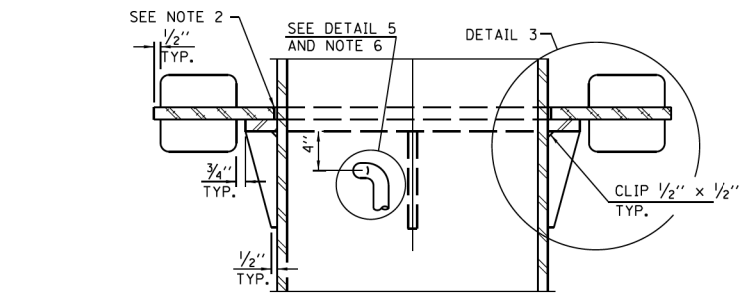
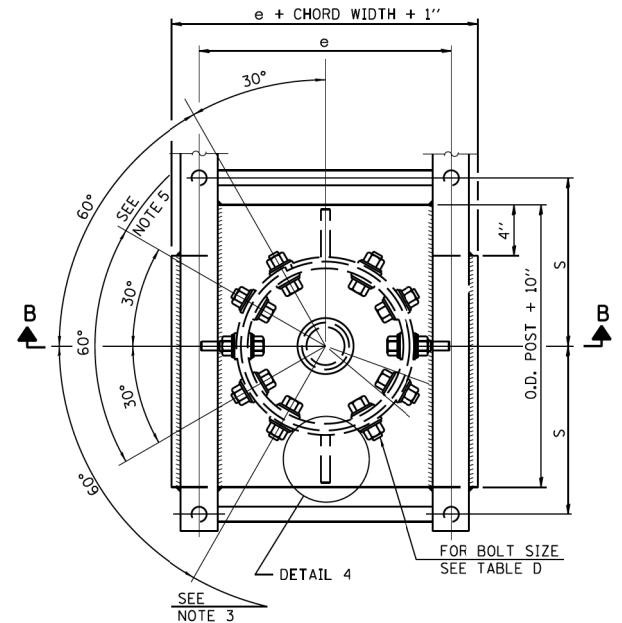


