

DATE: May 31, 2021

REPORT NO: PW-15-2021

SUBJECT: **Mill Creek Drain Preliminary Report – Meeting to Consider**

CONTACT: Ray Vachon, C.E.T., Project Manager
Mike DiPaola, P. Eng., Director of Public Works & Recreation

OVERVIEW:

- On September 26, 2019, the Township received from Mr. Frank Svob, a Petition for drainage works under Section 4 of Drainage Act for the Mill Creek ditch, which is an open ditch in the area of Wiley Road and East Chippawa Road.
- On October 28, 2019 Council adopted a recommendation to move forward with the Petition under Section 5(1) of the Drainage Act.
- On December 16, 2019 Council appointed RJ Burnside to prepare a Preliminary Report for the Mill Creek Drain under Section 10 of the Drainage Act.
- On April 15, 2021, RJ Burnside submitted the Preliminary Report to the Clerks department, and a “Notice of Meeting to Consider the Preliminary Report” was sent to affected landowners and stakeholders.
- Staff recommends Council direct the Engineer to proceed with the Final Report.
- Staff recommends Council direct the Engineer to proceed with Scenario No. 2.

RECOMMENDATION:

1. THAT, Report PW-15-2021, dated May 31, 2021 regarding “Mill Creek Drain Preliminary Report – Meeting to Consider”, be received; and,
2. THAT, Council directs the Engineer to proceed with a Final Report; and,
3. THAT, Council directs the Engineer to proceed with Scenario No. 2.

ALIGNMENT TO STRATEGIC PLAN:

Theme #3

- **Strategic, Responsible Growth** - Welcoming new residents and businesses and respecting the heritage and rural character that people value.

BACKGROUND:

Landowner Frank Svob, who owns properties at Con BF PT Lot 26 and PT Lot 27, filed a "Petition for Drainage Works by Owners Form 1" with the Township in September 2019.

Since the early 1970s, the petitioner has farmed and maintained the two properties, including the cleaning and maintenance of the existing ditch (Mill Creek). The Mill Creek ditch crosses two (2) Township roads at three different locations, and flows across approximately eight properties before outletting into the Welland River in the Town of Pelham. At present time, the Mill Creek ditch is not meeting the drainage needs of the petitioner. The petition seeks to deepen and widen the existing watercourse. A map showing the location of the proposed municipal drain is located on page 69 (of 70) of the Preliminary Report in Appendix 'A'.

Following the filing of the petition, in October 2019 under report PW-20-2019, Council passed a motion to proceed with the petition, and notices were sent out to all affected landowners and stakeholders.

Under Section 5 of the Drainage Act, Council has 60 days to appoint an Engineer if a Section 4 petition moves forward. On December 16 2019, under report PW-25-2019, RJ Burnside was appointed as Engineer to proceed with a Preliminary Report.

Throughout 2020, the Engineer worked on the Preliminary Report which included a site meeting on August 6. All landowners potentially affected by this petition were invited. The list of attendees along with the minutes of this meeting are included in the Preliminary Report.

CURRENT SITUATION:

The Preliminary Report for the Mill Creek Drainage Petition was submitted by RJ Burnside on April 15, 2021. This report can be found under Appendix 'A'. As per the Drainage Act Section 10(2), the Clerk sent notices to all affected landowners and a copy of the Preliminary Report was available for viewing on the Township website or arrangements could be made to pick up a copy at the Township office.

The objective for this Preliminary Report is to review existing conditions, summarize input received from stakeholders, present options considered, estimate costs, and provide recommendations for Mill Creek Drainage Petition.

The Preliminary Report presents three drainage solutions which are summarized below.

Scenario No. 1 – No Construction

This scenario would involve proceeding to a final report only and would include:

- Establishing Mill Creek as a Municipal Drain under the Drainage Act, R.S.O. 1990, by identifying standards (plans, profiles, specifications) through a final Engineer's report adopted by a by-law; however, no physical work would be performed on the Mill Creek Drain.

- The report would include assessment schedules to be used to assess the initial costs, and for the cost of any future maintenance or repair work on the drain.
- Allowances covered under this report would be provided under Section 29 for Right of-Way and Section 30 for damages. The included allowance to establish the 3m buffer above both channel banks is approximately \$78,210, and will be credited proportionally to affect property owners, which will be determined in the final report.

In this scenario, the existing Mill Creek would be maintained in its current location and Grad; however, if works are required on the system in the future, it would be undertaken by the Township and cost-shared using the proportions in the assessment schedule(s) for maintenance.

Total cost for this option is \$235,000.00

Scenario No. 2 – Channel Cleanout & Bank Stabilization Only

The second scenario is identical to the first with the addition of construction items. Updated details of the construction process, cost estimates, etc., would be provided following a complete field survey and investigation as part of the scope of a final report prior to construction. This scenario would consist of the following:

- A clean out of the existing channel from the Welland River upstream through the most upstream Wiley Road Culvert, approximately 4,050 m in length. This would not include new excavation but the removal of sedimented material in the channel bottom to encourage flow through the entire system.
- Approx. 572 m of brushing and clearing to establish a 10 m width working space along the channel.
- Spot excavation would address minor high points within the channel to increase flow, especially in areas of low gradient.
- Stabilization of bank slumping, especially at channel bends, culvert inlets/outlets, and erosion prone areas of higher gradient. Supplied and installed approximate quantities included:
 - Over 500 m² of OPSS R-50 quarry stone rip-rap.
 - Over 10,000 m² of hydroseeding on channel banks.
- Environmental features such as sediment basins, riffle structures, and sediment control structures have been included in this cost as typical items used to offset environmental impacts from the works in order to meet the specific requirements of the individual reviewing agencies.
- Construction costs have been estimated approximately 10% higher than typical prices due to fluctuating bids in recent tenders.

