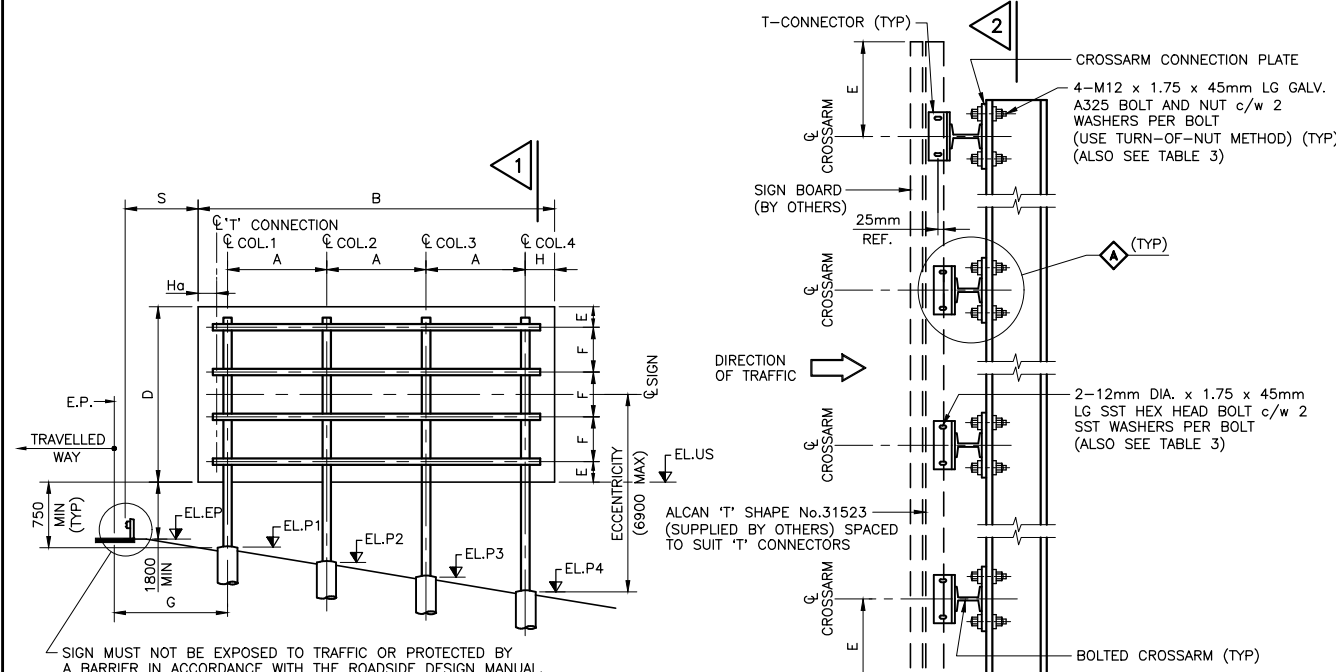


NOTES TO DESIGNER:

