



## The Corporation of the Town of Tecumseh

Public Works & Environmental Services

**To:** Mayor and Members of Council

**From:** Phil Bartnik, Director Public Works & Environmental Services

**Date to Council:** September 11, 2018

**Report Number:** PWES-2018-21

**Subject:** National Disaster Mitigation Program – Intake 5

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### Recommendations

It is recommended:

**That** Administration be authorized to submit two separate Project Proposal Forms to the federal government (through the Ministry of Municipal Affairs and Housing) for funding under the National Disaster Mitigation Program (NDMP) for the Sanitary Sewer Collection System Rehabilitation Project Phase 3, and the Oldcastle Storm Drainage Master Plan;

**And that** Administration **be authorized** to complete any business cases(s), application(s), and/or to provide all information/documentation as required in order to complete the Project Proposal Forms and subsequent application(s) to NDMP;

**And further that** the Treasurer **be authorized** to sign any required documents necessary to complete the Project Proposal Forms and subsequent application(s) to NDMP;

**And furthermore that** the Mayor and Clerk **be authorized** to sign any documents/agreements (if required) for the Project Proposal Forms submission and application(s) to NDMP, in a form satisfactory to the Town's Solicitor, financial content satisfactory to the Town's Treasurer and technical content to the Town's Engineer.

### Background

The National Disaster Mitigation Program (NDMP) is part of the Government of Canada's commitment to build safer and more resilient communities. The NDMP fills a critical gap in Canada's ability to effectively mitigate, prepare for, respond to, and recover from flood-related

events by building a body of knowledge on flood risks in Canada, and investing in foundational flood mitigation activities.

Overall, the NDMP helps reduce the impacts of natural disasters by:

- Focusing investments on significant, recurring flood risk and costs; and
- Advancing work to facilitate private residential insurance for overland flooding.

The NDMP is a five-year program with \$183 million in federal funding for projects that mitigate future flood events by addressing significant and recurring flood risks and costs.

Under the NDMP, the federal government funds up to 50 per cent of the costs of eligible flood mitigation projects, up to \$1.5 million in federal funding per project.

Projects can address riverine or urban flooding and proponents are responsible for the remainder of project costs.

Project proposals can be in one or more of the following streams:

- **Flood risk assessment:** for the completion of risk assessment processes to inform flood risks. Risk assessments are the foundational step in disaster mitigation. These risk assessments will identify flood hazards, potential impacts, and community and infrastructure vulnerabilities, as well as the overall flood risk profile for the area.
- **Flood mapping:** for the development and/or modernization of flood maps to address flood risks. A flood map identifies the boundaries of a potential flood event based on type and likelihood, and can be used to help identify the specific impacts of a flood event on structures, people and assets.
- **Flood mitigation planning:** for the development/modernization of mitigation plans to address flood risks. A comprehensive mitigation plan allows applicants to develop realistic and sustainable mitigation solutions by clearly outlining the plan's objectives, key activities, expected outputs, timelines, and roles and responsibilities.
- **Investments in non-structural and small-scale structural flood mitigation projects:** for non-structural and small-scale structural disaster mitigation projects, to proactively prevent or mitigate damages and losses. Eligible projects would include actions such as the replacement of storm culverts, or projects that improve flood resilience by proactively preventing or mitigating damages and losses.

To be eligible for NDMP funding, project Proposals must:

- Identify the project stream for the proposed project;
- Describe how the proposed project addresses one or more high-risk communities, and/or advances flood mapping in the jurisdiction;
- Demonstrate how the proposed project would benefit implicated and adjacent communities and how it may also be of interest to surrounding communities;
- Describe how the proposed project meets the specific criteria identified within the stream for which funding is requested;
- Explain how the proposed project objectives align with the NDMP's overall objectives;

