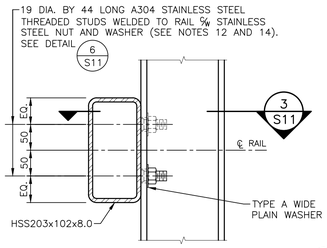
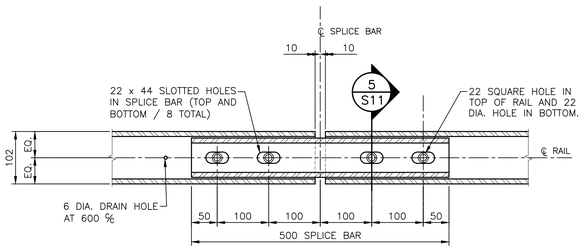


RAIL CONNECTION 1 S10

SCALE: 1:5

0mm 100mm 200mm 300mm 400mm 500mm



RAIL INTERIOR SPLICE SECTION—PLAN 4 S10

SCALE: 1:5

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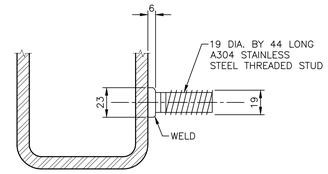

STUD WELD DETAIL 6 S11

SCALE : 1:2

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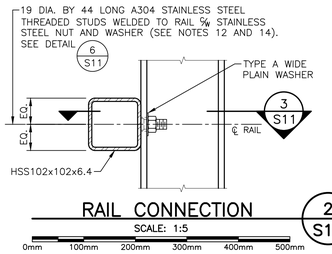

RAIL CONNECTION 2 S10

SCALE: 1:5

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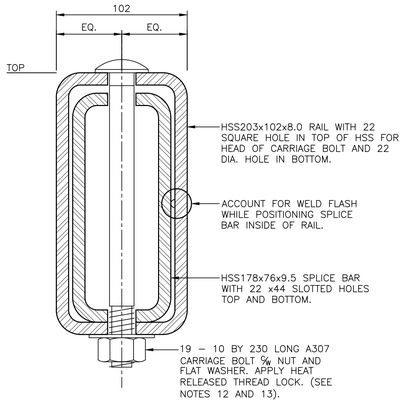

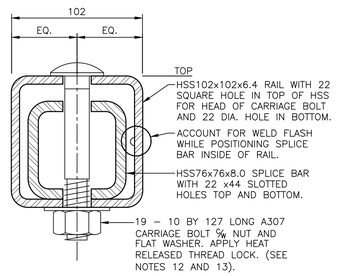

RAIL SPLICE SECTIONS 5 S11

SCALE : 1:2

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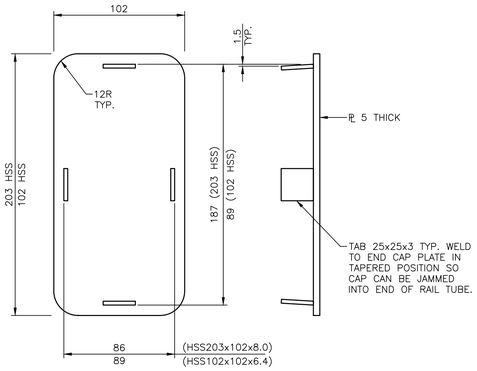
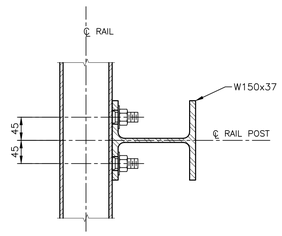


END CAP DETAIL 7 S10

SCALE : 1:2

0mm 50mm 100mm 150mm 200mm 250mm



SECTION 3 S11

SCALE: 1:5

0mm 100mm 200mm 300mm 400mm 500mm

RAIL NOTES:

