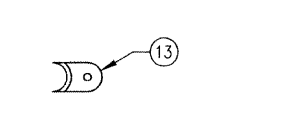
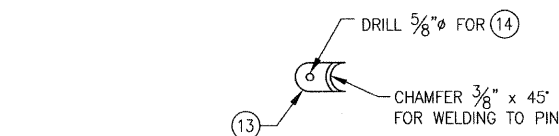


**2-LUG PIVOT DETAIL**  
3 REQUIRED ON BARGE "A-FRAME"  
SCALE: 1" = 1'-0"

**2-LUG PIVOT DETAIL**  
(1) REQUIRED  
SCALE: 1" = 1'-0"

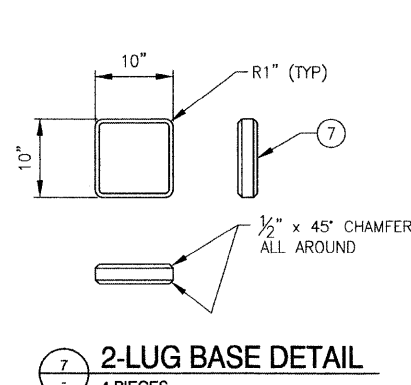
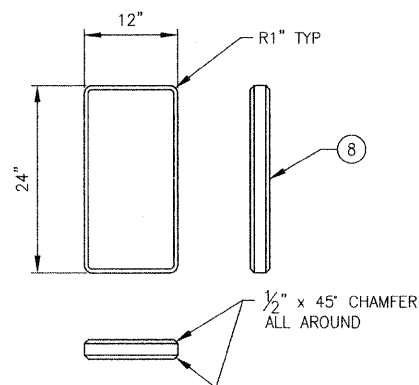
**JAW-EYE TOGGLE DETAIL**  
2 REQUIRED  
SCALE: 1" = 1'-0"

**3-LUG PIVOT DETAIL**  
(1) REQUIRED  
SCALE: 1" = 1'-0"



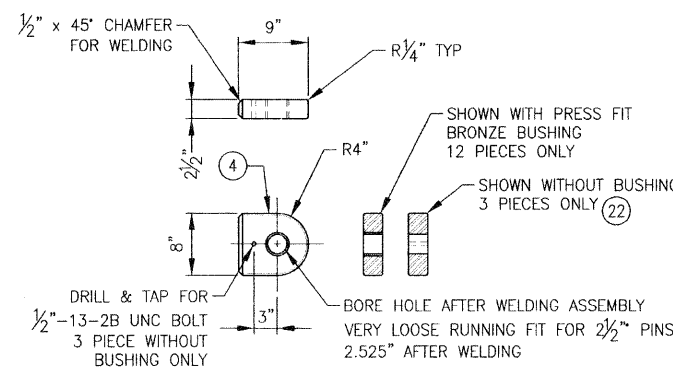
**2-LUG PIN DETAIL**  
1 REQUIRED  
SCALE: 1 1/2" = 1'-0"

**3-LUG PIN DETAIL**  
4 REQUIRED  
SCALE: 1 1/2" = 1'-0"

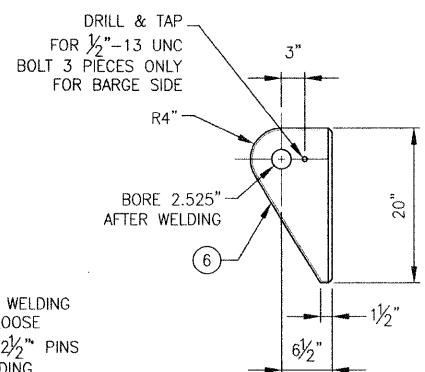
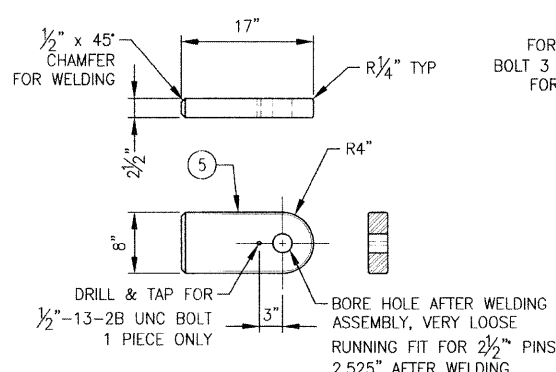
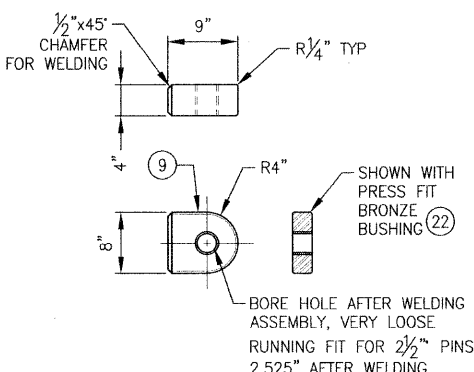


