



The Corporation of the Town of Tecumseh

Public Works & Engineering Services

To: Mayor and Members of Council

From: Phil Bartnik, Director Public Works & Engineering Services

Date to Council: May 9, 2023

Report Number: PWES-2023-43

Subject: Disaster Mitigation and Adaptation Fund 2023 Intake
Cedarwood Sanitary Pump Station Reconstruction

Recommendations

It is recommended:

That Administration **be authorized** to submit an application to the federal government for funding under the Disaster Mitigation and Adaptation Fund (DMAF) 2023 Intake, for the Cedarwood Sanitary Pump Station Reconstruction Project;

And that Administration **be authorized** to complete any business case(s), application(s) and/or to provide all information/documentation as required in order to constitute an application under the DMAF 2023 Intake;

And further that the Chief Financial Officer and the Director Public Works & Engineering Services **be authorized** to sign any required documents necessary to complete the application and the subsequent documentation to the DMAF 2023 Intake.

Background

The Disaster Mitigation and Adaptation Fund (DMAF) is a Government of Canada contribution program intended to support public infrastructure projects designed to mitigate current and future climate-related risks and disasters triggered by climate change, such as floods, wildland fires, droughts and seismic events.

Eligible infrastructure projects under the DMAF include new construction of public infrastructure and/or modification or reinforcement of existing public infrastructure including natural infrastructure that prevent, mitigate or protect against the impacts of climate change, disasters triggered by natural hazards, and extreme weather.

To be considered eligible, projects must be aimed at reducing the socio-economic, environmental and cultural impacts triggered by natural hazards and extreme weather events taking into consideration current and potential future impacts of climate change in communities and infrastructure at high risk.

Projects must have a minimum of \$1M in total eligible costs to be considered for funding.

The maximum federal contribution is up to 40% for municipalities. The deadline for grant submissions is July 19, 2023.

Comments

Administration has reviewed potential capital projects that may be eligible for funding under the DMAF 2023 Intake program and recommends submitting an application for the Cedarwood Sanitary Pump Station Reconstruction.

The Cedarwood Sanitary Pump Station (Cedarwood PS) was constructed in 1972 and is located at the intersection of Gauthier Drive and Cedarwood Drive. It services Tecumseh and St. Clair Beach areas north of County Road 22, totaling approximately 920 hectares.

The Cedarwood PS is equipped with three (3) Archimedes screw pumps and a gravity bypass pipe. These screw pumps have been in service for over 50 years and have been well maintained during this period. However, it would be prudent to replace this aging infrastructure now in advance of mechanical failures. Obtaining replacement parts has become more challenging, and the frequency of maintenance and costs are increasing.

Stantec Consulting Ltd. (Stantec) was retained by the Town in 2022 to complete a Condition and Capacity Assessment on the Cedarwood Sanitary Pump Station, which is currently being finalized. In discussions with Stantec, their report is recommending a full reconstruction of the Cedarwood PS due to the following:

- **Site Elevation and Flooding** - The existing site elevation is below the 1:100-year Lake St. Clair flood elevation, and significantly below the 1:100-year (plus Climate Change) elevation as identified in the Town's Shoreline Management Plan (2023). This leaves the site susceptible to flooding during lake flooding events as well as larger storm events.

- **Existing Pump Station Condition** – The existing pump station has been in operation for approximately 50 years. Pump components are aging, and replacement parts are more difficult to obtain. Maintenance is more frequent and maintenance costs are increasing. A full replacement of the Cedarwood PS is recommended by Stantec to preclude future potential pump failure and mitigate associated risks, given the large service area for this pump station.
- **Operational Efficiencies** – A reconstructed Cedarwood PS will ensure optimal operating efficiencies of the pumps and will reduce the risk of the sanitary system surcharging caused by inflow and infiltration within the pump station service area.

Consultations

Financial Services
Dillon Consulting Limited
Stantec Consulting Ltd.

Financial Implications

The preliminary estimate for the reconstruction of the Cedarwood Sanitary Pump Station is \$7.75M. Under the DMAF 2023 Intake, up to 40% (\$3.1M) would be eligible for recovery should the Town be successful with an application. The Town's share of 60% (\$4.65M) would be funded from the Wastewater Facilities Reserve Fund.

Link to Strategic Priorities

Applicable	2019-22 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 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 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
Project Technician

Reviewed by:

Tom Kitsos, CPA, CMA, BComm
Director Financial Services & Chief Financial Officer

Reviewed by:

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

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	Attachment Name
1	Cedarwood Sanitary Pump Station – Location and Service Area
2	Cedarwood Sanitary Pump Station – Plan View