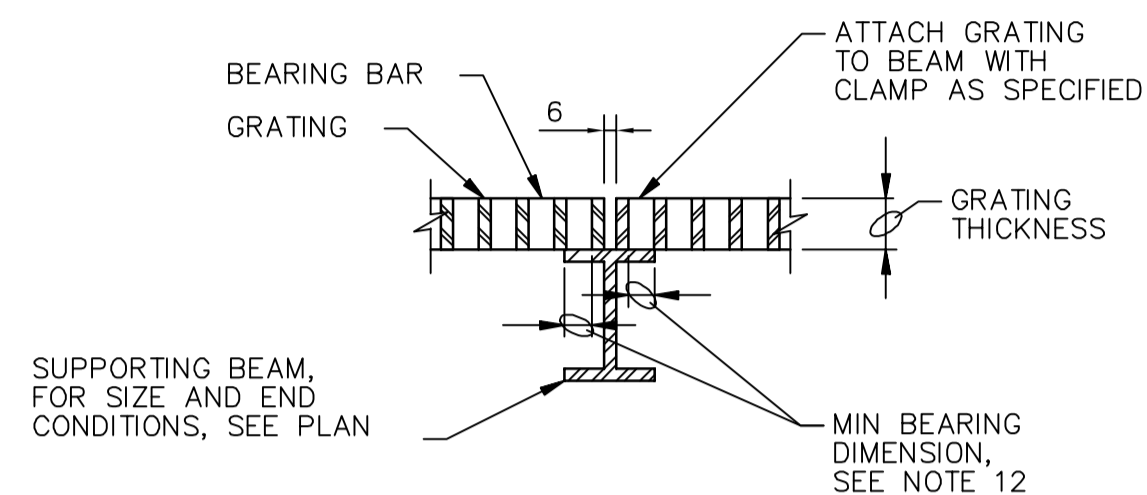
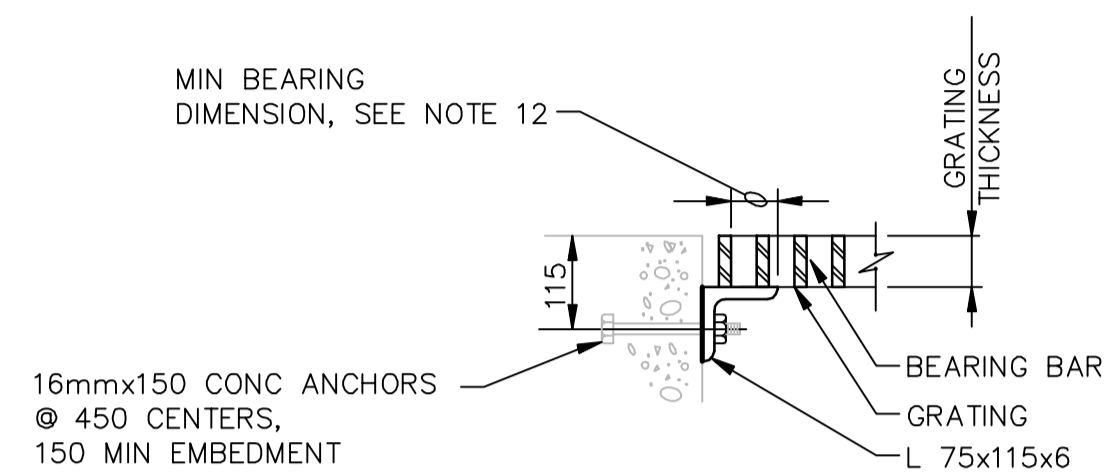


GS-2 - ONE SIDED



GS-2 - TWO SIDED



NOTE:
USE GS-3 ONLY FOR FOOT TRAFFIC GRATING.