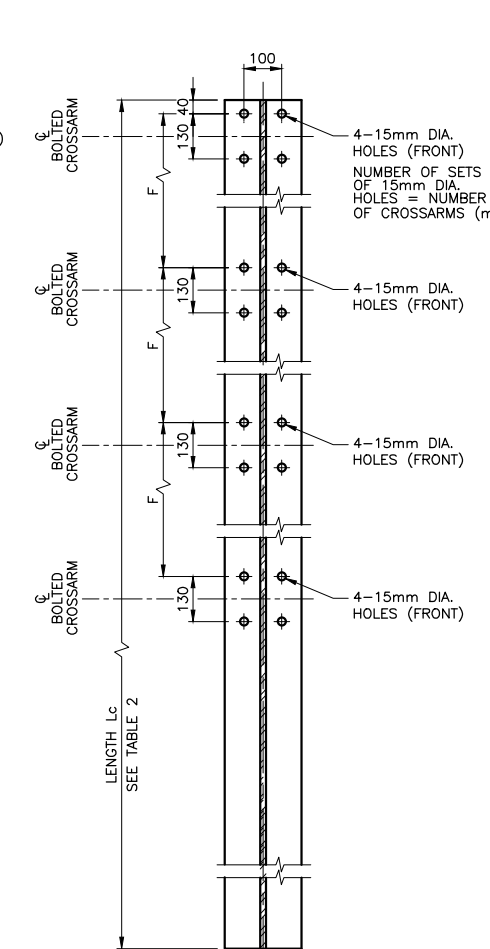
- THIS SIGN SUPPORT STRUCTURE IS DESIGNED TO SUPPORT A 3900mm TALL BY 7900mm WIDE SIDE PANEL FOR A MAXIMUM 10 YEAR RETURN WIND PRESSURE OF 465 kPa.
- FOOTING DEPTHS ARE BASED ON AN FACTORED PASSIVE EARTH PRESSURE OF 60 kPa AT ULS AND 45 kPa AT SLS. THESE CORRESPOND TO A SOFT COHESIVE SOIL WITH UNDRAINED SHEAR STRENGTH, CU OF 15 kPa OR A VERY LOOSE COHESIONLESS SOIL.
- THIS SUPPORT STRUCTURE IS DESIGNED TO ACCOMMODATE A MAXIMUM ECCENTRICITY OF 6900mm.
- PROTECTION AND SETBACK DISTANCE MUST MEET MINIMUM REQUIREMENTS OF THE ROADSIDE DESIGN MANUAL.
- WHERE INFORMATION IN TABLES AND DIMENSIONS ARE ADDED TO STANDARD DRAWINGS FOR THEIR COMPLETION, THE DRAWINGS SHALL BEAR THE SEAL, DATE AND SIGNATURE OF A PROFESSIONAL ENGINEER. THIS ENGINEER ACCEPTS FULL RESPONSIBILITY FOR THE ACCURACY OF THE ADDED INFORMATION ONLY. WHERE ENGINEERING DESIGN CHANGES ARE MADE ON STANDARD DRAWINGS THAT AFFECT THE ORIGINAL DESIGN, THESE DRAWINGS SHALL BE IDENTIFIED AS "MODIFIED" AND BEAR THE SEALS, DATES, AND SIGNATURES OF TWO PROFESSIONAL ENGINEERS. THESE ENGINEERS ACCEPT FULL RESPONSIBILITY FOR THE DESIGN THAT RESULTS FROM THESE CHANGES.
- THE "NOTES TO DESIGNER" SHALL BE DELETED FROM THIS DRAWING PRIOR TO ISSUING.

NOTES:

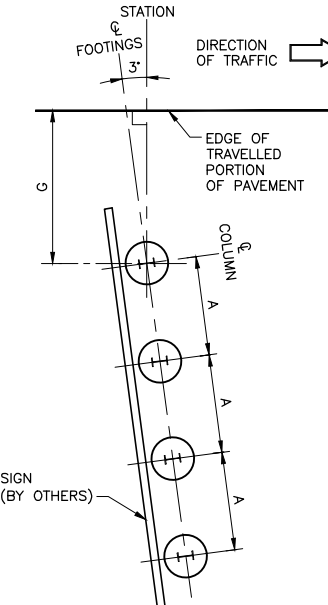
- ALL STRUCTURAL STEEL SHALL CONFORM TO CSA 40.20/G40.21 GRADE 300W AND HOT DIP GALVANIZED.
- ALL BOLTS, NUTS, AND WASHERS FOR CROSSARM CONNECTIONS SHALL CONFORM TO ASTM F3125 GRADE A325M AND BE HOT DIP GALVANIZED.
- SPECIFIED 28-DAY COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 30 MPa.
- CONCRETE TO BE PLACED AGAINST UNDISTURBED GROUND IN AUGERED HOLE.
- TOP SURFACE OF FOOTING SHALL BE DOMED.
- EL.P₁, EL.P₂, EL.P₃, OR EL.P₄ DENOTES ELEVATION OF TOP OF FOOTING CONCRETE.
- THE COLUMNS SHALL BE INSTALLED AND HELD IN CORRECT POSITION UNTIL THE CONCRETE HAS PROPERLY SET.
- SIGN BOARD SHALL NOT BE ERECTED UNTIL 7 DAYS AFTER CONCRETE HAS PROPERLY BEEN PLACED.
- FOR TURN-OF-NUT TIGHTENING METHOD, THE BOLTS SHALL BE FIRST BROUGHT TO A SNUG-TIGHT CONDITION, AND THEN FURTHER TIGHTENED BY 1/4 OF A TURN.
- SNUG-TIGHT IS THE TIGHTNESS ATTAINED BY THE FULL EFFORT OF A MAN USING A SPUD WRENCH.
- COLUMN HEIGHT ABOVE GROUND SHALL NOT EXCEED 8.5m.



