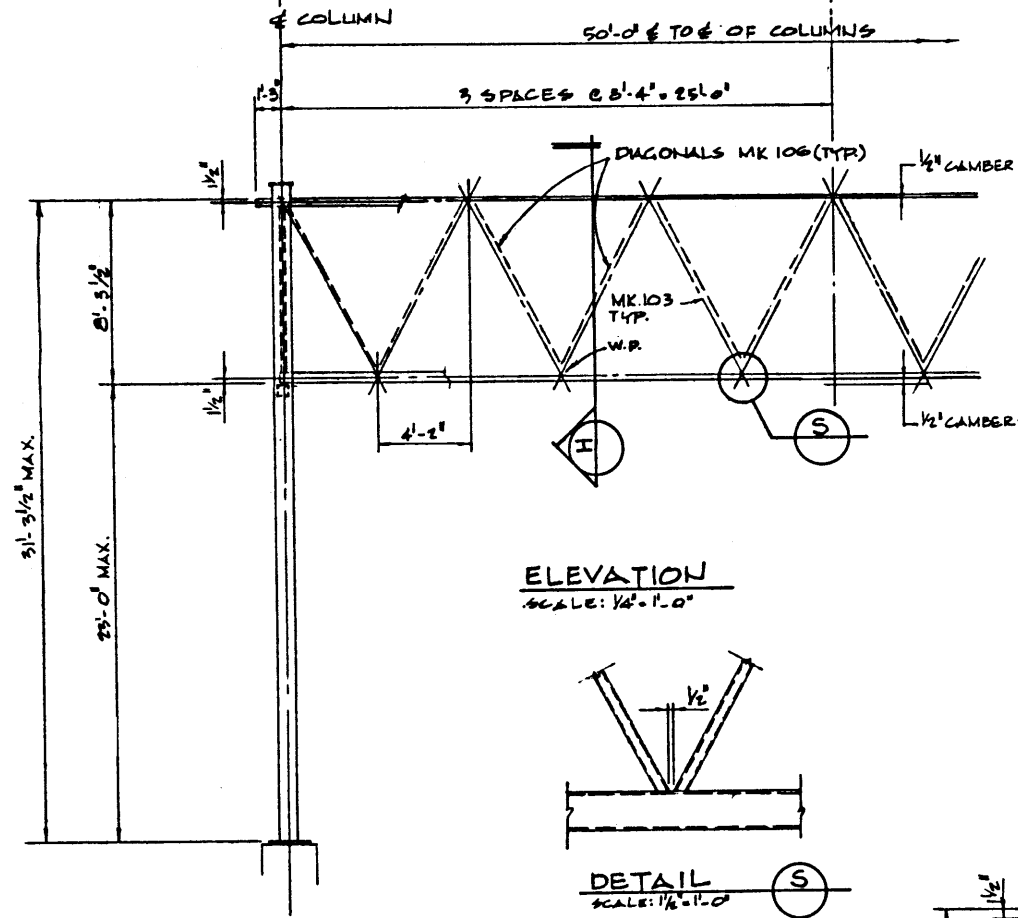
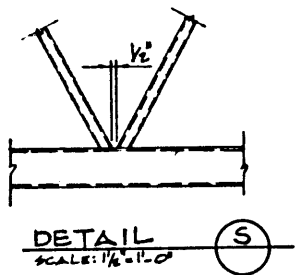


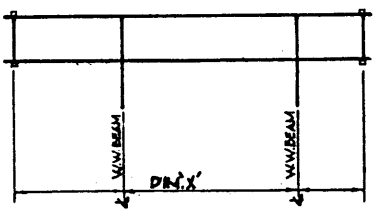
**PLAN**  
SCALE: 1/4" = 1'-0"



