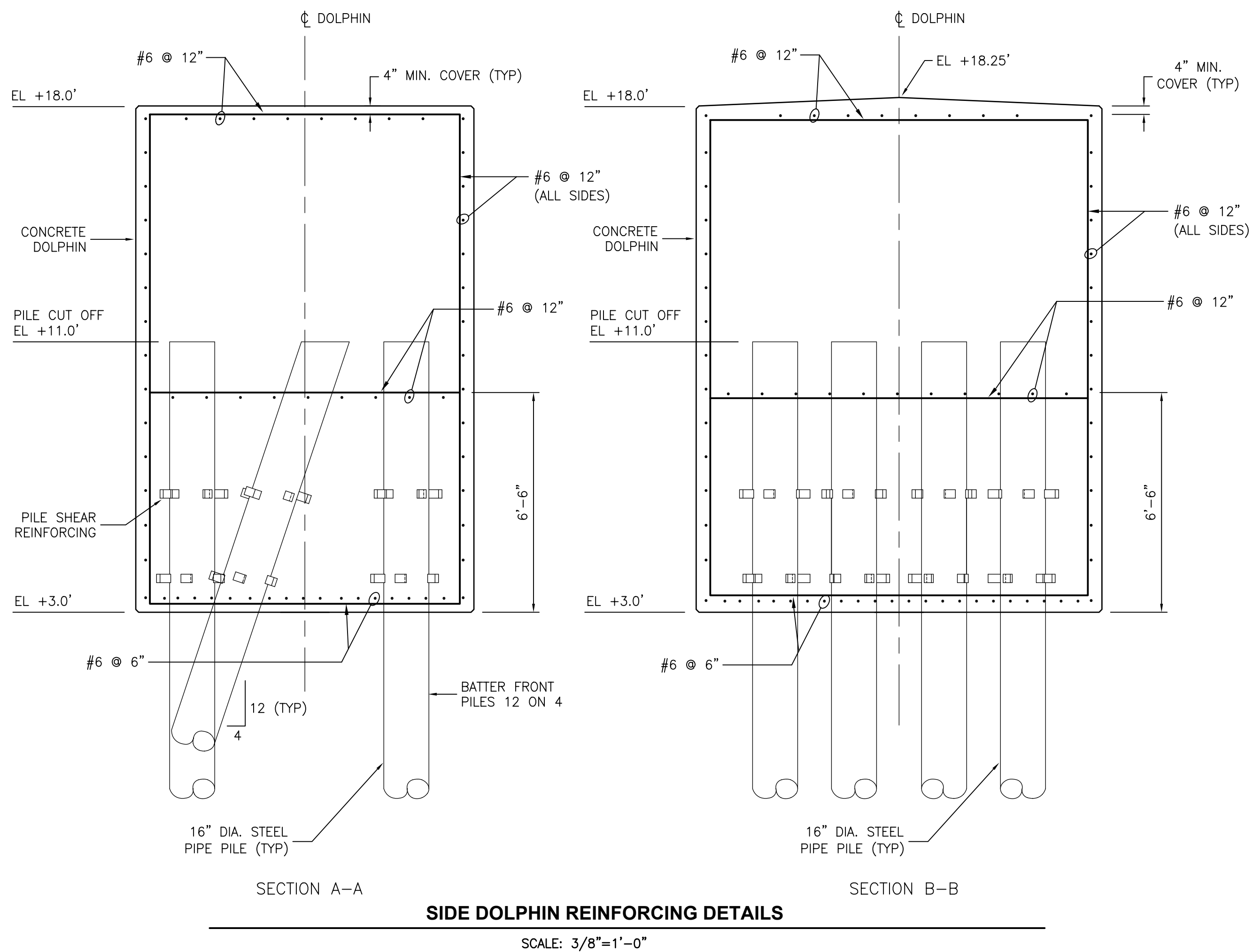
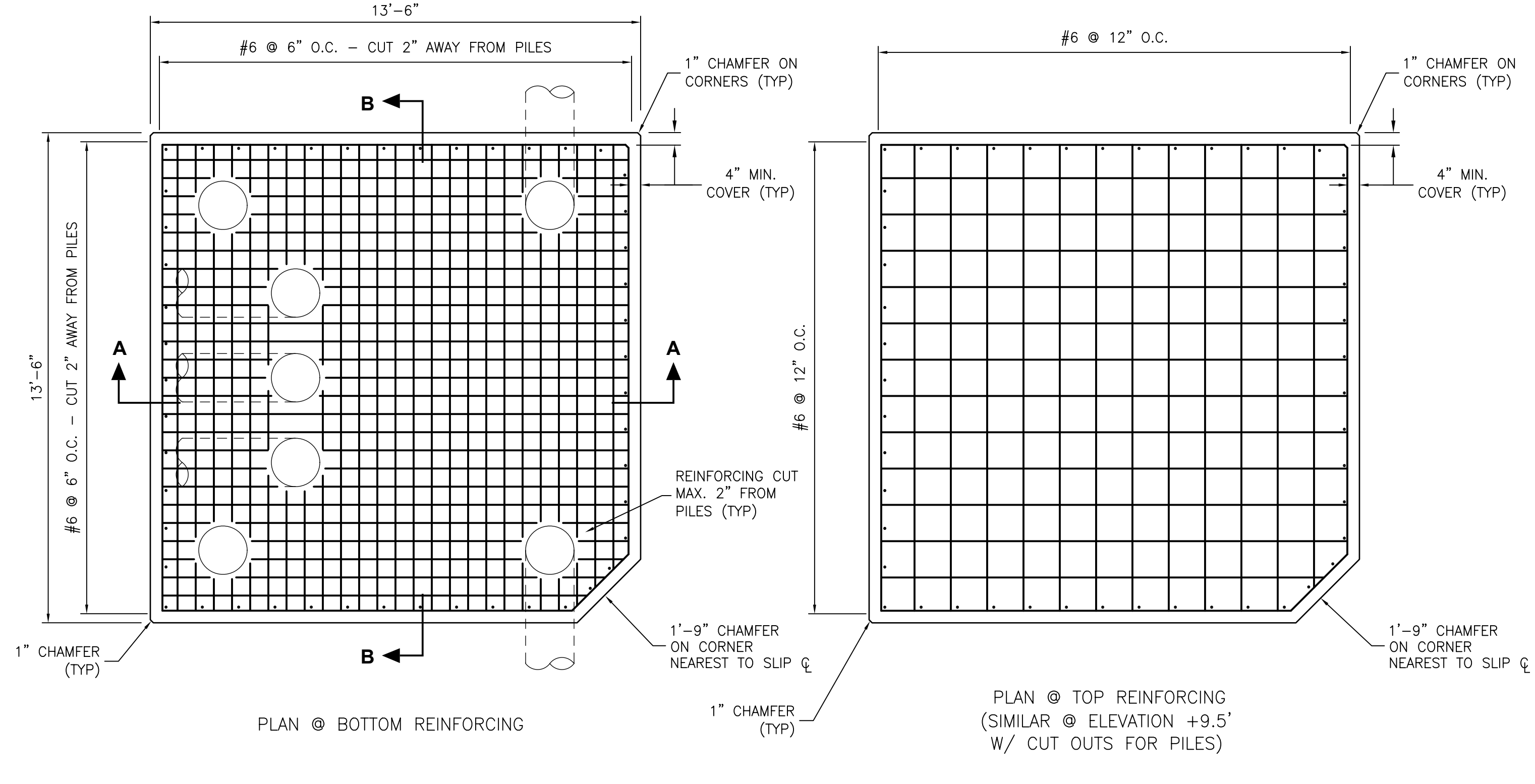
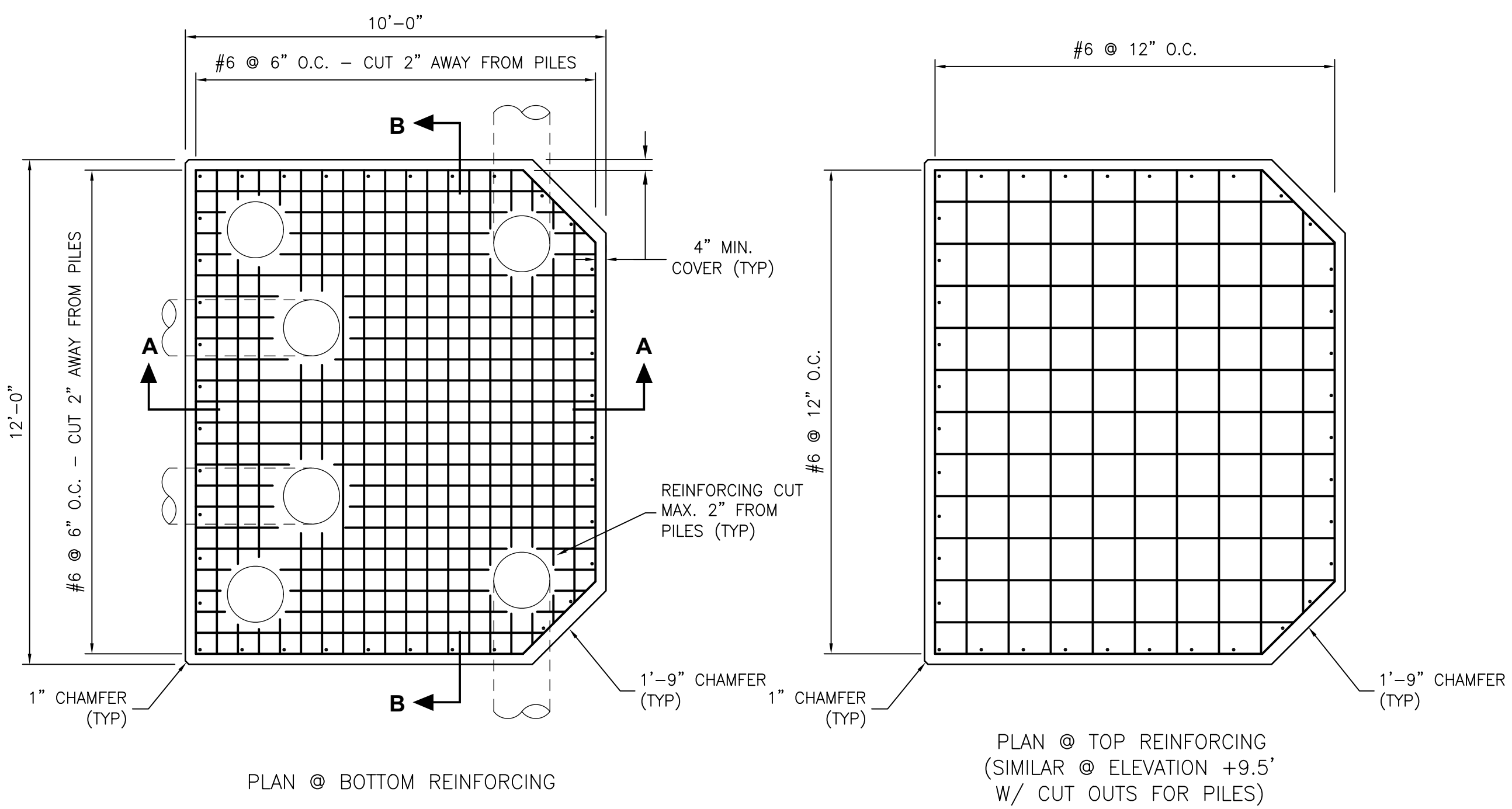
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Date	Appr.	Description

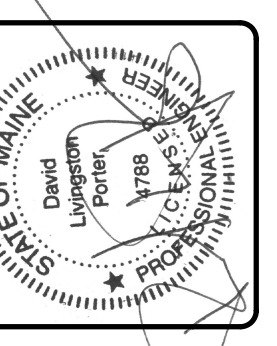
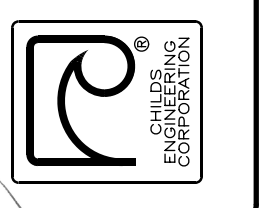
Designed by: RGF	Date: 08/20/10
Drawn by: APL	Design file no.: 221910-X-04
Reviewed by: RGF	Plot Scale: 1"=0'-1"

MAINE STATE FERRY SERVICE
 MAINE DEPARTMENT OF TRANSPORTATION
 BASS HARBOR TERMINAL
 PROPOSED LAYOUT PLAN

Sheet reference number:
X-04
 Sheet 4 OF 17



NOTE:
THIS DRAWING IS FROM MAINE DOT PROJECT FBD-7826(10)
"BASS HARBOR FERRY PIER" 2001. THIS SHEET IS TO BE USED
FOR REFERENCE. ALL DIMENSIONS, MATERIAL AND LAYOUTS SHALL
BE FIELD VERIFIED.

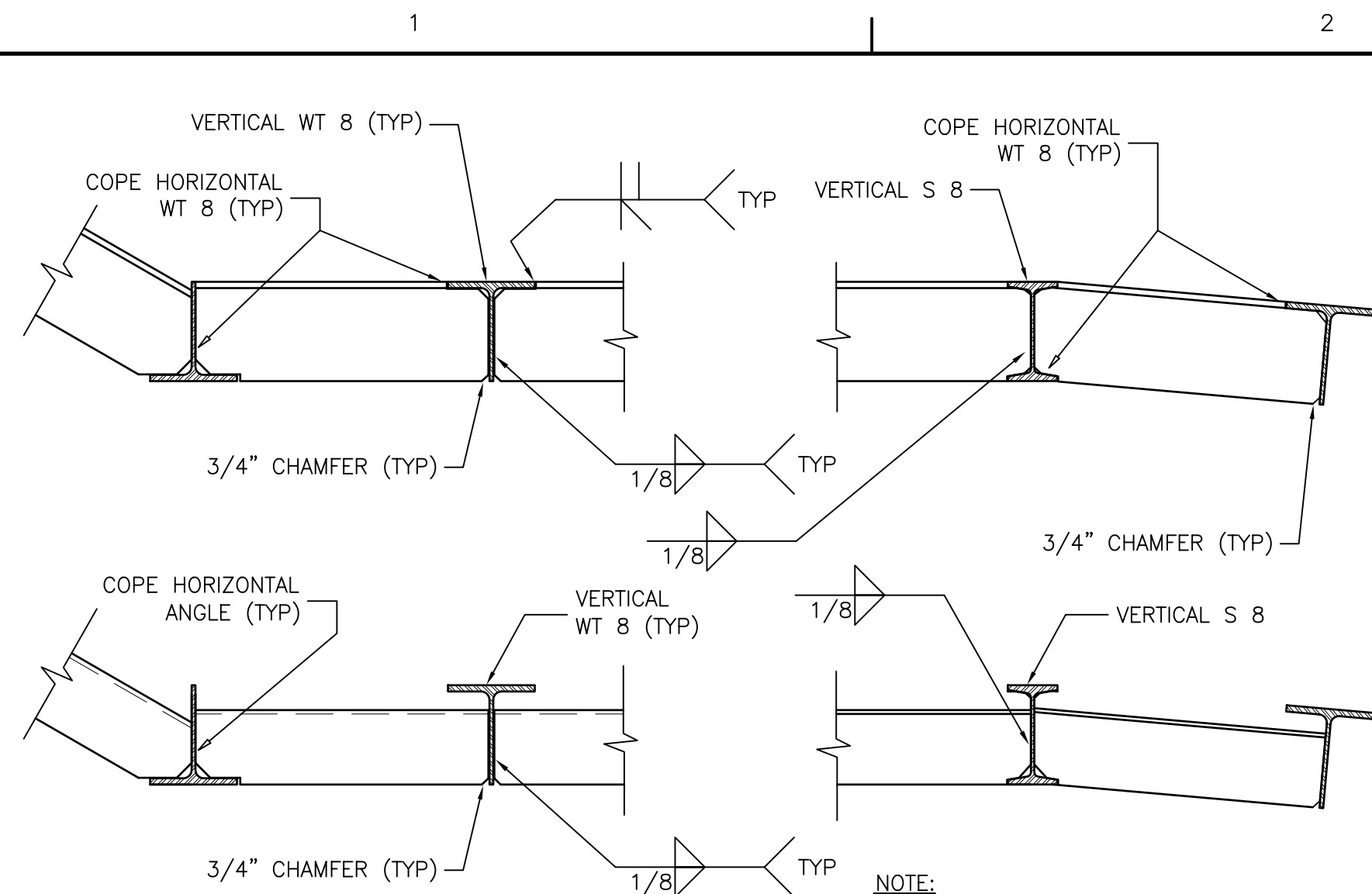


Date	Appr.

Mark	Description

Designed by:	09/20/10
RF	RGF
Drawn by:	Design file no.
APL	221610-X-05
Reviewed by:	Plot Scale:
RGF	1"=0'-1"

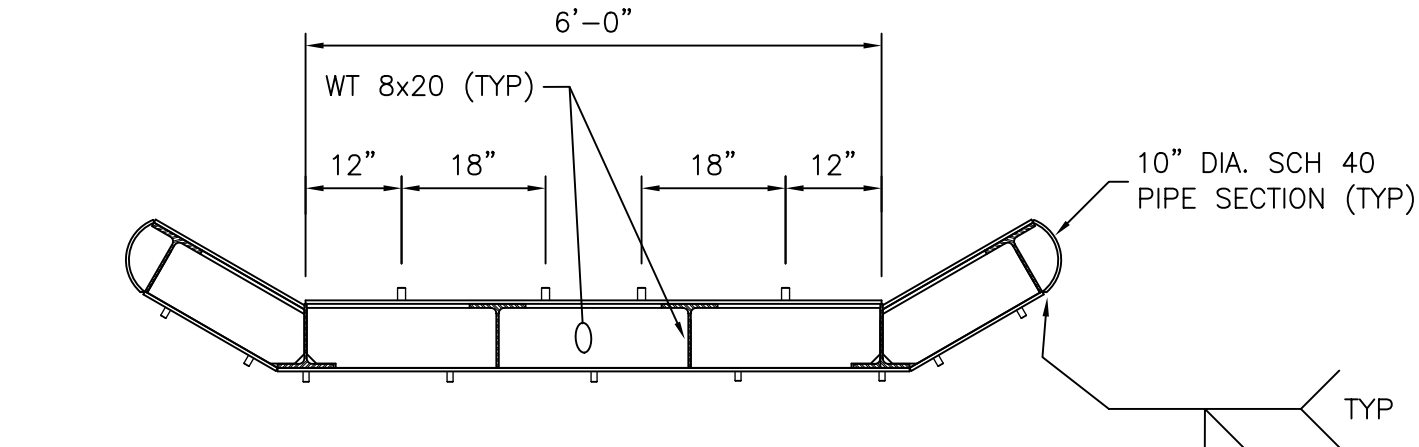
MAINE STATE FERRY SERVICE
 MAINE DEPARTMENT
 OF TRANSPORTATION
BASS HARBOR TERMINAL
 EXISTING DOLPHIN
 REINFORCING DETAILS



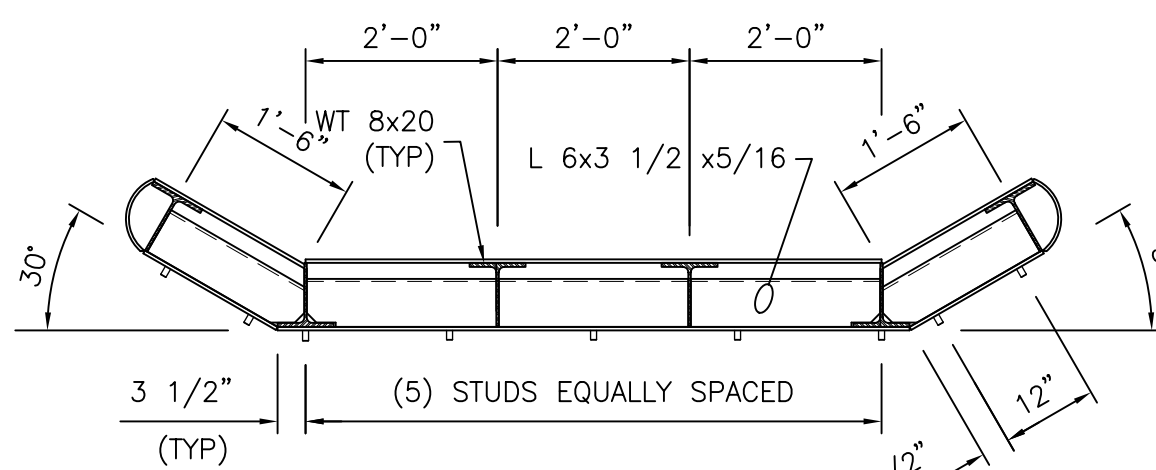
TYPICAL FRAME CONNECTION DETAILS

SCALE: 1"=1'-0"

NOTE:
CONNECTIONS SHOWN ARE TYPICAL FOR ALL DOLPHINS.



PLAN - HORIZONTAL WT MEMBERS

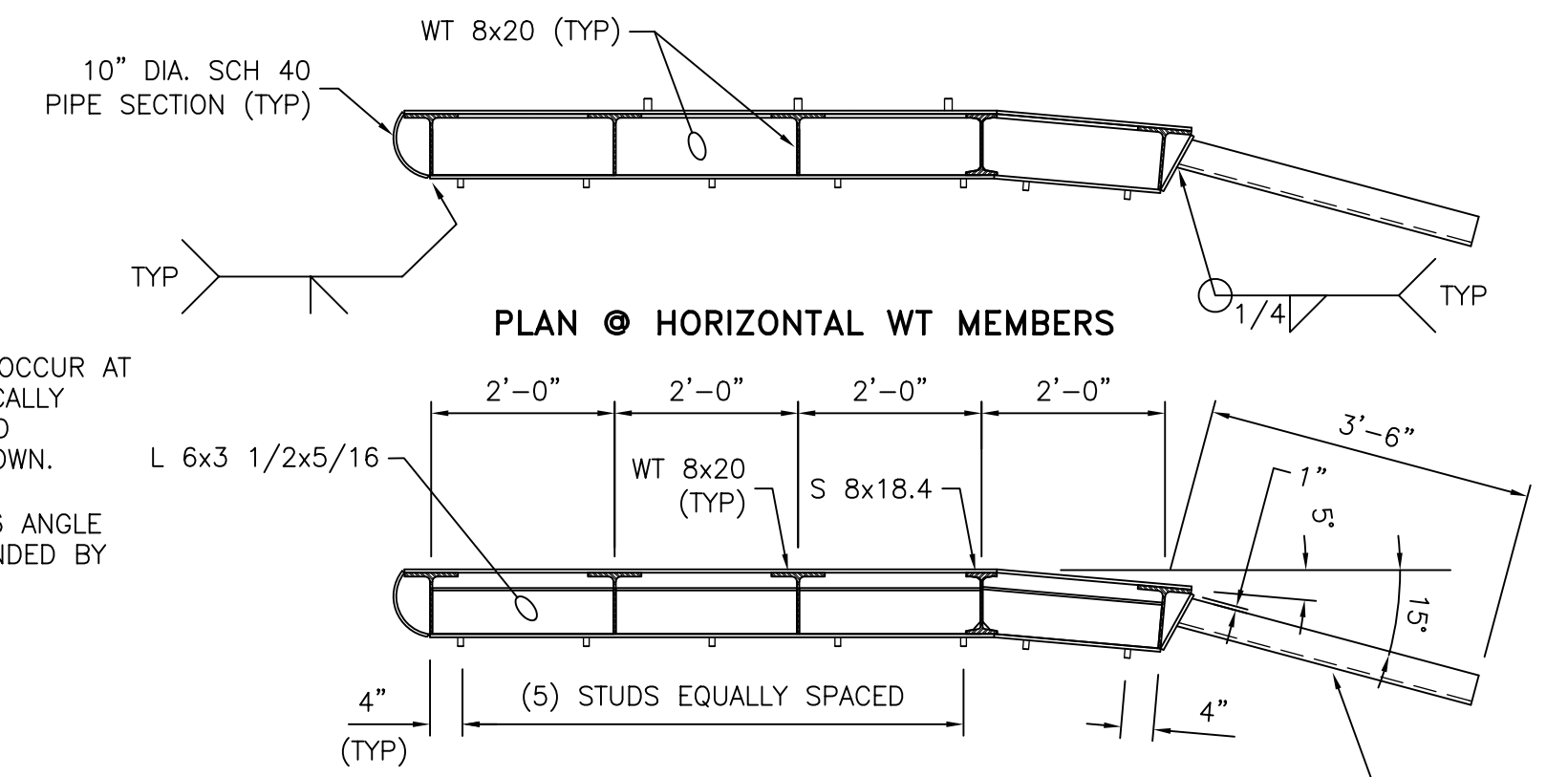


PLAN - HORIZONTAL ANGLES

NOTE:
TOP PLATE NOT SHOWN FOR CLARITY.