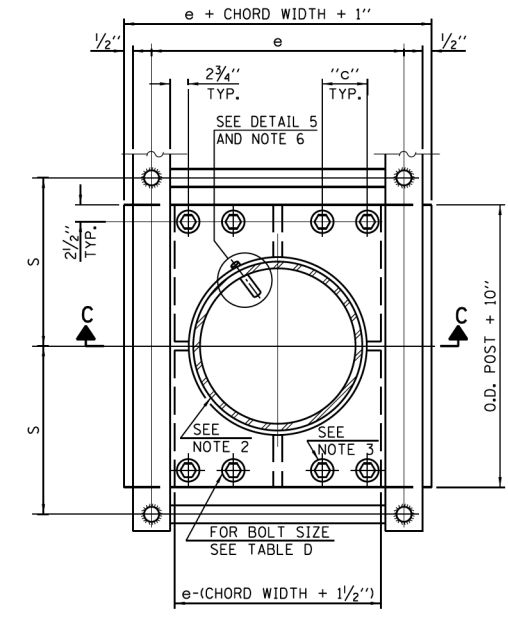
SECTION B-B



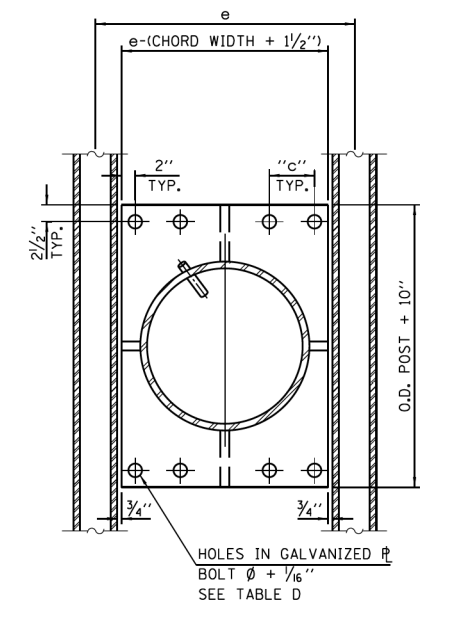
SECTION C-C



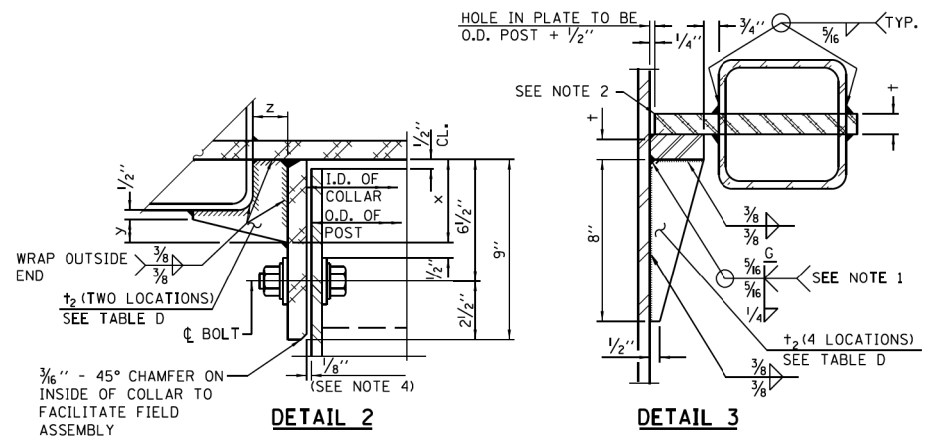
VIEW D-D (Cap Plate)



SECTION E-E (Juncture Plate)



SECTION F-F (SETTING PLATE)

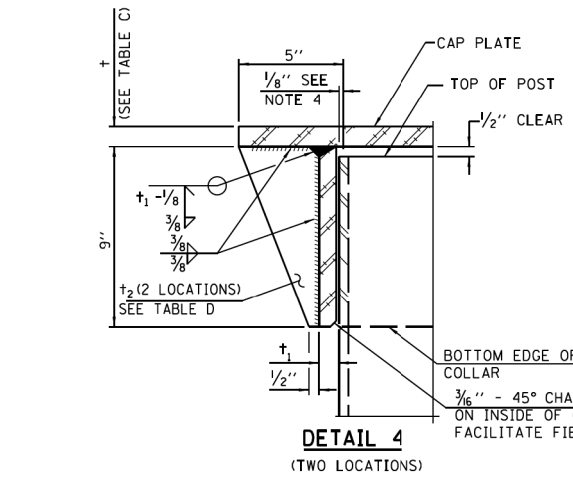


NOTES:

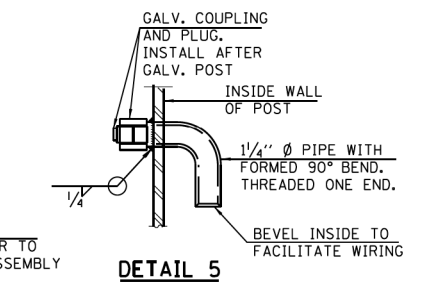
1. GRIND TOP IF REQUIRED TO FULLY SEAT PLATE. REPAIR DAMAGED GALVANIZING BEFORE ASSEMBLY.
2. AFTER TIGHTENING LOWER CONNECTION BOLTS, FILL GAP WITH NON-HARDENING SILICONE CAULK SUITABLE FOR EXTERIOR EXPOSURE AND ACCEPTABLE TO THE ENGINEER. COST IS INCLUDED IN OVERHEAD SIGN STRUCTURE CANTILEVER.
3. CONNECTION BOLTS IN COLLAR AND BOLTS AT LOWER CHORD CONNECTION MUST BE HIGH STRENGTH WITH MATCHING LOCK NUTS. LOWER CONNECTION BOLTS MUST HAVE 2 FLATWASHERS EACH.
4. AFTER GALVANIZING, COLLAR I.D. SHALL EQUAL O.D. OF GALVANIZED POST PLUS 1/8" (±1/16") MAXIMUM GAP BETWEEN POST AND COLLAR AT ANY LOCATION SHALL BE 1/8" BEFORE TIGHTENING BOLTS.
5. OPTIONAL FULL PENETRATION WELD IN COLLAR. (TWO LOCATIONS MAXIMUM (180° APART) X-RAY OR UT 100%) ALL BOLTS SHOWN ARE HIGH STRENGTH.
6. ORIENT PIPE TOWARD SIGN PANEL SIDE. HOLE IN POST = O.D. PIPE + 1/8".

