

GENERAL NOTES

- THIS SET OF DRAWINGS SHOWS THE COMPLETED PROJECT. IT IS TO BE READ IN CONJUNCTION WITH THE NON-STRUCTURAL DRAWING SETS. IT DOES NOT INCLUDE COMPONENTS THAT MAY BE NECESSARY FOR CONSTRUCTION SAFETY. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY IN AND ABOUT THE JOB SITE DURING CONSTRUCTION, AND THE DESIGN AND ERECTION OF ALL TEMPORARY STRUCTURES, FORM WORK, FALSE WORK, SHORING, ETC. REQUIRED TO COMPLETE THE WORK.
- THE USE OF THESE DRAWINGS IS LIMITED TO THAT IDENTIFIED IN THE REVISIONS COLUMN. DO NOT CONSTRUCT FROM THESE DRAWINGS UNLESS MARKED "ISSUED FOR CONSTRUCTION" IN THE REVISIONS COLUMN BY TOWER ENGINEERING GROUP.
- THE INFORMATION ON THIS DRAWING SHALL NOT BE USED FOR ANYTHING OTHER THAN THE SPECIFIED WORKS OR PART OF THE WORKS FOR WHICH IT HAS BEEN AUTHORIZED BY TOWER ENGINEERING GROUP.
- THE CONTRACTOR SHALL REVIEW ALL THE DRAWINGS AND CHECK DIMENSIONS BEFORE CONSTRUCTION. REPORT DISCREPANCIES BETWEEN STRUCTURAL AND OTHER DISCIPLINES DRAWINGS FOR CLARIFICATION.
- THE CONTRACTOR SHALL REPORT ANY SITE MODIFICATIONS MADE DURING CONSTRUCTION, THAT DIFFER FROM THE STRUCTURAL DRAWINGS, TO TOWER ENGINEERING GROUP FOR REVIEW.
- DO NOT CUT OR DRILL ANY OPENINGS IN STRUCTURAL MEMBERS WITHOUT THE WRITTEN PERMISSION OF TOWER ENGINEERING GROUP. CONTRACTOR TO PROVIDE APPROPRIATE ATTACHMENTS AND CONNECTIONS FOR MECHANICAL, ELECTRICAL, AND OTHER SERVICES WITHOUT CUTTING OR DRILLING.
- REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND LANDSCAPE DRAWINGS FOR LOCATIONS, CONFIGURATIONS, EXTENT, AND SIZES OF ALL CURBS, UPSTANDS, DOWNTURNS, OPENINGS THROUGH FLOORS AND WALLS FOR DUCTS.
- FIRE RESISTANCE RATINGS: SEE ARCHITECTURAL DRAWINGS AND SPECIFICATION FOR PRECISE LOCATIONS OF REQUIRED FIRE RESISTANCE RATINGS.
- THE CONTRACTOR SHALL BE FAMILIAR WITH THE CONTENT AND RECOMMENDATIONS OF THE GEOTECHNICAL REPORTS.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL COMPONENTS TO TOWER ENGINEERING GROUP FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS ARE TO INCLUDE SEAL AND SIGNATURE OF A PROFESSIONAL ENGINEER, REGISTERED IN THE PROJECT PROVINCE, FOR DESIGN OF COMPONENTS AND/OR CONNECTIONS AS REQUIRED.

OWNERSHIP AND COPYRIGHT RESERVED

- ALL DRAWINGS, PLANS, MODELS, DESIGNS, SPECIFICATIONS AND OTHER DOCUMENTS PREPARED BY TOWER ENGINEERING GROUP AND USED IN CONNECTION WITH THE PROJECT ARE INSTRUMENTS OF SERVICE FOR THE EXECUTION OF THE PROJECT, AND ARE AND REMAIN THE PROPERTY OF TOWER ENGINEERING GROUP, WHETHER THE PROJECT IS EXECUTED OR NOT, AND TOWER ENGINEERING GROUP RESERVES THE COPYRIGHT THEREIN AND IN THE WORK EXECUTED THEREFROM. SHALL NOT BE USED FOR ANY OTHER PROJECT, EXCEPT ONLY FOR GENERAL REFERENCE PURPOSES FOR ADDITION OR ALTERATION TO THE WORK SHOWN IN THEM, AND SINCE SUCH DOCUMENTS ARE "DESIGN" DOCUMENTS ONLY AND MAY NOT REPRESENT THE ACTUAL PROJECT "AS CONSTRUCTED", USE OF THESE DOCUMENTS FOR GENERAL REFERENCE PURPOSES IS AT THE SOLE RISK OF THE PARTY USING THEM: THEY SHALL NOT BE COPIED WITHOUT THE WRITTEN CONSENT OF AN AUTHORIZED REPRESENTATIVE OF TOWER ENGINEERING GROUP.

