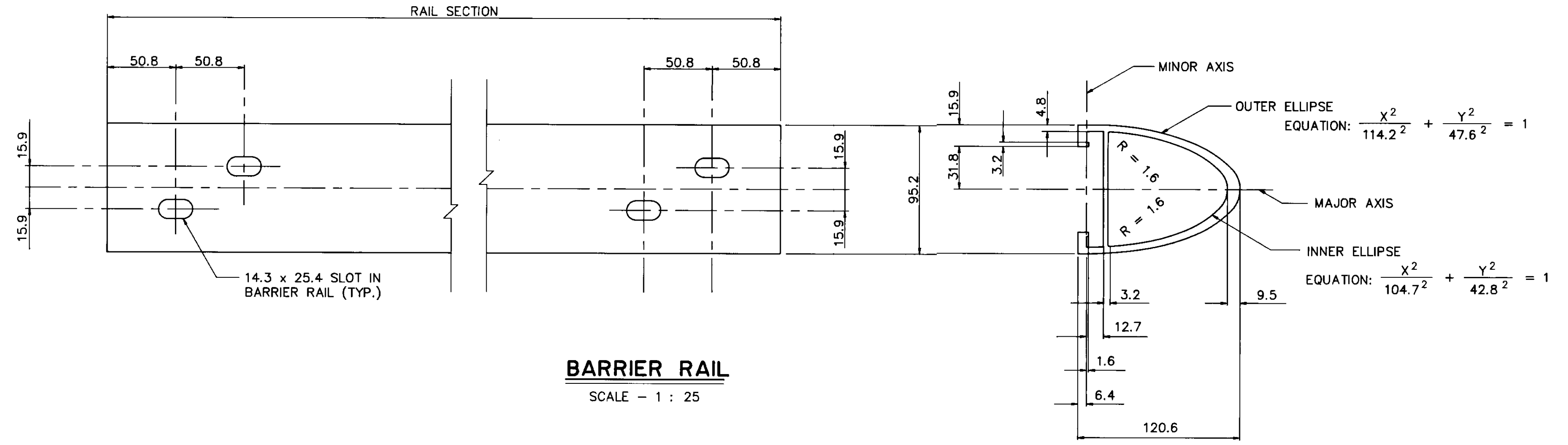


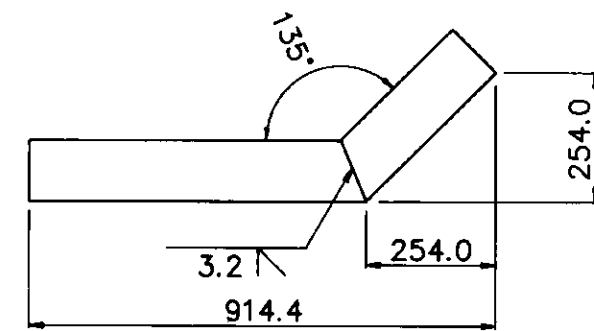
RAIL CLAMP BAR

SCALE - 1 : 25



BARRIER RAIL

SCALE - 1 : 25

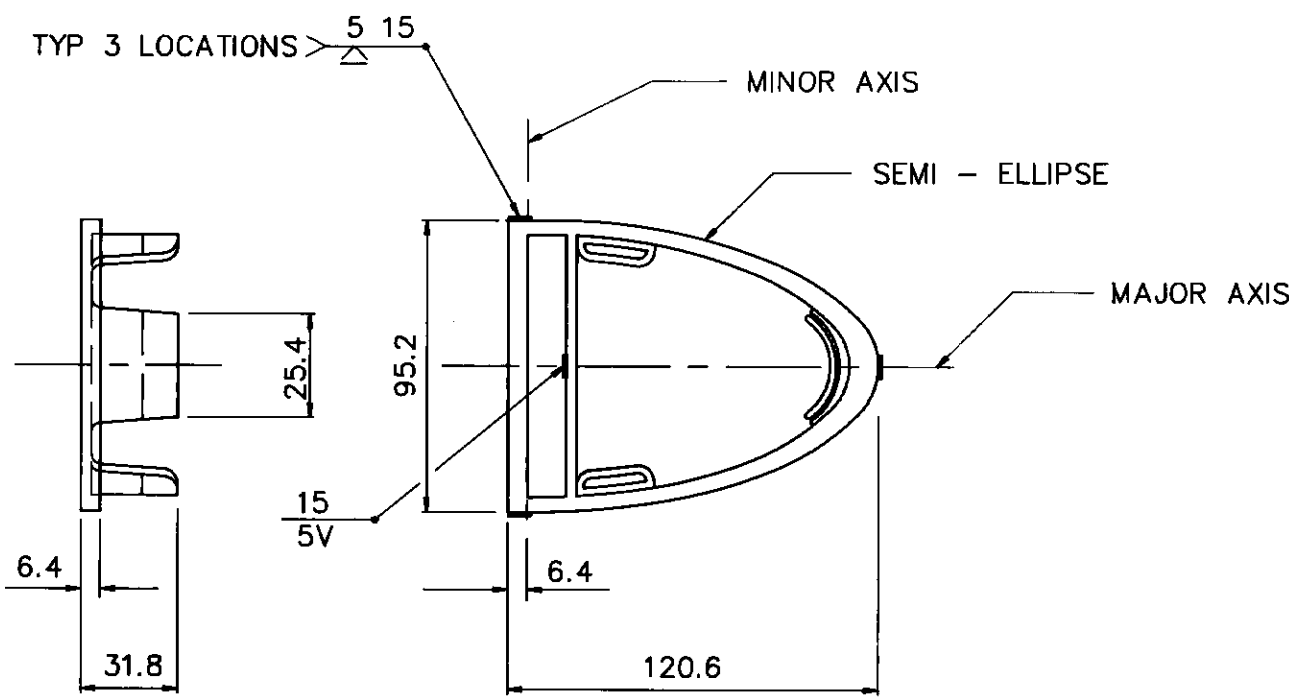


PLAN

FRONT ELEVATION

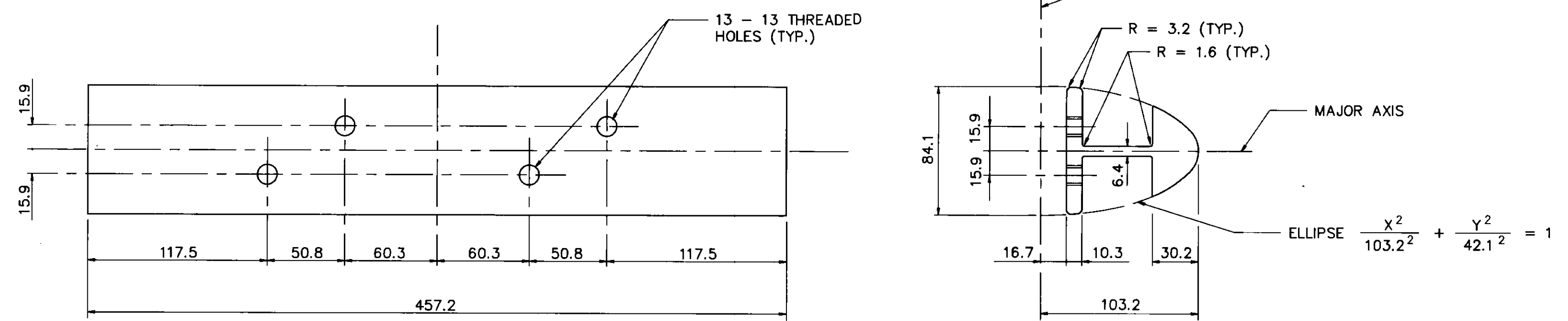
TERMINAL END

(FABRICATED FROM BARRIER RAIL)
SCALE - 1 : 150



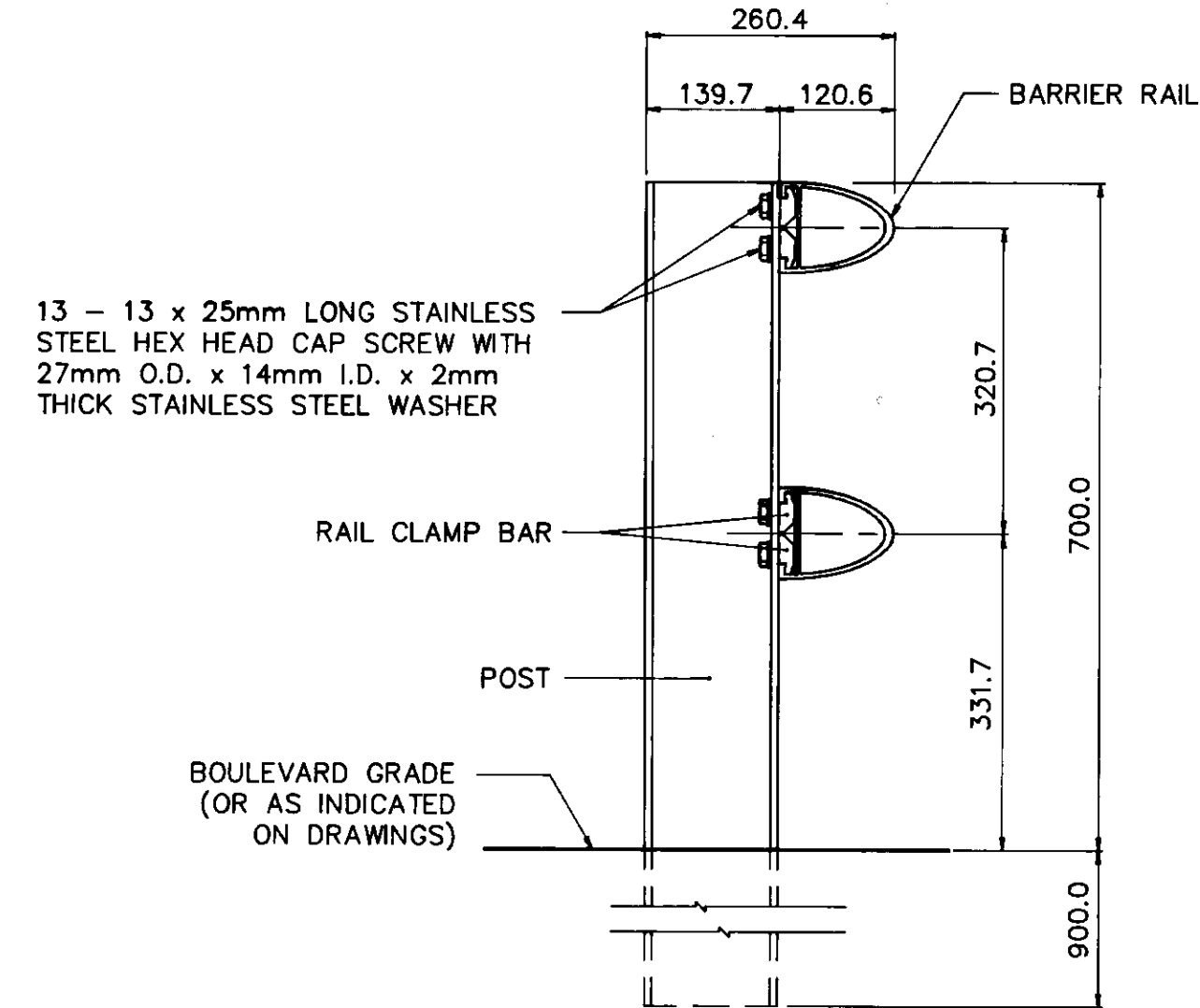
RAIL END CAP

SCALE - 1 : 25



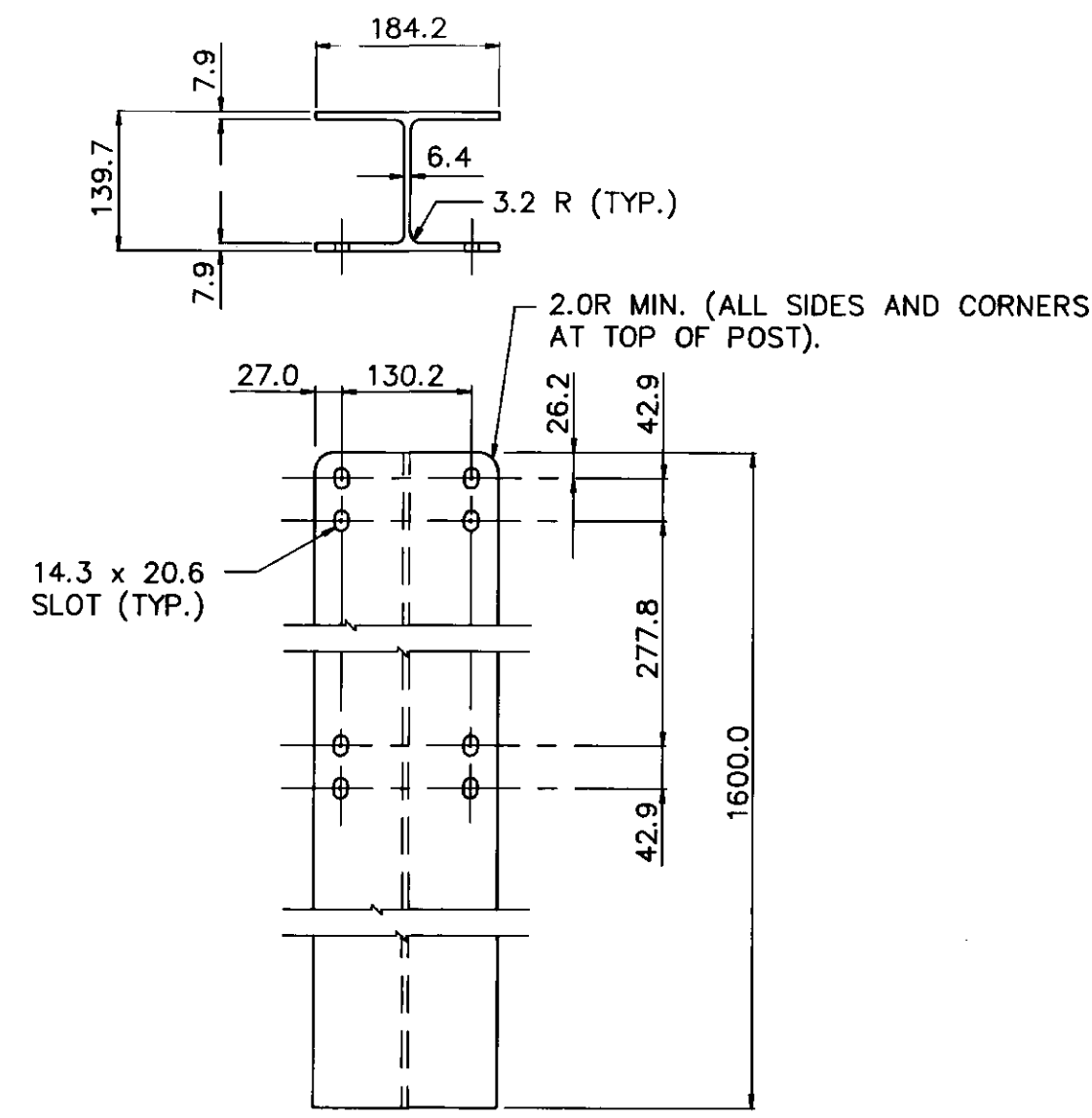