**ELEVATION**  
SCALE: 1/4" = 1'-0"



**DETAIL S**  
SCALE: 1/4" = 1'-0"

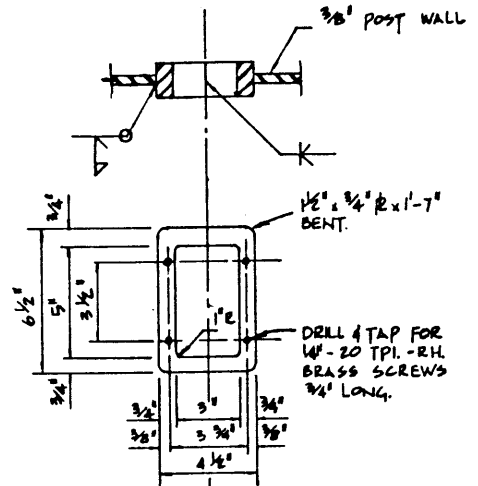


**WALKWAY BEAMS LOCATION**  
N.T.S.  
SEE GENERAL LAYOUT FOR EACH SIGN STRUCTURE FOR DIM. X'

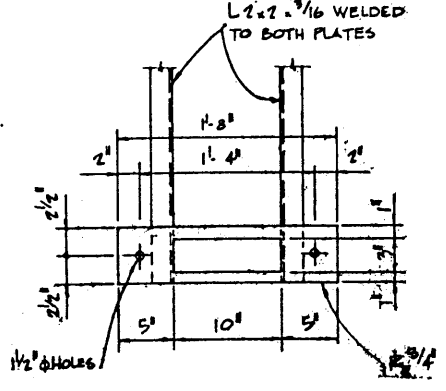
**STEEL SCHEDULE FOR 50'-0" SIGN STRUCTURE**

MARK	SIZE	STEEL	REMARKS
101	HSS 3 x 3 x .188		F <sub>MAX</sub> = 22 K
102	HSS 3 x 3 x .188		F <sub>MAX</sub> = 22 K
103	HSS 2 x 2 x .188		F <sub>MAX</sub> = 22 K
104	HSS 2 x 2 x .188		F <sub>MAX</sub> = 22 K
105	HSS 3 x 3 x .188		
106	HSS 2 x 2 x .188		
107	HSS 3 x 3 x .188		
201	HSS 10 x 10 x .312		F <sub>MAX</sub> = 53 K
202	HSS 2 x 2 x .188		F <sub>MAX</sub> = 10 K
203	HSS 6 x 6 x .188		

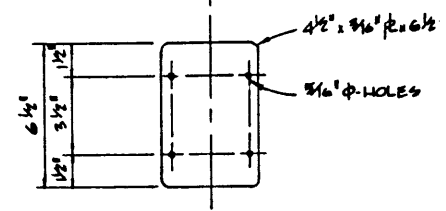
PANEL POINT SPACING DIM. A = 8'-4"



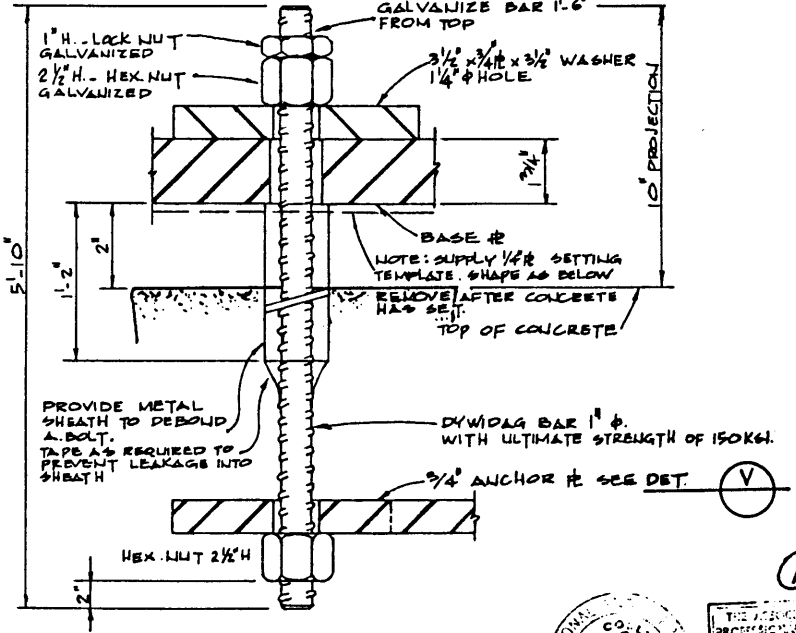
**HANDHOLE AND COVER DETAILS**  
SCALE: 3/4" = 1'-0"



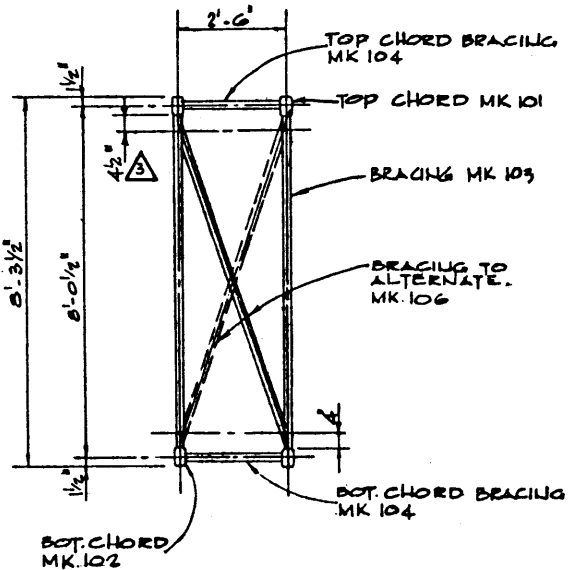
**DETAIL V**  
N.T.S.



