

Plotted: May 12, 2025 at 5:21:38 PM | Last saved by: pathanaric
File: C:\Users\pathanaric\Documents\WSP Canada projects (MEX)\CA0047563-3090 - Midtown Bridge - C2A\Project Files\01-Bridges\03-Working Drawings\CA0047563-3090 Midtown Bridge Repairs - general notecard.dwg | Layout: 2 Design Data and General Notes
A1 SIZE (594 mm x 841 mm)

GENERAL

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH CONTRACT SPECIFICATIONS.
2. THE METRIC SYSTEM OF MEASUREMENT IS USED ON ALL DRAWINGS. ELEVATIONS AND STATIONS ARE SHOWN IN METRES AND ALL OTHER DIMENSIONS ARE SHOWN IN MILLIMETRES. HARD CONVERSIONS ARE USED FOR EXISTING MATERIALS IN IMPERIAL UNITS (I.E. ½" = 13 mm).
3. CONTRACTOR MUST VERIFY ALL EXISTING GEOMETRY AS WELL AS PROPOSED DIMENSION AND LAYOUT IN THE FIELD PRIOR TO FABRICATION AND CONSTRUCTION. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR PRIOR TO CONSTRUCTION.
4. ALL REFERENCES TO CODES, STANDARDS, SPECIFICATIONS, GUIDELINES, ETC., SHALL MEAN THE LATEST EDITION.
5. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY IN AND ABOUT THE JOB SITE DURING CONSTRUCTION. EXCEPT WHERE INDICATED OTHERWISE, THESE DRAWINGS SHOW DETAILS FOR THE COMPLETED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR DESIGN AND STABILITY OF ANY TEMPORARY WORKS DURING CONSTRUCTION. CONSTRUCTION METHODS REQUIRING THE TEMPORARY INSTALLATION OF SHORING, SCAFFOLDING, BRACING, ETC. SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR FOR REVIEW AND ACCEPTANCE PRIOR TO PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA TO PERFORM AND TAKE RESPONSIBILITY FOR ANY SUCH DESIGNS NECESSARY TO COMPLETE THE CONSTRUCTION AS REQUIRED BY THE CONTRACT DOCUMENTS.
6. BRIDGE SOUTHBOUND CURB LANE TO BE CLOSED TO TRAFFIC AND BRIDGE WEST SIDEWALK TO BE CLOSED TO PEDESTRIANS DURING THE WORK. ASSINBOINE RIVER WALK TRAIL SHALL BE CLOSED DURING WORK ON OR NEAR PIER 2 (SU.3).
7. ANY ADDITIONAL LOADS CAUSED BY THE CONSTRUCTION PROCESS MUST REMAIN WITHIN A LENGTH OF 10 m FROM THE CENTERLINE OF PIERS 1 AND 2 IN EACH DIRECTION ALONG THE LENGTH OF THE BRIDGE. THESE LOADS CAN NOT BE LOCATED NEAR THE MIDSPAN OF ANY BRIDGE SPANS. THIS IS FOR THE DURATION THAT GIRDERS ARE JACKED AND NEW PLATES ARE NOT YET INSTALLED IN THEIR FINAL POSITIONS.
8. ALL REQUIRED TEMPORARY LATERAL BRACING SHALL BE INSTALLED PRIOR TO REMOVAL OF EXISTING COVER PLATES.

STRUCTURAL DESIGN DATA

1. DESIGN SPECIFICATION:

CAN/CSA-S6-19 (R2024) "CANADIAN HIGHWAY BRIDGE DESIGN CODE"
2. DESIGN LOAD:

CAN/CSA S6-19 (R2024) CL-625 TRUCK AND LANE LOAD IN MEDIAN LANE ONLY

MAXIMUM SPEED LIMIT 30 km/hr

MAXIMUM CONSTRUCTION LIVE LOADS: 314 kN PER PIER

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40.21 GRADE 350W UNLESS NOTED OTHERWISE.
2. BOLTS SHALL BE 22 mm DIAMETER ASTM A325 COMPLETE WITH TWO WASHERS AND ONE HEAVY HEX NUT, ALL HOT DIP GALVANIZED, UNLESS NOTED OTHERWISE.
3. ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.5M/D1.5, 2015 - BRIDGE WELDING CODE.
4. TEMPORARY LATERAL BRACING TO BE PROVIDED BETWEEN TWO WESTERNMOST GIRDER LINES AT EACH STIFFENER LOCATION (1/3 POINTS BETWEEN DIAPHRAGMS) BETWEEN GIRDER SPLICES AND PIERS.