NOTES:

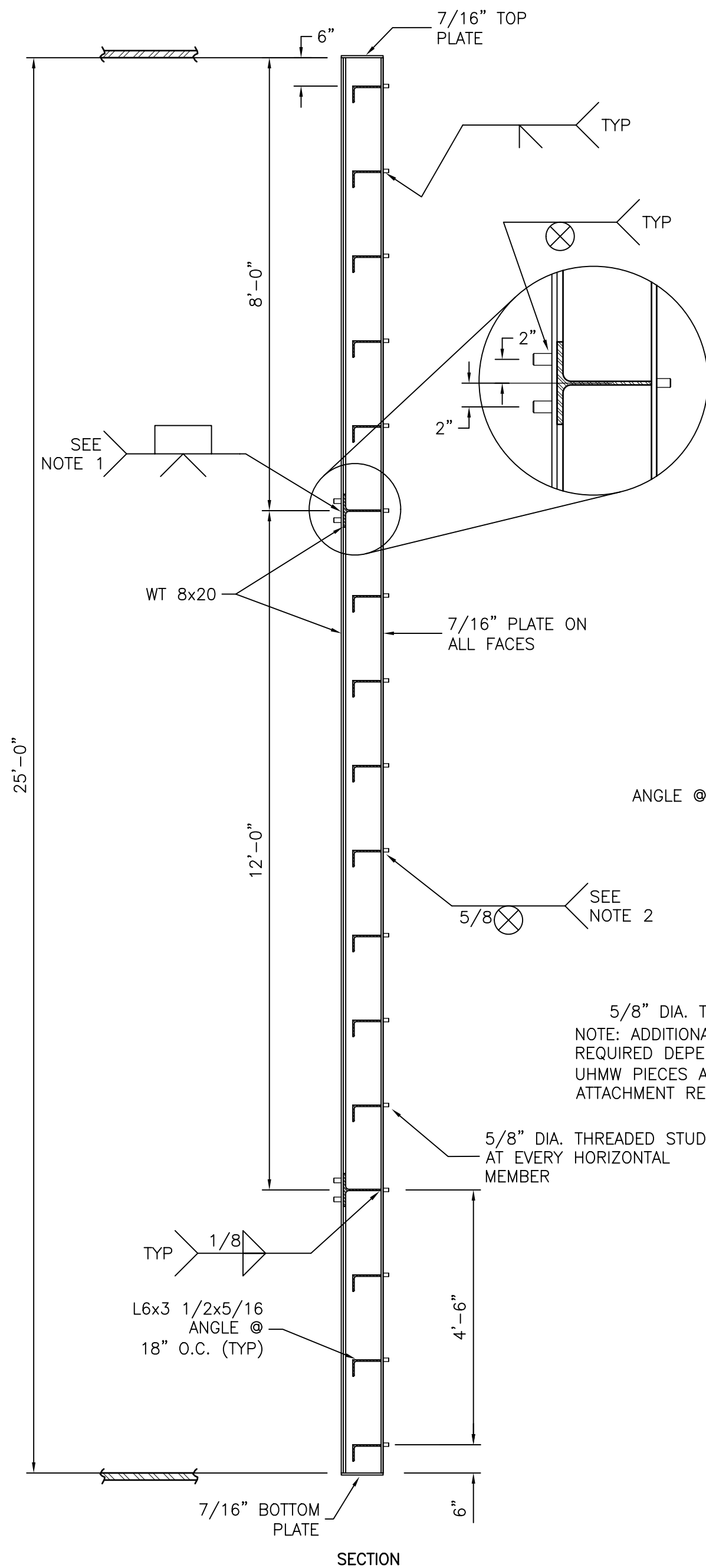
- 1.) ATTACH PLATE TO WT 8 FLANGE WITH CONTINUOUS "V" GROOVE WELD. SEAMS TO OCCUR AT EACH WT 8 BOTH HORIZONTALLY AND VERTICALLY ALIGNED WITH THE STEM, EXCEPT AT ANGLED CONNECTIONS WHERE SEAM OCCURS AS SHOWN.
- 2.) STUD WELDS TO OCCUR ALONG THE L6 ANGLE LEGS, SPACED AS SHOWN OR AS RECOMMENDED BY THE UHMW WEAR SURFACE MANUFACTURER.
- 3.) FRAMES TO BE WATERTIGHT.



PLAN - HORIZONTAL WT MEMBERS

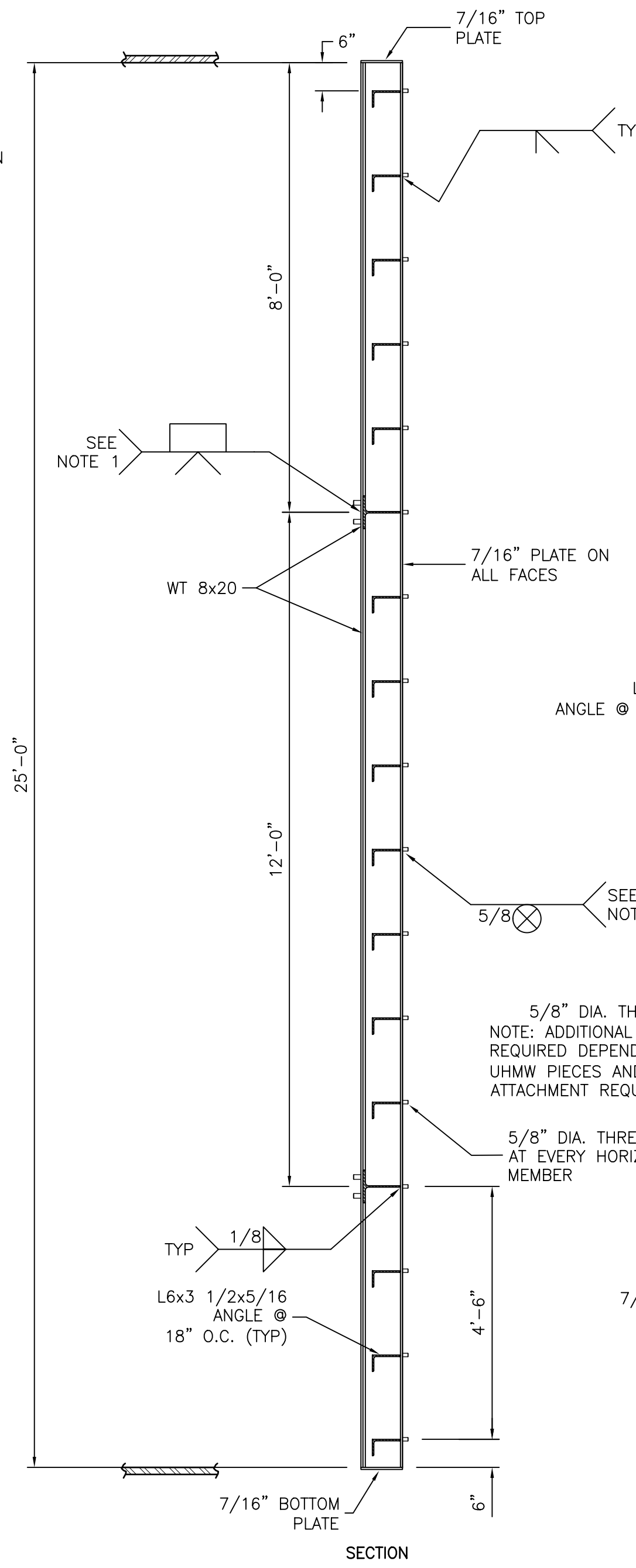
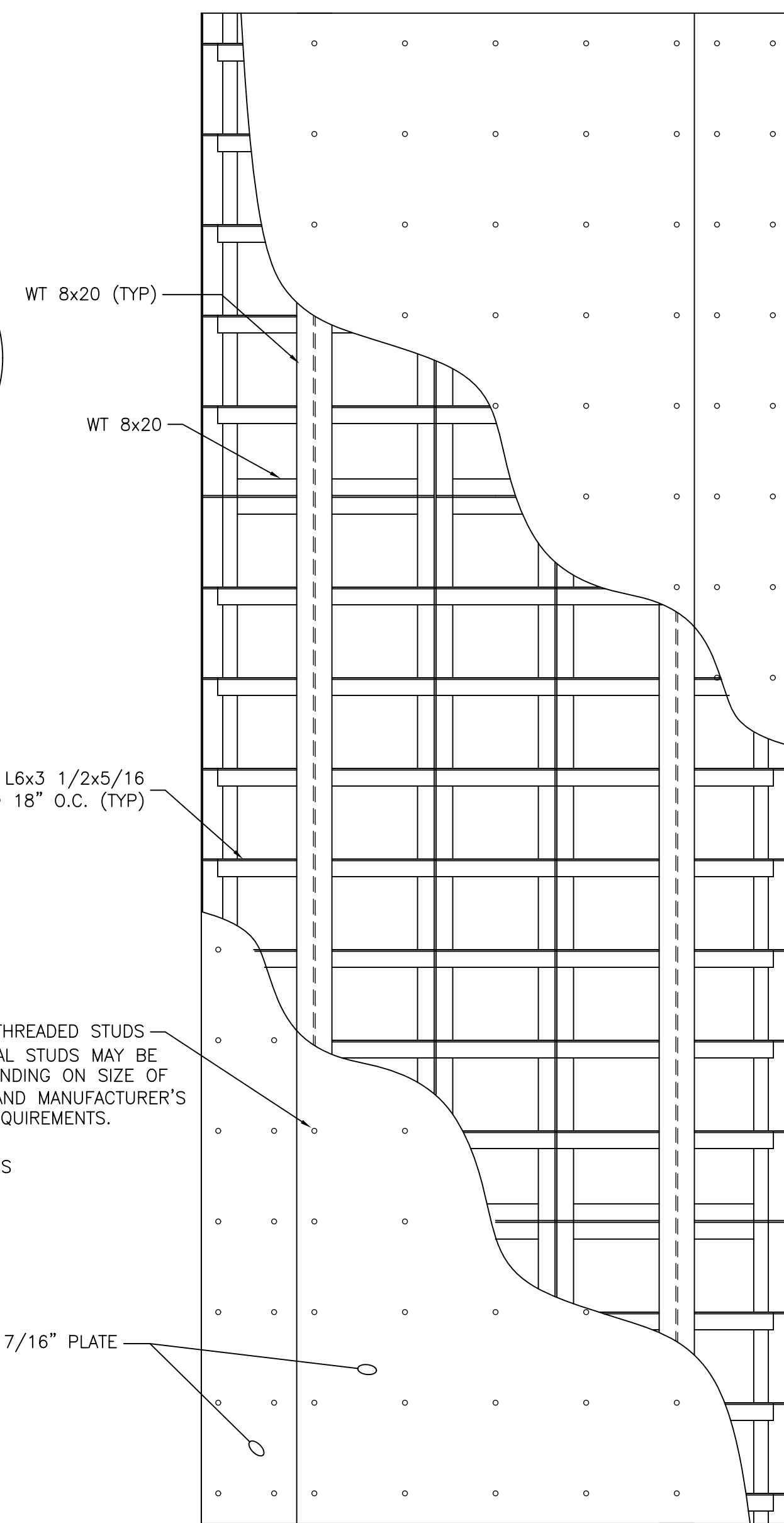
PLAN - HORIZONTAL ANGLES

NOTE:
TOP PLATE NOT SHOWN FOR CLARITY.



SIDE & TURNING DOLPHIN FENDER FRAME

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

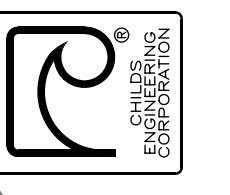


HEAD DOLPHIN FENDER FRAME

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

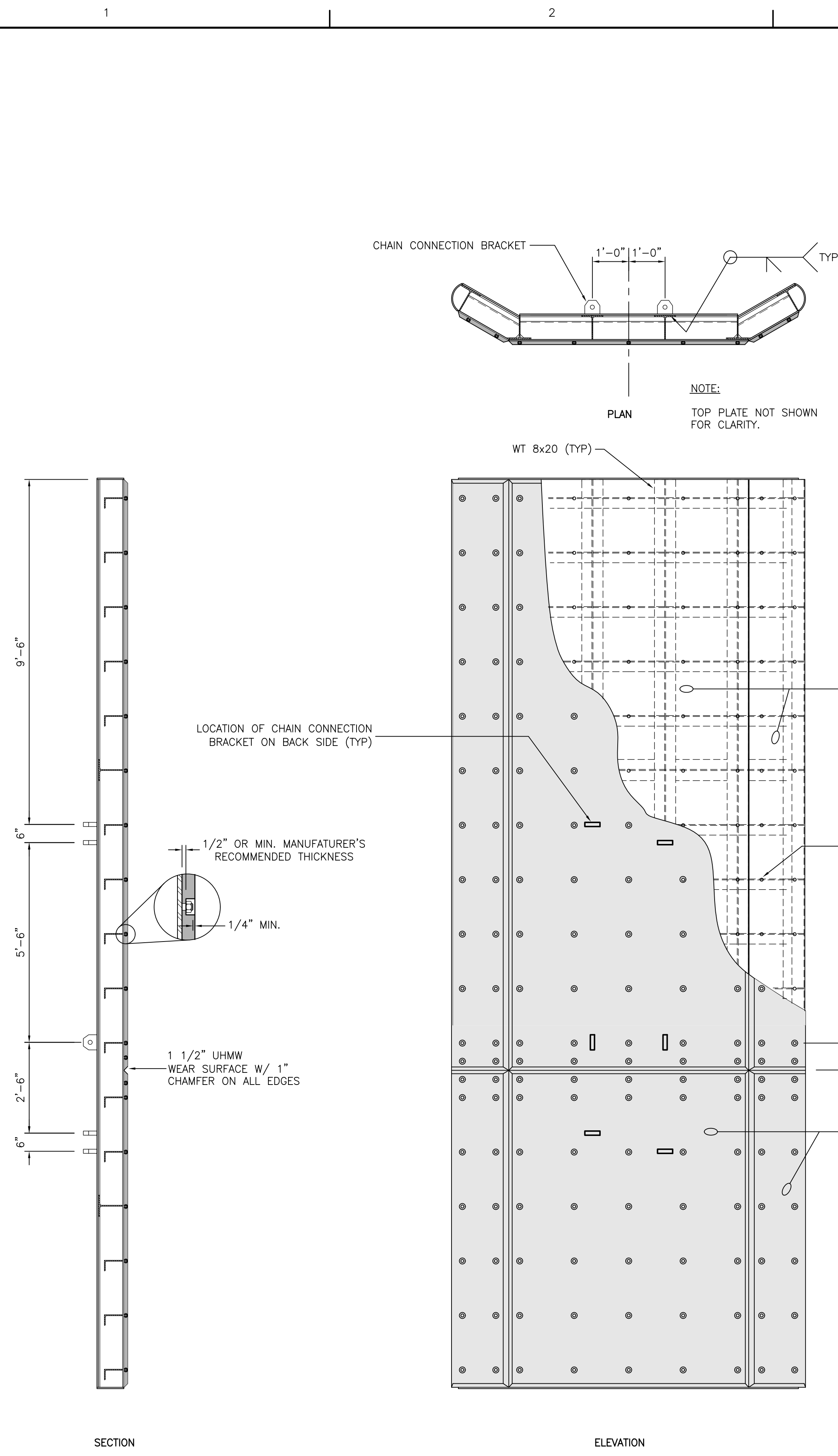
NOTE:

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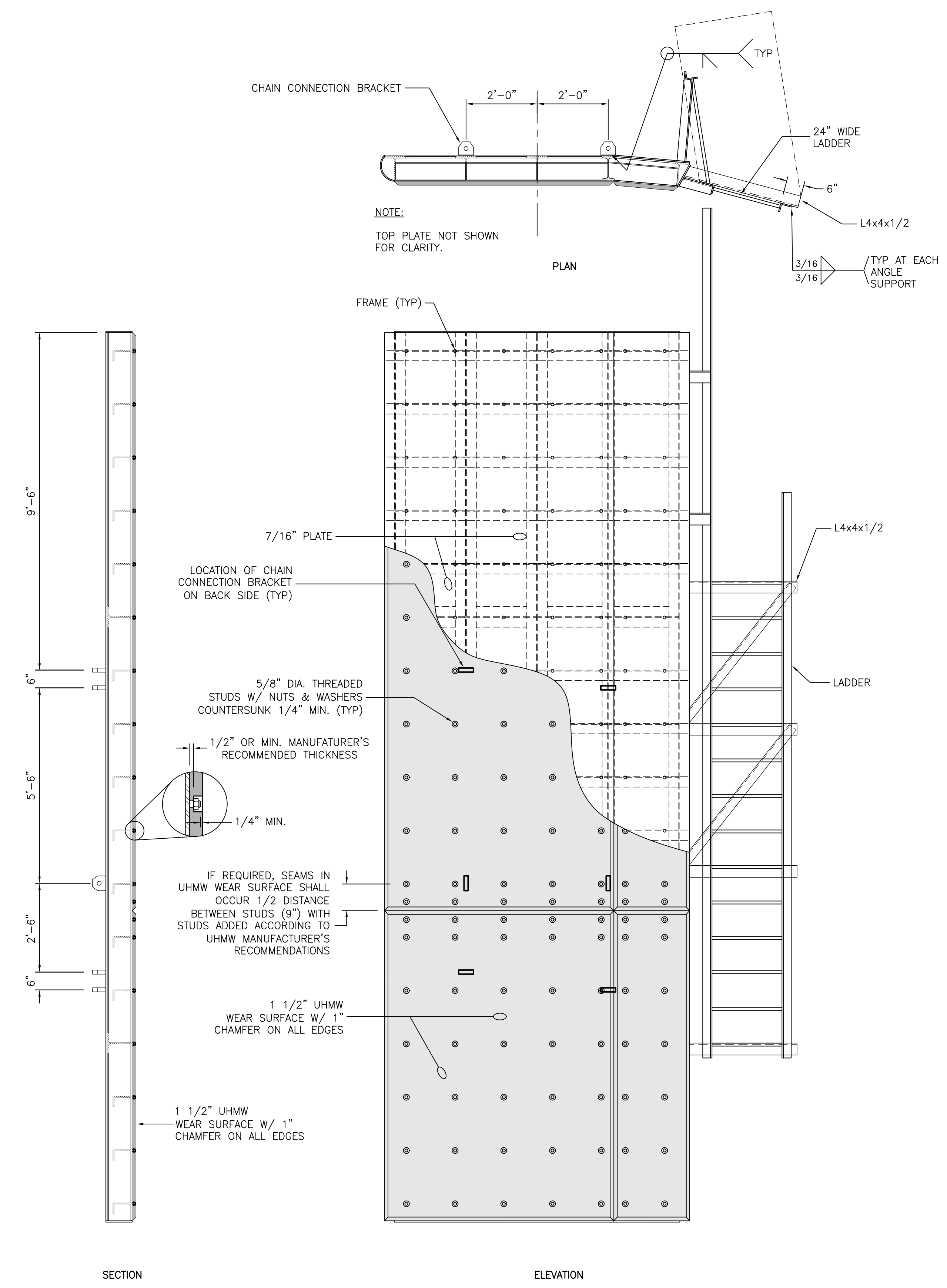


Mark	Date	Appr.	Description

Designed by	Date	Checked by	Design file no.	Plot Scale
RGF	08/20/10	RGF	221610-X-06	1"=0'-1"
Drawn by		Reviewed by		
APL		RGF		



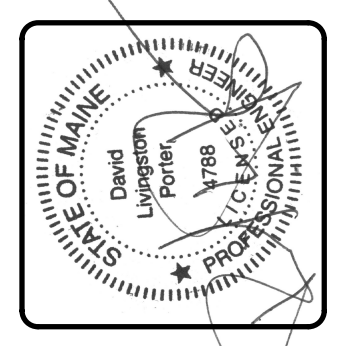
SIDE DOLPHIN FENDER FACING
SCALE: 1/2"=1'-0"



HEAD DOLPHIN FENDER FACING
SCALE: 1/2"=1'-0"

NOTE:
THIS DRAWING IS FROM MAINE DOT PROJECT FBD-7826(10)
"BASS HARBOR FERRY PIER" 2001. THIS SHEET IS TO BE USED
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CHILDS ENGINEERING CORPORATION
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E-mail: mail@childsendg.com

