

**ANNEX A
SPECIFICATIONS
ROYAL CANADIAN MOUNTED POLICE (RCMP)
DEPOT DIVISION
REGINA, SASKATCHEWAN**

**SUPPLY AND INSTALL COOLING SYSTEM FOR NEW GYM
IN THE PHYSICAL TRAINING BUILDING**

Supply all labour, material, tools, and equipment required provide a cooling system in the new gym area in the Physical Training Building at the RCMP Depot Academy in Regina, Saskatchewan without the disruption of RCMP employees during normal working hours.

1 SCOPE OF WORK

- 1.1 The intent of this project is to supply the new gym with a Chilled Water Cooling System by utilizing the chilled water from Fort Dufferin.
- 1.2 Execution: Cooling Lines
 - 1.2.1 Supply and install approximately 250ft each of supply and return chilled water piping.
 - 1.2.1.1 Approximately 50 – 90 degree elbows. Contractor to verify on site.
 - 1.2.1.2 Piping to be 4 inch schedule 40 steel pipe using Victaulic Connections
 - 1.2.1.3 Pipe to have 1 ½ inch insulation vapor sealed and PVC covered.
 - 1.2.1.4 Contractor will be responsible for cutting and patching and must fire stop all penetrations.
 - 1.2.2 Chilled water supply and return future line connections are in the chiller room at Fort Dufferin
 - 1.2.2.1 Lines will terminate in the gym mechanical room in the North East corner.
 - 1.2.2.2 There is to be future 4 inch supply and return tees installed after the pump complete with valves and capped.

1.2.2.3 Supply lines after the future tees are to have isolation valves and capped. Venting to be installed at all high points as required.

1.2.3 Contractor to supply a new Taco chilled water pump Model CA – 30 (or equal) complete with drive and starter complete with hand/off/auto and capable of pumping 110 gpm of 33% Glycol.

1.2.3.1 Pump to have suction strainer and isolation valves and press gauges on both sides of pump.

1.2.3.2 Contractor to supply a new Honeywell 3 way valve (or equal) and install in piping after pump with bypass around valve.

1.2.3.3 System to have a Taco Model CA 140-25 or (equal expansion tank).

1.2.3.4 Expansion tank and pump to be installed in the North East corner of gym mechanical room.

1.2.4 All piping to be degreased before connection or opening of any system. Lines to be charged with 33% Maxim inhibited propylene glycol.

1.2.5 Wiring of pump/3 way valve and controls are the responsibility of the RCMP.

1.3 Connection

1.3.1 Remove a portion of the ductwork and filter section attached to the air handler. (AHU #1)

1.3.2 Install the new Daikin Model 3 CAC023GBAM Cabinet complete with Daikin Model 5WD1008A to cool 12,387 CFM coil total capacity 496,727 BTU/hr 80 deg F in 54 deg f out (or equal) complete with filter bank with Merv 13 filters to the back end of the air handler.

1.3.3 Connect the new return air section to the old ductwork and insulate with canvas covered or armafex 1 inches.

1.3.3.1 Contractor to seal all duct connections.

1.3.4 Connect chilled water piping to new chilled water coil.

1.3.5 Install coil venting and drain. Connect coil condensate drain to floor drain. Load coil with 33% inhibited glycol.

- 1.3.6 Insulate line with 1 ½ inch insulation PVC covered.
 - 1.3.6.1 Pump system and vent air.
- 1.4 Wiring and controls are the responsibility of the RCMP.
- 1.5 A site inspection will be completed at the end of the project with the contractor, RCMP plumbing shop representative, and Project Manager
- 1.6 General Requirements
 - 1.6.1 Contractor responsible for all site measurements. Layout to be confirmed with Project Manager prior to installation.
 - 1.6.2 Where not otherwise stated or specified, the work shall conform to at least the minimum standards of the National Building Code.
 - 1.6.3 Protect the property during the course of the work and make good at no extra cost to, and to the satisfaction of the RCMP, any damage caused throughout the performance of this contract.
 - 1.6.4 The General Contractors and all Subcontractors shall be responsible for and arrange their own storage facilities and portable washrooms. Parking will be available near location of work site.
 - 1.6.5 All materials to be removed under this contract and not required for reuse shall become the property of the General Contractor and are to be removed from the site unless otherwise noted.
 - 1.6.6 If specification is unclear, or can no longer match specified items, the specification will be submitted to and approved by the RCMP Project Manager.
 - 1.6.7 Contractor and/or subcontractors shall protect existing facilities and employees from any physical disruptions during performance of work.
 - 1.6.8 Provide access to buildings during the execution of the project. Arrange construction schedule so as not to interfere with normal use of premises.
 - 1.6.9 A site specific safety plan will be provided to the Project Manager prior to the work taking place.
 - 1.6.10 The RCMP will not be responsible for any accidents as a result of the execution of this Contract.

- 1.6.11 Project shall commence no longer than three weeks after award of contract and is to be scheduled with the Project Manager and to be completed during normal working hours between 7:00 – 17:00 Monday to Friday unless any unforeseen facility usage prohibits work during this time.
- 1.6.12 Contractor to advise RCMP of any system shut-downs, and length of shut down, a minimum of 5 days in advance.
- 1.6.13 Throughout the course of work, contractor shall keep the site free of debris, waste, unnecessary material and equipment at all times. Upon completion of the work, leave the area clean and tidy.

2 CODE AND REFERENCE MATERIALS

2.1 REFERENCES

2.1.2 FCC No. 301-1982 Standard for Construction Operations

2.1.3 NCBC 2010 – National Building Code of Canada 2010

2.2 CONSTRUCTION SAFETY MEASURES

2.2.1 Observe construction safety measures of National Building Code 2010, Provincial Government Workers/Workmen Compensation Board and municipal authority provided that in any case of conflict or discrepancy the more stringent requirements are to apply.

2.2.2 Comply with requirements of FCC N. 301

2.3 OVERLOADING

2.3.1 Ensure no part of work is subjected to loading that will endanger its safety or will cause permanent deformation.

2.4 WHIMS

2.4.1 Comply with requirements of Workplace Hazardous Materials Information System (WHIMS) regarding use, handling, storage, and disposal of hazardous materials; with labelling and provision of material safety data sheets acceptable to Labour Canada and Health Canada.