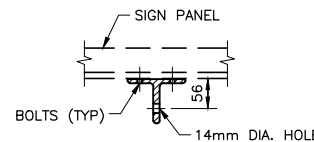
**TYPE 4-4
ELEVATION**



2 NON-BREAKAWAY COLUMN



TYPICAL LAYOUT PLAN



4 T-SECTION

TABLE 1 - GENERAL INFO

STATION	3.9x7.9	3.9x7.9	3.9x7.9	3.9x7.9	3.9x7.9
SIGN SIZE (DxB)	3.9x7.9	3.9x7.9	3.9x7.9	3.9x7.9	3.9x7.9
TYPE (TYPE n-m)	4-4	4-4	4-4	4-4	4-4
ELEVATION AT EDGE OF PAVEMENT ELEP					
ELEVATION AT COLUMN 1, EL.EP					
ELEVATION AT COLUMN 2, EL.EP					
ELEVATION AT COLUMN 3, EL.EP					
ELEVATION AT COLUMN 4, EL.EP					
COLUMN SPCG., A (mm)	2300	2300	2300	2300	2300
VERT. EDGE DIST., E (mm)	450	450	450	450	450
CROSSARM SPCG., F (mm)	1000	1000	1000	1000	1000
COLUMN OFFSET, G (mm)					
SIGN OFFSET S (mm)					
HORIZ. EDGE DIST., H (mm)	500	500	500	500	500
EL.US					
COLUMN SIZE	W200x59	W200x59	W200x59	W200x59	W200x59
FOOTING DEPTH, Df (mm)	2500	2500	2500	2500	2500