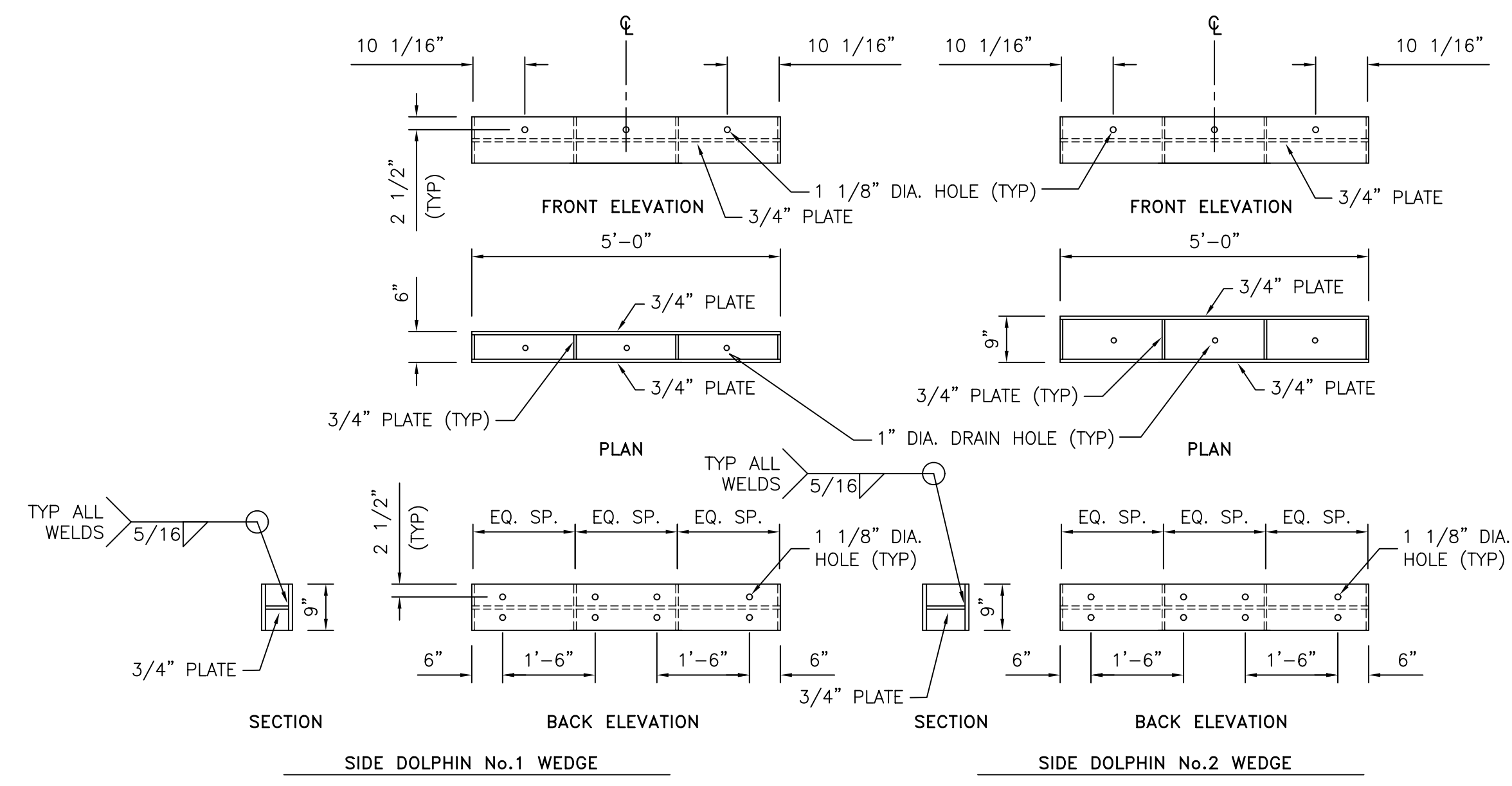
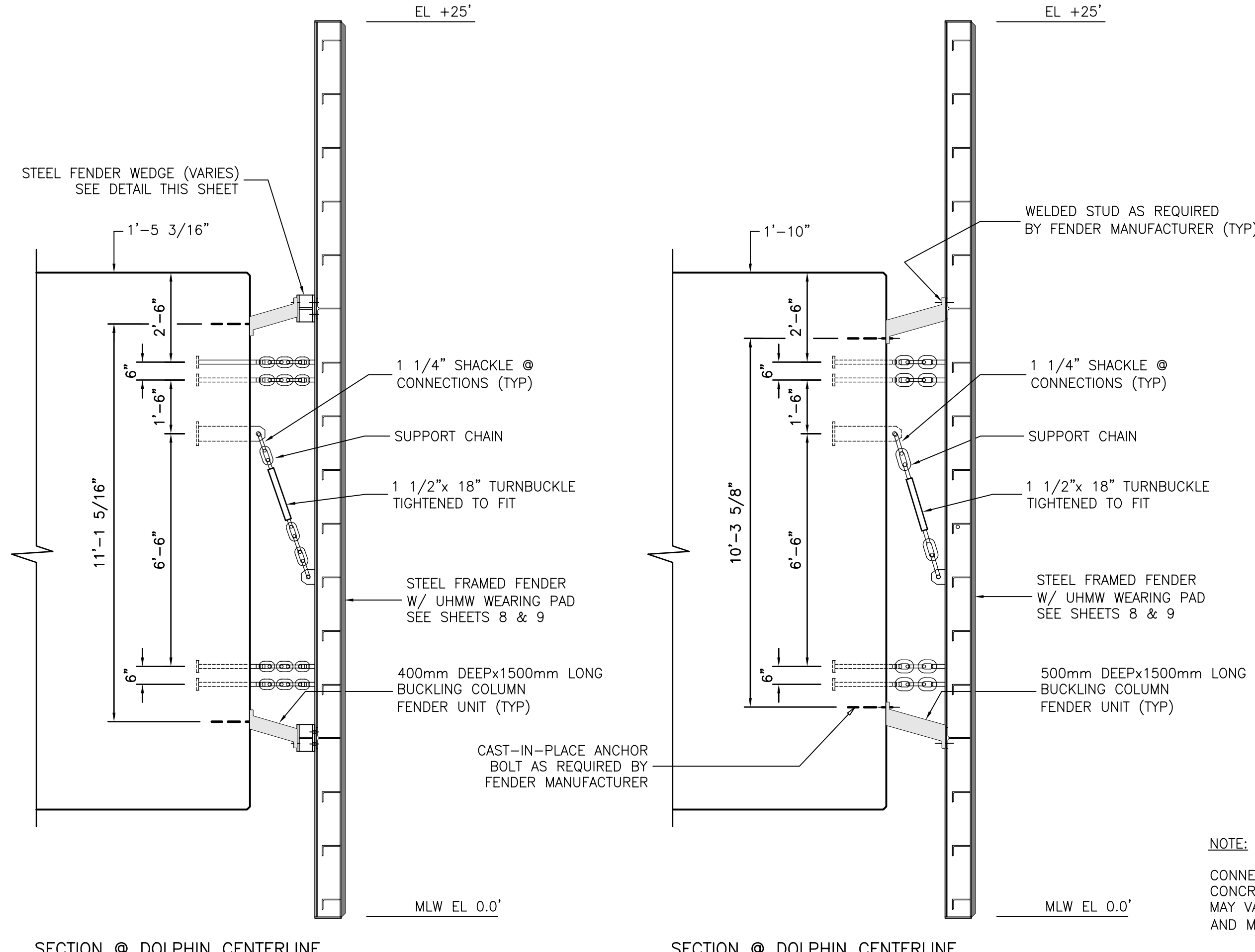
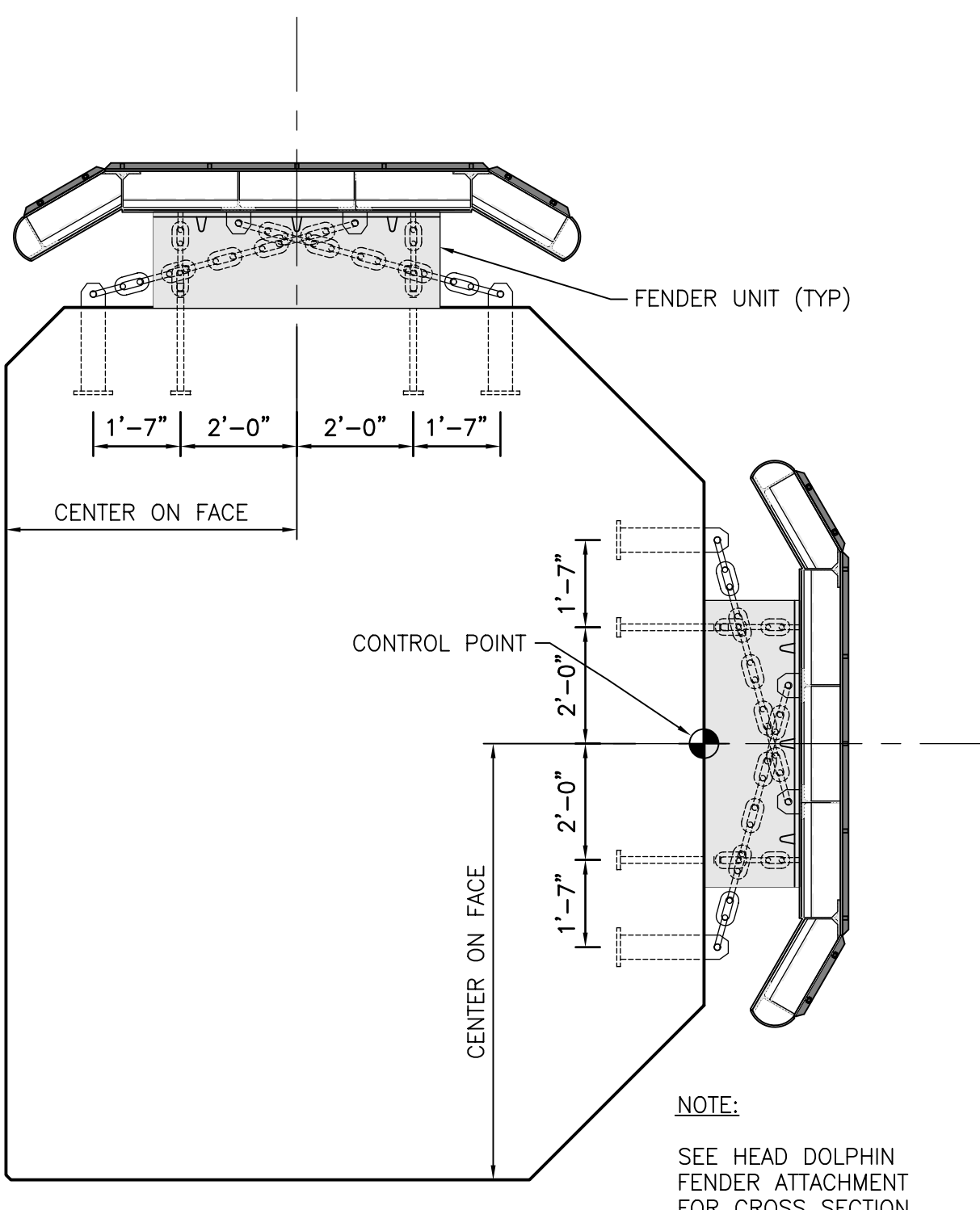
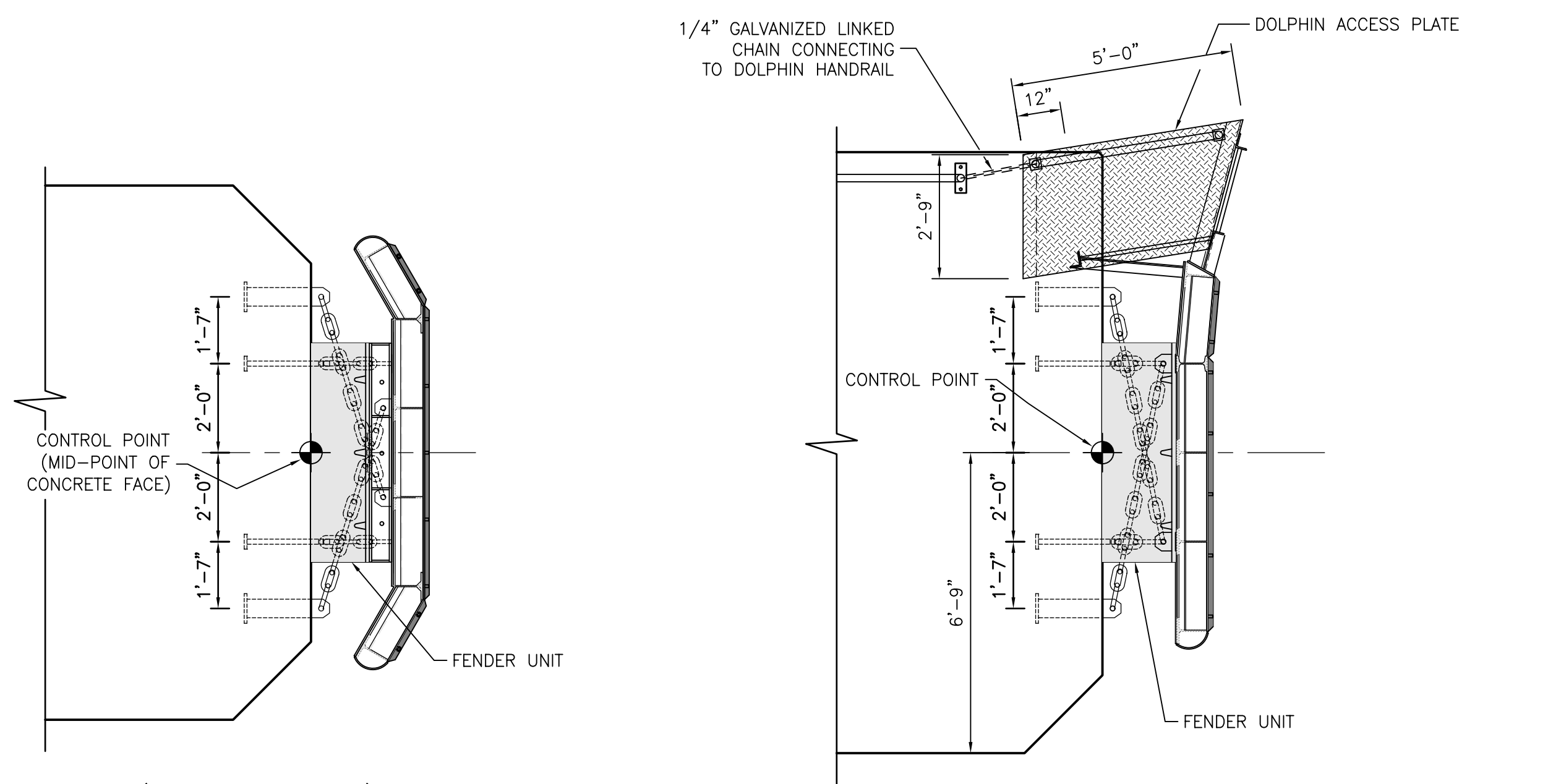


Mark	Date	Appr.	Description
A	REVISED 2-20-02		

Designed by:	RGF	Date:	09/20/10
Drawn by:	APL	Check by:	RGF
Reviewed by:	RGF	Design file no.:	221610-X-07
		Plot Scale:	1"=0'-1"

MAINE STATE FERRY SERVICE
MAINE DEPARTMENT
OF TRANSPORTATION
BASS HARBOR TERMINAL
EXISTING FENDER FACING DETAILS

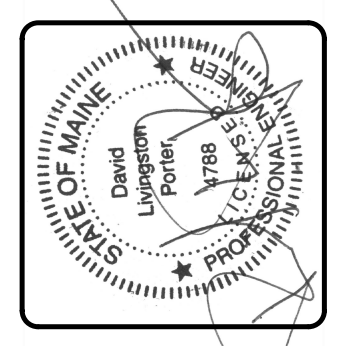
Sheet
reference
number:
X-07
Sheet 7 OF 17



NOTE:
 CONNECTION OF FENDER UNITS TO CONCRETE DOLPHIN AND FENDER FRAME MAY VARY DEPENDING ON FENDER SHAPE AND MANUFACTURER'S RECOMMENDATIONS.

NOTE:
 THIS DRAWING IS FROM MAINE DOT PROJECT FBD-7826(10) "BASS HARBOR FERRY PIER" 2001. THIS SHEET IS TO BE USED FOR REFERENCE. ALL DIMENSIONS, MATERIAL AND LAYOUTS SHALL BE FIELD VERIFIED.

CHILDS ENGINEERING CORPORATION
 BOX 333 MEDFIELD, MASSACHUSETTS 02052 U.S.A.
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 E-mail: mail@childseng.com

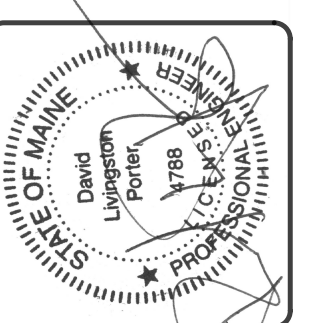


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Drawn by	Design file no.	Plot Scale
APL	221610-X-08	1"=0'-1"
Reviewed by		
RGF		

MAINE STATE FERRY SERVICE
 MAINE DEPARTMENT OF TRANSPORTATION
 BASS HARBOR FERRY TERMINAL
 EXISTING FENDER ATTACHMENT DETAILS

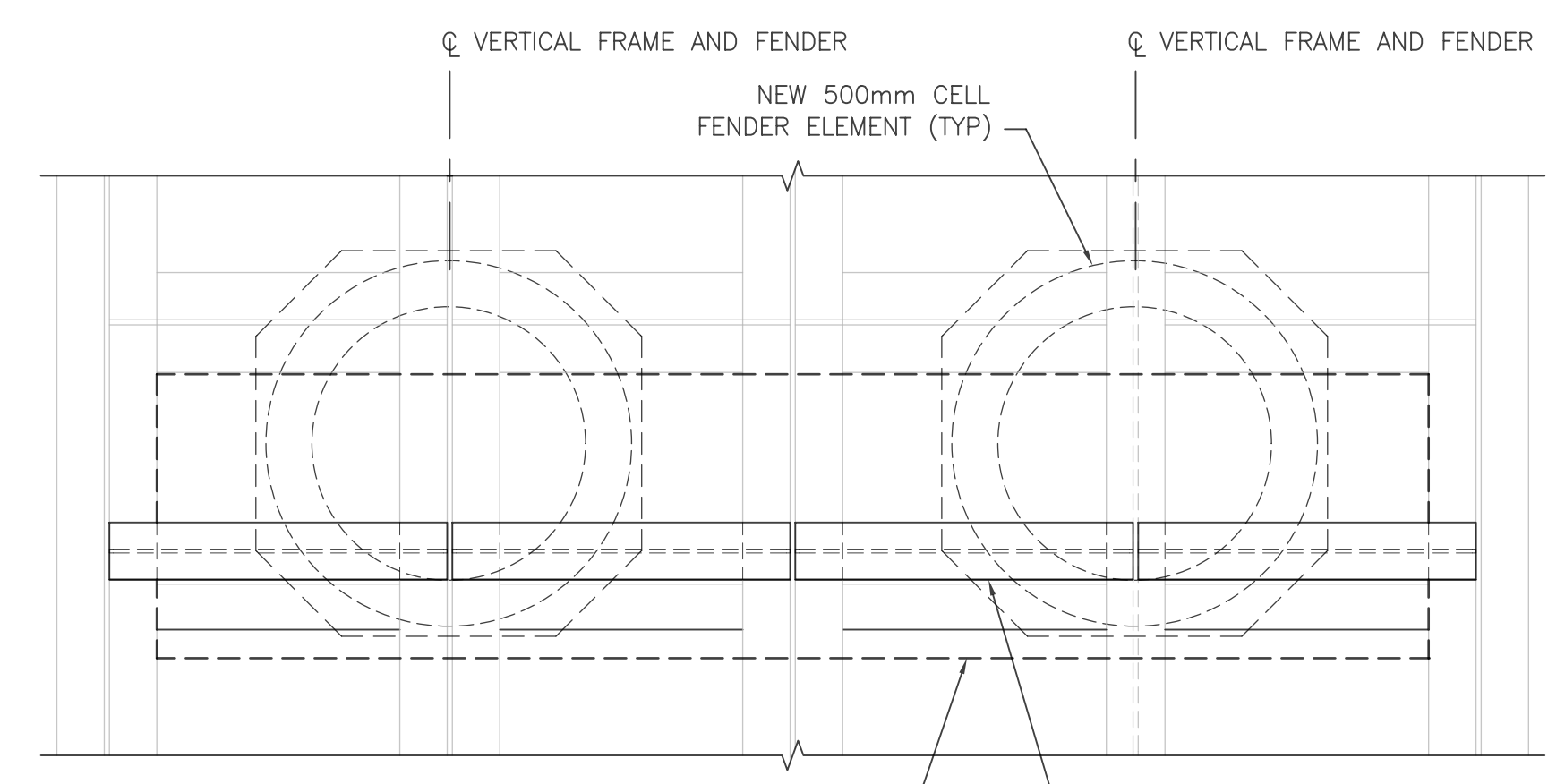
Sheet reference number:
X-08
 Sheet 8 OF 17



Mark	Date	Appr.	Description

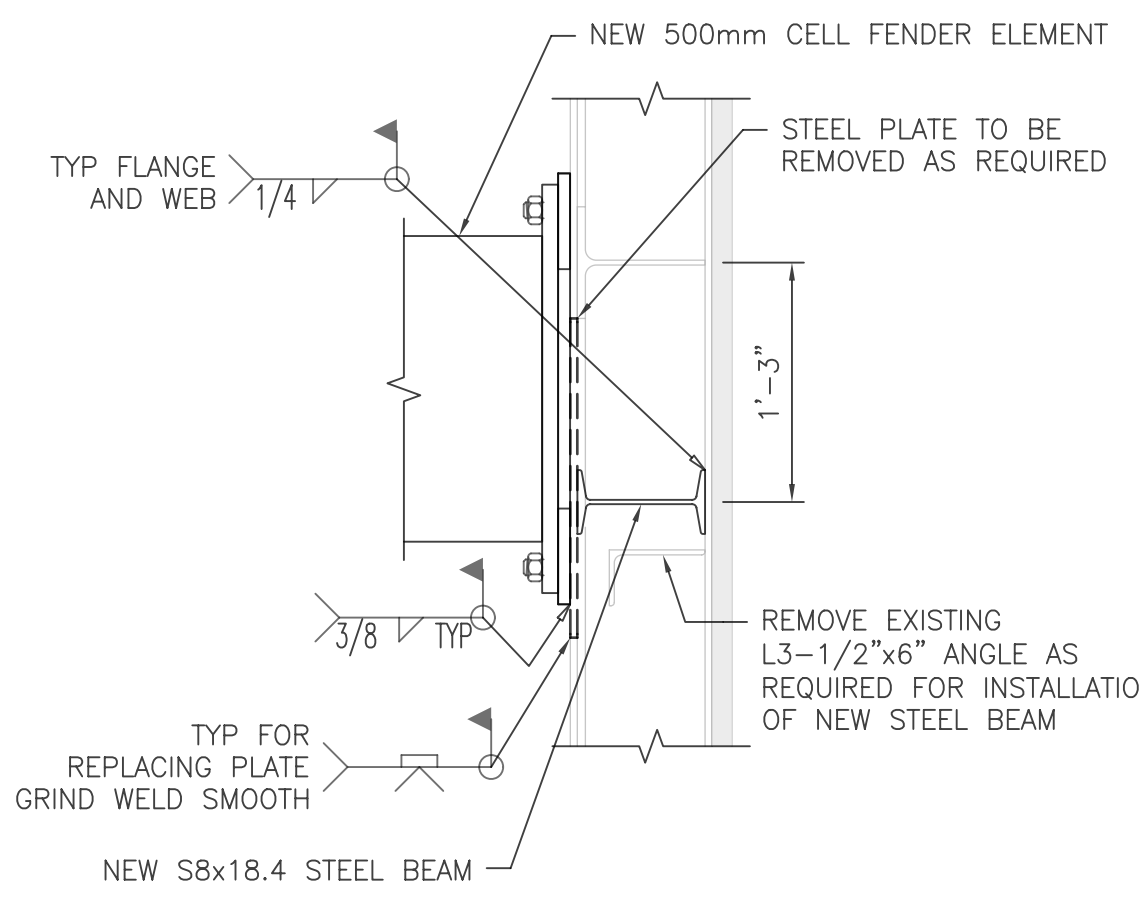
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MAINE STATE FERRY SERVICE
 MAINE DEPARTMENT
 OF TRANSPORTATION
 BASS HARBOR TERMINAL
 PROPOSED HEAD DOLPHIN
 MODIFICATIONS AND DETAILS

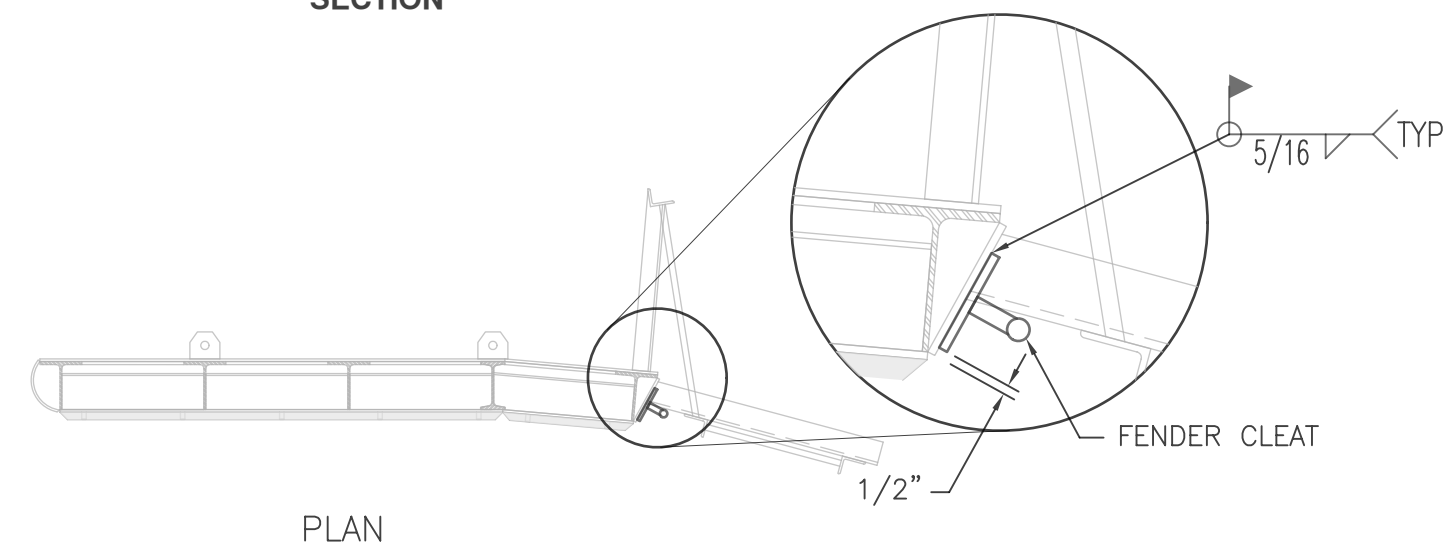


1 MODIFICATION DETAIL
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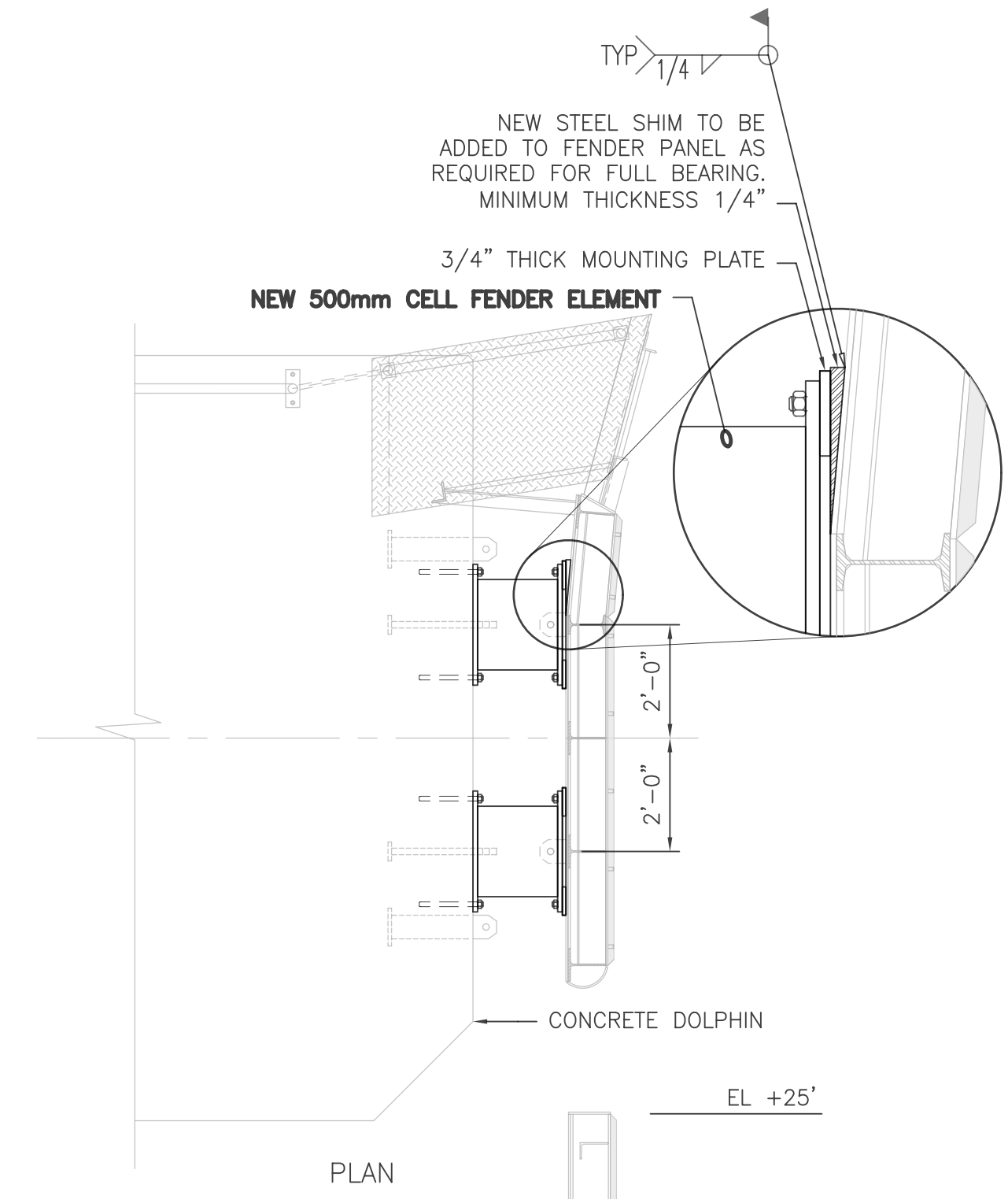
- NOTE:
1. ANY DAMAGED COATING EITHER EXISTING OR DUE TO WELDING OR HANDLING SHALL BE RECOATED ACCORDING TO PROJECT SPECIFICATIONS.
 2. UHMW FACING MATERIAL SHALL BE REMOVED BEFORE WELDING ON ADJACENT STEEL.
 3. SEE SHEET X-05 FOR DOLPHIN REINFORCING.
 4. EXISTING CHAINS AND CONNECTORS SHALL BE REUSED UNLESS DAMAGED OR CORRODED. THE ENGINEER SHALL DETERMINE IF REPLACEMENT IS REQUIRED.



