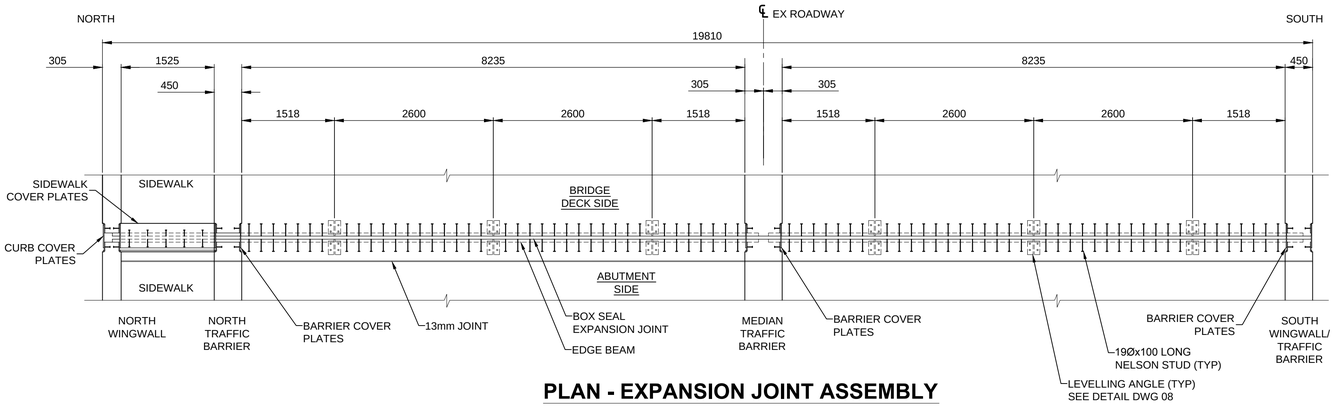
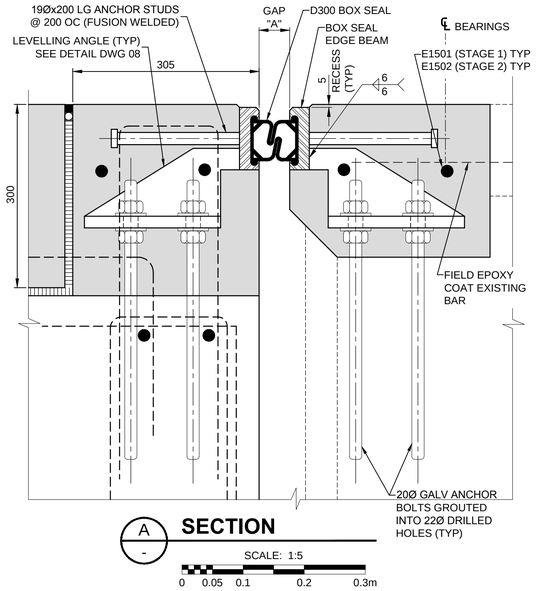