REVIEW BY TOWER ENGINEERING GROUP

- THE CONTRACTOR SHALL PROVIDE REASONABLE NOTICE TO TOWER ENGINEERING GROUP PRIOR TO POURING CONCRETE OR CONCEALING ANY STRUCTURAL COMPONENTS. THE PURPOSE OF THIS NOTICE IS TO ENABLE TOWER ENGINEERING GROUP TO CONDUCT ANY REQUIRED FIELD REVIEWS.
- TOWER ENGINEERING GROUP PROVIDES FIELD REVIEW ONLY FOR THE WORK SHOWN ON THESE STRUCTURAL DRAWINGS. THIS REVIEW IS NOT A "FULL TIME" REVIEW BUT IS A PERIODIC REVIEW AT THE SOLE DISCRETION OF TOWER ENGINEERING GROUP'S ENGINEERS IN ORDER TO VISUALLY ASCERTAIN THAT THE WORK IS IN GENERAL CONFORMANCE WITH THE PLANS AND SUPPORTING DOCUMENTS PREPARED BY TOWER ENGINEERING GROUP. FIELD REVIEW BY TOWER ENGINEERING GROUP IS NOT CARRIED OUT FOR THE CONTRACTOR'S BENEFIT, NOR DOES IT MAKE TOWER ENGINEERING GROUP GUARANTORS OF THE CONTRACTOR'S WORK. IT REMAINS THE CONTRACTOR'S RESPONSIBILITY TO BUILD THE WORK IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. TOWER ENGINEERING GROUP SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- TOWER ENGINEERING GROUP WILL REVIEW SHOP DRAWINGS PERTAINING TO WORK SHOWN ON TOWER ENGINEERING GROUP'S DRAWINGS. THE EXTENT OF THIS REVIEW IS AT THE SOLE DISCRETION OF TOWER ENGINEERING GROUP'S ENGINEER AND IS FOR THE SOLE PURPOSE OF ASCERTAINING GENERAL CONFORMANCE WITH THE STRUCTURAL DESIGN CONCEPT. THE REVIEW IS NOT AN APPROVAL OF THE DESIGN, DETAILS AND DIMENSIONS INHERENT IN THE SHOP DRAWINGS. RESPONSIBILITY FOR WHICH SHALL REMAIN WITH THE CONTRACTOR SUBMITTING THEM. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR ERRORS AND OMISSIONS IN THE SHOP DRAWINGS OR FOR MEETING ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS.

ABBREVIATIONS

BOT	BOTTOM	H1E	HOOK ONE END
BTW	BETWEEN	H2E	HOOK TWO ENDS
B/W	BOTH WAYS	HOR	HORIZONTAL
C/W	COMPLETE WITH	MAX.	MAXIMUM
CL	CENTRELINE	MIN.	MINIMUM
C/C	CENTRE TO CENTRE	N.T.S.	NOT TO SCALE
CIP	CAST IN PLACE	O/C	ON CENTER
CMU	CONCRETE MASONRY UNIT	R/W	REINFORCED WITH
CONT.	CONTINUOUS	SIM.	SIMILAR
DL	DEAD LOAD	S.O.G.	SLAB ON GRADE
LL	LIVE LOAD	SV	SITE VERIFY
SL	SNOW LOAD	TYP.	TYPICAL
E/E	EACH END	T/O	TOP OF
E/F	EACH FACE	T & B	TOP AND BOTTOM
E/S	EACH SIDE	T & C	TENSION AND COMPRESSION
E/W	EACH WAY	J.N.O.	UNLESS NOTED OTHERWISE
(E) ; EXIST.	EXISTING	U/S	UNDER SIDE OF
E.O.C.	EDGE OF CONCRETE	VERT.	VERTICAL

