

Meeting Date: December 4, 2023
Department: Engineering & Public Works
Report No.: EPW-2023-75
Prepared by: Steve Morriss, Drainage Superintendent
Submitted by: Jake Straus, Director, Engineering and Public Works
Approved by: Trisha McKibbin, Chief Administrative Officer

SUBJECT: Winters Drain 2023 – Report Consideration Meeting

RECOMMENDATION: THAT: Council adopt the Engineers Report for the Winters Drain 2023, and give first and second reading to provisional By-law #92-23 for the project.

BACKGROUND:

A Request for Major Drain Improvement was received by the Municipality of Strathroy-Caradoc for the Winters Drain 1967 on January 14, 2022. Council accepted the petition on February 7, 2022 and appointed Spriet Associates Ltd. to prepare the engineer's report.

The Winters Drain was originally constructed pursuant to a report submitted by A.S. Code, O.L.S. dated August 10, 1927. The drain was later reconstructed pursuant to another report submitted by A.J. DeVos, P. Eng. dated May 15, 1967. The existing drain extends southeast from the McEvoy Drain 2008 just west of the centre of Lot 15, Concession 4. The drain continues in this direction crossing under Falconbridge Drive into Lot 15, Concession 3. It turns east and north running parallel to the road allowance before continuing southeast in the west half of Lot 16, Concession 3 then continuing until its end in the northwest part of Lot 16, Concession 3.

The required on site meeting was held on May 18, 2022 where landowners reported that the existing drain is not working properly and requires frequent maintenance. The drain is located close to a forested area where roots frequently plug the drain. Due to the installation of the major gas main along Falconbridge Drive the tile has been damaged in several areas and although repairs have been completed, replacement of this length of tile has been recommended. The engineer attended site to complete investigations of the existing drain on May 12, 2022, and July 14, 2023 with additional data collected on October 26, 2023. Site investigations confirmed that the existing tile is in poor working conditions and heavily plugged with roots.

On May 30, 2023 the municipality held an informal public meeting to present the preliminary design

and cost distribution prepared by the engineers to the assessed landowners where further input was provided at that time. A second preliminary meeting was held with some of the assessed landowners on June 12, 2023. One landowner expressed a need for a direct connection to the existing drain 7 to service his lands and a petition under Section 4 of the Drainage Act was received by the Municipality of Strathroy-Caradoc on June 27, 2023 to construct a new closed branch as part of this project.

COMMENTS:

Municipal drains have been a fixture of rural Ontario's infrastructure since the 1800's. Most municipal drains were constructed to improve the drainage of agricultural land by serving as the discharge point for private agricultural tile drainage systems. However, they also remove excess water collected by roadside ditches, residential lots, institutions, industrial lands, commercial lands and any other properties in rural areas. Drains are a vital component of the local infrastructure. Without them, many areas of the rural area would be subjected to regular flooding, reduced production from agricultural land and increased public health risks.

Most municipal drains are constructed on private lands and each drain is adopted under a By-Law when established. The Drainage Act provides access for drainage to have a legal outlet. Downstream landowners must accept flow of water from upstream landowners and must not impede or block the flow of water. As a result, downstream drains are larger and deeper on abutting property owners. Upstream landowners must contribute to the costs of downstream landowners for the allowance of a legal outlet. The landowners including road authorities (municipalities) and public utilities (Hydro One, Union Gas), within the defined drainage watershed, contribute for the construction of the municipal drain and the on-going maintenance of the drain.

CONSULTATION:

This report was reviewed in consultation with:

- Drainage Superintendent – Municipality of Strathroy-Caradoc
- Director of Engineering and Public Works
- Manager of Public Works
- Spriet Associates Ltd.

FINANCIAL IMPLICATIONS:

- Schedule of Net Assessment included in the report.

STRATEGIC PLAN ALIGNMENT:

This matter is in accord with the following strategic priorities:

- Households and businesses in Strathroy-Caradoc are supported by reliable, financially responsible and well-maintained infrastructure network.

ATTACHMENTS:

- Spriet & Associates Engineering Report and Plans on the Winters Drain 2023