GENERAL NOTES

1. 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.
2. CONTRACTOR MUST VERIFY ALL EXISTING GEOMETRY AS WELL AS PROPOSED DIMENSION AND LAYOUT IN THE FIELD PRIOR TO FABRICATION AND CONSTRUCTION AND NOTIFY THE CONTRACT ADMINISTRATOR OF ANY CHANGES.
3. CONTRACTOR MUST VERIFY ALL EXISTING UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION
4. ANY DAMAGE TO EXISTING STRUCTURES AND UTILITIES BY THE CONTRACTORS OPERATIONS MUST BE REPAIRED BY THE CONTRACTOR AT HIS OWN COST.
5. ALL REFERENCES TO CODES, STANDARDS, SPECIFICATIONS, GUIDELINES, ETC, SHALL MEAN THE LATEST EDITION.

DESIGN DATA

1. DESIGN CODE: CANADIAN HIGHWAY BRIDGE DESIGN CODE (CHBDC) CAN/CSA S6-06
2. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH THE CONTRACT SPECIFICATIONS.
3. EXISTING DIMENSIONS ARE APPROXIMATE ONLY. CONTRACTOR SHALL SITE VERIFY ALL DIMENSIONS.
4. ALL COORDINATES ARE IN LOCAL COORDINATES. ALL DIMENSIONS ARE GIVEN AS GROUND DISTANCES.

VEHICULAR LIVE LOADING

1. CHBDC CL-625 TRUCK AND LANE LOAD

CAST IN PLACE CONCRETE

1. CONCRETE MATERIAL, QUALITY, MIXING, PLACING, FORM WORK AND OTHER CONSTRUCTION PRACTICES TO CONFORM TO CSA A23.1 / A23.2 - 2009
2. ALL EXPOSED CORNERS SHALL HAVE A 20 mm CHAMFER OR FILLET UNLESS OTHERWISE NOTED.

TYPE	SUPPLY AND PLACE STRUCTURAL CONCRETE	STRENGTH (MPa)	EXP. CLASS	MINIMUM POST RESIDUAL CRACKING INDEX
1	ABUTMENT MODIFICATIONS	35 @ 28 DAYS	C-1	-
2	DECK, TRAFFIC BARRIER, APPROACH SLABS, SLEEPER SLAB, REINFORCED SIDEWALK & ROADWAY SLAB	35 @ 28 DAYS	C-1	0.15

REINFORCING STEEL FOR CAST IN PLACE CONCRETE

1. ALL REINFORCING SHALL BE STAINLESS STEEL CONFORMING TO ASTM A955M, GRADE 60 (420), TYPE 2205 DUPLEX (UNS S30803), TYPE 316 LN (UNS S31653), TYPE 2304 (UNS S32304).
2. ALL REBAR SHALL BE STORED ON WOOD BLOCKING AT THE SITE
3. CONCRETE CLEAR COVER TO REINFORCEMENT UNLESS NOTED OTHERWISE:

ABUTMENT MODIFICATIONS	50 + 10, - 0
DECK TOP LAYER	60 + 10, - 0
BOTTOM LAYER AT EXTERIOR	60 + 10, - 0
OVERHANGS	60 + 10, - 0
BARRIER INSIDE AND OUTSIDE	50 + 10, - 0

4. SUPPLY SUPPORT BARS TO SUPPORT BRIDGE APPROACH SLAB, SLEEPER SLAB, TRANSITION SLABS AS REQUIRED.
5. STAINLESS STEEL REINFORCING LAP SPLICES/PROJECTION LENGTH

BAR SIZE	TOP BARS (mm)	OTHER BARS (mm)	PROJECTION (mm)
10	700	450	700
16	1000	650	1000
19	1200	800	1200
25	1900	1200	1900
29	2200	1550	2200
36	2650	1800	2650

6. LOCATE REINFORCING SPLICES NOT INDICATED ON THE DRAWINGS AT POINTS OF MINIMUM STRESS. LOCATION OF SPLICES TO BE APPROVED BY THE CONTRACT ADMINISTRATOR.
7. PROJECTION SHOWN SHALL BE PROVIDED AT CONSTRUCTION JOINTS UNLESS NOTED OTHERWISE.
8. BEFORE PLACING REBAR ENSURE IT IS CLEAN, FREE OF LOOSE SCALE, DIRT OR OTHER DELETERIOUS MATERIAL WHICH WOULD REDUCE THE BOND TO CONCRETE.

PRECAST PRESTRESSED CONCRETE CHANNEL GIRDERS

CONCRETE

- EXPOSURE CLASS C-1
- f ' c = 35 MPa AT TIME OF DESTRESSING
- f ' c = 45 MPa AT 28 DAYS

REINFORCING

- FOR REINFORCING BARS PROJECTING OUT OF GIRDER: STAINLESS STEEL BARS SHALL BE IN ACCORDANCE WITH ASTM A955M, GRADE 60 (420), TYPE 2205 DUPLEX (UNS S30803), TYPE 316 LN (UNS S31653), TYPE 2304 (UNS S32304)
- OTHERWISE REINFORCING SHALL BE DEFORMED BILLET STEEL CONFORMING TO CSA G30.18 M, GRADE 400W.

