CONC. PILE SCHEDULE

'P1' 16"ø x 25'–0"LG C.I.P PILES
R/W 4–10M VERT. FULL LENGTH
C/W 3–10M TIES @6"O/C TOP
REMINDER 10M TIES @48"O/C MAX.
T/O PILE ELEV.=98'–8"

CONC. GRADE BEAM SCHEDULE

'GB1' 8"x48"DP GRADE BEAM
R/W 2–20M T&B
10M HORIZ. E/F @⅓ DEPTH LOC
10M STIRRUPS @16"O/C
ON 6" CARDBOARD VOID FORM

'GB2' 8"x34¼"DP GRADE BEAM
R/W 2–20M T&B
10M STIRRUPS @16"O/C
ON 6" CARDBOARD VOID FORM

'GB3' 8"x25⅛"DP GRADE BEAM
R/W 2–20M T&B
10M STIRRUPS @16"O/C
ON 6" CARDBOARD VOID FORM

'GB4' 8"x22⅜"DP GRADE BEAM
R/W 2–15M T&B
10M STIRRUPS @16"O/C
ON 6" CARDBOARD VOID FORM

'GB5' 8"x48"DP/34¼"DP GRADE BEAM
R/W 2–20M T&B
10M HORIZ. E/F @⅓ DEPTH LOC
10M STIRRUPS @16"O/C
ON 6" CARDBOARD VOID FORM

'GB6' 8"x34¼"DP/25⅛"DP GRADE BEAM
R/W 2–20M T&B
10M STIRRUPS @16"O/C
ON 6" CARDBOARD VOID FORM

'GB7' 8"x25⅛"DP/16"DP GRADE BEAM
R/W 2–20M T&B
10M STIRRUPS @16"O/C
ON 6" CARDBOARD VOID FORM

'GB8' 8"x48"DP/22⅜"DP GRADE BEAM
R/W 2–20M T&B
10M HORIZ. E/F @⅓ DEPTH LOC
10M STIRRUPS @16"O/C
ON 6" CARDBOARD VOID FORM

CONC. SLAB SCHEDULE

'S1' 6" SLAB R/W 10M @12"O/C E/W BOT
TOP DOWELS AS PER PLAN

'S2' 4" SLAB R/W 10M @12"O/C E/W TOP;
C/W 12"x12"DP THICKENED EDGE
AROUND SLAB R/W 2–15M T&B
10M TIES ⊏ @24"O/C
ON 6" COMPACTED GRANULAR
BACKFILL

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 – Is = Iw = 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.
6. STRUCTURAL DRAWINGS SHOWING THE COMPLETED STRUCTURE DO NOT INDICATE COMPONENTS WHICH MAY BE NECESSARY FOR SAFETY DURING CONSTRUCTION.
7. OBTAIN CONTRACT ADMINISTRATOR'S APPROVAL PRIOR TO MAKING ANY MEMBER SUBSTITUTIONS OR CONNECTION DETAIL CHANGES.
8. PROVIDE STEEL HANDRAIL SHOP DRAWINGS FOR REVIEW TO CONTRACT ADMINISTRATOR PRIOR TO CONSTRUCTION. SHOP DRAWINGS TO BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA. SHOP DRAWINGS SHALL INCLUDE BASE CONNECTION DETAIL.

FOUNDATIONS:

1. ALL FRICTION PILES ARE DESIGNED ON THE BASIS OF 300PSF FACTORED USL AND 300 PSF SLS CAPACITY.
2. EFFECTIVE LENGTH OF FRICTION PILE IS LENGTH SHOWN ON DRAWING MINUS 10 FEET.
3. PILE REINFORCING TO BE AS NOTED ON THE DRAWINGS

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%)

6. EXTERIOR SLABS SHALL HAVE A BROOM FINISH. FOR SMOOTH EXTERIOR SLAB FINISH, AIR REQUIREMENTS SHALL BE CONFIRMED WITH THE CONTRACT ADMINISTRATOR.

REINFORCING STEEL:

1. ALL REINFORCING STEEL TO BE CSA G30.18 M 400 MPa DEFORMED BARS. 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 ½ IN. (40 mm)
GRADE BEAMS: (BOTTOM)	3 IN. (75 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.
6. PROVIDE REBAR SHOP DRAWINGS FOR REVIEW TO CONTRACT ADMINISTRATOR PRIOR TO CONSTRUCTION.

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.

No	Revision	Date	By
2	RE–ISSUED FOR CONSTRUCTION	2019–06–05	KC
1	ISSUED FOR CONSTRUCTION	2018–09–21	KC
0	ISSUED FOR REVIEW	2018–09–19	KC

SEALS

PROVINCE OF MANITOBA
K. W. CHARLESON
2019-06-05
REGISTERED PROFESSIONAL ENGINEER

APEGM
Certificate of Authorization
Charleson Engineering Ltd.
No. 50 Date: 2019-06-05

KC	KC
DESIGNED BY	REVIEWED BY
SW	2018-09-11
DRAWN BY	DATE (YYYY–MM–DD)

CHARLESON ENGINEERING LTD
101-1200 PEMBINA HWY, WINNIPEG, MB R3T 2A7
PH# 204-895-1474, FAX# 204-416-4606
EMAIL: KEN@CHARLESONENG.CA

PROJECT NAME

ACCESSABLE RAMP
& STAIR ADDITION

SOUTH TRANSCONA COMMUNITY CENTER
124 BORDEN AVE, WINNIPEG MB R2C 3L7

SHEET TITLE

SCHEDULES
&
GENERAL NOTES

SCALE

AS SHOWN

PROJECT NO.	SHEET NO.	REVISION
18124	S1 1 OF 4	2