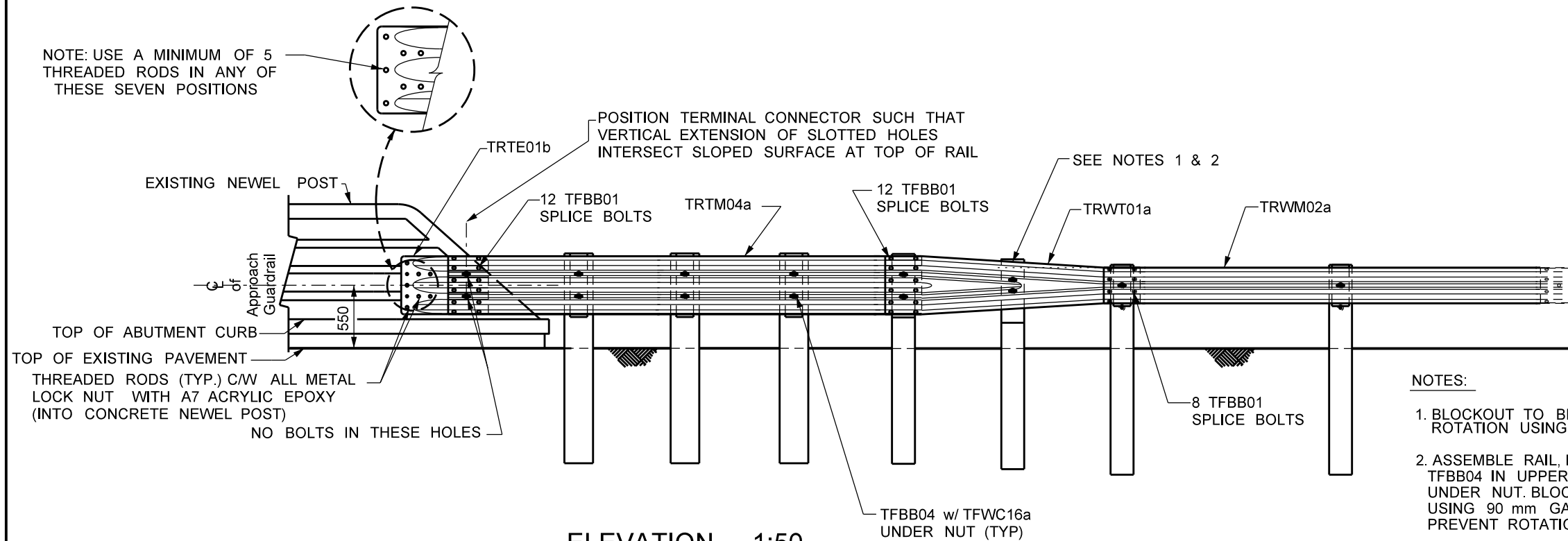


PLAN 1:50

NOTE: USE A MINIMUM OF 5  
THREADED RODS IN ANY OF  
THESE SEVEN POSITIONS



ELEVATION 1:50

NOTES:

1. BLOCKOUT TO BE NAILED TO POST TO PREVENT ROTATION USING 90mm GALVANISED NAIL
2. ASSEMBLE RAIL, BLOCKOUT AND POST USING ONE TFBB04 IN UPPER HOLE OF EACH C/W 1 TFCW16a UNDER NUT. BLOCK TO BE TOENAILED TO POST USING 90 mm GALVANISED NAIL TO PREVENT ROTATION.
3. ALL SCALES ARE APPROXIMATE.

NOTE: Original structural drawing sealed by  
J. Lukashenko P.Eng., Feb.23, 2000. It is  
filed in the Bridges and Structures Branch.

REVISIONS		
DATE	DESCRIPTION	BY
11-2005	THREADED ROD	HPL

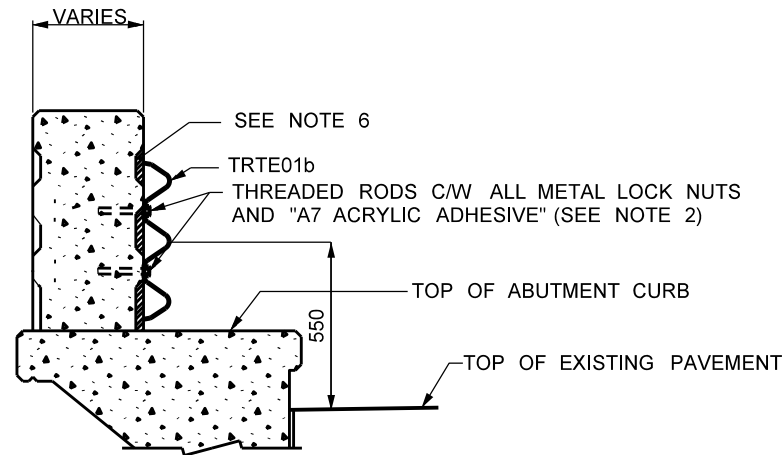
**Manitoba**  
Infrastructure and  
Transportation  
TRAFFIC ENGINEERING