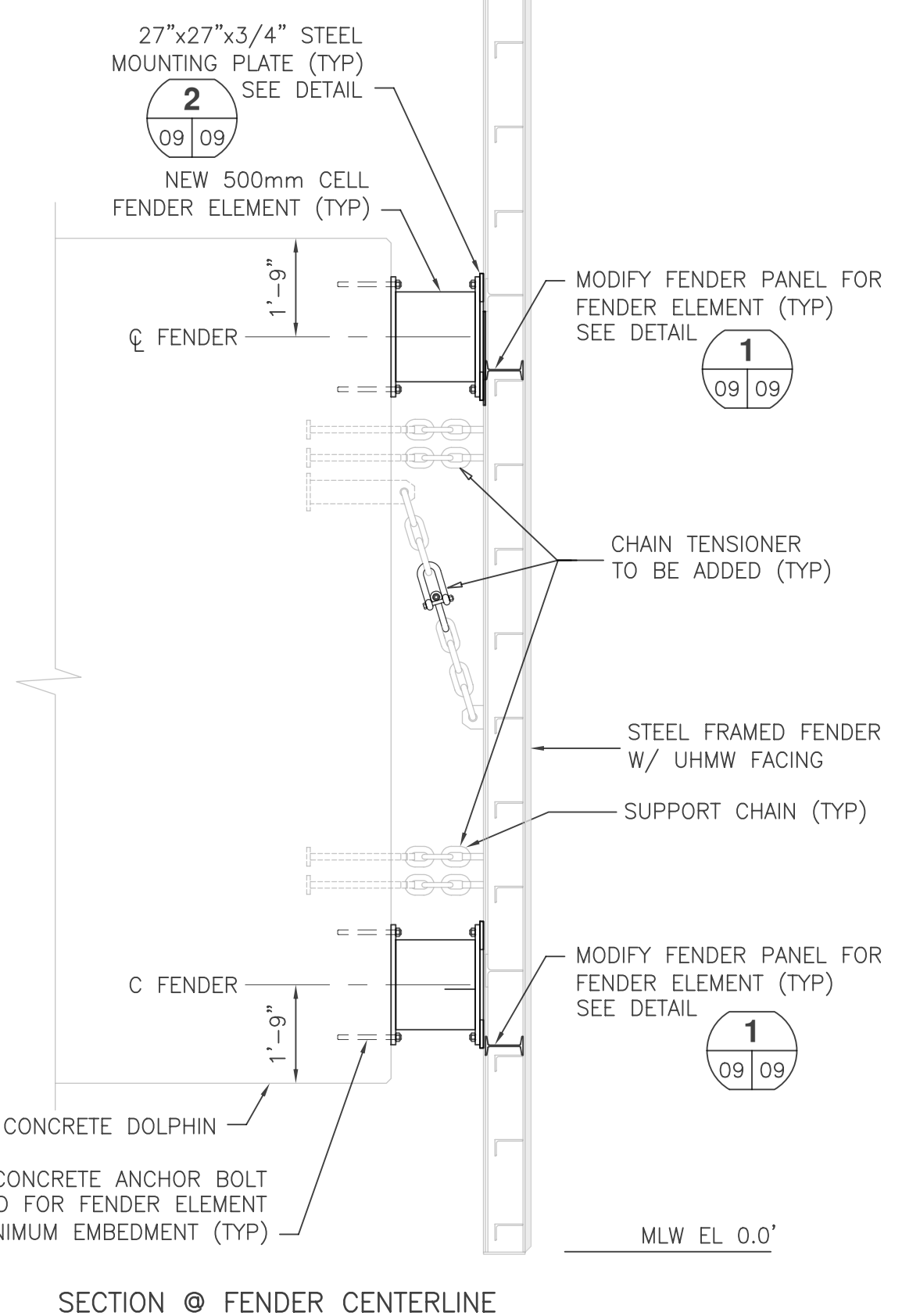
SECTION



PLAN

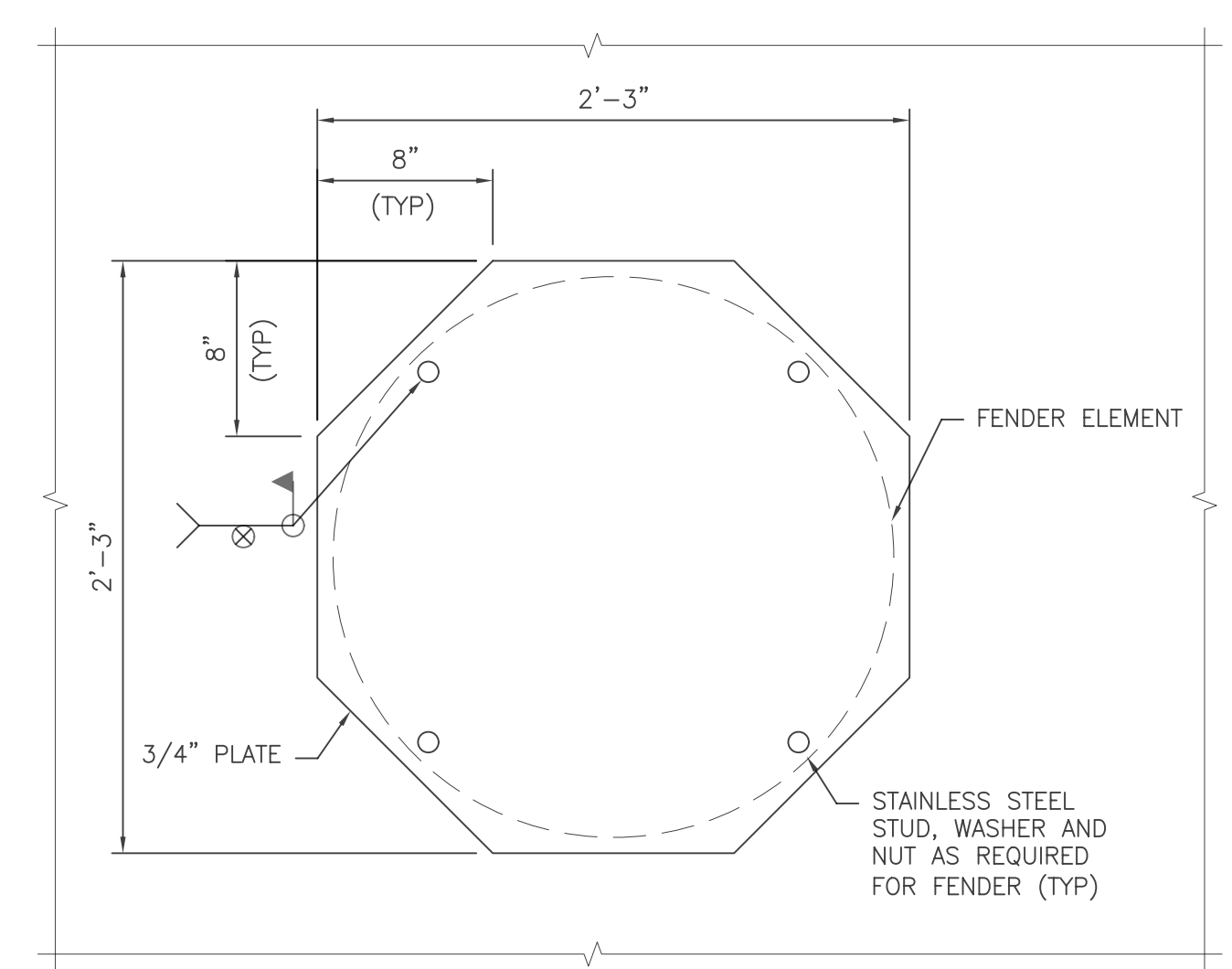


PLAN

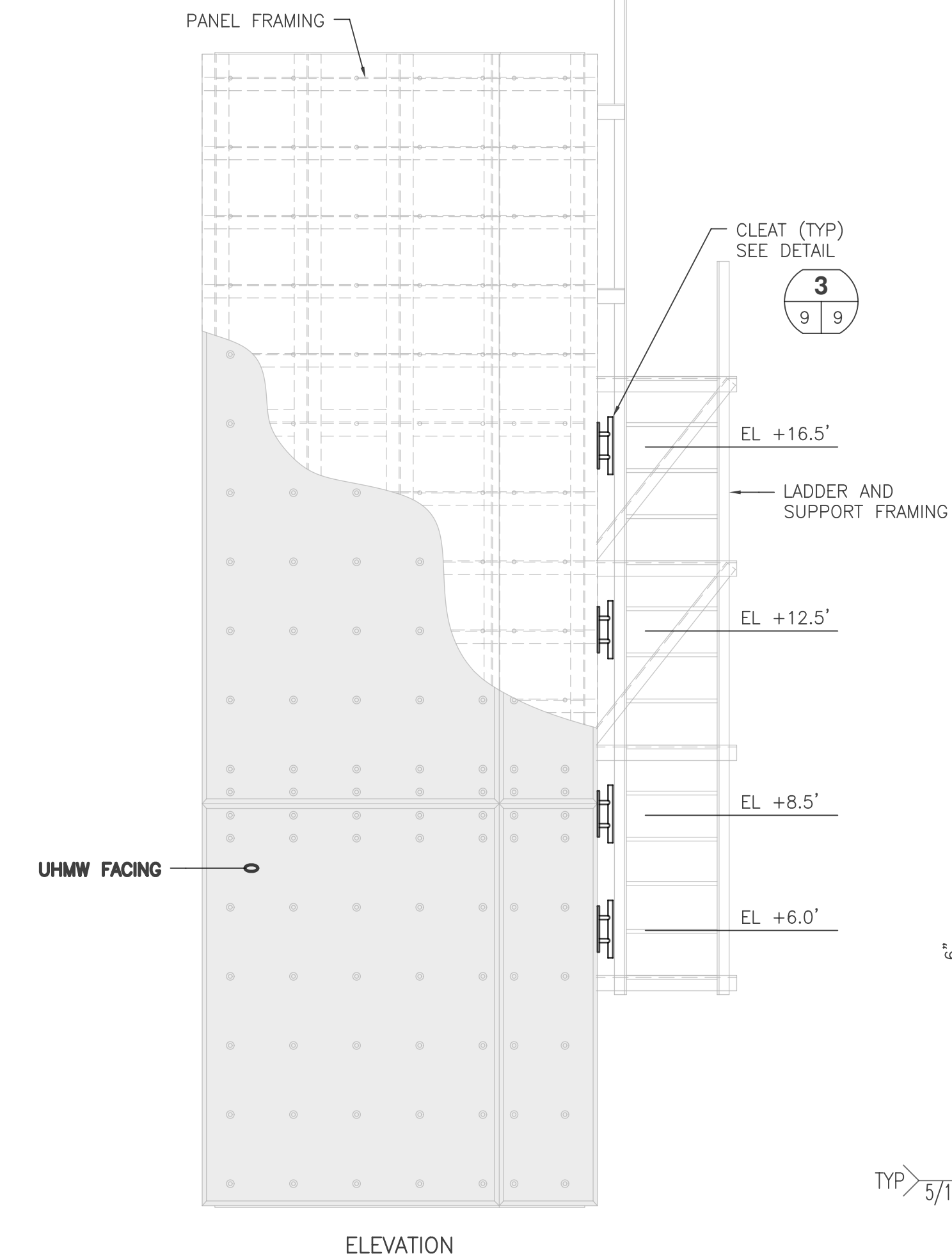


SECTION @ FENDER CENTERLINE

HEAD DOLPHIN FENDER ATTACHMENT
 SCALE: 3/8"=1'-0"

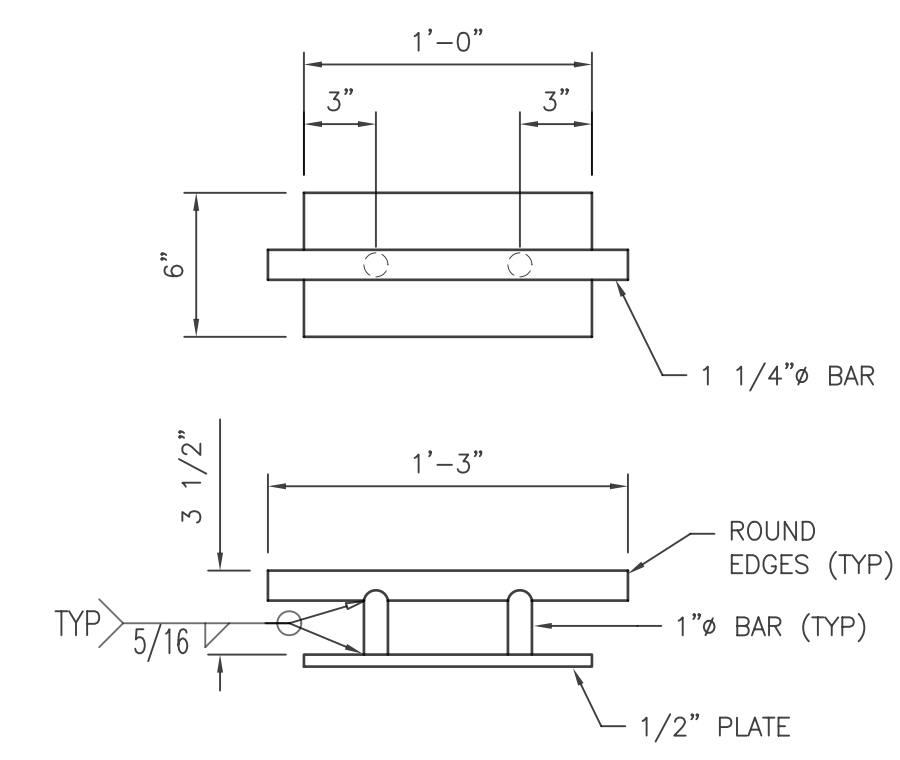


2 MOUNTING PLATE DETAIL
 SCALE: 1 1/2"=1'-0"



ELEVATION

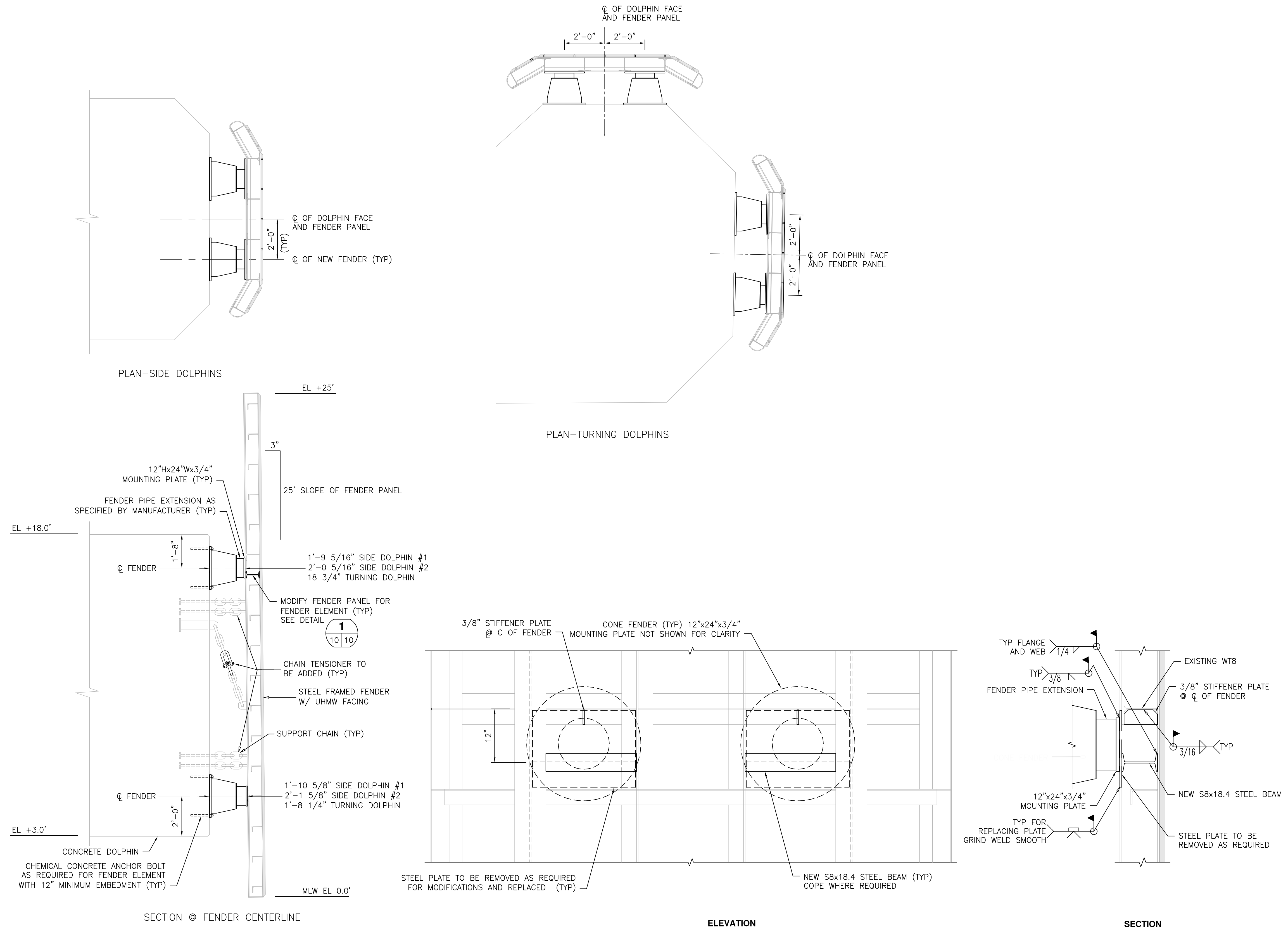
HEAD DOLPHIN FENDER CLEAT ATTACHMENT
 SCALE: 3/8"=1'-0"



3 FENDER CLEAT DETAIL
 SCALE: 1 1/2"=1'-0"

1 2 3 4 5

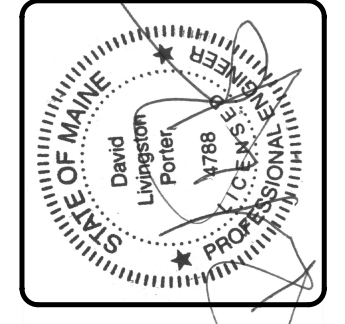
D
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- NOTE:
1. ANY DAMAGED COATING EITHER EXISTING OR DUE TO WELDING OR HANDLING SHALL BE RECOATED ACCORDING TO PROJECT SPECIFICATIONS.
 2. UHMW FACING MATERIAL SHALL BE REMOVED BEFORE WELDING ON ADJACENT STEEL.
 3. SEE SHEET X-05 FOR DOLPHIN REINFORCING.
 4. EXISTING CHAINS AND CONNECTORS SHALL BE REUSED UNLESS DAMAGED OR CORRODED. THE ENGINEER SHALL DETERMINE IF REPLACEMENT IS REQUIRED.

1
10/10

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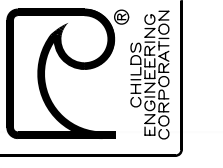


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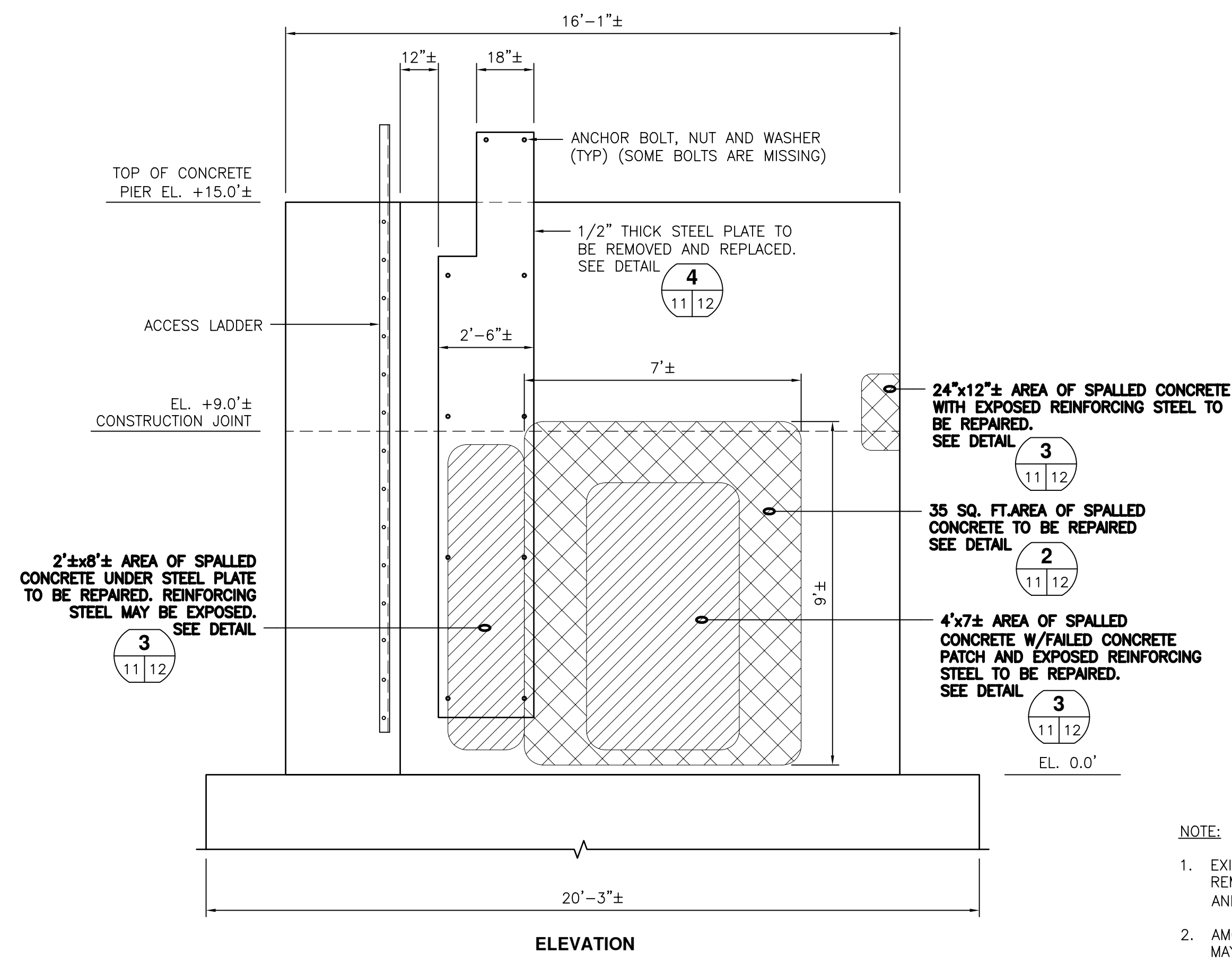
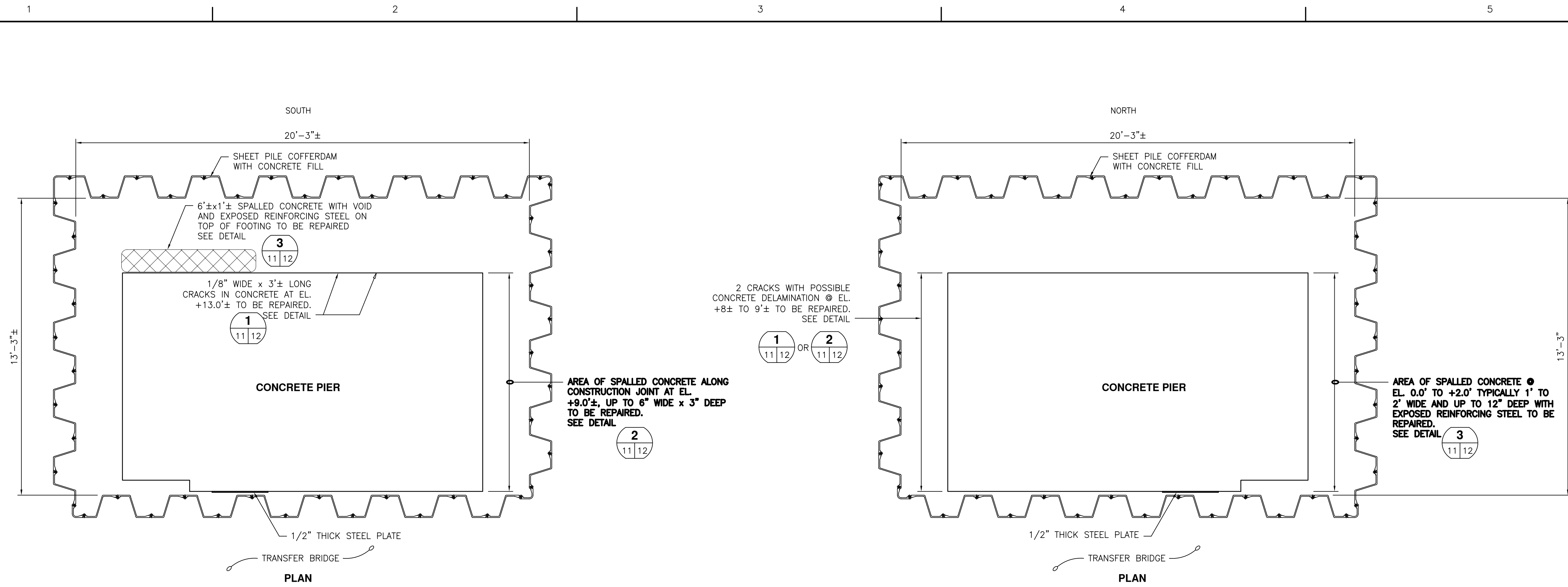
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Drawn by:	APL	Design file no.:	221910-X-10
Reviewed by:	RGF	Plot Scale:	1"=0'-1"

MAINE STATE FERRY SERVICE
 MAINE DEPARTMENT
 OF TRANSPORTATION
 BASS HARBOR TERMINAL
 PROPOSED SIDE AND
 TURNING DOLPHINS
 MODIFICATIONS AND DETAILS

Sheet reference number:
X-10
 Sheet 10 OF 17



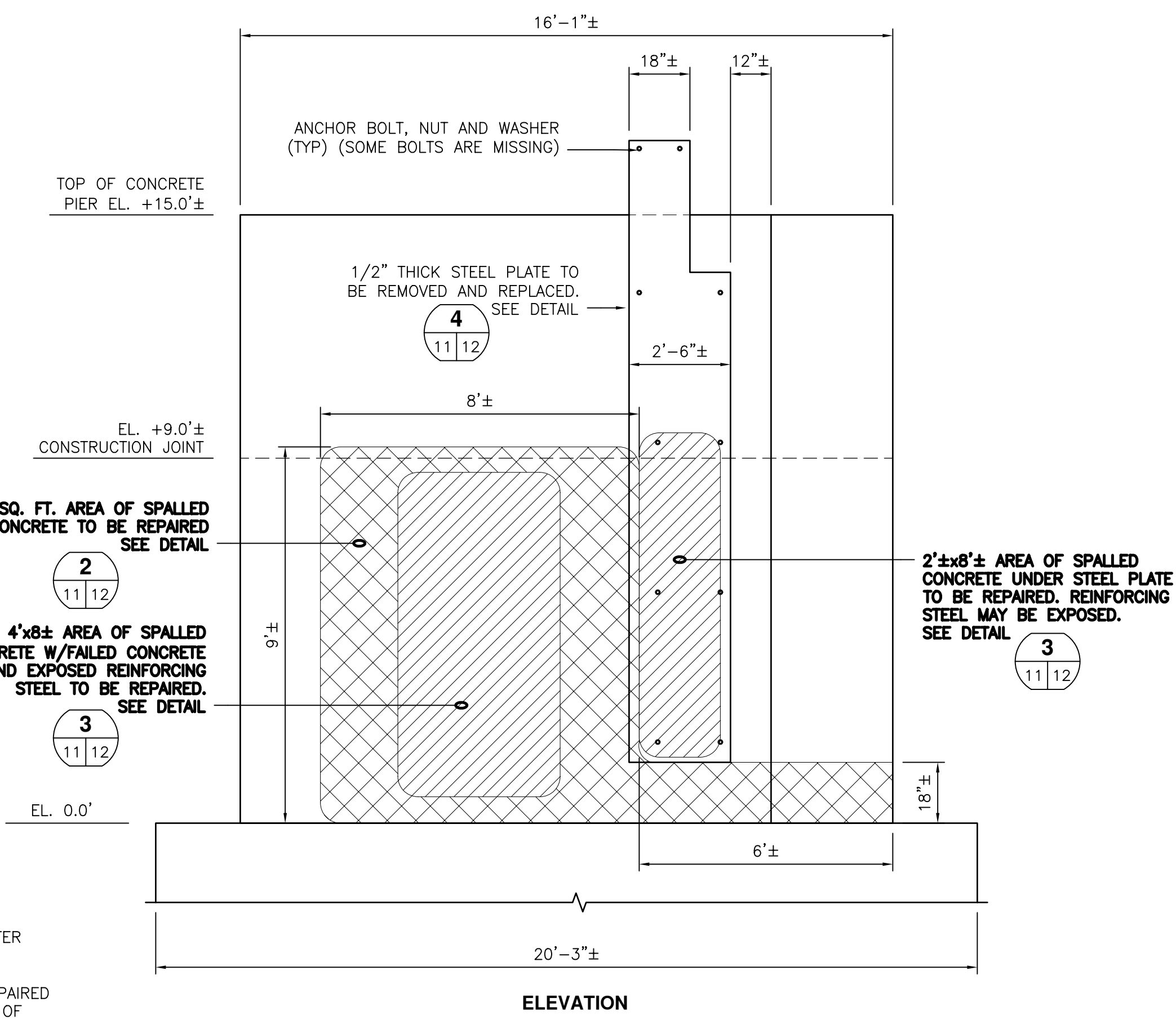
Date	Appr.



