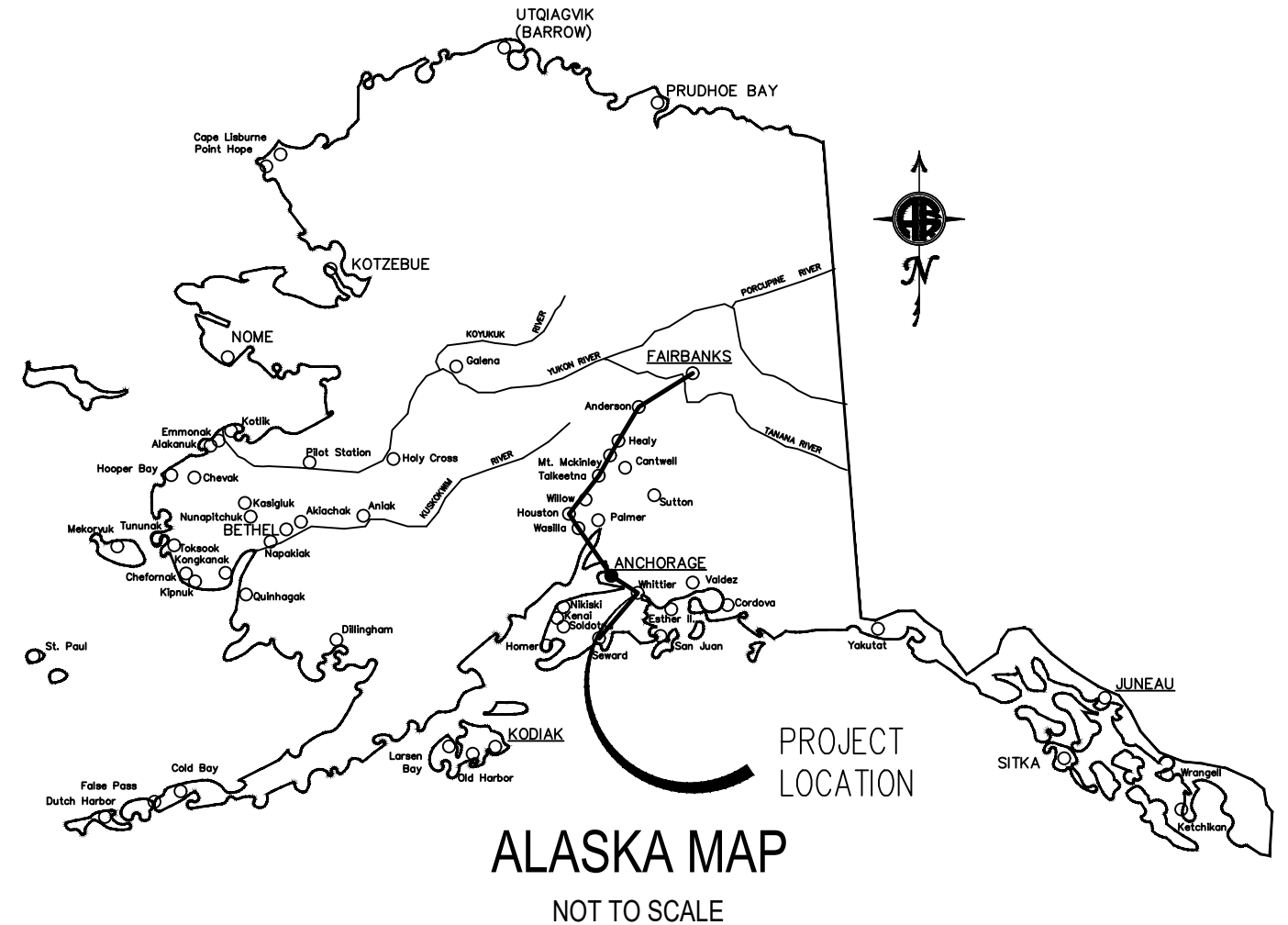


ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES

P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

WHITTIER BARGE SLIP REHABILITATION

FALL, 2022



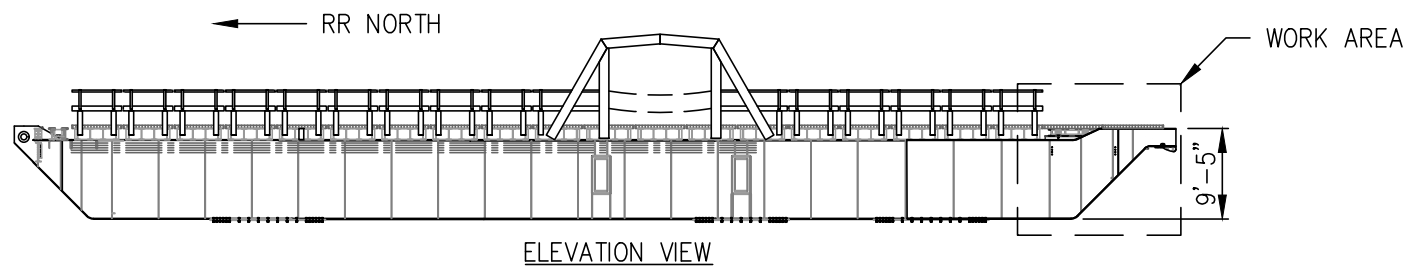
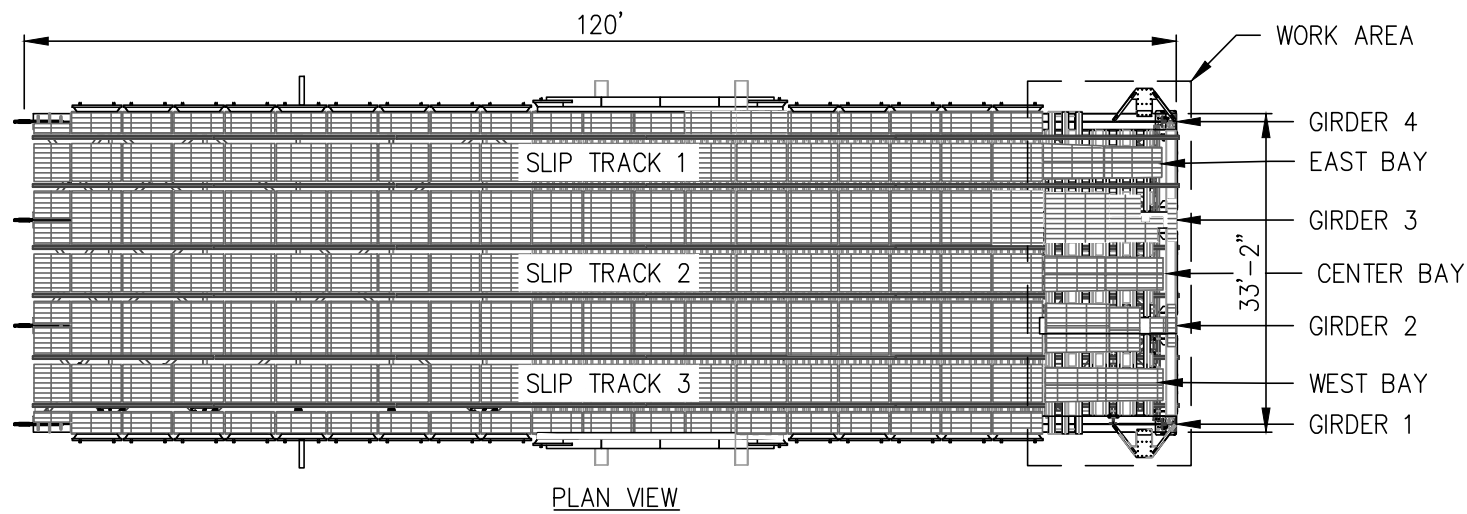
DRAWING INDEX:

1. TITLE PAGE AND DRAWING INDEX
2. BARGE LAYOUT AND GENERAL SCOPE OF WORK
3. NEW DECK GRATING ASSEMBLY
4. GRATING DETAILS
5. GRATING SHIM AND CONNECTION ANGLE DETAILS
6. STRINGER TO FLOORBEAMS ASSEMBLY
7. END FLOORBEAM AND STRINGER CONNECTION ANGLE DETAILS
8. INTERMEDIATE FLOORBEAM AND CONNECTION ANGLE DETAILS
9. STRINGER DETAILS 1 OF 2
10. STRINGER DETAILS 2 OF 2
11. STRINGER BRACING DETAILS
12. GIRDER 1 AND 2 REPAIR
13. GIRDER 1 ASSEMBLY
14. WEB AND FLANGE SPLICE PLATE DETAILS
15. FASCIA AND BEARING CONNECTIONS
16. FASCIA AND BEARING MEMBERS DETAILS
17. BEARING SHOW MODIFICATIONS

P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\BargeSlip_Rehab_2022.dwg VPort: S1 TITLE Plot Style: -----

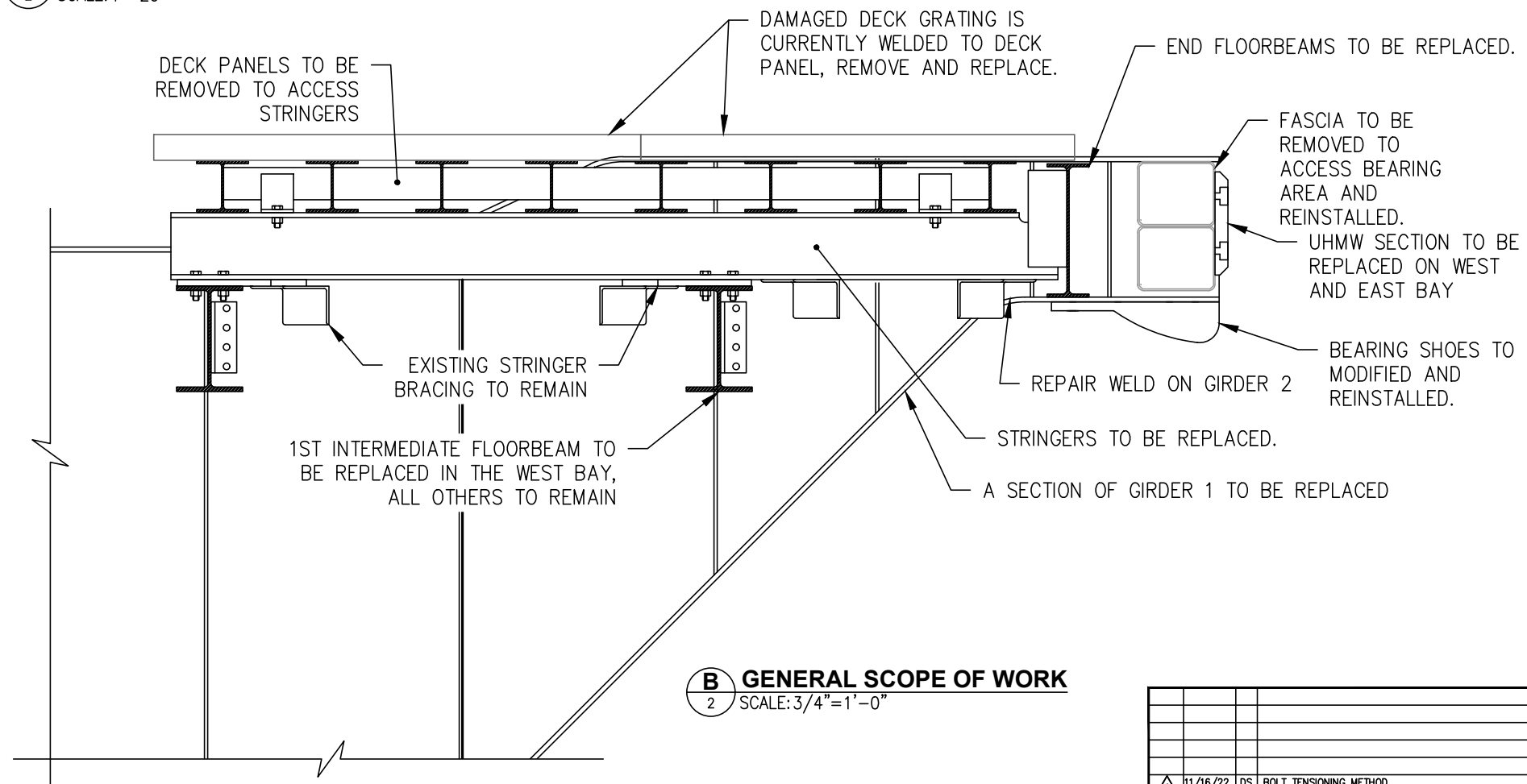
ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500			
PROJECT : WHITTIER BARGE SLIP REHAB			
TITLE: TITLE PAGE AND DRAWING INDEX			
DESIGNED BY: <u>DJS</u>	SCALE : AS NOTED	1	DWG NO.
CHECKED BY: _____	DATE : 9/1/22		1 OF 17
APPROVED BY: _____			

REV.	DATE	BY	REVISION




A BARGE SLIP GENERAL LAYOUT
 2 SCALE: 1"=20'

- GENERAL NOTES:
1. ALL STEEL TO BE ASTM A572 GRADE 50 UNLESS NOTED.
 2. ALL BOLTS TO BE ASTM F3125 GRADE A325.
 3. ALL STEEL BE HOT DIPPED GALVANIZED OR SPRAY METALLIZED UNLESS NOTED.
 4. ALL HARDWARE TO BE HOT DIPPED GALVANIZED.
 5. ALL FIELD WELDS TO BE COATED WITH ZINC SOLDIER.
 6. ALL BOLTS TO BE TIGHTENED WITH TURN OF NUT METHOD. Δ



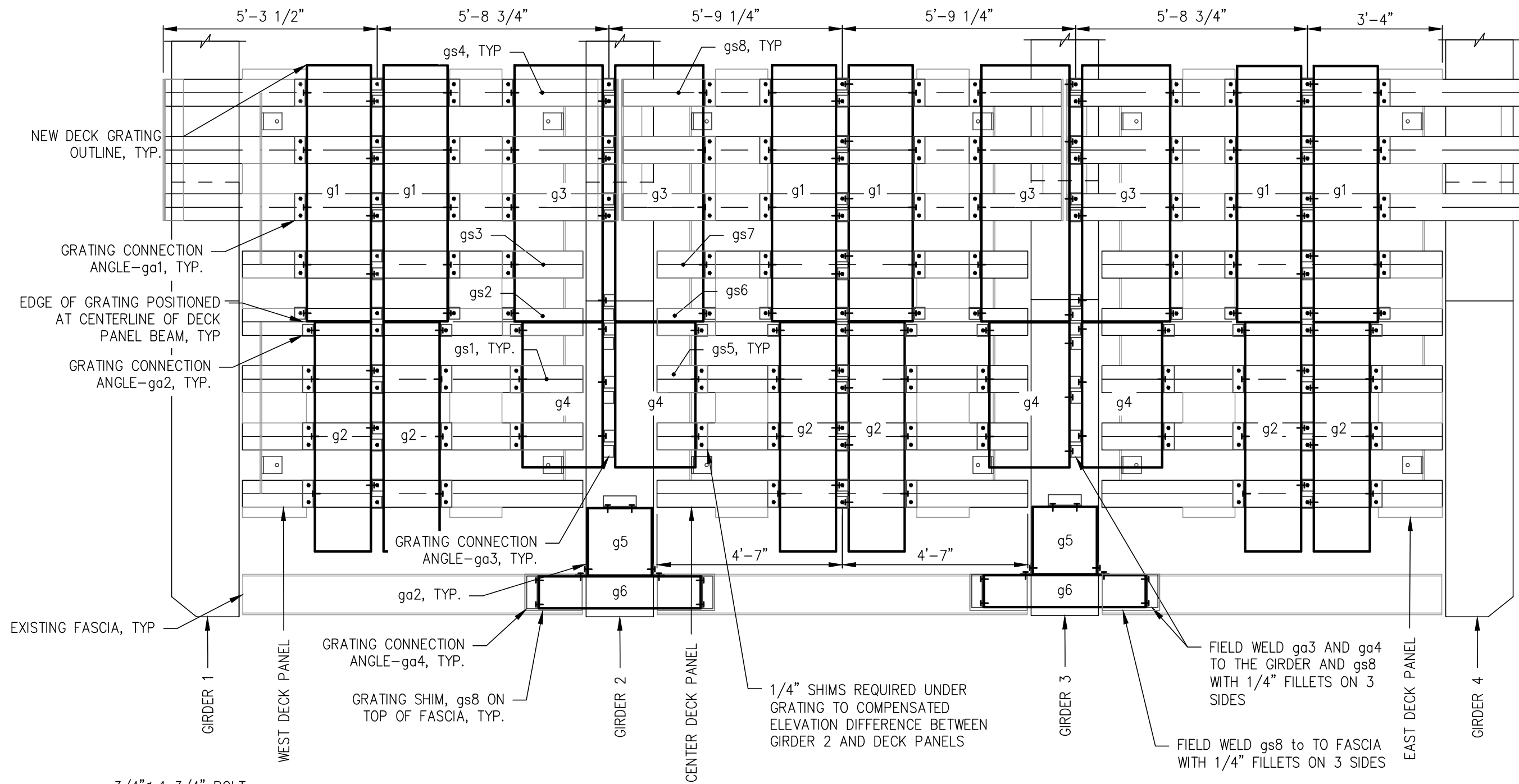
B GENERAL SCOPE OF WORK
 2 SCALE: 3/4"=1'-0"

REV.	DATE	BY	REVISION
Δ	11/16/22	DS	BOLT TENSIONING METHOD

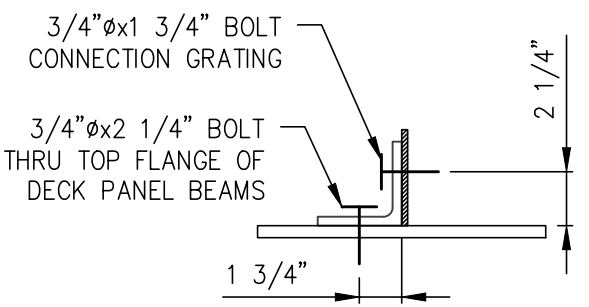
 ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500	
PROJECT :	
WHITTIER BARGE SLIP REHAB	
TITLE:	
BARGE LAYOUT AND GENERAL SCOPE OF WORK	
DESIGNED BY: <u>DJS</u>	SCALE : AS NOTED
CHECKED BY: _____	DATE : 9/1/22
APPROVED BY: _____	2
	DWG NO. 2 OF 17

P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\BargeSlip_Rehab_2022.dwg VPort: S2 Layout Plot Style: -----

P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\BargeSlip_Rehab_2022.dwg VPort: S3 Deckpanel Grating Plot Style: -----



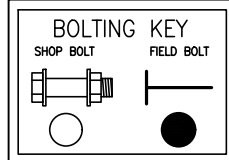
RR NORTH



B TYPICAL CONNECTION DETAIL
3 SCALE: 1 1/2"=1'-0"

NOTE: FIELD DRILL 13/16" ϕ HOLES INTO DECK PANEL AND GRATING. Δ

A DECK GRATING ASSEMBLY
3 SCALE: 3/8"=1'-0"



ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

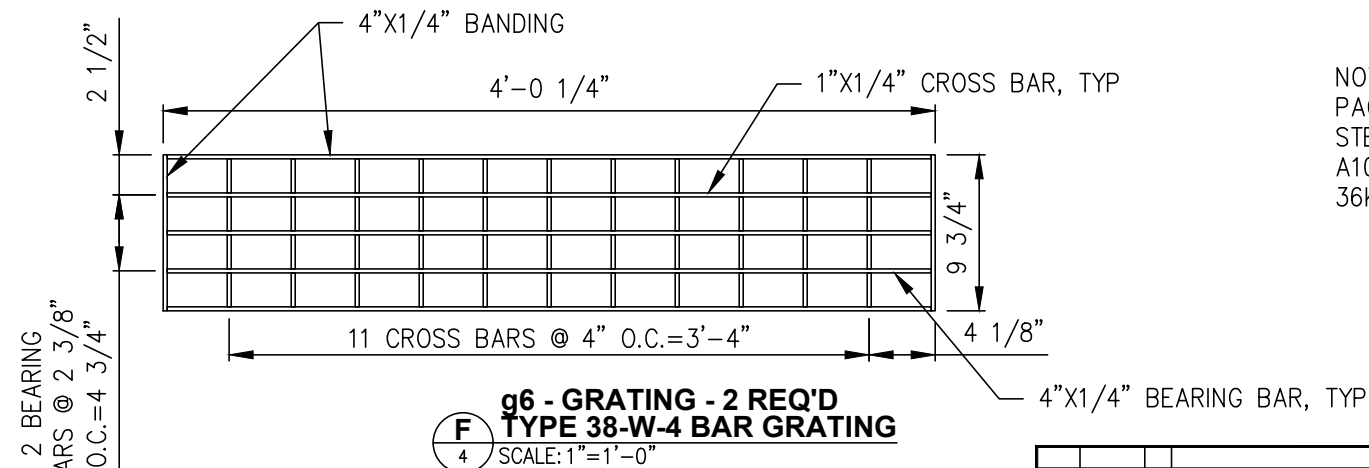
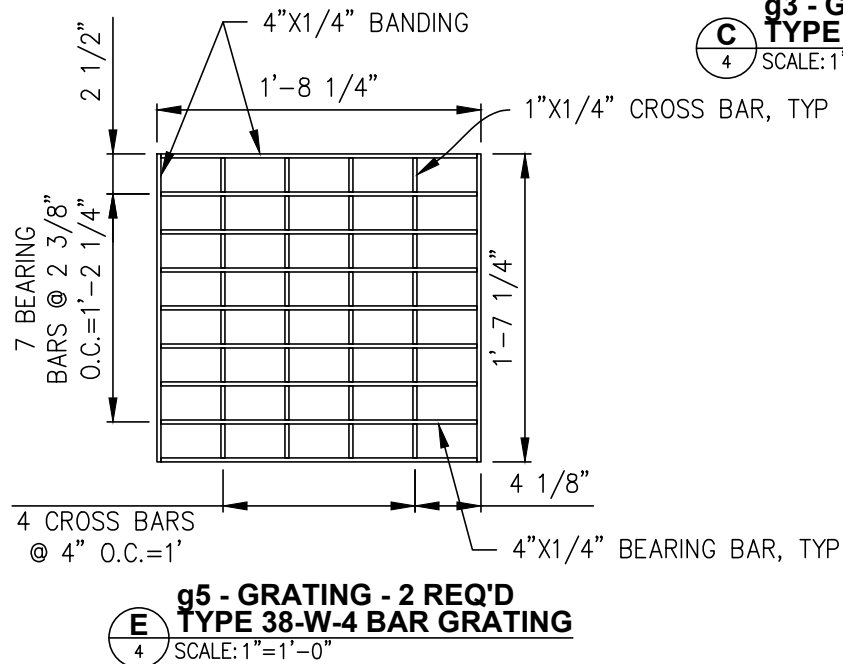
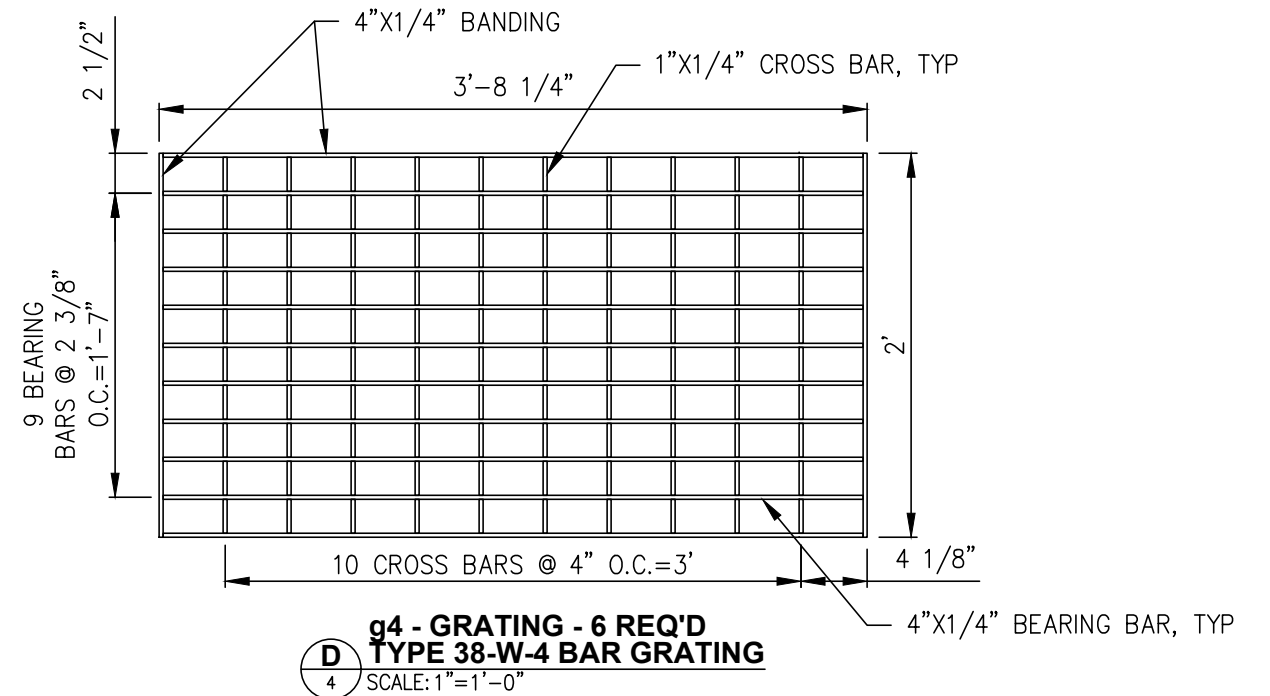
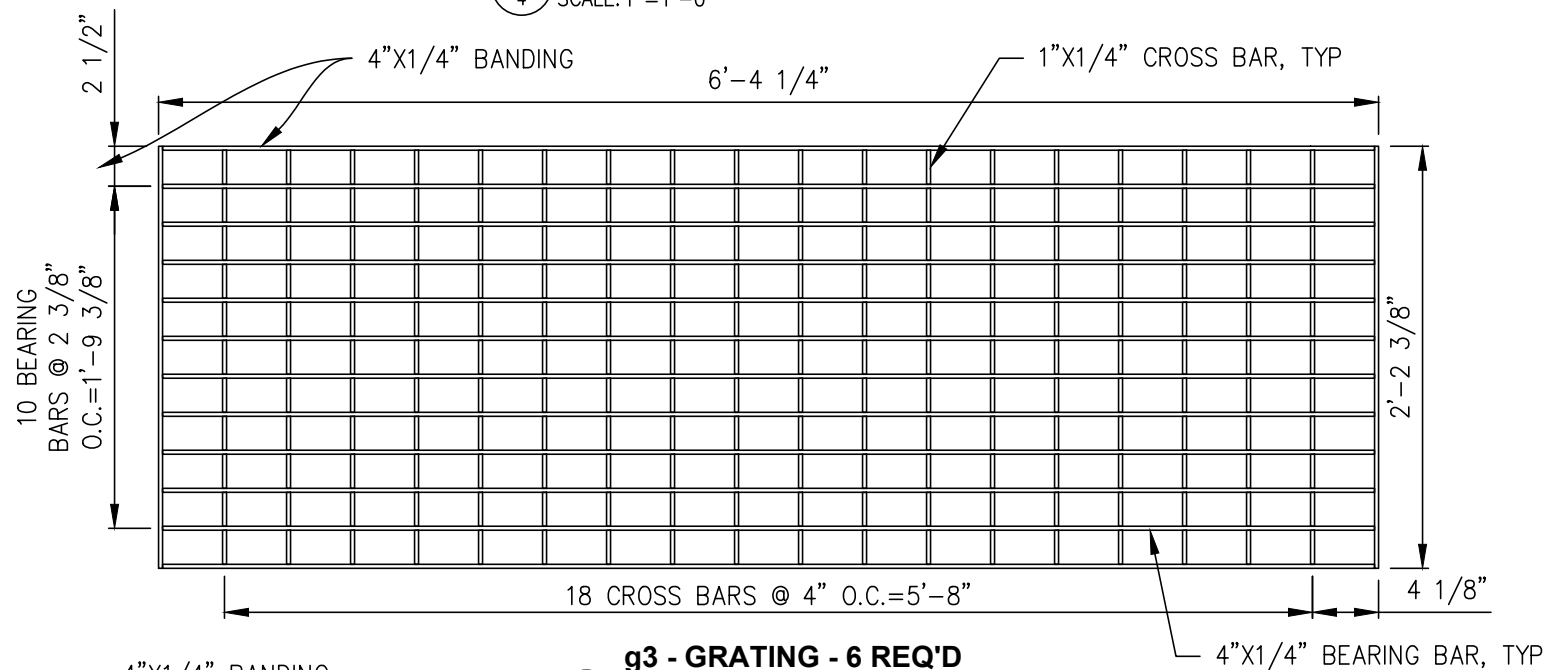
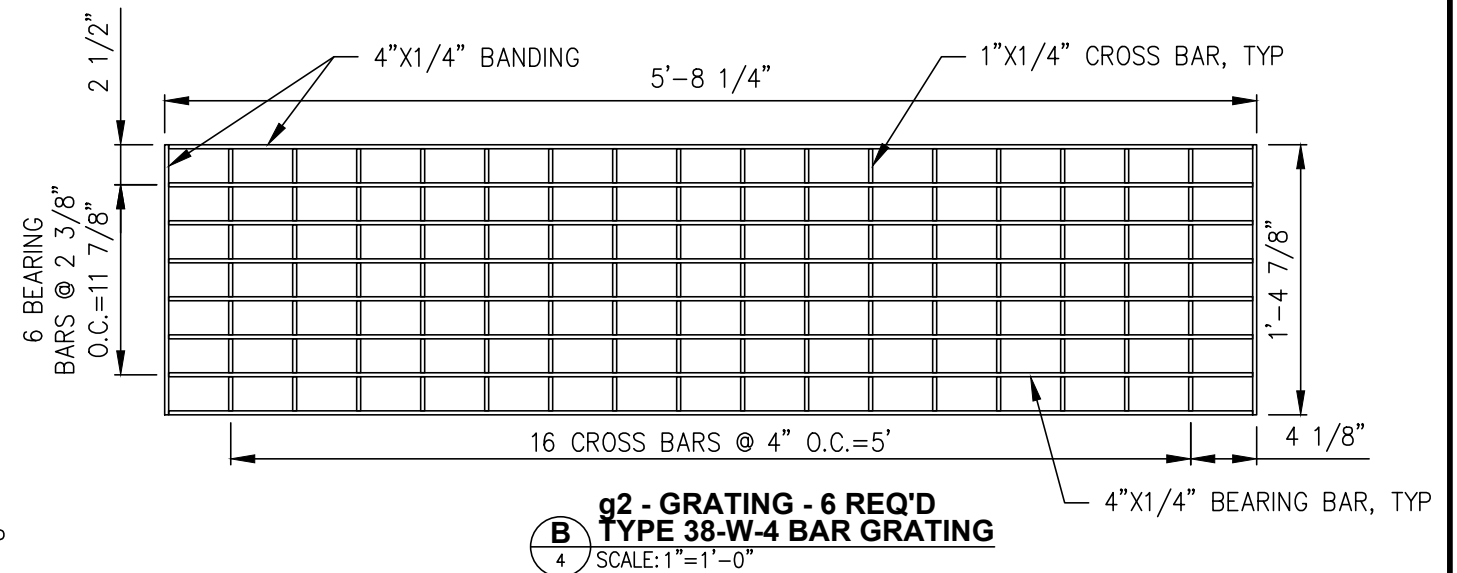
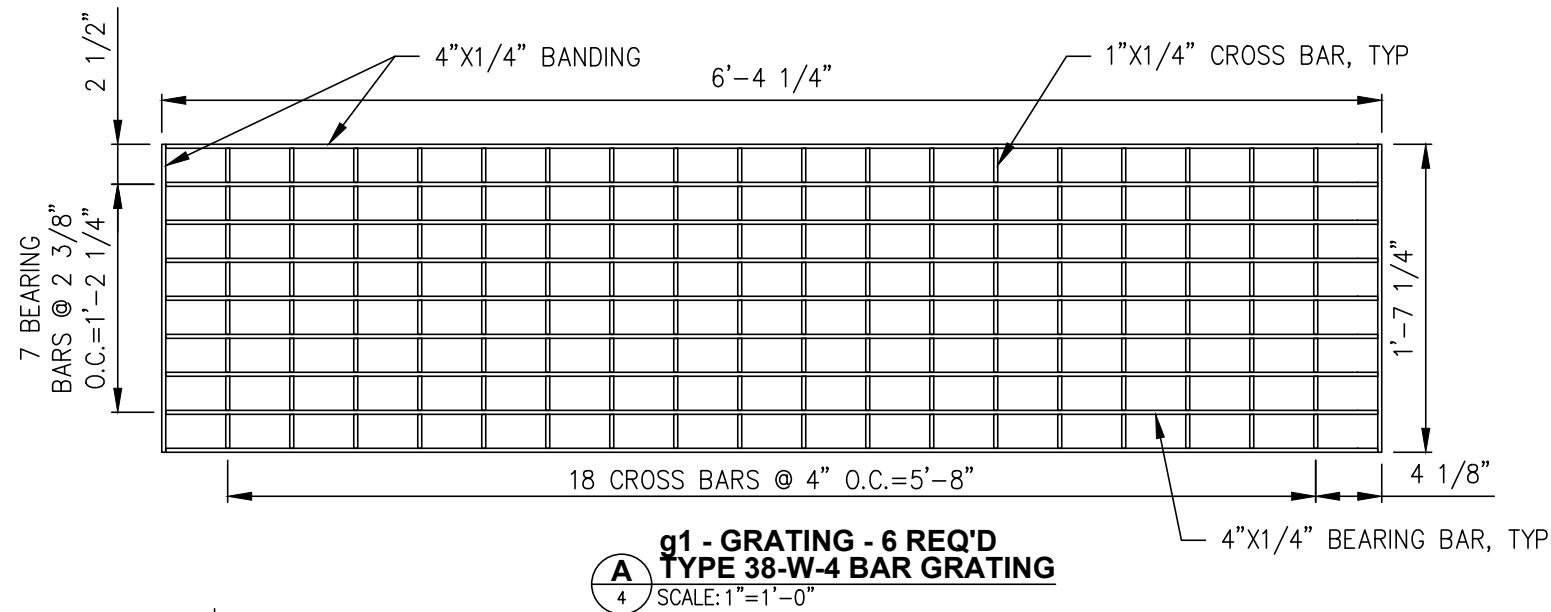
PROJECT : **WHITTIER BARGE SLIP REHAB**

TITLE: **NEW DECK GRATING ASSEMBLY**

DESIGNED BY: DJS	SCALE : AS NOTED	3	DWG NO.
CHECKED BY:	DATE : 9/1/22		3 OF 17
APPROVED BY:			

REV.	DATE	BY	REVISION
Δ	11/16/22	DS	HOLE SIZE

P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\BargeSlip_Rehab_2022.dwg VPort: S4 Grate Det Plot Style: -----

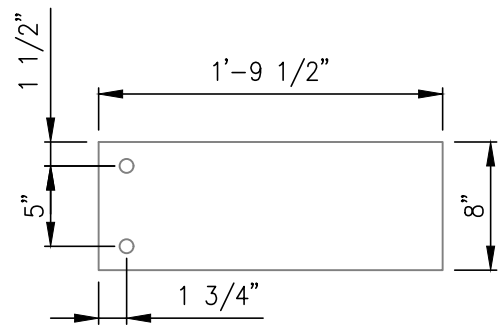


NOTE: GRATING TO MANUFACTURED BY PACIFIC GRATING, LLC OR APPROVED EQUAL. STEEL USED FOR GRATING SHALL BE ASTM A1011 WITH MINIMUM YIELD STRENGTH OF 36KSI AND GALVANIZED AFTER FABRICATION.

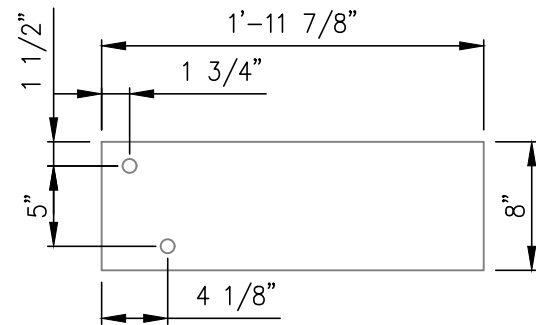
REV.	DATE	BY	REVISION

ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500			
PROJECT : WHITTIER BARGE SLIP REHAB			
TITLE: GRATING DETAILS			
DESIGNED BY: DJS	SCALE : AS NOTED	4	DWG NO.
CHECKED BY: _____	DATE : 5/25/22		4 OF 17
APPROVED BY: _____			

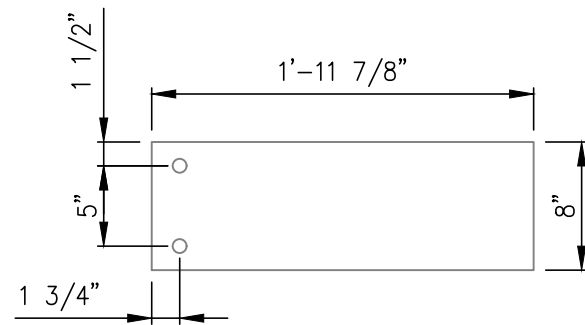
P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\BargeSlip_Rehab_2022.dwg VPort: S5 Shim Angle Det Plot Style: -----



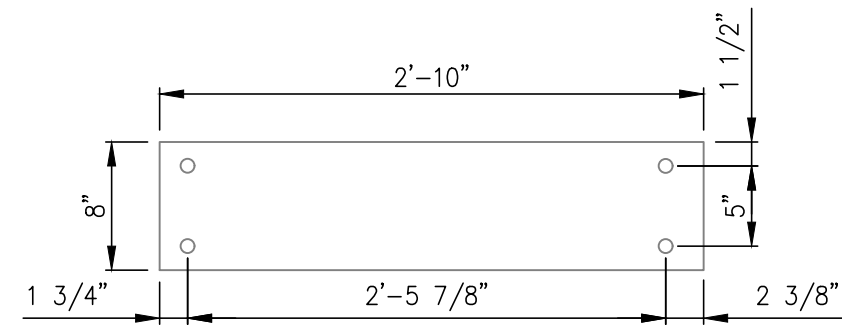
A gs1 - GRATING SHIM- 2 REQ'D
 PL 8"X1/4"X1'-9 1/2"
 5 SCALE: 1"=1'-0"



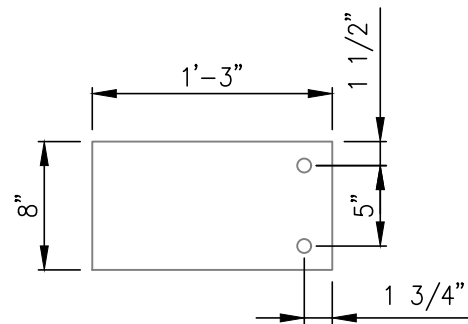
B gs2 - GRATING SHIM- 1 REQ'D
 PL 8"X1/4"X1'-11 7/8"
 5 SCALE: 1"=1'-0"



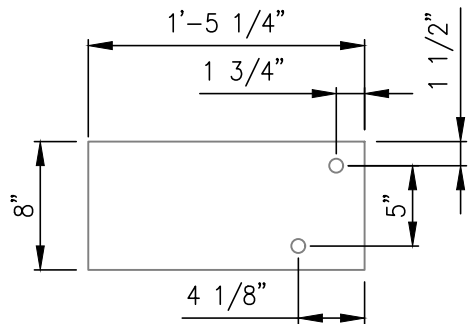
C gs3 - GRATING SHIM- 1 REQ'D
 PL 8"X1/4"X1'-11 7/8"
 5 SCALE: 1"=1'-0"



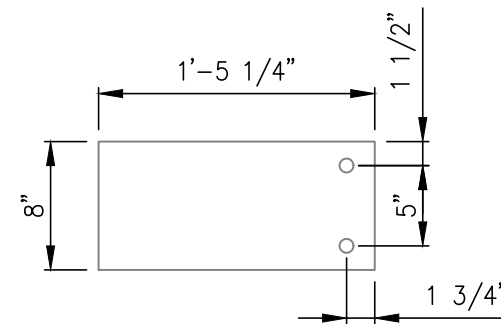
D gs4 - GRATING SHIM- 3 REQ'D
 PL 8"X1/4"X2'-10"
 5 SCALE: 1"=1'-0"



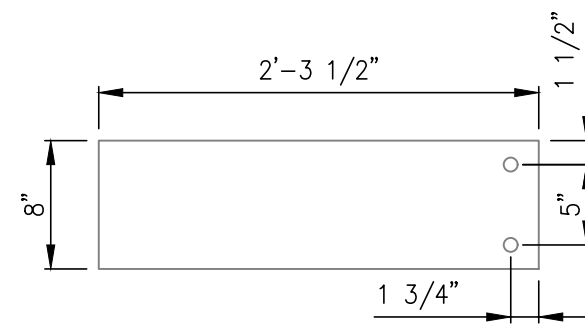
E gs5 - GRATING SHIM- 2 REQ'D
 PL 8"X1/4"X1'-3"
 5 SCALE: 1"=1'-0"



