GENERAL NOTES:

- 1. THE STRUCTURE HAS BEEN DESIGNED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2011 MANITOBA BUILDING CODE.
- DESIGN LOADS ARE SHOWN ON THE DRAWINGS. IMPORTANCE FACTOR Is = Iw = 1.25 DO NOT SCALE DRAWINGS.
- VERIFY ALL DIMENSIONS SHOWN PRIOR TO COMMENCING CONSTRUCTION.
- VERIFY WEIGHT AND LOCATION OF ALL EQUIPMENT ON STRUCTURE AND REPORT ANY DISCREPANCIES TO CONTRACT ADMINISTRATOR PRIOR TO CONSTRUCTION.
- STRUCTURAL DRAWINGS SHOWING THE COMPLETED STRUCTURE DO NOT INDICATE
- COMPONENTS WHICH MAY BE NECESSARY FOR SAFETY DURING CONSTRUCTION. 7. OBTAIN CONTRACT ADMINISTRATOR'S APPROVAL PRIOR TO MAKING ANY MEMBER
- SUBSTITUTIONS OR CONNECTION DETAIL CHANGES. 8. THE CONTRACTOR WILL BE RESPONSIBLE TO ARRANGE WASTEWATER PUMPING WHEN THE CONTRACTOR IS DOING ANY KIND OF WORK IN THE WET WELL AND NEEDS TO REDUCE THE WASTEWATER LEVELS TO PROPERLY PERFORM HIS WORK, i.e. REPLACE TRASH RACKS
- AND CONCRETE REPAIRS. 9. SCAN EXIST FLOOR FOR REBAR AND REVIEW FINDINGS WITH CONTRACT ADMINISTRATOR PRIOR TO CUTTING NEW HOLES IN EXISTING CONCRETE.

ROUGH CARPENTRY:

- 1. ALL WOOD MEMBERS SHALL BE GRADE SPF #2 OR BETTER. ALL WOOD TO BE KILN
- DRIED. ALL WALLS TO BE ADEQUATELY BRACED UNTIL STRUCTURAL MEMBERS ARE INSTALLED.
- NAILING PATTERNS AND LENGTHS TO CONFORM TO REQUIREMENTS OF PART 9 OF NATIONAL BUILDING CODE OF CANADA.
- PLYWOOD SHALL BE EXTERIOR GRADE DOUGLAS FIR PLYWOOD CONFORMING TO CAN3-0121-M1978 "DOUGLAS FIR PLYWOOD", ALL OTHER PLYWOOD TO CONFORM TO CAN3-0151-M1978" CANADIAN SOFTWOOD PLYWOOD".
- CONTRACTOR TO PROVIDE GALVANIZED METAL HANGERS AT ALL FLUSH FRAMED CONNECTIONS.

CAST-IN-PLACE CONCRETE:

- 1. ALL CONCRETE TO BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH CAN\CSA A23.1-04.
- 2. SUPPLEMENTARY CEMENTITIOUS MATERIALS TO CAN/CSA A3000 CEMENTITIOUS MATERIALS COMPENDIUM.
- CHEMICAL ADMIXTURES TO ASTM C494 AND ASTM C1017.
- 4. GENERAL CONTRACTOR TO PROVIDE PROPRIETARY MIX DESIGN PERFORMANCE RECORD AS REQUIRED BY THE MANITOBA READY MIX ASSOCIATION.