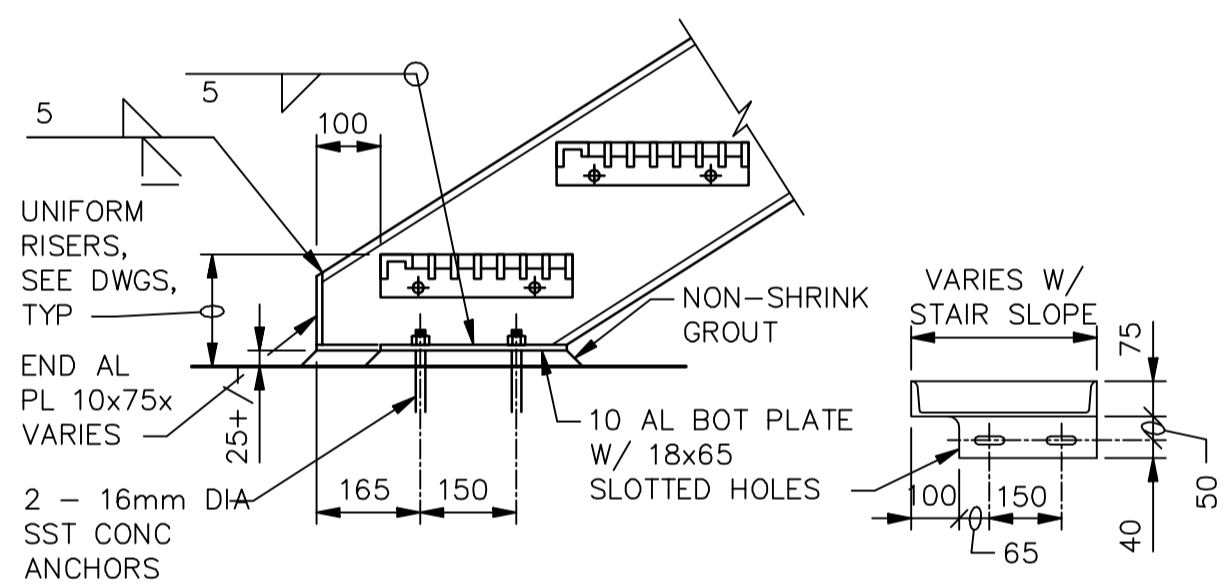
GS-3

GENERAL NOTES:

- GRATING SPAN SEE PLAN.
- WIDTH OF GRATING SECTIONS SHALL NOT EXCEED 900mm.
- SHOP DRAWINGS BASED ON FIELD DIMENSIONS SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR PRIOR TO FABRICATION.
- MATERIAL FOR SUPPORTS OF STEEL AND ALUMINUM GRATING TO BE SAME AS GRATING, EXCEPT METAL SUPPORTS THAT ARE TO BE EMBEDDED IN CONCRETE SHALL BE TYPE 316 STAINLESS STEEL.
- UNLESS NOTED OTHERWISE ON PLANS, GRATING THICKNESS SHALL BE AS TABULATED IN "GRATING THICKNESS TABLE" FOR APPLICABLE TRAFFIC.
- BEARING BAR THICKNESS FOR GRATING TO BE 4.8mm MINIMUM.
- BAND ALL EDGES WITH 5mm x DEPTH OF BEARING BAR.
- PROVIDE MISCELLANEOUS GRATING FASTENERS AS REQUIRED.
- TYPE OF MATERIAL USED SHALL BE AS SHOWN ON PLANS OR AS SPECIFIED. THIS STANDARD DETAIL INCLUDES 2 TYPES, ALTHOUGH BOTH MAY NOT BE INCLUDED IN PROJECT.
- THE HORIZONTAL CLEARANCE BETWEEN THE GRATING AND GRATING SUPPORTS SHALL NOT BE LESS THAN 6mm NOR GREATER THAN 13mm AND AS SPECIFIED.
- ALL GRATING SECTIONS, WHEN IN PLACE, SHALL ALWAYS BE FIRMLY ANCHORED TO THEIR SUPPORTS AS SPECIFIED.
- MIN BEARING HORIZONTAL DIMENSION = 25mm FOR GRATING DEPTH 57mm OR LESS, MIN BEARING HORIZONTAL = 50mm FOR GRATING DEPTH GREATER THAN 57mm