**3-LUG BASE DETAIL**  
2 PIECES  
SCALE: 1" = 1'-0"

**2-LUG BASE DETAIL**  
4 PIECES  
SCALE: 1" = 1'-0"

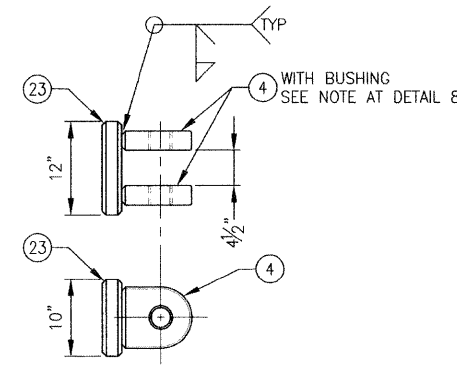


**LUG DETAIL**  
11 PIECES  
SCALE: 1" = 1'-0"



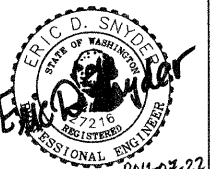
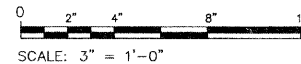
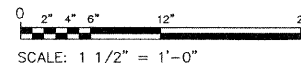
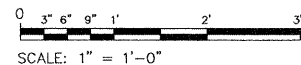
**2-LUG PIVOT DETAIL**  
(9) REQUIRED ON BARGE SIDE  
SCALE: 1" = 1'-0"

**PLATE BRACKET DETAIL**  
(6) REQUIRED ON BARGE  
SCALE: 3" = 1'-0"



**2-LUG PIVOT DETAIL**  
1 REQUIRED  
SCALE: 1" = 1'-0"

BILL OF MATERIAL				
PC NO.	QTY	DESCRIPTION	MATERIAL/SPECIFICATION	REMARKS
1	6 EA	PLATE 1/2" BRACKET	ASTM A-36	SEE DETAIL 12
2	3 EA	PLATE 1/4", SHELL INSERT	ASTM A-36	SEE SHEET 21, DETAIL 4
3	3 EA	PLATE 1/4", DECK INSERT	ASTM A-36	SEE SHEET 21, DETAIL 3
4	15 EA	PLATE 2 1/2", LUG, 9" LONG	ASTM A-36	SEE DETAIL 8
5	2 EA	PLATE 2 1/2", LUG, 17" LONG	ASTM A-36	SEE DETAIL 10
6	9 EA	PLATE 2 1/2", LUG, 20" LONG	ASTM A-36	SEE DETAIL 11
7	4 EA	PLATE 2 1/2", LUG BASE PLATE, 10"x10"	ASTM A-36	SEE DETAIL 7
8	2 EA	PLATE 2 1/2", LUG BASE PLATE, 24"x12"	ASTM A-36	SEE DETAIL 6
9	2 EA	PLATE 4", LUG, 9" LONG	ASTM A-36	SEE DETAIL 9
10	1 EA	PLATE 4 1/2", SPACER BLOCK, 8" LONG	ASTM A-36	SEE DETAIL 3
11	1 EA	ROUND BAR 2 1/2", 2-LUG PIN	ASTM A-36	SEE DETAIL 1
12	4 EA	ROUND BAR 2 1/2", 3-LUG PIN	ASTM A-36	SEE DETAIL 2
13	5 EA	FB 2 1/2"x2 1/2", PIN RETAINING TAB	ASTM A-36	SEE DETAIL 1
14	5 EA	HEX HEAD BOLT 1/2"-13 UNC 2A, PIN RETAINING BOLT	ASTM F593, TYPE 316 SS	-
15	5.5 SF	PLATE 3/8"	ASTM A-36	-
16	1 SF	PLATE 1/2", PADEYE	ASTM A-36	-
17	36 LF	STRUCTURAL TUBE 6x6x3/8	ASTM A500 GR B	-
18	4 LF	S-BEAM S10x35	ASTM A-36	-
19	9 LF	CHANNEL C7x19.1	ASTM A-36	-
20	53 LF	ANGLE L2x2x1/4	ASTM A-36	-
21	31 SF	EXPANDED METAL	CARBON STEEL	McNICHOLS 1/2 #1.3S
22	AS REQ	BUSHING, 3" ODx2 1/2" ID	BRONZE	-
23	1 EA	PLATE 2 1/2", LUG BASE PLATE, 10"x12"	ASTM A-36	SEE DETAIL 13



FILE NAME =	USER NAME =	DESIGNED - E. SNYDER	REVISED - REV A 07/21/2011
	PLOT SCALE =	DRAWN - J. WALKER	REVISED -
	PLOT DATE =	CHECKED - P. MARTIN	REVISED -
		DATE - 10/04/2010	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

IDOT BRUSSELS FERRY  
TOW LINKAGE - DETAILS

SCALE: NTS SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
304	21-3	JERSEY	26	22
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO.	76D29	