

TOWNSHIP OF LANARK HIGHLANDS

TENDER #PR 2021-02

OBTAIN THE SERVICES OF LICENSED REFRIDGERATION CONTRACOR TO UPGRADE THE REFRIDGERATION CONTROLS TO A SMART HUB CONTROLLER

Having examined the Request for Tender – to obtain the services of licensed refrigeration contractor to upgrade the refrigeration controls to a Smart Hub controller attached, the undersigned agrees to supply and deliver all goods and services according to Schedule "C" to the Corporation of the Township of Lanark Highlands for the Lanark Arena in accordance with all terms and conditions specified herein.

The undersigned agrees to indemnify and save the Township harmless from any and all claims and demands whatsoever, arising from or in any way connected with property damage while performing services for the Township of Lanark Highlands.

Na	me of Firm or Individual	
Λ -Ι	ldus as	
Ad	ldress	
Te	lephone and Fax Number	
En	nail Address	
— Na	ame of Person Signing for Firm	
INC	and of Ferson digning for Firm	
Po	sition of Person Signing for Firm	

TENDERS RECEIVED BY:

Chelsea Dawes,
Manager of Facilities/Community Affairs
Township of Lanark Highlands
75 George Street, P.O. Box 340
Lanark, Ontario
K0G 1K0

Telephone: (613) 259-2398 Ext. 252

FAX: (613) 259-2291

Note: Personal information collected from applications is collected under the authority of the Municipal Freedom of Information and Protection of Privacy Act, and will be used to determine qualifications. Questions about the collection of Information should be directed to the Clerk Administrator at the address indicated above.

The Contractor has carefully examined the provisions, specifications and conditions attached to this bid and has carefully examined this contract and the bidder understands and accepts the said provisions and conditions, and for the prices set forth in this sealed bid.

All pages of this document shall be returned with the bid submission, and all pages of this document shall be initialed by the bidder in the space provided.

BY:	
(Name of Firm or Individual – Contractor)	
Address:	
Telephone:	

THE TOWNSHIP OF LANARK HIGHLANDS

Obtain the Services of Licensed Refrigeration Contractor to Upgrade the Refrigeration Controls to a Smart Hub Controller

TENDER #PR-2021-02

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CLOSING TIME AND DATE: 2:00 P.M. (LOCAL TIME)
MONDAY, June 14th, 2021

The Tender submissions will be opened in a virtual public meeting at 2:30 p.m., on the same day. The virtual meeting link will be emailed to bidders the day of the tender closing.

Documents are to be submitted, signed by an authorized officer of the company, and clearly marked as to contents. Due to Covid-19 implications, proponents may submit their bids by email to;

Name: Chelsea Dawes, Manager of Facilities/Community Affairs

Email: commaffairs@lanarkhighlands.ca

This must be done on June 14th before 1:00 p.m.

LATE SUBMISSIONS WILL NOT BE ACCEPTED.

SCHEDULE "A" - GENERAL CONDITIONS

1.0 INSTRUCTIONS TO BIDDERS

Definition: the term "Township", Shall mean the Township of Lanark Highlands

Submittals Procedure

- 1.1 All Request for Tender submissions shall be emailed to the Township of Lanark Highlands, as described in 1.5. Request for Tenders received after the said time will be returned unopened. All Requests for Tender submissions must clearly indicate "Replacement of Existing Top Section of the Condenser for the Ammonia Refrigeration Plant", the Bidders name and address.
- 1.2 The lowest or any Request for Tender bids will not necessarily be accepted and the Township reserves the right to reject all Request for Tender bids submitted or select options from various Requests for Tender bids or to select any Request for Tender bids for reasons deemed to be in the best interests of and for the best value for the Township.
- 1.3 Bidders must complete all parts of the Request for Tender in accordance with the Request for Tender documents as specified herein.
- 1.4 All Bids must be comprehensive and in sufficient detail so as to permit complete evaluation in accordance with the criteria set out herein. The Bids must be copies of the complete response submitted.
- 1.5 Time, Date, and Address for Response Submission

The Proposal documents described in 1.1 above shall be submitted to the following individual, on or before 2:00 p.m. (local time) on MONDAY JUNE 14th, 2021, to:

Name: Chelsea Dawes

Title: Manager of Facilities/Community Affairs

Address: 75 George St, Lanark, ON Email: commaffairs@lanarkhighlands.ca

Phone: 613-259-2398 ext 252

The Requests for Tenders will then be opened in a virtual public meeting at 2:30 p.m., on the same day. The virtual meeting link will be emailed to bidders the day of the tender closing

1.6 Language of Response SubmissionsBids and related documents shall be submitted in English.

SCHEDULE "A" - GENERAL CONDITIONS (continued)

2.0 BIDDERS INFORMATION

This Request for Tender is for a qualified company / contractor, to provide detailed cost information and complete the work required to remove and replace the top section of the existing condenser at the Lanark Arena for the Township of Lanark Highlands, 75 George Street, P.O. Box340, Lanark, Ontario.

