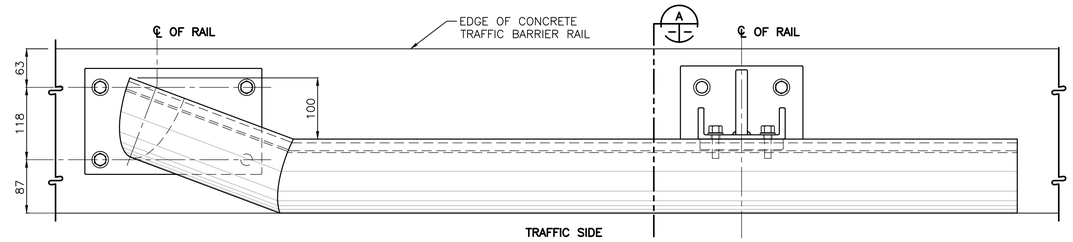
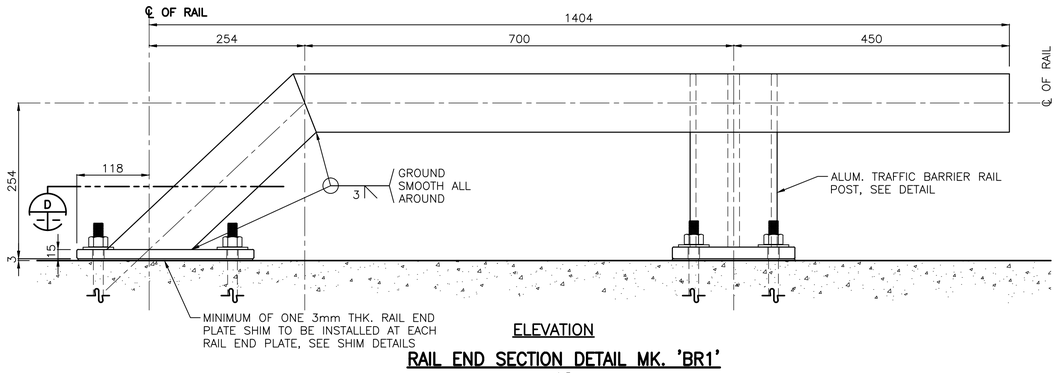
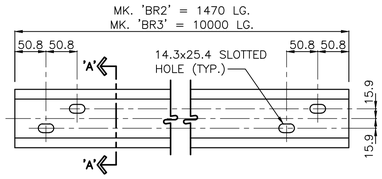


PLAN

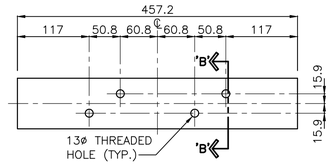


ELEVATION

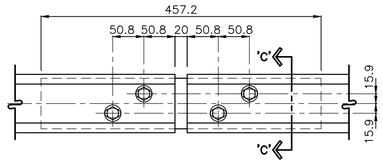
RAIL END SECTION DETAIL MK. 'BR1'
1:5



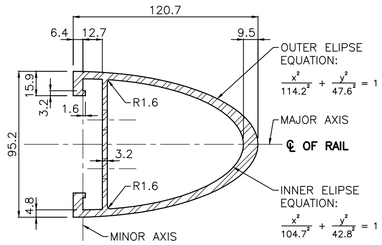
BARRIER RAIL DETAIL
MK. 'BR2', 'BR3' & 'BR4'
1:5