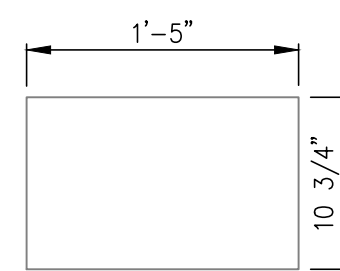
F gs6 - GRATING SHIM- 1 REQ'D
 PL 8"X1/4"X1'-5 1/4"
 5 SCALE: 1"=1'-0"



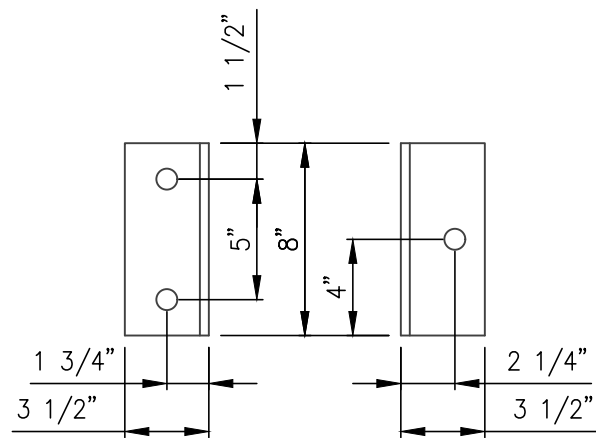
G gs7 - GRATING SHIM- 1 REQ'D
 PL 8"X1/4"X1'-5 1/4"
 5 SCALE: 1"=1'-0"



H gs8 - GRATING SHIM- 3 REQ'D
 PL 8"X1/4"X2'-3 1/2"
 5 SCALE: 1"=1'-0"

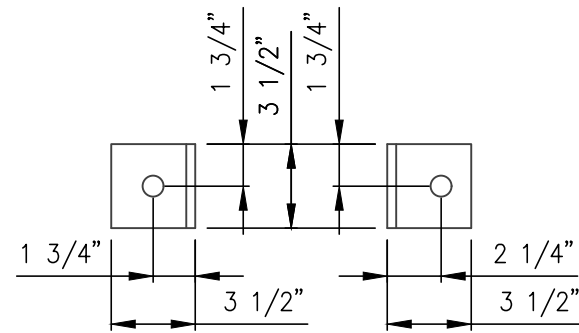


I gs9 - GRATING SHIM- 4 REQ'D
 PL 10 3/4"X3/4"X1'-5"
 6 SCALE: 1"=1'-0"



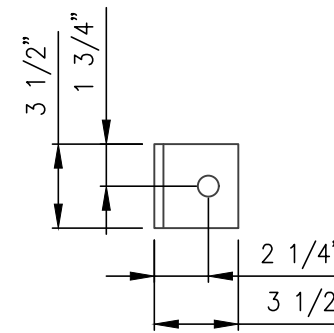
TOP VIEW SIDE VIEW

J ga1 - GRATING CONN. ANGLE - 66 REQ'D
 L 3 1/2"X3 1/2"X3/8"X8"
 5 SCALE: 1 1/2"=1'-0"



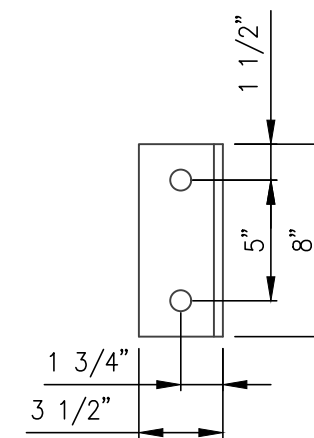
TOP VIEW SIDE VIEW

K ga2 - GRATING CONN. ANGLE - 84 REQ'D
 L 3 1/2"X3 1/2"X3/8"X3 1/2"
 5 SCALE: 1 1/2"=1'-0"



SIDE VIEW

L ga3 - GRATING CONN. ANGLE - 16 REQ'D
 L 3 1/2"X3 1/2"X3/8"X3 1/2"
 5 SCALE: 1 1/2"=1'-0"




SIDE VIEW

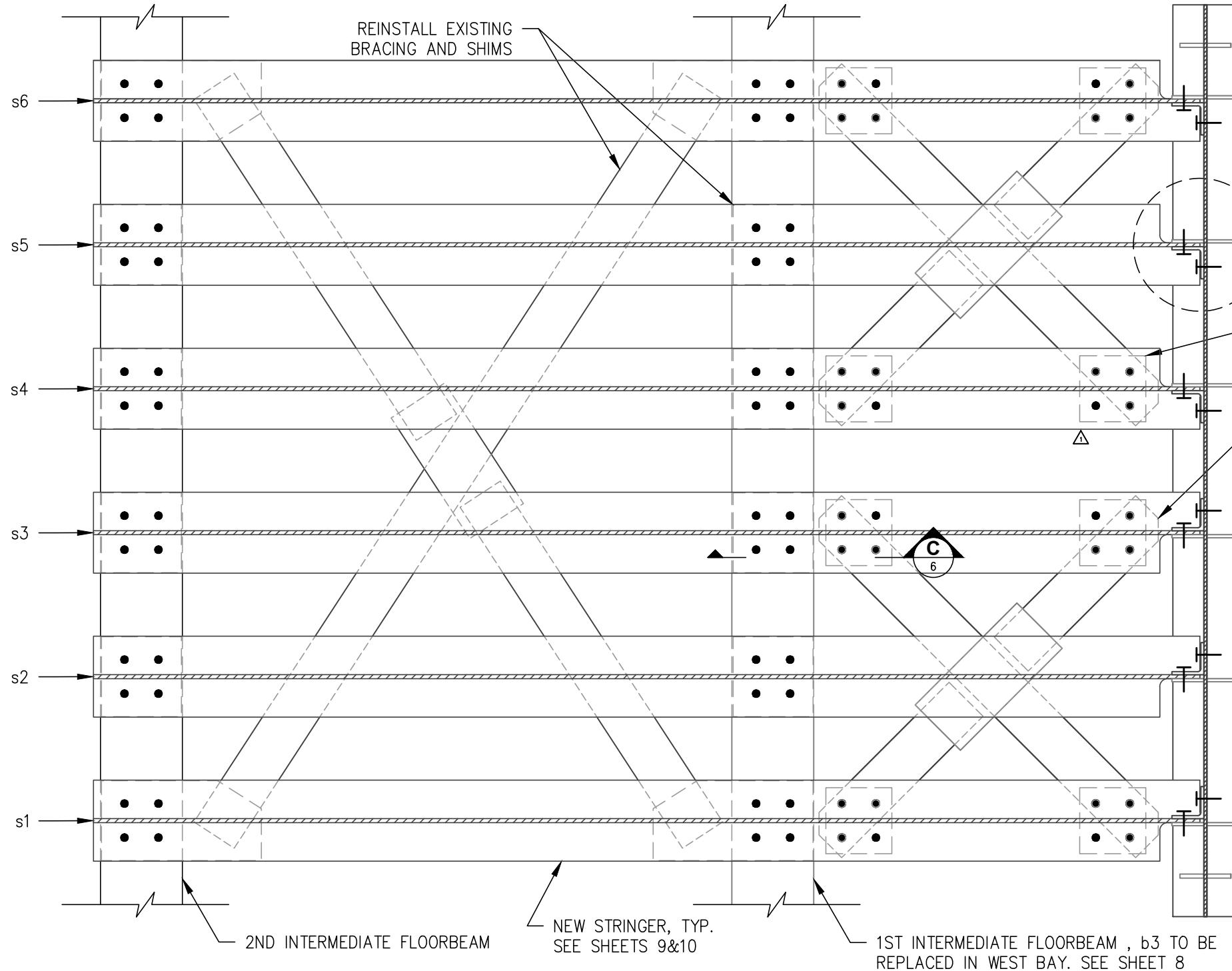
M ga4 - GRATING CONN. ANGLE - 6 REQ'D
 L 3 1/2"X3 1/2"X3/8"X8"
 5 SCALE: 1 1/2"=1'-0"

NOTE: ALL HOLES TO BE 7/8"Ø. Δ

REV.	DATE	BY	REVISION
Δ	11/16/22	DS	HOLE SIZE

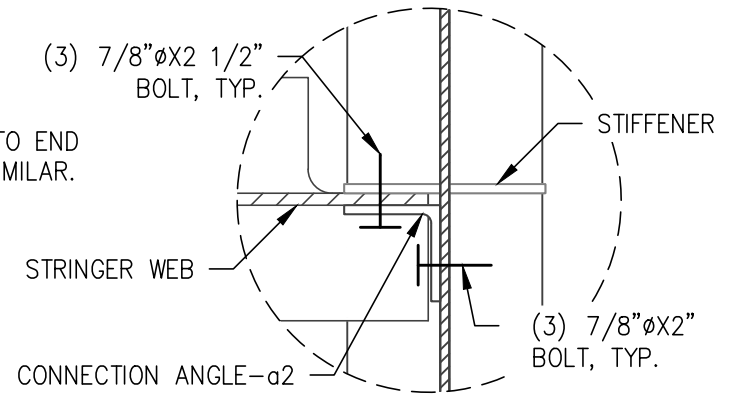
 ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500			
PROJECT :			
WHITTIER BARGE SLIP REHAB			
TITLE:			
GRATING SHIM AND CONNECTION ANGLE DETAILS			
DESIGNED BY: <u>DJS</u>	SCALE : AS NOTED	5	DWG NO. 5 OF 17
CHECKED BY: _____	DATE : 5/25/22		
APPROVED BY: _____			

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NEW END FLOORBEAM-b1,
SEE SHEET 7

NOTE: CONNECTION TO END
FLOORBEAM-b2 IS SIMILAR.

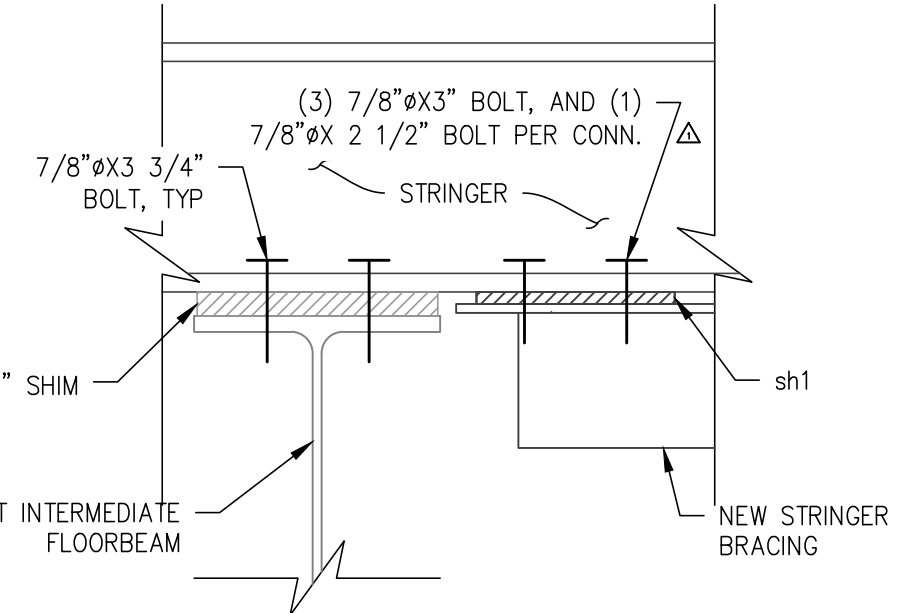


B END FB CONN. DETAIL
6 SCALE: 1 1/2"=1'-0"

NOTE: ALL STRINGER TO END FLOORBEAM
CONNECTIONS TO BE FIELD DRILLED.

NEW SHIM-sh1, WELDED TO
BRACING, TYP., SEE SHEET 11

NEW STRINGER
BRACING, TYP.
SEE SHEET 11



C SECTION DETAIL
6 SCALE: 1 1/2"=1'-0"

A STRINGER-FLOORBEAM ASSEMBLY
6 SCALE: 3/4"=1'-0"

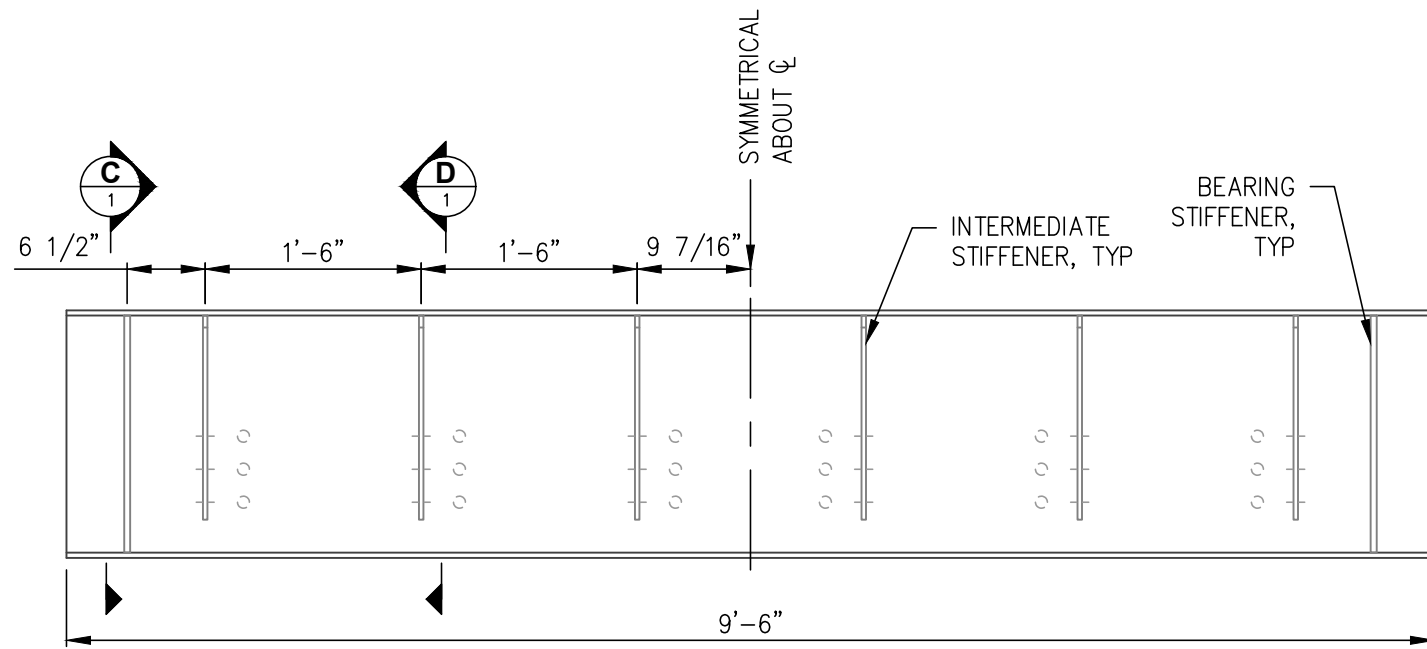
NOTE:
1. NEW STRINGER BRACING TO BE SHOP FITTED TO STRINGERS BUT SHIPPED LOOSE.
2. EXISTING INTERMEDIATE FLOORBEAMS WILL DETERMINE NEW STRINGERS AND END FLOORBEAMS FINAL POSITIONS, WHICH VARY SLIGHTLY PER BAY.

BOLTING KEY	
SHOP BOLT	FIELD BOLT

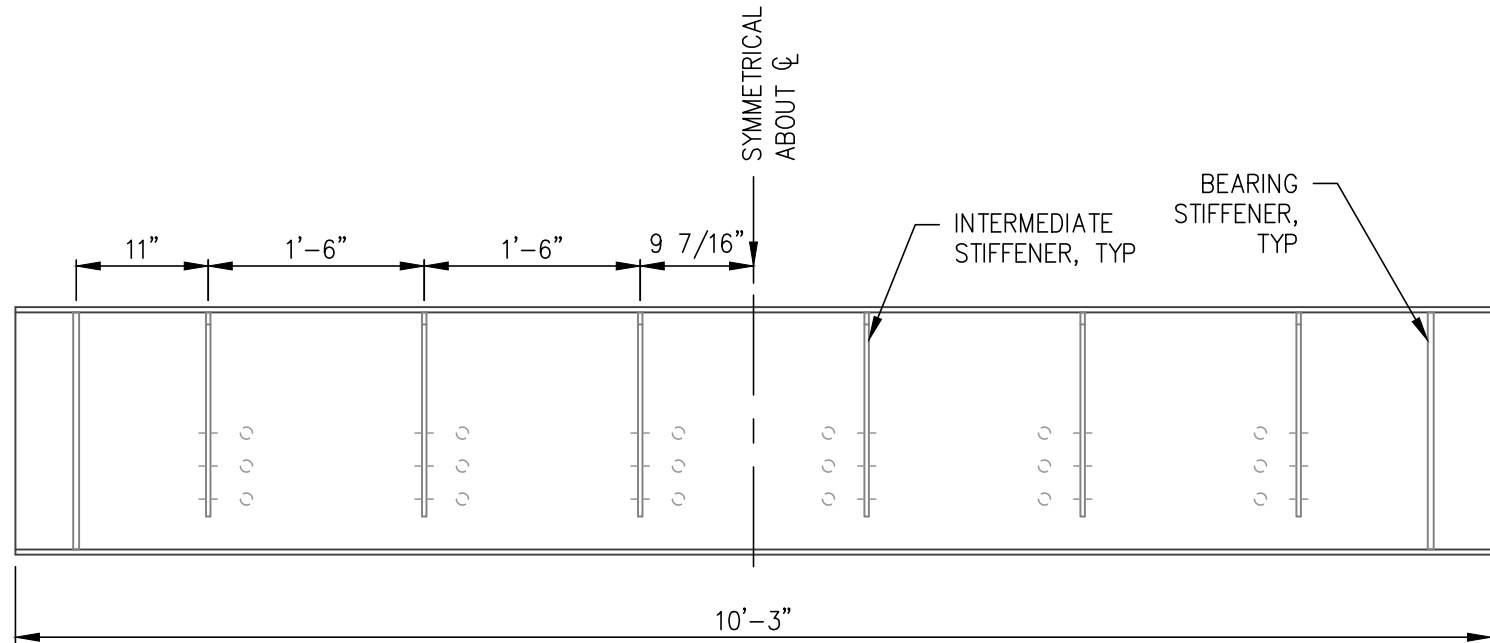
ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500	
PROJECT : WHITTIER BARGE SLIP REHAB	
TITLE: STRINGER TO FLOORBEAMS ASSEMBLY	
DESIGNED BY: DJS	SCALE : AS NOTED
CHECKED BY: _____	DATE : 9/1/22
APPROVED BY: _____	6 OF 17