3.0 FACSIMILE OR ELECTRONIC BIDS

Facsimile or Electronic Bids will be accepted due to the current Provincial Wide Lockdown and the closure of the Township Office from the public.

4.0 REQUEST FOR TENDER PRICES

Bid Prices must be valid for 90 days after the Request for Tender closing date stated herein. After this time elapses, the bids may only be accepted with the consent of the successful bidder.

5.0 **NEGOTIATIONS**

The Township of Lanark Highlands reserves the right to enter into negotiations with the selected Proponent. If the Township and the selected Proponent cannot negotiate a successful contract, The Township may terminate the negotiations and begin negotiations with the next selected Proponent. This process will continue until a contract has been executed or all Proponents have been rejected. No Proponent shall have any rights against The Township arising from such negotiations.

QUESTIONS

- Questions concerning General Conditions or Scope of Work must be communicated to the Township's Manager of Facilities for clarification. Any material changes resulting from inquiries will be documented in writing to the bidders prior to the closing date and time.
- 2. Bidders are requested to make all inquiries prior to the last Friday preceding the closing date.
- 3. Person to Contact Chelsea Dawes, Manager or Facilities/Community Affairs

Telephone: 613-259-2398 ext 252

Email: commaffairs@lanarkhighlands.ca

4. All inquiries and communications with the Township of Lanark Highlands about this RFT throughout the bid period are only to be directed to the individual identified in Item 3. Non-compliance with this condition during the bid period may (for that reason alone) result in disqualification of the bidders offer.

PAYMENT

1. Payment may be made 30 days after delivery pursuant to the Bidder submitting an invoice, contract requirements being completed and work being deemed satisfactory.

SCHEDULE "B" - STANDARD TERMS & CONDITIONS

1. <u>DEFINITIONS</u>

Township - The Corporation of the Township of Lanark Highlands, its

successors and assigns.

Bidder - The person, firm or corporation submitting a bid to the

Township.

Company - The person(s), contractor(s), firm(s) or corporation(s) to whom

the Township has awarded the contract, its successors and

assigns.

Contract - A binding agreement between two or more legal entities,

awarded under the Township's Procurement Bylaw.

Subcontractor - A person(s), firm(s) or corporation(s) having a contract with the

company for any part of the work.

Document - The document(s) issued by the Township in response to which

bids are invited to perform the work in accordance with the

specifications contained in the document.

Bid - An offer by a Bidder in response to the document issued by

the Township.

Equipment - The materials, machinery, assemblies, instruments, devices or

articles as the case may be, or components thereof, which are

the subject of the contract.

Work - All labour, materials, products, articles, fixtures, services,

supplies, and acts required to be done, furnished and/or performed by the company, which are subject to the Contract.

2. SUBMISSION OF TENDERS

Tender invitation shall be in accordance with the Township of Lanark Highlands By-law #2006-721 and will apply for the calling, receiving and opening of Tenders. The Township will be responsible for evaluating Tenders, awarding and administering the contract in accordance with the Procurement By-law.

The Tender must be signed by a designated signing officer of the Bidder.

The Tender must not be restricted by a covering letter, a statement added, or by alterations to the document unless otherwise provided herein.

Tenders received after the closing date and time will not be considered and will be returned, unopened.

Should a dispute arise from the terms and conditions of any part of the contract, regarding meaning, intent or ambiguity, the decision of the Township shall be final.

3. CONTRACT DOCUMENTS AND ORDER OF PRECEDENCE

The contract documents shall consist of all the pages of the Tender documents issued by the Township and the company's Tender. Do not remove any pages from the Proposal document.

The contract and portions thereof, take precedence in the order in which they are named above, notwithstanding the chronological order in which they are issued or executed.

Amendments to the contract, in the form of Change Notices shall take precedence over the documents or portions thereof amended thereby.

Change notices, appendices and addenda to any contract document shall be considered part of such document.

The intent of the contract is that the company shall supply equipment, materials, or services complete and suitable for the Township's intended use.

None of the conditions contained in the Bidder's standard or general (printed) conditions of sale shall be of any effect unless explicitly agreed to by the Township and set forth or specifically referred to therein.

The contract shall be governed and interpreted in accordance with the laws of the Province of Ontario.

4. CLARIFICATION OR TENDER DOCUMENTS

Any clarification of the Tender documents required by the Bidder prior to submission of its Proposal shall be requested through the Township's contact identified in the document. Any such clarification so given shall not in any way alter the document and in no case shall oral arrangements be considered.

No officer, agent or employee of the Township is authorized to alter orally any portion of these documents. During the period prior to submission of Tenders, alterations will be issued to Bidders as written addenda. The Bidder shall list in its Tender all addenda that were considered when its Proposal was prepared.

5. PROOF OF ABILITY

The Bidder may be required to show, in terms of experience and facilities, evidence of its ability, as well as that of any proposed subcontractor, to perform the work by the specified delivery date.

6. <u>DELIVERY</u>

Unless otherwise stated, the work specified in the bid shall be delivered or completely performed by the company as soon as possible and in any event prior to September 15, 2021.

