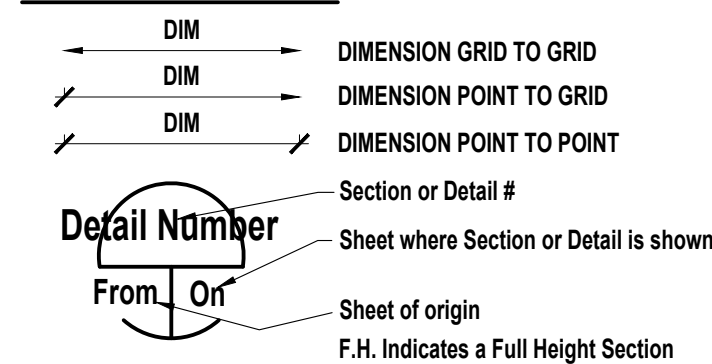


GENERAL NOTES

- 1. DO NOT SCALE DRAWINGS.
2. Design live loads shall not be exceeded at any time during construction.
3. Construction loads must not be imposed on structure in excess of specified design live load.
4. The contractor is to verify dimensions, elevations, slopes, details, conditions and other data noted on the structural drawings with conditions on the site, co-ordinate all dimensions with the architectural drawings prior to construction or fabrication of any building component, and is held responsible for reporting any discrepancies that effect structural framing to the engineer before proceeding with the work.

DIMENSIONS & SYMBOLS



DESIGN SPECIFICATIONS

- 1. The building modifications are designed in accordance with the 2011 Manitoba Building Code.
2. Importance Category for building = High
3. Design specified loads:
- Live Loads: as per floor plans
- Dead Loads: as per floor plans

FLOOR SLAB SUPPORTED ON GRADE

- 1. Floor slab on grade design based on the following geotechnical report prepared for this project: St. James Civic Centre New Additions and Building Geotechnical Investigation, prepared by Treck Geotechnical Inc., project number 0015 024 00 dated May 9, 2018.
2. Remove all top soil and soils containing organics. Contractor is to refer to geotechnical report, for indication of depths of unsuitable soil and is to remove soft or weak areas to competent material.
3. Prepare sub-grade as per Geotechnical Engineers recommendation and geotechnical report.

CONCRETE

- 1. Concrete, as specified in A23.1-09, shall have the following properties.

Table with columns: USE, EXPOSURE CLASS, CEMENT TYPE, MINIMUM COMPRESSIVE STRENGTH, MAXIMUM WATER TO CEMENT RATIO, AIR CONTENT (%), SLUMP, MAXIMUM AGGREGATE SIZE.

- 2. Construction joints shall be made and located so as not to significantly impair the strength of the structure.
3. Provide 6" (150mm) plastic wrapped cardboard void form below all beams, walls and pile caps.
4. Place concrete as a continuous operation stopping only at construction joints.

REINFORCING STEEL

- 1. Reinforcing steel shall be new billet, deformed bars in accordance with CSA Standard CAN/CSA-G30.18-M92 minimum yield strength to be 400 MPa.
2. Reinforcing steel shall be detailed in accordance with the latest RSIC Reinforcing Steel Manual of Standard Practice.
3. Lap top bars at centre span and bottom bars over supports.

Table with columns: Exposure Condition, Exposure Class (N, F-1, F-2, S-1, S-2), and aggregate sizes (C-1, C-2, C-3, A-1, A-2, A-3).

MASONRY

- 1. Masonry work shall conform to CSA Standards S304.1 and A371.
2. Masonry work shall comply with S304.1-04 masonry design for buildings (limit states design) including design testing and workmanship.
3. All concrete masonry shall be standard block for all walls, U/N on drawings. Unit compressive strength to be 15 MPa.

STRUCTURAL STEEL

- 1. Fabricate & erect structural steel to CSA Standard CAN/CSA-S16-09
2. Structural steel shapes and plates shall conform to CSA Standard CAN/CSA-G40.21, Grade 350W and CAN/CSA-G40.21, Grade 350W for H.S.S., Class C.
3. All welding shall be performed by qualified welders fully approved for structural welding by the Canadian Welding Bureau in accordance with CSA Specifications W47 and W59.

STEEL DECK

- 1. Unless otherwise noted, Steel Deck shall be 1 1/2" X 22 ga. (38mmx 22 ga) thick non-cellular, flutes at 6" (150mm) o.c. (minimum). Floor deck to have deformed webs for composite action.
2. Provide Zinc-iron alloy (ZF) coated steel sheet to ASTM/A653/A653M Structural quality grade 230 with Z275 coating.
3. Supply all closures, cover plates and accessories.

MECHANICAL FASTENERS (ALTERNATE DECK CONNECTIONS)

- 1. Install powder-actuated and screw fasteners according to the manufacturer's recommendations.
2. Powder-actuated fasteners shall be manufactured from AISI 1070 modified steel, austempered to a Rockwell C Hardness of 52 - 58.
3. Powder-actuated fasteners shall have full-tip knurled shanks and minimum 12-mm diameter steel washers.

STEEL STUDS

- 1. Studs are designed in accordance with the requirements of the National Building Code of Canada CAN/CSA-S136-07 Cold Formed Steel Structural Members.
2. Stud steel to meet the requirements of ASTM A446 Standard Specification for sheet steel, zinc coated (galvanized) by the hot dip process.
3. Grades are as follows:
-- Grade A, 33 ksi (228 mPa) min. yield, for 0.045" (1.22mm) material and thinner

STRUCTURAL FIELD REVIEW

- 1. Structural review shall be undertaken by Lavergne Draward and Associates Inc. on behalf of the owner.
2. A review of all reinforcement placing is to be made by the contract administrator prior to casting concrete.
3. Structural field reviews are periodic reviews to verify that work is in general conformance with the structural drawings and documents prepared by Lavergne, Draward, & Associates Inc. and does not guarantee the contractor's work.

SHOP DRAWING REVIEW

- 1. Erection and fabrication shop drawings for all building components work are to be submitted to the engineer for approval before commencing work.
2. As part of the field services, Lavergne Draward and Associates Inc. will review shop drawings pertaining to work shown on Lavergne Draward and Associates Inc. drawings by means of appropriate rational sampling procedures and comment on the accuracy with which the contractor prepared the drawings.

ELEVATORS

- 1. It is the responsibility of the elevator supplier to review the structural and architectural drawings to ensure that the elevator supplied conforms to the drawings.
2. He shall indicate in his bid all areas of non conformance including shaft size, clearances, pit depth and any special structural framing conditions pertaining to the elevator supplied.