

FIRE PARAMEDIC SERVICE STATION No. 5

845 SARGENT AVENUE, WINNIPEG, MANITOBA

STRUCTURAL REPAIRS TO APPARATUS ROOM FLOORS

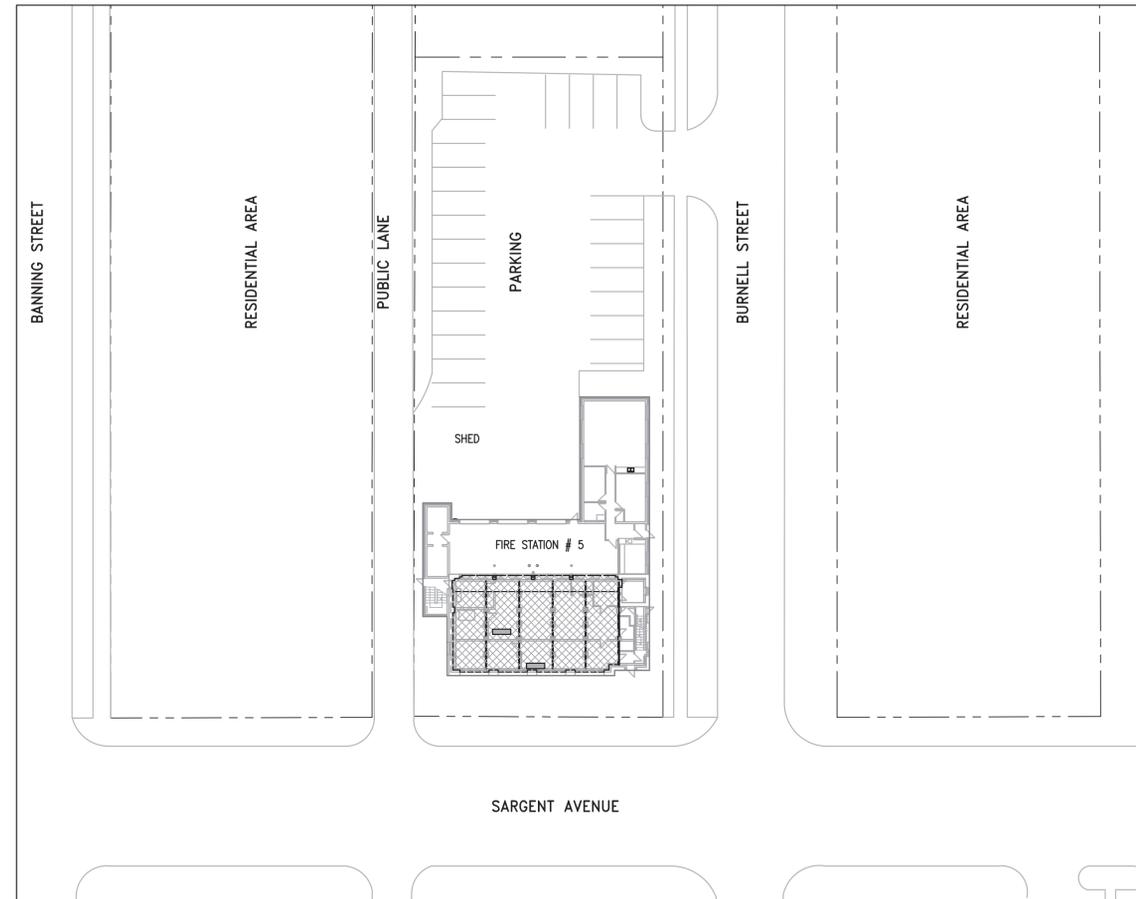
BID OPPORTUNITY # 1118-2017

CONTRACT ADMINISTRATOR

300-275 Carlton Street
Winnipeg, Manitoba R3C 5R6
T 204. 943. 7501
F 204. 943. 7507



**Crosier Kilgour
& Partners Ltd.**
CONSULTING STRUCTURAL ENGINEERS



SITE PLAN
NTS

DRAWING LISTS

S0.1	TITLE PAGE, DRAWING LISTS, SITE PLAN AND GENERAL NOTES
S2.1	EXISTING BASEMENT REFLECTED CEILING PLAN
S2.2	EXISTING MAIN FLOOR PLAN (DEMOLITION)
S2.3	EXISTING MAIN FLOOR PLAN (NEW CONSTRUCTION)
S4.1	SECTIONS AND DETAILS
S5.1	TYPICAL CONCRETE REPAIR SECTIONS AND DETAILS
S6.1	TYPICAL WATERPROOFING MEMBRANE SECTIONS AND DETAILS