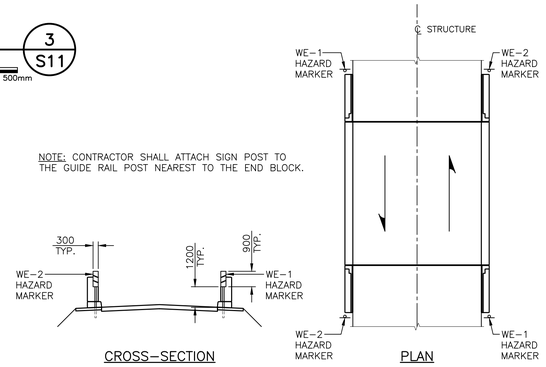
1. BRIDGE RAIL SHALL INCLUDE POSTS, BASE PLATES, ANCHOR PLATES, ANCHOR RODS, FABREEKA PADS, RAIL ASSEMBLY BOLTS, NUTS, WASHERS, STUDS, STRUCTURAL TUBING, SPLICE BARS, ALL APPURTENANCES, AND GALVANIZING.
2. BRIDGE RAIL POSTS SHALL BE SET PERPENDICULAR TO THE PROFILE GRADE.
3. ENDS OF RAIL TUBE SECTIONS SHALL BE SAWED OR MILLED AND SHALL BE TRUE AND SMOOTH. ALL CUT EDGES OF ALL MATERIAL SHALL BE GROUND SMOOTH.
4. EACH PIECE OF RAIL TUBING SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS.
5. BOLT HOLES SHALL BE DRILLED OR PUNCHED. FLAME CUTTING MAY BE USED TO FINISH SLOTTED HOLES IF MECHANICALLY GUIDED.
6. NO PUNCHING, DRILLING, CUTTING OR WELDING SHALL BE PERMITTED AFTER GALVANIZING, EXCEPT AS ALLOWED IN THE RAIL CONNECTION DETAIL. DAMAGED AREAS OF GALVANIZING SHALL BE THOROUGHLY CLEANED, PRETREATED, AND PAINTED WITH TWO COATS OF ORGANIC ZINC-RICH GALVANIZING REPAIR PAINT, HAVING MIN. 94% ZINC BY WEIGHT, TO A THICKNESS EQUAL TO THE ORIGINAL COATING ACCORDING TO THE STANDARD SPECIFICATIONS AND ASTM A780.
7. NUTS FOR 25 DIAMETER THREADED ANCHOR RODS CONNECTING THE 3 RAILER BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ⅓ TURN.
8. THREADS FOR ANCHOR RODS MAY BE ROLLED OR CUT. IF CUT THREADS ARE USED, BOLT DIAMETER SHALL NOT BE LESS THAN NOMINAL DIAMETER. IF ROLLED THREADS ARE USED, ROD DIAMETER SHALL NOT BE LESS THAN ROOT DIAMETER OF THREADS.
9. ALL BRIDGE RAIL SHALL HAVE 6mm DIAMETER DRAIN HOLES SPACED AT 600mm ℄.

MATERIAL NOTES:

10. STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A1085.
11. RAIL POSTS, AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A572 GR50. ANCHOR PLATES MAY BE ASTM A36 OR CAN/CSA G40.21 GRADE 300W.
12. THREADED STUDS AND MATCHING NUTS FOR RAIL-TO-POST ATTACHMENT (RAIL CONNECTION DETAIL) SHALL CONFORM TO ASTM A276 TYPE 304, STAINLESS STEEL, AND SHALL BE TORQUE TESTED PER AWS D1.5, 7.7.1. ALL OTHER BOLTS AND NUTS SHALL CONFORM TO ASTM A307 AND ASTM 563 GRADE A RESPECTIVELY OR BETTER (U.N.O.). WASHERS SHALL BE HARDENED STEEL COMMERCIAL TYPE A PLAIN WIDE WASHERS AND SHALL MEET THE DIMENSIONAL REQUIREMENTS OF A.N.S.I. B18.22.
13. ALL STEEL COMPONENTS (EXCEPT STAINLESS) SHALL BE GALVANIZED AFTER FABRICATION IN CONFORMANCE TO AASHTO M232 (ASTM A153) AND AASHTO M111 (ASTM A123). THE GALVANIZING KETTLE SHALL HAVE 0.05 TO 0.09 PERCENT NICKEL. GALVANIZED SURFACES SHALL HAVE A UNIFORM APPEARANCE AND GALVANIZED MATERIAL SHALL BE PROPERLY STORED. IF TOUCH-UP IS REQUIRED, IT MUST BE DONE IN ACCORDANCE WITH ASTM A780.
14. 'RAIL CONNECTION' STUDS SHALL BE WELDED ON AFTER TUBES ARE GALVANIZED BY SPOT GRINDING OFF GALVANIZING, WELDING ON STUDS, THEN TOUCH UP GALVANIZING PER NOTE 6 ABOVE.

