

MECHANICAL SPECIFICATIONS

1. Reference Standards (Current Editions)

1.1. National Building Code of Canada (NBCC) with all Provincial and Local Amendments,

1.2. National Plumbing Code of Canada (NPCC) with all Provincial and Local Amendments,

1.3. Manitoba Regulation 132/97

1.4. Applicable Municipal By-Laws,

1.5. Canadian Standards Associations (CSA),

1.6. American Society of Mechanical Engineers (ASME) Testing Standards
2. General Requirements

2.1. It is the intent of these drawings to provide for a complete and fully operating system in accordance with all applicable codes. Notwithstanding that the drawings may not cover each and every item required for the complete mechanical installation, the mechanical contractor shall supply all labour, materials, tools, equipment, and transportation necessary for the complete installation of the mechanical system on-site.

2.2. The contractor is to ensure that delivery time of all mechanical equipment does not cause a delay in the scheduling of this project. Notify the engineer if any problems arise.

2.3. Employ only experienced tradespeople with proper licenses for the work.

2.4. Drawings are diagrammatic and approximate to scale. The contract documents establish scope, materials and quality and are not a comprehensive bill of materials, or detailed installation instructions.

2.5. Co-operate with other sections and trade disciplines as required for the completion of the total work. These drawings are to be read in conjunction with architecture, structural, electrical and landscaping drawings. Report any discrepancies to engineer.

2.6. All fire-rated separations must be maintained. See architectural drawing and/or code summary page for the location of fire-rated separations.

2.7. Confirm all new equipment loadings and support requirements with structural engineer prior to installation.

2.8. Conform to manufacturer's installation instructions, details, and procedures for equipment installations and start-up.

2.9. When connecting to existing systems or equipment, contractor is to immediately notify engineer of any deficiencies with the existing systems or any conditions with respect to the existing system that would impact the operation of the newly installed services or systems.
3. Equals for Equipment

3.1. Equals for all equipment and fixtures will be considered, subject to the general contractor's, engineer's, and owner's approval.

3.2. Submit request for equals to engineer with the following information:

3.2.1. Name of item on drawings for which the equal is being requested,

3.2.2. Make and model of equal,

3.2.3. Performance information showing that performance is equal to original item,

3.2.4. Electrical requirements of equal,

3.2.5. Confirmation of compliance with minimum efficiency standards as set out in the NECB.
4. Shop Drawings

4.1. Submit 2 sets of shop drawings to DGH Engineering after acceptance by the General Contractor for review for the following items, as required:

4.1.1. All mechanical equipment listed in this drawing package,

4.1.2. Plumbing fixtures,

4.1.3. Specialty equipment.

4.2. The engineer's review does not relieve the contractor from responsibility to provide and install materials and equipment in accordance with the design intent of the drawings. Meeting all spatial and layout constraints while ensuring suitability for site conditions are the responsibility of the contractor. All electrical service characteristics and requirements must be coordinated with the electrical contractor.

4.3. Equipment is not to be purchased prior to shop drawing approval including the Owners approval and approval by other responsible professionals.
5. Permits, Certificates and Fees

5.1. It is the Owner's responsibility to obtain all required permits and pay all associated fees.
6. Project Record Drawings

6.1. At the conclusion of the job, the contractor is to submit to the engineer a marked-up set of drawings including any changes to the initial design including revisions, site instructions, and accepted equals. These documents are subjected to be review and acceptance by the Engineer.
7. Maintenance Manuals

7.1. Provide building owner with operation and maintenance manual for all equipment installed and a set of the record drawings.
8. Site Reviews

8.1. Where certification is to be provided by DGH Engineering for building code compliance the mechanical contractor is to contact DGH Engineering prior to starting construction to confirm a schedule for site visits. The contractor is to notify DGH Engineering at least 4 working days prior to each visit.
9. Electrical Contractor

9.1. Electrical contractor to supply and install electrical unit heaters, forced flow heaters, and baseboard heaters, unless otherwise noted in the sealed plans or instructed in writing by the General Contractor/ Project Manager.

9.2. When an electric baseboard heater is installed in an area susceptible to flooding, such as a washroom or mechanical room, the baseboard heater should be installed 6 inches above the finished floor. Alternatively, the baseboard heater can be protected with a GFCI device.

9.3. Electrical Contractor to supply and install all conduits, wires, junction boxes, and associated devices required for the control of mechanical systems. Control conduit runs and wiring may not be indicated on the mechanical or electrical drawings. It is the responsibility of the Electrical Contractor to ensure all conduits and wiring has been provided for the proper operation of the mechanical systems.

9.4. For building classification refer to the electrical plans for full classification details. All equipment shall meet electrical classification requirements, including labels indicating compliance. Report any conflicts to the Engineer.

10. Controls

10.1. The Mechanical contractor is responsible to provide controls for a fully operational mechanical system in compliance with the mechanical plans for a fully operational mechanical system. This can be completed by either the mechanical contractor or a subtrade.