Work shall be subject to further inspection and approval by the Township.

The Company shall be responsible for arranging the work so that completion shall be as specified in the contract.

Time shall be of the essence of the contract.

7. PRICING REQUIREMENTS

Prices shall be in Canadian Funds and prices shall be firm for the duration of the contract.

Prices quoted must include all incidental costs and the company shall be deemed to be satisfied as to the full requirements of the Tender. Any additional work must be authorized in writing prior to commencement. Should the company require more information or clarification on any point, it must be obtained prior to the submission of the Tender.

Payment shall be full compensation for all costs related to the work, including operating and overhead costs to provide work to the satisfaction of the Township.

If the Bidder intends to manufacture or fabricate any part of the work outside of Canada, it shall arrange its shipping procedures so that its agent or representative in Canada is the importer of record for customs purposes.

Should any additional tax, duty or any variation in any tax or duty be imposed by the Government of Canada or the Province of Ontario become directly applicable to work specified in this document subsequent to its submission by the Bidder and before the delivery of the work covered thereby pursuant to a purchase order issued by the Township appropriate increase or decrease in the price of work shall be made to compensate for such changes as of the effective date thereof.

8. TERMS OF PAYMENT

Where required by the Construction Lien Act, appropriate monies may be held back until 60 days after the completion of the work.

Payments made hereunder, including final payment, shall not relieve the company from its obligations or liabilities under the contract.

Acceptance by the company of the final payment shall constitute a waiver of claims by the company against the Township, except those previously made in writing in accordance with the contract and still unsettled.

The Township shall have the right to withhold from any sum otherwise payable to the company such amount as may be sufficient to remedy any defect or deficiency in the work, pending correction of it.

Payment may be made 30 days after delivery pursuant to the Bidder submitting an invoice, contract requirements being completed, and work being deemed satisfactory.

9. PATENTS AND COPYRIGHTS

The company shall at its expense, defend all claims, actions or proceedings against the Township based on any allegations that the work or any part of the work constitutes an infringement of any patent, copyright or other proprietary right and shall pay to the Township all costs, damages, charges and expenses, including its lawyers' fees on a solicitor and his own client basis occasioned to the Township by reason thereof.

The company shall pay all royalties and patent license fees required for the work.

If the work or any part thereof is in any action or proceeding held to constitute an infringement, the company shall forthwith either secure for the Township the right to continue using the work, or shall at the company's expense, replace the infringing work with non-infringing work or modify them so that the work no longer infringes.

10. ASSIGNMENT AND SUBCONTRACTING

The company shall not assign or subcontract the contract or any portion thereof without the prior written consent of the Township.

11. FINANCING INFORMATION REQUIRED OF THE COMPANY

The Township is entitled to request of the company to furnish reasonable evidence that financial arrangements have been made to fulfill the company's obligations under the Contract.

12. <u>LAWS AND REGULATIONS</u>

The company shall comply with relevant Federal, Provincial and Municipal statues, regulations and by-laws pertaining to the work and its performance. The company shall be responsible for ensuring similar compliance by its suppliers and subcontractors.

13. CORRECTION OF DEFECTS

If at any time prior to one year (or specified warranty/guarantee period if longer than one year) after the actual delivery date of the equipment, material or service any part of the equipment or material becomes defective or is deficient or fails due to defect in design, material or workmanship, or otherwise fails to meet the requirements of the contract, then the company, upon request, shall make good every such defect, deficiency or failure without cost to the

Township. The company shall pay all transportation costs for parts and/or equipment, and/or material both ways between the company's factory or repair depot and the point of use.

14. TENDER PROCEDURES

Tender submissions will be called, received, evaluated, accepted and processed in accordance with the Township's procurement policy.

15. <u>DEFAULT BY COMPANY</u>

- A) If the company: commits any act of bankruptcy; or if a receiver is appointed on account of its insolvency or in respect of any of its property; or if the company makes a general assignment for the benefit of its creditors; then, in any such case, the Township may, without notice; terminate the contract.
- B) If the company: fails to comply with any request, instruction or order of the Township; or fails to pay its accounts; or fails to comply with or persistently disregard statutes, regulations, by-laws or directives of relevant authorities relating to the work; or fails to perform the work with the skill and diligence; or assigns or sublets the contract or any portion thereof without the Township's written consent; or refuses to correct defective work; or is otherwise in default in carrying out its part of any of the terms, conditions and obligations of the contract, then, in any such case, the Township may, upon expiration of ten days from the date of written notice to the company, terminate the contract.
- C) Any termination of the contract by the Township, as aforesaid, shall be without prejudice to any other rights or remedies the Township may have and without incurring any liability whatsoever in respect thereto.
- D) If the Township terminates the contract, it is entitled to:
 - i) take possession of all work in progress, materials and construction equipment then at the project site (at no additional charge for the retention or use of the construction equipment), and finish the work by whatever means the Township may deem appropriate under the circumstances;
 - ii) withhold any further payments to the company until the completion of the work and the expiry of all obligations under the Correction of Defects section;
 - iii) recover from the company loss, damage and expense incurred by the Township by reason of the company's default (which may be deducted from any monies due or becoming due to the company, any balance to be paid by the company to the Township).

