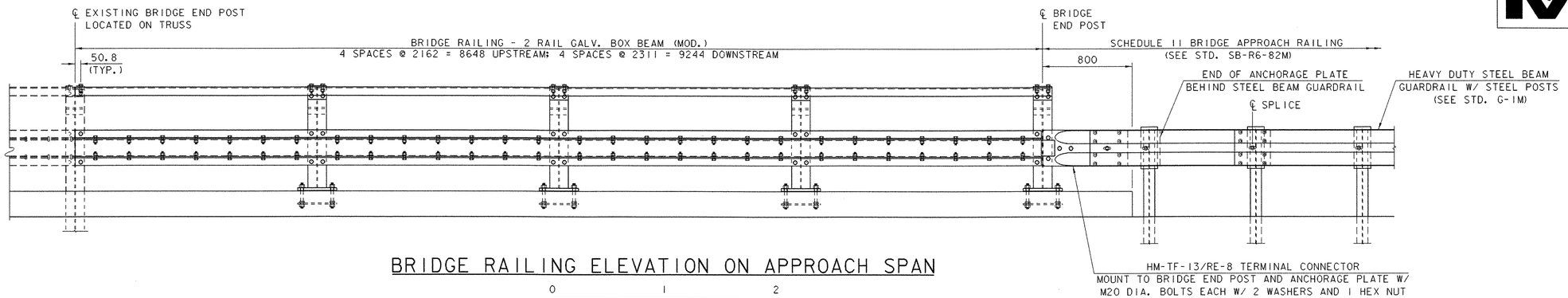
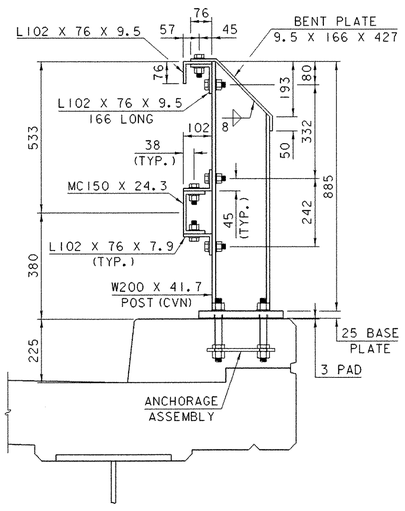


BRIDGE RAILING ELEVATION ON APPROACH SPAN

0 1 2

SCALE = 1:20

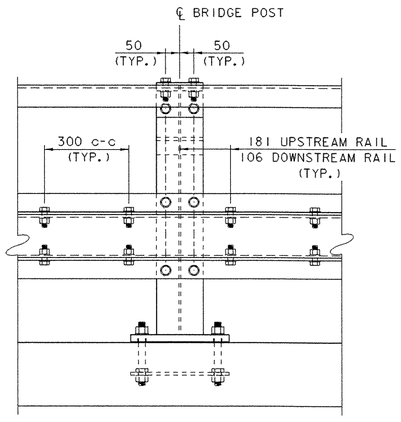
ALL CONNECTIONS FOR BRIDGE RAILING SHALL BE M20 DIA. BOLTS W/ 2 WASHERS AND 1 HEX NUT THROUGH 22 DIA. HOLES.