The implementation of this option is conditional on receiving the necessary permits, approvals and authorizations from regulatory agencies. Currently, the NPCA does not allow new municipal drains within a wetland or wetland boundary therefore further discussions will be required with the agency.

Total cost for this option is \$410,000.00

Scenario No. 3 – Channel Deepening & Widening

The third scenario is similar to the second but includes additional costs for construction, engineering, and contingency due to an increased scope of work. Updated details of the construction process, cost estimates, etc., would be provided following a complete field survey and investigation as part of the scope of a final report prior to construction. This scenario would consist of the following:

- A deepening and widening of the existing channel from the Welland River upstream through the most upstream Wiley Road Culvert, approximately 4,050 m in length. This would include new excavation, and the modification of the existing channel (which is shallow in many locations) to a typical trapezoidal cross-section.
- Approximate dimensions of the new channel would be:
 - 1 m channel bottom width.
 - 2H:1V sideslopes.
 - Typical 1.5 m depth where possible.
- Approx. 526 m of channel relocation and filling along Wiley Road (Sta. 3+419 to Sta. 4+005).
- Approx. 703 m of brushing and clearing to establish a 10 m width working space along the channel.
- Stabilization of bank slumping, especially at channel bends, culvert inlets/outlets, and erosion prone areas of higher gradient. Supplied and installed approximate quantities included:
 - Over 650 m² of OPSS R-50 quarry stone rip-rap.
 - Over 18,000 m² of hydroseeding on channel banks.
- Culvert end erosion protection has been included in this estimate. Any costs to remove, reinstall, replace, improve/repair existing culverts or to add any additional crossings have not been included and are beyond the scope of this report; such items, if deemed necessary, would be addressed in the final report.
- Environmental features such as sediment basins, riffle structures, and sediment control structures have been included in this cost as typical items used to offset environmental impacts from the works in order to meet the specific requirements of the individual reviewing agencies.

The implementation of this option is conditional on receiving the necessary permits, approvals, and authorizations from regulatory agencies. As mentioned under Scenario No. 2, currently, the NPCA does not allow new municipal drains within a wetland or wetland boundary therefore further discussions will be required with the agency.

Total cost for this option is \$555,000.00

Scenario No. 4 – Do Nothing

There is a fourth scenario to consider, and that is to do nothing. Under this scenario, Council would decide not to proceed with a Final Report and a new municipal drain would

not be created. All costs associated with this petition to date would then be the responsibility of the Township. If the petitioners do not agree with Council's decision, they have the option to appeal to provincial Agriculture, Food and Rural Affairs Appeal Tribunal (Tribunal). The Tribunal would then have the final say on the matter.

OPTIONS:

The Meeting to Consider must include the opportunity for any of the original petitioners to withdraw their names from the petition and for any other affected landowner to add their names to the Section 4 petition (Section 10(3) of the Act).

At the Meeting to Consider, Council must decide to either direct the Engineer to prepare a Final Report or not to proceed with a Final Report. The following could occur after the affected landowners have had the opportunity to withdraw or add their names to the petition:

- If the Section 4 petition remains valid, but Council does not proceed to a Final Report, the petitioner(s) may appeal Council's decision to the Tribunal (Section 10(6) of the Act).
- If at the end of the meeting, the petition is no longer valid and Council does not proceed to a Final Report, the Drainage Act process stops and the cost of the Preliminary Report is assessed equally to each petitioned property, approximately \$26,000 after the 1/3 OMAFRA grant is applied. The 1/3 grant will apply to all the petitioners regardless of whether or not their properties are agricultural.

Township staff recommends that Council direct the Engineer to proceed with a Final Report and recommends the Engineer use Scenario No. 2; however, Council's decision must also take into consideration the responses of the affected landowners.

The key issue will likely be the cost of the project, particularly the cost to individual parcels. The estimated cost to a parcel will not be defined until a Final Report is completed and adopted by Council, at which time the assessments can be appealed to the Court of Revision. The difference between the estimated costs in the Preliminary and Final reports cannot be appealed.

FINANCIAL IMPLICATIONS:

To date, the Township has carried the costs associated with the Preliminary Report. If sufficient names are withdrawn from the petition so that it is no longer valid, these costs will be recovered from the original petitioners.

If the petition remains valid and Council directs the Engineer to proceed to a Final Report, the Township will continue to front-end all costs associated with the process until it is completed, at which time costs will be recovered based on the assessment schedules incorporated in the Final Report. The Township has the authority to add interest charges to the accrued costs.

If the petition remains valid and Council decides not to proceed with the Final Report, all costs related to this petition to date will remain the responsibility of the Township, which to date is approximately \$35,000.00. In this scenario the 1/3 OMAFRA grant does not apply.

INTER-DEPARTMENTAL COMMENTS:

This report has been reviewed by the Director of Finance, Clerks Department, and the CAO.

CONCLUSION:

In summary, Staff recommends that Council direct the Engineer to proceed with a Final Report and further recommends using Scenario No. 2 indicated in the Preliminary Report.

Prepared & Submitted by:



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Approved by:



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Approved by:



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