

DATE: June 17, 2024
REPORT NO: PW-16-2024
SUBJECT: **Fifteen Mile Municipal Drain Maintenance**
CONTACT: Ray Vachon, C.E.T., Project Manager
Mike DiPaola, P.Eng., Director of Public Works & Recreation

OVERVIEW:

- The Fifteen Mile municipal drain was established in 1967.
- In 2008, the drain was improved and some new branches were created to accommodate drainage concerns.
- In June of 2023, The Niagara Region brought up drainage concerns at the HWY 20 and Rail underpass, which drains to Branch No. 6 and Rosedene Branch of the Fifteen Mile drain.
- A Notice of Request for Drain Maintenance was requested by the Region in August 2023, under Section 74 and 79 of the Drainage Act.
- Township’s Drainage Superintendent surveyed and evaluated the branches in question and determined maintenance is required due to sediment build-up.
- A tender will be posted in the summer of 2024 to complete the work.
- Once the work is completed, property owners upstream of the work that are assessed to the drain, will be billed their portion.

RECOMMENDATION:

1. That Information Report PW-16-2024 “Fifteen Mile Municipal Drain Maintenance” dated June 17, 2024 be received for information.

ALIGNMENT TO STRATEGIC PLAN: N/A

BACKGROUND:

The original Fifteen Mile Drain was established in 1967 pursuant to an Engineer’s Report submitted by Ralph E. Crysler. The drain at this time consisted of the Main Drain, Moote Branch, Felker Branch (now Branch 7), Fifteen Branch, Branches No 1 through 4, Rosedene Branch, and South Rosedene Branch.

In 2001, the Township requested a cleanout to upgrade some culvert capacity at several of the road crossings. The Region of Niagara also indicated ongoing flooding of Highway 20 underpass at the rail line.

In 2002, a field investigation and survey was undertaken for most of the drains within the Fifteen Mile Drain, including 2 new profiles; Branch No. 5, and No. 6.

In 2005, Spriet Associates was appointed by Council under Section 8 of the Drainage Act following a petition from the Township for drain improvements. The recommendations and proposed work in Spriet's report included approximately 16,700 metres of open ditch cleanout and construction, construction of farm and road culverts and sediment basins, and 458 metres of concrete tile drain. Construction was completed in 2008 at a total cost of \$574,192.

In June 2023, a representative of the Transportation Operation's department at the Niagara Region contacted the Township regarding ongoing drainage issues at the underpass of Regional Road 20 and the Rail Line. Over the period of 3 years, that section of road had to be closed over 8 separate instances for major rain events due to road flooding. Branch No. 6 and the Rosedene branch of the Fifteen Mile Drain are responsible to drain this area. Several site visits and discussions were had between the Region and Township staff, along with the Township's Drainage Superintendent, GM Blue Plan (GMBP).

On August 4, 2023, the Niagara Region submitted a Notice of Request for Drain Maintenance under Section 74 and 79 of the Drainage Act for Branch No. 6 and part of Rosedene Branch.

Following the request, GMBP collected survey data of Branch No. 6 and the downstream portion of Rosedene Branch, did an analysis, and submitted a technical memo to the Township in October 2023 detailing the findings and recommendations. Due to buildup of sediment in the drain, they recommended cleaning out Branch No. 6 and the downstream section of Rosedene Branch up to the culvert crossing at Rosedene Road, which is approximately 2,320 linear metres.

CURRENT SITUATION:

Based on the analysis and recommendations, the Township must comply with the Drainage Act and proceed with maintenance. Therefore, in the spring of 2024, GMBP submitted an application to the NPCA to permit the maintenance work to the drain, to be completed in the summer of 2024. The approved permit is forthcoming.

Shortly, the Township will be sending out letters to property owners that are assessed to the municipal drain informing them of the upcoming maintenance work. Following this, a tender will be posted to complete the work.

Once the maintenance work is complete, the Township's Treasurer will apply for a grant through that Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) for those that qualify. These grants will pay up to 1/3 the cost of maintenance to assessed properties that have a Farm Property Class Tax Rate designation, therefore lowering the costs for those property owners. Once the grants are approved, the Treasurer would

proceed to bill the costs of the drain maintenance work to all property owners that are assessed to the drain, and upstream of the work completed.

FINANCIAL IMPLICATIONS:

As per the Drainage Act R.S.O. 1990, expenditures related to the construction and maintenance of municipal drains are invoiced directly to the lands that contribute to and/or benefit from the drain. The rates are determined by the assessment schedule outlined in the Engineer's Reports for each drain. The initial costs of all maintenance activities are carried by the Township until the project is completed. Overall, the maintenance work is estimated to cost in the range of \$30,000 to \$50,000. Once complete, a grant application is sent to OMAFRA. Based on the grant monies received from OMAFRA, the net costs of the project are then invoiced to landowners assessed to the drain.

The Township contributes approximately 4% to this section of the municipal drain from its road network; therefore, some drainage costs will need to be absorbed by the Township's Traffic Operations and Roadside Maintenance Operating Budget. These costs should be minimal, estimated at approximately \$2,000.

INTER-DEPARTMENTAL COMMENTS:

This report has been reviewed by the Acting Director of Finance, Interim CAO/Treasurer, and the Clerk's Office.

CONCLUSION:

This report is to inform Committee and Council that municipal drain maintenance is forthcoming in 2024 on Branch No. 6 and Rosedene Branch of the Fifteen Mile Drain.

ATTACHMENTS:

SCHEDULE A - Fifteen Mile Drain & Proposed Maintenance Work Location

Prepared and Submitted by:



**Ray Vachon, C.E.T.
Project Manager**

Approved by:



**Donna DeFilippis, CPA, CA
Interim CAO/Treasurer**



**Mike DiPaola, P. Eng.
Director of Public Works & Recreation**