Winnipeg

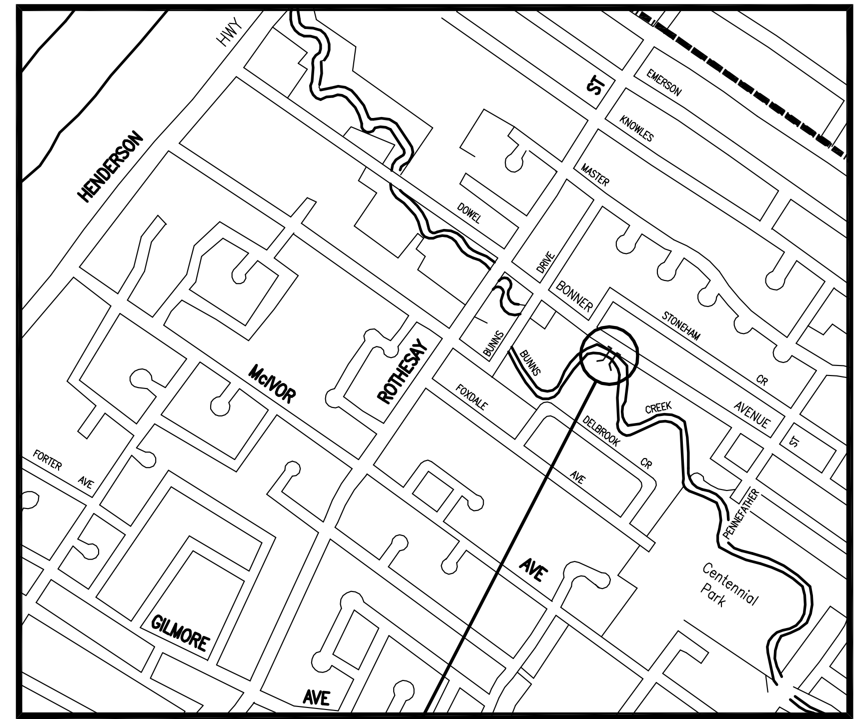
THE CITY OF WINNIPEG

PUBLIC WORKS DEPARTMENT
TRANSPORTATION ENGINEERING DIVISION

ACCESS BRIDGE

TO 330 AND 334 BONNER AVENUE

BID OPPORTUNITY No. 867-2007



BRIDGE SITE
330 AND 334 BONNER AVENUE
WINNIPEG, MANITOBA

DESIGN DATA

DESIGN SPECIFICATION	– CAN/CSA-S6-06
LIVE LOAD	– CL625 – DESIGN LANE LOAD
FUTURE ASPHALT	– 50mm
REINFORCING STEEL	– CSA G30.18 – M92 (R2002) GRADE 400W
STEEL H-PILES	– HP250x85 GRADE 300W
ALUMINUM BALANCED BARRIER	– ASTM STANDARD B221
CONCRETE STRENGTH AT 28 DAYS	– 35 MPa

GENERAL NOTES

THESE DRAWINGS TO BE READ IN CONJUNCTION WITH THE CONTRACT SPECIFICATIONS.

EXISTING DIMENSIONS ARE APPROXIMATE ONLY. CONTRACTOR SHALL SITE VERIFY ALL DIMENSIONS.

FOUNDATIONS

FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL INVESTIGATION PERFORMED BY AMEC EARTH & ENVIROMENTAL AND REPORT DATED SEPT. 2007 PREPARED BY AMEC EARTH & ENVIROMENTAL ENSURE THAT THE REQUIREMENTS OUTLINED IN THESE REPORTS ARE READ AND UNDERSTOOD PRIOR TO COMMENCING WITH FOUNDATION WORK. FOR TEST HOLE LOCATION REFER TO THE GEOTECHNICAL REPORTS OR BRIDGE SITE PLAN DRAWINGS B176-08-03, DRAWING 3 OF 9.

PROTECT EXCAVATIONS FROM RAIN, SNOW, FREEZING TEMPERATURES AND STANDING WATER.

REMOVE GROUND WATER ENTERING EXCAVATIONS BY AN APPROVED DEWATERING METHOD.

DO NOT PLACE CONCRETE AGAINST FROZEN GROUND. THAW BY AN APPROVED METHOD, THEN PROTECT EXCAVATIONS FROM FREEZING PRIOR TO PLACING CONCRETE.

STEEL H- PILES

MAXIMUM ALLOWABLE LOAD DRIVEN TO REFUSAL IS 1145kN.

CAST IN PLACE CONCRETE

CONCRETE MATERIALS, QUALITY, MIXING, PLACING, FORMWORK AND OTHER CONSTRUCTION PRACTICES TO CONFORM TO CSA-A23.1-04.

SEE SPECIFICATION FOR CONCRETE MIX DESIGN REQUIREMENTS.

DO NOT USE CALCIUM CHLORIDE IN CONCRETE MIX.

ALL EXPOSED SURFACES OF THE ABUTMENT AND SUPERSTRUCTURE SHALL RECEIVE ONE COAT OF PRIMER AND TWO COATS OF PAINT, EXCLUDING DECK SOFFIT AND TOP OF DECK.

PERMEABLE FORMWORK LINER SHALL BE USED ON ALL EXPOSED FORMED SURFACES, EXCEPT DECK SOFFIT.