SYMBOL LEGEND

	SECTION MARKER (MEANS SECTION # SHOWN ON DRAWING SHEET S#)
	PLAN DETAIL REFERENCE MARKER (MEANS DETAIL # SHOWN ON DRAWING SHEET S#)
	ELEVATION REFERENCE MARKER
	FOUNDATION PLAN DRAWING SHEET REFERENCE MARKER
	NORTH ARROW REFERENCE MARKER

DESIGN CRITERIA

THE DESIGN OF THE STRUCTURE IS IN ACCORDANCE WITH NBCC 2010 AND PART 4 OF DIVISION B, STRUCTURAL DESIGN OF THE 2011 MB BUILDING CODE.

IMPORTANCE CATEGORY NORMAL
WIND DESIGN DATA $q(1/50) = 0.45 \text{ kPa}$ $q(1/10) = 0.35 \text{ kPa}$ $lw = 1.0$

ROOF LOADS, FLOOR LOADS, UPLIFT LOADS, LATERAL LOADS REFER TO PLAN
CONTRACTOR TO ENSURE THAT CONSTRUCTION LOADS DO NOT EXCEED DESIGN LOADS.

STRUCTURAL MOVEMENTS/ TOLERANCES

- THIS STRUCTURE WILL UNDERGO NORMAL TYPES OF MOVEMENT AND DEFLECTION AND THE NON-STRUCTURAL COMPONENTS MUST BE DETAILED TO ACCOMMODATE THIS.
- ALL STRUCTURES ARE SUBJECT TO CONSTRUCTION TOLERANCES. THIS SHOULD BE ALLOWED FOR IN DETAILING NON-STRUCTURAL COMPONENTS.

NON-STRUCTURAL ELEMENTS

- "NON-STRUCTURAL" OR "SECONDARY STRUCTURAL" ELEMENTS ARE NOT THE RESPONSIBILITY OF TOWER ENGINEERING GROUP. THEY ARE DESIGNED, DETAILED, AND REVIEWED IN THE FIELD BY OTHERS. THEY APPEAR ON DRAWINGS OTHER THAN THOSE OF TOWER ENGINEERING GROUP. WHERE STRUCTURAL ENGINEERING RESPONSIBILITY IS REQUIRED FOR THESE ELEMENTS, THIS SHALL BE PROVIDED BY SPECIALTY STRUCTURAL ENGINEERS, WHO SHALL ALSO PROVIDE ANY CERTIFICATION REQUIRED BY BUILDING PERMIT AUTHORITIES. SPECIALTY STRUCTURAL ENGINEERS ARE TO DESIGN THESE ELEMENTS ACCORDING TO THE APPLICABLE DESIGN LOADS AS NOTED IN PART 4 OF THE NBCC 2010.
- EXAMPLES OF NON-STRUCTURAL OR SECONDARY STRUCTURAL ELEMENTS INCLUDE, BUT ARE NOT LIMITED TO:
 - ARCHITECTURAL COMPONENTS SUCH AS GUARDRAILS, HANDRAILS, CEILING, MILLWORK ETC.
 - LANDSCAPE ELEMENTS SUCH AS BENCHES, LIGHT POSTS, PLANTERS, ETC.
 - CLADDING, GLAZING, WINDOW MULLIONS, INTERIOR STUD WALLS AND EXTERIOR STUD WALLS.
 - ARCHITECTURAL PRECAST, PRECAST CLADDING.
 - MECHANICAL AND ELECTRICAL EQUIPMENT, COMPONENTS, AND THEIR ATTACHMENT DETAILS.
 - ELEVATORS, ESCALATORS, AND OTHER CONVEYING SYSTEMS.
 - BRICK OR BLOCK VENEERS AND THEIR ATTACHMENTS.
 - NON-LOAD BEARING MASONRY.
 - NON-STRUCTURAL CONCRETE TOPPING
 - ALUMINUM SKYLIGHTS.
 - STAIRS
- SHOP DRAWINGS FOR NON-STRUCTURAL ELEMENTS WHICH MAY AFFECT THE PRIMARY STRUCTURAL SYSTEM SHALL BE SUBMITTED TO TOWER ENGINEERING GROUP THESE DRAWINGS WILL BE REVIEWED ONLY FOR THE EFFECT ON THE PRIMARY STRUCTURAL SYSTEM.