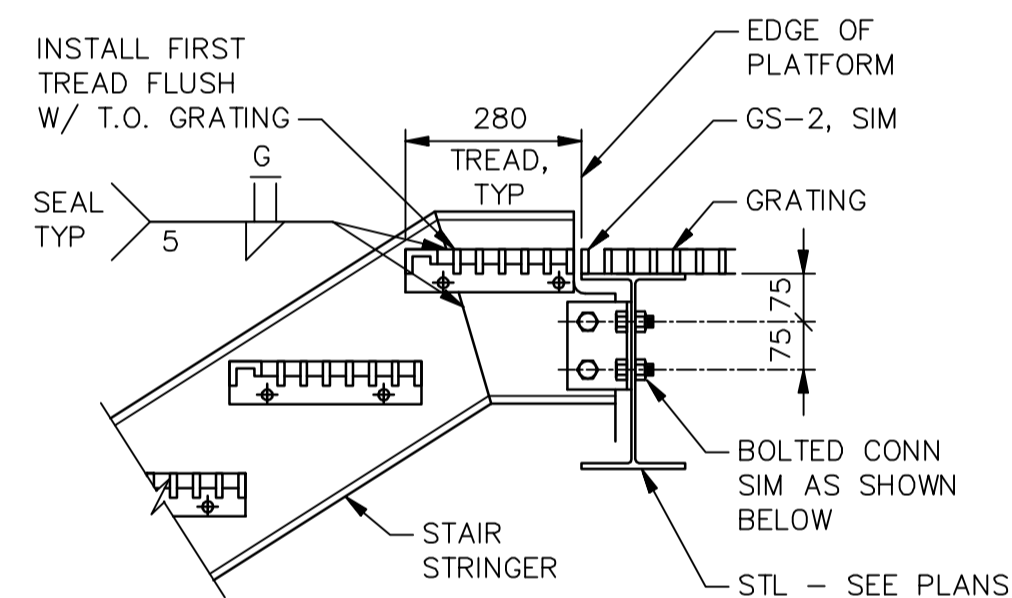
FOOT TRAFFIC		
GRATING THICKNESS TABLE		
MAXIMUM SPAN (mm)	ALUMINUM (mm)	STEEL (mm)
1050	32	25
1200	38	25
1350	44	25
1500	44	32
1650	51	32
1800	57	38
1950	57	38
2100	64	44

1 STANDARD GRATING
- N.T.S.



BOTTOM CONNECTION

PLAN

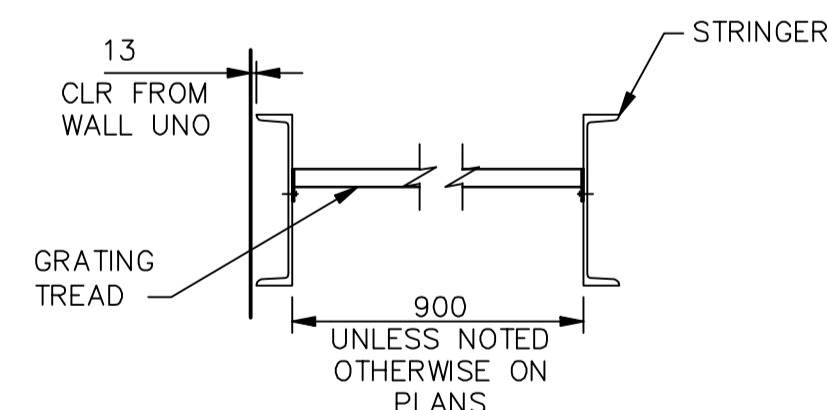


TOP CONNECTION - ALUMINUM

STAIRWAY WIDTH	TREAD BEARING BARS
	ALUMINUM TREAD
685 OR LESS	25mm x 5mm
840 OR LESS	30mm x 5mm
990 OR LESS	40mm x 5mm
1400 OR LESS	45mm x 5mm

