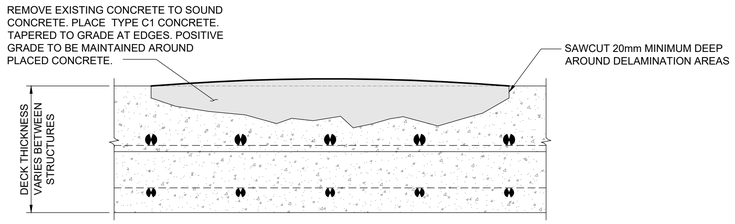
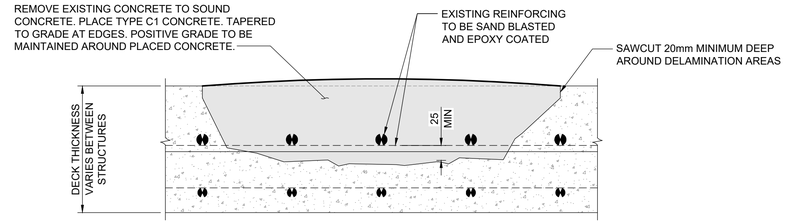
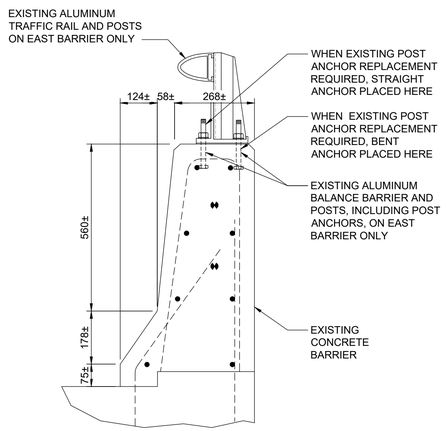


TYPE 1A

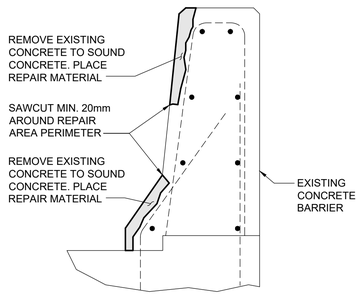


TYPE 1B

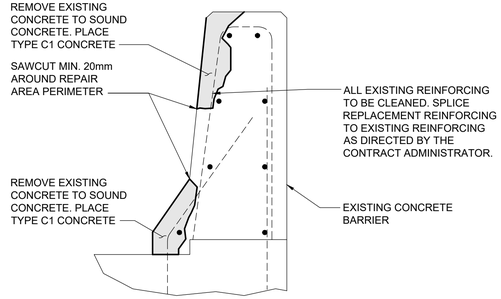
1 - - DELAMINATION REPAIR
1 : 5



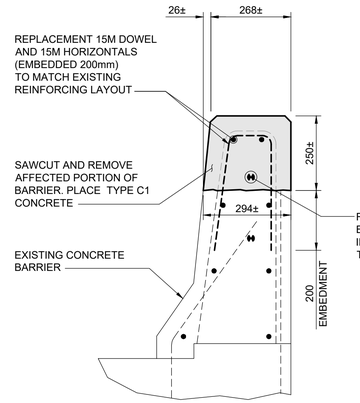
2 - - EXISTING BARRIER DETAILS
1 : 10



3 - - BARRIER REPAIR - TYPE 1A
1 : 10



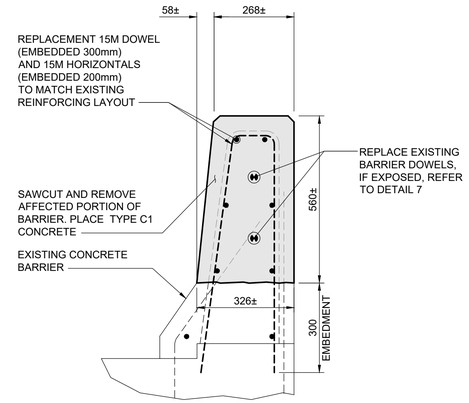
4 - - BARRIER REPAIR - TYPE 1B
1 : 10



5 - - BARRIER REPAIR - TYPE 2A
1 : 10

IF REPAIR IS DONE AT A BARRIER JOINT LOCATION, THE EXISTING BARRIER EMSEAL BEJS PRECOMPRESSED FOAM JOINT WILL BE REPLACED.

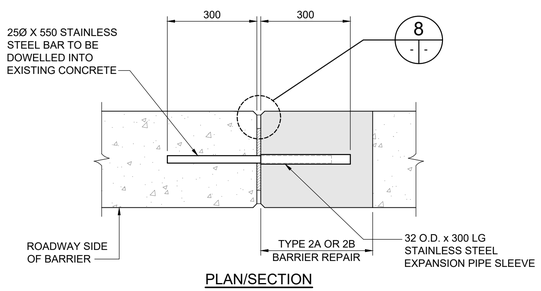
IF REPAIR IS DONE AT LOCATION WITH ALUMINUM BALANCE BARRIER ANCHOR POSTS, REMOVE AND REPLACE EXISTING ANCHOR BOLTS, SEE DETAIL 9.