NORTH FACE - SOUTH PIER HOIST TOWER FOUNDATION

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

- NOTE:
1. EXISTING MARINE GROWTH TO BE REMOVED BY HIGH PRESSURE WATER AND/OR MECHANICAL MEANS.
 2. AMOUNT OF CONCRETE TO BE REPAIRED MAY BE REVISED AFTER REMOVAL OF STEEL PLATES AND MARINE GROWTH.

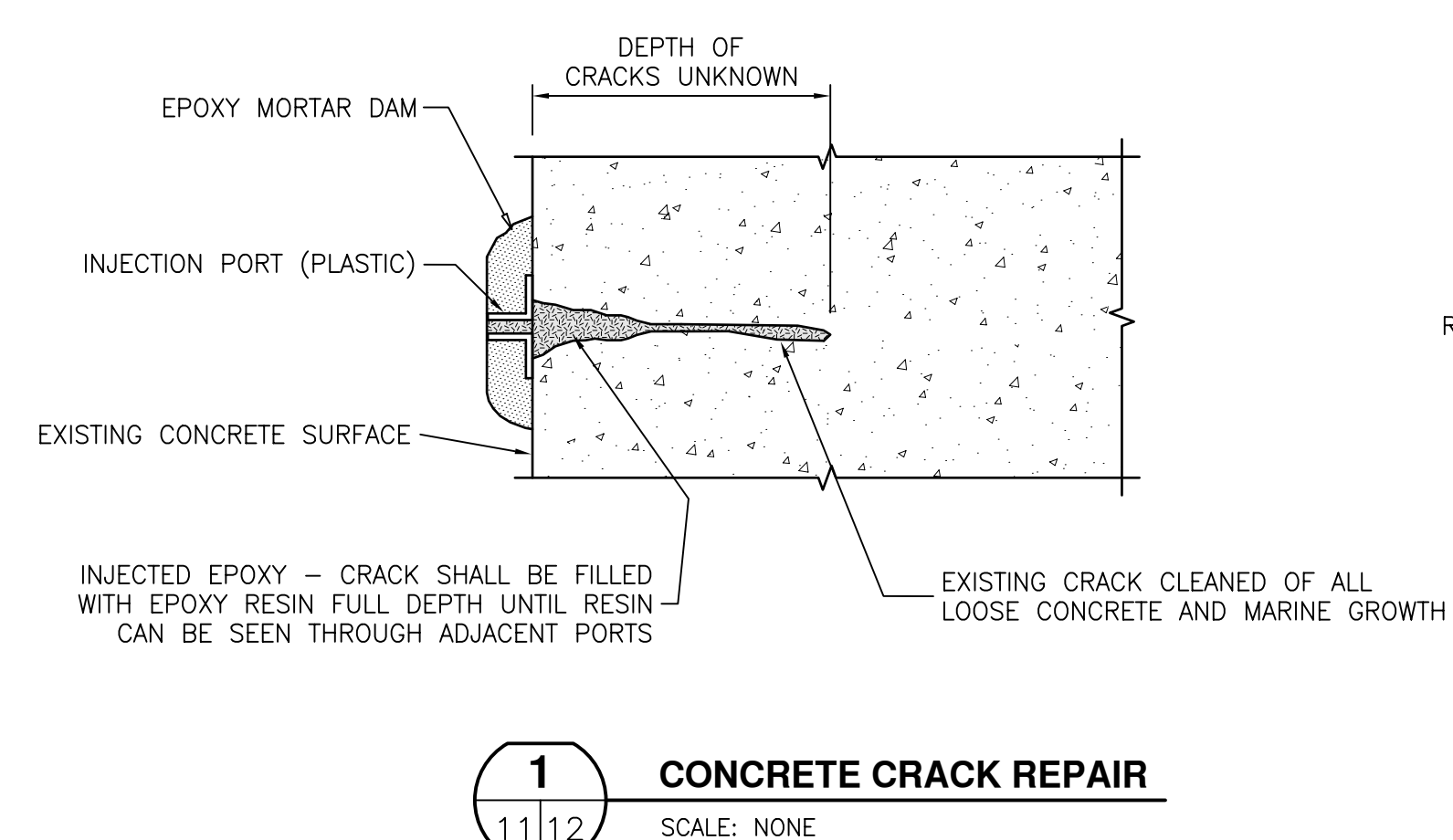


SOUTH FACE - NORTH PIER HOIST TOWER FOUNDATION

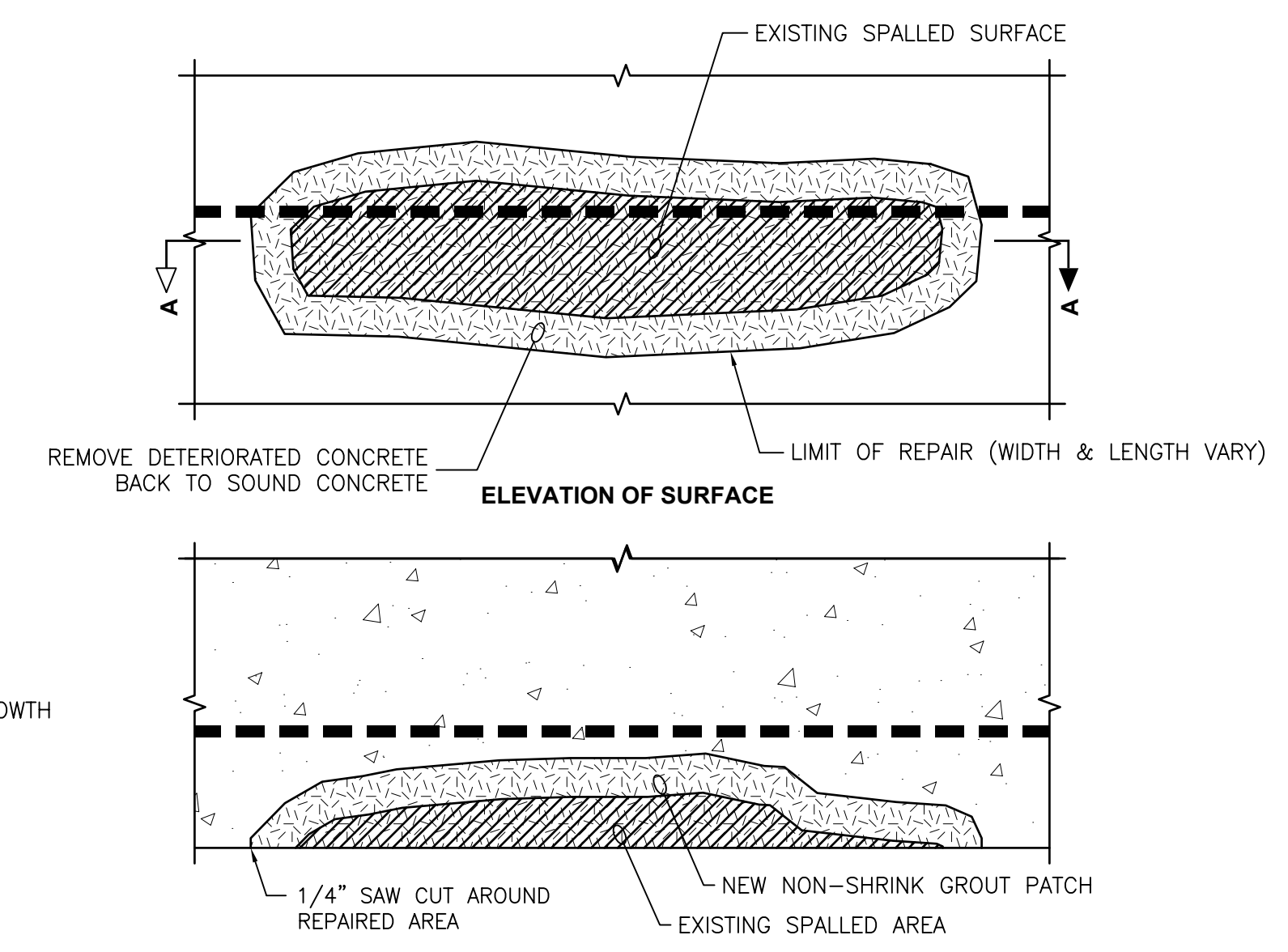
SCALE: 3/8"=1'-0"

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MAINE STATE FERRY SERVICE
 MAINE DEPARTMENT
 OF TRANSPORTATION
 BASS HARBOR TERMINAL
 TOWER FOUNDATION CONDITIONS



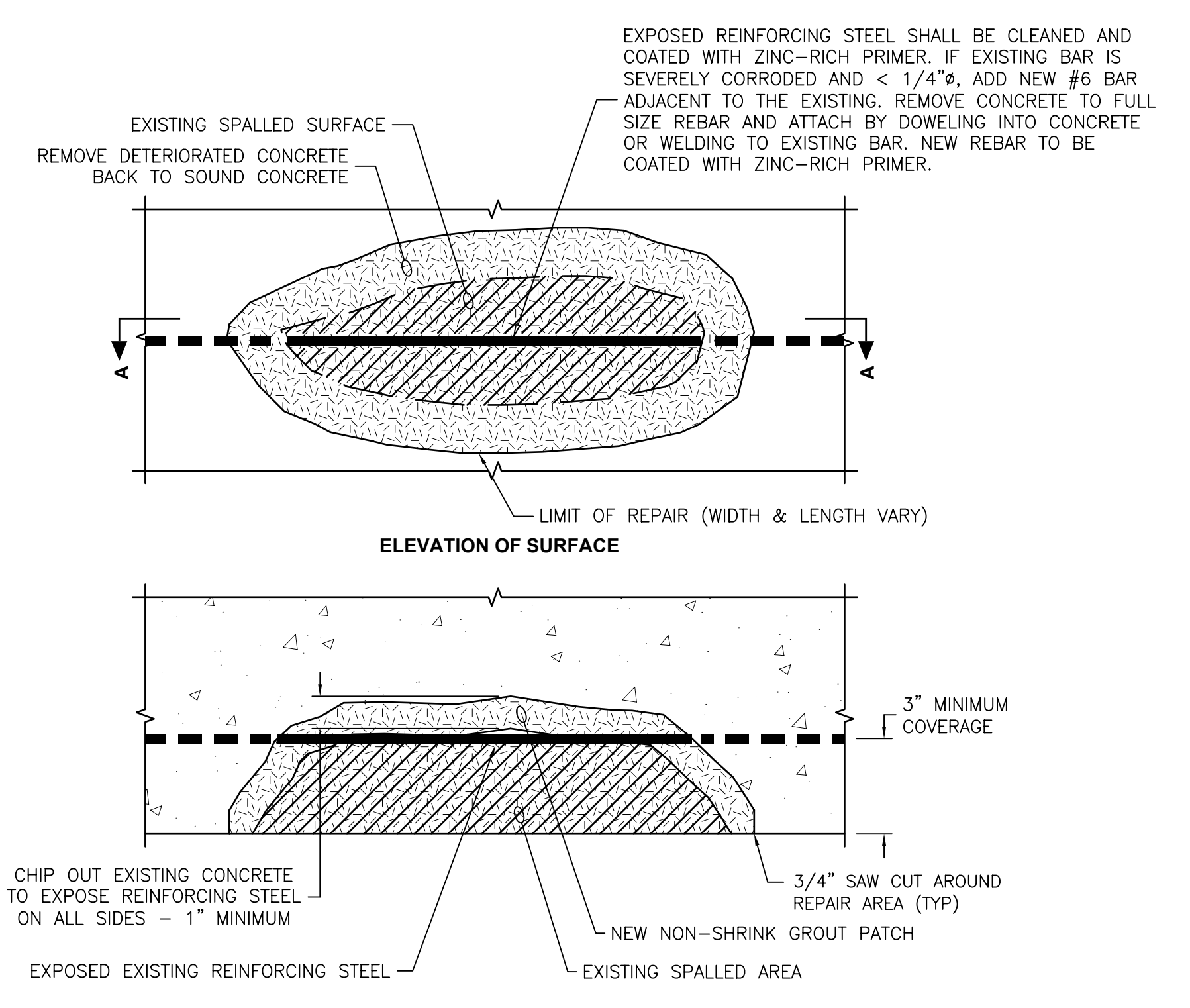
1 CONCRETE CRACK REPAIR
11/12 SCALE: NONE



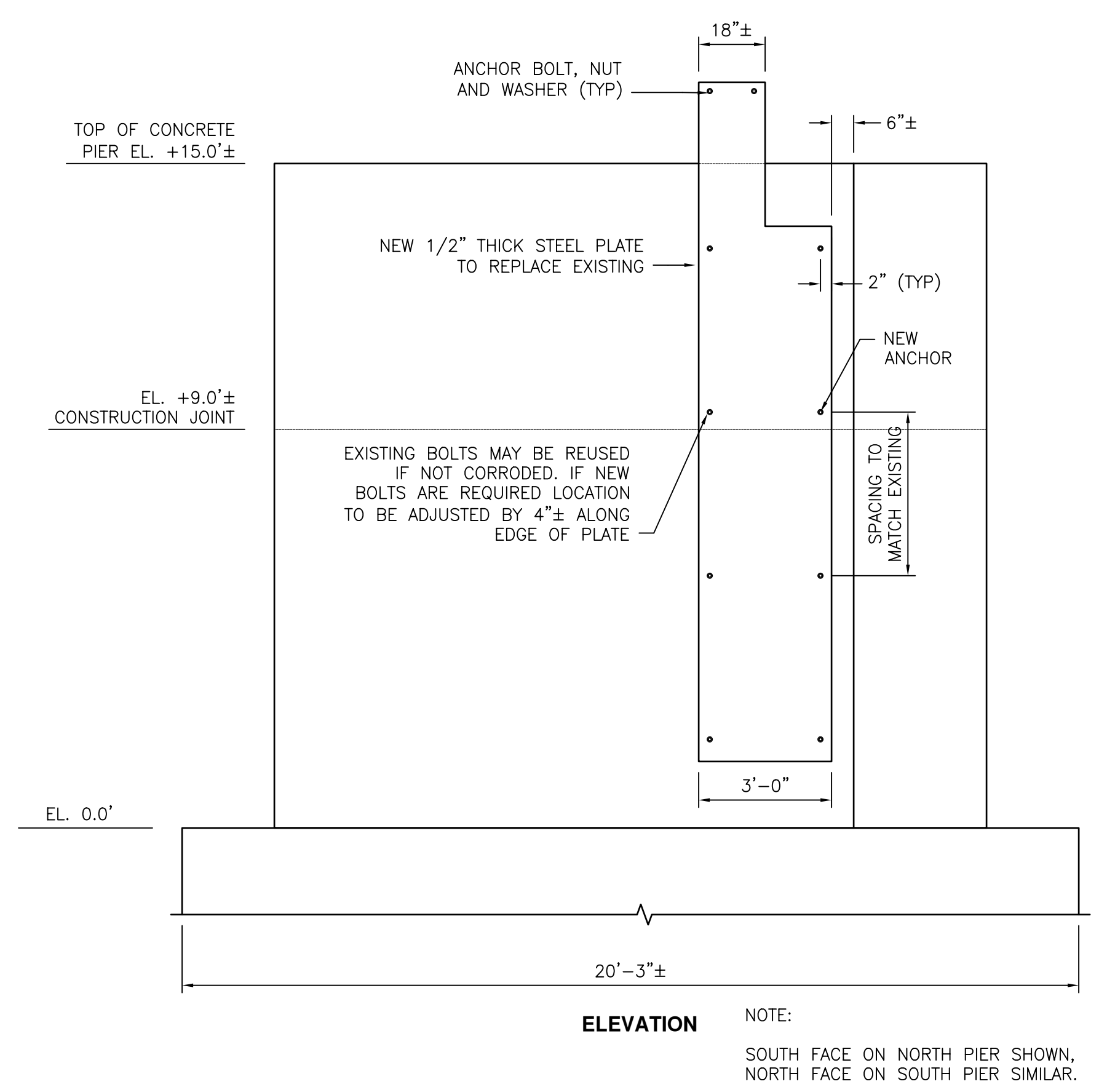
2 CONCRETE SPALL REPAIR - TYPE 1
11/12 SCALE: 3"=1'-0"

- CONCRETE REPAIR QUANTITIES:**
- CONCRETE SPALL REPAIR TYPE 1:
57 SQ.FT. (UP TO 3" DEEP)
 - CONCRETE SPALL REPAIR TYPE 1 SUBMERGED:
32 SQ.FT. (UP TO 3" DEEP)
 - CONCRETE SPALL REPAIR TYPE 2:
94 SQ.FT. (UP TO 12" DEEP)
 - CONCRETE SPALL REPAIR TYPE 2 SUBMERGED:
20 SQ.FT. (UP TO 12" DEEP)
 - CONCRETE CRACK REPAIR:
26 LIN.FT.

- NOTE:**
- EXTENT OF CONCRETE REPAIR MAY BE REVISED AFTER REMOVAL OF STEEL PLATES AND MARINE GROWTH.
 - AREAS OF SPALLED CONCRETE ALWAYS SUBMERGED SHALL BE CLEANED OF MARINE GROWTH AND DETERIORATED CONCRETE AND PATCHED WITH UNDERWATER GROUT.



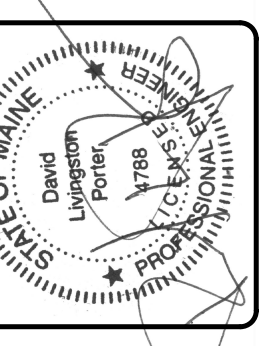
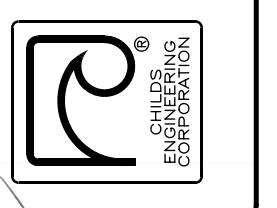
3 CONCRETE SPALL REPAIR - TYPE 2
11/12 SCALE: 3"=1'-0"



4 HOIST TOWER FOUNDATION STEEL PLATE REPAIR
11/12 SCALE: 3/8"=1'-0"

NOTE:
SOUTH FACE ON NORTH PIER SHOWN,
NORTH FACE ON SOUTH PIER SIMILAR.

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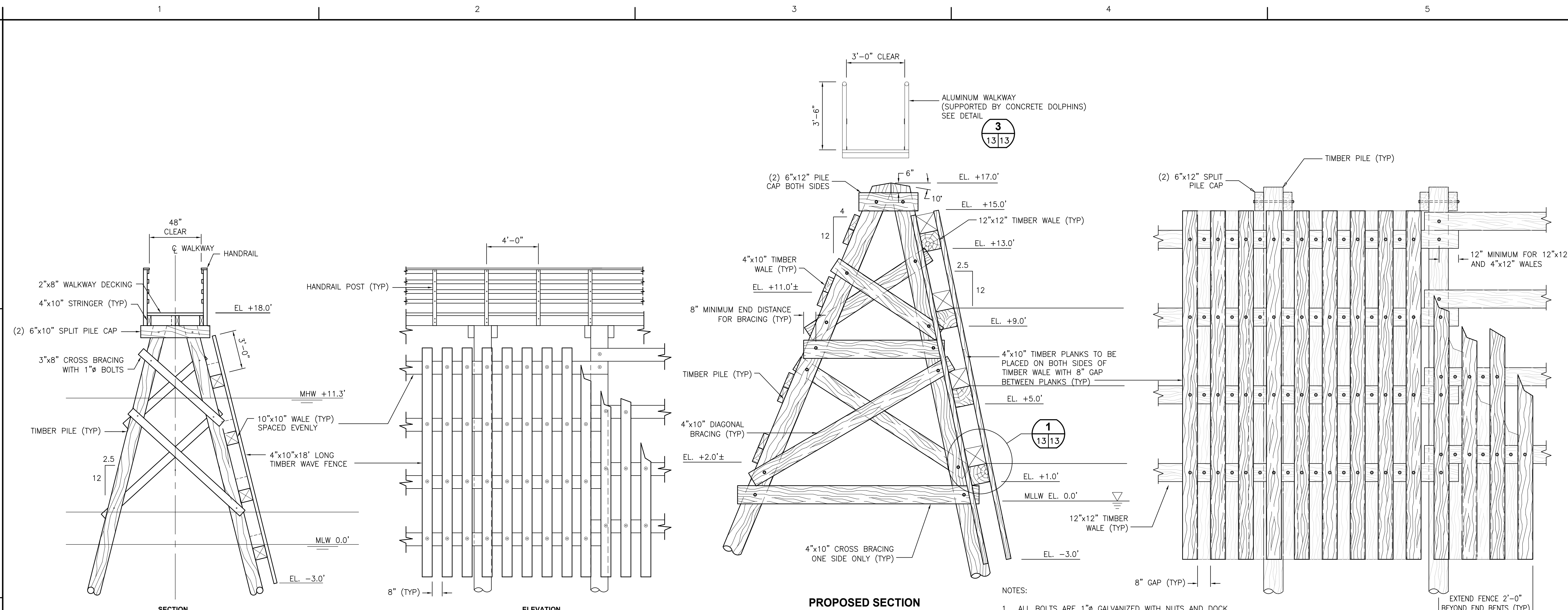


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Reviewed by:	RGF		

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MAINE DEPARTMENT
OF TRANSPORTATION
**BASS HARBOR TERMINAL
TOWER FOUNDATION
REPAIR DETAILS**

Sheet
reference
number:
X-12
Sheet 12 OF 17

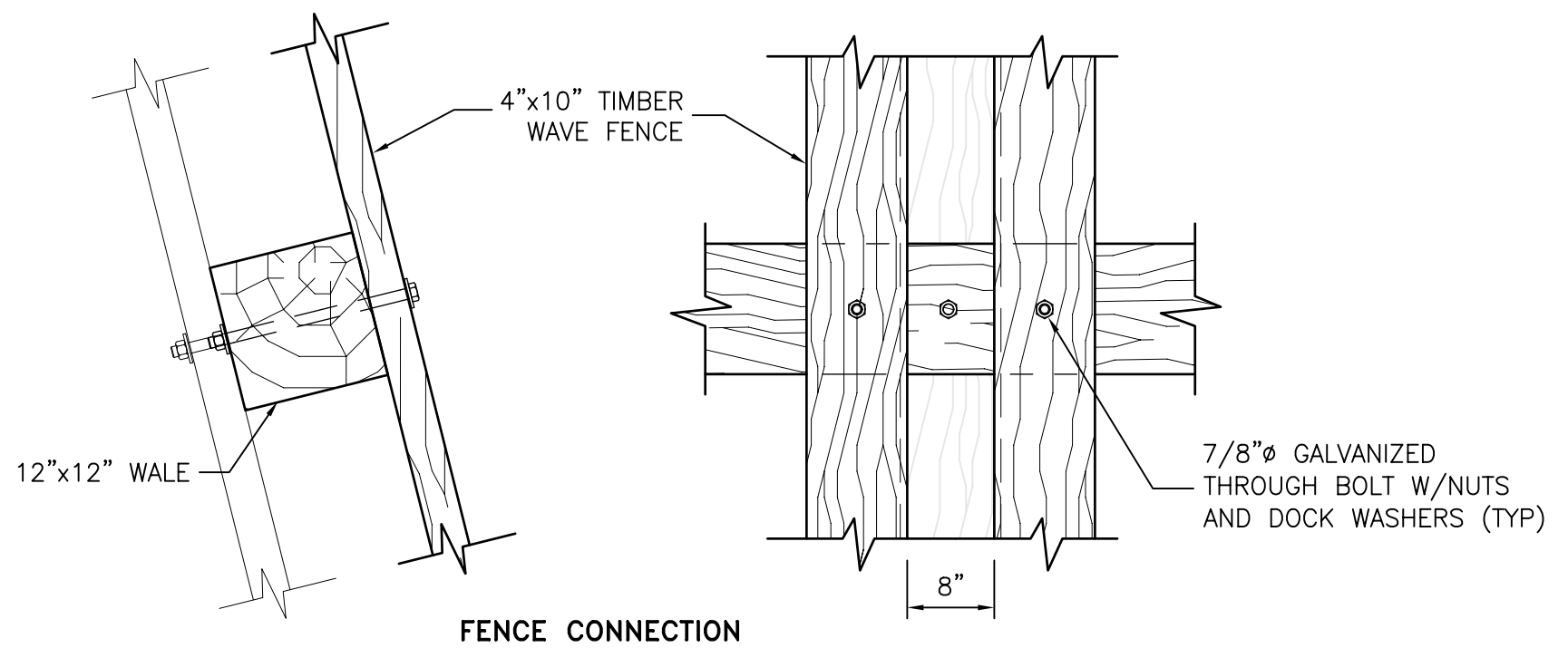


EXISTING WAVE FENCE/WALKWAY DETAILS
SCALE: 1/4"=1'-0"