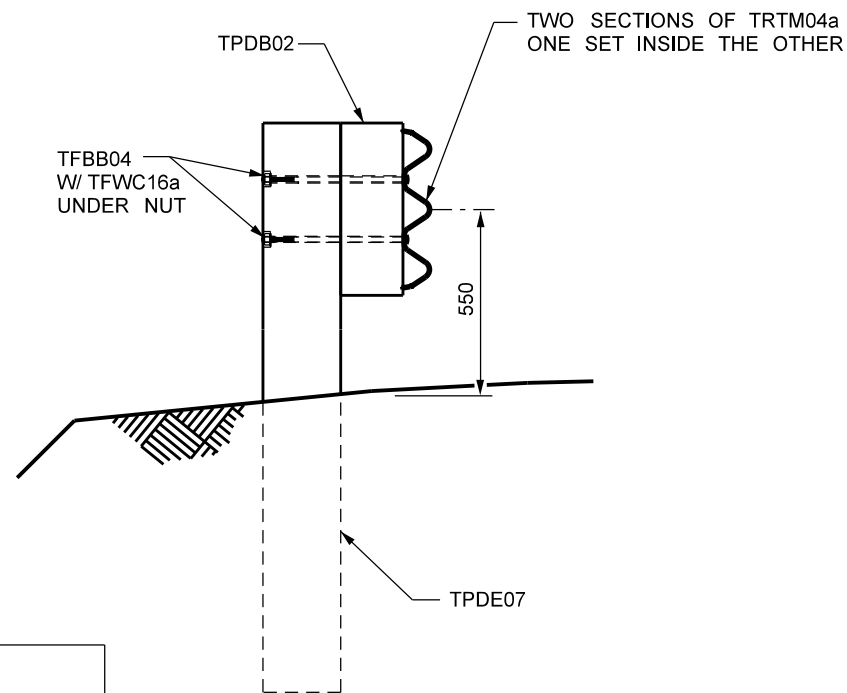
NESTED  
THRIE-BEAM  
APPROACH GUARDRAIL TO  
NEWEL POST TRANSITION

SHEET NO	1 OF 2
DATE:	2002 - 09
DRAWN:	D.C.

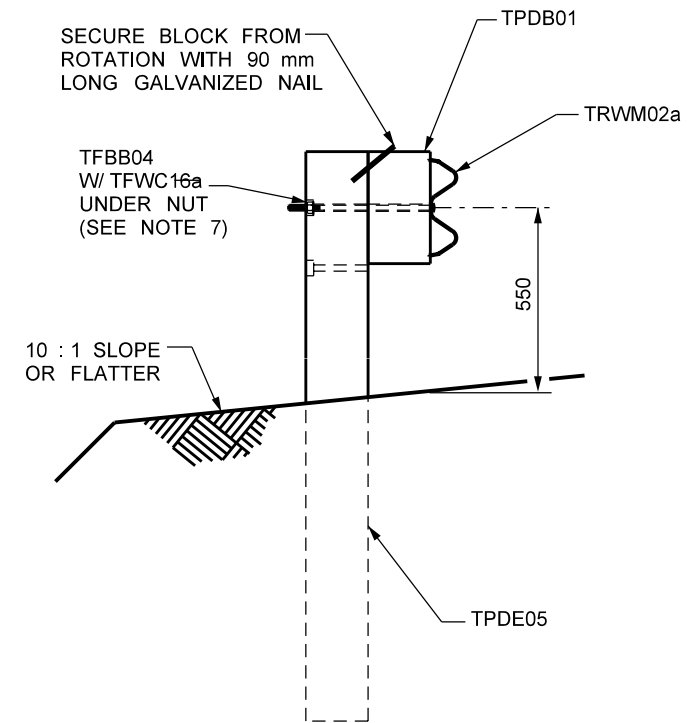
TSTB07a



SECTION A-A 1:25



SECTION B-B 1:25



SECTION C-C 1:25

BILL OF MISCELLANEOUS METAL				Site No.	
MARK	No.	DESCRIPTION	SIZE	MASS PER / UNIT	TOTAL MASS
		Threaded Rod	22 $\phi$ x150 Threaded rod c/w all metal lock nut (see note 7)	0.154	N/A
Total mass					kg

NOTES:

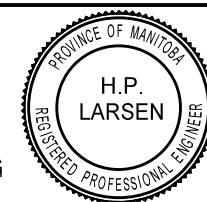
1. THE THRIE-BEAM TERMINAL CONNECTOR SHALL BE USED AS A TEMPLATE TO CORE HOLES INTO THE NEWEL POST. CARE SHALL BE TAKEN TO ENSURE HOLES ARE CORED ACCURATELY WITH MINIMAL DAMAGE TO NEWEL POST. USE OF ROTARY HAMMER DRILLS WILL NOT BE ALLOWED.
2. HOLES FOR THREADED ROD SHALL BE CORED INTO THE NEWEL POST AT 2 mm LARGER THAN THE BOLT DIAMETER.
3. ALL THREADED RODS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A325 EXCEPT WHERE NOTED OTHERWISE.
4. ALL MATERIAL IN THE NOTED BILL OF MISCELLANEOUS METAL SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH CAN/CSA G164-M92
5. UNEVEN SURFACES BEHIND THRIE BEAM TERMINAL CONNECTOR SHALL BE PATCHED SMOOTH AS REQUIRED TO PROVIDE UNIFORM BEARING OF THE CONNECTOR. NON-METALIC, NON SHRINK GROUT SHALL BE USED.
6. CUT / GRIND POST BOLT AS REQUIRED TO FACILITATE ASSEMBLY.
7. THREADED ROD 150 LONG. EMBED 100 INTO CONCRETE NEWEL POST.

ALL SCALES ARE APPROXIMATE

NOTE: Original structural drawing sealed by J. Lukashenko, P.Eng., Feb.23, 2000. It is filed in the Bridges and Structures Branch.

REVISIONS		
DATE	DESCRIPTION	BY

**Manitoba**  
Infrastructure and  
Transportation  
TRAFFIC ENGINEERING



NESTED  
THRIE- BEAM  
APPROACH GUARDRAIL TO  
NEWEL POST TRANSITION

SHEET NO	2 OF 2
DATE:	2002 - 09
DRAWN:	D.C.

TSTB07a