6 - - BARRIER REPAIR - TYPE 2B
1 : 10

IF REPAIR IS DONE AT A BARRIER JOINT LOCATION, THE EXISTING BARRIER EMSEAL BEJS PRECOMPRESSED FOAM JOINT WILL BE REPLACED.

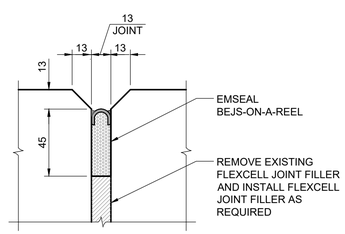
IF REPAIR IS DONE AT LOCATION WITH ALUMINUM BALANCE BARRIER ANCHOR POSTS, REMOVE AND REPLACE EXISTING ANCHOR BOLTS, SEE DETAIL 9.



PLAN/SECTION

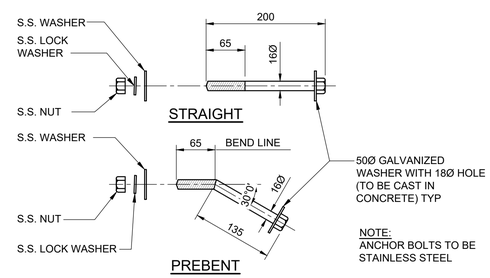
7 - - BARRIER JOINT DOWEL REPLACEMENT DETAIL
1 : 10

- ESTIMATED QUANTITY OF DOWEL REPLACEMENTS IS 10.



8 - - BARRIER JOINT REPLACEMENT DETAIL
1 : 2

- ESTIMATED QUANTITY OF BARRIER JOINT REPLACEMENTS IS 13.



9 - - RAIL POST ANCHOR BOLTS DETAIL
1 : 5

- ESTIMATED LOCATIONS OF ANCHORS TO BE REPLACED IS 3.

TYPICAL REPAIR NOTES:

1. ON EAST BARRIER, REMOVE AND REINSTALL EXISTING ALUMINUM BALANCE BARRIER AND POSTS AS NECESSARY. ENSURE MIN 3mm ALUMINUM SHIM IS PLACED.
2. DURING DEMOLITION DO NOT DAMAGE EXISTING REINFORCING.
3. IMMEDIATELY PRIOR TO PLACEMENT OF CONCRETE, ALL METAL SURFACES WHICH WILL BE IN CONTACT SHALL BE COATED WITH EPOXY ADHESIVE. RATE OF PLACEMENT OF ADHESIVE SHALL BE SUCH THAT THE ADHESIVE DOES NOT DRY OR SET BEFORE CONCRETE IS PLACED.
4. ALL EXISTING CONCRETE TO BE CLEANED OF DUST, DEBRIS AND CONTAINMENTS PRIOR TO PLACEMENT OF CONCRETE.
5. IF REPAIR AREA EXPOSES EXISTING REINFORCING, EXISTING REINFORCING TO BE SAND BLASTED AND EPOXY COATED
6. CARE SHALL BE TAKEN DURING CONSOLIDATION OF CONCRETE TO ENSURE THERE ARE NO VOIDS IN THE CONCRETE. FOLLOWING CONCRETING OPERATIONS THE ENGINEER SHALL INSPECT THE REPAIR AREA BY METHOD OF SOUNDING. ALL VOIDS SHALL BE FILLED WITH AN APPROVED NON-SHRINK GROUT.
7. REPAIR AREA IS AN EXAMPLE. METHODOLOGY SHALL BE SIMILAR FOR REPAIRS AT OTHER LOCATIONS IF NECESSARY

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
Tetra Tech Canada Inc.
No. 6499

B.M. ELEV.

NO.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	23.03.07	E.F.S.

TETRA TECH

DESIGNED BY	R.L.	CHECKED	E.F.S.
DRAWN BY	E.V.	APPROVED BY	E.F.S
HOR. SCALE: / VERTICAL:	AS NOTED	ACCEPTED BY	DATE
		ORIGINAL SIGNED	23.03.07
DATE	22.12.06	V. BANTHIA, M.SC, P.ENG., CIM, PMP BRIDGE PROJECTS ENGINEER	

ORIGINAL DRAWING REVISION "00" SEALED BY E.F.G. SHEHATA 23.03.07

CONSULTANT DRAWING NO.
734-2200070500-DWG-S2109

Winnipeg
THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

MINOR REHABILITATION OF ST JAMES BRIDGES
SOUTHBOUND BRIDGE

CITY DRAWING NUMBER B101-22-009
SHEET 7 OF 9

TYPICAL BARRIER AND DECK REPAIR DETAILS

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