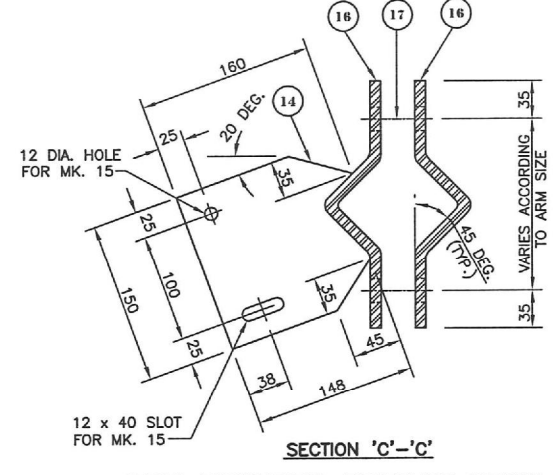
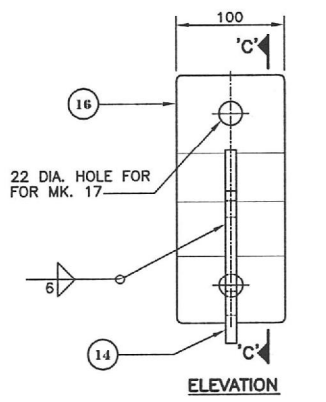
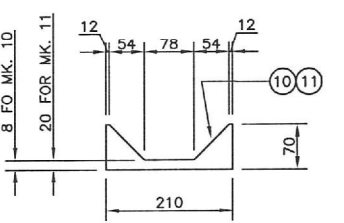
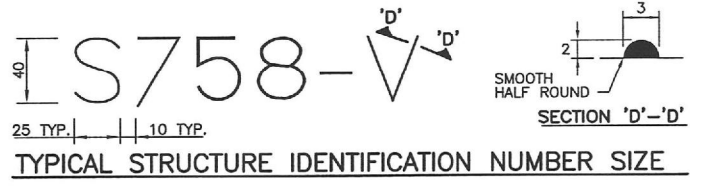


HANDHOLE-MARK H1 & H2



SIGN MOUNTING BRACKET DETAIL FOR SIGN BOXES (NONE REQUIRED)



BILL OF MATERIALS		
MK.	QTY.	DESCRIPTION
1	1	OCTAGONAL SHAFT 240 A/F TO 200 A/F x 6.35
2	1	OCTAGONAL ARM 200 A/F TO 130 A/F x 6.35
3	1	BASE PLATE 40 THICK
4		
5	1	BACKUP STRIP 40 x 6
6	1	END PLATE 130 A/F OCTAGONAL 6 THICK
7	8	19 DIA. A325 BOLTS GALVANIZED
8	2	FLANGE PLATE 400 x 400 x 32
9	2	SIDE GUSSET PLATE 20 x 400 x 135
10	1	TOP GUSSET PLATE 10 THICK
11	1	BOTTOM GUSSET PLATE 10 THICK
12	1	COVER PLATE 210 DIA x 10 THICK
13	2	OCTAGONAL INTERIOR GUSSET PLATE 8 THICK
SIGN MOUNTING BRACKETS (NONE REQ'D.)		
14	4	BRACKET PLATE 10 THICK
15	8	10 DIA. BOLTS S/S (TYPE 316)
16	8	CLAMP PLATE 10 THICK
17	8	20 DIA. BOLT S/S (TYPE 316)
HANDHOLE MARK H1		
18	1	COVER PLATE 11 GA. x 160x 340 (A569)
19	1	REINFORCING RING 8 x 65 x 830
20	2	CLAMP BAR 6 x 40 x 180
21	2	10 DIA. x 140 BOLT S/S (TYPE 316)
22	1	GROUND STUD ASSEMBLY 10 DIA. x 40
HANDHOLE MARK H2		
23	1	COVER PLATE 11 GA. x 130 x 220 (A569)
24	1	REINFORCING RING 8 x 65 x 555
25	1	CLAMP BAR 6 x 40 x 150
21	1	10 DIA. x 140 BOLT S/S (TYPE 316)
22	1	GROUND STUD ASSEMBLY 10 DIA. x 40

NOT USED

- NOTES:**
- 1. MARK NO. 7, 15 & 17 C/W NUT AND WASHER.
 - 2. MARK NO. 20 & 25 C/W 8-DIA. PUNCHED 10 N.C. TAPPED AT THE CENTER OF PLATE.
 - 3. MARK NO. 21 C/W CUP WASHER.
 - 4. MARK NO. 22 C/W 2-10 DIA. HEX NUT, 2-TERMINAL WASHER, & 1-LOCKWASHER

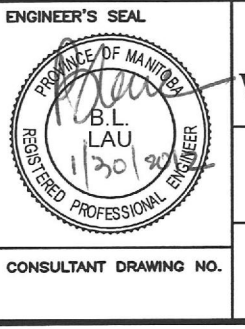
GENERAL NOTES

- DESIGN DATA**
AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 5TH EDITION, 2009.
DESIGN WIND LOAD = 1.44 kPa (30 PSF)
DESIGN ICE LOAD = 0.15 kPa (3 PSF)
- ALL MATERIALS SHALL BE CSA G40.21 - 350W STRUCTURAL STEEL UNLESS OTHERWISE NOTED.
- ALL MATERIALS EXCEPT STAINLESS STEEL AND ALUMINUM SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123-09 TO A MIN. NET RETENTION OF 600 g/m²
- ALL AREAS OF DAMAGED GALVANIZING SHALL BE REPAIRED WITH SELF-FLUXING LOW TEMPERATURE, ZINC BASED ALLOY ROD OR SPRAY-ON COATING CALLED "ZINGA".
- NEW STRUCTURE TO BE INSTALLED ON NEW CONCRETE PILE FOUNDATION AND ANCHOR BOLTS.
- NEW 50 mm. MAX. GROUT PAD TO BE PROVIDED AFTER INSTALLING THE STRUCTURE.
- SIGNS**
TWO SIGNS (PLATES)
MAXIMUM SIZE 915 x 915 mm. SUPPLIED AND INSTALLED (C/W BRACKETS) BY THE CITY OF WINNIPEG TRAFFIC SERVICES BRANCH.

- NOTES**
- 1. PROVIDE "RAISED" IDENTIFICATION NO. WITH WELDING ELECTRODE FOR THE SIGN STRUCTURE.
 - 2. GRIND ALL SHARP POINTS AND EDGES.

B.M. ELEV.				
0	ISSUED FOR TENDER	12/01/30	JGW	
NO.	REVISIONS	DATE	BY	DATE

DILLON CONSULTING			
DESIGNED BY	CDW	CHECKED BY	MBL
DRAWN BY	JGW	APPROVED BY	
HOR. SCALE:	AS SHOWN	RELEASED FOR CONSTRUCTION BY:	
VERTICAL:	AS SHOWN	DATE	2012/01/30
		DATE	



THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
TRANSPORTATION ENGINEERING DIVISION

INKSTER BOULEVARD
WIDENING PROJECT
BROOKSIDE BOULEVARD TO
KEEWATIN STREET

CITY DRAWING NUMBER
S758-11-04
SHEET **4** OF **8**

STRUCTURE NO. S758
FABRICATION DETAILS