

## STAFF REPORT

DATE: 1/16/2020 **CONSENT** 

TO: City Council

FROM: Marty Powers, Public Works Director

**AGENDA ITEM**: SCADA System Service Agreement **REVIEWED BY:** Kristina Handt, City Administrator

**BACKGROUND:** Starting in 2016 the City of Lake Elmo has entered into a service agreement with Telemetry & Process Control to perform preventative and corrective maintenance of the computer system and controls that operate the municipal water and sewage pumping systems. The aforementioned contract has expire on April 30, 2019. After reviewing the needed services and our SCADA system over the last several months I have found necessary benefits from this contract.

**ISSUE BEFORE COUNCIL:** Does the City Council want to enter an annual maintenance contract with TPC for the water and wastewater SCADA System?

**PROPOSAL DETAILS/ANALYSIS:** Entering into the proposed service agreement helps ensure that SCADA System functions will be maintained to operate as designed. In addition, this contract reduces hourly service & support rates and guarantees phone support and on-site services 24 hours a day.

TPC is the designer of the current SCADA System and has been providing support for the operation of city wells, water towers and lift stations for years. With the growth of the city's infrastructure service of this type is crucial in order to provide uninterrupted water and sewer services to Lake Elmo residents.

FISCAL IMPACT: \$15,984 per year paid monthly out of Water and Sewer Contract Services

### **OPTIONS:**

- Approve SCADA System Service Agreement
- Deny SCADA system Service Agreement

**RECOMMENDATION**: If removed from consent agenda

"Motion to approve a two year SCADA System Service Agreement with Telemetry & Process Controls"

### **ATTACHMENTS:**

• Service Agreement Proposal

7250 Hudson Blvd. Suite 160, Oakdale, MN 55128 p (651) 430-0435 f (651) 430-0783

January 10, 2020 July 11, 2019

City of Lake Elmo - Public Works Department 3800 Laverne Avenue Lake Elmo, MN 55042

Attention: Mr. Marty Powers - Public Works Director

mpowers@lakeelmo.org

651-747-3941

Subject: City of Lake Elmo Water Distribution / Wastewater Collection SCADA System – Annual Service Agreement Proposal

Dear Mr. Powers,

Please find in this letter information and pricing for a new annual service agreement.

We highly recommend that the City of Lake Elmo enter into a new Water Distribution / Wastewater Collection SCADA System maintenance agreement with TPC, Inc. The proposed agreement includes preventative and corrective maintenance services\*.

Listed below are some important reasons why the agreement will be of benefit to the City of Lake Elmo:

- Reduced hourly service & support rates will apply.
- A guaranteed response time for phone support and "on-site" services that will be negotiated based upon your needs and the requirements of the system. Customers who are not under contract will continue to receive our technical service support; however, the response time is not guaranteed.
- It has been proven that SCADA systems that are properly maintained operate more efficiently with much less downtime and potential associated overtime expense.
- Systems that are routinely maintained typically last longer than systems without preventative maintenance services.

TPC's maintenance agreement includes three major service components:

- The first of these components is the provision for a complete "on-site" system check out. We recommend that this preventative maintenance be done a minimum of once a year.
- The second component of our agreement consists of "on-site" corrective maintenance; to repair and/or replace failed hardware components or to troubleshoot and rectify system operational or data communication issues.
- The third component is the provision for an estimated number of TPC service engineer "in-house" service and phone support hours.

The following services are typically provided as part of a complete "on-site" system check out:

- Check each sites PLC processor for proper running condition.
- Verify each digital input and digital output.
- Verify the calibration of each analog input and recalibrate if necessary.
- Check all PLC power supplies for proper voltages and replace if necessary.
- Examine all local hardware (i.e. switches, displays, lights, relays, etc.) to verify their proper operating condition.

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- Check all local D.C. power supplies; to verify output voltages and replace if necessary.
- Check each Uninterruptible Power Supply (UPS) to verify proper operation and the status of the battery in each unit. Replace as necessary.
- Verify and tighten all terminals so there are no loose wire connections.
- Verify proper RF communication at all SCADA system equipment locations.
- Verify the proper operation of the HMI software programs and provide the City with recommended HMI package updates when they become available.
- Run tests on the SCADA system printer(s); verify proper communications with the PC.
- Check all spare parts, verify proper working condition, and replace bad parts.
- Retrain all existing personnel and train new City personnel who interface with the SCADA system as needed.

TPC is fully aware of and acknowledges the City's economic constraints. For this reason, we stress the importance in considering the short and long-term savings that can be realized by having this annual service agreement in place.

Based upon the number of TPC service tech hours incurred during the most recent annual agreement, this new City of Lake Elmo Water Distribution / Wastewater Collection SCADA System – Annual Service Agreement Contract includes a maximum of one-hundred ninety (190) hours of TPC technical Service Engineer's time per year for "on-site" and "in-house" support services, travel time and mileage. The "on-site" support services include one yearly system preventative maintenance check.

TPC's monthly charge for this continued service will be \$1,332; resulting in a total annual amount of \$15,984.

TPC, Inc. is willing to extend this annual contract rate for an additional year; if that is part of the signed agreement now.

Replacement parts are not included in this service agreement.

We appreciate the opportunity to present this proposal to the City of Lake Elmo Public Works Department.

Following your review, please let us know if you have any questions or concerns.

