

DRAWING NOTES:

GENERAL

1. THE STRUCTURE HAS BEEN DESIGNED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2011 MANITOBA BUILDING CODE.
2. DESIGN LOADS ARE SHOWN ON THE DRAWINGS. IMPORTANCE FACTOR - $I_s = I_w = 1.0$
3. DO NOT SCALE DRAWINGS.
4. VERIFY ALL DIMENSIONS SHOWN PRIOR TO COMMENCING CONSTRUCTION.
5. LOCATE UNDERGROUND SERVICES AND PROTECT THEM AT ALL TIMES DURING CONSTRUCTION.

FOUNDATIONS

1. ALL FRICTION PILES ARE DESIGNED ON THE BASIS OF 15 KPA FACTORED ULS RESISTANCE. THE FRICTION RESISTANCE SHALL BE VERIFIED AT THE TIME OF CONSTRUCTION BY A PROFESSIONAL GEOTECHNICAL ENGINEER REGISTERED TO PRACTICE IN THE PROVINCE OF MANITOBA.
2. EFFECTIVE LENGTH OF FRICTION PILE IS LENGTH SHOWN ON DRAWINGS MINUS 10'-0" (3000 mm).
3. PILE REINFORCING TO BE AS NOTED ON THE DRAWING.

CAST IN PLACE CONCRETE

1. ALL CONCRETE TO BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH CAN\CSA A23.1-04.
2. SUPPLEMENTARY CEMENTITIOUS MATERIALS TO CAN/CSA - A3000 CEMENTITIOUS MATERIALS COMPENDIUM.
3. CHEMICAL ADMIXTURES TO ASTM C494 AND ASTM C1017.
4. GENERAL CONTRACTOR TO PROVIDE PROPRIETARY MIX DESIGN PERFORMANCE RECORD AS REQUIRED BY THE MANITOBA READY MIX ASSOCIATION.
5. CONCRETE MIX GUIDELINES ARE AS FOLLOWS:

PILES: EXPOSURE CLASS: S-1
CEMENT TYPE: HS
MINIMUM CONCRETE STRENGTH: 35 MPA
MINIMUM AGGREGATE SIZE: 20 MM
AIR CONTENT CATEGORY: 2 (4-7%)

GRADE BEAMS: EXPOSURE CLASS: F-2
CEMENT TYPE: GU
MINIMUM CONCRETE STRENGTH: 25 MPA
MINIMUM AGGREGATE SIZE: 20 MM
AIR CONTENT CATEGORY: 2 (4-7%)

EXT STRUC SLABS: EXPOSURE CLASS: C1
CEMENT TYPE: GU
MINIMUM CONCRETE STRENGTH: 35MPA
MINIMUM AGGREGATE SIZE: 20 MM
AIR CONTENT CATEGORY: 1(5-8%)

EXT SLABS ON GRADE: EXPOSURE CLASS: C2
CEMENT TYPE: GU
MINIMUM CONCRETE STRENGTH: 32MPA
MINIMUM AGGREGATE SIZE: 20 MM
AIR CONTENT CATEGORY: 2(4-7%)

REINFORCING STEEL

1. ALL REINFORCING STEEL TO BE CSA G30.18 M 400 MP_a DEFORMED BARS EXCEPT STIRRUPS WHICH MAY BE 300 MP_a GRADE STEEL. ALL REINFORCING TO BE DETAILED IN ACCORDANCE WITH LATEST EDITION OF ACI DETAILING MANUAL, UNLESS OTHERWISE NOTED.
2. REINFORCING STEEL COVER TO CONFORM TO LATEST EDITION OF CSA A23.3 AND AS FOLLOWS:

SLABS: 1 IN. (25 mm)
GRADE BEAMS: (SIDES & TOPS) 1 1/2 IN. (40 mm)
GRADE BEAMS: (BOTTOM) 2 IN. (50 mm)

3. IN GRADE BEAMS BEND HORIZONTAL STEEL 18" (460 mm) AROUND CORNERS, OR USE EXTRA CORNER BARS 36" (900 mm) LONG.
4. BOTTOM STEEL IN CONCRETE BEAMS TO BE BUTT SPLICED OVER SUPPORT, TOP STEEL TO BE LAPPED AT CENTRE SPAN UNLESS NOTED OTHERWISE.
5. ALL REINFORCING TO BE HELD IN PLACE AND TIED WITH PROPER ACCESSORIES, SUCH AS HI-CHAIRS AND SPACERS. SUPPLY AND DETAIL ALL ACCESSORIES. HI-CHAIRS TO HAVE 4 LEGS AND TO BE STAPLED OR NAILED TO THE FORMWORK.

FORMWORK

1. USE 6" (150 mm) CARDBOARD VOID FORM WRAPPED IN POLYETHYLENE SHEETS AS BOTTOM FORM FOR STRUCTURAL SLABS AND GRADE BEAMS AT GRADE. ACCESSORIES SUCH AS HI-CHAIRS, SPACERS, ETC. SHALL BE SUPPORTED USING PADS OF PLYWOOD OR TEMPERED FIBREBOARD TO PREVENT PUNCTURING FORM.
2. ALL CONSTRUCTION JOINTS TO HAVE KEY MINIMUM 1 1/2" (40 mm) DEEP.

SHEET:

S-01

DESIGNED BY:

K.C.

DRAWN BY:

LDM

SCALE:

AS SHOWN

DATE:

SEP., 2014

CITY OF WINNIPEG
CENTRAL FREIGHT HOUSE
WHEELCHAIR RAMP & STAIRS

GENERAL NOTES

CHARLESON ENGINEERING LTD.

101-1200 Pembina Hwy.

WINNIPEG, MANITOBA

TEL. (204) 895-1474