TABLE 2 - MAIN MEMBERS

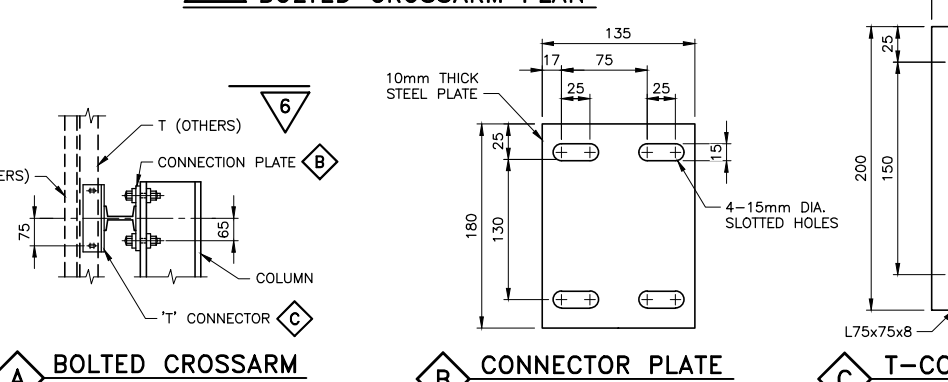
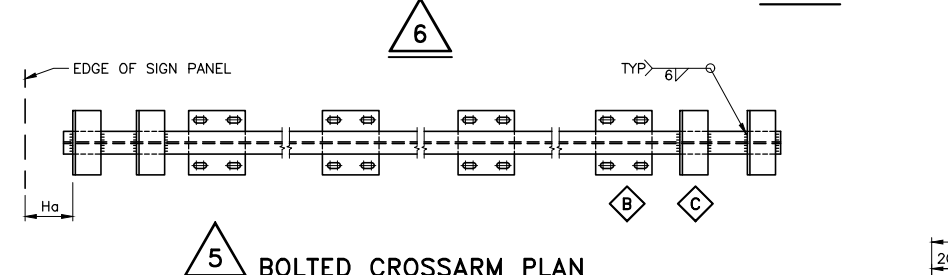
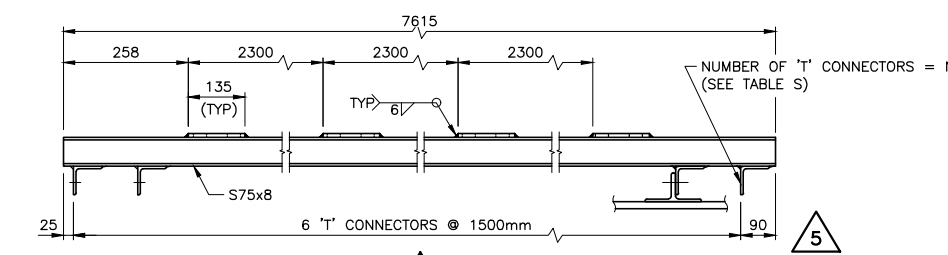
PART	LENGTH OR Q'TY	LENGTH OR Q'TY	LENGTH OR Q'TY	LENGTH OR Q'TY	LENGTH OR Q'TY
COLUMN 1, Lc1 (mm)					
COLUMN 2, Lc2 (mm)					
COLUMN 3, Lc3 (mm)					
COLUMN 4, Lc4 (mm)					
BOLTED CROSSARM Q'TY (S75x8)	4	4	4	4	4

TABLE 3 - CROSSARM CONNECTION

PART	Q'TY	Q'TY	Q'TY	Q'TY	Q'TY	MAT'L	TIGHTENING
BOLTED COLUMN CONNECTION: 12x1.75x45mm LG GALV. A325 BOLT (c/w NUT AND 2-GALV. WASHERS PER BOLT)	64	64	64	64	64	GALV	TURN-OF-NUT
SIGN PANEL CONNECTION: 12x1.75x45mm LG SST HEX HEAD BOLT (c/w NUT AND 2-SST WASHERS PER BOLT)	48	48	48	48	48	SST	TURN-OF-NUT

TABLE S - SIGN BOARD LAYOUT (ALL COMPONENTS BY OTHERS)

VALUE	3.9x7.9	3.9x7.9	3.9x7.9	3.9x7.9	3.9x7.9
SIGN SIZE (DxB)	3.9x7.9	3.9x7.9	3.9x7.9	3.9x7.9	3.9x7.9
TYPE (TYPE n-m)	4-4	4-4	4-4	4-4	4-4
VERT. EDGE DIST., E (mm)	450	450	450	450	450
CROSSARM SPCG., F (mm)	1000	1000	1000	1000	1000
No. OF CROSSARM, m	4	4	4	4	4
TOTAL No. T-SECTIONS, Nt	6	6	6	6	6
DIST. TO 1st T-SECTION, Ha (mm)	200	200	200	200	200

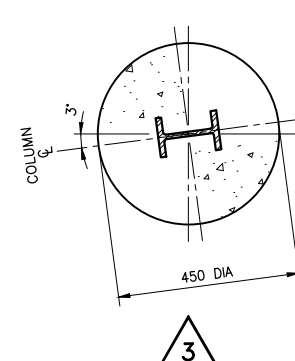


6 BOLTED CROSSARM PLAN

A BOLTED CROSSARM

B CONNECTOR PLATE

C T-CONNECTOR



3

REFER TO 2.4.1 IN THE SIGN SUPPORT MANUAL FOR PROFESSIONAL ENGINEER STAMPING REQUIREMENTS.

STANDARD DRAWING
MAY 30, 2024

SS118-99
3.9m x 7.9m STEEL COLUMN
NON-BREAKAWAY SIGN SUPPORTS

REVISIONS	DATE	BY	DESCRIPTION