- Describe the expected outcomes for each of its objectives;
- Include a proposed budget that clearly outlines the categories of work and expenditures for which the financial contribution is being requested for each fiscal year, as well as other sources of revenue and in-kind support where applicable;
- Include a clearly articulated work plan outlining all activities for which the financial contribution is being requested for each fiscal year;
- Identify potential stakeholders/partnerships and describe their level of engagement, as applicable;
- Identify potential project implementation risks that may impact the recipient's ability to deliver on the project, and outline mitigation measures to address them;
- Include a commitment to share information with the Government of Canada, including: risk information/data and overall risk assessment; flood maps and associated data; and all relevant project information such as lessons learned;
- Include a commitment to publicly recognize the federal government's contribution in any announcement;
- Describe the internal measures to conduct implementation monitoring and performance management;
- Include a declaration to prevent the risk of conflicts of interest; and
- Indicate whether and how the needs of official language minority communities were considered, where appropriate (such as for proposed stakeholder engagement activities)

Provincial and territorial governments are the eligible recipients for funding under the NDMP. However, provincial and territorial authorities may collaborate with, and redistribute funding to eligible entities, such as municipal or other local governments, public sector bodies, private sector bodies, band councils, international non-government organizations or any combination of these entities.

As an eligible organization, the Town may submit one or more project proposals to the Ministry of Municipal Affairs and Housing.

The deadline for submissions to the Ministry of Municipal Affairs and Housing is September 14, 2018. Projects submitted for this last Call for Proposals must be completed by March 31, 2020.

## Comments

### Recommended Flood Mitigation Projects

#### 1. Sanitary Sewer Collection System Rehabilitation Project Phase 3

The Sanitary Sewer Collection System Rehabilitation Project Phase 3 will be submitted under **Stream 4: Investments in Non-Structural and Small Scale Structural Mitigation Projects**.

Stream 4 is the actual implementation of a specific mitigation project. The proposed mitigation project must have a detailed implementation plan including the resources, time, costs, agreements, materials and other factors required to complete the mitigation project. Non-structural and small-

scale structural disaster mitigation projects proactively prevent or mitigate damages and losses. Eligible projects would include actions such as the replacement of storm culverts, or projects that improve flood resilience by proactively preventing or mitigating damages and losses.

The Sanitary Sewer Collection System Rehabilitation Project is for the renewal and rehabilitation of approximately 30,000 linear metres of sanitary sewer pipe, 500 manholes and the rehabilitation of approximately 500 sanitary sewer service connections in Wards 1, 2 and 3 in Tecumseh. Phases 1 and 2 are completed and these Phases included the following:

- Camera inspection of the sewer pipes to identify pipe condition, pipe defects, and sources of inflow and infiltration using trenchless technology;
- Flushing and cleaning debris from the sanitary sewer pipes and service connection to facilitate leak testing and repair using trenchless technology; and
- Pressure testing and sealing of mainline joints, cracked or otherwise leaking pipes, tee connection, clean outs, manhole risers and sanitary service connections using innovative trenchless technology.

Phase 3 is the next phase of the Sanitary Sewer Collection System Rehabilitation Project and includes sealing leaks in manholes, mainline and (private drain connections) laterals.

Following the implementation of this project in its entirety, this project will:

- Reduce the amount of storm water entering the sanitary collection system during a severe rainfall event and thereby reducing the likelihood of overwhelming the sanitary system.
- Reduce the risk of basement flooding and the resulting environmental, health and safety issue and economic losses.
- Reduce the amount of storm water treated at the sewage plant resulting in annual cost savings.
- Reduce the amount of stormwater that is entering the sanitary system that contributes to bypassing at the Windsor sewage treatment plant thereby reducing the potential for health and safety threats to Lake St. Clair.

## **2. Oldcastle Storm Drainage Master Plan**

The Oldcastle Storm Drainage Master Plan project will be submitted under **Stream 3: Mitigation Planning**.

