

Meeting Date: January 15, 2024
Department: Engineering and Public Works
Report No.: EPW-2024-01
Prepared by: Steve Morriss, Drainage Superintendent
Submitted by: Jake Straus, Director of Engineering and Public Works
Approved by: Trisha McKibbin, Chief Administrative Officer

SUBJECT: Ballantine - Christina Road Drain 2023 – Report Consideration Meeting

RECOMMENDATION: THAT: Council receive Report EPW 2024-01 for information; and further THAT: Council adopt the Engineers Report for the Ballantine – Christina Road Drain 2023 and give first and second reading to provisional By-law # 01-24 for the project.

BACKGROUND:

A petition for new drainage works was received by the Municipality of Strathroy-Caradoc on November 12, 2021. Council accepted the petition on December 6, 2021 and appointed Spriet Associates Ltd. to prepare the engineer's report.

The required on-site meeting was held on January 11, 2022 with the affected landowners to discuss the project where information was exchanged at that time and through later discussions. Landowners expressed concerns that the existing watercourse through has silted in over many years and no longer provides a proper sub-surface outlet. In addition, the owners have reported that the existing private tile outlets are located below the collected sediment levels and that the ditch bottom has risen significantly in the last 30 years. The owners requested that the engineers explore the possibility of improving and deepening the existing channel.

The engineer conducted investigations of the existing channel conditions on March 17, 2022 through March 18, 2022 with further data collected on July 11, 2023. The results determined that the open ditch requires improvement due to the following deficiencies:

- Inadequate surface and sub-surface outlet;
- Private tiles blocked by debris and beaver activity;
- Flat grades causing erosion.

On July 25, 2023, the municipality held an informal public meeting to present the preliminary design

and cost distribution. Further input was provided by the affected landowners 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:

- 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 networks.

ATTACHMENTS:

- Spriet Associates Ltd. Report and Plans on the Ballantine - Christina Road Drain 2023
- Provisional By-law 01-24 - Ballantine-Christina Road Drain 2023