



TOWN OF INNISFIL STAFF REPORT

STAFF REPORT NO: DSR-050-16

DATE: April 20, 2016

To: Mayor, Deputy Mayor and Members of Council

From: Jason Inwood, Manager of Operations

Subject: South Innisfil Creek Drain

Cross Reference:

RECOMMENDATION:

That Council appoint R.J. Burnside as the Town's Drainage Engineer for the South Innisfil Creek Drain drainage works pursuant to the provisions outlined in the Drainage Act, R.S.O. 1990, c. D.17., and,

That Council approve the proposed work plan and fees schedule as outlined in Staff Report DSR-050-16 dated April 20, 2016 and the proposal submitted by R.J. Burnside with an upset limit not to exceed \$250,000.00 without further Council approvals and,

That staff undertakes a comprehensive review of funding options to address the fees associated with the R.J. Burnside's proposal and report back to Council with options and alternatives to address these expenditures.

BACKGROUND:

On January 6, 2016 Council and the public received a presentation from R.J. Burnside outlining the findings of the Phase 1 & 2 Peer Reviews and Staff Report DSR-08-16 (CR-002.16) from the Manager of Operations. Council directed staff to work with Dillion Consulting and bring a report back to Council outlining Dillon Consulting's proposal.

On February 17, 2016 DSR-022-16 (Manager of Operations) outlined the details of the discussion with Dillion Consulting and provided Council with options to move the project forward. Council Resolution CR-030-06.16 provided direction for staff to enter into negotiations with R.J. Burnside through a single source procurement to develop a proposal for completing a revised design and drainage report to the previously submitted Final Engineers Report completed by Dillon Consulting

Furthermore, staff was directed to bring a report to Council outlining R.J. Burnside's proposal to complete a revised design and drainage report including the associated expenses.

ANALYSIS/CONSIDERATION:

Following Council Resolution CR-030-06.16, staff has been actively working with R.J. Burnside to develop a detailed work plan for the South Innisfil Creek Drain improvements. Discussions and collaboration between the Town of Innisfil and R.J. Burnside has advanced Burnside's ability to develop and ultimately submit a detailed and comprehensive work plan to address the revised design and engineer's drainage report for the South Innisfil Creek Drain Improvement project.

Work Plan

The South Innisfil Creek Drain Improvements project is a very large and complicated project, with over 500 affected property owners and an already tested process arriving where we are today. Further, the extent of this undertaking comes with many unknown challenges, these include works associated with other agencies, the degree of the field work and technical analysis, the degree of the alterations to the design, usefulness of the Dillion data and the additional engineering works required to mitigate capital costs to the drain.

Burnside has proposed a multi-step plan that is detailed in their proposal. A brief overview of the work plan is provided below and is detailed in the Burnside proposal.

Procurement of Documentation from Dillon

A lengthy list of documentation as outlined below will be acquired from Dillion for possible use in future works and the new engineers report proposed through this report:

- Field survey
- Auto CAD drawings
- Hydrologic and hydraulic models
- Correspondence and documentation from the NVCA
- Correspondence from the Department of Fisheries and Oceans (DFO) including direction and approvals for the proposed works
- Environmental Impact Study
- Species at Risk Study
- Aquatic Assessments
- Assessment Schedules
- Assessment Roll Mapping

Steering Committee

Burnside has recommended through their proposal that a Steering Committee could be implemented to assist with providing input in determining the extent of the final works, design criteria and be utilized as a conduit for communications between property owners, the Town, the Agencies involved and the appointed Engineer.

The Steering Committee will provide support, guidance and oversight on the progress of the project. Further, a Steering Committee ensures accountability and transparency to this large and complex assignment. A list of recommended members for this Steering Committee is included in the proposal and should Council approve this scope of work, the committee will be assembled as quickly as possible.

Communications with the Public

The Drainage Act requires specific opportunities for the public to be involved within the prescribed process. Planning and achieving the required public consultations will be a coordinated effort between Town staff and resources, the Steering Committee and the appointed Engineer.

Ministry of Transportation of Ontario

Through the hydrologic and hydraulic modelling completed in the peer review process, indicators suggest that the Highway 400 crossings are having a significant impact on the upstream drainage. While the processes set out in the Drainage Act allow for a report to proceed and mandate that the crossings be replaced, Town staff and Burnside's believes a collaborative approach to addressing this hurdle is most effective and appropriate.

The outcome, including timing of any Highway 400 crossing improvements, has a significant impact on the balance of the proposed improvements to the South Innisfil Creek Drain. It is essential that this component of the work plan be addressed early in the process so suitable planning for the remainder of the drain can be executed accordingly.

Modelling

While modeling in any municipal drain project is expected, there are varying factors that need to be explored for this project. More specifically, modeling to determine what impacts Flood Area No. 1 actually has on flood conditions may have a significant financial impact on the proposed capital works.

Additionally, exploring grade lines of the drain and alternate design concepts require modeling to determine the most cost effective solution mitigating capital costs of the improvements.

Environmental

There is significant involvement required from the NVCA and DFO with respect to work for the South Innisfil Creek Drain. Further, any and all previous approvals for works have likely expired and with changes to DFO now being independent of the NVCA, we expect that a review of the species at risk assessments will require new studies to be completed.

