

GENERAL NOTES

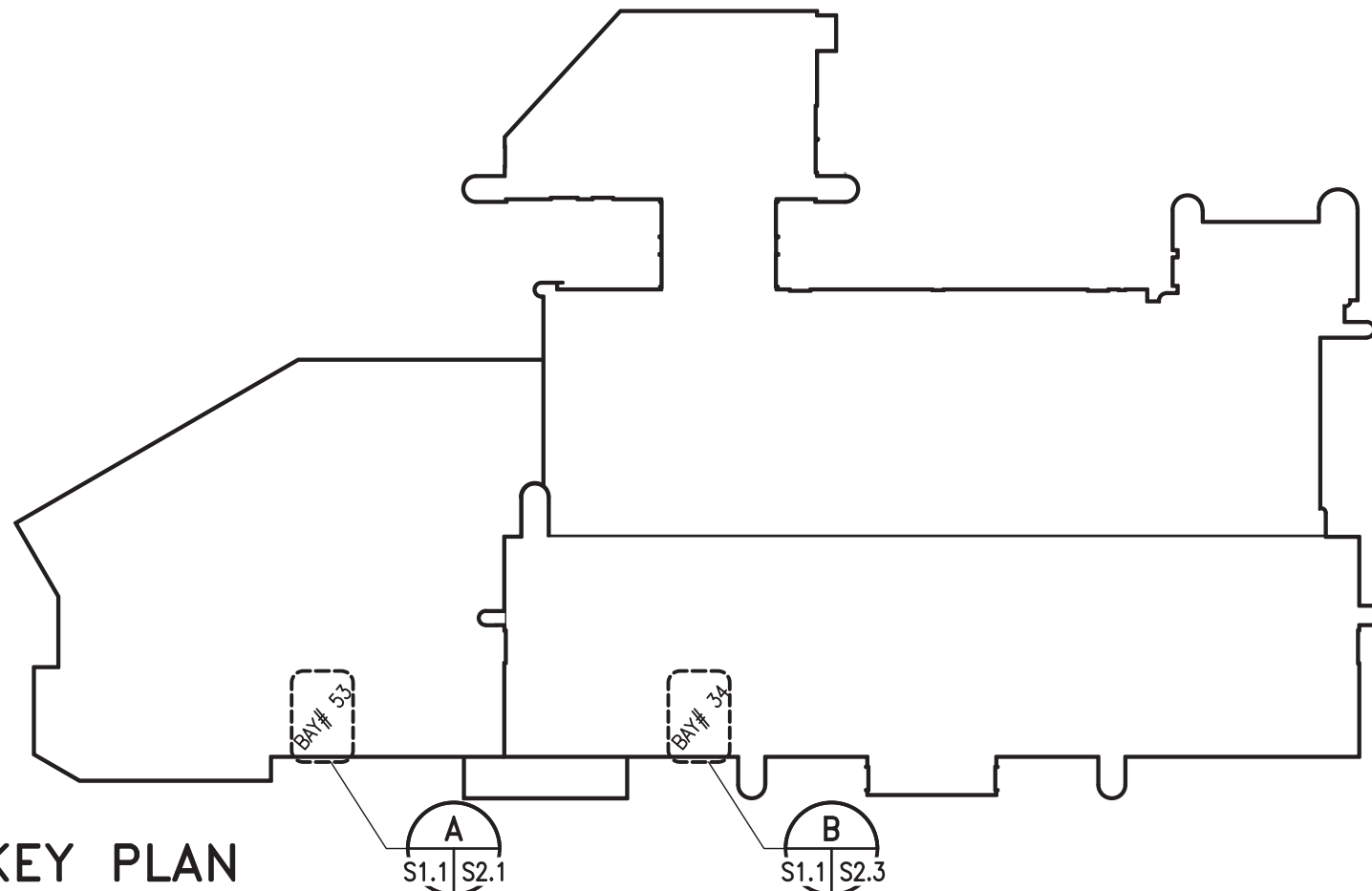
1. STRUCTURAL DESIGN BASED ON THE MANITOBA BUILDING CODE 2011 EDITION.
  - A) IMPORTANCE CATEGORY: NORMAL
  - B) WIND LOAD:  $q_{50} = 0.45 \text{ kPa}$
  - C) GROUND SNOW LOAD:  $S_s = 1.9 \text{ kPa}$
  - D) ASSOCIATED RAIN LOAD:  $S_r = 0.2 \text{ kPa}$
2. SEISMIC SITE CLASSIFICATION: NOT APPLICABLE
3. DO NOT SCALE DRAWINGS.
4. ALL DIMENSIONS ARE TO BE VERIFIED WITH THE EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION.
5. THESE STRUCTURAL DRAWINGS SHOW THE COMPLETED STRUCTURE AND DO NOT INDICATE ALL COMPONENTS NECESSARY FOR SAFETY DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON AND AROUND THE JOBSITE DURING CONSTRUCTION INCLUDING BUT NOT LIMITED TO ALL TEMPORARY SHORING/BRACING.
6. THE EXISTING BUILDING SUPERSTRUCTURE AND FOUNDATIONS HAVE BEEN REVIEWED AND CAN SUPPORT ALL NEW LOADING CONDITIONS SHOWN ON THESE DRAWINGS IN ACCORDANCE WITH PART 4 OF THE 2011 MANITOBA BUILDING CODE, UNLESS NOTED.