16. CONTRACT CANCELLATION

The Township shall have the right, which may be exercised from time to time, to cancel any uncompleted or unperformed portion of the work or part thereof. In the event of such cancellation, the Township and the company may negotiate a settlement. The Township shall not be liable to the company for loss of anticipated profit on the cancelled portion or portions of the work.

17. <u>SURETY</u>

The successful Tender shall, if the Township in its absolute discretion so desires, be required to satisfy surety requirements by providing a deposit in the form of a certified cheque, bank draft or money order or other form of surety, in an amount determined by the Township. This surety may be held by the Township until 60 days after the day on which all work covered by the contract has been completed and accepted. The surety may be returned before the 60 days have elapsed providing satisfactory evidence is provided that all liabilities incurred by the company in carrying out the work have expired or have been satisfied and that a Certificate of Clearance from the WSIB - Workplace Safety Insurance Board has been received.

The company shall, if the Township in its absolute discretion so desires, be required to satisfy fidelity bonding requirements by providing such bonding in an amount and form determined by the Township.

Failure to furnish required surety within two weeks from date of request thereof by the Township shall make the award of the Contract by the Township subject to withdrawal.

18. <u>INSURANCE</u>

The company shall maintain and pay for Comprehensive General Liability insurance including premises and all operations. This insurance coverage shall be subject to limits of not less than \$3,000,000.00 inclusive per occurrence for third party Bodily Injury and Property Damage or such other coverage or amount as may be requested.

The policy shall include the Township as an additional insured in respect of all operations performed by or on behalf of the company. A certified copy of such policy or certificate shall be provided to the Township prior to commencement of the work. Further certified copies shall be provided upon request.

19. LIABILITY

The company agrees to defend, fully indemnify and save harmless the Township from all actions, suits, claims, demands, losses, costs, charges and expenses whatsoever for all damage or injury including death to any person and all damage to any property which may arise directly or indirectly by reason of a requirement of the contract, save and except for damage caused by the negligence of the Township or its employees.

20. VISITING THE SITE

The company shall carefully examine the site and existing surroundings affecting the proper execution of the work, and obtain a clear and comprehensive knowledge of the existing conditions. No claim for extra payment will be allowed for work or difficulties encountered due to conditions of the site which were visible or reasonably inferable, prior to the date of submission of Proposals. Bidders shall accept sole responsibility for any error or neglect on their part in this respect.

A site visit can be arranged for bidders. To schedule a site visit you can contact the project manager Chelsea Dawes:

Email: commaffairs@lanarkhighlands.ca

Phone #: 613-259-2398 ext 252

21. SAFETY

The company shall obey all Federal, Provincial and Municipal Laws, Act, Ordinances, Regulations, Orders-in- Council and By-laws, which could in any way pertain to the work outlined in the Contract or to the Employees of the Company.

Without limiting the generality of the foregoing, the company shall satisfy all statutory requirements imposed by the Occupational Health and Safety Act and Regulations made thereunder, on a contractor, a Constructor and/or Employer with respect to or arising out of the performance of the company's obligations under this Contract.

The company shall be aware of and conform to all governing regulations including those established by the Township relating to employee health and safety. The company shall keep employees and subcontractors informed of such regulations.

The company shall provide Material Safety Data Sheets (MSDS) to the Township for any supplied Hazardous Materials.

22. <u>UNPAID ACCOUNTS</u>

The company shall indemnify the Township from all claims arising out of unpaid accounts relating to the work. The Township shall have the right at any time to require satisfactory evidence that the work in respect of which any payment has been made or is to be made by the Township is free and clear of liens, attachments, claims, demands, charges or other encumbrances.

23. SUSPENSION OF WORK

The Township may, without invalidating the contract, suspend performance by the company from time to time of any part or all of the work for such reasonable period of time as the Township may determine.

The resumption and completion of work after the suspension shall be governed by the schedule established by the Township.

SCHEDULE "B" - STANDARD TERMS & CONDITIONS (continued)

24. CHANGES IN THE WORK

The Township may, without invalidating the contract, direct the company to make changes to the work. When a change causes an increase or decrease in the work, the contract price shall be increased or decreased by the application of unit prices to the quantum of such increase or decrease, or in the absence of applicable unit prices, by an amount to be agreed upon between the Township and the company. All such changes shall be in writing and approved by the Township.

25. MUNICIPAL FREEDON INFORMATION AND PROTECTION OF PRIVACY ACT (MFIPPA)

All correspondence, documentation, and information provided to staff of the Township of Lanark Highlands by every bidder, including the submission of Proposals, shall become the property of the Township, and as such, is subject to the Municipal Freedom of Information and Protection of Privacy Act, and may be subject to release pursuant to the Act.