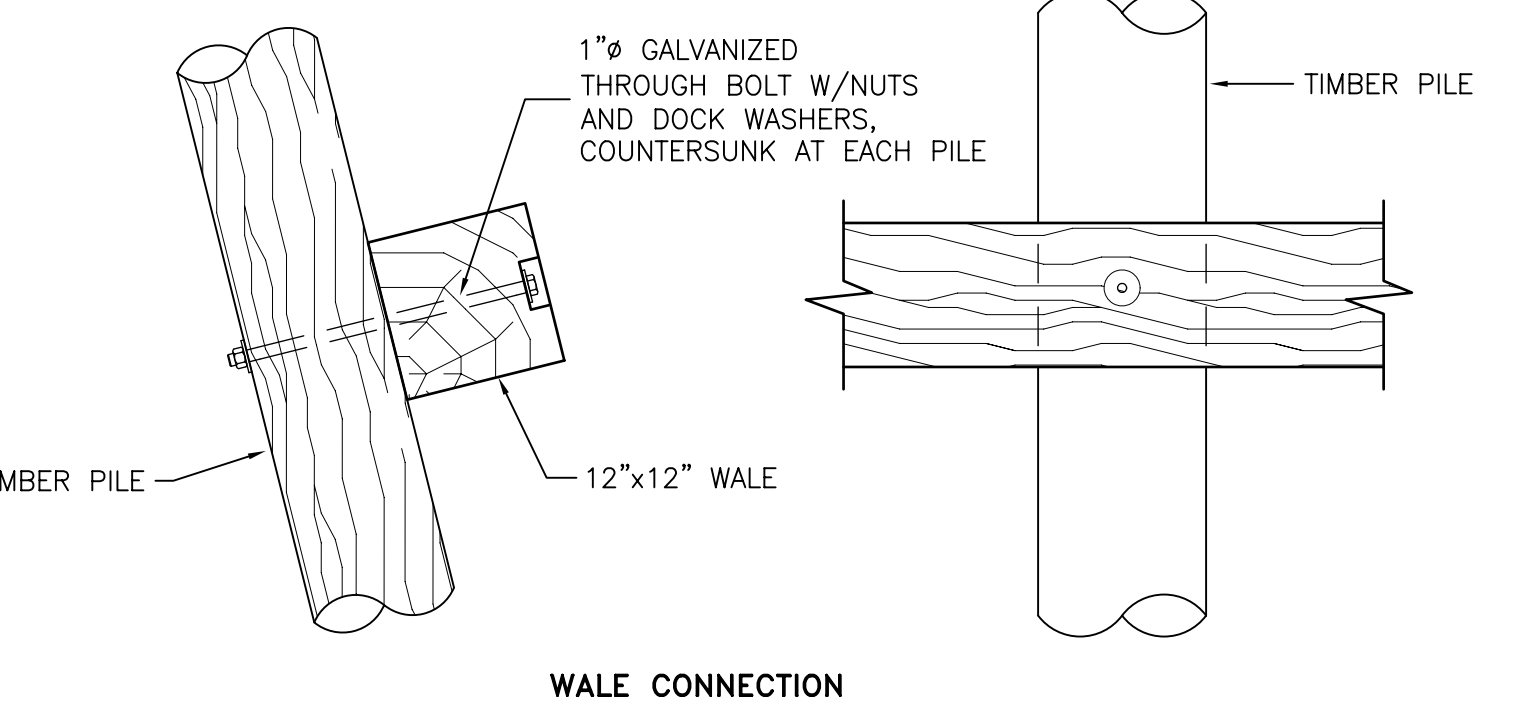
PROPOSED SECTION

PROPOSED ELEVATION

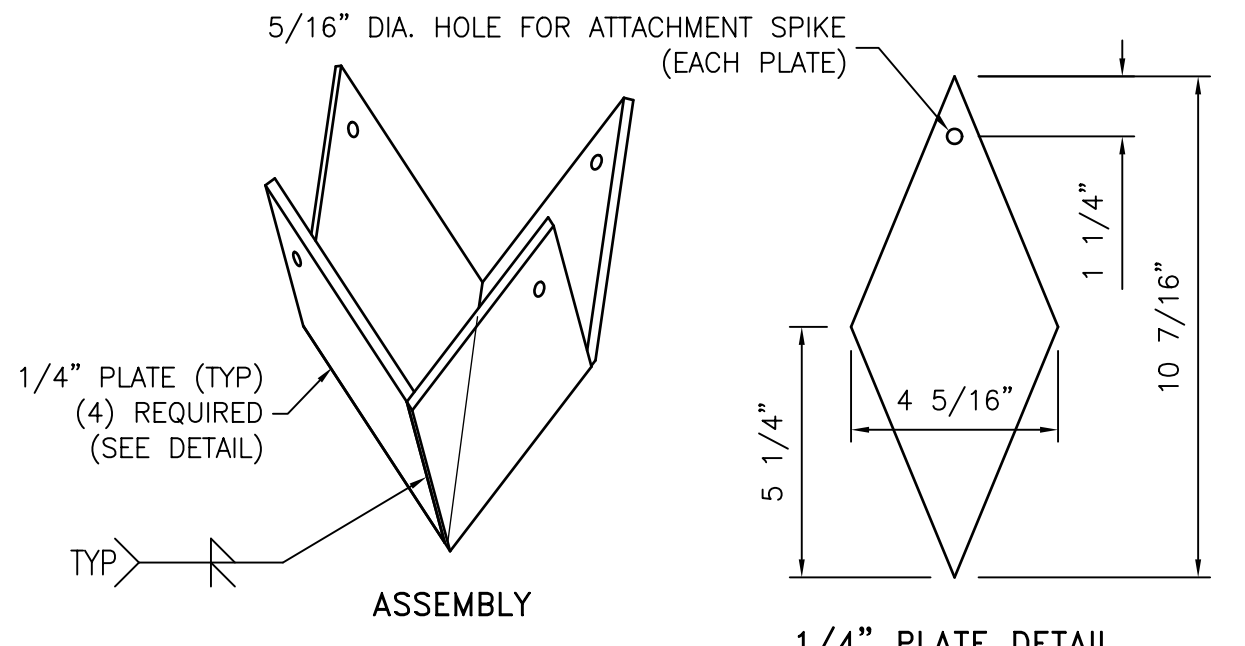
- NOTES:
- ALL BOLTS ARE 1" GALVANIZED WITH NUTS AND DOCK WASHERS, EXCEPT WHERE NOTED.
 - ALL TIMBER ASSOCIATED WITH WAVE FENCE SHALL BE 2.5 CCA TREATED.
 - ALL TIMBER PILE SHALL BE DRIVEN TO A CAPACITY 16 TONS WITH A MINIMUM EMBEDMENT OF 20' UNLESS REFUSAL IS ENCOUNTERED.
 - ALL TIMBER PILES SHALL HAVE A PILE POINT SEE DETAIL.
 - EXISTING TIMBER PILES MAY BE REUSED IF NOT DAMAGED, CAN BE DRIVEN TO THE REQUIRED CRITERIA AND APPROVED BY THE ENGINEER. CONTRACTOR SHALL ASSUME 7 PILES CAN BE REUSED FOR BIDDING PURPOSES.



FENCE CONNECTION

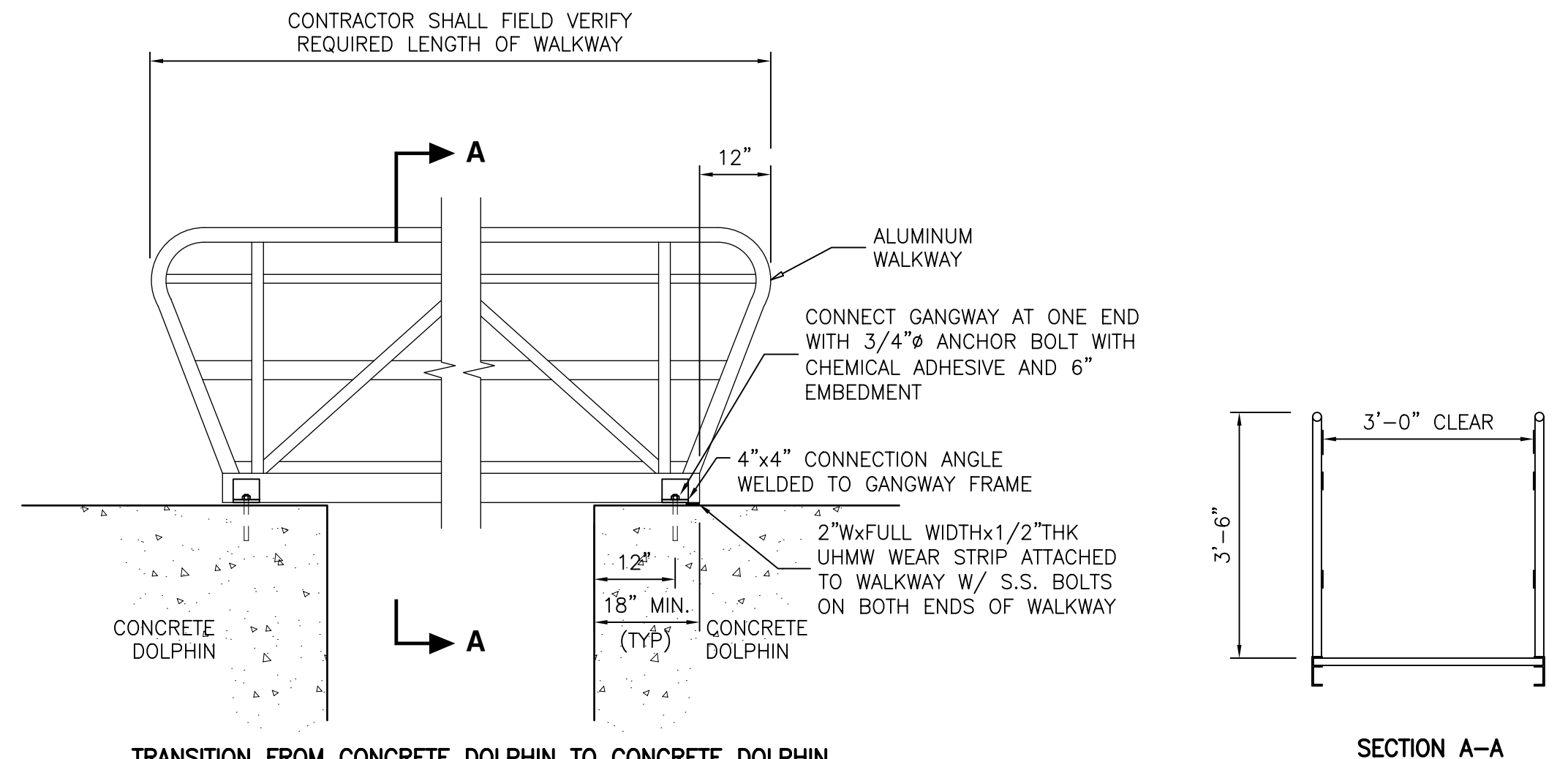


WALE CONNECTION



TIMBER PILE POINT

NOTE: DIMENSIONS SHOWN SIMILAR TO PILE POINT MANUFACTURED BY ASSOCIATED PILE & FITTING.



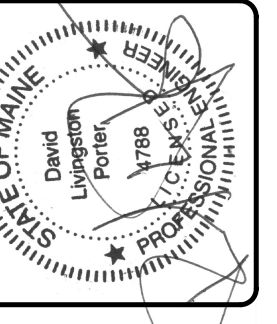
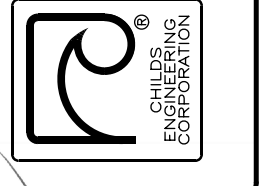
TRANSITION FROM CONCRETE DOLPHIN TO CONCRETE DOLPHIN

SECTION A-A

1
13 13
WAVE FENCE CONNECTIONS
SCALE: 3/4"=1'-0"

2
13 13
TIMBER PILE POINT
SCALE: 3"=1'-0"

3
13 13
WALKWAY TRANSITION DETAILS
SCALE: 1/2"=1'-0"

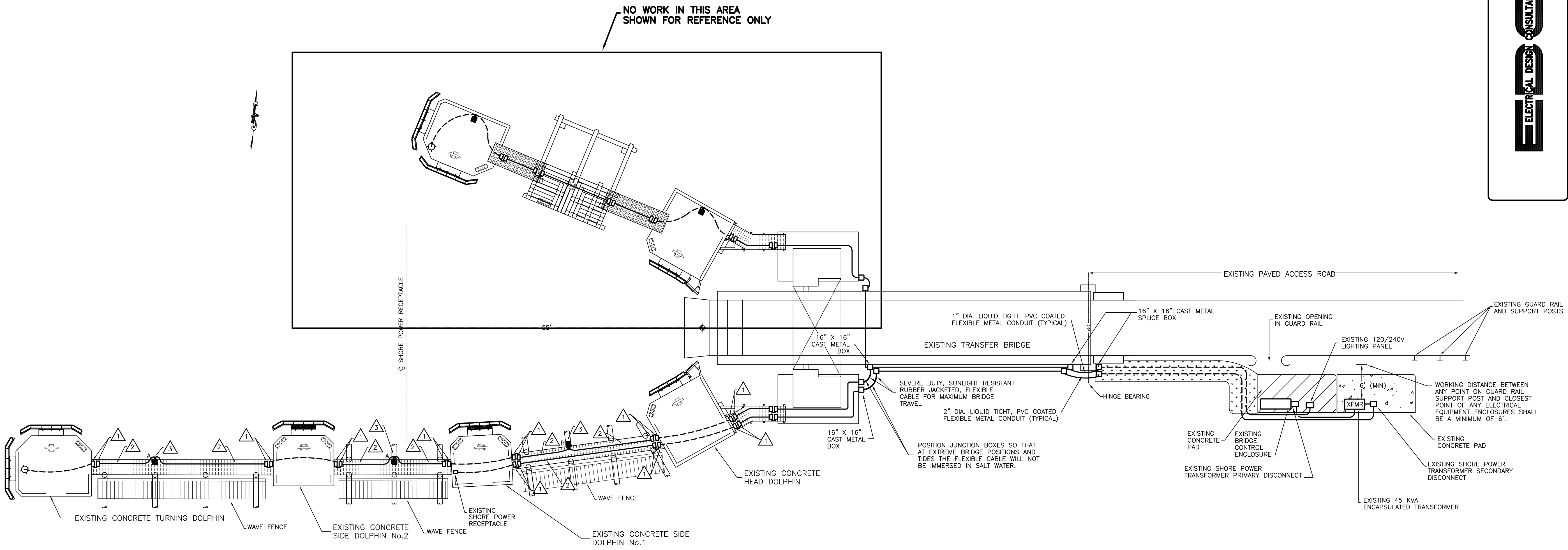


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Checked by:	RGF	Plot Scale:	1"=0'-1"
Reviewed by:	RGF		

MAINE STATE FERRY SERVICE
MAINE DEPARTMENT
OF TRANSPORTATION
BASS HARBOR TERMINAL
WAVE FENCE AND DETAILS



EXISTING BASS HARBOR TERMINAL - ELECTRICAL DEMOLITION PLAN

SCALE: 3/32"=1'-0"

DEMOLITION NOTES:

- △ REMOVE JUNCTION BOX AND WIRING. SEAL MOUNTING HOLES IN CONCRETE DOLPHIN WITH WEATHERPROOF SEALING COMPOUND.
- △ REMOVE CONDUIT AND WIRING.
- △ REMOVE LIGHT POLE. SALVAGE FOR INSTALLATION AS SHOWN ON SHEET E-3.

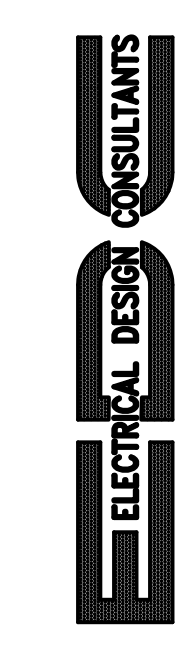
Mark	Description	Date	Appr.

Designed by:	RFS	Date:	08-26-10
Drawn by:	BMC	Design file no.:	BASS-E1
Reviewed by:	RSF	Rev. No.:	1
		Rev. Scale:	3/32" = 1'-0"

MAINE STATE FERRY SERVICE
 MAINE DEPARTMENT
 OF TRANSPORTATION
 BASS HARBOR TERMINAL
 ELECTRICAL
 DEMOLITION PLAN

Sheet reference number:
E-1
 Sheet 1 of 4

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Work	Date	Appr.

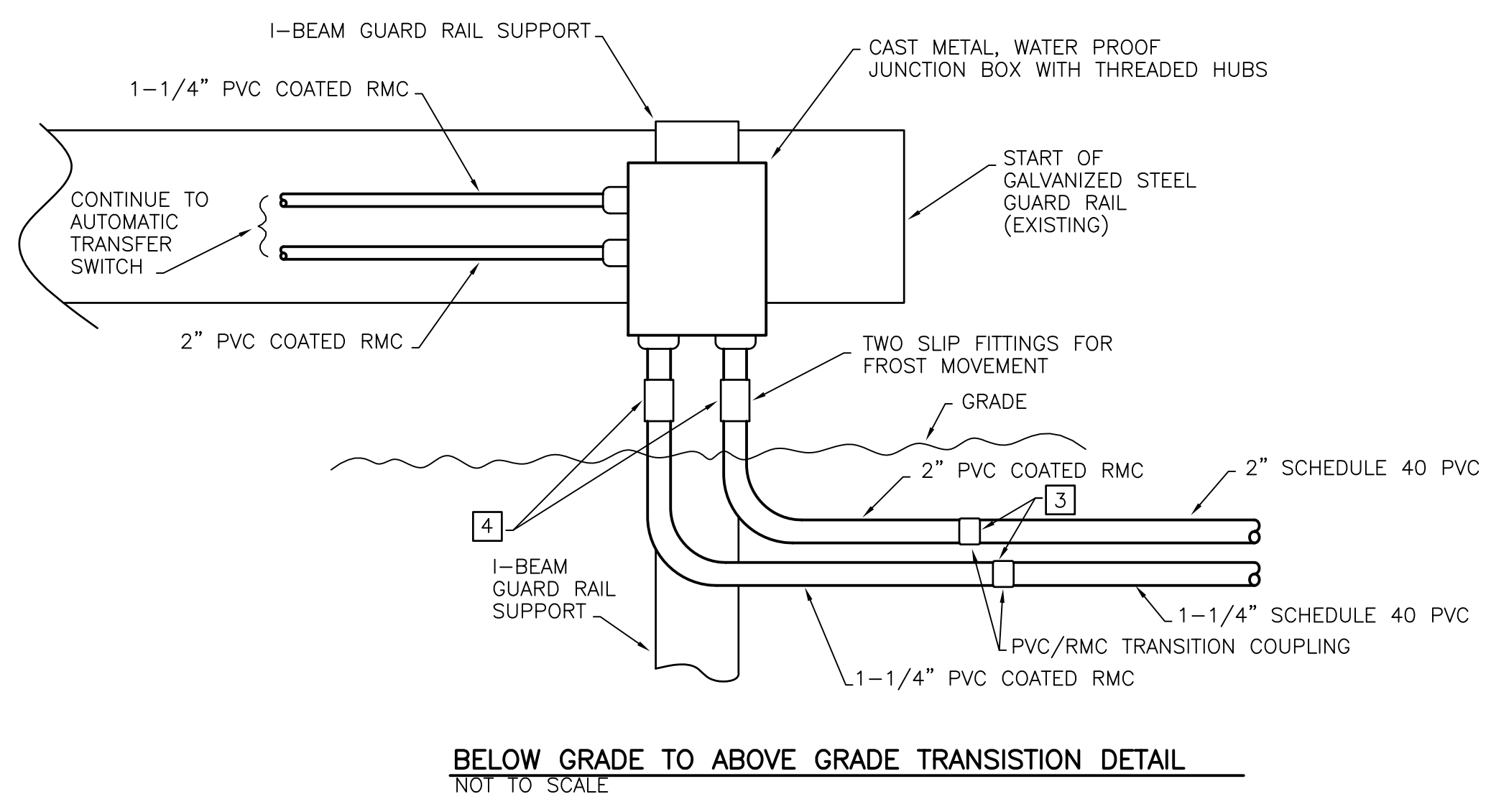
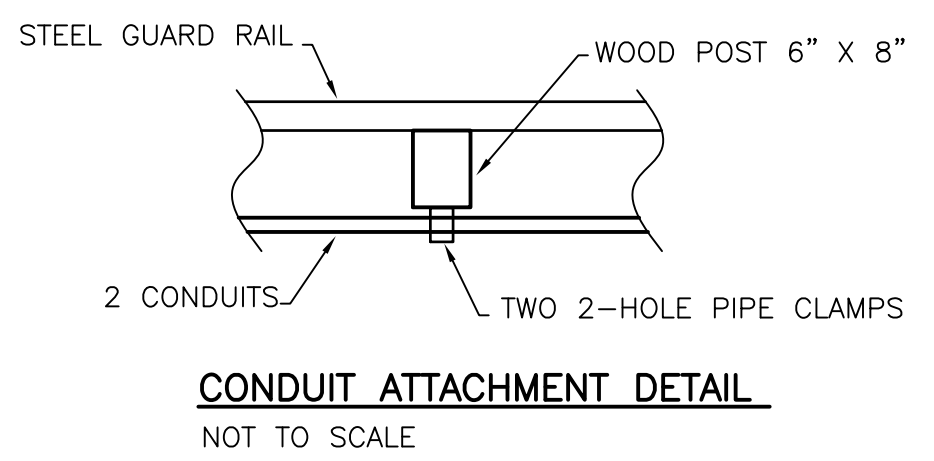
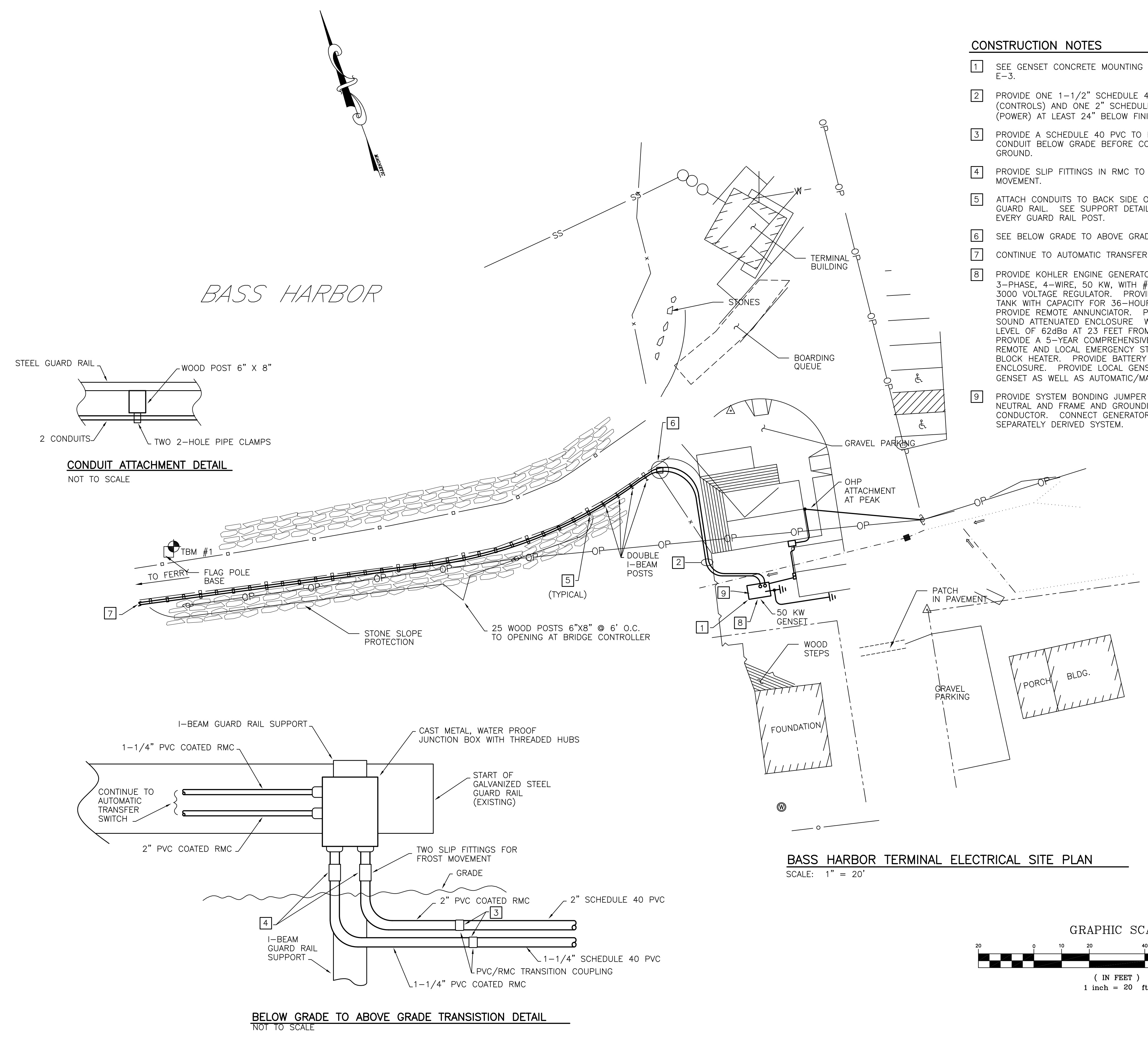
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MAINE STATE FERRY SERVICE
 MAINE DEPARTMENT
 OF TRANSPORTATION
 BASS HARBOR TERMINAL
 ELECTRICAL
 SITE PLAN

