

COUNCIL REPORT

SUBJECT:	Carruthers-Hetzel Drain 2023 – Report Consideration Meeting
Approved by:	Trisha McKibbin, Chief Administrative Officer
Submitted by:	Jake Straus, Director of Engineering and Public Works
Prepared by:	Steve Morriss, Drainage Superintendent
Report No.:	EPW-2023-57
Department:	Engineering & Public Works
Meeting Date:	October 16, 2023

RECOMMENDATION: THAT: Council adopt the Engineer's Report for the Carruthers-Hetzel Drain 2023; and further

THAT: Provisional By-law No. 73-23 for the project be referred to the Consideration of By-laws section of the agenda for first and second reading.

BACKGROUND:

A Request for Major Drain Improvement was received by the Municipality of Strathroy-Caradoc for the Carruthers-Hetzel Drain 1969 on September 28, 2022. Council accepted the request on November 7, 2022 and appointed Spriet Associates Ltd. to prepare the engineer's report.

The Carruthers-Hetzel Drain 1969 was originally constructed pursuant to a report submitted by A.J. Graham, P.Eng. dated January 17, 1969 and consisted 150mm and 300mm concrete tile and provided for the improvements to the downstream outlet which is the open drain known as the Christina Drain 1974.

The engineer conducted investigations of the existing drain conditions on March 16, 2023 and again on May 5, 2023 with further data collected on June 6, 2023. The results determined that the existing drain is in a very poor state of repair due to both the age of drain and the negative pressure created by downstream tree roots. Investigation further confirmed that the upstream tile portion on the south side of Longwoods Road is in good working condition however recent utility installations in this area have caused some damage to portions of the existing drain.

On June 26, 2023 the municipality held an informal public meeting to present the preliminary design and cost distribution prepared by the engineers. Further input by the affected landowners was provided at that time.

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 Municipality of Strathroy-Caradoc
- Roads Supervisor County of Middlesex
- 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:

• Local Infrastructure - Households and businesses in Strathroy-Caradoc are supported by reliable, financially responsible and well-maintained infrastructure networks.

ATTACHMENTS:

- Spriet Associates Ltd. Report and Plans on the Carruthers-Hetzel Drain 2023.
- Provision By-Law 73-23 Carruthers-Hetzel Drain 2023