Mitigation planning is the process by which a community reflects on its identified risks, and uses this information to make more informed planning decisions. First, it must identify its broad mitigation goals. Second, it should identify the

objectives/strategies required to meet those goals. Finally, the key activities that are identified in the mitigation plan may also be planned mitigation projects.

A good mitigation plan provides a roadmap for action, a justification for the implementation of specific mitigation projects, and a demonstration of the engagement of the community in its success.

At the December 12, 2017 Regular Meeting of Council, Council approved the recommendations (Motion RCM-441/17) of PWES Report No. 57/17 titled “2018-2022 Public Works & Environmental Services Capital Works Plan” that authorized Administration to proceed with the 2018 capital works projects including the Oldcastle Storm Drainage Master Plan.

The stormwater infrastructure network located within Oldcastle Hamlet area is comprised of a combination of roadside ditches, Municipal Drains, storm sewers, swales/sub-drains, as well as County and Provincial storm infrastructure. There are three distinct watershed areas within the Oldcastle Hamlet which include Little River (eight outlets), Turkey Creek (one outlet), and River Canard (three outlets).

The proposed Oldcastle Storm Drainage Master Plan will focus on an analysis of the storm infrastructure within these watersheds and will set the framework for how stormwater is addressed for new and re-developments.

This analysis will review how the storm infrastructure functions during minor rainfall events (what can be contained within the ditches, drains, and sewers), and major rainfall events (which would follow overland flood routes). The Master Plan will follow the Municipal Class Environmental Assessment (EA) process.

## Recommendations

The main project objectives of the Sanitary Sewer Collection System Rehabilitation Project and the Oldcastle Storm Drainage Master Plan align with the NDMP objectives to reduce the impacts of natural disasters on Canadians by:

- Focusing investments on significant, recurring flood risk and costs; and
- Advancing work to facilitate private residential insurance for overland flooding.

The NDMP fills a critical gap in Canada’s ability to effectively mitigate, prepare for and respond to flood-related events. Accordingly, Administration therefore recommends:

**That** Administration **be authorized** to submit two separate Project Proposal Forms to the federal government (through the Ministry of Municipal Affairs and Housing) for funding under the National Disaster Mitigation Program (NDMP) for the Sanitary Sewer Collection System Rehabilitation Project Phase 3, and the Oldcastle Storm Drainage Master Plan;

**And that** Administration **be authorized** to complete any business cases(s), application(s), and/or to provide all information/documentation as required in order to complete the Project Proposal Forms and subsequent application(s) to NDMP;

**And further that** the Treasurer **be authorized** to sign any required documents necessary to complete the Project Proposal Forms and subsequent application(s) to NDMP;

**And further that** the Mayor and Clerk **be authorized** to sign any documents/agreements (if required) for the Project Proposal Forms submission and application(s) to NDMP, in a form satisfactory to the Town's Solicitor, financial content satisfactory to the Town's Treasurer and technical content to the Town's Engineer.

## Consultations

Financial Services

## Financial Implications

Should the application for funding be successful, the following financial implications arise if the grant application is approved:

### Sanitary Sewer Collection System Rehabilitation Project Phase 3

Total net eligible project costs*:	\$3.0 M
Requested federal funding (50%, max \$1.5M)	\$1.5 M
<b>Amount to be funded by Town:</b>	<b>\$1.5 M</b>

\*This project will be included as part of the 2019 PWES Capital Works Plan, however it would not proceed unless grant funding is secured.

The Town's portion will be funded by the Wastewater Sewers Reserve Fund.

### Oldcastle Storm Drainage Master Plan

Total project costs:	\$0.45 M
Total net eligible project costs*:	\$0.36 M
Requested federal funding (50%, max \$1.5M)	\$0.18 M
<b>Amount to be funded by Town:</b>	<b>\$0.27 M</b>

\*This project originally commenced in 2018 and the eligible project costs have been estimated.

The Town's portion of the project costs will be funded by the Storm Water Reserves.

## 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:

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

<b>Attachment Number</b>	<b>Attachment Name</b>
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