GENERAL NOTES

- DO NOT SCALE DRAWINGS.
- ALL DIMENSIONS ARE TO BE VERIFIED WITH EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION.
- THESE STRUCTURAL DRAWINGS SHOW THE COMPLETED STRUCTURE AND DO NOT INDICATE ALL COMPONENTS NECESSARY FOR SAFETY DURING CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON AND AROUND THE JOBSITE DURING CONSTRUCTION.

DESIGN ASSUMPTIONS

- EXISTING MATERIALS PROPERTIES (HISTORICAL VALUES)
 - A) CONCRETE: $f'_c = 1.45 \text{ ksi (10 MPa)}$
 - B) REINFORCING STEEL: $f_y = 33 \text{ ksi (225 MPa)}$
 - C) STRUCTURAL STEEL: $f_y = 40 \text{ ksi (275 MPa)}$
- DESIGN LOADS:
 - A) DEAD LOAD = 163 psf
 - B) LIVE LOAD = 250 psf OR MAXIMUM POINT LOAD = 23700 #/S

SHORING AND BRACING

- INSTALL SHORING AND BRACING REQUIRED TO COMPLETE REPAIRS AS SHOWN ON DRAWINGS.
- FOR UNIT PRICE CONCRETE REPAIRS, THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMATION OF SHORING REQUIREMENTS PRIOR TO COMMENCEMENT OF DEMOLITION AND THROUGHOUT THE REPAIR PROCESS.

CAST-IN-PLACE CONCRETE

1 CONCRETE

- ALL CONCRETE IS TO BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF CSA-A23.1-14 "CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION" AND CSA-A23.2-14 "METHOD OF TEST FOR CONCRETE".
- PROVIDE CERTIFICATION THAT MIX PROPORTIONS SELECTED WILL PRODUCE CONCRETE OF QUALITY, YIELD AND STRENGTH AS SPECIFIED IN CONCRETE MIXES, AND WILL COMPLY WITH CSA-A23.1. CERTIFICATION LETTER TO BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.
- PROVIDE CERTIFICATION THAT PLANT, EQUIPMENT, AND MATERIALS TO BE USED IN CONCRETE COMPLY WITH REQUIREMENTS OF CSA-A23.1. CERTIFICATION LETTER TO BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.
- CONCRETE PROPERTIES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

CONCRETE CURBS: 35 MPa MIN. AT 28 DAYS
CLASS OF EXPOSURE: C-1
ENTRAINED AIR/CATEGORY: 1 (5% TO 8%)
AGGREGATE MAX. 20 mm
CURING TYPE: 7 DAY WET CURE

BONDED CONCRETE OVERLAY AND TOP SURFACE CONCRETE REPAIRS: 35 MPa MIN. AT 28 DAYS
CLASS OF EXPOSURE: N
ENTRAINED AIR/CATEGORY: 1 (5% TO 8%)
AGGREGATE MAX. 14 mm
MACRO SYNTHETIC: 2.27 KG/M³
CURING TYPE: 7 DAY WET CURE

UNLESS INDICATED OTHERWISE THE CONTRACTOR SHALL SPECIFY CONCRETE SLUMP APPROPRIATE WITH PLACEMENT METHODS AND SITE CONDITIONS. THE CONTRACTOR SPECIFIED SLUMP MUST BE SHOWN ON THE CERTIFICATION LETTER AND CONCRETE DELIVERY TICKET.

The General Contractor shall check & verify all dimensions and report any errors or omissions to the designers.

No.	Date	Issue/Revision	By
0	2018-01-10	ISSUED FOR BID	PG

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WINNIPEG, MANITOBA

Sheet Title
TITLE SHEET, DRAWING LISTS,
GENERAL NOTES AND SITE PLAN

File	2017-1192	Date	2017-11-06
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Design	DJM/PG	Drawn	RBC
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Revision	Sheet No.
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