REV.	DATE	BY	REVISION
1	11/16/22	DS	sh1 MODIFIED

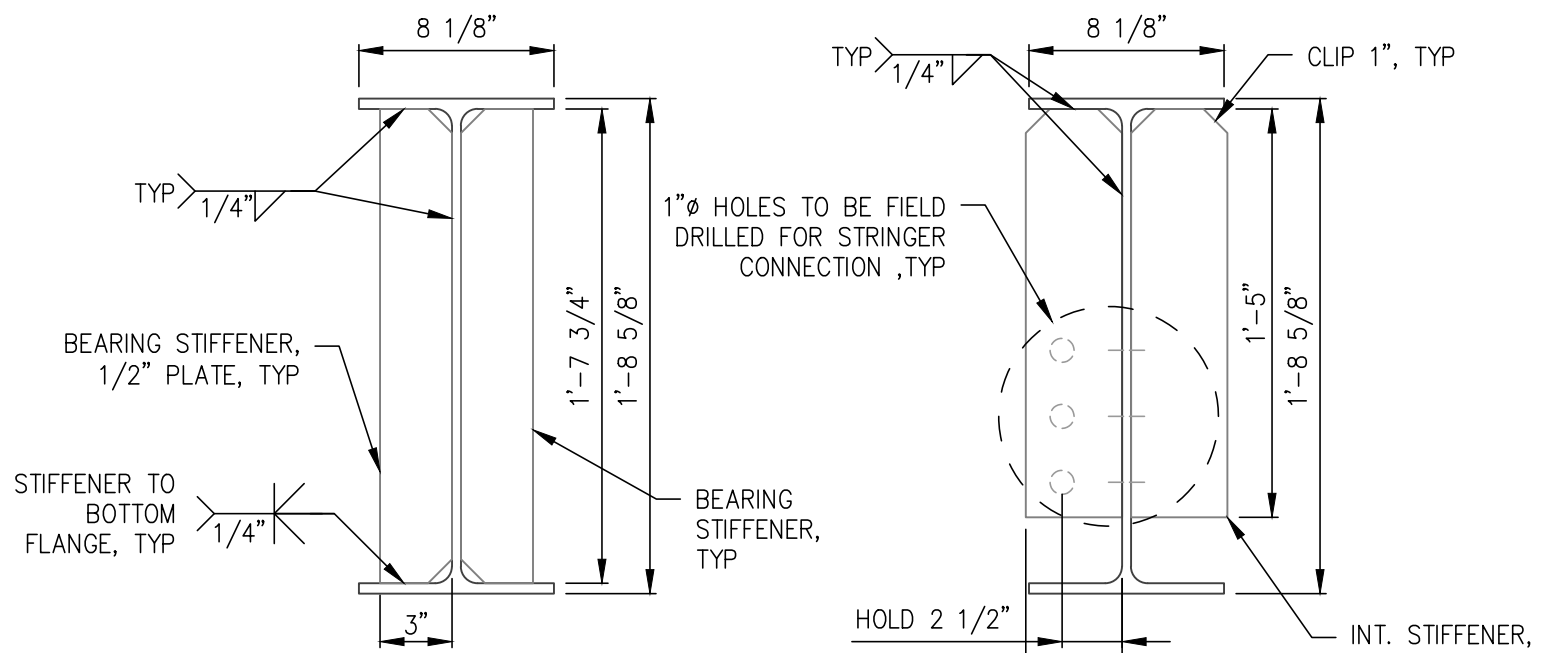
P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\BargeSlip_Rehab_2022.dwg VPort: S7 EndFB Plot Style: -----



A b1- END FLOORBEAM - 2 REQ'D
W21X48X9'-6"
 SCALE: 3/4"=1'-0"

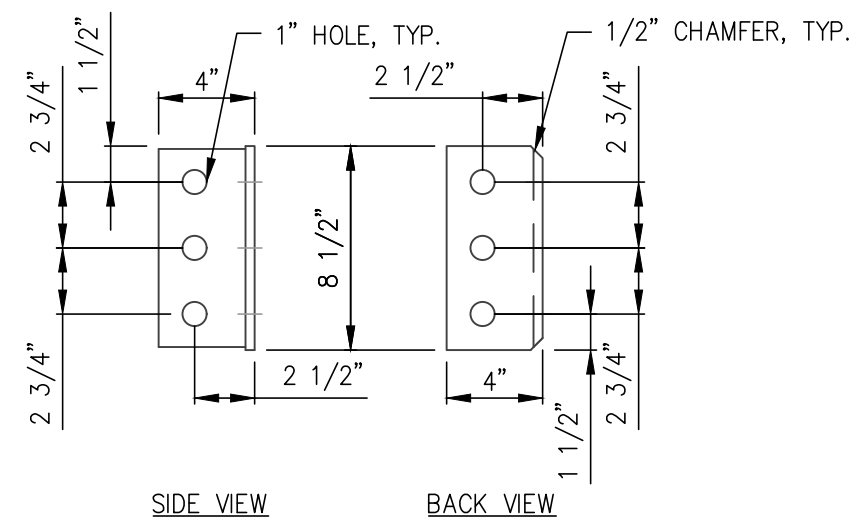


B b2 - END FLOORBEAM - 1 REQ'D
W21X48X10'-3"
 SCALE: 3/4"=1'-0"



C END FLOORBEAM
 TYPICAL SECTION
 SCALE: 1 1/2"=1'-0"

D END FLOORBEAM
 TYPICAL SECTION
 SCALE: 1 1/2"=1'-0"

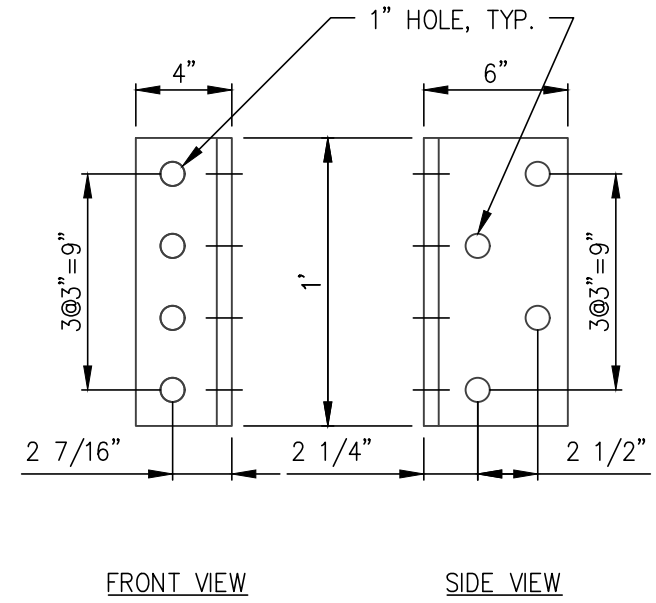
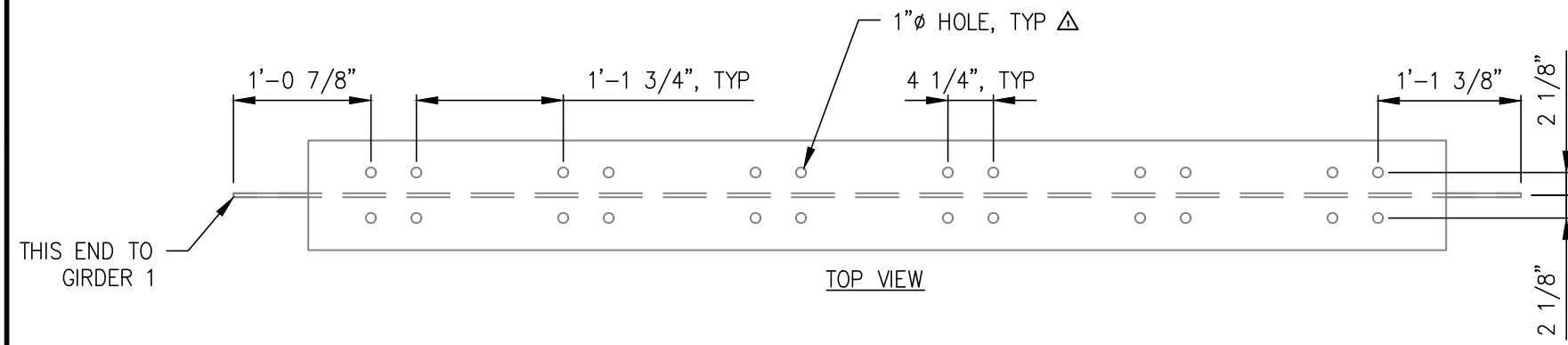


E a2 - CONNECTION ANGLE - 18 REQ'D
L 4"X4"X3/8"X8 1/2"
 SCALE: 1 1/2"=1'-0"

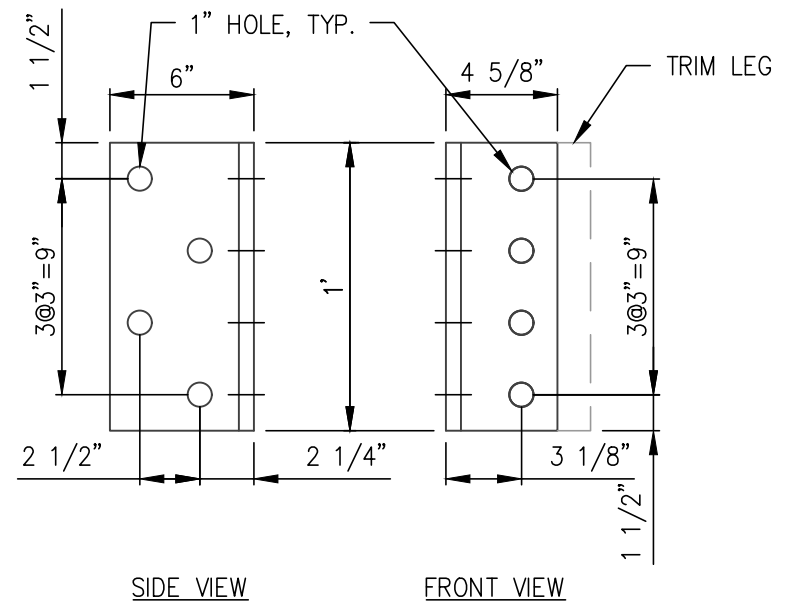
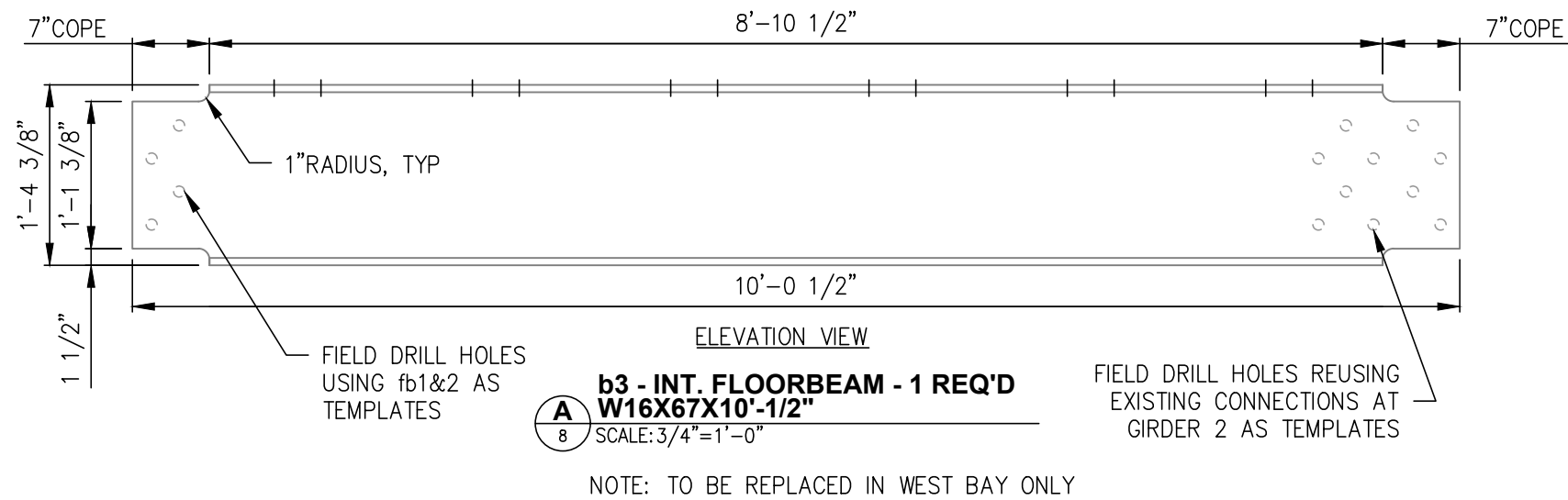
ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500			
PROJECT : WHITTIER BARGE SLIP REHAB			
TITLE: END FLOORBEAM AND STRINGER CONNECTION ANGLE DETAILS			
DESIGNED BY: DJS	SCALE : AS NOTED	7	DWG NO.
CHECKED BY:	DATE : 5/25/22		7 OF 17
APPROVED BY:			

REV.	DATE	BY	REVISION

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B fb1 - FLOORBEAM CONN. ANGLE - 1 REQ'D
L 6"X4"X5/8"X1'-0"
 SCALE: 1 1/2"=1'-0"

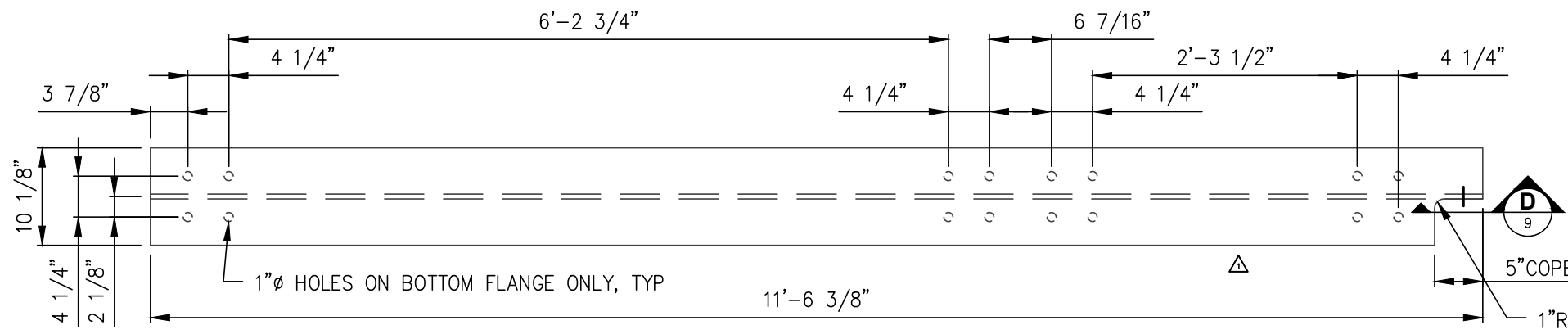


C fb2 - FLOORBEAM CONN. ANGLE - 1 REQ'D
L 6"X6"X5/8"X1'-0"
 SCALE: 1 1/2"=1'-0"

ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		PROJECT :	
		WHITTIER BARGE SLIP REHAB	
TITLE:		INTERMEDIATE FLOORBEAM AND CONNECTION ANGLE DETAILS	
DESIGNED BY:	DJS	SCALE :	AS NOTED
CHECKED BY:		DATE :	5/25/22
APPROVED BY:		8	DWG NO.
			8

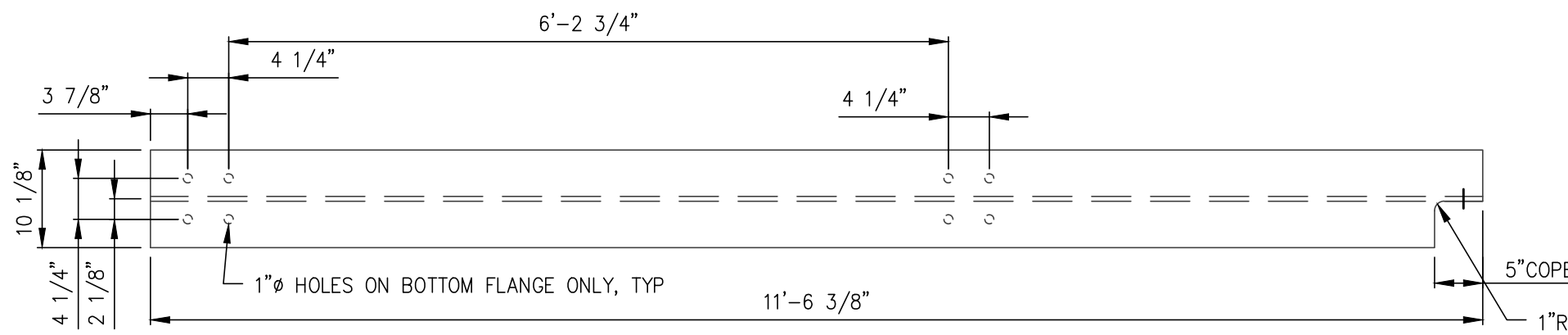
REV.	DATE	BY	REVISION
Δ	11/16/22	DS	HOLE SIZE

P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\BargeSlip_Rehab_2022.dwg VPort: S9 Stringer (1) Plot Style: -----

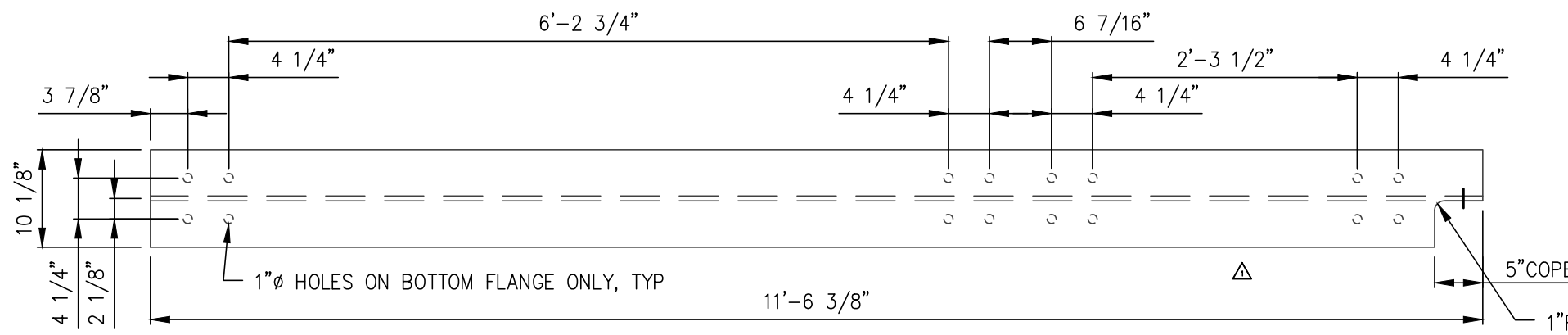


A s1- STRINGER- 3 REQ'D
W10X68X11'-6 3/8"
 SCALE: 3/4"=1'-0"

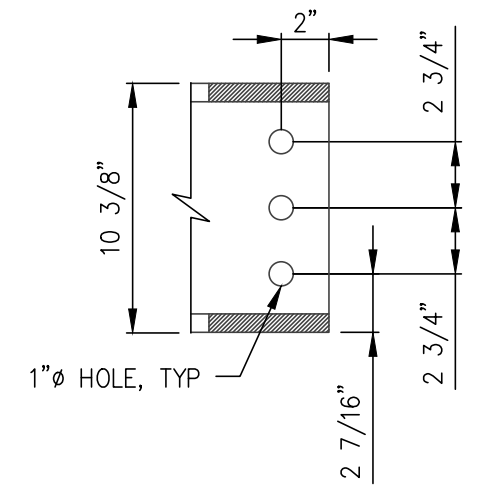
TOP VIEW SHOWN, TYP.