SPLICE BAR

SCALE - 1 : 25



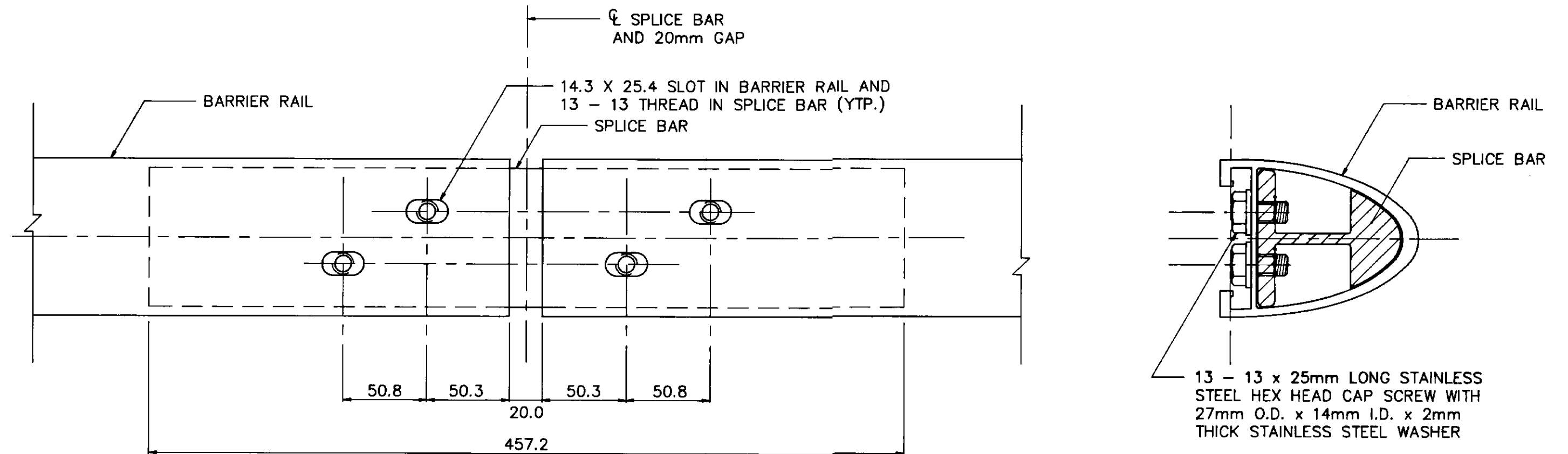
RAIL TO POST ASSEMBLY DETAIL

SCALE - 1 : 75



1.600m POST

(0.800m POST SIMILAR EXCEPT WITH ONLY FOUR SLOTS AT TOP OF POST)
SCALE - 1 : 75



SPLICE BAR TO RAIL ASSEMBLY DETAIL

SCALE - 1 : 25

MATERIAL SPECIFICATION

1. ALUMINUM RAILS, POSTS, SPLICE BARS, AND RAIL END CAPS CONFORM TO ASTM B221, ALLOY 6061 - T6, OR ALLOY 6351 - T6.