GENERAL NOTES:

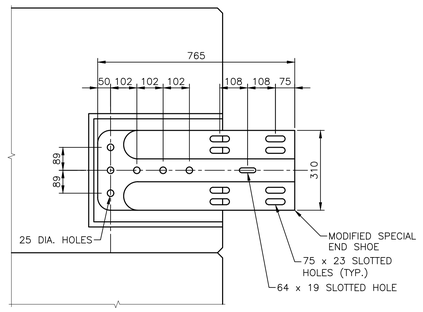
15. ALL DIMENSIONS ARE IN MILLIMETRES.



STANDARD MARKER LOCATION AT BRIDGE ENDS 8

N.T.S.

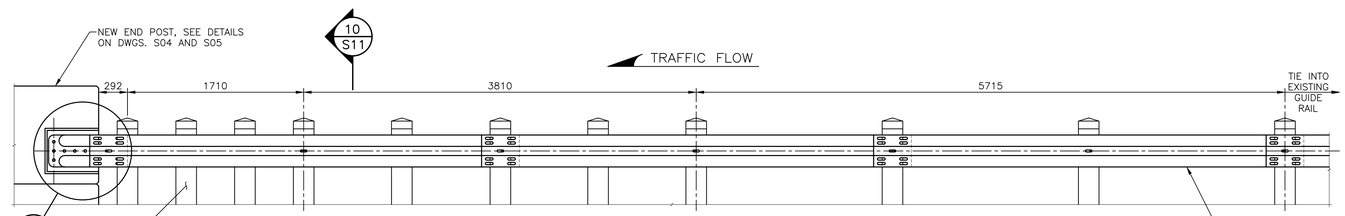
0mm 100mm 200mm 300mm 400mm 500mm



TYPICAL END SHOE DETAIL 9 S11

SCALE : 1:10

0mm 100 200 300 400 500 600 700 800 900 1000mm



SECTION – TYPICAL APPROACH GUIDE RAIL ARRANGEMENT 11 S01

SCALE: 1:25

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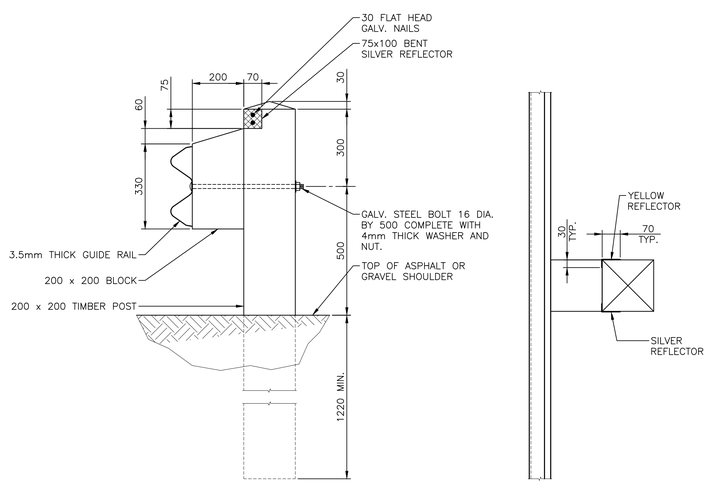

GUIDE RAIL POST DETAILS 10 S11

SCALE : 1:10

0mm 100 200 300 400 500 600 700 800 900 1000mm

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