CONCRETE

- ALL CONCRETE CONSTRUCTION, COLD WEATHER CONSTRUCTION & CONCRETE TESTING TO BE IN ACCORDANCE WITH THE CSA STANDARDS A23.1-09 AND A23.2-09 (R2014).
- ALL CONCRETE TO BE NORMAL WEIGHT HARD ROCK CONCRETE WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH AS NOTED IN TABLE 2 OF THE CSA A23.1-09 (R2014).
- CONCRETE CLASSES OF EXPOSURE (REFER TO TABLE 1, CSA A23.1-09 (R2014)):
 - PILE CAPS CLASS S-1 EXPOSURE (35 MPa @56d)
- CONCRETE SLUMP TO BE COORDINATED BETWEEN CONTRACTOR AND CONCRETE SUPPLIER CONSIDERING THE PERFORMANCE CRITERIA AND THE CONTRACTOR'S CRITERIA FOR CONSTRUCTION AND PLACEMENT.
- MISCELLANEOUS CONCRETE ELEMENTS (PITS, TRENCHES, ETC.) TO BE MINIMUM 6" (150mm) THICK REINFORCED WITH 10M @ 12" (300mm) O/C EACH WAY U.N.O.
- CONCRETE SAMPLING AND TESTING TO BE COMPLETE IN ACCORDANCE WITH THE CSA A23.1-09/A23.2-09 (R2014).

REINFORCING

- REINFORCING STEEL SHALL BE GRADE 400 DEFORMED NEW BILLET STOCK CONFORMING TO THE CSA SPECIFICATION G30.18-09. WELDED WIRE MESH SHALL CONFORM TO THE CSA A23.1-09 (R2014) CLAUSE 6.1.1.1.
- CONCRETE COVER TO BE AS PER TABLE 17 OF THE CSA A23.1-09 (R2014).

EXPOSURE CONDITION	EXPOSURE CLASS		
	N	F-1, F-2, S-1, S-2	C-XL, C-1, C-3 A-1, A-2, A-3
PILES	30mm	40mm	60mm

- CONCRETE COVER FOR EXPOSURE CLASSES NOT NOTED ABOVE TO BE 40 mm.
- CONCRETE COVER FOR FIRE RATING REQUIREMENTS AS PER CURRENT EDITION OF NBCC

STRUCTURAL STEEL

- STRUCTURAL STEEL TO CONFORM TO CSA G40.20-13/G40.21-13 350W EXCEPT PLATES AND ANGLES, WHICH SHALL CONFORM TO CSA G40.20-13/G40.21-13 300W. CORTEN STEEL $F_y = 300 \text{ MPa}$ MIN.
- ALL WELDERS AND WELDING PROCEDURES TO BE CERTIFIED BY CANADIAN WELDING BUREAU.
- INSPECTION OF BOLTS/WELDS/OTHER CONNECTIONS TO BE COMPLETED BY AN APPROVED, QUALIFIED INDEPENDENT THIRD PARTY. A LETTER OF CERTIFICATION IS TO BE SUBMITTED TO TOWER ENGINEERING GROUP UPON COMPLETION.
- DESIGN CONNECTIONS, UNLESS NOTED, FOR FACTORED SHEAR CAPACITIES OF MEMBER SIZES USING STANDARD SHEAR CONNECTIONS AS PUBLISHED BY CISC.

LIST OF STRUCTURAL DRAWINGS

- S1.1 GENERAL NOTES-
S2.1 CORTEN STEEL PARK SIGN PILING PLAN, SECTIONS AND DETAILS

ISSUED FOR
CONSTRUCTION

April 11, 2017



APEGM

Certificate of Authorization

Tower Engineering Group

No. 4156 Expiry: April 30, 2018

TOWER ENGINEERING GROUP
UNIT 1-1140 WAVERLEY ST.
WINNIPEG, MB.
TEL: (204) 925-1150
FAX: (204) 925-1155

PROJECT TITLE: REYKDAL FAMILY PARK
WINNIPEG, MB

DRAWING TITLE: GENERAL NOTES

FILE: 171178

DATE: April 11, 2017

DRAWING NO. / REVISION NO.

S1.1