February 2022

REQUEST FOR PROPOSAL

UPDATE ENTRY AND SECURITY SYSTEM ADMIN OFFICE

P-2022-27

Closing Date: March 2, 2022

Time: 2:00 pm

Contact: Ken Becking, P. Eng.

Director of Public Works 705-765-3156 Ext. 250

kbecking@muskokalakes.ca

Township of Muskoka Lakes
1 Bailey St
P.O. Box 129
Port Carling, ON
P0B 1J0

1. Introduction and Instructions

1.1. Intent

1. It is the intent of the Township of Muskoka Lakes to upgrade the existing Security System located within the Town Hall, 1 Bailey St., Port Carling, Ontario, P0B 1J0, to a standard acceptable to the Owner and/or its duly authorized agent. These services must be maintained at a high standard and will be monitored from time to time by the Owner. It is the Bidder's responsibility to ensure that they comply with Township Standards, as well as Industry Best Practices.
2. This project will migrate the existing Intrusion Detection System to a Bosch System that includes Access Control support with the addition of FOUR Access Control Doors.

1.2. The Proposal

1. The Township is requesting experienced and qualified bidders to submit proposals based on the following criteria:

Rating	Description
10pts	Contractor References
45pts	Understanding of Solution requirements and ability to deliver
20pts	Depth of Team Qualifications
10pts	Understanding of risk and mitigation strategy
15pts	Value proposition

2. Bidders are requested to provide a proposal that will meet The Township requirements at the best possible overall value, as determined by The Township at its discretion.

1.3. Guiding Principles

1. When preparing the Bid, the Bidder must take into consideration the following principles which will be used in the evaluation of this proposal.

- Quality
- Value
- Reliability
- Cost Effectiveness
- Related Expertise
- Compliance with all laws and regulations
- Training
- Business continuity preparedness

1.4. Schedule of Events

1. The following schedule for this Request for Proposal (RFP) and award of Contract is current as of the release date of this RFP.
    a. Release of Request for Proposal 02/02/22
    b. Site Meeting 02/15/22
    c. Closing Date 03/02/22
    d. Final Contract Award 03/16/22
    e. Commencement of Obligations ASAP

1.5. Amendment of Bidding Documents

1. No representation, amendment or clarification in connection with this bid package or the Contract by The Township will be considered as having any force until and unless: (a) it is made by notice in writing, and (b) it is delivered to all Bidders whose receipt of this bid package has been recorded by The Township and who have not been disqualified, are given notice at least five (5) days prior to the deadline for submission of bids or any deadline extension.

1.6. Examination of Documents

1. All Bidders are cautioned to examine and inspect all drawings, examine and thoroughly read all specifications and other documents and data provided as necessary to fully perform under the Contract. By submitting a bid, the Bidder represents that it is familiar with and fully understands all aspects of the Contract.

1.7. Investigation of Site and Existing Property

1. Before submitting a bid, each Bidder shall thoroughly examine the Property and shall inform themselves fully regarding conditions under which the Bidder will be obliged to operate or that in any way may affect the work under the Contract.
2. Submission of a bid will be considered to imply that the Bidder has fully informed itself and understands and accepts the existing conditions. Failure to fully inspect the Property will in no way relieve the successful Bidder from the necessity of furnishing any materials or performing any labour necessary for the satisfactory completion of the "Services". No claim for extra compensation will be allowed by reason of anything concerning which a Bidder might have duly informed itself prior to its bid.

1.8. Preparation of Submission of Proposals

1. All Bid Forms shall be filled out and submitted to: (see Appendix I for bid form)

   Ken Becking P. Eng.
   Director of Public Works

1.9. Rejection and Negotiation of Bids

1. The Township reserves the right to reject any or all bids; to waive any irregularities/errors, and to negotiate with any one or more of the Bidders for changes in the terms of the proposed Contract. After the bids have been opened, and before awarding the Contract, The Township, at its discretion, may require any one or more of the Bidders to do all or any of the following:
   a. Make changes to its bid;
   b. Explain or clarify aspects of its bid;
   c. Supplement its bid with additional information and/or documents.