2. TYPE 316. STAINLESS STEEL WASHERS CONFORM TO ASTM A296, TYPE 316.
3. CAP SCREWS CONFORM TO ASTM A276, TYPE 316 STAINLESS STEEL.
4. ANTI-SEIZE COATING APPLIED TO ALL THREADED COMPONENTS WHEN BEING ASSEMBLED.
i.e. LPS-3-MANUFACTURED BY HOLT LLOYD (CANADA) LTD., MARKHAM, ONTARIO L3R 2Z3
5. TWO COATS, EACH 1mm IN THICKNESS OF ALKALI-RESISTANT BITUMINOUS PAINT APPLIED ON THE SURFACES OF POSTS AND RAILS THAT ARE IN CONTACT WITH THE GROUND.

METRIC

ALL DIMENSIONS SHOWN ARE IN MILLIMETRES



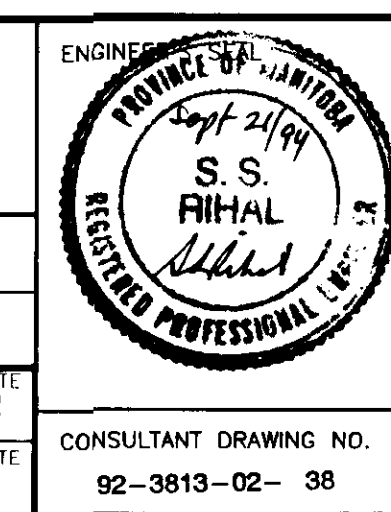
B.M. ELEV.	DESIGNED BY	CHECKED BY

DILLON
Consulting Engineers - Planners
Environmental Scientists

DESIGNED BY: _____
DRAWN BY: _____
HOR. SCALE: AS SHOWN
VERTICAL: _____
DATE: SEPT. 1994

CHECKED BY: _____
APPROVED BY: *S.S. Aihal*
ACCEPTED BY: _____
DATE: 94/10/12

CONSULTANT DRAWING NO. 92-3813-02-38



RECORD DRAWING
APPROVED BY: *S.S. Aihal* DATE: Dec 20/96

CW-302-R-2

THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
STREETS AND TRANSPORTATION DEPARTMENT

PORTAGE AVE. CULVERT & UNDERPASS
OMAND'S CREEK CULVERT REHABILITATION,
UNDERPASS, ROADWAY RESURFACING
AND RELATED WORKS

CITY DRAWING NUMBER U200-95-38
SHEET OF _____

BALANCED ALUMINUM BARRIER STANDARD DETAILS

B-5983-38