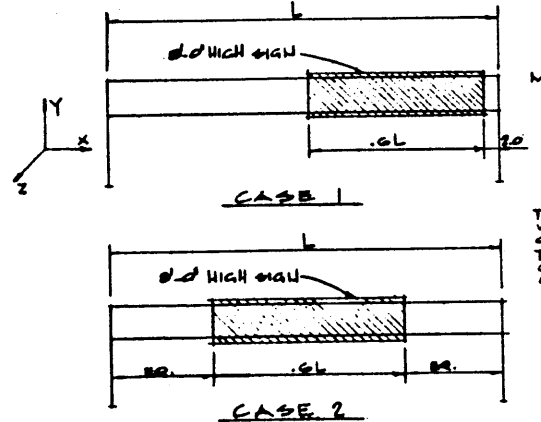
**DETAIL U**  
SCALE: FULL SIZE



**DETAIL W**  
SCALE: FULL SIZE



**SECTION H**  
SCALE: 1/4" = 1'-0"

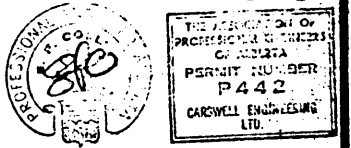


**TRUSS LOADING CONDITIONS**

MAX. TRUSS MTS.  
M<sub>x</sub> = 37 K.F.T.  
M<sub>y</sub> = 36 K.F.T.

THE MAX COLUMN MOMENT OCCURS WHEN WIND STRIKES SIGN AT AN ANGLE OF 40° TO A LINE PERPENDICULAR TO THE SIGN. (REFER TO FIG. C1-10 COMPLEMENTARY NO. 1, SUPPLEMENT NO. 4 OF N.B.C. OF CANADA 1970)

- GENERAL NOTES - APPLY TO ALL DRAWINGS**
- Materials: All steel tubing shall conform to C.S.A. 640.214-350W. All other steel shall conform to C.S.A. 640.21M-300 W.
  - Welding shall conform to current A.W.S. D.1.1. All welds to be 1/4" unless otherwise noted.
  - Design Loading:
    - Wind Load: 32 lbs. per sq. ft. on sign surface; 40 lbs. per sq. ft. on projected area of truss members.
    - Live Load: 500 lbs. concentrated load on walkway
    - Dead Load: Includes weight of sign and support structure.
    - Ice Load: 1/2" of ice on face of each sign and the surface area of all members.
  - The sign panel and frame not supplied by structural steel fabricator.
  - All truss joints to be welded. Joints to be designed and detailed by the fabricator to carry forces indicated on the drawings and the weld shall be designed to resist fatigue cracking. The weld shall be continuous around the member and the welding design and details are to be approved by the Department.
  - Fabrication shall conform to current Bridge Branch Specification B167-M.
  - Supply bolts and washers as noted. Bolts and nuts to have hex heads. Bolts to be high strength A325 friction type connections unless noted otherwise.
  - All steel shall be blast cleaned in accordance with Specification SSPC-SP-6-63F of the Steel Structures Painting Council before painting. Painting shall not commence until cleaning has been approved by the Engineer. (Refer to B167M clause 5.1).
  - Shop Paint: All surfaces not in contact with steel or concrete shall be given one coat of paint conforming to the requirements of C.G.S.B. Specification 1-68-1684 Type III having a dry thickness of 1.5 to 2.5 mils. In addition there shall be applied one coat of aluminum paint conforming to the requirements of the C.G.S.B. Specification 1-62-694.
  - Field Paint: Touch up all disfigurements and field bolts.
  - All shop splices shall be shown on the shop drawings for approval by the Department. All chord splices shall be radiographed by the fabricator, at his expense, and are to meet A.W.S. requirements.
  - All column to base plate welds will be tested by the Department, either by the ultrasonic method or by the magnetic particle method. Any extra testing due to repairs which may be required will be at the expense of the fabricators.
  - Electrical conduit and fixtures not to be supplied by the structural steel supplier.
  - Concrete strength = 3,000 psi @ 28 days (20 MPa).
  - Reinforcing steel shall conform to C.S.A. 630.12M Grade 400 (minimum yield strength = 400 MPa).



CARSWELL ENGINEERING LTD. CONSULTING ENGINEERS CALGARY ALBERTA	APPROVED		HIGHWAYS AND TRANSPORT BRIDGE BRANCH	
	DESIGNED BY E.C. DRAWN BY R.F.B. DATE OCT. 75 CHECKED BY E.F.C. DATE JAN. 76		STANDARD SIGN BRIDGE 50'-0" SPAN TRUSS DETAILS	
REVISIONS		DATE		
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