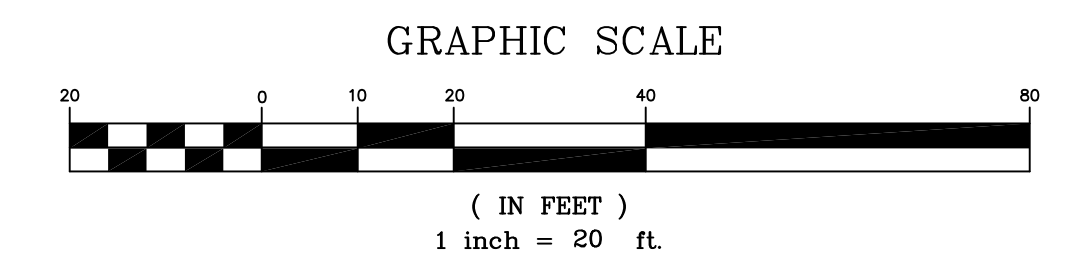
Sheet
 reference
 number:
E-2
 Sheet 2 of 4

CONSTRUCTION NOTES

- 1 SEE GENSET CONCRETE MOUNTING PAD DETAIL. SEE SHEET E-3.
- 2 PROVIDE ONE 1-1/2" SCHEDULE 40 PVC CONDUIT (CONTROLS) AND ONE 2" SCHEDULE 40 PVC CONDUIT (POWER) AT LEAST 24" BELOW FINISHED GRADE.
- 3 PROVIDE A SCHEDULE 40 PVC TO RMC COUPLING IN EACH CONDUIT BELOW GRADE BEFORE CONDUITS RISE TO BREAK GROUND.
- 4 PROVIDE SLIP FITTINGS IN RMC TO ALLOW FOR FROST MOVEMENT.
- 5 ATTACH CONDUITS TO BACK SIDE OF POSTS SUPPORTING THE GUARD RAIL. SEE SUPPORT DETAILS. SUPPORT CONDUIT AT EVERY GUARD RAIL POST.
- 6 SEE BELOW GRADE TO ABOVE GRADE TRANSITION DETAIL.
- 7 CONTINUE TO AUTOMATIC TRANSFER SWITCH.
- 8 PROVIDE KOHLER ENGINE GENERATOR # 50RE0ZJC, 480/277V, 3-PHASE, 4-WIRE, 50 KW, WITH # 4P8 ALTERNATOR AND # 3000 VOLTAGE REGULATOR. PROVIDE SUB BASE DIESEL FUEL TANK WITH CAPACITY FOR 36-HOUR FULL LOAD OPERATION. PROVIDE REMOTE ANNUNCIATOR. PROVIDE WEATHERPROOF, SOUND ATTENUATED ENCLOSURE WITH A MAXIMUM NOISE LEVEL OF 62dB_a AT 23 FEET FROM THE ENCLOSURE. PROVIDE A 5-YEAR COMPREHENSIVE WARRANTY. PROVIDE REMOTE AND LOCAL EMERGENCY STOP CONTROL. PROVIDE BLOCK HEATER. PROVIDE BATTERY CHARGER IN GENSET ENCLOSURE. PROVIDE LOCAL GENSET START CONTROL AT GENSET AS WELL AS AUTOMATIC/MANUAL START ATS.
- 9 PROVIDE SYSTEM BONDING JUMPER BETWEEN GENERATOR NEUTRAL AND FRAME AND GROUNDING ELECTRODE CONDUCTOR. CONNECT GENERATOR SO AS TO BE A SEPARATELY DERIVED SYSTEM.

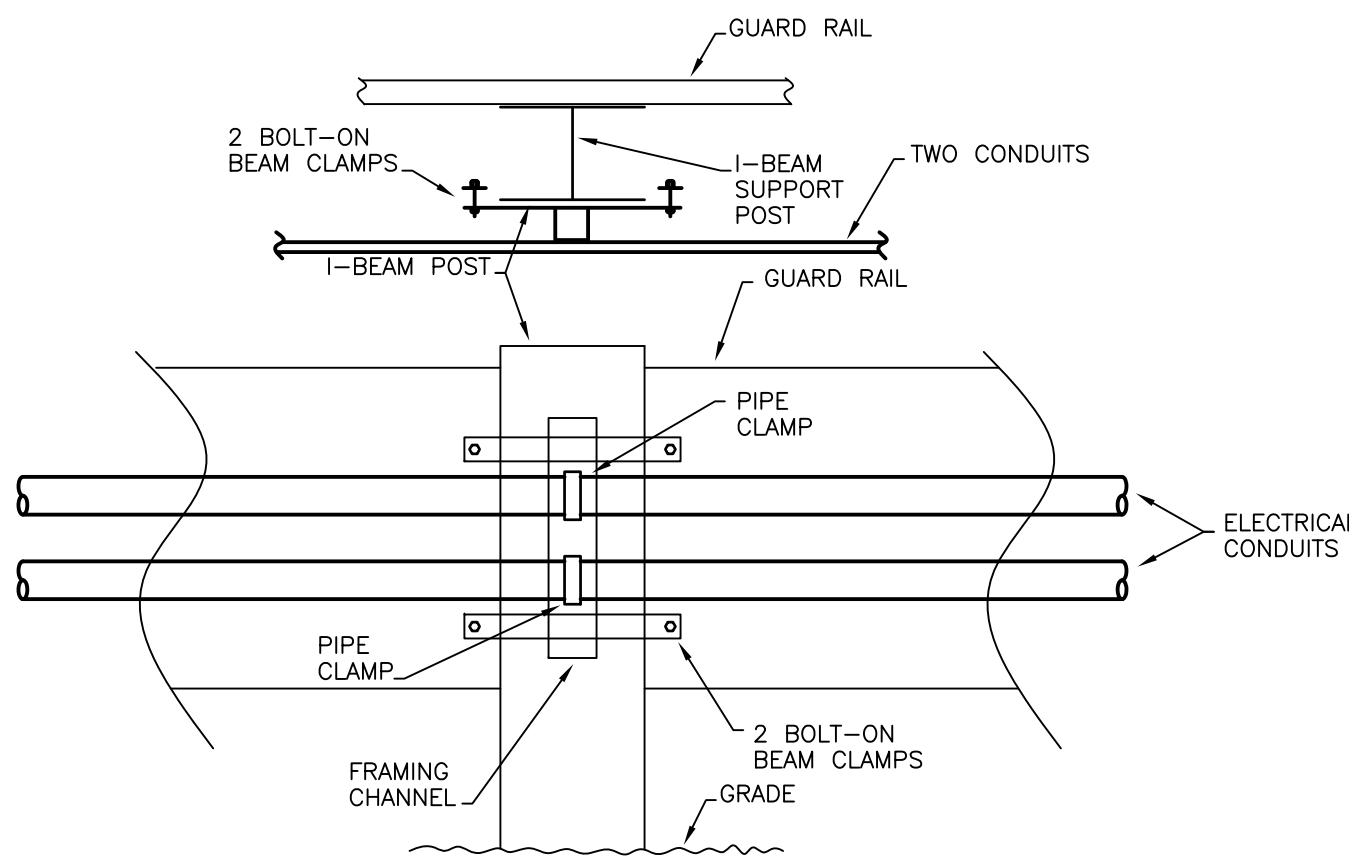


BASS HARBOR TERMINAL ELECTRICAL SITE PLAN
 SCALE: 1" = 20'

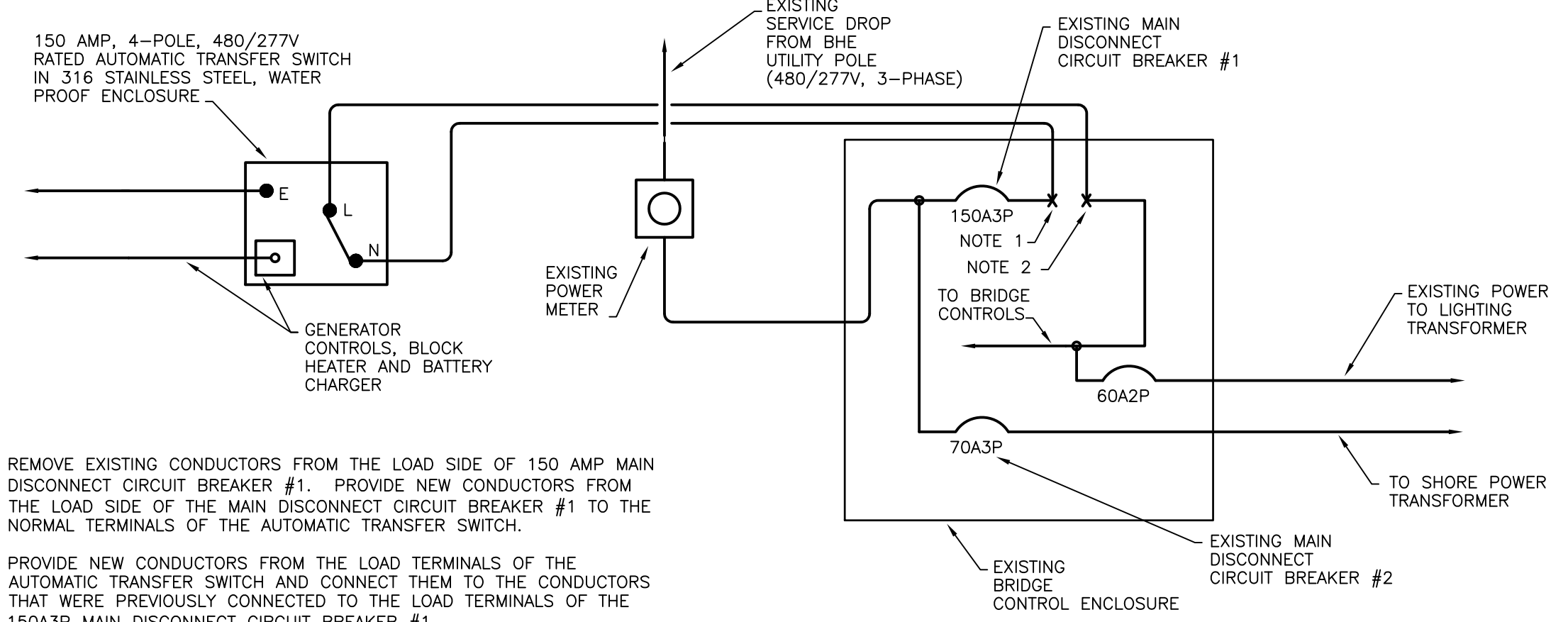


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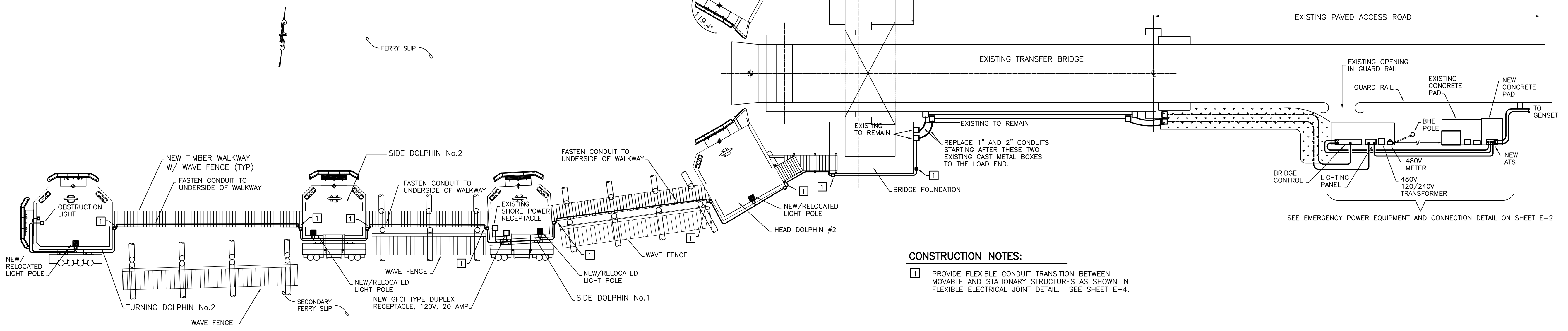
CONDUIT SUPPORT AT GUARD RAIL - I-BEAM POST
NOT TO SCALE



NOTE 1: REMOVE EXISTING CONDUCTORS FROM THE LOAD SIDE OF 150 AMP MAIN DISCONNECT CIRCUIT BREAKER #1. PROVIDE NEW CONDUCTORS FROM THE LOAD SIDE OF THE MAIN DISCONNECT CIRCUIT BREAKER #1 TO THE NORMAL TERMINALS OF THE AUTOMATIC TRANSFER SWITCH.

NOTE 2: PROVIDE NEW CONDUCTORS FROM THE LOAD TERMINALS OF THE AUTOMATIC TRANSFER SWITCH AND CONNECT THEM TO THE CONDUCTORS THAT WERE PREVIOUSLY CONNECTED TO THE LOAD TERMINALS OF THE 150A3P MAIN DISCONNECT CIRCUIT BREAKER #1.

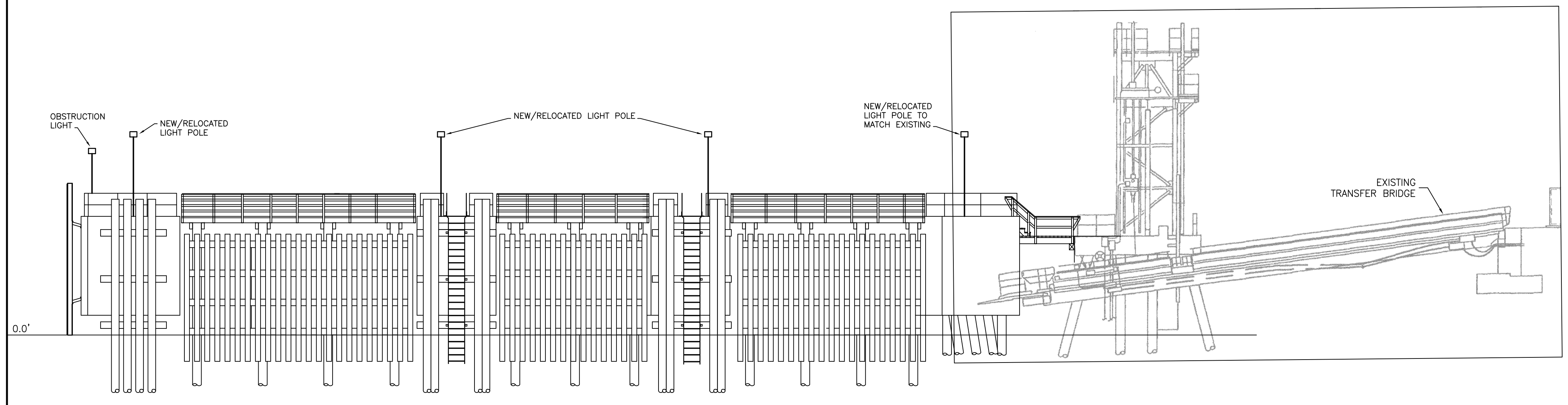
MODIFICATION TO EXISTING POWER DISTRIBUTION SYSTEM
NOT TO SCALE



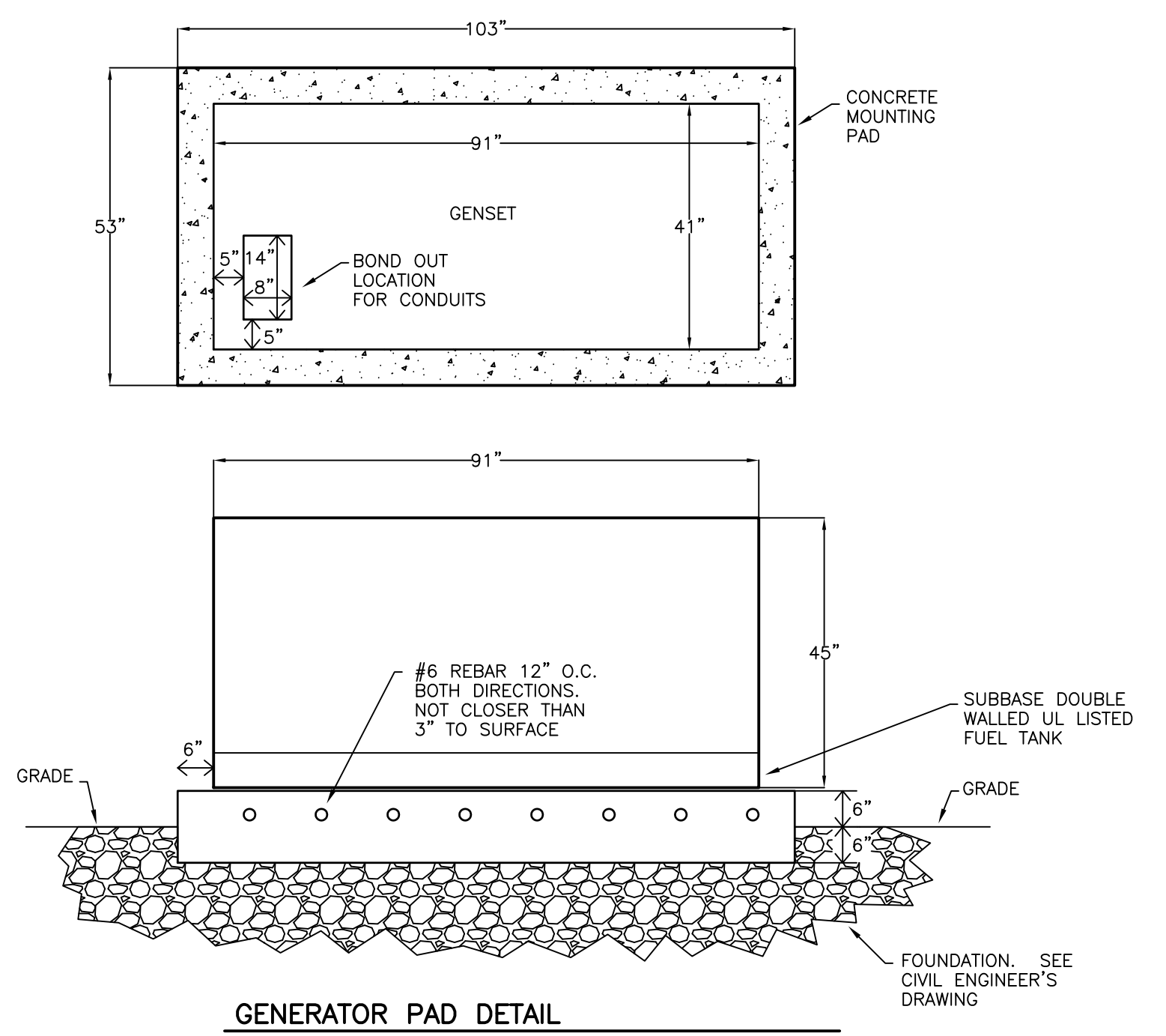
CONSTRUCTION NOTES:

1 PROVIDE FLEXIBLE CONDUIT TRANSITION BETWEEN MOVABLE AND STATIONARY STRUCTURES AS SHOWN IN FLEXIBLE ELECTRICAL JOINT DETAIL. SEE SHEET E-4.

BASS HARBOR TERMINAL PROPOSED ELECTRICAL LAYOUT
SCALE: 3/32" = 1'-0"



PROPOSED BASS HARBOR TERMINAL ELEVATION
SCALE: 1" = 10'-0"