1.10. Award of Contract

1. The Contract will not necessarily be awarded to the lowest Bidder. The Township may use all or any of the following criteria in selecting the successful Bidder:
   a. Bidder's Reputation
   b. Bidder's Performance Record
   c. Bidder's Stability
   d. General Stability - (how long Bidder has been in business in the local area and how many years its local owner or manager has been in its current position)
   e. Management Quality and Depth of Bidder

1.11. Contact

1. Any questions regarding the Request for Proposal should be directed to KEN BECKING no later than 4:00pm, February 22, 2022.

1.12. Bid Period

1. All bids are irrevocable for a period of ninety (90) days after the bid opening.

1.13. Execution of Contract

1. The successful Bidder will be presented with The Township’s Standard Construction Contract

1.14. Technical Proposal

1. COMPANY INFORMATION - Name, Street Address, E-mail Address, Telephone Number and Web Site of Bidder. Head Office and Local Office, ownership, organizational chart.
2. QUALITY CONTROL - Describe planned procedures for monitoring and controlling the quality of service. (Include projected frequency of inspections as well as a sample Quality Control Report.)

1.15. Tender Bid Form

1. All Bid forms are hardcopy and are to be submitted, in the entirety, to:

   Ken Becking P. Eng.
   Director of Public Works
   Township of Muskoka Lakes
   1 Bailey St
   P.O. Box 129
   Port Carling, ON
   P0B 1J0

   Bids can be emailed to:

   Pam Barager, Administrative Assistant at

   pbarager@muskokalakes.ca

   Emailed bids must be followed with a hard copy to be received no later than 48 hours after bid closing.

1.16. Owner Supplied Equipment

1. The following represent the equipment supplied by the Owner to which the Contractor will be responsible to interface:
   a. None

1.17. Removal of Existing Equipment

1. The Contractor is responsible for the removal and disposal of all existing equipment that is not to be repurposed.

1.18. Works By Others

1. The Contractor shall be responsible for providing all Works in order to provide a fully functional Security System as defined and specified within this document.

1.19. Standards

1. Canadian Standards Association (CSA International) CSA C22.1- 12, Canadian Electrical Code – Most Current Release
2. CAN/CSA-C22.3, Overhead Systems. – Most Current Release
3. National Fire Protection Association (NFPA) NFPA 70,
4. National Electric Code – Most Current Release

5. Underwriters Laboratories of Canada (ULC) ULC-S317- 1996, Installation and Classification of Closed Circuit Video Equipment (CCVE) Systems for Institutional and Commercial Security Systems – Most Current Release
6. Underwriters Laboratory UL294, Standards for Access Control Systems – Most Current Release
7. Underwriters Laboratory UL1076, Standards for Safety for Proprietary Burglar Alarm Units and Systems – Most Current Release
8. The Ontario Electrical Safety Code (OESC) – Most Current Release
9. ANSI/TIA/EIA-568 (CSA&529-95), Commercial Building Telecommunication Standard – Most Current Release
10. Local Building Code
11. System shall be RoHS (Restriction of Hazardous Substances) compliant and meet proposed amendments to the reduction of toxic substances in manufacturing as stated in the Environmental Design of Electrical Equipment Act (EDEE).

1.20. RFQ Submission Requirements

1. Submission will include the following:
    a. Technical write up illustrating the proponents understanding of the project
    b. Team roster including CVs and role designations
    c. Copies of current applicable certifications
    d. Project plan in both narrative and timeline format
    e. Testing and Commissioning Plan
    f. Bill of Materials
    g. Detailed Pricing

1.21. Project Submittal Requirements

1. Shop Drawings: Include system line diagrams, equipment locations, installation details, and system integration plans.
2. Field quality-control reports.
3. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
4. Functional Block Diagram: Show single-line interconnections between components for signal transmission and control. Show cable types, quantities, and sizes.
5. Plans and Elevations: Dimensioned plans and elevations of equipment racks, including access and workspace requirements.
6. Data Calculations: Provide VMS bandwidth and storage calculations meeting the minimum project requirements as described herein.
7. Power and Heat Load Calculations: Provide power and heat load calculations for all hardware, including UPS capacity calculations.
8. Wiring Diagrams: For power and data wiring.
9. Equipment and Software List: Include every piece of equipment and software by product/model name and/or number, manufacturer, serial number, revision number, location, and date of original installation. If factory and/or bench testing regimens are required by the project plan, add pretesting record of each piece of equipment and software, listing name of person testing, date of test, and adjustments made.
10. As-Built Drawings
11. Camera Information matrix including MAC, Serial Number, IP information, User name, and password
12. Operator and Maintenance Manuals

13. Warranty: Software support and warranty information for all components, including Service Level Agreement (SLA) details, and duration of agreement from date of system acceptance by Owner.