B s2- STRINGER- 3 REQ'D
W10X68X11'-6 3/8"
 SCALE: 3/4"=1'-0"



C s3- STRINGER- 3 REQ'D
W10X68X11'-6 3/8"
 SCALE: 3/4"=1'-0"

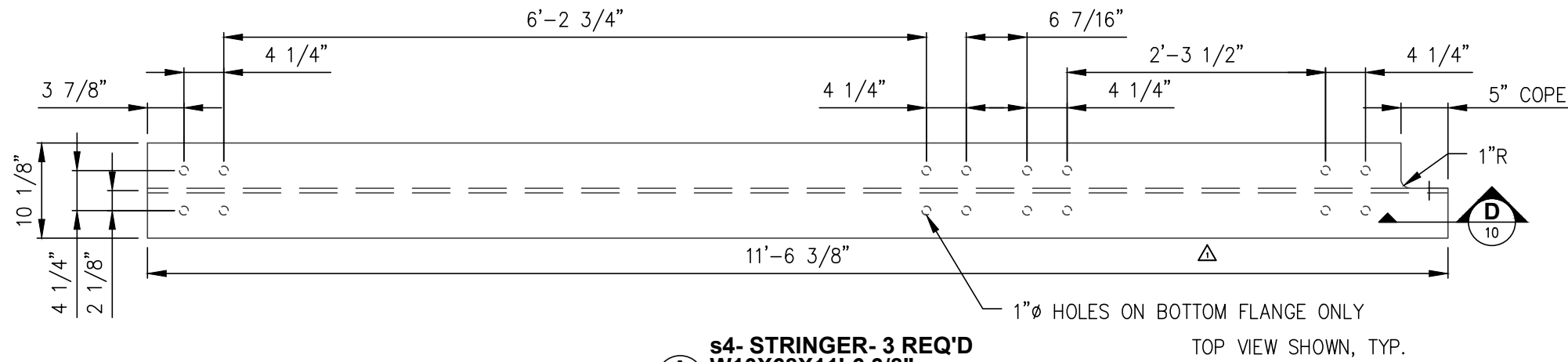


D SECTION DETAIL
 SCALE: 1 1/2"=1'-0"
 TYPICAL AT COPED END

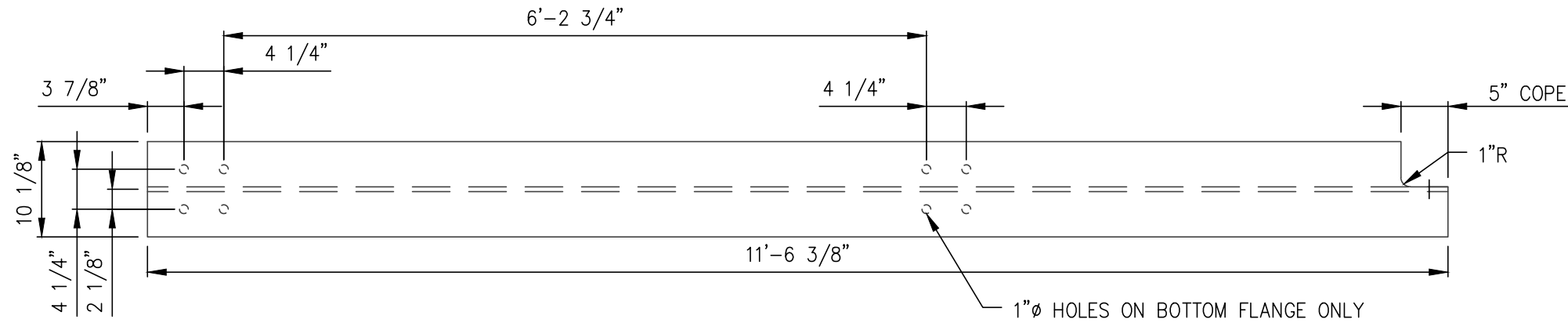
REV.	DATE	BY	REVISION
△	11/16/22	DS	HOLE PATTERN

 ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500	
PROJECT :	
WHITTIER BARGE SLIP REHAB	
TITLE:	
STRINGER DETAILS 1 OF 2	
DESIGNED BY: <u>DJS</u>	SCALE : AS NOTED
CHECKED BY: _____	DATE : 5/25/22
APPROVED BY: _____	
9	DWG NO. 9 OF 17

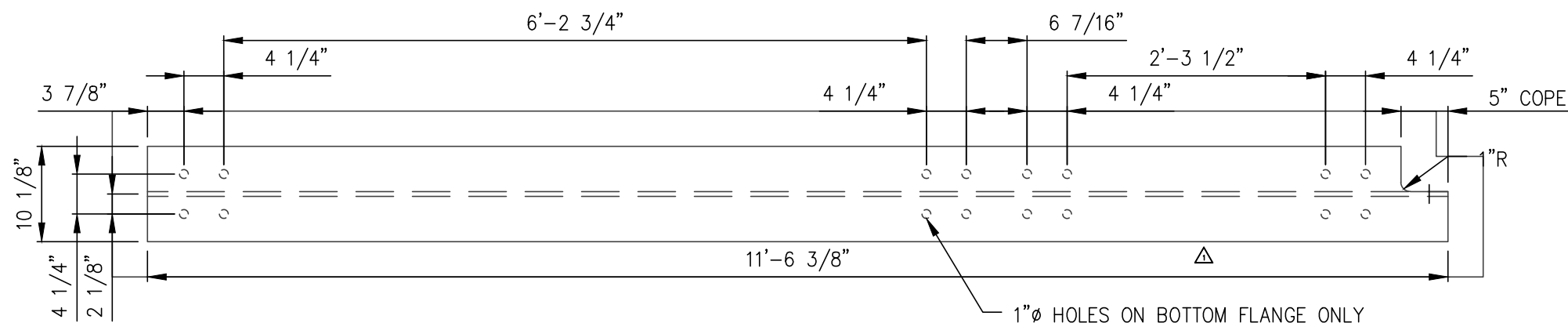
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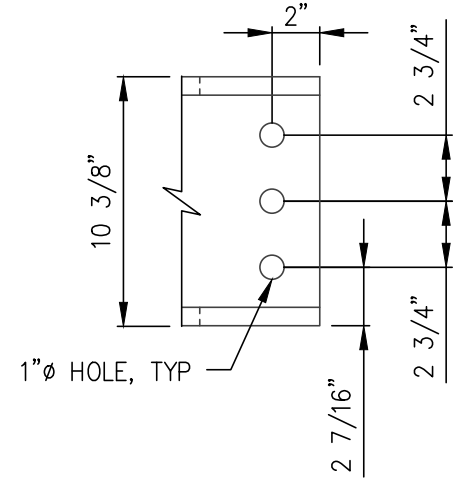
A s4- STRINGER- 3 REQ'D
W10X68X11'-6 3/8"
 SCALE: 3/4"=1'-0"



B s5- STRINGER- 3 REQ'D
W10X68X11'-6 3/8"
 SCALE: 3/4"=1'-0"



C s6- STRINGER- 3 REQ'D
W10X68X11'-6 3/8"
 SCALE: 3/4"=1'-0"

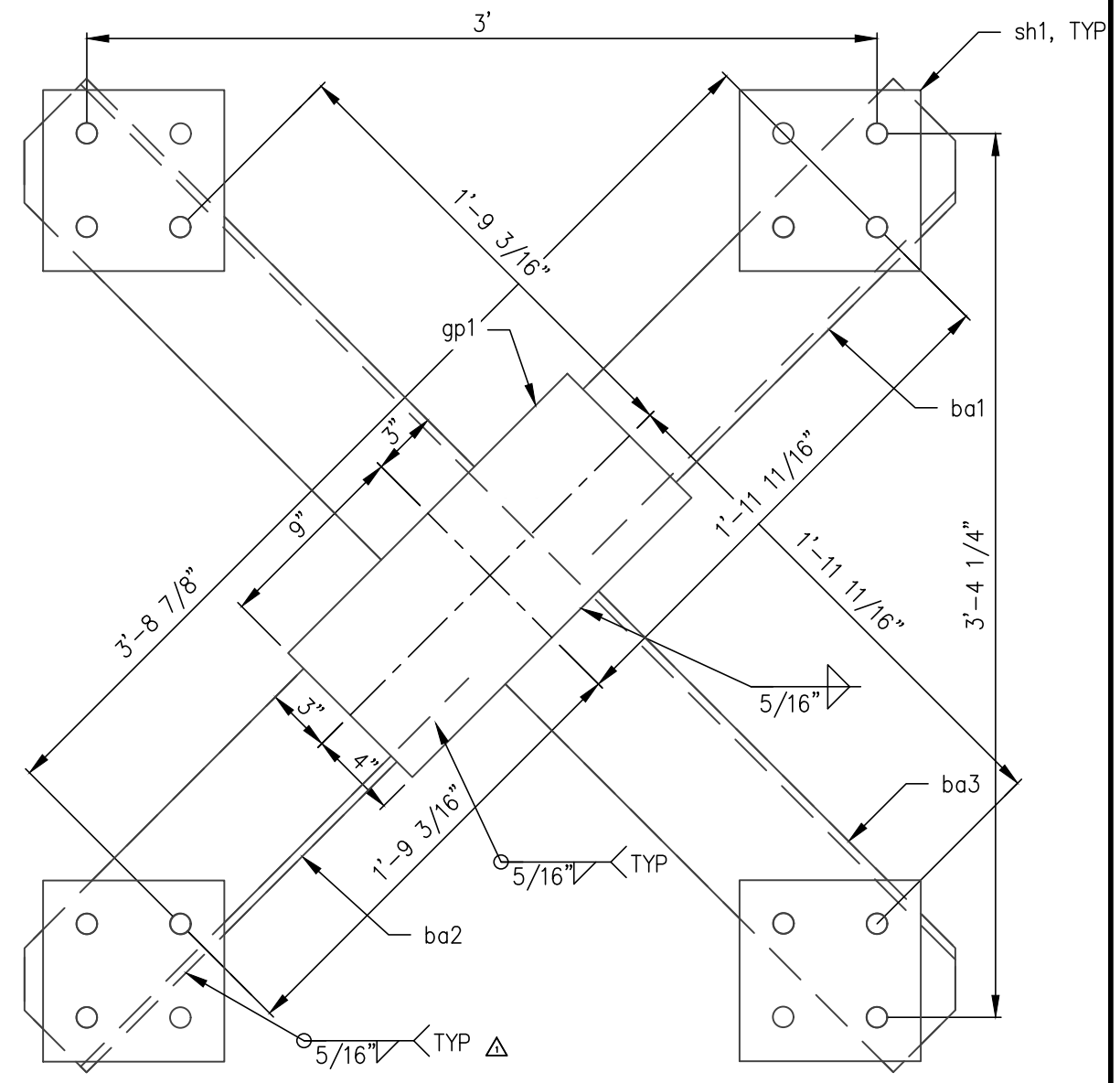
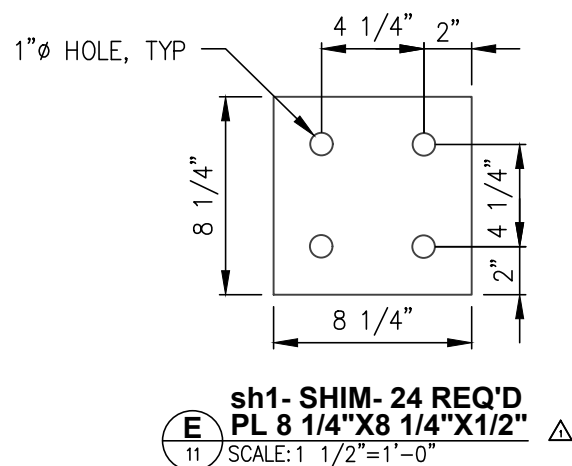
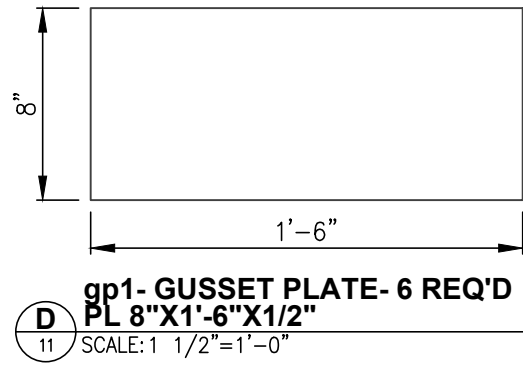
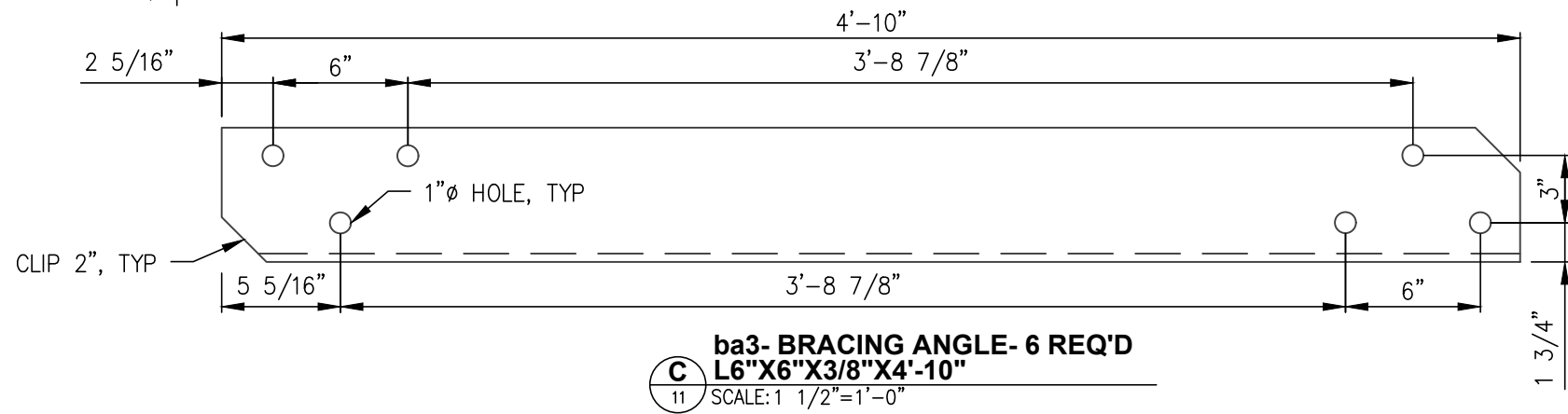
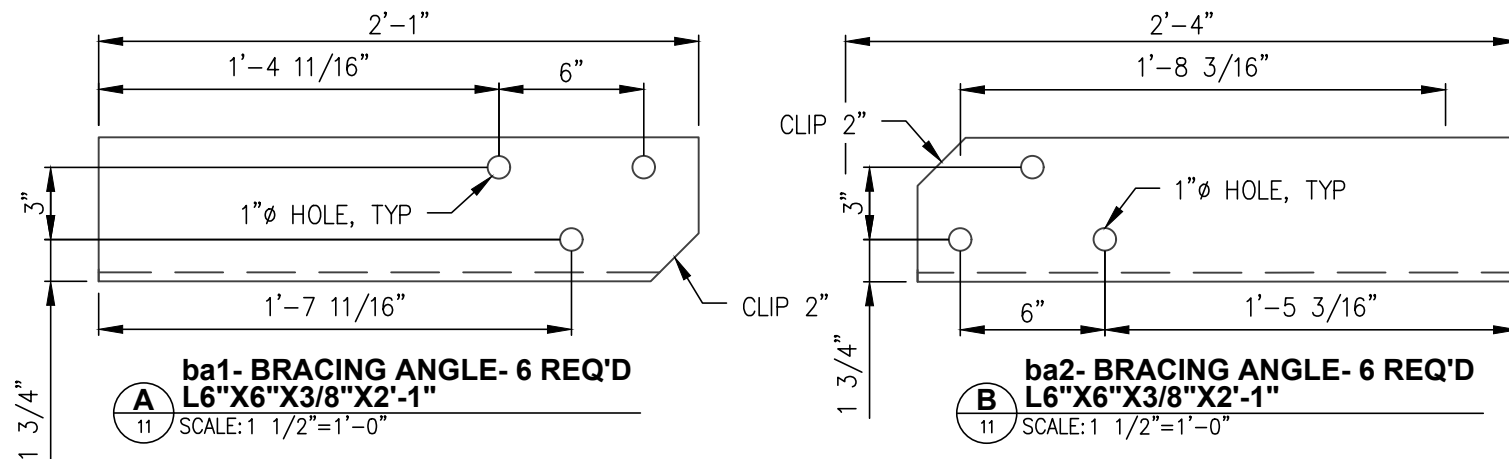


D SECTION DETAIL
 SCALE: 1 1/2"=1'-0"
 TYPICAL AT COPED END

REV.	DATE	BY	REVISION
△	11/16/22	DS	HOLE PATTERN

 ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500			
PROJECT :			
WHITTIER BARGE SLIP REHAB			
TITLE:			
STRINGER DETAILS 2 OF 2			
DESIGNED BY:	DJS	SCALE :	AS NOTED
CHECKED BY:		DATE :	5/25/22
APPROVED BY:		10	DWG NO. 10 OF 17

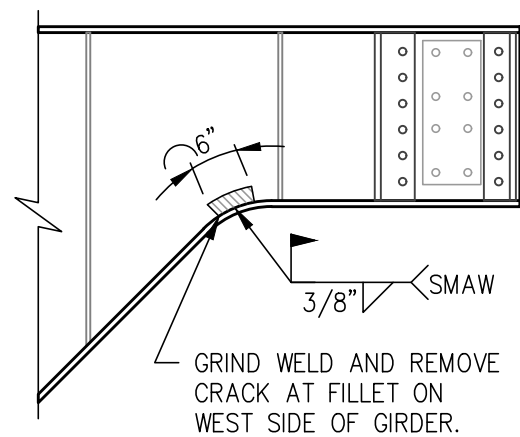
P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\BargeSlip_Rehab_2022.dwg VPort: S11 StrBracing Plot Style: -----



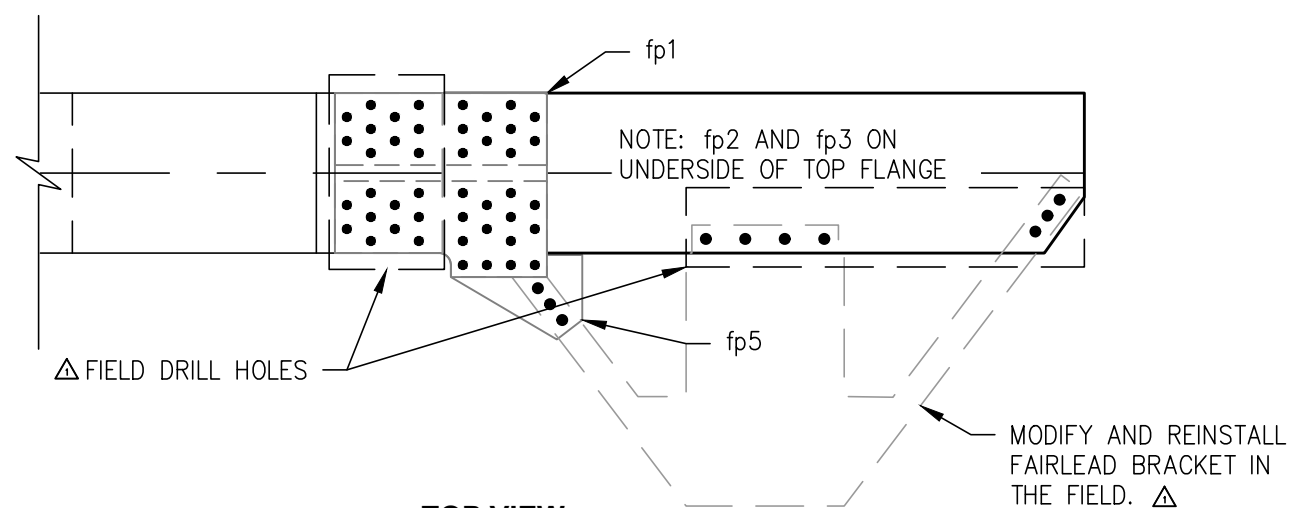
REV.	DATE	BY	REVISION
△	11/16/22	DS	sh1 MODIFIED

ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500			
PROJECT : WHITTIER BARGE SLIP REHAB			
TITLE: STRINGER BRACING DETAILS			
DESIGNED BY: DJS	SCALE : AS NOTED	11	DWG NO.
CHECKED BY:	DATE : 5/25/22		11 OF 17
APPROVED BY:			

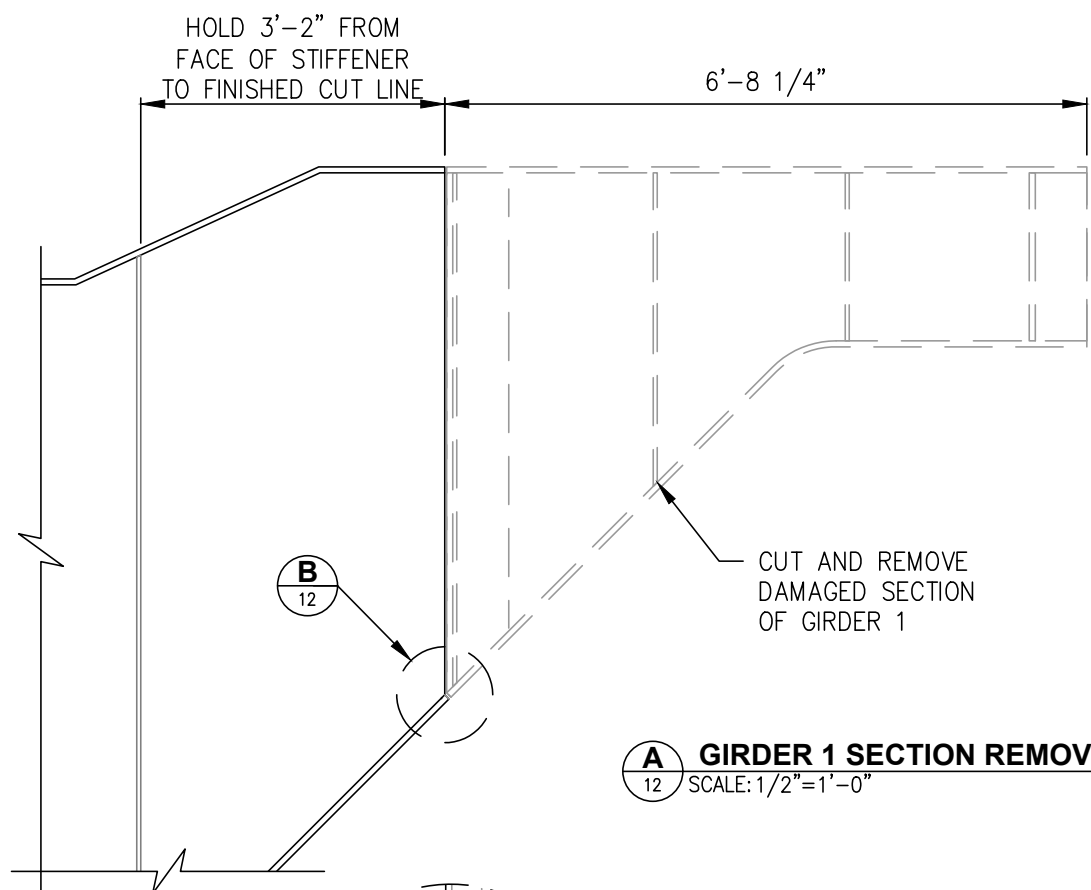
P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\BargeSlip_Rehab_2022.dwg VPort: S12 G1 & G2 REPAIR Plot Style: -----