B.C. = BOLT CIRCLE

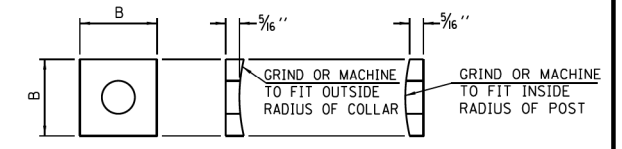
APPROVED: *Paul Kovacs* CHIEF ENGINEER DATE 2-7-2012



DETAIL 4 (TWO LOCATIONS)



DETAIL 5



BOLT SIZE	CONTOURED WASHERS HOLE DIA.	B
1/8"Ø	1/4"Ø	2/4"
1/4"Ø	1 3/8"Ø	2/4"
1/2"Ø	1 5/8"Ø	2/4"

CONTOURED WASHERS

TABLE D: BOLT SCHEDULE

TRUSS TYPE	POST OUTSIDE DIAMETER	JUNCTURE & COLLAR CONNECTION BOLT DIAMETER	LOWER JUNCTURE BOLT SPACING DIMENSION "c"	PLATE THICKNESS		STIFFENER THICKNESS	SIDE RIBS		
				(t)	(t ₁)		(t ₂)	x	y
15-D	16"	1/8"	3 1/8"	3/4"	1/2"	1/2"	4 7/8"	2 5/8"	1 1/2"
20-D	20"	1/8"	3 1/8"	1"	3/4"	1/2"	4 7/8"	2 1/4"	1 5/8"
25-D	24"	1/4"	3 3/4"	1"	3/4"	1/2"	4 7/8"	2 1/4"	2 5/8"
30-D	28"	1/4"	3 3/4"	1 1/8"	7/8"	3/4"	4 7/8"	1 9/8"	3"
35-D	32"	1/4"	3 3/4"	1 1/8"	7/8"	3/4"	4 7/8"	1 9/8"	4"
40-D	36"	1/2"	4 1/2"	1 1/4"	1"	3/4"	4 9/8"	1 1/8"	1 7/8"
45-D	38"	1/2"	4 1/2"	1 1/4"	1"	3/4"	4 9/8"	1 1/8"	3 3/8"
50-D	40"	1/2"	4 1/2"	1 1/4"	1"	3/4"	4 9/8"	1 1/8"	2 7/8"

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OVERHEAD SIGN STRUCTURE CANTILEVER TYPE, STEEL

STANDARD F4-01

BOWMAN, BARRETT & ASSOCIATES INC. CONSULTING ENGINEERS Chicago, Illinois 312.228.0100 www.bbainc.com

FILE NAME = #FILES#	USER NAME = default	DESIGNED -	REVISED -
		DRAWN -	REVISED -
		CHECKED - RGR	REVISED -
		DATE - 6/19/2012	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TOLLWAY STANDARD DRAWING

SCALE: SHEET NO. N/A OF N/A SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	49-1-R-1	LAKE	677	662C
CONTRACT NO. 60L77				
ILLINOIS FED. AID PROJECT				

S:\1101\95-CADD\60L77 IL 175\60L77 Sheets\0160L77-INT-151TH.dwg