Bidders are reminded to identify in their Proposal material any specific scientific, technical, commercial, proprietary, or similar confidential information, the disclosure of which could cause them injury. Complete Proposal submissions are not to be identified as confidential.

26. DISCLOSURE

The total number of Proposal Submissions and the name of each Bidder will be made available at the public Proposal opening. After the Proposal opening, requests may be submitted to the Township for the results, and only the total number of Proposal Submission and the name of each bidder as read out at the Proposal openings will be given in the reply.

SCHEDULE "C" - SCOPE OF WORK

1.0 PURPOSE

The intent of the Request to Tender is to obtain the services of licensed refrigeration contractor to upgrade the refrigeration controls to a Smart Hub controller which is a complete microprocessor based automatic control system at the Lanark Community Centre.

2.0 LOCATION

The required service will be at the following locations:

Lanark Community Centre 67 Princess St, Lanark ON K0G 1K0

SCHEDULE "C" - SCOPE OF WORK (continued)

3.0 PROJECT SCOPE

This Section of the Contract includes all ice rink equipment work called for, or implied, together with all necessary incidentals, whether referred to or not, as will be required to complete the work to the full intent and meaning of the specifications. The work includes, but is not limited to the following:

- Refrigeration Contractor must be T.S.S.A approved
- Work under this Contract covers the upgrade and/or replacement of the Refrigeration Plant Control System. This includes but is not limited to the reinstatement of all connections to the panel in accordance with the specifications. Also additional new equipment may be provided as noted in the specification. It is the responsibility of the refrigeration contractor to coordinate all components of the project and defined herein.
- The specification is not intended as a detailed description of installation methods but serves to indicate particular requirements of the completed work.
- It is the intention of the specification to provide finished work. Any items omitted there which are clearly necessary for the completion of the work or its appurtenances shall be considered as portion of the work.
- Refrigeration Contractor is responsible to review the existing system and equipment within the refrigeration plant and include for all necessary devices to complete the installation. Coordinate requirements with electrical contractor.
- Refrigeration Contractor shall provide a fully functional control system to safely operate the refrigeration plant condenser system based on a floating head pressure design.
- TSSA and ESA inspections.
- Start-up and testing.
- Training.
- Manuals and as-built drawings (2 copies).

4.0 SPECIFICATIONS

A copy of the Specifications (attached as Schedule "E" to this RFT) shall be included in each Tender.

5.0 RESPONSIBILITIES OF CONTRACTOR

The Contractor shall be responsible for all of the following requirements:

- Maintain a safe workplace/work site in accordance with standard safe work practices and housekeeping.
- Compliance with the Occupational Health and Safety Act of Ontario and regulations and the Township of Lanark Highlands Occupational Health and Safety Policies;

- Maintain knowledge of, and be required to comply with, any appropriate safe work practices; Obtain all required permits and utility locates required to conduct the proposed works;
- Provide proof of WSIB coverage and liability coverage throughout the duration of each project;
- Obey all Federal, Provincial and Municipal Laws, Acts, Ordinances, Regulations, Orders-in-Council and By-laws, which in any way could pertain to the work outlined in the Contract or to the Employees of the Contractor.

SCHEDULE "D" - BID FORM

BID FORM #1 FOR ITEMS AND UNIT PRICES

In accordance with the terms and conditions of the RFT, the undersigned (the "Proponent") hereby offers to provide the Equipment to the Township at the following price:

		BID	
ITEM	QTY	DESCRIPTION	PRICE
1	1	Supply & Install Smart Hub Refrigeration Controller. Specifications (17-22)	\$
		Subtotal, excluding HST	\$
		H.S.T + 13%	\$
		Total Contract Price	\$

Proponent's HST Registration No	
Name of Proponent	
Mailing Address	
Telephone Number	
Fax Number	
Email for Proponent	
Name of person authorized to Sign for the Proponent	
Signature of Authorized Person	
Date of Signature	, 2021
Witness or Proponent's Seal	

SCHEDULE "E" - SPECIFICATIONS

INFRARED TEMPERATURE CONTROL OF REFRIGERATION SYSTEM

GENERAL

The Refrigeration contractor as part of the refrigeration contract is to supply a complete microprocessor based automatic control system to achieve the performance specified in the following clauses.

Refrigeration Management System shall be Smart Hub™. The RMS control system shall be part of the refrigeration control system to form a single physical network so that data can be directly shared.

Controllers must be Distech Controls Eclypse hardware version 1.10.18199.491 or newer.

All control products provided for this project shall comprise a BACnet internetwork. Communication involving control components (i.e., all types of controllers and Operator Workstations) shall conform to ANSI/ASHRAE Standard 135-2001, BACnet.

Each Building Controller shall support BACnet™ over IP. The Building Controller shall be connected to the BACnet network using the BACnet™ IP.

The Building Controller secondary communication network if applicable shall support BACnet MS/TP.