1.22. Commissioning

1. The Contractor shall provide a full Commissioning plan and checklist for all system components. The System shall not be considered complete or fully commissioned until all buildings have undergone the commissioning process and been accepted by the Owner or their Designate.

1.23. Patching and Painting

1. Patching and Painting will be done by the Security Contractor

1.24. Working At Heights

1. It is the responsibility of the integrator to ensure that any work done adheres to Working at Heights as laid out by the Occupational Health and Safety Awareness and Training Regulation (O. Reg. 297/13).

1.25. Lifts

1. The supply of any and all required lifts, if required, are the responsibility of the integrator

1.26. Warranty

1. The Contractor shall Warrant all goods, services, software, and workmanship for a period of one year ***from the date of Commissioning.***
2. The Contractor shall include an option for Extended Warranty in one-year increments. This extended warranty will include all requisite Software Service Agreement costs.

2. Infrastructure

2.1. Cable, Conduit, and Troughing

2.1.1. Cable

2.1.2. It is not anticipated that the existing cabling is of an age and level of degradation that it would require new cabling. In the event that new cabling is required, it shall adhere to the following requirements.

2.1.3. Cable

1. All cable shall be labelled according to ANSI TIA 606-B Cable Labeling Standards and at a distance of every 10 feet.
2. The Integrator can make use of their own forces for cable installation.
3. The Contractor shall guarantee that all network cabling provides the performance defined by ISO or TIA for cat 6A.
4. The following table defines the acceptable cable types

	Belden Number		Conductors	Gauge	Shield
Device Type	Free Air	Conduit			
Card Reader	82777	8777	8	24	Y
Door Contact	88444	8444	4	22	N
Electric Strike	89740	9740	2	18	N
Maglock	N/A	9740	2	18	N
Request to Exit Motion	2 x 88444	2 x 8444	4	22	N
Keyswitch	2 x 88444	2 x 8444	4	22	N
Door Operator	2 x 88444	2 x 8444	4	22	N
Keypad	2 x 88444	2 x 8444	4	22	N
Fire Alarm Release	2 x 88444	2 x 8444	4	22	N
Serial Data	82723	2 x 8723	4	22	Y
Motion Detector	2 x 88444	2 x 8444	4	22	N
Exit Button	88444	8444	4	22	N
Local Audible	88444	8444	4	22	N
Glass Break	88444	8444	4	22	N

2.1.4. Conduit

1. Conduit shall be installed according to all applicable codes including, but not limited to NEC 345/346, NFPA 70, and local building codes.
2. Conduit shall have no more than 100 feet between junction boxes.
3. Conduit fill shall not exceed 50%.
4. Junction boxes and enclosures containing security-system components or cabling, and which are easily accessible to employees or to the public, shall be provided with tamper resistant fasteners and/or tamper detection switches. In addition, hinged enclosure doors shall be equipped with locking hardware. Boxes above ceiling level in occupied areas of the building shall not be considered accessible. Junction boxes and small device enclosures below ceiling level and easily accessible to employees or the public shall be covered with a suitable cover plate and secured with tamperproof screws.
5. Conduit shall be supported as per the following table:

Conduit Size	Distance Between Supports
½" - ¾"	10 Feet
1"	12 Feet
1¼" - 1½"	14 Feet
2" - 2½"	16 Feet
3" and larger	20 Feet

2.1.5. Plywood and Troughing

1. All wall mount equipment shall be mounted to fire rated plywood, sized according to the equipment being installed with a 25% (of square area) open for future expansion.
2. All wall panel installations shall be troughed.
3. All trough shall be end capped.
4. All horizontal troughing shall be 152mm x152mm galvanized steel trough of appropriate length to the equipment being installed.
5. All vertical troughing shall be 102mm x 102mm galvanized steel trough of appropriate length to the equipment being installed.
6. A trough T junction shall be installed where all horizontal and vertical trough meet.