GENERATOR PAD DETAIL
NOT TO SCALE

ELECTRICAL DESIGN CONSULTANTS

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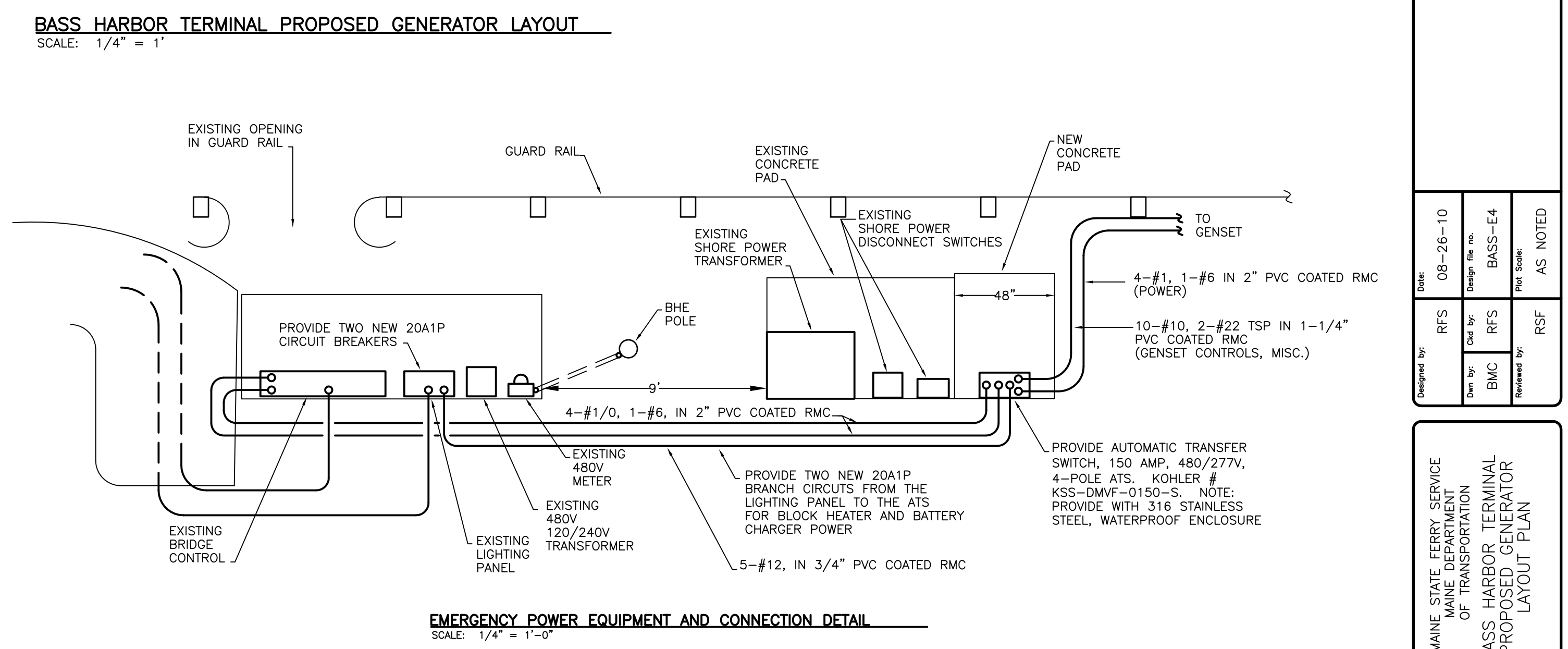
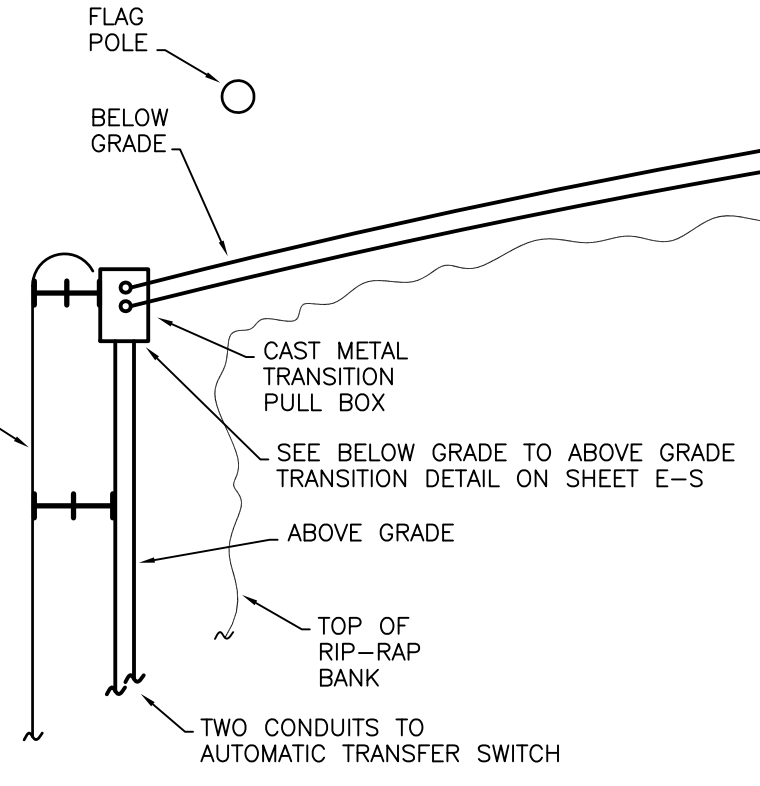
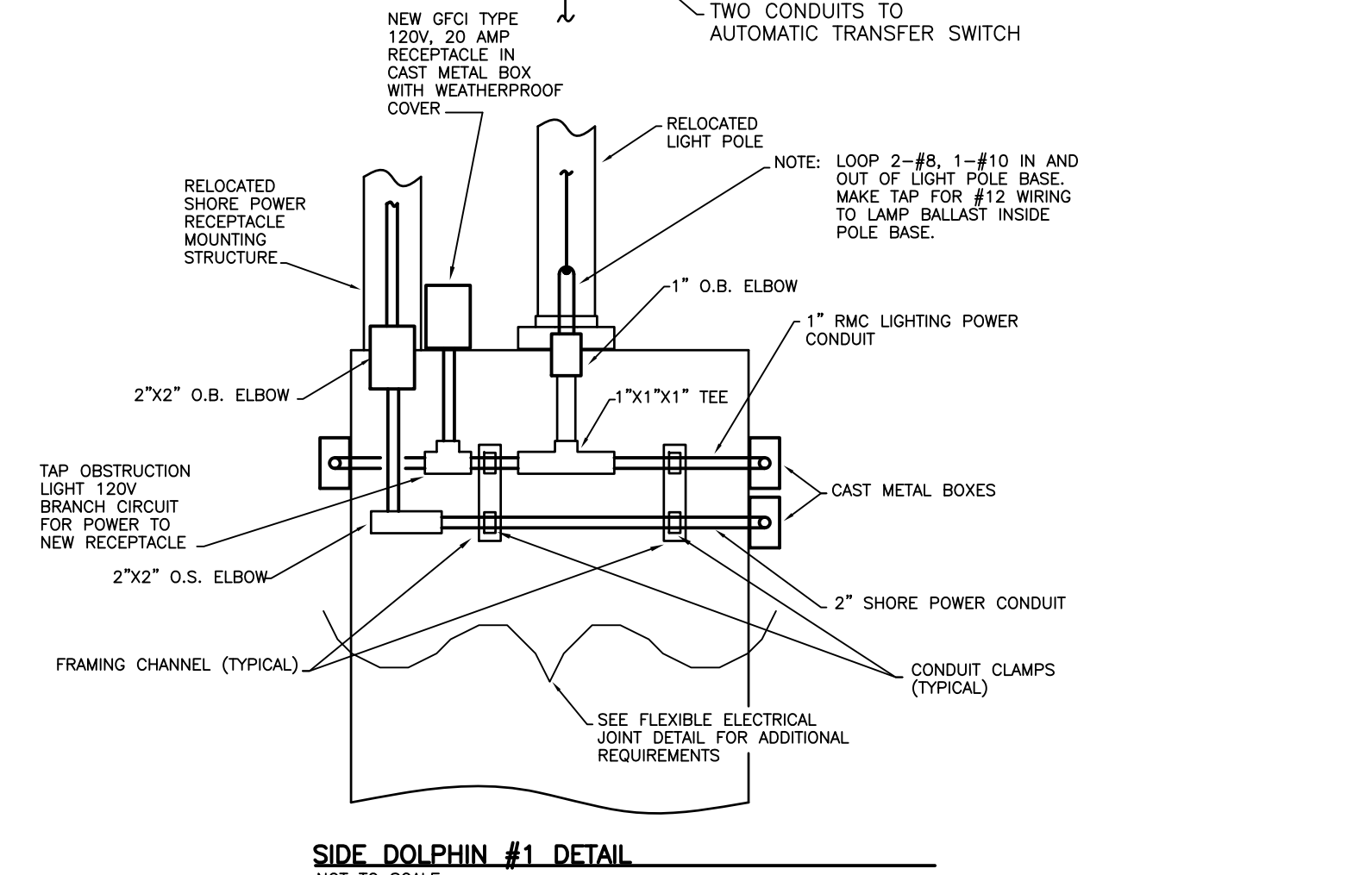
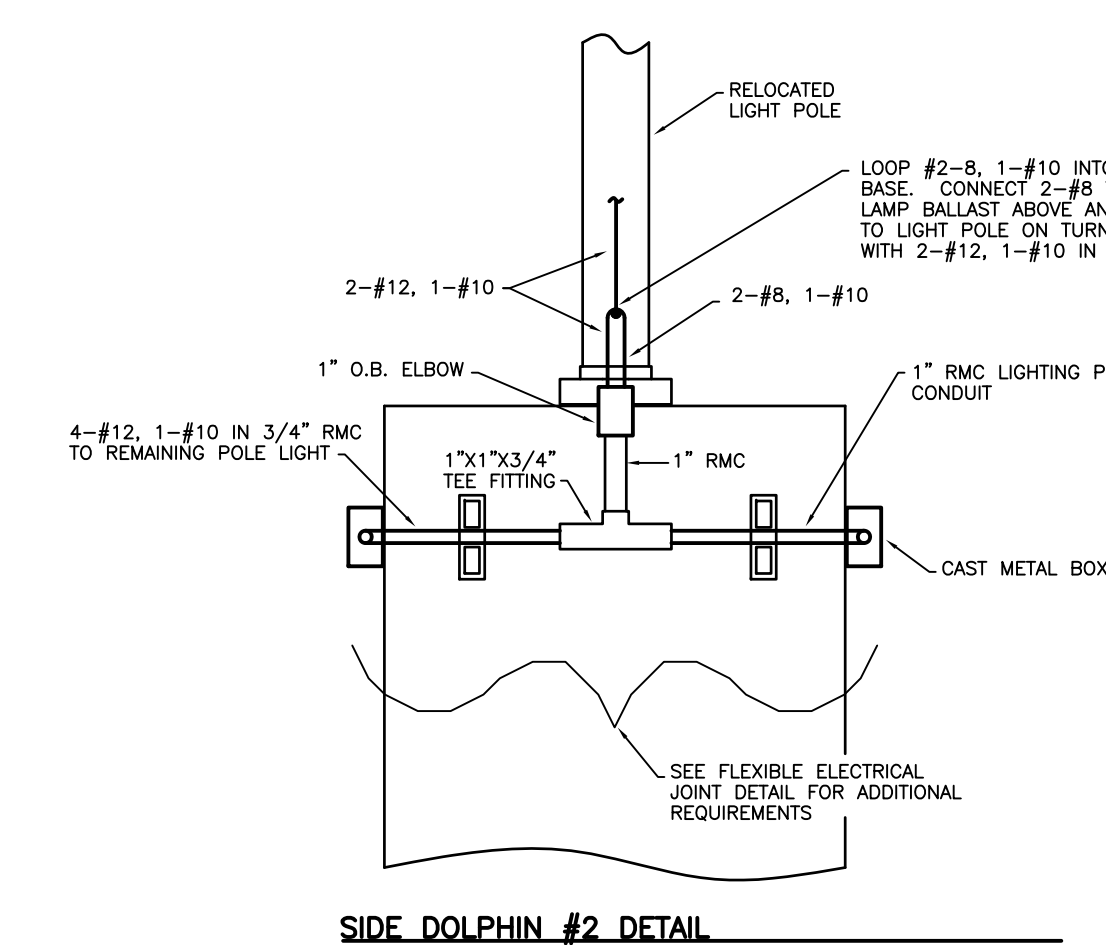
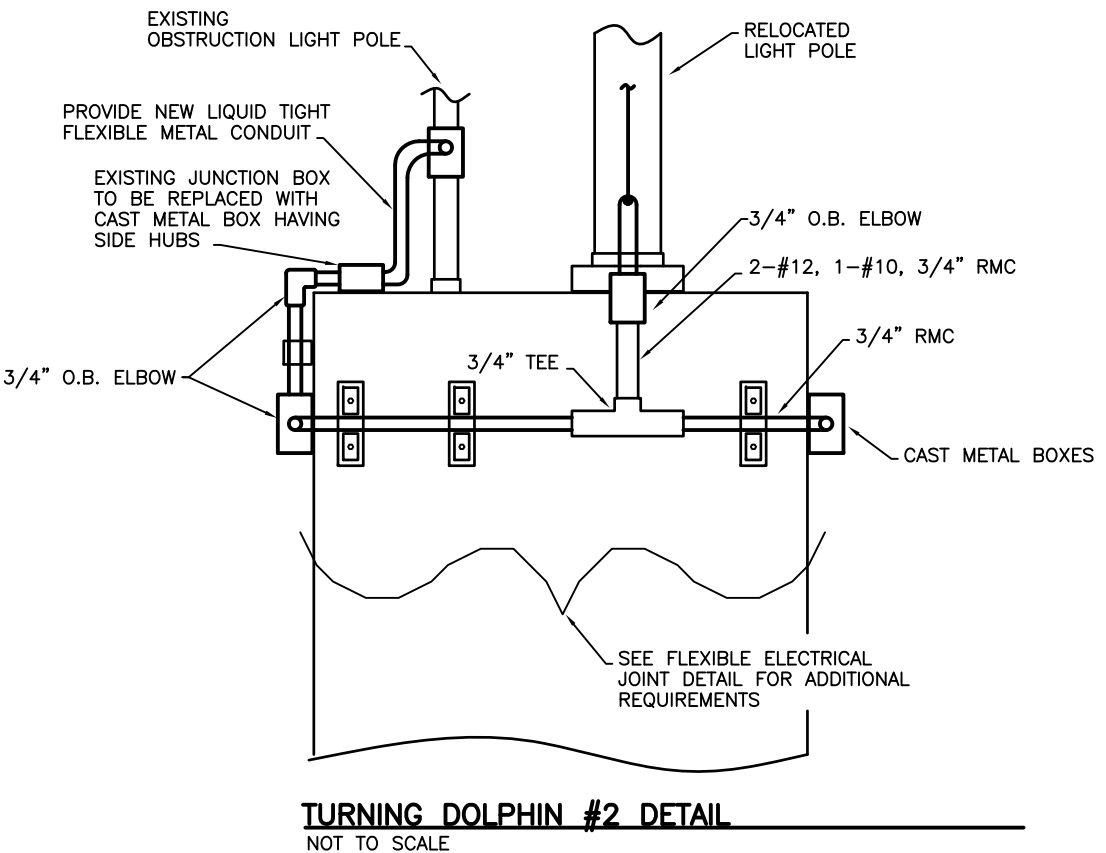
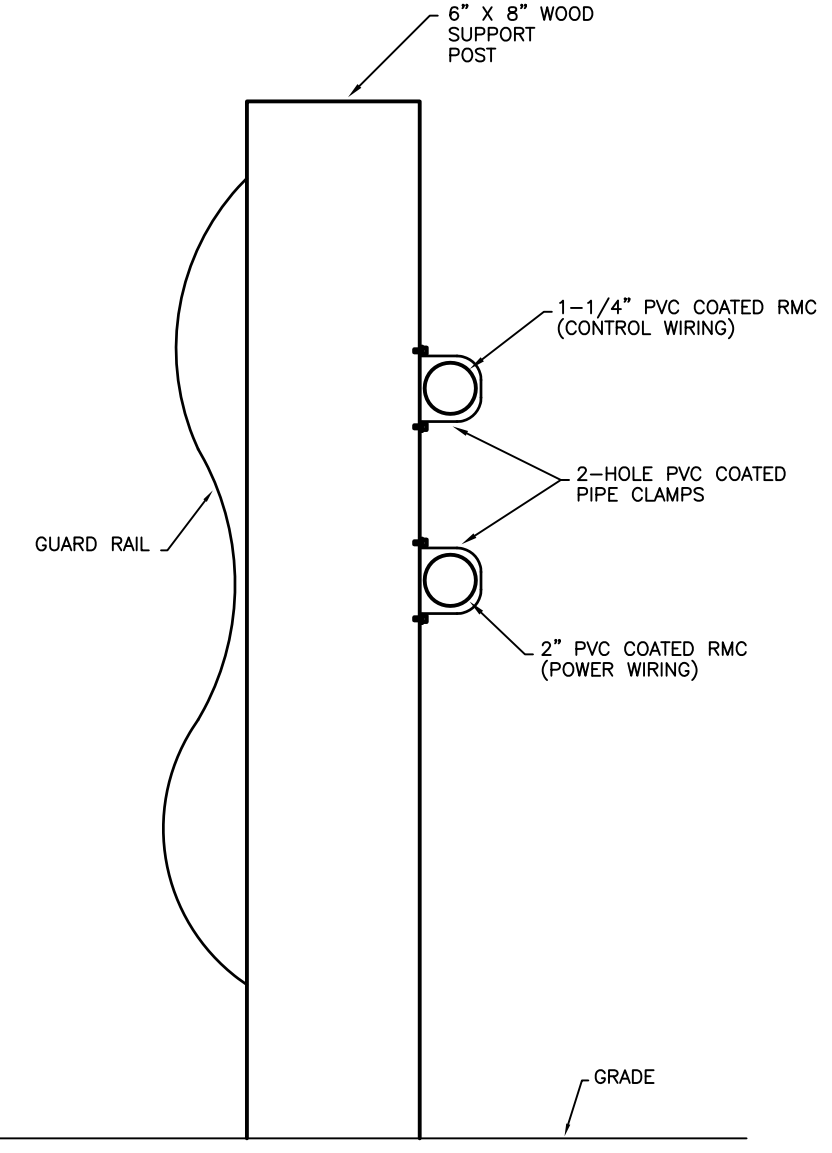
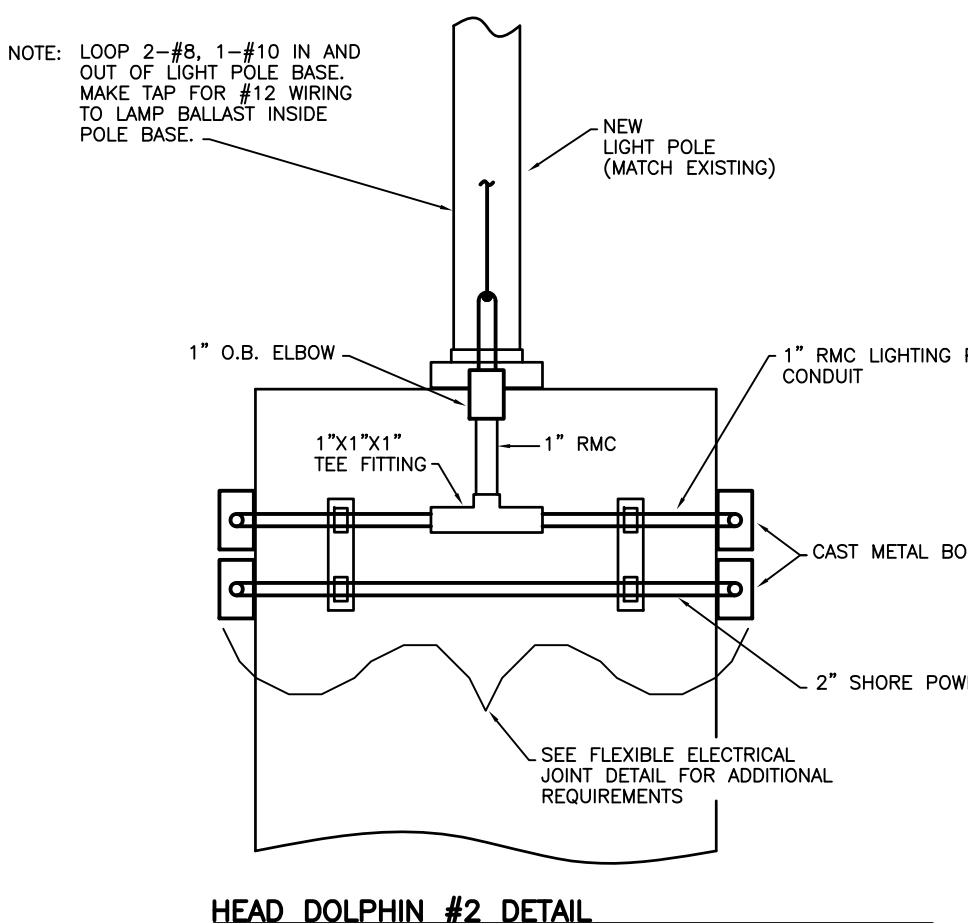
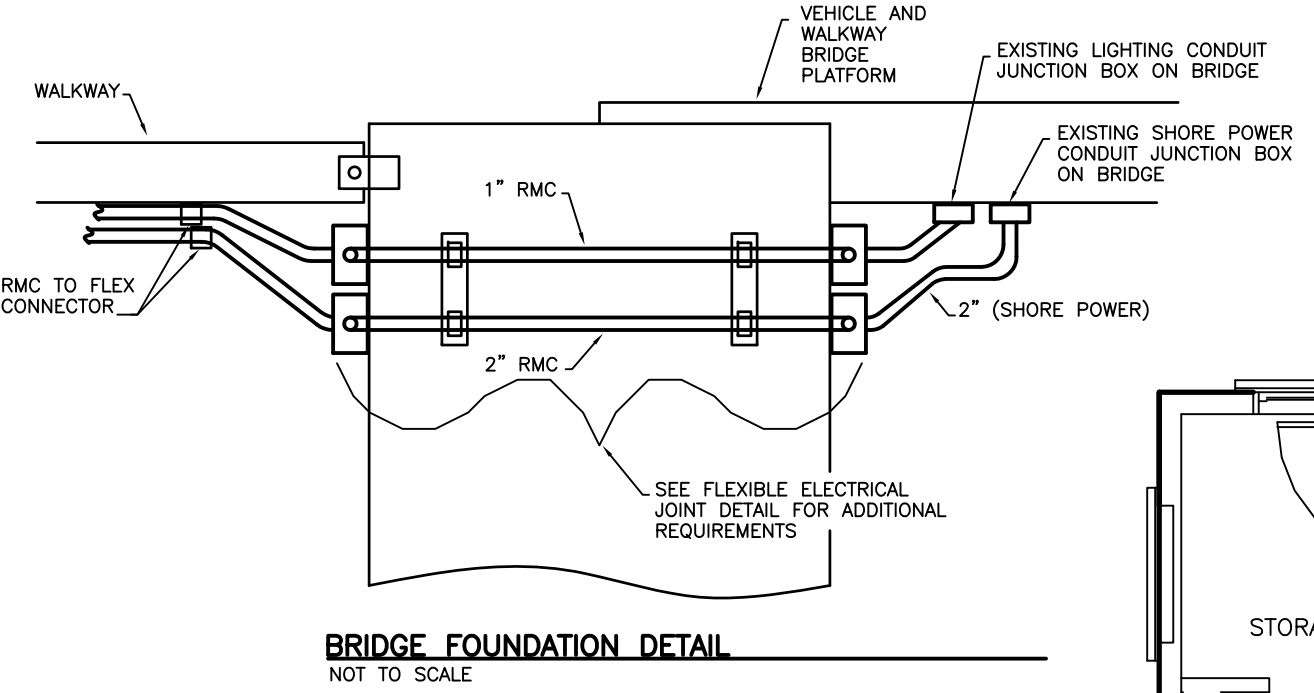
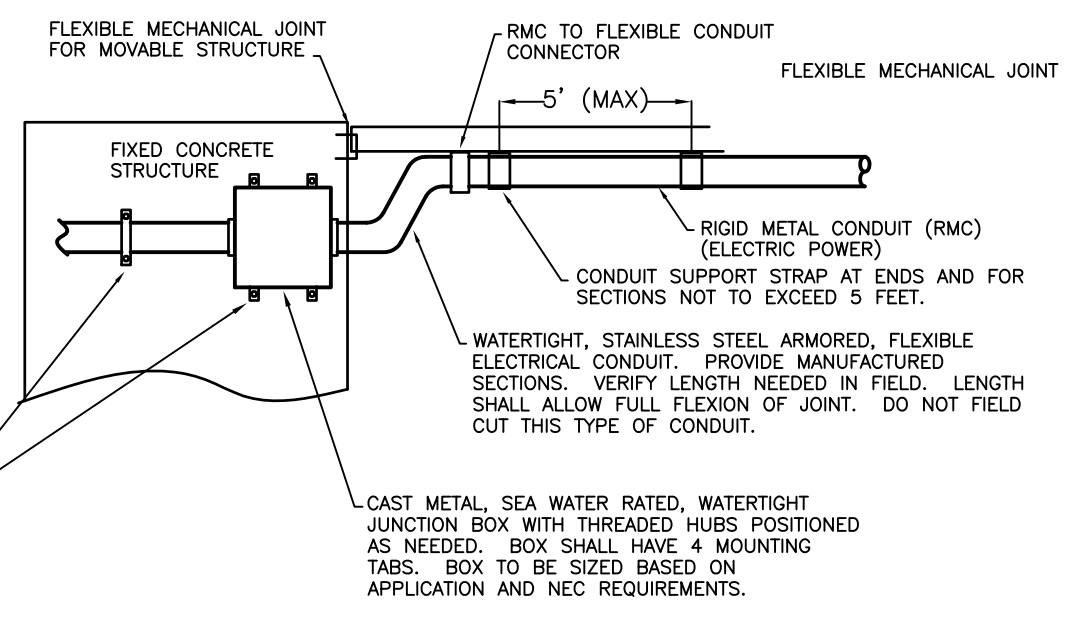
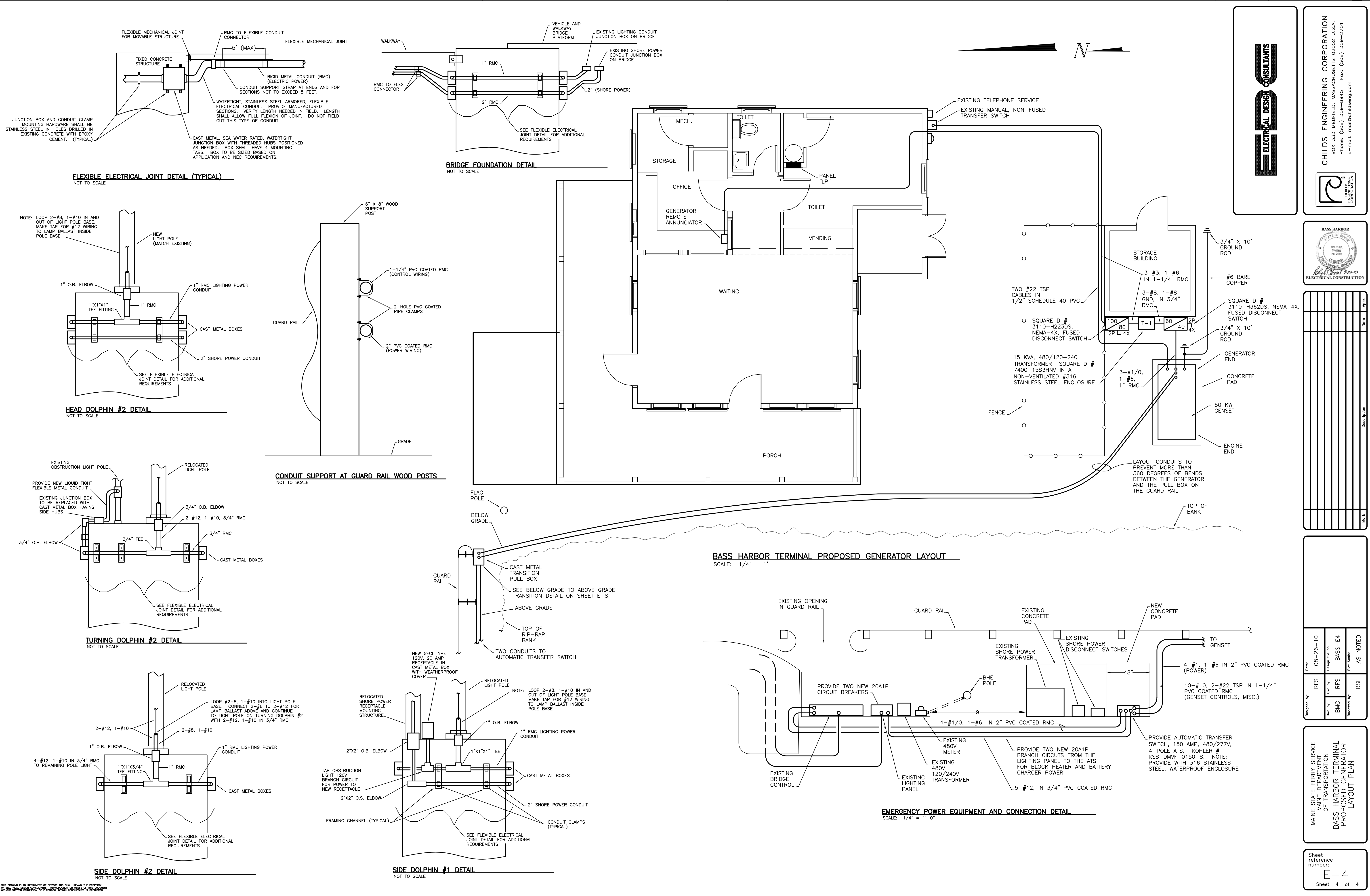
Mark	Description	Date	Appr.

Date:	08-26-10
Designed by:	RFS
Checked by:	BMC
Drawn by:	RFS
Reviewed by:	RFS
Design File No.:	BASS-E3
Plot Scale:	3/32" = 1'-0"

MAINE STATE FERRY SERVICE
MAINE DEPARTMENT
OF TRANSPORTATION
BASS HARBOR TERMINAL
PROPOSED ELECTRICAL
LAYOUT PLAN

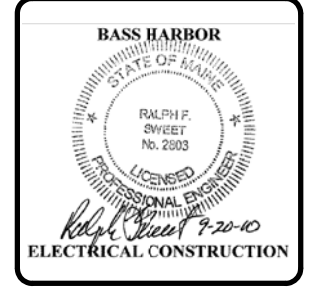
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Date	Appr.	Mark	Description

Date:	08-26-10	Design file no.:	BASS-E-4
Designed by:	RFS	Checked by:	RFS
Drawn by:	BMC	Reviewed by:	RFS
AS NOTED			

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