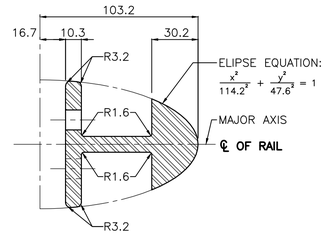
SPLICE BAR DETAIL
1:5



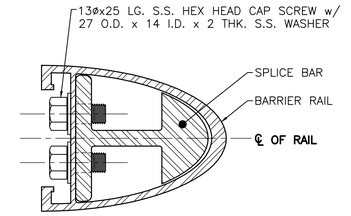
SPLICE BAR TO BARRIER RAIL ASSEMBLY
1:5



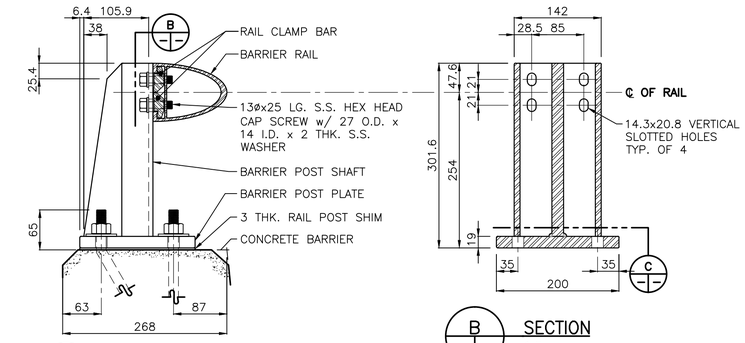
SECTION A–A
1:2



SECTION B–B
1:2

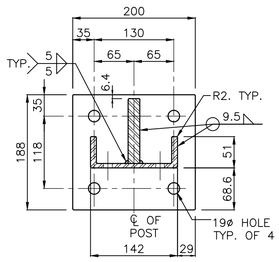


SECTION C–C
1:2

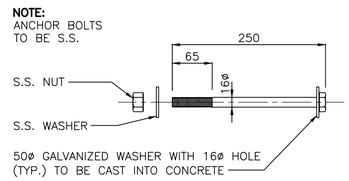


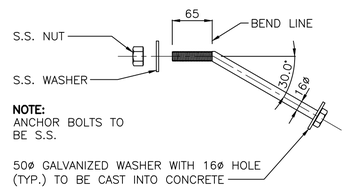
A TRAFFIC BARRIER RAIL POST
1:5

B SECTION
1:5

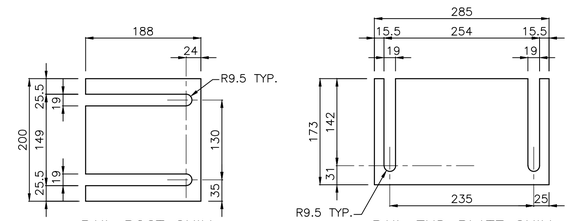


C BARRIER POST PLATE SECTION
1:5





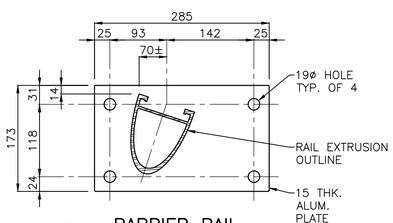
ANCHOR BOLT DETAIL
1:5



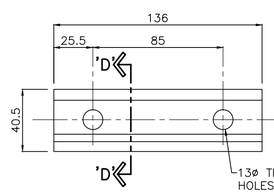
RAIL POST SHIM

RAIL END PLATE SHIM

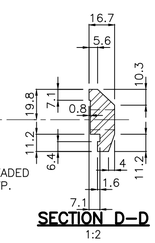
SHIM DETAILS
1:5



BARRIER RAIL END PLATE SECTION
1:5



RAIL CLAMP BAR DETAIL
1:2



SECTION D–D
1:2

NOTES:

1. THE 4–19øMM HOLES IN THE BARRIER POST AND RAIL PLATES ARE DESIGNED TO ACCOMMODATE 16øMM RAIL POST ANCHOR BOLTS AS DETAILED. SUPPLY WITH EACH ANCHOR BOLT: ONE S.S. PLAIN WASHER, ONE S.S. LOCK WASHER, ONE S.S. HEX. NUT AND ONE 50ø GALVANIZED PLATE WASHER.
2. A COMBINATION OF 1.5, 3.0 AND/OR 6.0mm THK. ALUM. RAIL POST PLATE SHIMS ARE TO BE USED AS REQUIRED TO SET THE BARRIER RAIL TO THE SPECIFIED HEIGHT (MINIMUM 3 THK. SHIM REQUIRED AT EACH POST OR PLATE).
3. ALL EDGES AND CORNERS OF THE BARRIER POST PLATES AND EXTRUSIONS SHALL BE ROUNDED IN THE SHOP, TO A SMOOTH 2mm RADIUS TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR.
4. BOTTOM SURFACE OF THE SHIM (SURFACE IN CONTACT WITH CONCRETE) IS TO BE PAINTED WITH 2 COATS OF ALKALI RESISTANT BITUMINOUS PAINT, EACH COAT BEING 1mm IN THICKNESS.

SPECIFICATIONS:

1. EXTRUDED ALUM. SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. B221, ALLOY 6061–T6 OR ALLOY 6351–T5 (MINIMUM ELG.ATION 10%)
2. THE S.S. HEX. HEAD AND SOCKET HEAD CAP SCREWS SHALL MEET THE REQUIREMENTS OF A.S.T.M. A276 TYPE 430 AND THE DIMENSIONAL REQUIREMENTS OF A.N.S.I. B18.3.
3. DIMENSIONAL TOLERANCES NOT SHOWN OR IMPLIED ARE INTENDED TO BE THOSE CONSISTENT WITH THE PROPER FUNCTIONING OF THE PART, INCLUDING ITS APPEARANCE AND ACCEPTED MANUFACTURING PRACTICES.
4. THE BARRIER POST SHAFT SHALL BE FABRICATED FROM A SINGLE CHANNEL–SHAPE EXTRUSION WELDED TO A PLATE SHAPE. THE BARRIER POST PLATE AND BARRIER POST SHAFT SHALL THEN BE WELDED TOGETHER.
5. WELDING SHALL CONFORM TO THE REQUIREMENTS OF CSA STANDARDS S224–1969, WELDING ALUM. DESIGN AND WORKMANSHIP AND W47.2–1987, ALUM. WELDING QUALIFICATION CODE. ALUM. FILLER ALLOY SHALL BE ONE OF THE FOLLOWING: ER4043, ER5183, ER5554, ER5556 AND ER5654.
6. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS CONSISTING OF THREE PRINTS AND ONE REPRODUCIBLE SPIA TO THE CONTRACT ADMINISTRATOR FOR APPROVAL PRIOR TO FABRICATION OF ALUM. TRAFFIC BARRIER COMPONENTS.
7. ANTI–SEIZE COATING TO BE APPLIED TO ALL THREADED COMPONENTS WHEN BEING ASSEMBLED,. I.E. LPS–3 MANUFACTURED BY HOLT–LLOYD (CANADA) LTD. MARKHAM, ONTARIO L3R 2Z3.

APEGM
Certificate of Authorization
Stantec Consulting Ltd.
No. 1301 Date:_____

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

LOCATION APPROVED
UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE — DATE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M.
ELEV.

NO.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	11.12.15	K.S.A.

Stantec Consulting Ltd.
905 Waverley Street, Winnipeg, Manitoba
Tel 204–489–5900 Fax 204–453–9012

DESIGNED BY	K.S.A.	CHECKED BY	K.S.A.
DRAWN BY	V.J.F.	APPROVED BY	B.J.W.
HOR. SCALE: VERTICAL:	AS SHOWN	RELEASED FOR CONSTRUCTION:	
DATE	DEC. 15, 2011	DATE	

ENGINEER'S SEAL

CONSULTANT DRAWING NO.
S-708

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

STURGEON ROAD
BRIDGE REPLACEMENT
PORTAGE AVENUE TO HALLONQUIST DRIVE
TRAFFIC BARRIER ALUMINUM GUARDRAIL
SECTIONS & DETAILS

SHEET 55 OF 82
CAD FILE DRAWING NUMBER 31590s-708-767.dwg
CITY DRAWING NUMBER B120-12-055

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Date: 2011 Dec 22 9:14am Login: Beernaerts, James