NOTE:
These design documents are prepared solely for the use by the party with whom the design professional has entered into a contract and there are no representations of any kind made by the design professional to any party with whom the design professional has not entered into a contract.

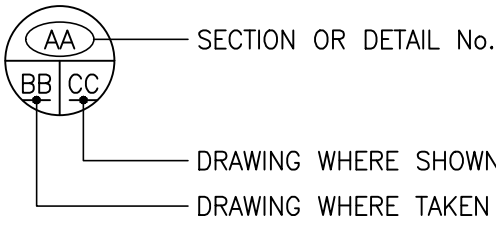
JACKING PROCEDURE (APPLIED AT SOUTH ABUTMENT, PIERS 1, 2 & 3)

1. REMOVE WEST SIDEWALK COVER PLATE AT PIER 3.
2. RAISE STRUCTURE WITH JACKS AT TEMPORARY JACK LOCATIONS JUST ENOUGH TO REMOVE EXISTING FLANGE COVER PLATES, GIRDER SOLE PLATE AND BEARING TOP PLATE FROM EXTERIOR GIRDER. JACKING TO BE UNDERTAKEN SIMULTANEOUSLY AT ALL REQUIRED LOCATIONS WITH HEIGHT OF LIFT AT ADJACENT INTERIOR GIRDER APPROXIMATELY HALF OF THAT REQUIRED AT EXTERIOR GIRDER. MAXIMUM LIFT HEIGHT NOT TO EXCEED 15 mm. MAXIMUM FORCE AT PIERS 1 AND 2 NOT TO EXCEED 4300 kN ON EXTERIOR GIRDER AND 6300 kN ON INTERIOR GIRDER, AND MAXIMUM FORCE AT THE SOUTH ABUTMENT AND PIER 3 NOT TO EXCEED 2970 kN ON THE EXTERIOR GIRDER AND 1870 kN ON THE INTERIOR GIRDER.
3. AFTER JACKING, POSITION OF STRUCTURE TO BE LOCKED IN PLACE BY MECHANICAL MEANS.
4. GRIND OFF EXISTING WELD BETWEEN GIRDER BOTTOM FLANGE COVER PLATE AND BEARING TOP PLATE TO REMOVE GIRDER SOLE PLATE AND BEARING TOP PLATE.
5. REMOVE EXISTING GIRDER BOTTOM FLANGE COVER PLATES.
6. CLEAN FAYING SURFACES TO REMOVE RUST. COMPLETED SURFACE TO BE APPROVED BY CONTRACT ADMINISTRATOR. PLEASE BE ADVISED THAT EXISTING PAINTED STEEL IS LEAD-BASED AND CONTANMENT WITH PROPER DISPOSAL WILL BE REQUIRED AS PER THE CONTRACT SPECIFICATIONS.
7. INSTALL NEW GIRDER FLANGE COVER PLATES C/W NEW HOT DIP GALVANIZED A325 BOLTS.
8. INSTALL NEW GIRDER SOLE PLATE.
9. INSTALL NEW BEARING TOP PLATE. CONTRACT ADMINISTRATOR TO PROVIDE REQUIRED POSTION OF BEARING TOP PLATE.
10. LOWER THE STRUCTURE SIMULTANEOUSLY AND PROGRESSIVELY. CONTRACT ADMINISTRATOR TO INSPECT THE FINAL POSITION BEFORE REMOVING JACKS.
11. REMOVE JACKS.
12. REMOVE TEMPORARY LATERAL BRACING.
13. REINSTALL SIDEWALK COVER PLATE.

