Winnipeg

Bill and Helen Norrie Library

Project No.: 2017-082 Tender No.: 542-2019

15 Poseidon Bay, Winnipeg, MB.



Conceptual Artist Rendering - Subject to Change - Approach from Grant Avenue and Cambridge Street

SITE CONTEXT PLAN

PROJECT DESCRIPTION:

THE PROJECT CONSISTS OF A NEW STAND ALONE 14,000 SF (1,300 SQ.M) ONE STOREY LIBRARY BUILDING ON UNDEVELOPED LAND ON THE NORTHWEST CORNER OF THE GRANT PARK RECREATION CAMPUS. THE NEW LIBRARY BUILDING PROGRAM INCLUDES STAFF LOUNGE AND WORK AREAS, SERVICES COUNTER, PUBLIC WASHROOM FACILITIES, AND AN OPEN LIBRARY WITH TUTORIAL SPACES AND MULTI-PURPOSE ROOM. THE SITE WILL BE DEVELOPED TO INCORPORATE A NEW PRIVATE APPROACH AND 40 NEW DEDICATED LIBRARY PARKING STALLS

PROJECT TEAM:

CITY OF WINNIPEG

LM ARCHITECTURAL GROUP

ARCHITECT / PRIME CONSULTANT

TOWER ENGINEERING GROUP STRUCTURAL / MECHANICAL / AND ELECTRICAL ENGINEERING

HTFC PLANNING & DESIGN LANDSCAPE ARCHITECT

SISON BLACKBURN CONSULTING INC.

MORR TRANSPORTATION CONSULTING LTD.

TRANSPORTATION ENGINEERING

FOOTPRINT S + A SUSTAINABILITY

SUSTAINABLE DESIGN

GWH CMS LTD.

QUANTITY SURVEYOR

DRAWING LIST:

COVER SHEET TOPOGRAPHICAL SURVEY PROPOSED SUBDIVISION PLAN

CIVIL

C1.1 SITE SERVICING PLAN

LANDSCAPE

- L-100 SITE DEMOLITION PLAN L-200 SITE MATERIALS PLAN L-300 SITE LAYOUT PLAN L-400 SITE GRADING PLAN
- L-500 SITE PLANTING & SIGNAGE PLAN L-600 WOOD DECK DETAILS
- L-601 CONCRETE & TIMBER BENCH DETAILS
 L-602 GARBAGE ENCLOSURE & SITE FURNITURE DETAILS

ARCHITECTURAL

- **BUILDING KEY PLAN** CRAWLSPACE PLAN MAIN FLOOR PLAN
- ROOF PLAN
 MAIN FLOOR REFLECTED CEILING PLAN
- EXTERIOR ELEVATIONS
 ALUMINUM WINDOW TYPES BUILDING SECTIONS WALL SECTIONS
- WALL SECTIONS
 MISCELLANEOUS SECTIONS
- PLAN DETAILS
 PLAN DETAILS
- ENLARGED FLOOR PLAN & INTERIOR ELEVATIONS INTERIOR ELEVATIONS FURNITURE, EQUIPMENT & FLOOR FINISHES PLAN

STRUCTURAL

- GENERAL NOTES
 TYPICAL DETAILS & SECTIONS
- FOUNDATION PLAN
 MAIN FLOOR FRAMING PLAN
- ROOF FRAMING PLAN PLAN DETAILS & SECTIONS
- SECTIONS & DETAILS SECTIONS & DETAILS

MECHANICAL

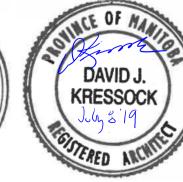
- M0.1 LEGENDS, CALCULATIONS & DRAWING LISTS ASHRAE 62.1 CALCULATIONS SITE PLAN
- CRAWLSPACE PLUMBING LAYOUT
 MAIN FLOOR PLUMBING LAYOUT M1.2 PLUMBING DETAILS
 M1.3 PLUMBING DETAILS CRAWLSPACE - HVAC LAYOUT MAIN FLOOR - HVAC LAYOUT
- HVAC DETAILS HVAC SECTIONS MAIN FLOOR - HYDRONIC LAYOUT HYDRONIC DETAILS & SCHEMATIC HYDRONIC DETAILS & SCHEMATIC
 MAIN FLOOR - FIRE PROTECTION LAYOUT M5.1 MECHANICAL EQUIPMENT SCHEDULES
 M5.2 MECHANICAL EQUIPMENT SCHEDULES

