



MUNICIPALITY OF **West Elgin**

Staff Report

Report To: Council Meeting
From: Lee Gosnell, Manager of Operations & Community Services
Date: 2020-11-26
Subject: Water Meter Reading Technology

Recommendation:

That West Elgin Council hereby receives the report from Lee Gosnell, Manager of Operations & Community Services; and

That West Elgin Council approves the purchase of Sensus Automatic Meter Reading Technology from KTI Limited at a cost of \$6,989.54 plus applicable tax; and

That this money be taken from the 2020-budgeted amount of \$60,000.00 for water meter replacement.

Purpose:

The purpose of this report is to acquire the necessary hardware and software to support West Elgin's automated water meter reading program, which will be implemented in 2021.

Background:

During the 2019 budget year, money was allocated for the purchase of hardware and software to support the installation of new radio read technology, which will increase efficiencies and lower costs with respect to collecting water meter readings. In the fall of 2019, utilities staff met with a local supplier of this technology to gain pricing and information, but no comparisons were done at this time and no decision was made. Due to delays, acquisition and implementation were never completed, and unfortunately, the money for this software purchase was not carried forward to the 2020 budget year. There was, however, money allocated to start a meter replacement program, which was never used in 2020 due to the ongoing COVID 19 health crisis. Staff were not able to enter homes for these meter exchanges; therefore, the budgeted amount of \$60,000.00 has not been utilized.

In an effort to get things back on track, senior staff met with various suppliers in October of 2020 to review their proposals and evaluate how their software would integrate with the municipality's current financial program. KTI Limited of Aurora, Ontario was one of these proponents and is the current provider of software for reading meters in West Elgin. Their presentation included a practical solution for upgrading from Touch Read to Walk By meter reading, as well as information on a fixed base system, which would eliminate the need to read meters all together.

The Walk By solution would see a small radio transmitter attached to the meter reading fobs on the exterior of all homes with municipal water. In many cases, this would eliminate the need for staff to make an appointment and enter the home to set up automated reading. Once installed, the radio

transmitter would automatically send a reading to the meter reader as he/she walked (or slowly drove) down the street. This will greatly reduce the amount of time required to read meters and eliminate the need to enter residents' property to gain access to the fob. Money is being allocated in the Capital Forecast to complete radio transmitter installation over a 2-3 year period. This will provide increased benefit in the short term as more homes are converted to the Walk By system, and the same transmitter can be used if West Elgin becomes fully automated by utilizing the tower base system. With the proposed tower base system, water usage can be monitored daily which –

- Eliminates the expense of reading meters (labour, vehicle expense and gas)
- Allows staff to do re-reads and final reads on water accounts from the office
- Monitors water consumption and alerts staff if there is a possible leak (this would allow staff to contact residents early, with the hopes of preventing a large water bill)
- Provides expanded billing options

Receiver technology would be installed on municipal infrastructure (likely one of the water towers), which would gather the readings from each transmitter and relay to the water billing department. Depending on the type of meters installed, staff could even start, stop or restrict the flow of water to accounts without having to attend the property. Money has also been allocated in the draft 2021 budget for a propagation study to determine radio coverage requirements for a fixed base system.

Financial Implications:

Although the money for this software was not carried forward from the 2019 budget, the lack of meter upgrades due to COVID-19 has left a surplus, which will more than cover this necessary purchase and any meter replacements that are required in the remainder of 2020. With the purchase of this equipment and software, West Elgin will be ready to build on this program early in the New Year.

Report Approval Details

Document Title:	Water Meter Reading Technology - 2020-23-Operations Community Services.docx
Attachments:	
Final Approval Date:	Nov 24, 2020

This report and all of its attachments were approved and signed as outlined below:

Jana Nethercott