MINIMUM SYSTEM REQUIREMENTS

GENERAL

Design, provide and commission all the accessories necessary, the software, the Human Machine Interfaces, relays, transmitters, the control panels and others for the complete operation of a DDC based centralized control system following refrigeration equipment where applicable:

- Cold glycol / brine pumps
- Warm glycol / brine pumps
- Refrigeration compressors
- Evaporative Condenser
- Underfloor heating
- Evaporative Condenser/Cooling tower fan(s)
- Condenser is floating head pressure ready
- Machine room ventilation system
- Dehumidifier(s)

CONTROL SYSTEM EQUIPMENT

Controls will be assembled in appropriate enclosure. The control elements will be identified by means of P-TOUCH type ribbon inside the enclosure. The elements in front of the enclosure will be indicated by means of engraved plate. All the wiring inside the panel will be routed inside appropriate dimension wire duct. Each wire will carry a number to each ends, these numbers will have to correspond to the electric drawings.

The control panels have to be manufactured in a factory to be certified CSA and the panels will have clear indication that they are in conformity with the CSA standards.

Enclosure will be manufactured with the following characteristics: hinges doors. Electrostatic factory paint of gray color, Interior components such as transformer, fuses relays, programmable controllers, will be assembled on a dismountable back plate, the installation of component directly on the panel will not be accepted.

Each panel will be designed for a power supply 120 volts ac 15 amps maximum and will be protected by a suitable integrated circuit breaker and will have a double service socket to power 115-volt laptop and router.

Wiring connection of cables coming from outside the enclosure will have connections to a terminal block with the exception of the wires connecting to the Input side of the programmable controllers.

SENSORS

All transmitters shall be electronic type with 4-20ma control signal.

The control system shall control the refrigeration equipment based on information received from the following field sensors,

- 1. Infrared camera mounted above the ice surface
- 2. Cold glycol / brine supply temperature
- 3. Cold glycol / brine return temperature
- 4. Compressors discharge pressure
- 5. Compressors suction pressure
- 6. Sub-slab temperature
- 7. Outdoor air temperature and relative humidity
- 8. Condenser condensate temperature
- 9. Rink space temperature and relative humidity
- 10. Status inputs from all, pumps, compressors & fans
- 11. Individual safety status from each compressor

OPERATOR WORKSTATION

Provide the following minimum configuration for a panel mounted touchscreen operator station:

- 1. Intel Core i5 Processor or higher
- 2. 4GB RAM Memory or more
- 3. 250GB hard drive or larger
- 4. 19" Panel mount touchscreen display
- 5. (2) USB ports
- 6. (2) Network Interface Cards
- 7. Windows 10 Professional operating system
- 8. HTML5 compatible web browser

And/or provide the following minimum configuration for a desktop operator workstation:

- 1. Intel Core i5 Processor or higher
- 2. 4GB RAM Memory or more
- 3. 250GB hard drive or larger
- 4. 27" LCD Flat screen Monitor
- 5. (2) USB ports

- 6. (2) Network Interface Cards
- 7. USB Optical mouse
- 8. Windows 10 Professional operating system
- 9. HTML5 compatible web browser

DDC CONTROLLER

The BACnet DDC controllers shall be mounted in CSA certified control panel installed locally in the building as close as possible of controlled equipment.

- 1. The DDC controllers must support peer-to-peer data communication between BACnet/IP, and BACnet MS/TP networks.
- 2. The DDC controller must be a BACnet system with inputs, outputs and variables available as standard BACnet AI, BI, AO, BO, AV and BV objects.
- 3. The DDC system must utilize high- speed networks using Ethernet between the major controllers and the HMI. Between major and secondary controllers, the DDC system must use BACnet/MSTP.
- 4. THE DDC HMI must be capable of communicating with other HVAC manufacturer's equipment using industry-standard BACnet protocol.
- 5. The DDC application controllers when connected together can have their firmware upgraded without disconnecting them from an active network.
- 6. Each controller must have a specific network address
- 7. The DDC system must be able to communicate with other peripheral controllers using Modbus.

The DDC controller shall be capable of the following functions:

- Control all the refrigeration equipment and associated components directly. The DDC
 controller shall not depend on any other CPU or computer to perform this function. Loss or
 failure of the operator workstation shall in no way affect the operation of the refrigeration
 equipment.
- Provide scheduling for the temperature setpoints. Schedules shall include, day mode, night
 mode and game mode settings. The controller shall be capable of scheduling at least four
 different on/off periods per day for each 7-day schedule.
- Each ice surface shall have its own unique set of schedules
- Each ice surface shall have a trend log associated with it. As a minimum, the DDC system HMI shall store to hard drive, all of the input readings and control outputs from the control system.
- All compressors, pumps and fans shall have their own individual trend logs. The trends will show readings of equipment status, i.e. on/off or fail, and the associate control variable relevant to that equipment, i.e. temperature, pressure etc.
- The controller shall log run hours and # of starts for each pump, compressor and fan.
- The controller shall monitor all temperatures, pressures, and equipment status for alarm conditions. The alarm setpoints shall be adjustable by the operator with the appropriate password.