Sincerely,

# Davíd Gardeen

Vice President - Environmental Sales

\*Preventive maintenance, as the term is used herein, has the following meanings:

- 1. The care and servicing by personnel for the purpose of maintaining the SCADA system hardware & software in satisfactory operating condition by providing for systematic inspection, detection, and correction of incipient failures either before they occur or before they develop into major defects.
- 2. Maintenance, including tests, measurements, adjustments, and parts replacement, performed specifically to prevent faults from occurring.

The primary goal of this maintenance is to avoid or mitigate the consequences of equipment failure. This may be by preventing the failure before it occurs; which Planned Maintenance and Condition Based Maintenance help to achieve. It is designed to preserve and restore equipment reliability by replacing worn components before they fail. Preventive maintenance activities include partial or complete overhauls at specified periods. In addition, our service engineers can record equipment deterioration, so they know to replace or repair worn parts before they cause system failure. The ideal preventive maintenance program would prevent all equipment failure before it occurs.

### In summary:

- Preventive maintenance is conducted to keep the SCADA system equipment working and to extend the life of the equipment.
- Corrective maintenance, sometimes called "repair", is conducted to get the SCADA system equipment working again.



# Proposal to provide the City of Lake Elmo, MN Public Works Department an Annual Service Agreement for the Water Distribution / Wastewater Collection Supervisory Control And Data Acquisition (SCADA) System

Accepted by:	
The proposal and terms & conditions herein are acknowledged and accepted:	
Name/Title	Date
Authorized Signature	Purchase Order No.
Please put a check mark here if you v	want this to be a two-year Service Agreement

### **Terms and Conditions**

ACCEPTANCE: This proposal is an invitation for an offer and will become a binding contract when accepted.

**LIMITATION OF PROPOSAL:** The prices and terms quoted in this proposal are subject to acceptance by the Purchaser within a period of (30) calendar days from the date herein.

**EXCLUSIONS:** This proposal is based solely and completely on specifications submitted to Telemetry and Process Controls, Inc. (TPC) at the time of the writing of the proposal. General plans and specification not actually submitted shall not apply. This proposal, together with all annexed specifications, when accepted, shall be the complete agreement between the parties; and any alternations or unusual and undisclosed conditions or deviations from the above specifications involving extra costs shall be agreed upon in writing by both parties and shall become an additional charge over and above the proposal price set forth herein. Delays or impossibility of performance by TPC because of strikes, accidents, or other reasons beyond the control of TPC shall relieve us from all liability herein.

**TERMS OF PAYMENT:** Terms are Net 30 days, based on rated credit. Otherwise, alternate arrangements must be made. These terms and conditions have control over any terms presented by Buyer, through a purchase order or otherwise.

We reserve the right to cancel the contract or cease work if payments thereon are not received when due. 1.5% per month shall be charged on all unpaid balances.

**TAXES:** The Purchaser shall pay any local, state or federal sales, excise or use tax imposed on the equipment in addition to the prices quoted.

WARRANTY LIMITATION: There are no warranties that extend beyond the warranties herein after expressed.

**WARRANTIES:** All work shall be done in a workmanlike manner according to standard practices. We warrant performance against defects in materials and workmanship for a period of twelve (12) months from the date of shipment from TPC. We agree to pass on to the Purchaser such warranties, if any, as may be extended by the manufacturer for material supplied. Labor for replacing defective materials shall not be provided by us unless it is specifically spelled out in the proposal. We shall not be responsible for materials damaged, lost or stolen after delivery, through no fault of ours, or for failure to deliver and perform because of reasons beyond our control.

**EXCLUSIVE REMEDIES:** Remedies are limited to the repair or replacement at FOB point of delivery. Consequential damages are excluded. In no event shall TPC be responsible for consequential damages of any such defective material or workmanship including, but not limited to, the Purchaser's loss of material or profits, increased expenses of operation, downtime or reconstruction of the work, and in no event, shall TPC's obligation under this warranty exceed the original contract price of the defective item. It is agreed that any action for breach of express or implied warranty shall be initiated within fifteen (15) months from the date of shipment by TPC and only those defects that are documented to have occurred within twelve (12) months from the date of the equipment's start-up and acceptance or (15) fifteen months from the date of TPC's shipment will be covered by the warranty.

**DISCLAIMER:** TPC will not be responsible for damage to equipment or materials through improper installation, storage, improper services, or through attempts to operate it more than its rated capacity or recommended use, intentional or otherwise, by parties other than TPC or its authorized representatives.

CONDITIONS OF SALE: Prices quoted are those now in effect.

### LIMITATIONS OF LIABILITY

A. Neither Seller nor its suppliers of any tier will be liable to Purchaser, whether in contract, in tort (including negligence and strict liability), under any warranty or otherwise, for any special, indirect, incidental, or consequential loss or damage whatsoever, or for loss of or to the plant, loss of use of equipment or power system, cost of capital, loss of profits or revenue or the loss of use thereof, cost of environmental damage or clean-up, or claims of customers of Purchaser. The remedies set forth herein are exclusive, and the total cumulative liability of seller and it suppliers under any purchase order or any act or omission in connection therewith or related thereto, whether in contract, in tort (including negligence and strict liability), under any warranty, or otherwise, will be limited to the price of the contract.

B. The provisions of this Article shall survive termination, cancellation or expiration of the purchase order and shall apply, notwithstanding any other provisions of this Agreement or any related document thereto, to the fullest extent permitted by law. Prior to the transfer of any equipment or material furnished or for which work is furnished hereunder from the project site (except temporarily for repair work or permanently for disposal), or the transfer of any interest therein or in the plant, Purchaser shall obtain for Seller written assurances from the transferee of limitation of and protection against liability following the proposed transfer at least equivalent to that afforded seller and its suppliers under the purchase order.