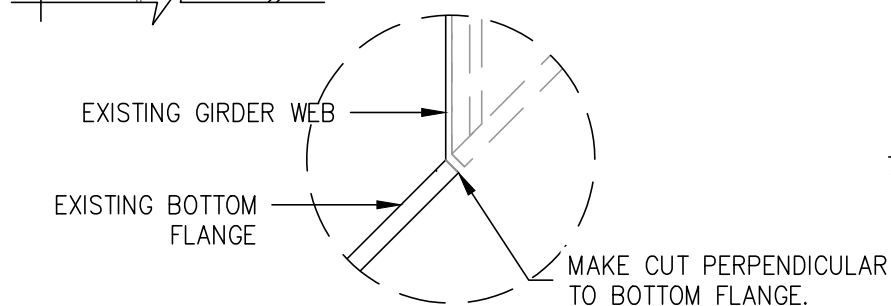
F GIRDER 2 REPAIR
12 SCALE: 1/2"=1'-0"



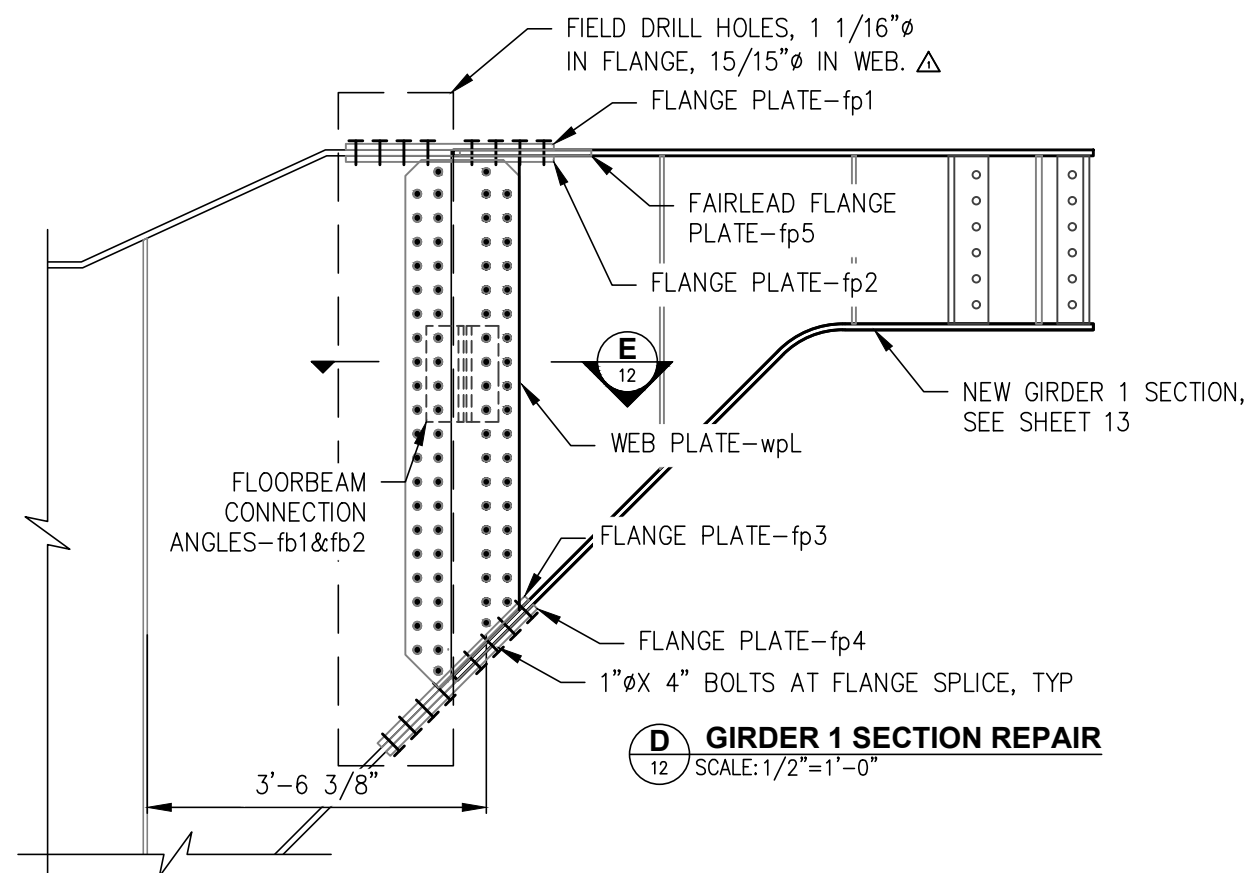
C TOP VIEW GIRDER 1 SECTION REPAIR
12 SCALE: 1/2"=1'-0"



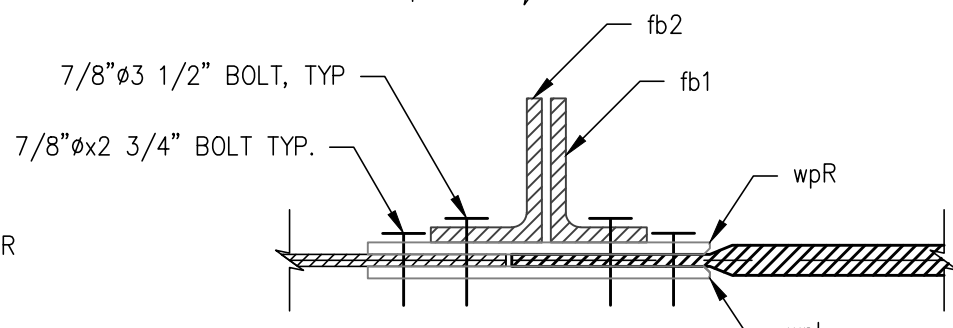
A GIRDER 1 SECTION REMOVAL
12 SCALE: 1/2"=1'-0"



B CUTTING DETAIL
12 SCALE: 1 1/2"=1'-0"



D GIRDER 1 SECTION REPAIR
12 SCALE: 1/2"=1'-0"

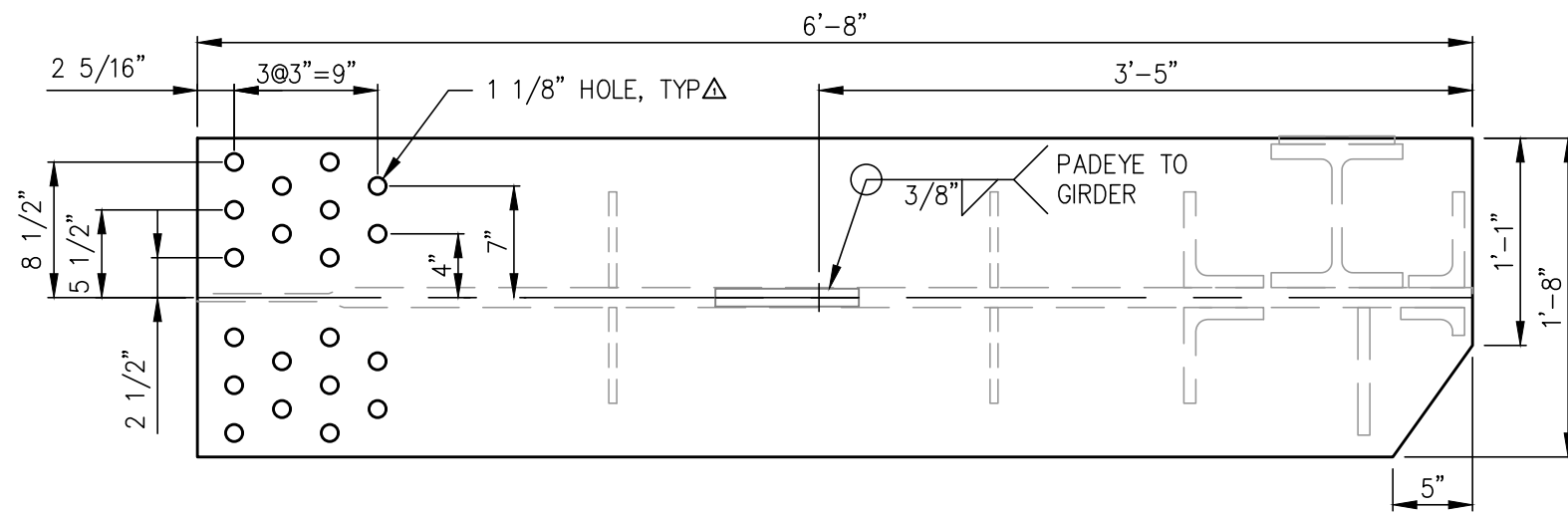


E WEB SPLICE DETAIL
12 SCALE: 1 1/2"=1'-0"

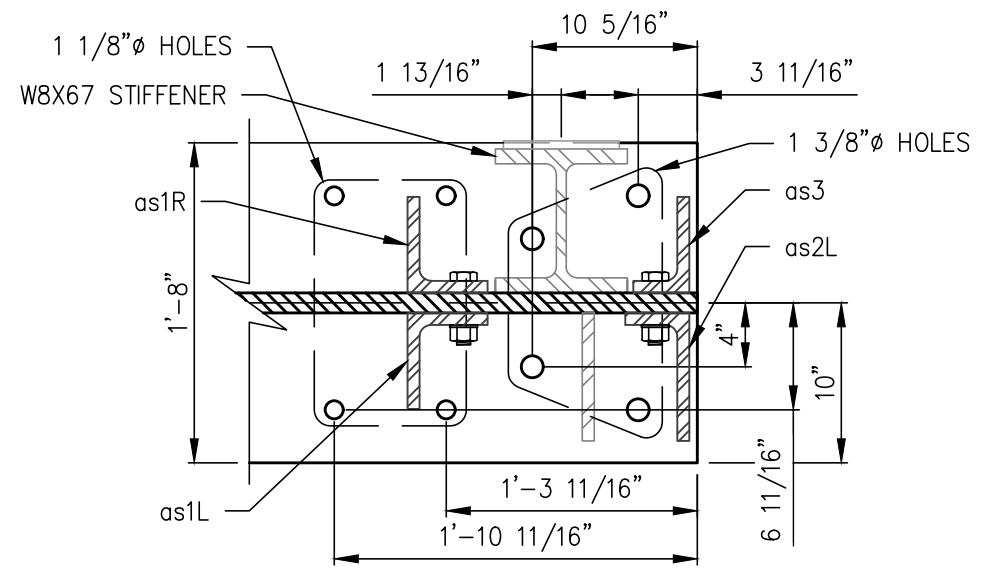
REV.	DATE	BY	REVISION
1	11/16/22	DS	FIELD NOTES

 ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500			
PROJECT : WHITTIER BARGE SLIP REHAB			
TITLE: GIRDER 1 & 2 REPAIR			
DESIGNED BY: DJS	SCALE : AS NOTED	12	DWG NO. 12 OF 17
CHECKED BY:	DATE : 9/1/22		
APPROVED BY:			

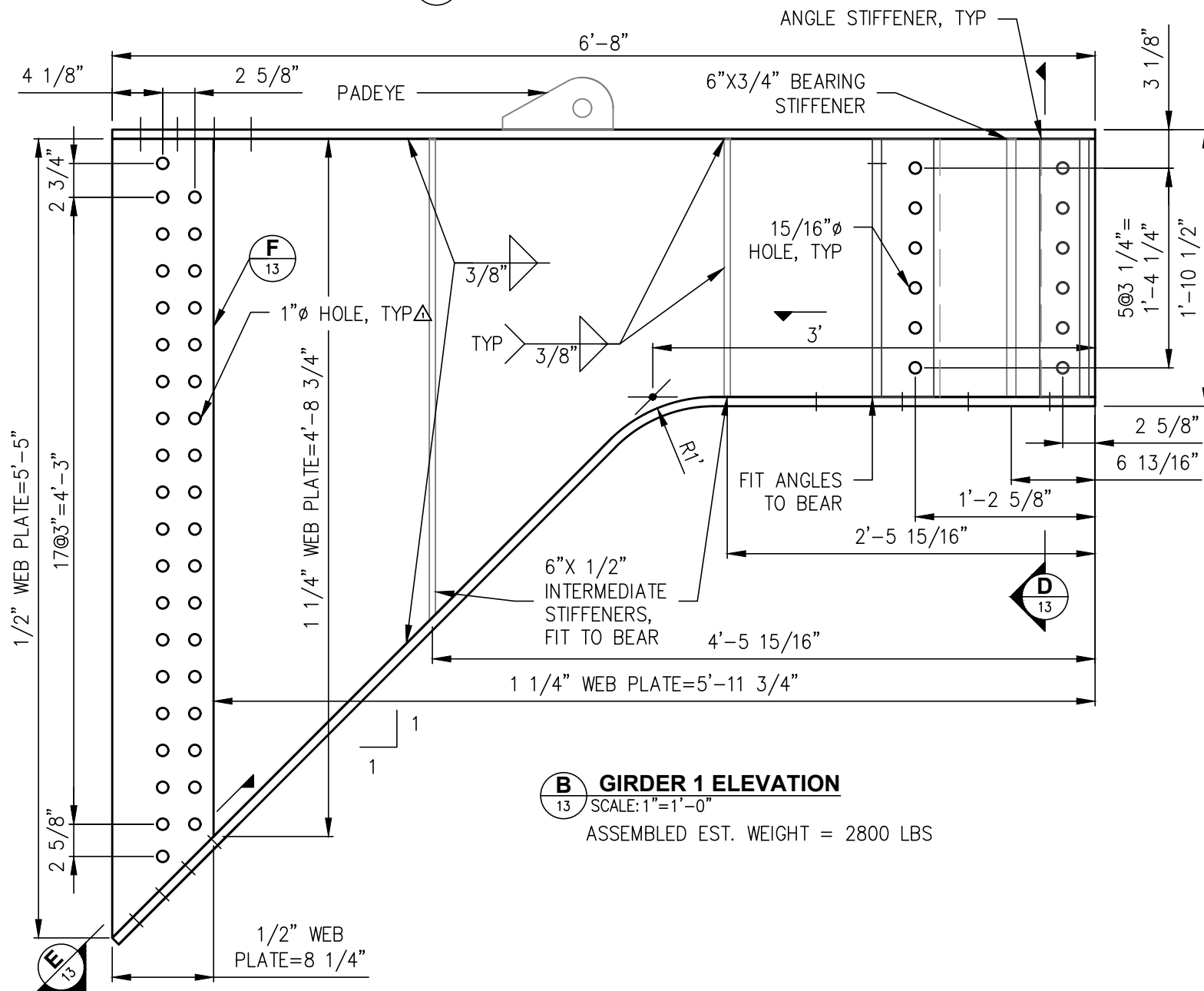
P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\BargeSlip_Rehab_2022.dwg VPort: S13 Girder 1 Plot Style: -----



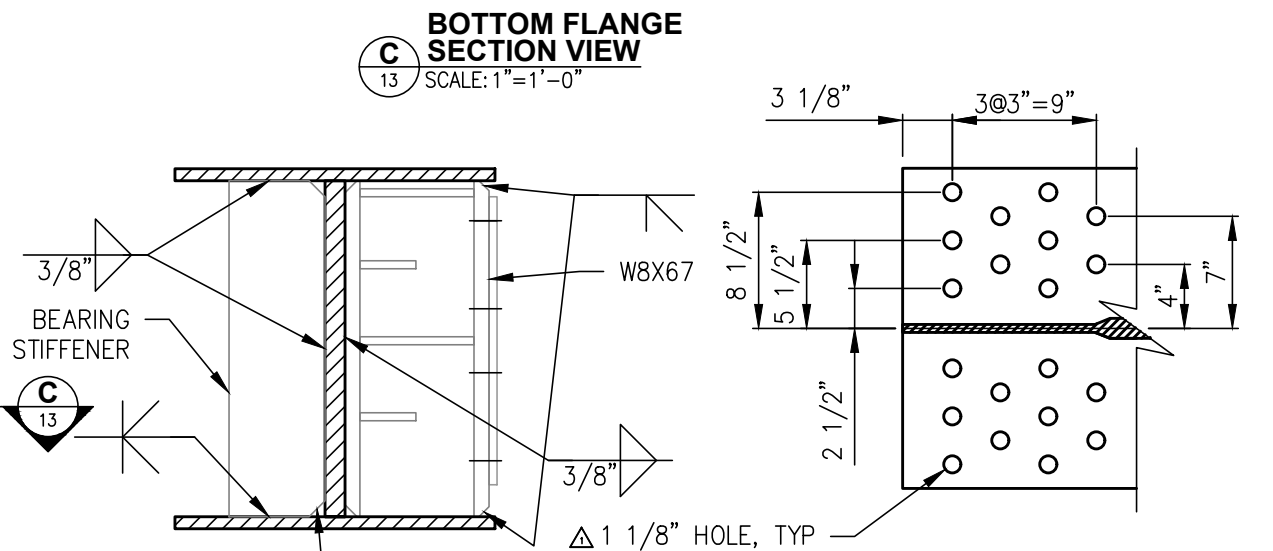
A GIRDER 1 TOP VIEW
13 SCALE: 1"=1'-0"



C BOTTOM FLANGE SECTION VIEW
13 SCALE: 1"=1'-0"

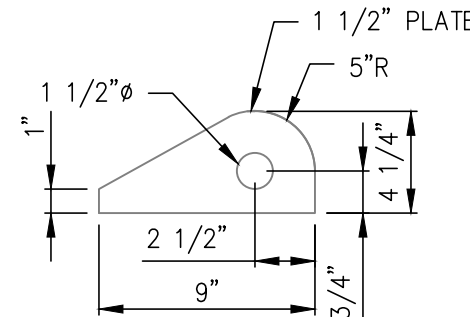


B GIRDER 1 ELEVATION
13 SCALE: 1"=1'-0"
ASSEMBLED EST. WEIGHT = 2800 LBS

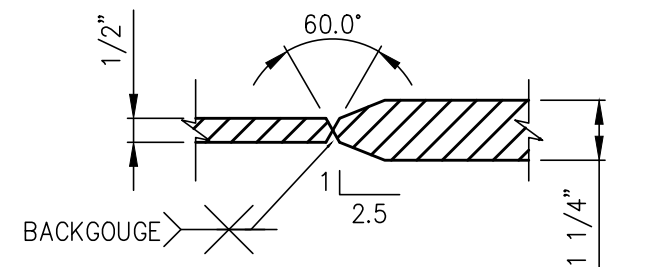


D GIRDER END SECTION VIEW
13 SCALE: 1"=1'-0"

E BOTTOM FLANGE SPLICE SECTION VIEW
13 SCALE: 1"=1'-0"



G PADEYE - 1 REQ'D PL 9"X1 1/8"X4 1/4"
13 SCALE: 1 1/2"=1'-0"