STRUCTURAL STEEL

1. THE STRUCTURAL STEEL FABRICATOR'S ENGINEER SHALL BE RESPONSIBLE FOR LOCATING AND DESIGNING PROVISIONS FOR ALL TEMPORARY FALL PROTECTION SYSTEMS REQUIRED DURING CONSTRUCTION TO MEET MANITOBA WORKPLACE HEALTH AND SAFETY REGULATIONS.
2. THE STRUCTURAL STEEL ERECTOR SHALL BE RESPONSIBLE FOR SUPPLYING AND ERECTING ALL TEMPORARY GUYING AND BRACING OF THE STEEL FRAMING TO PROVIDE STABILITY FOR THE STRUCTURE AS A WHOLE. THESE SHALL REMAIN IN PLACE UNTIL ALL STEEL FRAMING AND CONNECTIONS ARE COMPLETED.
3. STRUCTURAL STEEL TO CONFORM TO CSA-G40.21-04, "STRUCTURAL QUALITY STEELS" AND CSA-G40.20 "GENERAL REQUIREMENTS FOR ROLLED OR WELDED STRUCTURAL QUALITY STEEL", ASTM A572/A572M "STANDARD SPECIFICATION FOR HIGH-STRENGTH LOW-ALLOY COLUMBIUM-VANADIUM STRUCTURAL STEEL" OR ASTM A992/A992M "STANDARD SPECIFICATION FOR STRUCTURAL STEEL SHAPES".
4. ALL ROLLED OR STEEL STRUCTURAL SECTIONS SHALL BE G40.21-350W, ASTM A992 OR ASTM A572 GRADE 50. ALL HOLLOW STRUCTURAL SECTIONS TO BE G40.21-350W CLASS C OR ASTM A500-C. ALL ANGLES AND PLATES SHALL BE G40.21-300W.
5. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE PERFORMED IN ACCORDANCE WITH CSA S16-09, "DESIGN OF STEEL STRUCTURES".
6. ALL WELDING SHALL CONFORM TO THE LATEST EDITION OF CSA W59, "WELDED STEEL CONSTRUCTION". FABRICATORS SHALL BE PROPERLY CERTIFIED IN ACCORDANCE WITH CSA W47.1, "CERTIFICATION OF COMPANIES FOR FUSION WELDING OF STEEL STRUCTURES".
7. STRUCTURAL STEEL SUPPLIER IS TO SUBMIT ENGINEERING DRAWINGS BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA COVERING THE DESIGN OF CONNECTIONS, TO THE PROJECT DESIGN ENGINEER FOR REVIEW PRIOR TO FABRICATION. CONNECTION DESIGN TO INCLUDE FOR ALL ADJUSTABLE CONNECTIONS REQUIRED TO SUIT FABRICATION AND ERECTION PROCEDURES AND TOLERANCES.
8. ALL BOLTED CONNECTIONS TO USE A325 HIGH STRENGTH BOLTS. MINIMUM CONNECTION SHALL CONSIST OF 2 BOLTS.
9. STEEL RECEIVING FINISH PAINTING TO HAVE ONE COAT OF CISC/CPMA 2-75 QUICK DRYING SHOP PRIMER. STEEL TO BE CLEANED IN CONFORMANCE WITH SSPC-SP7. ALL STEEL TO RECEIVE TWO COATS OF WHITE PAINT TO MATCH EXISTING, ADJACENT FALL ARREST BEAMS.
10. FABRICATOR TO NOTIFY ENGINEER OF ANY PROPOSED MEMBER SUBSTITUTIONS AND CHANGED CONNECTION DETAILS.