PRESTRESSING STANDS

- ASTM A416M 12.7 mm Ø SEVEN WIRE, UNCOATED, LOW RELAXATION STEEL STAND, fpu = 1860 MPa.
- JACKING FORCE PER STAND = 137.7 kN

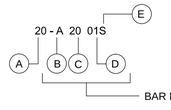
LATERAL POST-TENSIONING STANDS

- ASTM A416M 12.7 mm Ø SEVEN WIRE, GALVANIZED LOW RELAXATION STRAND , fpu = 1860 MPa, 2 STRANDS PER DUCT.
- JACKING FORCE PER STAND = 103 kN

ABBREVIATIONS

ABUT.	- ABUTMENT
A.D.	- ALGEBRAIC DIFFERENCE
APPROX.	- APPROXIMATELY
ASP.	- ASPHALT
ATP	- ACTIVE TRANSPORTATION PATH
BV	- BOULEVARD
BVCS	- BEGIN VERTICAL CURVE STATION
BVCE	- BEGIN VERTICAL CURVE ELEVATION
B.C.	- BEGINNING OF CURVE
BRG.	- BEARING
BTM	- BOTTOM
B.O.	- BOTTOM OF
℄	- CENTER LINE
C/A	- CONTRACT ADMINISTRATOR
CONC.	- CONCRETE
CSC	- CORRUGATED STEEL CULVERT
CS	- COMBINED SEWER
CT	- CURVE TO TANGENT
C/W	- COMPLETE WITH
DIA.	- DIAMETER
DO.	- DITTO
D.L.	- DEAD LOAD
DWL.	- DOWEL
E/B	- EASTBOUND
E.C.	- END OF CURB
E.F.	- EACH FACE
ELEV.	- ELEVATION
EVCS	- END VERTICAL CURVE STATION
EVCE	- END VERTICAL CURVE ELEVATION
EXP. JT.	- EXPANSION JOINT
EXIST.	- EXISTING
E.F.	- EQUALLY SPACED
F.F.	- FAR FACE
FOC	- FIBRE OPTIC CABLE
F.R.E.	- FIBER REINFORCED EPOXY
FTG.	- FOOTING
G.B.M.	- GEODETIC BENCH MARK
H.P.	- HIGH PRESSURE
I.F.	- INSIDE FACE
INV.	- INVERT
L.D.S	- LAND DRAINAGE SYSTEM
L.L.	- LIVE LOAD
LVC	- LENGTH OF VERTICAL CURVE
MK.	- MARK
M.P.	- MONITORING PILE
N.F.	- NEAR FACE
N/B	- NORTHBOUND
No.	- NUMBER
N.S.W.L.	- NORMAL SUMMER WATER LEVEL
N.T.S.	- NOT TO SCALE
PCS.	- PIECES
O.C.	- ON CENTER
O.F.	- OUTSIDE FACE
P.I.	- POINT OF INTERSECTION
PVI	- POINT OF VERTICAL INTERSECTION
R.C.	- REINFORCED CONCRETE
R.P.	- REFERENCE POINT
S/B	- SOUTHBOUND
SL	- STREET LIGHT
SLP.	- SLOPE
STA.	- STATION
SU.	- SUBSTRUCTURE UNIT
TC	- TANGENT TO CURVE
T.O.	- TOP OF
T.H.	- TEST HOLE
TYP.	- TYPICAL
U/N	- UNLESS NOTED OTHERWISE
U/S	- UNDERSIDE
W/B	- WESTBOUND
W.P.	- WORKING POINT
WM	- WATER MAIN
W.W.S.	- WASTE WATER SEWER

CODE FOR REINFORCING STEEL



- (A) NO. OF BARS
- (B) LOCATION OF CODE
- (C) SIZE OF BAR
- (D) IDENTIFICATION NO.
- (E) SUFFIX : S = STAINLESS STEEL NONE= BLACK STEEL

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

APEGM
Certificate of Authorization
Dillon Consulting Limited (MB)
No. 1789 Date: 13/11/07

NO.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	13/11/07	SSR

B.M. ELEV.

DESIGNED BY SSR
DRAWN BY PMW
CHECKED BY CDW
APPROVED BY MBL
HOR. SCALE AS SHOWN
VERTICAL
DATE 13/11/07

DILLON CONSULTING

RELEASED FOR CONSTRUCTION
DATE

ENGINEER'S SEAL
PROVINCE OF MANITOBA
Nov 7/13
S.S. RIHAL
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT PROJECT NUMBER
13-7555

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT

RECONSTRUCTION OF THE ST. JAMES STREET BRIDGE OVER OMAND'S CREEK

CITY DRAWING NUMBER B126-13- 02
SHEET 2 OF 26
CONSULTANT DRAWING NUMBER

GENERAL NOTES

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