2.2. Network

2.2.1. Switches

1. All Network Switching infrastructure will be supplied by the Owner

2.2.2. Cyber Security

1. In addition to full compliance with The Township standards the system will enforce the following network and software security measures:
    a. Network components of the system shall be installed in compliance with IEC 27033
    b. Access to the System shall be restricted by means of a logical or /and physical credential
    c. Passwords shall NOT be transmitted, displayed or stored in clear text
    d. Passwords will have a forced complexity, expiry, and restriction on re-use
    e. All system users shall have a unique credential to identify specific individual users
    f. System functions shall have granular access/deny on a per user basis
    g. User administration
    h. System Configuration
    i. Device admin level username and passwords (provided by The Township Properties IT Department)

2.3. UPS

1. All equipment shall be equipped with a UPS
2. UPS shall supply a minimum 1 hour of operation
3. All UPS shall have a network interface for monitoring and management
4. All UPS shall have enough capacity for an additional 25% load

2.4. Power Supplies

1. All power supplies shall be CSA approved for their applied use
2. All Power supplies shall be hard wired
3. All power supplies shall have 4hrs of back-up battery where applicable
4. All power supplies shall provide distinct fused outputs

3. Scope

3.1.1. Description

The existing Intrusion system within the facility is dated and requires upgrade. The existing panels, keypads, and expansion modules are to be decommissioned and removed upon completion. The existing field devices are assumed to be in good working order and are to remain in place. If during the Installation process a field device is found to be faulty this will be addressed as an OUT OF SCOPE item. End of Line resistor wiring is to be used and resistors are to be installed at EACH field device. The new system is to support access control functionality and will be connected to the existing monitoring station through an IP connection with cellular backup. Administration of the system shall be done through software supplied by the Security Contractor. There are four doors that will require card readers, locking hardware, contacts, and associated hardware. The Security Contractor is responsible for delivering a turnkey system and must include all parts, labour, and software required to realize this goal.

3.1.2. Requirements Summary

The following encompasses all required works to be included within the bid price.

1. The Contractor confirms that, prior to entering into this Contract, that they have carefully investigated the scope of work requirements. No claim by the Contractor will be entertained in connection with conditions which reasonably could have been ascertained by such investigation or other due diligence undertaken prior to entering into this Contract.
2. The following items are to be considered “IN SCOPE”
    a. All devices illustrated on the authoritative drawing set, both new and existing
    b. All required control equipment to support the field devices
    c. All required power supplies with battery backup
    d. All required racking
    e. All required UPS devices
    f. All required cable, conduit, fire rated plywood, and troughing
    g. All Electrical
    h. All Permits
    i. All Project Documentation
    j. Any and all required software and licenses
    k. 200 iClass Credentials

3.1.3. Bill of Materials

	QTY	ITEM	DESCRIPTION
Intrusion System			
	1	B6512	IP control panel, 96 points
	1	B444-A	Plug-in cell module, AMEC LTE
	2	B208	SDI2 8-Input Expansion Module
	2	B921C	Two-line Keypad w/Touch keys, Inputs
	1	D117	Outdoor two-tone siren, 30W 120db
	1	TR1850-CA	Transformer, plug-in, 18V 50VA, Canada
	1	B12	Mounting plate for D8103 enclosure
	1	B8103	Universal enclosure, white
	1	D126	Battery, 12V 7Ah
	1	ICP-EZTS	Dual tamper switch
	1	D101	Enclosure lock and key set
Access Control Add-On			
	4	B901	Door Controller
	1	ISN-CSD70-W	Contact, 3/4", recessed, white, 10pcs
	4	DS150I	Request-to-exit sensor
	4	ARD-SER40-WI	Card reader, iCLASS, Wiegand
	200	ACD-IC2K26-50	Card, iCLASS, 26bit, 2kB, 50pcs
	2	B8103	Universal enclosure, white
	1	B12	Mounting plate for D8103 enclosure
	1	D126	Battery, 12V 7Ah
	1	D9002-5	Mounting plate, 6 location 3-hole, 5 pcs
	2	ICP-EZTS	Dual tamper switch
	2	D101	Enclosure lock and key set
	1	TR1850-CA	Transformer, plug-in, 18V 50VA, Canada
	1	B520	Auxiliary power supply module, 2A 12V
		Grand Total	
Ancillary Devices			
	4	Electric Strikes, Fail Safe	Electronic Door Locking Hardware
	LOT	PS	CSA/ULC Power Supplies
	LOT	C&C	Cable and Conduit
	LOT	Labour	Installation Labour
	LOT	PM	Project Management
	LOT	Documentation	Documentation and As-Builts
	LOT	Training	Training