FALL ARREST EQUIPMENT

1. STRUCTURAL DESIGN BASED ON THE MANITOBA BUILDING CODE 2011 EDITION.
2. DESIGN OF FALL ARREST EQUIPMENT BASED ON:
  - A) MANITOBA REGULATION 217/2006 - WORKPLACE HEALTH AND SAFETY REGULATION
  - B) CSA-Z91-17 - HEALTH AND SAFETY CODE FOR SUSPENDED EQUIPMENT OPERATIONS
  - C) CSA-Z721-20 - SAFETY CODE FOR SUSPENDED PLATFORMS
3. PERMANENT FALL ARREST EQUIPMENT IS DESIGNED TO WITHSTAND A FALL ARREST FORCE OF 22.2 kN (4,990 LBS) APPLIED IN ANY DIRECTION IN WHICH THE LOAD MAY BE APPLIED WITHOUT ANY PERMANENT DEFORMATION, FRACTURE, OR DETACHMENT.
4. SHOP DRAWINGS:
  - A) SUBMIT SHOP DRAWINGS BEARING THE SEAL OF A REGISTERED PROFESSIONAL ENGINEER IN THE PROVINCE OF MANITOBA.
  - B) INDICATE COMPONENT PROFILES, SIZES, CONNECTION ATTACHMENTS, REINFORCING, ANCHORAGE, SIZE AND TYPE OF FASTENERS, AND ACCESSORIES. INCLUDE ERECTION DRAWINGS, ELEVATIONS, AND DETAILS WHERE APPLICABLE.
  - C) INDICATE WELDED CONNECTIONS USING STANDARD WELDING SYMBOLS INCLUDE NET WELD LENGTHS.
5. EXAMINE SURFACES AND AREAS UPON WHICH THE WORK OF THIS SECTION DEPENDS. REPORT TO THE CONTRACT ADMINISTRATOR IN WRITING, ANY SITE CONDITIONS OR STRUCTURAL DEFICIENCIES THAT MAY ADVERSELY AFFECT THE INSTALLATION AND/OR FUNCTION OF THE FALL ARREST EQUIPMENT.
6. VERIFY ALL DIMENSIONS AND LOCATIONS ON-SITE PRIOR TO INSTALLATION.
7. INSTALL ANCHORS OR EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS, SHOP DRAWINGS AND AS SPECIFIED.
8. WHERE NECESSARY, PROVIDE PROTECTION AGAINST DETERIORATION DUE TO CONTACT OF DISSIMILAR MATERIALS.
9. ALL ANCHORS TO BE PROOF TESTED TO 11.1 kN (2,500 LBS) USING LOAD CELL TEST APPARATUS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. TESTING TO BE WITNESSED AND RECORDED BY THE CONTRACT ADMINISTRATOR.
10. THE FALL ARREST SYSTEM MUST BE INSPECTED BY A QUALIFIED PERSON AT INTERVALS NOT EXCEEDING 12 MONTHS IN ACCORDANCE WITH REGULATIONS AND MANUFACTURER'S RECOMMENDATIONS.



**KEY PLAN**

NTS

**ENGINEERS  
GEOSCIENTISTS  
MANITOBA**  
Certificate of Authorization  
**Crosier Kilgour & Partners Ltd.**  
No. 235



2021-06-04

No.	Date	Issue/Revision	By
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Project  
**WINNIPEG TRANSIT**  
ROOF FALL ARREST  
FORT ROUGE GARAGE - BUILDING 'A'  
421 OSBORNE STREET  
WINNIPEG, MANITOBA

Sheet Title  
**GENERAL NOTES AND  
KEY PLAN**

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