INTERIOR SLABS INFILL: EXPOSURE CLASS: N

CEMENT TYPE: GU

MINIMUM CONCRETE STRENGTH: 25MPA MINIMUM AGGREGATE SIZE: 20 MM AIR CONTENT CATEGORY: N/A

EXT SLAB ON GRADE:

EXPOSURE CLASS: C1 CEMENT TYPE: GU MINIMUM CONCRETE STRENGTH: 35MPA MINIMUM AGGREGATE SIZE: 20 MM AIR CONTENT CATEGORY: 1(5-8%)

REINFORCING STEEL:

- 1. ALL REINFORCING STEEL TO BE CSA G30.18M 400 MPa DEFORMED BARS. ALL REINFORCING TO BE DETAILED IN ACCORDANCE WITH LATEST EDITION OF ACI DETAILING MANUAL, UNLESS OTHERWISE NOTED.
- 2. REINFORCING STEEL COVER TO CONFORM TO LATEST EDITION OF CSA A23.3 AND AS FOLLOWS:

1 IN. (25 mm)

3. ALL REINFORCING TO BE HELD IN PLACE AND TIED WITH PROPER ACCESSORIES. SUCH AS HI-CHAIRS AND SPACERS. SUPPLY AND DETAIL ALL ACCESSORIES. HI-CHAIRS TO HAVE 4 LEGS AND TO BE STAPLED OR NAILED TO THE FORMWORK.

STRUCTURAL STEEL:

- 1. STRUCTURAL STEEL TO CONFORM TO CSA G40.21., "STRUCTURAL QUALITY STEEL" AND CSA G40.20 "GENERAL; REQUIREMENTS FOR ROLLED OR WELD QUALITY STEEL".
- 2. ROLLED OR WELDED STEEL STRUCTURAL SECTIONS AND PLATES TO BE G40.20 44 W (300 MPa) GRADE STEEL
- 3. FABRICATION AND ERECTION OF STRUCTURAL STEEL TO CONFORM TO CAN3_S16.1, "STEEL STRUCTURES FOR BUILDINGS".
- 4. ALL WELDING TO CONFORM TO CAN3_W59_1989 "WELDED STEEL CONSTRUCTION".
- 5. FABRICATORS SHALL BE CERTIFIED IN ACCORDANCE WITH CAN3_W47.1_M83 "CERTIFICATION OF
- COMPANIES FOR FUSION WELDING OF STEEL STRUCTURES".
- BOLTED CONNECTIONS TO USE A MINIMUM OF 2_A325 HIGH STRENGTH BOLTS. ALL FASTENERS TO BE INSTALLED FOLLOWING MANUFACTURER SPECIFICATIONS.
- 8. STRUCTURAL STEEL TO RECEIVE ONE COAT OF CISC/CPMA 2_75 SHOP PRIMER.
- 9. OBTAIN CONTRACT ADMINISTRATOR'S APPROVAL PRIOR TO MAKING ANY MEMBER SUBSTITUTIONS OR CONNECTION DETAIL CHANGES
- 10. PROVIDE HOLES IN STEEL SECTIONS AS REQUIRED. SECTIONS SHALL BE STRENGTHENED AS REQUIRED TO GUARANTEE ORIGINAL STRENGTH OF BEAM. CUTTING OF STEEL AT JOBSITE SHALL BE DONE ONLY AS APPROVED AND DIRECTED BY ENGINEER. 11. SUPPLY AND ERECT TEMPORARY GUYING AND BRACING TO PROVIDE STABILITY FOR STRUCTURE
- AS A WHOLE. THESE SHALL REMAIN IN PLACE UNTIL STEEL DECKING AND PERMANENT BRACING IS ERECTED AND FULLY WELDED IN PLACE AND ALL MASONRY WALLS ARE CONSTRUCTED.
- 12. SUBMIT ENGINEERING SHOP DRAWINGS BEARING SEAL OF A REGISTERED PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA COVERING DESIGN OF CONNECTIONS TO PROJECT ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
- 13. ENGINEERING SHOP DRAWINGS SHALL INCLUDE A LAYOUT PLAN.