DRAWING INDEX

CITY DWG. No.	CONSULTANT DRW. No.	SHEET No.	SHEET TITLE
B176-08-01	GI001-682	1 of 9	COVER SHEET & DRAWING INDEX
B176-08-02	SB701-682	2 of 9	TEMPORARY SITE ACCESS PLAN
B176-08-03	SB702-682	3 of 9	BRIDGE SITE PLAN
B176-08-04	SB703-682	4 of 9	GENERAL ARRANGEMENT & FOUNDATION LAYOUT
B176-08-05	SB704-682	5 of 9	CONCRETE PLAN, SECTIONS & DETAILS
B176-08-06	SB705-682	6 of 9	CONCRETE SECTIONS & DETAILS
B176-08-07	SB706-682	7 of 9	REINFORCING PLAN, SECTIONS & DETAILS
B176-08-08	SB707-682	8 of 9	REINFORCING SECTIONS, DETAILS & SCHEDULE
B176-08-09	SJ701-682	9 of 9	ALUMINUM BRIDGE GUARDRAIL DETAILS

REINFORCING

ALL REINFORCING STEEL SHALL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH CSA STANDARD G164 TO A MINIMUM RETENTION OF 600 g/m?.

CONCRETE CLEAR COVER TO REINFORCEMENT 75mm UNLESS NOTED OTHERWISE.

SUPPLY SUPPORT BARS TO SUPPORT MAIN REINFORCEMENT AS REQUIRED.

LAP SPLICE SCHEDULE

BAR SIZE	EMBEDMENT	TENSION LAP
15M	400	550
20M	500	700
25M	800	1100

LAP SPLICE SCHEDULE IS FOR CLASS B SPLICE UNLESS NOTED OTHERWISE AND APPLIES TO REINFORCING SPLICES NOT OTHERWISE DETAILED.

LOCATE REINFORCING SPLICES NOT INDICATED ON THE DRAWINGS AT POINTS OF MINIMUM STRESS. LOCATIONS OF SPLICES TO BE APPROVED BY THE ENGINEER.

BEFORE PLACING REBAR, ENSURE IT IS CLEAN, FREE OF LOOSE SCALE, DIRT, OR OTHER FOREIGN COATING WHICH WOULD REDUCE THE BOND TO CONCRETE.

WELDING

WELDING SHALL CONFORM TO CSA-W59. ALL WORK IS TO BE PERFORMED BY A FIRM CERTIFIED, AND POSSESSING VALID CERTIFICATION WITHIN TWO YEARS FROM THE START OF THE WORK, BY THE CANADIAN WELDING BUREAU TO THE REQUIREMENTS OF DIVISION 2 (MINIMUM) OF CSA-W47.1.

THE WELDING ELECTRODE SHALL BE E480XX.

LOCATION PREFIX

B – BRIDGE

REINFORCING MARK NUMBERING SYSTEM

eg: **B 25 15**

- 15 – MARK
- 25 – SIZE OF BAR
- B – LOCATION PREFIX

SECTION AND DETAILS

- A – SECTION NUMBER OR DETAIL LETTER
- B – DRAWING WHERE SECTION OR DETAIL IS TAKEN
- C – DRAWING WHERE SECTION OR DETAIL IS DRAWN

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

LIST OF ABBREVIATIONS

@	AT	MK.	MARK
ALT.	ALTERNATING	MAX.	MAXIMUM
ALUM.	ALUMINUM	m	METRE
APPROX.	APPROXIMATE	MIN.	MINIMUM
AVE.	AVENUE	mm	MILLIMETRE
B.C.	BEGINNING OF CURB	No.	NUMBER
BOT.	BOTTOM	O/C	ON CENTRE
B/W	BOTH WAYS	O/O	OUTSIDE TO OUTSIDE
C.I.P.	CAST-IN-PLACE	PL.	PLATE
CJ.	CONTRUCTION JOINT	QTY.	QUANTITY
℄	CENTRE LINE	R	RADIUS
C/W	COMPLETE WITH	REINF.	REINFORCEMENT
CONC.	CONCRETE	SHT.	SHEET
CONT.	CONTINUOUS	S.U.	SUBSTRUCTURE UNIT
CL.	CLEAR	THK.	THICK
CRES.	CRESCENT	TYP.	TYPICAL
DBL.	DOUBLE	T/O	TOP OF
DIA.	DIAMETER	U.N.O.	UNLESS NOTED OTHERWISE
DTL.	DETAIL	U/S	UNDERSIDE
DWG.	DRAWING	VERT.	VERTICAL
E.C.	END OF CURB	WM	WATERMAIN
E.E.	EACH END	WP	WORKING POINT
E.F.	EACH FACE	W/	WITH
E.W.	EACH WAY		
EQ.	EQUAL		
EQ. SP.	EQUAL SPACE		
EL.	ELEVATION		
EXIST	EXISTING		
GALV.	GALVANIZING		
GRAN.	GRANULAR		
HORIZ.	HORIZONTAL		
IB	IRON BAR		
I.F.	INSIDE FACE		
LG.	LONGE		

ORIGINAL SEALED BY K.S. AMY P. ENG. 07.12.03

APEGM
Certificate of Authorization
Stantec Consulting Ltd.
No. 1301 Expiry: April 30, 2008

RELEASED FOR CONSTRUCTION BY: BILL EBENSPANGER
DATE: DEC 6, 2007

Stantec Consulting Ltd.
Stantec
WINNIPEG MANITOBA

CONSULTANT DRAWING No.	CITY DRAWING No.	CAD FILE DRAWING No.
GI001-682	B176-08-01	31410gi001-682.dwg