PLAN - EXPANSION JOINT ASSEMBLY

SCALE: 1:50

0 0.5 1.0 2.0 3.0m



A - **SECTION**

SCALE: 1:5

0 0.05 0.1 0.2 0.3m

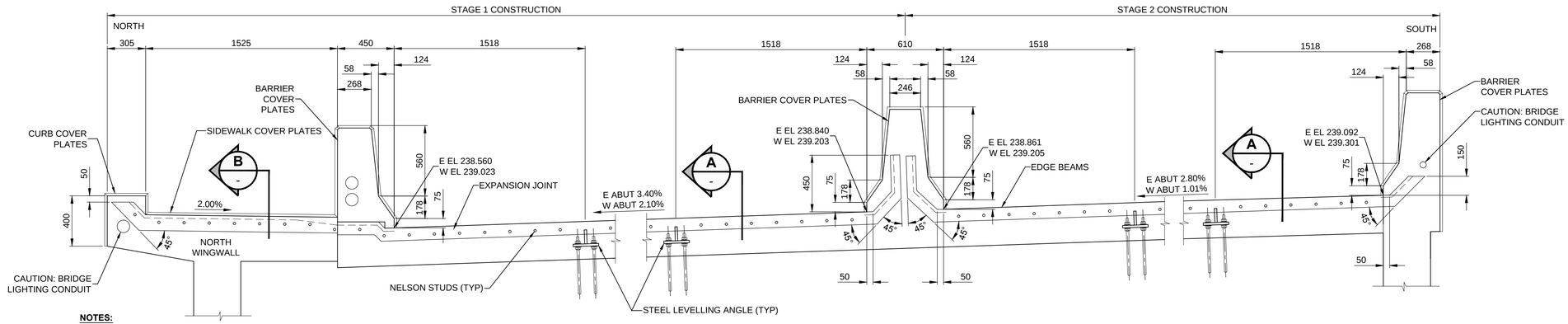
TEMPERATURE WIDTH ADJUSTMENT TABLE

TEMP	-40°	-20°	0°	20°	40°
GAP "A"	70	65	60	55	50

NOTE: 20° DENOTES TEMPERATURE IN CELCIUS

EXPANSION JOINT GENERAL NOTES:

1. EXPANSION JOINTS ARE DESIGNED TO ACCOMMODATE THE ANTICIPATED THERMAL EXPANSION / CONTRACTION REQUIREMENTS BASED ON AN 80°C TEMPERATURE RANGE PLUS AN ADDITIONAL 25mm OF MOVEMENT FOR EACH END OF TEMPERATURE SPECTRUM.
2. EXPANSION JOINTS ARE PRESET TO ALLOW FOR A MINIMUM SEAL INSTALLATION WIDTH OF 33mm AT 15°C.
3. THE EXPANSION JOINT ASSEMBLIES SHALL BE DESIGNED TO CARRY THE LATEST EDITION OF CHBD CS6-06 CL-625 TRUCK LOADS.
4. STEEL SHALL BE IN ACCORDANCE WITH THE LATEST CSA STANDARD CAN/CSA G40.21M GRADE 300W OR GRADE A588 OR EQUAL AND ALL SUBSEQUENT REVISIONS.
5. STEEL EXTRUSIONS SHALL BE IN ACCORDANCE WITH THE LATEST CSA STANDARD CAN/CSA G40.21M GRADE 230G OR GRADE A588 MINIMUM AND ALL SUBSEQUENT REVISIONS.
6. ALL STEEL COMPONENTS SURFACES, INCLUDING COVER PLATES AND TRENCH SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH THE LATEST CSA STANDARD CAN/CSA G164-M92 AND ALL SUBSEQUENT REVISIONS TO A MINIMUM NET RETENTION OF 610 gm/m² AFTER FABRICATION.
7. JOINT ASSEMBLY SHALL BE FABRICATED AND COMPLETELY SHOP ASSEMBLED AND PRESET TO DIMENSIONS "A" FOR 20°C PRIOR TO SHIPMENT.
8. THE CONTRACTOR SHALL FIELD VERIFY CONCRETE DIMENSIONS AROUND THE EXPANSION JOINT BLOCKOUT PRIOR TO FABRICATION.
9. EXPANSION JOINT UNITS AND RELATED MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
10. THE CONTRACTOR IS REQUIRED TO PROVIDE SUPPORT FOR THE EXPANSION JOINT ASSEMBLIES DURING PLACEMENT OF CONCRETE. ALL SUPPORT SYSTEMS SHALL NOT INTERFERE WITH ANY CONCRETE FINISHING OPERATIONS.
11. BLEEDER HOLES SHALL BE DRILLED INTO THE TOP OF THE STEEL EDGE BEAMS OF THE EXPANSION JOINT AND INTO THE TOP OF THE CURB COVER PLATES WHERE CONCRETE CAST DIRECTLY AGAINST. FOLLOWING CONCRETING OPERATIONS THE ENGINEER SHALL INSPECT THESE AREAS BY METHOD OF SOUNDING. ALL VOIDS SHALL BE FILLED WITH AN APPROVED NON-SHRINK GROUT.
12. EXPANSION JOINTS SHALL BE INSTALLED TO THE MANUFACTURER'S PROCEDURE FOR INSTALLATION.
13. SEAL SHALL BE PREFORMED NEOPRENE RUBBER AS SPECIFIED. EACH SEAL SHALL BE SUPPLIED & INSTALLED IN ONE CONTINUOUS PIECE. NO SPLICE IN THE RUBBER SEAL WILL BE PERMITTED.
14. ALL CURB COVER PLATES SHALL BE RECESSED 13mm FROM THE FACE OF THE CONCRETE.
15. UNLESS NOTED, CURB DIMENSIONS SHOWN ARE TO CONCRETE FACES. EXPANSION JOINT FABRICATOR SHALL MAKE APPROPRIATE ADJUSTMENTS FOR CHAMFERS AND OFFSETS AS SHOWN ON DETAILS.
16. INSTALLATION TEMPERATURE SHALL BE TAKEN AS THE MEAN SHADE AIR TEMPERATURE 48 HOURS PRIOR TO JOINT INSTALLATION.
17. IMMEDIATELY PRIOR TO PLACEMENT OF CONCRETE, ALL METAL SURFACES WHICH WILL BE IN CONTACT WITH CONCRETE 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 AGAINST IT.
18. LOOSEN ERECTION BOLTS WITHIN 24 HOURS OF CONCRETING TO ALLOW JOINT MOVEMENT DUE TO TEMPERATURE CHANGE.
19. AFTER REMOVAL OF CLAMPING CHANNELS AND SPACER DAM, BOLT AND BLEEDER HOLES TO BE FILLED WITH AN APPROVED EPOXY GROUT.
20. SEAL WELDING OF THE TOP EDGE COVER PLATE MEMBERS TO THE EXPANSION JOINT END PLATES AND ASSOCIATED FIELD GALVANIZING SHALL TAKE PLACE PRIOR TO INSTALLATION OF EXPANSION JOINT SEALS.
21. ALL SURFACES IN CONTACT WITH JOINT SEALS SHALL BE CLEANED PRIOR TO INSTALLATION OF SEALS.
22. AVOID ANY CONTACT BETWEEN REINFORCING STEEL AND GALVANIZED ANCHORS.