CONCRETE REPAIR PROCEDURE:

- 1. REMOVE LOOSE CONCRETE WITH A CHIPPING HAMMER AT LOCATIONS INDICATED ON THE
- DRAWINGS. PROTECT WORK TO REMAIN.
- 3. CLEAN EXPOSED REINFORCING IN ACCORDANCE WITH SSPC SP3 POWER TOOL CLEANING.
- 4. EXPOSED REINFORCING SHALL BE UNCOVERED SUCH THAT THERE IS A 12.7mm (火")
- MINIMUM CLEARANCE AROUND THE PERIMETER OF THE REINFORCING. CLEAN AND CURE CONCRETE WALL SURFACES IN ACCORDANCE WITH REPAIR PRODUCT
- SPECIFICATIONS. CONCRETE FOR REPAIRS SHALL BE THE FOLLOWING PRODUCTS OR AS APPROVED EQUAL IN ACCORDANCE WITH B.7:
 - "TAMMS FORM AND POUR" MORTAR WITH CORROSION INHIBITOR BY THE EUCLID CHEMICAL COMPANY.
 - "EXPRESS REPAIR" RAPID SETTING MORTAR WITH CORROSION INHIBITOR BY THE EUCLID CHEMICAL COMPANY.
- 7. CONCRETE PRODUCT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S
- 8. INSTALL CONCRETE REPAIR PRODUCT. LEAVE CONCRETE FORMWORK IN PLACE AS DICTATED BY REPAIR PRODUCT SPECIFICATIONS.

NEW CONCRETE SLAB TOPPING INSTALLATION PROCEDURE:

- 1. SCARIFY EXISTING CONCRETE SLAB SURFACE.
- 2. APPLY BONDING AGENT (SIKATOP® ARMATEC-110 EPOCEM, OR APPROVED EQUIVALENT)
- 3. APPLY HIGH STRENGTH CONCRETE PATCHING MATERIAL (SIKATOP®-123 PLUS, OR APPROVED EQUIVALENT) TO ACHIEVE ELEVATIONS AND SLOPES AS INDICATED.
- 4. SURFACE TO BE NON-SLIP SURFACE.

Certificate of Authorization Charleson Engineering Ltd. No. 50 Date: 2019-05-31

TENDER NO.: 269-2019

CONTRACT NUMBER: X

METRIC WHOLE NUMBERS INDICATE MILLIMETRES DECIMALIZED NUMBERS INDICATE METRES

ISSUED FOR TENDER



PH# 204-895-1474. FAX# 204-416-4606

EMAIL: KEN@CHARLESONENG.CA

WARNING

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:

1) NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.

2) TAKE PRECAUTION TO AVOID DAMAGE

TO GAS COMPANY INSTALLATIONS.

SEE PROVINCIAL REGULATION 210/72 FOR DETAILS

SUPV. U/G STRUCTURES NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

LOCATION APPROVED

UNDERGROUND STRUCTURES

ELEV.

ENGINEER'S SEAL Neegan Burnside Limited 307 Commerce Drive **NEEGAN**BURNSIDE Winnipeg, Manitoba, R3P 1B3 CONSTRUCTION COMPLETION DATE: YYYY MM DD telephone (204) 949-7110 fax (204) 949-7111 web www.neeganburnside.com CHECKED BY DESIGNED KC KC DRAWN APPROVED SW KC 2019 05 31 | KC | SCALE: ISSUED FOR TENDER AS NOTED | RELEASED FOR CONSTRUCTION ISSUED FOR 99% REVIEW | 2019 05 09 | KC | HORIZONTAL CONSULTANT DRAWING NUMBER 2019 04 17 KC VERTICAL ISSUED FOR 66% REVIEW REVISIONS DATE BY DATE 2019.04.15 DATE

PLOT DATE: 2019-04-17

Winnipeg

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION

MISSION FPS UPGRADES

STRUCTURAL

CITY DRAWING NUMBER 1-0163F-S0002-001

SHEET OF

GENERAL NOTES

FILE PATH: C:\Users\Siyu\Desktop\SIYU DWG-2019\19041 - Mission FPS Upgrades FILE NAME: 19041 - Mission FPS Upgrades