



The Corporation of the Town of Tecumseh

Public Works & Environmental Services

To: Mayor and Members of Council
From: Kirby McArdle, Manager Roads & Fleet
Date to Council: March 26, 2019
Report Number: PWES-2019-17
Subject: Purchase of a Valve Maintenance Trailer

Recommendations

It is recommended:

That Administration **be authorized** to obtain quotations for the Supply of a Valve Maintenance Trailer;

And that Appendix A “Town of Tecumseh 2019 – 2028 Ten Year Fleet Funding and Replacement Schedule – Water - Amended” attached to Public Works and Environmental Services Report No. 2019-17 **be adopted**;

And that funding for the purchase of the Valve Maintenance Trailer in the amount of \$85,000 **be funded** from the Fleet Lifecycle Reserve.

Background

Water valves are a critical component of the water distribution system. They are used in controlled shutdowns, emergency situations and during flushing programs to maintain water quality. There are approximately 2,590 mainline valves within the Town’s water distribution system.

Water staff currently use a valve key to open and close a valve. A valve key is a steel handle tool used for manual turning of valves.

Comments

The proposed Valve Maintenance Trailer (VMT) equipment uses hydraulic power to open and close water valves.

A VMT is designed to exercise valves as carefully as possible, with precise fine torque control, far beyond the capacity of a Water Operator. Such fine torque exercising represents the best chance available for bringing a water valve back into reliable service.

The benefits of purchasing the VTM are as follows:

- Decrease in the number of service interruptions annually involving depressurized watermain and households out of service.
- Decreased costs associated with broken valves and significant decrease in restoration costs, including asphalt, concrete, gravel and excavator charges as well as employee overtime.
- Reduction in labour and travel time to exercise water valves.
- Improved Water Operator health and safety compared to existing methods of valve maintenance.

During unplanned maintenance (of the water distribution system), water valves are utilized to isolate the area (to be maintained) with minimal disruption to the Town's water consumers. If the valve is full of debris (i.e. stone, dirt) the valve may become inoperable. When this occurs, Water staff is forced to the adjacent valve thereby increasing the area to isolate (for the maintenance work) and, in so doing, affecting a larger area of water consumers.

With the purchase of a VMT, Water staff will no longer rely on contractors to perform certain work and excavations (i.e. work on valves, hydrants, sample stations, and signpost installations), saving time, money and service disruptions. That said, large excavations (i.e. sanitary sewer repair) will still require contracting large vacuum trucks.

In accordance with the Town's Purchasing Policy, it is recommended that a Request for Quotations (RFQ) be prepared to seek tender submissions for the supply of the Valve Maintenance Trailer.

The RFQ will include specifications to ensure the product meets the needs of Water staff.

The VMT will be included in the Fleet Maintenance Schedule for replacement every ten years with a value of \$85,000.

Given the multitude of benefits of purchasing this equipment, it is therefore recommended:

1. That Administration be authorized to obtain quotations for the Supply of a Valve Maintenance Trailer;
2. And that Appendix A "Town of Tecumseh 2019 – 2028 Ten Year Fleet Funding and Replacement Schedule – Water – Amended" attached to Public Works and Environmental Services Report No. 2019-17 be adopted.

Consultations

Financial Services

Financial Implications

Administration recommends that the purchase of the Valve Maintenance Trailer in the amount of \$85,000 be funded from the 2019 Fleet Lifecycle Reserve. Refer to Attachments No. 1 and 2 for the Town's Fleet Replacement Summary and Amended Water Fleet Replacement Schedule. The current annual Lifecycle Fleet allocation from Water/Wastewater is sufficient, within the 10-year horizon, to accommodate this addition.

Link to Strategic Priorities

| Applicable | 2017-18 Strategic Priorities |
|-------------------------------------|---|
| <input type="checkbox"/> | Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers. |
| <input checked="" type="checkbox"/> | Ensure that the Town of Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making. |
| <input type="checkbox"/> | Integrate the principles of health and wellness into all of the Town of Tecumseh's plans and priorities. |
| <input checked="" type="checkbox"/> | Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses. |
| <input type="checkbox"/> | Demonstrate the Town's leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals. |

Communications

Not applicable

Website

Social Media

News Release

Local Newspaper

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

Prepared by:

Cheryl Curran, BES
Clerk I Administrative Clerk

Reviewed by:

Kirby McArdle, P.Eng.
Manager Roads & Fleet

Reviewed by:

Phil Bartnik, P.Eng.
Director Public Works & Environmental Services

Reviewed by:

Luc Gagnon, CPA, CA, BMath
Director Financial Services & Treasurer

Recommended by:

Tony Haddad, MSA, CMO, CPFA
Chief Administrative Officer

| Attachment Number | Attachment Name |
|--------------------------|---|
| 1 | 2019-2028 Ten Year Fleet Replacement Schedule – Summary |
| 2 | 2019-2028 Ten Year Fleet Replacement Schedule – Water - Amended |