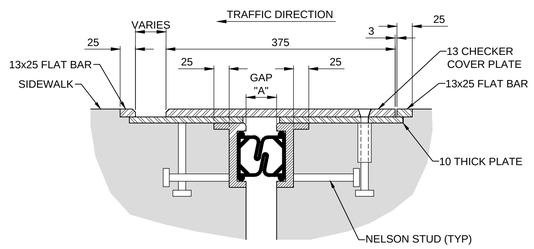
NOTES:

- LAYOUT DIMENSIONS ARE TO FACE OF CONCRETE
- PLATES TO BE RECESSED AS PER DETAILS
- TOP OF FINISHED DECK ELEVATIONS GIVEN ARE BASED ON RECORD DRAWINGS. TOP OF FINISHED DECK TO MATCH EXISTING ROAD CROSSFALL AND VERTICAL PROFILE. CONTRACTOR TO FIELD VERIFY EXISTING SITE ELEVATIONS AND PROVIDE ELEVATIONS ALONG INSIDE FACE OF BACKWALL TO CONTRACT ADMINISTRATOR PRIOR TO EXPANSION JOINT FABRICATION.

ELEVATION - EXPANSION JOINT ASSEMBLY

SCALE: 1:20

0 0.5 1.0m



B - **SECTION**

SCALE: 1:5

0 0.05 0.1 0.2 0.3m

NOTE:

- CONTRACTOR TO REFER TO REFERENCE DRAWINGS FOR DETAILS OF EXISTING CONSTRUCTION.

BID OPPORTUNITY No. 1051-2013

APEGM Certificate of Authorization MORRISON HERSHFIELD No. 1736

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

LOCATION APPROVED
UNDERGROUND STRUCTURES

SUPR. U/G STRUCTURES COMMITTEE — DATE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

BM ELEV

No.	REVISIONS	YY/MM/DD	BY
0	ISSUED FOR TENDER	14/03/07	BE
DATE		14/02/28	

MORRISON HERSHFIELD

DESIGNED BY	BE	CHECKED BY	BE, KEL
DRAWN BY	DML	APPROVED BY	BWB
HOR. SCALE	AS SHOWN	RELEASED FOR CONSTRUCTION	
VERT. SCALE	AS SHOWN		
DATE	14/02/28	DATE	

PROFESSIONAL'S SEAL

ORIGINAL DRAWING REV No. 0

SEALED BY:

B. EBENSPANGER
MAR 7, 2014

CONSULTANT DRAWING No.
W130027-DET-03.dwg

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

NAIRN AVENUE OVERPASS MAINTENANCE WORKS

EXPANSION JOINTS 1

CITY DRAWING NUMBER B121-14-07

SHEET 7 OF 11

DRAWING No. 07 REV 0