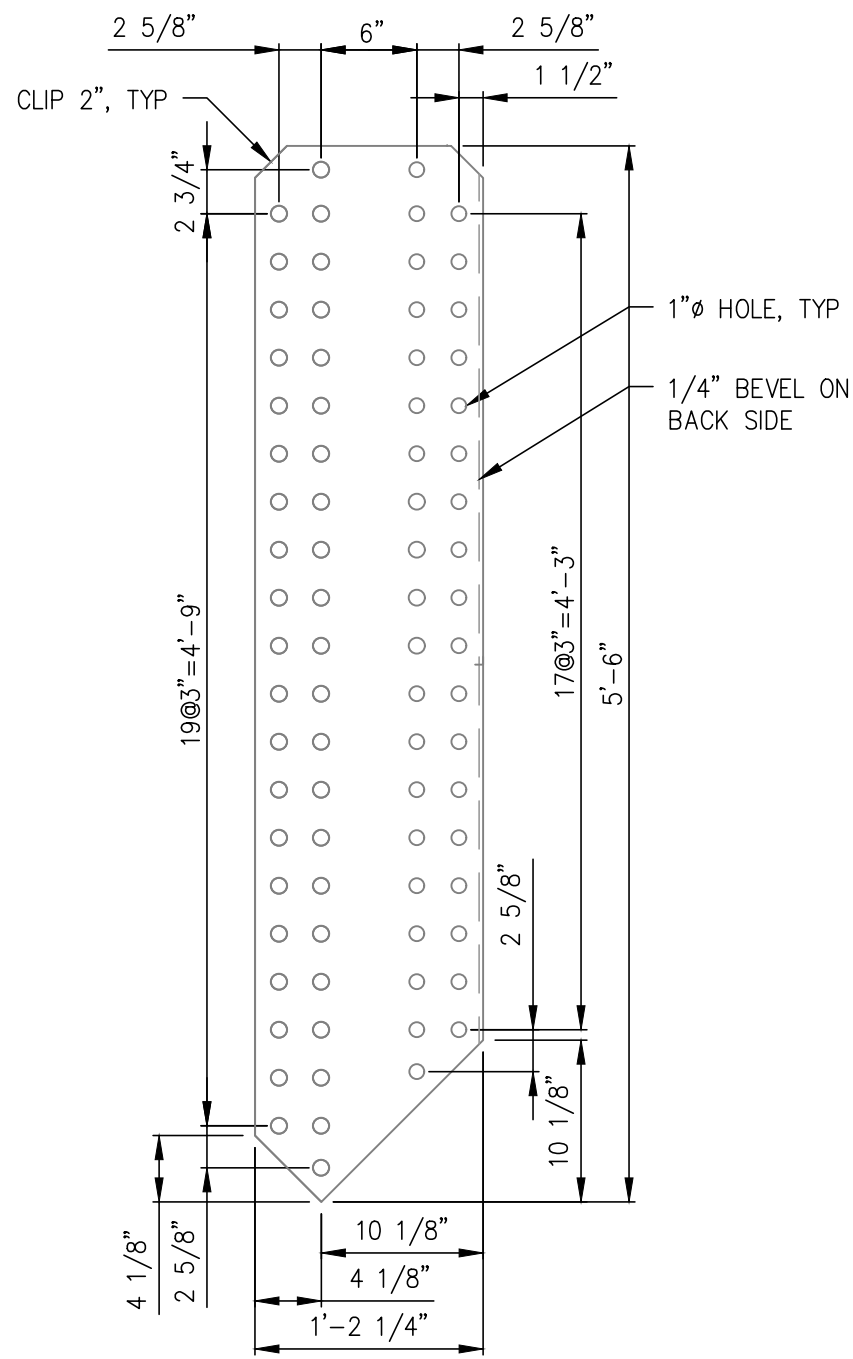


F WEB WELDING DETAIL
13 SCALE: 3"=1'-0"

 ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		PROJECT :	
		WHITTIER BARGE SLIP REHAB	
TITLE:		GIRDER 1 ASSEMBLY	
DESIGNED BY: DJS	SCALE : AS NOTED	13	DWG NO. 13 OF 17
CHECKED BY:	DATE : 9/1/22		
APPROVED BY:			

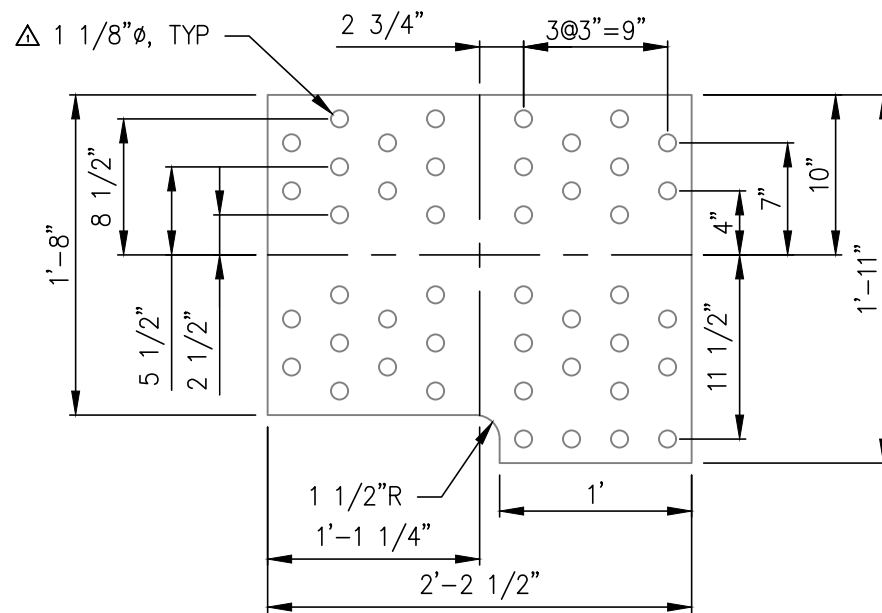
REV.	DATE	BY	REVISION
1	11/16/22	DS	INCREASE BOLT HOLE SIZE

P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\BargeSlip_Rehab_2022.dwg VPort: S14 SPLICE PL Plot Style: -----

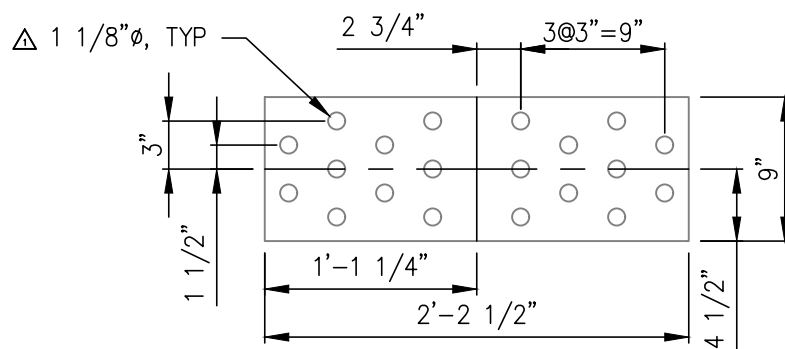


A wpL/R - WEB PLATE - 2 REQ'D
PL 1'-2 1/4"X1/2"X5'-6"
SCALE: 1"=1'-0"

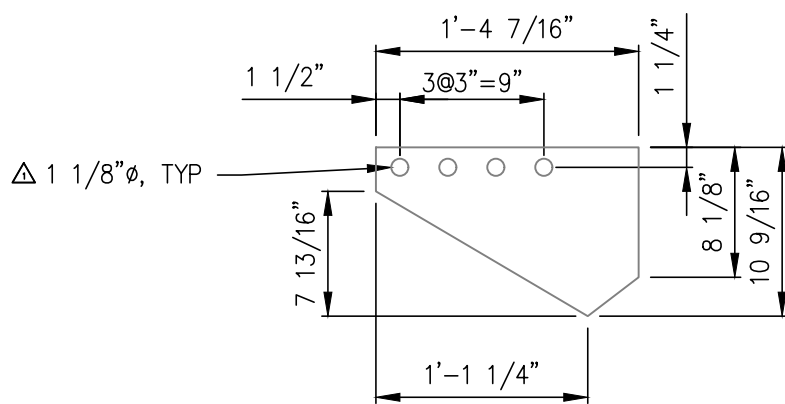
MAKE 1 AS SHOWN (LH)
MAKE 1 OPPOSITE (RH)



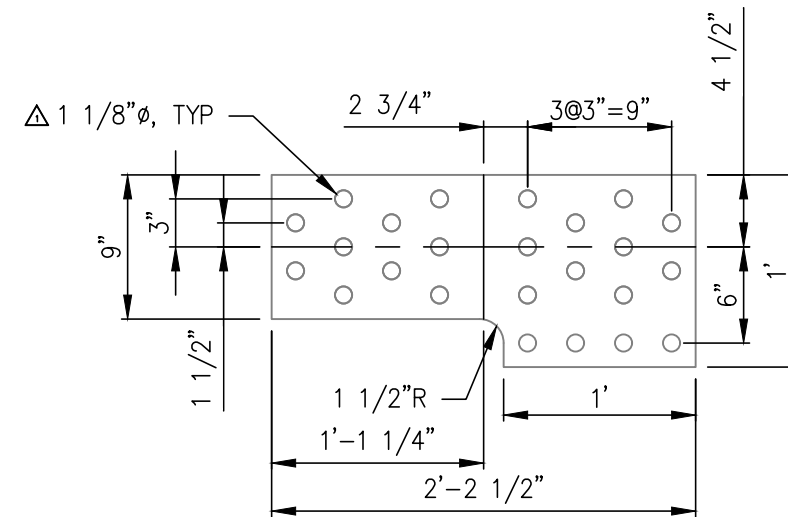
B fp1 - FLANGE PLATE - 1 REQ'D
1'-11"X3/4"X2'-2 1/2"
SCALE: 1"=1'-0"



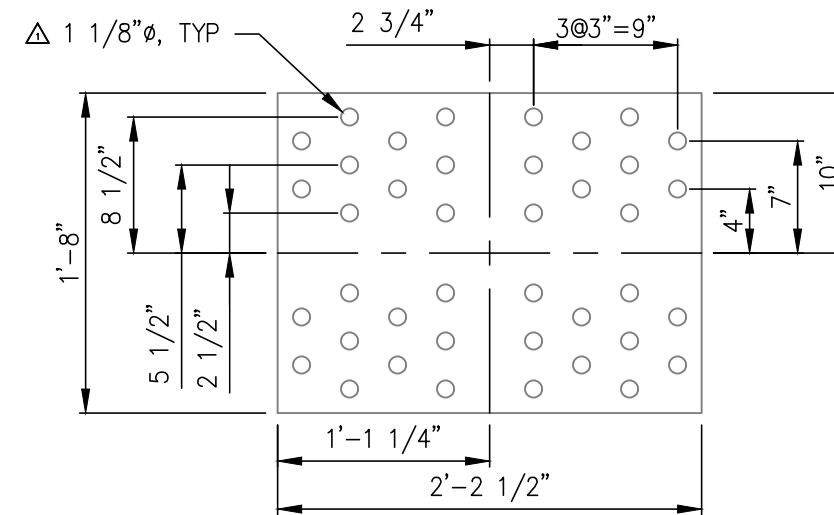
D fp3 - FLANGE PLATE - 3 REQ'D
PL 9"X3/4"X2'-2 1/2"
SCALE: 1"=1'-0"



F fp5 - FAIRLEAD FLANGE PLATE - 1 REQ'D
PL 11 1/2"X3/4"X1'-2 3/4"
SCALE: 1"=1'-0"



C fp2 - FLANGE PLATE - 1 REQ'D
1'-0"X3/4"X2'-2 1/2"
SCALE: 1"=1'-0"



E fp4 - FLANGE PLATE - 1 REQ'D
PL 1'-8"X3/4"X2'-2 1/2"
SCALE: 1"=1'-0"

ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

PROJECT : **WHITTIER BARGE SLIP REHAB**

TITLE: **WEB AND FLANGE SPLICE PLATE DETAILS**

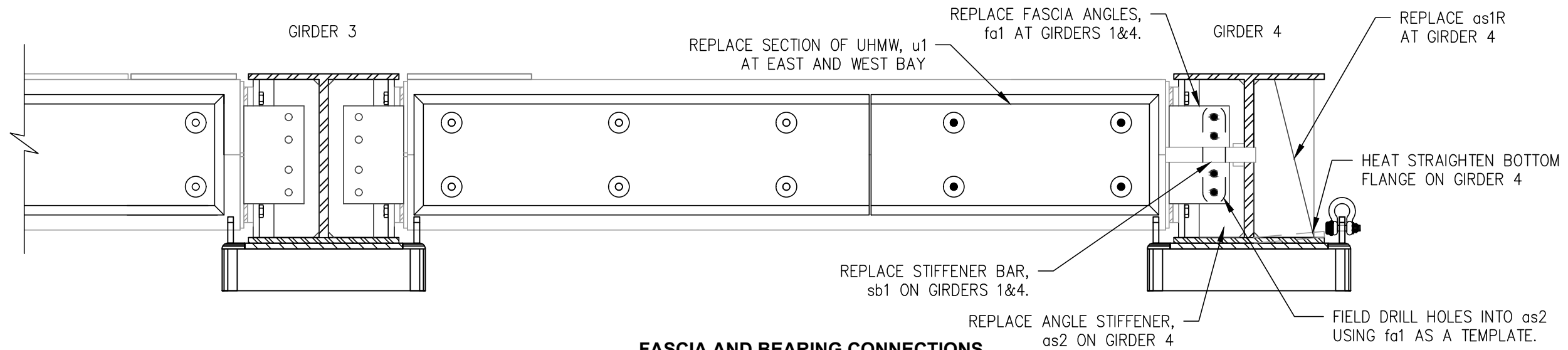
REV.	DATE	BY	REVISION
1	11/16/22	DS	INCREASED BOLT HOLE SIZE

DESIGNED BY: **DJS**
CHECKED BY: _____
APPROVED BY: _____

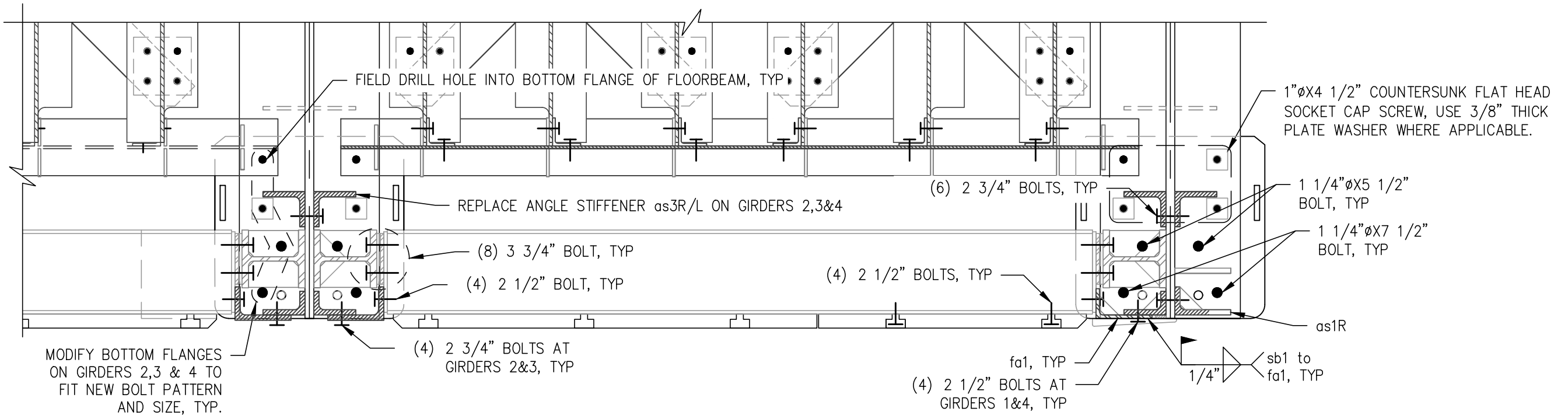
SCALE : AS NOTED
DATE : 9/1/22

DWG NO. **14** OF **17**

P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\BargeSlip_Rehab_2022.dwg VPort: S15 Fascia Conn. Plot Style: -----



A FASCIA AND BEARING CONNECTIONS
FRONT VIEW
SCALE: 3/4"=1'-0"

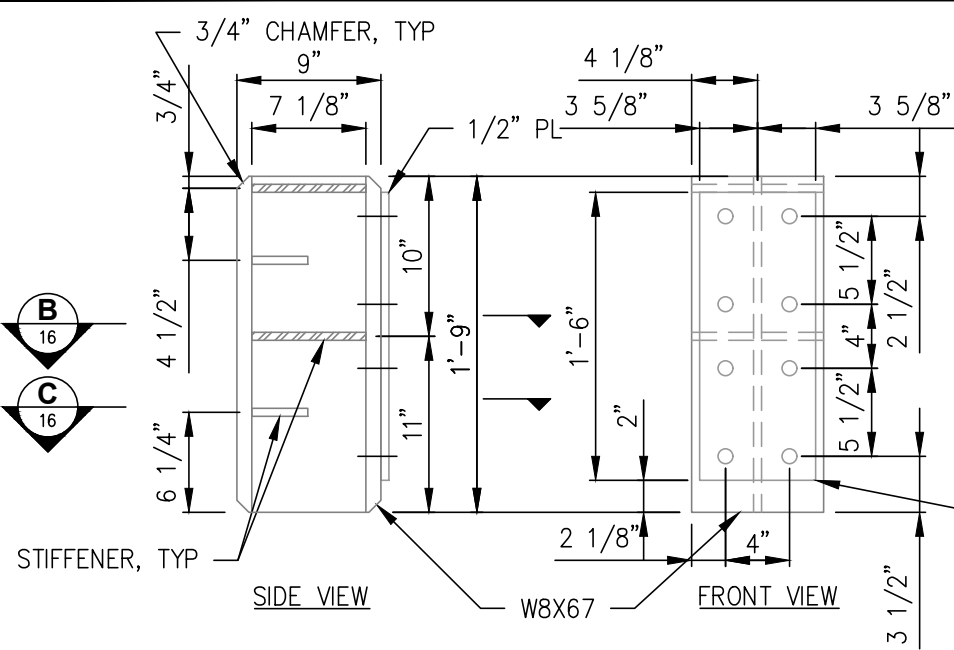


B FASCIA AND BEARING CONNECTIONS
SECTION VIEW
SCALE: 3/4"=1'-0"

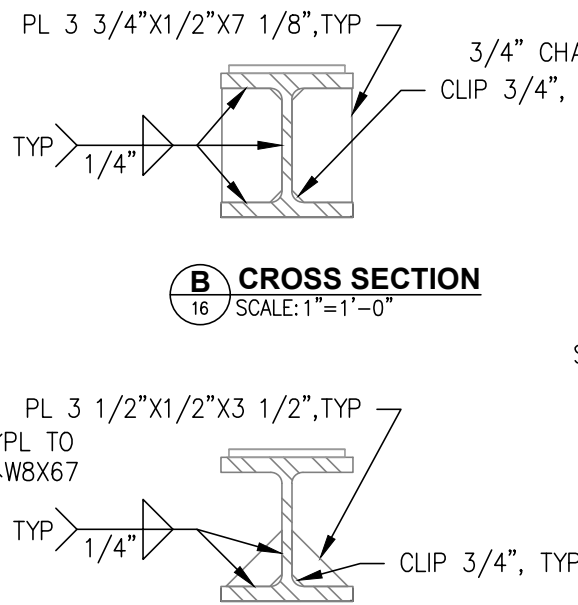
REV.	DATE	BY	REVISION

 ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500			
PROJECT :			
WHITTIER BARGE SLIP REHAB			
TITLE:			
FASCIA AND BEARING CONNECTIONS			
DESIGNED BY: <u>DJS</u>	SCALE : AS NOTED	15	DWG NO.
CHECKED BY: _____	DATE : 9/1/22		15 OF 17
APPROVED BY: _____			

P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\Bargeslip_Rehab_2022.dwg VPort: S16 BRG PARTS Plot Style: -----

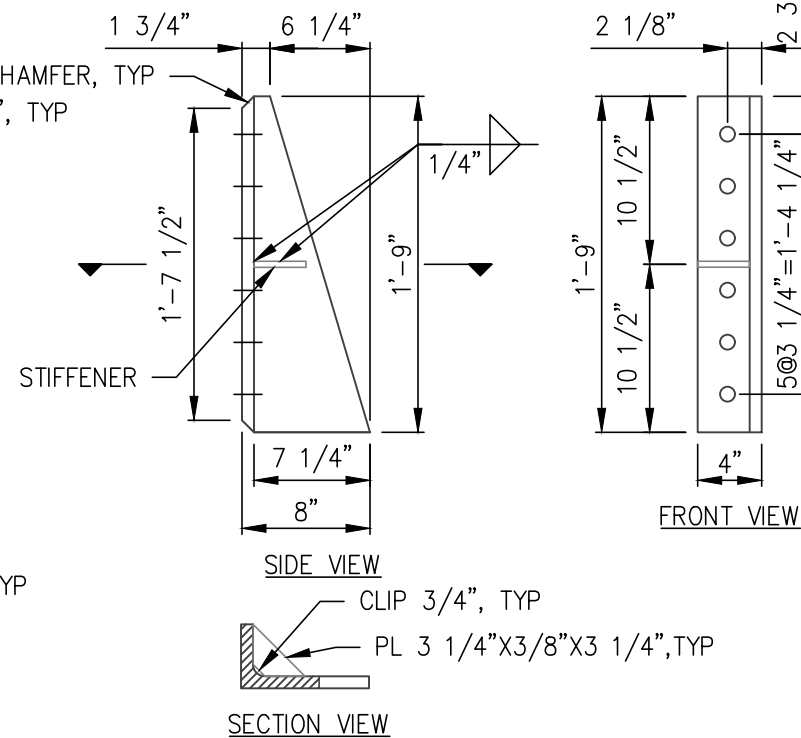


A STIFFENER ASSEMBLY - 1 REQ'D
W8X67X1'-9"
 SCALE: 1"=1'-0"