10.2. Mechanical contractor is responsible to provide all ancillary devices required for a fully functioning mechanical system meeting applicable codes. This includes interlocks, air proving switches, low water cutoff devices, high temperature limits, etc.. Motor starters, variable frequency drives, relays, contactors, and current sensing relays are to be provided by the Electrical Contractor, unless otherwise noted.

10.3. Mechanical contractor to coordinate with electrical contractor to install all line and low voltage controls. All wire to be supplied and installed by electrical contractor.
11. Drain, Water and Vent (Sewer and Sanitary) Piping

11.1. Piping to be PVC DWV.

11.2. Combustible piping shall be fire-stopped with an approved ULC listed assembly meeting the required duration where it passes through a fire rated membrane. See architectural drawings for locations of fire rated separations.

11.3. Slope to be 2% unless otherwise noted.

11.4. All vent penetrations through roof must be 3 inch.

11.5. Piping system is to be pressure tested.

11.6. Floor drains to be installed near all water fixtures such as laundry, furnaces, HRV, HWT, emergency eye washes, and emergency shower stations.

11.7. Holding or septic tanks are to be installed with the lid level two feet below finished floor. Tank locations are to be verified with the Owner, confirmed with the licensing of waste water systems, and meeting all required set-backs from property lines or other installations.
12. Water Piping

12.1. All fixtures connected to the water piping distribution are to be in accordance with ASME A 112.18.1 and CAN CSA-B125 "Plumbing Supply Fittings".

12.2. Install in accordance with NPC and provincial amendments where applicable.

12.3. Piping to be Copper or PEX.

12.4. Combustible piping shall be fire-stopped with an approved ULC listed assembly meeting the required duration where it passes through a fire rated membrane. See architectural drawings for locations of fire rated separations.

12.5. Pressure test water lines, repair defective materials and joints, and retest lines.

12.6. Sterilize water lines and flush entire system prior to putting system into operation.

12.7. All cold-water piping to be insulated with ½ inch preformed flexible elastomeric, closed cell insulation.

12.8. When PEX piping is color-coded, red colored piping is recommended for domestic hot water, and blue colored piping is recommended for cold water.

12.9. All hose bibs must have vacuum breakers.

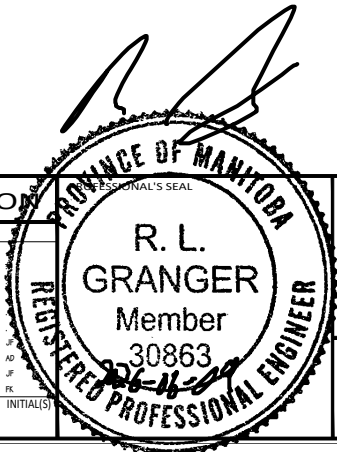
12.10. Exterior hose bibs are to be of the non-freezing type.
13. Identification

13.1. All pumps, motors, fans, piping and other mechanical equipment are to be labeled with permanent tags referenced to the drawings.

13.2. All control switches are to be labeled with the identification of the device that they control and the control function.

ENGINEERS
GEOSCIENTISTS
MANITOBA
Certificate of Authorization
DGH Engineering Ltd.
o/a Parsus Engineering
No. 540

ISSUED FOR CONSTRUCTION			
ISSUE (AND REVISION)			
04	2026-06-09	ISSUED FOR CONSTRUCTION	JC
03	2026-05-09	E-SERIES ISSUED FOR REVIEW	JF
02	2026-05-08	ISSUED FOR REVIEW	JF
01	2026-04-02	S-SERIES ISSUED FOR REVIEW	FK
NO.(REV)	DATE	DESCRIPTION	INITIAL(S)
PRINTED DATE: 6/9/2026 1:27:16 PM			



NOTE TO CONTRACTOR:
THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO CONSULTANT IN WRITING. DO NOT RELY ON SCALED DIMENSIONS. WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTACT THE CONSULTANT FOR CLARIFICATIONS IF NECESSARY. THIS DRAWING SHALL NOT BE USED FOR BUILDING PERMIT OR CONSTRUCTION PURPOSES UNLESS IT IS SEALED AND SIGNED BY THE CONSULTANT RESPONSIBLE FOR THE WORK.



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CLIENT DWAsitework WINNIPEG MB.			PROJECT TITLE WADING POOL CONVERSION AT MICHAELLE JEAN PARK/NORQUAY COMMUNITY CENTRE	
			PROJECT LOCATION 65 GRANVILLE ST. WINNIPEG, MB.	
			PROJECT NUMBER: 4289-001	
DESIGNED JC	DRAWN JF	COORDINATOR JC	MECHANICAL SPECIFICATIONS	MO REV. ◊ R00
DATE MAR/2026	SCALE AS NOTED	SSM SUBSET		