- Upon an alarm condition, a message shall appear on the operator interface indicating what the alarm condition is and time it occurred. Alarms shall be logged in the trending.
- Acknowledgment of the alarm will clear the alarm.
- The DDC system shall have the ability to send an alarm message via email to an email recipient or to a cell phone equipped with text-messaging capability. It shall generate a specific alarm message for each alarm incident including date and time stamp.
- An email will be required to be set up by Lanark Highlands IT to put this feature in place.
- The DDC controller shall be capable of being monitored remotely from any location via Internet. Remote diagnostics, software maintenance, graphics updates and setpoint adjustments shall be possible with remote communications.
- Internet access will be provided by the Township.
- The DDC controller shall be password protected. It shall have a minimum of four password levels programmer/engineer, service technician, supervisor/operator and view only.

GRAPHICAL INTERFACE SOFTWARE

Provide graphical operator interface software viewable via an HTML5 supported web browser.

The operator software shall allow navigation through the screens by navigating with a mouse. Other than entering numerical values, key entries shall be kept to a minimum.

The operator software shall allow for restricted access to setpoints and selected information depending on the password level of the operator.

The operator software shall allow for editing of setpoints, alarms, and schedules.

The operator software shall allow the display of trends, equipment screens, run-hours, flow screens, sensor values etc.

A screen specific help icon shall be available on each screen providing the user with relevant information.

Minimum graphic requirements are:

- 1. Logon graphic
- 2. Main project graphic
- 3. Flow graphic
- 4. One schedule graphic per ice surface
- 5. One graphic for each trend log
- 6. Setpoint graphic(s)
- 7. Alarm graphic(s)
- 8. Runtime data graphic(s)

REMOTE COMMUNICATIONS SOFTWARE

Remote access to the control system can be achieved by installing remote viewing software installed on the local workstation. The refrigeration contractor shall install remote access software to be able to remotely support and monitor the system if required.

COMMISSIONING

The refrigeration contractor shall provide a competent experienced technician for control system commissioning. Refrigeration contractor employees shall accomplish commissioning.

VARIABLE FREQUENCY DRIVE:

- 1.1 Variable Frequency Drive shall be manufactured by ABB Inc., Model # ACH550-VDR or approved equivalent
- 1.2 Line Reactor & Enclosure shall be manufactured by ABB Inc. or approved equivalent
- 1.3 Engineered Wiring Drawings must be complete by the selected contractor
- 1.4 Programming of the VFD must be completed by the selected contractor

PRODUCT EQUIVALENCY

Please note products that are deemed equivalent to the products listed in RFP must follow the below process for evaluation:

- 1.5 Submittal contractors must submit the equivalent product for review 1 week prior to closing date and time. In the event this does not take place than the products listed must be priced with your submittal.
- 1.6 Review Township will review the equivalents with a 3rd Party Consultant to ensure they meet the requirements.
- 1.7 Approval Township will advise contractor if the products meet or does not meet the requirements 72 hours after received.

REFERENCE STANDARDS

Selected Contractor must comply with all codes and standards (latest versions) applicable to this type of work, including:

- 1. CAN/CSA-B52-99 Mechanical Refrigeration Code, latest revision.
- 2. Ontario Electrical Safety Code, latest revision.
- 3. ANSI B31.5
- 4. ASHRAE 15 Safety Code for Mechanical Refrigeration.
- 5. ASME B31.5 Refrigeration Pressure Piping Code.
- 6. Boiler and Pressure Vessels Act.
- 7. WCB Regulations.
- 8. Register the Design with TSSA.

DRAWINGS & POST INSTALL INSPECTION

- 1. A complete as-built drawing of the new installation is to accompany the final installation specification, including all piping changes and shall form part of the tender and construction documents.
- 2. Relevant documentation from the Technical Standards and Safety Authority, verifying that a pressure test of any new piping has been undertaken and inspected by the local TSSA representative.
- 3. All documentation pertaining to the acquisition of a new Provincial Registration number is to accompany the final installation.
- 4. All equipment drawings and details to be reviewed and stamped by a PEO, professional engineer accredited in the Province of Ontario.

MANUALS

 Provide three copies of operating and maintenance manuals for the equipment covered under this contract, including an as-built drawing. All equipment, drawings and details to be reviewed and stamped by a PEO, professional engineer accredited in the Province of Ontario.

WARRANTY

1. One year parts and labour warranty from start-up date.

SCHEDULE "F" - CONTRACTOR QUALIFICATION INFORMATION

The Request for Proposal submission must include the following components in Qualification Information. If these completed documents are not included, the proposal submission will be rejected and will not be evaluated.

- 1. Vendor Information
- 2. List of five (5) Refrigeration and Air Conditioning Systems Mechanics that have an active membership with a classification of a Journeypersons Class.
- 3. Contractor to provide a list of ten (10) installations in the past 5 years to verify contractor experience

QUALIFICATION EVALUATION

The Contractor's Submission should consist of the following criteria. The criteria listed in this section will be evaluated. The proposal shall provide the following information in the 'Contractor Qualification' document:

Contractor Location (a)
Contractor Location (s)
Company Name:
Office Location Address:
Manager Information/Signature:
Phone/Fax:
Email:
B: Refrigeration Mechanics

Demonstrated experience (acquired and combined) in the area of Recreational refrigeration is considered an asset. Please note, only Certified Refrigeration Mechanics with a minimum five (5) years' experience as licensed ammonia mechanic will be utilized when performing the scope of work.