BRIDGE POST SECTION

0 0.5 1

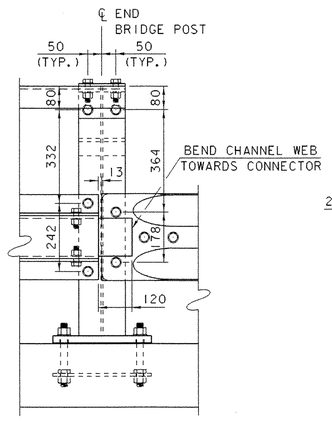
SCALE = 1:10



BRIDGE POST ELEVATION

0 0.5 1

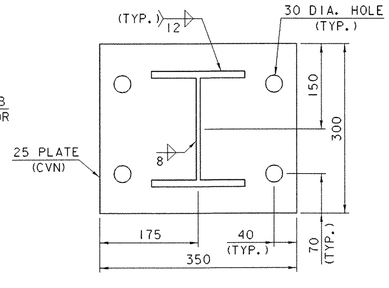
SCALE = 1:10



BRIDGE END POST ELEVATION

0 0.5 1

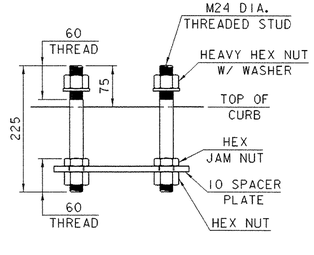
SCALE = 1:10



BASE PLATE

0 0.25 0.5

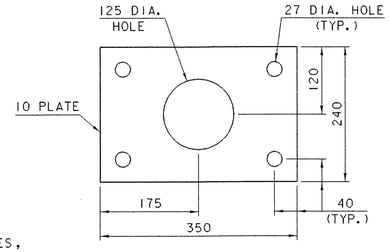
SCALE = 1:5



ANCHORAGE ASSEMBLY

0 0.25 0.5

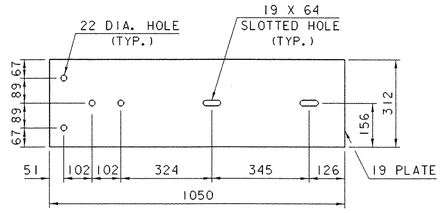
SCALE = 1:5



SPACER PLATE

0 0.25 0.5

SCALE = 1:5



ANCHORAGE PLATE

0 0.5 1

SCALE = 1:10

RAILING NOTES

1. ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525 OF THE STANDARD SPECIFICATIONS.
2. ALL EXPOSED CUT OR SHEARED EDGES SHALL BE ROUNDED TO A 1.6 MM RADIUS AND BE FREE OF BURRS.
3. SECTIONS OF BRIDGE RAILING SHALL BE ATTACHED TO MINIMUM OF TWO POSTS AND PREFERABLY TO AT LEAST FOUR POSTS.
4. RAIL POSTS SHALL BE SET NORMAL TO GRADE.
5. EXCEPT FOR ANCHORAGE ASSEMBLY, ALL BRIDGE RAIL COMPONENTS SHALL BE PAINTED GREEN, COLOR CHIP NO. 14062 AFTER FABRICATION IN ACCORDANCE WITH SECTION 513 OF THE SUPPLEMENTAL SPECIFICATIONS.
6. THE COST FOR ANCHORAGE PLATE AND ASSOCIATED HARDWARE SHALL BE SUBSIDIARY TO ITEM 525.31, "BRIDGE RAILING - 2 RAIL GALVANIZED BOX BEAM (MOD.)".
7. THE ANCHORAGE ASSEMBLY AND ANCHORAGE PLATE, EXCEPT FOR HARDWARE, SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M111M/M111. HARDWARE SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M232M/M232.
8. RAIL POST ANCHORING NUTS SHALL BE TIGHTENED TO A SNUG FIT AND THEN GIVEN AN ADDITIONAL 45 DEGREE TURN.
9. ANY BENDING OF RAIL SHALL BE BY SHOP PROCEDURE ONLY. ALL CURVED LONGITUDINAL RAIL ELEMENTS SHALL BE FABRICATED AS A SINGLE CURVE WITH NO CHORD SEGMENTS.
10. THE FABRICATOR SHALL SUBMIT SHOP DRAWINGS, INCLUDING WELDING PROCEDURES, TO THE STRUCTURES SECTION FOR APPROVAL IN ACCORDANCE WITH SUBSECTION 506.04 OF THE STANDARD SPECIFICATIONS. ALL WELDING SHALL CONFORM TO SUBSECTION 506.10 OF THE STANDARD SPECIFICATIONS.
11. RAIL POST AND BASE PLATES SHALL BE TESTED FOR IMPACT PROPERTIES IN ACCORDANCE WITH ASTM A370 CHARPY IMPACT TESTING USING TYPE A SPECIMENS.

MATERIALS

RAIL POSTS: ASTM A709/A709M, GRADE 345
ALL OTHER SHAPES AND PLATES: ASTM A709/A709M, GRADE 250
ANCHOR STUDS: ASTM F568M, CLASS 8.8
ALL OTHER BOLTS (UNLESS NOTED): AASHTO M164M, TYPE 1

NUTS FOR AASHTO M164M BOLTS AND ANCHOR STUDS SHALL COMPLY WITH AASHTO M291M.

WASHERS SHALL COMPLY WITH AASHTO M293M.

THE 3 MM PAD SHALL COMPLY WITH SUBSECTION 731.01 OR 731.02 OF THE STANDARD SPECIFICATIONS.

BRIDGE RAILING DETAILS

PROJECT NAME: BROOKLINE NEWFANE
PROJECT NUMBER: BHO 1442 (25)

FILE NAME: 95j278\Structures\sj278brd.i
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: G. ROY
PLOT DATE: 26-JUN-2003
DRAWN BY: G. ROY
CHECKED BY: M. LOZIER
SHEET 41 OF 78