4. Drawings and Schedules

1. The following are the authoritative drawings and schedules for this project:

5. Glossary of Terms

API: Application Programming Interface
AVI: Audio Video Interleave
CA: Certificate Authority
CAC: Common Access Card
CE: European Union Conformity
CPU: Central Processing Unit
CSV: Comma Separated Values
DNS: Domain Name Server
DSM: Door Status Monitor
DVR: Digital Video Recorder
EACS: Electronic Access Control System
FCC: Federal Communications Commission
FIPS: Federal Information Processing Standard
FIFO: First In – First Out
FTP: File Transfer Protocol
FRAC: First Responder Authentication Credential
GB: Gigabyte
GSOC: Global Security Operations Center
HA: High Availability
HTML: Hypertext Markup Language
H.264: Video Compression Standard
I2C: Inter-Integrated Circuit
IEEE: Institute of Electrical and Electronics Engineers
I/O: Input / Output
IP: Internet Protocol
IS: Integrated System
JPEG: Joint Photographic Experts Group
LAN: Local Area Network
LDAP: Lightweight Directory Access Protocol
MB: Megabyte
MJPEG: Motion JPEG
MSATA: Mini-Serial Advanced Technology Attachment
MSMA: Mobile Security Management Application
MTBF: Mean-Time Between Failure
NAS: Network Attached Storage
NECA: National Electric Code Association
NFPA: National Fire Protection Association
NVR: Network Video Recorder
ODBC: Open Database Connectivity
OS: Operating System
OVID: Open Video Integration Driver
PDF: Portable Document Format
PIN: Personal Identification Number
PIV: Personal Identity Verification
PoE: Power over Ethernet
PTZ: Pan-Tilt-Zoom
RAID: Redundant Array of Independent Disks
RAM: Random Access Memory
REX: Request to Exit
RFID: Radio Frequency Identification
RoHS: Restriction of Hazardous Substances
ROM: Read Only Memory

RU: Rack Unit
SFTP: Secure File Transfer Protocol
SHA: Secure Hash Algorithm
SIO: Serial Input / Output
SLA: Sealed Lead-Acid or Service Level Agreement
SMS: Security Management System or Short Message Service (text messaging)
SSL: Secure Sockets Layer
TCP: Transmission control protocol - connects hosts on the Internet
TIA: Telecommunications Industry Association
TWIC: Transportation Worker Identification Credential
UI: User Interface
UPS: Uninterruptible Power Supply
UTP: Unshielded Twisted Pair
VMS: Video Management System
WAN: Wide Area Network
Wi-Fi: Wireless Network

Appendix I

PRICES

I/We, hereby propose and agree to provide Services as outlined in RFP 2022-27 to The Corporation of the Township of Muskoka Lakes, Public Works Department.

Prices exclude all applicable sales taxes (HST).

Work Item/ Location	Lump Sum Price
Update Entry And Security System Admin Office, 1 Bailey St., Port Carling, Ontario	
Fees	
Disbursements and Expenses	
TOTAL	

Notes:

1. Fees shall include all labour costs associated with; undertaking any inspections, purchasing of software or equipment, installation, sub-consultants, etc. required to complete the work.

2. Disbursements and expenses shall include any additional costs to complete the work.

I/We have the authority to bind the Bidder.

Signature _____ Position_____