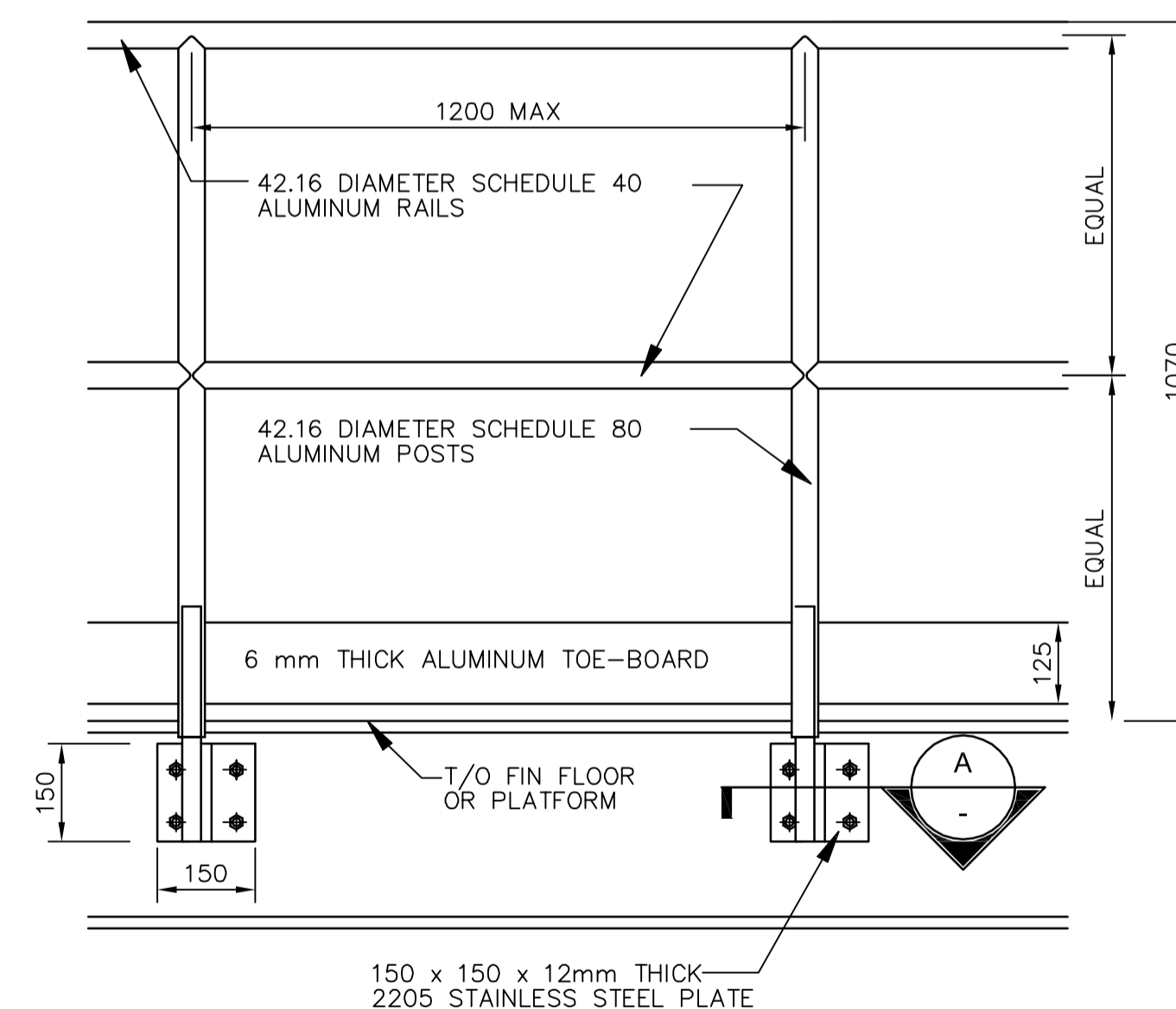
NOTES:

- PROVIDE PROTECTION FOR DISSIMILAR METALS AND CONCRETE AS SPECIFIED.
- AMERICAN STANDARD C304.8x15.2 kg/m ALUMINUM STRINGERS TYPICAL EXCEPT WHERE NOTED OTHERWISE ON PLANS.
- STAIR HANDRAIL NOT SHOWN.
- STAIR MANUFACTURER TO COORDINATE BOLTED TREADS AND HANDRAIL CONNECTIONS.
- ALL FASTENERS SHALL BE STAINLESS STEEL.
- FIELD VERIFY DIMENSIONS & ELEVATIONS PRIOR TO FABRICATION.