ABBREVIATIONS

⊙	AT	K	K VALUE
ABUT.	ABUTMENT	LDS	LAND DRAINAGE SYSTEM
ALT.	ALTERNATING	LVC	LENGTH OF VERTICAL CURVE
APPROX.	APPROXIMATELY	MAX.	MAXIMUM
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MIN.	MINIMUM
B.C.	BEGIN CURVE	MK.	MARK
BL	BOTTOM LOWER LAYER	N.F.	NEAR FACE
BLVD.	BOULEVARD	NB	NORTHBOUND
B.O.	BOTTOM OF	No.	NUMBER
BRG.	BEARING	N.S.W.L.	NORMAL SUMMER WATER LEVEL
B.S.	BOTH SIDES	N.T.S.	NOT TO SCALE
BTM.	BOTTOM	PCS.	PIECES
BUL	BOTTOM UPPER LAYER	O.C.	ON CENTER
BVCE	BEGIN VERTICAL CURVE ELEVATION	O.D.	OUTSIDE DIAMETER
BVCS	BEGIN VERTICAL CURVE STATION	O.F.	OUTSIDE FACE
CB	CATCH BASIN	O/H	OVERHEAD
C/C	CENTER TO CENTER	O/O	OUT TO OUT
CL	CENTER LINE	OPP.	OPPOSITE
CONC.	CONCRETE	PL	PLATE
CONT.	CONTINUOUS	PNT.	POINT
CMP	CORRUGATED METAL PIPE	PVI	POINT OF VERTICAL INTERSECTION
CS	COMBINED SEWER	REINF.	REINFORCING
CSA	CANADIAN STANDARDS ASSOCIATION	R.C.	REINFORCED CONCRETE
C/W	COMPLETE WITH	REQ'D	REQUIRED
DIA.	DIAMETER	R.O.W.	RIGHT OF WAY
Ø	DIAMETER	SB	SOUTHBOUND
D.L.	DEAD LOAD	SD	STANDARD DRAWING (CITY OF WINNIPEG STANDARD SPECIFICATION)
DWL.	DOWEL	SHLD.	SHOULDER
EB	EASTBOUND	SL	STREET LIGHT
E.C.	END CURVE	SP	SPACES
E.F.	EACH FACE	SPDD	STANDARD PROCTOR DRY DENSITY
ELEV.	ELEVATION	S.S.	STAINLESS STEEL
EL.	ELEVATION	STA.	STATION
EVCE	END VERTICAL CURVE ELEVATION	TC	TANGENT TO CURVE
EVCS	END VERTICAL CURVE STATION	TLL	TOP LOWER LAYER
EXP.	EXPANSION	THK.	THICK
EXIST.	EXISTING	T.O.	TOP OF
EXT.	EXTERIOR	TUL	TOP UPPER LAYER
F.F.	FAR FACE	TYP.	TYPICAL
FM	FEEDERMAIN	VERT.	VERTICAL
FTG.	FOOTING	U/G	UNDERGROUND
GALV.	GALVANIZED	U.N.O.	UNLESS NOTED OTHERWISE
G.B.M.	GEODETIC BENCH MARK	U/S	UNDERSIDE
HORIZ.	HORIZONTAL	WB	WESTBOUND
H.W.L.	HEAD WATER LEVEL	W.O.	WORKING POINT
I.F.	INSIDE FACE	WM	WATER MAIN
INT.	INTERIOR	W.W.S.	WASTE WATER SEWER
INV.	INVERT		

SECTION AND DETAIL SYMBOLS LEGEND



METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES



LOCATIONS APPROVED UNDERGROUND STRUCTURES				G.B.M.				ELEV.			
SIGNED BY: _____				DATE: _____							
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 EXISTANCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING											
0				ISSUED FOR TENDER				25.05.13			
No.				REVISIONS				DATE BY			

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DESIGNED BY

GN

CHECKED BY

EH

DRAWN BY

CP

APPROVED BY

MLW

HOR. SCALE

N.T.S.

VERTICAL

N.T.S.

RELEASED FOR CONSTRUCTION

M. MADDY, P.Eng.
CITY OF WINNIPEG

ENGINEER'S SEAL		CITY DRAWING NUMBER B114-25-02	
		BID OPPORTUNITY NUMBER 329-2025	
		SHEET 2 OF 9	
CONSULTANT PROJECT No. CA0047563.3090		REV 0	

Winnipeg

THE CITY OF WINNIPEG

PUBLIC WORKS DEPARTMENT

ENGINEERING DIVISION

MIDTOWN BRIDGE MAINTENANCE

REPAIRS AND RELATED WORKS

DESIGN DATA AND GENERAL NOTES