ELECTRICAL

SITE PLAN LIGHTING LAYOUT - CRAWLSPACE LIGHTING LAYOUT - MAIN FLOOR
POWER & SYSTEM LAYOUT - CRAWLSPACE POWER & SYSTEM LAYOUT - MAIN FLOOR LIFE SAFETY LAYOUT - CRAWLSPACE LIFE SAFETY LAYOUT - MAIN FLOOR ELECTRICAL SCHEDULES

ELECTRICAL SCHEDULES
SINGLE LINE DIAGRAM, RISER DIAGRAM & DETAILS





BUILDING CODE ANALYSIS:

BUILDING CODE ASSESSMENT
THIS ASSESSMENT, REVIEWED UNDER THE NATIONAL BUILDING CODE OF CANADA 2010, INCLUDING MANITOBA AMENDMENTS CONSIDERS ONLY THE PRELIMINARY DESIGN PROVIDED FOR THE PROPOSED NEW STANDALONE BILL AND HELEN NORRIE LIBRARY AND IS LIMITED TO THE DETAIL AND MATERIAL AS APPLICABLE AND APPROPRIATE TO THE DESIGN CURRENTLY IN DEVELOPMENT.

MAJOR OCCUPANCIES: BUILDING AREA: 1,300 sm (14,000 sf).

- 3.2.2.25, Group A, Division 2 Up to 2 Storeys
- Not more than two storeys
 Building area is not more than 1,600 sm if one storey facing 1 street
- The building can be combustible or non-combustible construction Floor assemblies if of combustible construction shall be 45 min. fire rated separations Mezzanines if of combustible construction shall be 45 min. fire rated separations. Roof assemblies if of combustible construction shall be shall be 45 min. fire rated separations
- Loadbearing walls, columns and arches supporting an assembly required to have a fire-resistance rating shall have a 45 min. fire-resistance

OCCUPANT LOAD: Per Table 3.1.17, the Occupant Load is calculated as a function of its area:

TOTAL OCCUPANT LOAD: 215 persons total (to be confirmed with library design development.)

TUTORIAL ROOMS: 6 each * (2) total = 12 persons OPEN LIBRARY = 129 persons

Separation of Suites
Section 3.3.1.5 mandates that 2 egress doorways be provided from a room or suite that is intended for an occupant load more than 60, and in a floor area that is sprinklered with a travel distance to an egress doorway is more than 25m or an area of the room or suite that is more than the value below from table 3.3.1.5.B. Section 3.3.1.5.2) Where 2 egress doorways are provided they shall be placed at a distance from one another equal to or greater than one third of the maximum overall diagonal dimension.

Section 3.3.1.21 requires that a non-rated fire separation be provided for a janitor room (in a sprinklered building)

Exits
Exits shall be located, per Section 3.4.2.5, such that the travel distance to at least one exit be no more than 30 meters in a non-sprinklered A2 Occupancy

Exit Width

Refer to Section 3.4.3.2. The aggregate exit width required is 6.1mm per person (for doorways) for Assembly Occupancies (215 persons at 6.1mm each) = 1.312 meters required

HEALTH REQUIREMENTS:

The following Occupant Loads and corresponding min. number of water closets for each sex were calculated.

Occupant Load: 215 persons total (subtract by 10 as per 3.7.2.2.2) Staff served by (1) UNIVERSAL TOILET ROOM 98 Female = 4 Water Closets As per 3.7.2.3.1) the following amount of Lavatories shall be provided. (2 PROVIDED) Male = 2 Lavatories

Female = 2 Lavatories

Section 3.8.1.2 mandates that all pedestrian entrances shall be barrier-free accessible.

Section 3.8.2.1.1) requires that a barrier-free path of travel shall be provided throughout the whole building and to every exit from the barrier-free entrances. As per 3.8.1.3.1) the barrier-free path of travel shall not be less than 1100mm unobstructed width.