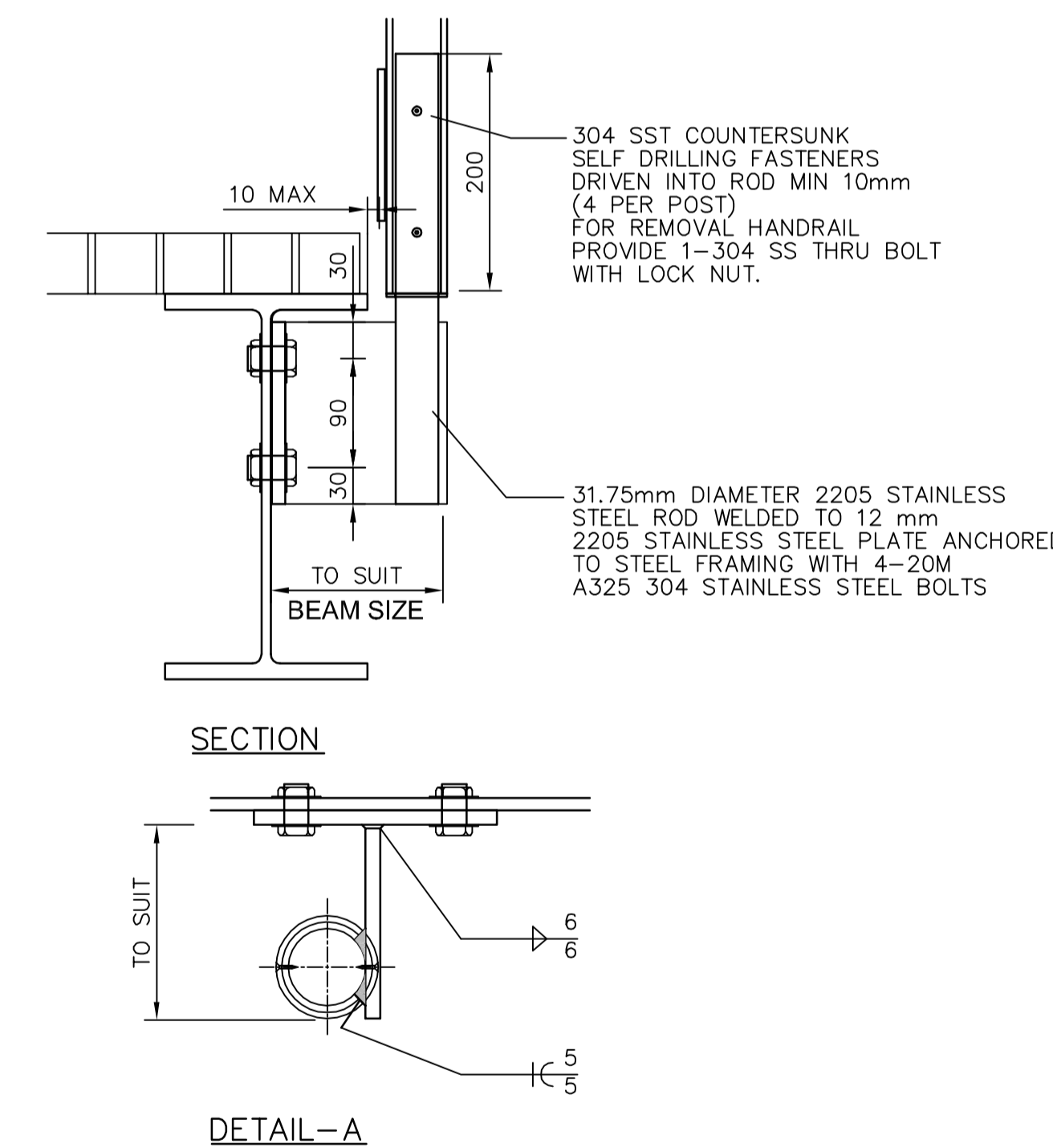


STAIR TREADS

2 STAIR DETAILS
- N.T.S.



3 SIDE MOUNTED GUARD ON STEEL FRAMING
- N.T.S.



NOTE:
MINIMUM YIELD STRENGTH OF SST ROD AND PLATE TO BE 450 KPa. WELD ROD AND PLATE WITH A FILLER METAL OF MATCHING OR GREATER YIELD STRENGTH

B.M. ELEV. CONSTRUCTION COMPLETION DATE: YYYY MM DD			ENGINEER'S SEAL		THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION
			DESIGNED BY KS		
	DRAWN BY JBC	APPROVED BY BW	CONSULTANT DRAWING NUMBER	SHEET 7 OF 9 CITY DRAWING NUMBER 1-0601X-S0004-002-00	
0 ISSUED FOR TENDER	14-01-21	JBC	WX-S0402		
NO. REVISIONS	DATE	BY	DATE	2014 01 21	