Provide a list of five (5) Refrigeration and Air Conditioning Systems Mechanics that have an active membership with a classification of a Journeypersons Class.

List must include:

A: Vendor Information

Mechanic	Trade	Trade Code	Recognition Type	Membership #
Name	Qualification			

Confirmation – The Township will be verifying the list provided to confirm mechanic active license utilizing the Ontario College of Trades Website – "Find a Member Public Search"; http://www.collegeoftrades.ca/

C: Experience

Experience – Contractor to provide a list of ten (10) installations in the past 5 years to verify contractor experience.

List must include:

Contact Name	Contact	Site Location	Equipment	Year
	Phone		Info	Complete

Confirmation – The Township will be contacting min of 3 x contacts provided to verify contractor experience

A: VENDOR INFORMATION

THIS VENDOR INFORMATION FORM MUST BE INCLUDED IN SUBMISSION.

- 1. I/WE, the undersigned authorized signing officer of the Bidder, HEREBY DECLARE that no person, firm or corporation other than the one represented by the signature (or signatures) of proper officers as provided below, has any interest in this proposal.
- 1. I/WE further declare that all statements, schedules and other information provided in this proposal are true, complete and accurate in all respects to the best knowledge and belief of the Bidder.
- 2. I/WE further declare that this proposal is made without collusion, connection, knowledge, comparison of figures or arrangement with any other company, firm or persons making a proposal and is in all respects fair and without collusion for fraud. I/we understand that this may result in the rejection of the proposal.
- 3. I/WE further declare that no Committee representing the City of Township is or will become interested, directly or indirectly as a contracting party or otherwise in the supplies, work or business to which it relates or in any portion of the profits thereof, or in any such supplies to be used therein or in any of the monies to be derived there from.
- 4. I/WE further declare that the undersigned is empowered by the Bidder to negotiate all matters with the City or Township representatives, relative to this proposal.
- 5. I/WE further declare that the agent listed below is hereby authorized by the Bidder to submit this proposal and is authorized to negotiate on behalf of the Bidder.
- 6. I/WE confirm that we have received all Addenda by listing the Addenda numbers in the blank space following or, if no addenda were issued, by writing the word "None" in the blank space following:

PROPOSAL SUBMITTED BY:				
ADDRESS:				
CITY:				
PHONE:	FAX:			
SIGNATURE:				
NAME (PRINT):				
EMAIL:				
DATE OF PROPOSAL:				

C: EXPERIENCE

THIS EXPERIENCE FORM MUST BE INCLUDED IN SUBMISSION:

Experience – Contractor to provide a list of ten (10) installations in the past 5 years to verify contractor experience.

List must include:

#	Contact Name	Contact Phone	Site Location	Equipment Info	Year Complete
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Confirmation – The Township will be contacting min of 3 x contacts provided to verify contractor experience

Failure to submit all required content can result in a disqualification of bid.

ACKNOWLEDGMENT AND ESTOPPEL

THIS 2021,	hv	EDGMENT AND ESTOPPEL dated this day of,
,	(hereina	fter called the "Proponent") in favour of
The C	Corporation of	f the Township of Lanark Highlands (hereinafter called the "Township")
		wnship has issued a Request for Tender for the supply of certain after called the "RFT");
AND	WHEREAS th	ne Proponent has submitted a Tender to the Township;
	THEREFOR	RE in consideration of the Township's review and consideration of the er:
1.	particularly Estoppel is	nent acknowledges the unique nature and character of the RFT as more set out in the RFT documents to which this Acknowledgement and attached. Without limiting the foregoing, the Proponent specifically les and agrees that:
	(a) (b) (c)	The lowest, or in fact, any tender will not necessarily be selected for further negotiation; In the event that a Tender is selected, the Township will negotiate with the Proponent that presented the most attractive Tender to the Township; and The Township shall not be obligated in any manner to any Proponent whatsoever until a written Purchase Order has been duly executed by the Township relating to an approved Tender.
2.	the Townsh or anticipate subsequent in response	nent waives any right to make any claim of any kind whatsoever against ip for any liabilities, costs, expenses, losses or damages, whether actual ed, that may be incurred, sustained or suffered by the Proponent prior or to or by reason of the Proponent's preparation or submission of a Tender to the RFT, or the selection or rejection by the Township of the Proponent's ny other Tender, or any components thereof.
		EREOF an authorized officer of the Proponent has signed, sealed and nowledgment and Estoppel.
	Name:	Title
	Signature:_ "I HAVE AU	Date: ITHORITY TO BIND"

Signature	of Bidder:	
Date Sigr	ned:	
	Date Signed	Signature of Authorized Person
	Name of Firm	Position in Firm