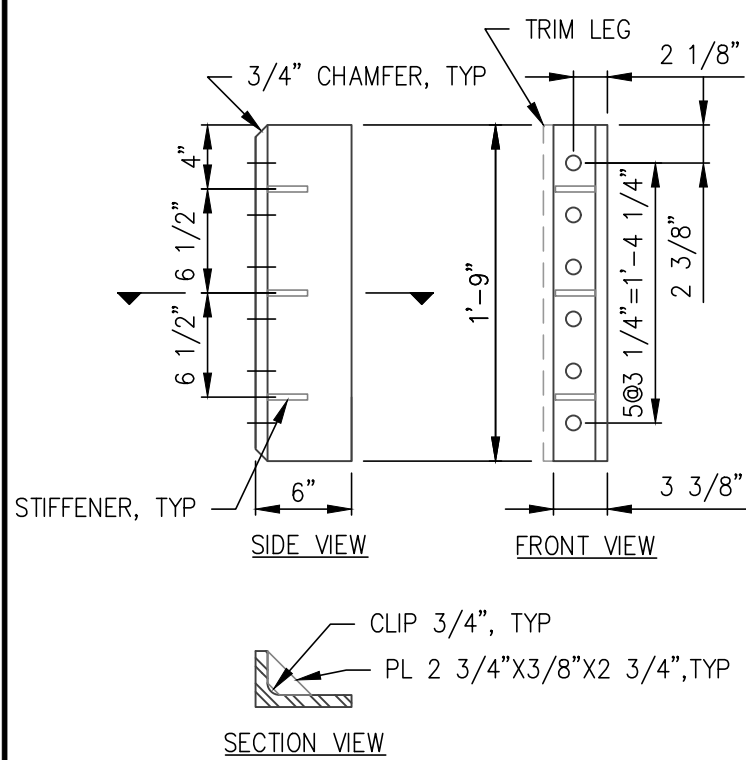


B CROSS SECTION
 SCALE: 1"=1'-0"

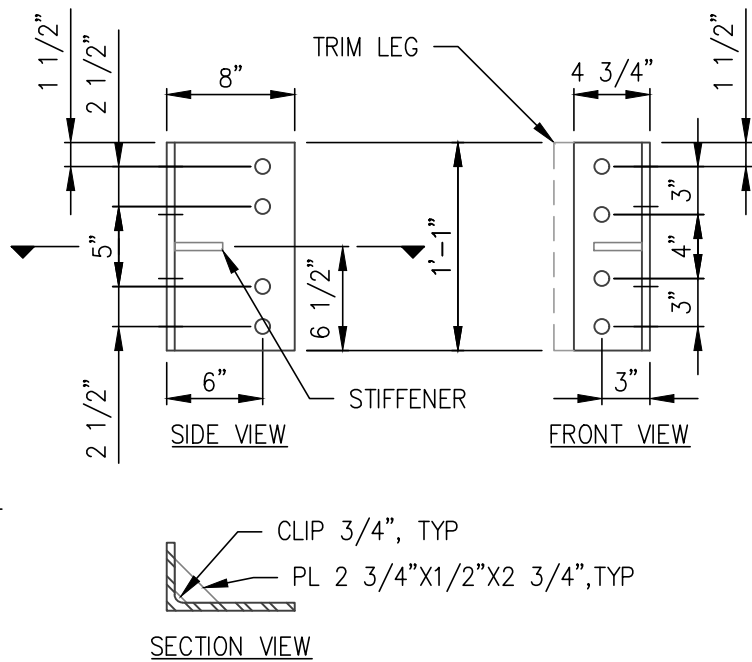
C CROSS SECTION
 SCALE: 1"=1'-0"



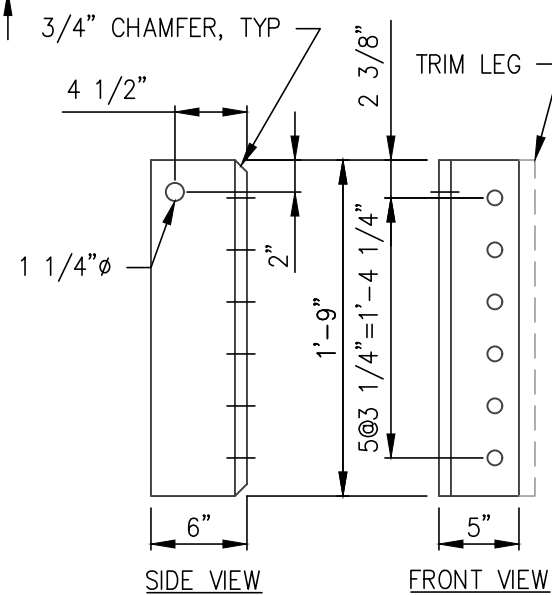
E sb1-STIFFENER BAR - 2 REQ'D
PL-2"X1'-0"X1 1/4"
 SCALE: 1"=1'-0"



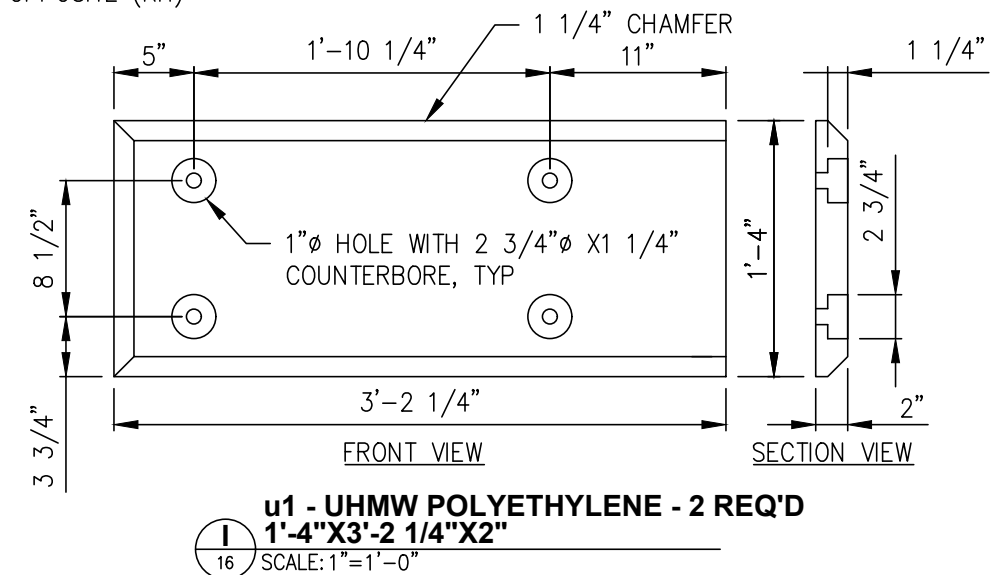
F as2 - ANGLE STIFFENER - 2 REQ'D
L - 6"X4"X3/4"X1'-9"
 SCALE: 1"=1'-0"



G fa1 - FASCIA ANGLE - 2 REQ'D
L - 8"X6"X1/2"X1'-1"
 SCALE: 1"=1'-0"



D as1 R/L - ANGLE STIFFENER - 2 REQ'D
L - 8"X4"X3/4"X1'-9"
 SCALE: 1"=1'-0"
 MAKE (1) AS SHOWN (LH)
 MAKE (1) OPPOSITE (RH)



I u1 - UHMW POLYETHYLENE - 2 REQ'D
1'-4"X3'-2 1/4"X2"
 SCALE: 1"=1'-0"

NOTE:

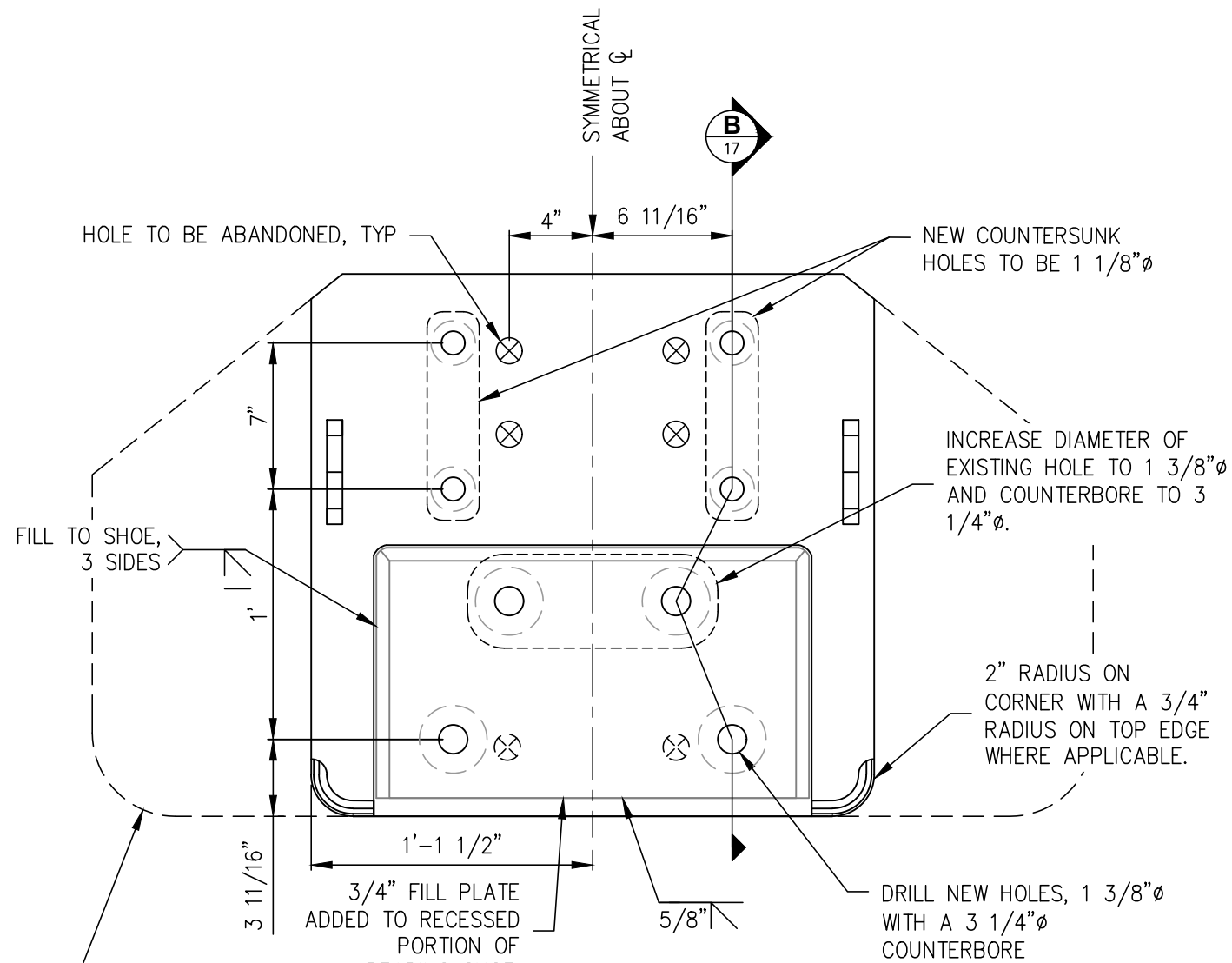
1. ALL HOLES TO BE 1"Ø, UNLESS NOTED. Δ
2. QUANTITIES SHOWN INCLUDE MEMBERS REQUIRED FOR GIRDER 1 ASSEMBLY.

H as3 R/L - ANGLE STIFFENER - 8 REQ'D
L - 6"X6"X3/4"X1'-9"
 SCALE: 1"=1'-0"
 MAKE (4) AS SHOWN (LH)
 MAKE (4) OPPOSITE (RH)

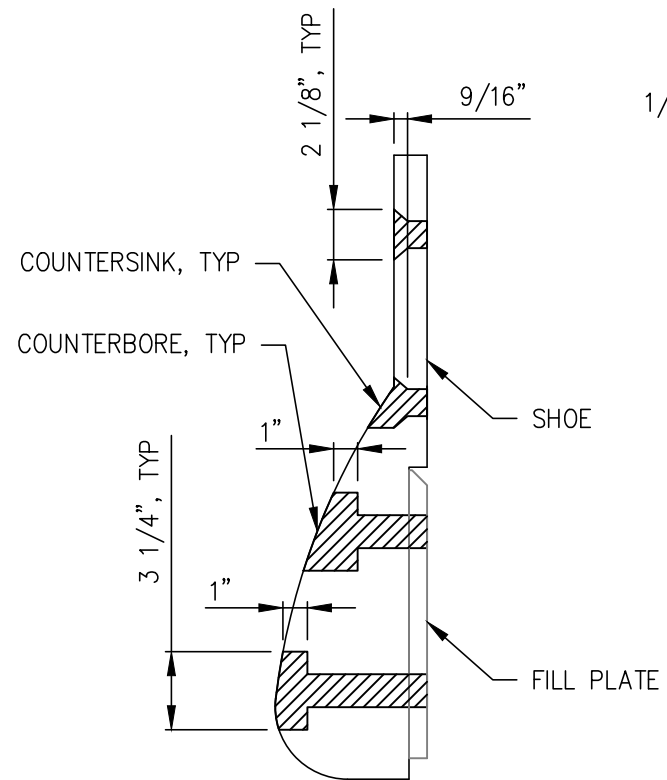
REV.	DATE	BY	REVISION
Δ	11/16/22	DS	INCREASED BOLT HOLE SIZE

ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500			
PROJECT :			
WHITTIER BARGE SLIP REHAB			
TITLE:			
FASCIA AND BEARING MEMBERS DETAILS			
DESIGNED BY:	DJS	SCALE :	AS NOTED
CHECKED BY:		DATE :	9/1/22
APPROVED BY:		16	DWG NO.
			16 OF 17

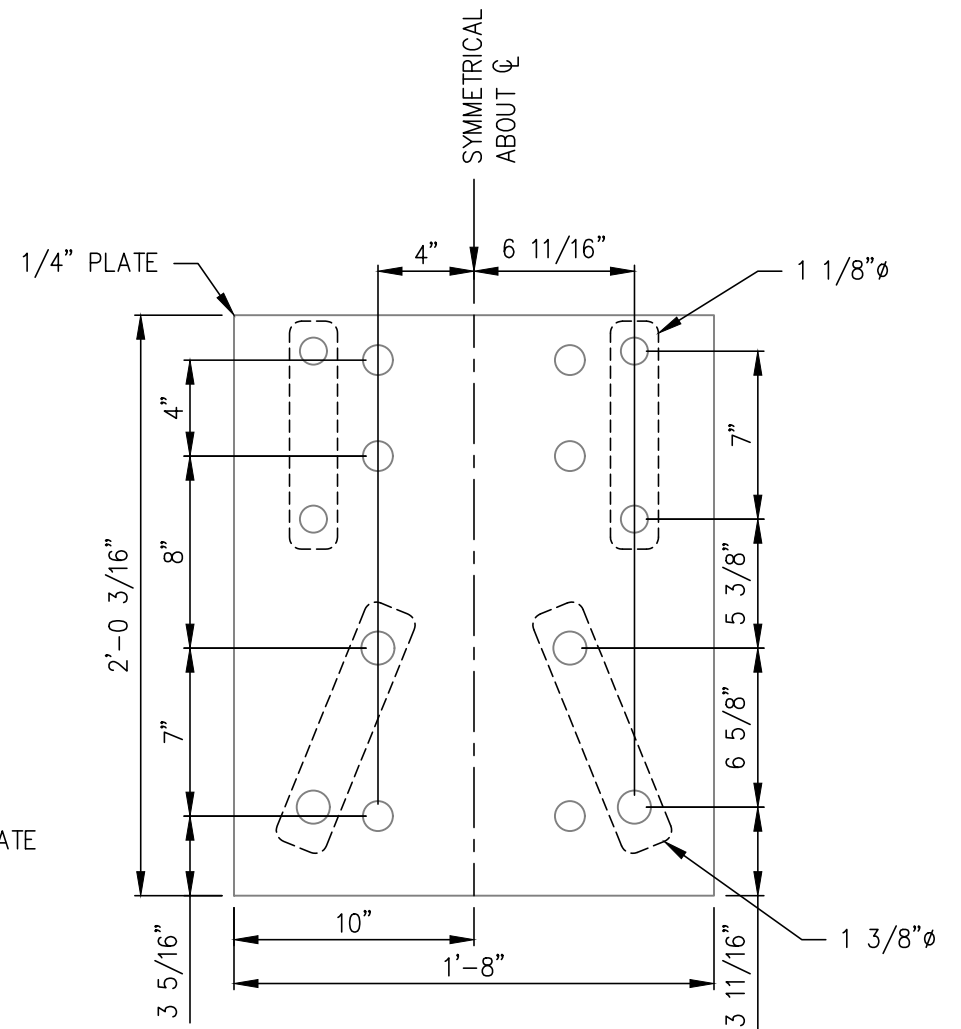
P:\Engineering\Docks & Slips\3. Whittier\Barge slip 2\2022 Slip Rehab\Drawings\Bargeslip_Rehab_2022.dwg VPort: S17 Shoes Plot Style: -----



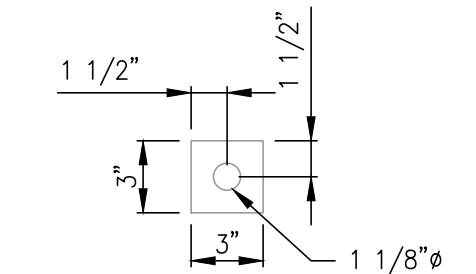
A MODIFIED BEARING SHOE
 17 SCALE: 1 1/2"=1'-0"
 MODIFIED EST. WEIGHT = 690LBS
 SHOE IS CAST STEEL, ASTM A27 GR. 65-35



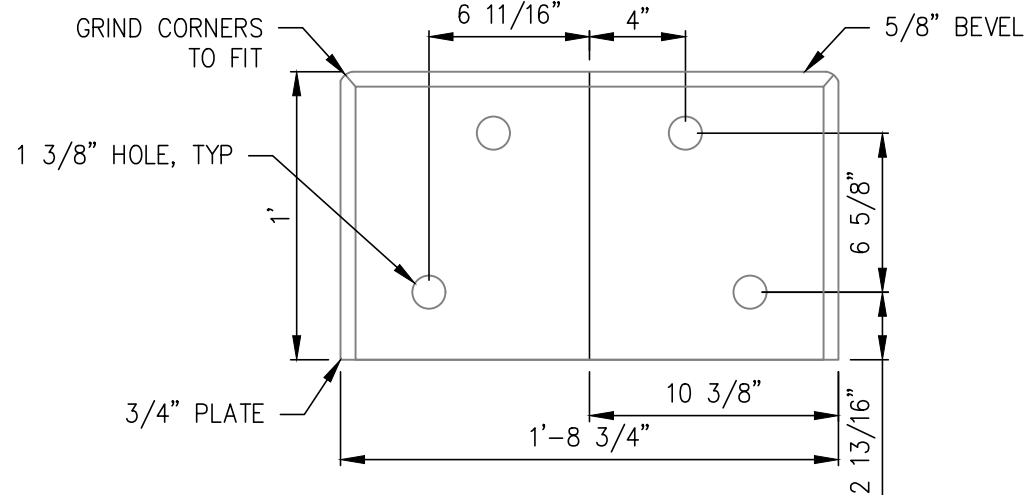
B SECTION VIEW
 17 SCALE: 1 1/2"=1'-0"



C t1- TEMPLATE - 2 REQ'D
PL 1'-8"X1/4"X2'-0 3/16"
 17 SCALE: 1 1/2"=1'-0"
 TEMPLATE TO BE ASTM A36, UNCOATED



E WASHER PLATE - 20 REQ'D
PL 2"X3/8"X2"
 17 SCALE: 1 1/2"=1'-0"



D f1- SHOE FILL PLATE - 4 REQ'D
PL 12"X3/4"X1'-8 3/4"
 17 SCALE: 1 1/2"=1'-0"
 FILL PLATE TO BE ASTM A36

REV.	DATE	BY	REVISION

ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500			
PROJECT : WHITTIER BARGE SLIP REHAB			
TITLE: BEARING SHOE MODIFICATIONS			
DESIGNED BY: DJS	SCALE : AS NOTED	17	DWG NO.
CHECKED BY: _____	DATE : 5/25/22		17 OF 17
APPROVED BY: _____			