Design Criteria for the Channel

The current Engineers report submitted by Dillion required the construction of earth berms on the top of the ditch banks to provide a channel cross section to accommodate water flows. As identified in the Peer Reviews, Burnside have expressed significant concerns with these design criteria.

A detailed review of the design criteria ensuring the cross sections are appropriate for the adjacent land uses will be undertaken and implemented into the new design. This review has the potential for significant cost savings to the project.

Farm Crossing Design

As previously noted in the Peer Review Reports, Burnside has expressed opportunities to de-scope the proposed farm crossings. A detailed review and design exercise will be undertaken to reduce the scope of these works and cut capital costs associated with crossings.

Drain Report

Upon completion of the detailed design and receiving the appropriate approvals, a final report will be prepared. The final report will provide the necessary documentation to advance the project to the final stages before construction. The final report will present the following:

- Construction drawings and specifications
- Calculations of the allowances payable to owners directly affected by the works
- Estimates of the construction and engineering costs
- Estimates of the additional costs to be included from the previous procedure
- Construction assessment schedule
- Maintenance assessment schedules

Schedule

In developing a schedule for the preparation of the South Innisfil Creek Drain project, a number of unknown factors present challenges in defining a set schedule. As outlined in Burnside's proposal, negotiations with MTO to address the highway 400 crossings could take a couple of months or it could extend to several months and all other work is contingent on the result of these discussions.

Outlined below is a proposed tentative schedule for the redesign and delivery of a new engineers report:

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| 1. Assignment and initial project start meeting | May 2016 |
| 2. Procurement and review of background information from Dillon | May – June 2016 |
| 3. Establishment and initial meeting of a Steering Committee | June – July 2016 |
| 4. Statutory Site Meeting as required by the Drainage Act (if required) | July 2016 |
| 5. Contact and discussions with MTO | June – October 2016 |
| 6. Additional Field Survey | August – October 2016 |
| 7. Modeling for hydrologic/hydraulic design and downstream impact | January – March 2017 |

8. Environmental design, submissions and approvals 2017	October 2016 – July
9. Farm crossing analysis and design	January – July 2017
10. Calculations of allowances to owners	June – July 2017
11. Preparation of Engineer's report 2018	June 2017 – October
12. Public Council Meeting to consider report	TBD
13. Appeals	TBD
14. By-law	TBD
15. Implementation of proposed improvements	TBD

Burnside's proposal outlines a number of key steps that ensure the processes related to developing a revised design and final engineers report are undertaken in a manner that fully engages all parties. There are key commitments to the land owners ensuring accountability and transparency in the proposal, specifically the monthly progress reporting and financial status updates will be made publicly available through communications to the land owners and posted on the South Innisfil Creek Drain page of the Town's web site. Additionally, a schedule of the next months planned activities will be reviewed and approved by Town staff then made available for public review.

Furthermore, Town staff and the appointed engineer are committed to providing Council and the affected land owners with status updates at all key milestones outlined in their proposal. These updates will be formally brought to the attention of Council and the land owners through correspondence for information or a formal staff report at regularly scheduled Council meetings.

OPTIONS/ALTERNATIVES:

Council has the option to:

1. Proceed with the existing final engineers report as submitted by Dillion Consulting. However, Council and the affected landowners have expressed concerns with the existing final engineers report.
2. Start the process over by tendering the required engineering services through a public procurement process.

FINANCIAL CONSIDERATION:

In light of a pending decision from Council to proceed with the recommendations outlined in this report, or, choose to explore either of the options or alternatives outlined above, Burnside's proposal and subsequent fees schedule have been included in this report as a confidential attachment.

The purpose of the confidential attachment is to protect the integrity of an open tendering process, should a public process be required.

If staff was to publicly release the proposal and fees schedule included in Burnside's proposal as part of this report, and, Council chose to explore other options, R.J. Burnside & Associates would be at a significant disadvantage in a public tender process. Because Burnside's proposal and fees would be part of a public record, all other potential firms would have access to their fees schedule creating an unfair disadvantage and compromising the purchasing process.

Should Council approve Burnside's proposal and fees schedule, staff will make Burnside's proposal and the attached memo a public document immediately following Council's approval.

Section 70 of the Drainage Act R.S.O. 1990, c. D.17, states that "the fees and expenditures of the engineer form part of the cost of the drainage works. R.S.O. 1990, c. D.17, s. 70." While the Town has the option to assess all or part of the costs of this undertaking against the assessed land owners, staff are actively exploring other alternatives for funding this portion of the works. Once staff has a fulsome understanding of what those options may be, a report will be provided to Council outlining what financial assistance may be available to assist in mitigating assessed costs to individual property owners.

CONCLUSION:

Staff recommend that Council approve the proposed work plan and fees schedule submitted by R.J. Burnside & Associates and proceed to appoint R.J. Burnside & Associates as the Town's Drainage Engineer for the South Innisfil Creek Drain drainage works pursuant to Section 78 of the Drainage Act, R.S.O. 1990, c. D.17.

PREPARED BY:

Jason Inwood, Manager of Operations

APPROVED BY:

Jason Inwood, Manager of Operations

Attachments:

Confidential Correspondence from R.J. Burnside & Associates dated April 11, 2016.