



Staff Report for Budget Committee of the Whole Meeting

Date of Meeting: November 10, 2020

Report Number: SRPI.20.022

Department: Planning and Infrastructure
Division: Infrastructure and Engineering Services

Subject: SRPI.20.022 - Muirhead Crescent and Stouffville Road Watermain and Sanitary Sewer Servicing

Purpose:

To seek Council's approval on the project timing changes as part of the Ten Year Capital Plan for Muirhead Crescent and Stouffville Road Watermain and Sanitary Sewer Servicing to residential properties and to re-engage the community to verify the support remains favorable.

Recommendation(s):

- a) That the Ten Year Capital Plan adjustments to reflect the project timing changes outlined in staff report SRPI.20.022 be received;
- b) That Budget Committee of the Whole provides direction to make the requested adjustments to the Capital Plan as outlined in staff report SRPI.20.022.
- c) That direction be provided to staff to re-engage the requesting municipal services on Muirhead Crescent and Stouffville Road subjected to 2016 petition to confirm that community support remains favorable.
- d) That staff report back to update council on the outcome of validating the community support for the local improvement

Contact Person:

Mohammad Kashani, Manager, Design and Construction, Extension 5479

Report Approval:

Submitted by: Kelvin Kwan Commissioner, Planning & Infrastructure

Approved by: Mary-Anne Dempster, City Manager

All reports are electronically reviewed and/or approved by the Division Director, Treasurer (as required), City Solicitor (as required), Commissioner and City Manager. Details of the reports approval are attached.

Page 2

Background:

In 2016, the Muirhead Crescent and Stouffville Road Local Improvement project gained status

The Muirhead Crescent and Stouffville Road Local Improvement is a project initiated by the area residents as a result of their desire to have municipal watermain and sanitary sewer servicing. Muirhead Crescent is a residential road located at the north/east quadrant of Yonge Street/Stouffville Road and serviced by water wells and septic tanks.

Residents petitioned the City for municipal servicing as part of a local improvement in 2016. The petition was successful and gained status in 2016 as it met the minimum thresholds required for Local Improvements for the 35 residential properties on Muirhead Crescent and Stouffville Road as part of SRCFS.16.003. (Attached as appendix A)

The budget for design was approved by Council in 2019 as part of the 2020 Capital budget deliberations

Following budget approval, the detail design proceeded and has recently met the 60% completion milestone. The approved budget for design is \$565,100 and to date \$229,000 has been spent. The current design on Muirhead Crescent includes typical smaller diameter pipes found in small residential areas (250mm sanitary sewer and 150mm watermain) and larger external trunk sewers and watermains.

Typically servicing to an area would be constructed by the first development-requiring infrastructure to support their development.

The Muirhead project is comprised of two components.

1. The local sewer and water infrastructure on Muirhead Crescent which distributes the services to individual properties and;
2. The mainline (trunk) sewer and water infrastructure which brings the services to Muirhead Cres;

The external servicing beyond the subject area to service to Muirhead Crescent is significant. Typically, the sewer would be constructed by the first development, which proceeded in the area requiring this infrastructure to service their development. Since servicing for Muirhead Crescent/Stouffville Road is proceeding in advance of development as part of the local improvement process, the cost for the external local trunk sanitary sewer along Yonge Street will form part of the total project servicing cost. A proportionate share (10% established as part of SREIS.14.004) of the sewer construction (based on contributing flows) will be borne by the impacted residents. The balance of the costs of the trunk sewers will be borne by the City utilizing Development Charge funds specifically allocated for this work. If Muirhead Crescent was serviced after a prospective development constructed the external trunks sanitary sewer, the Muirhead Crescent project would be allowed to connect to the existing local trunk sewer with no additional costs for the construction of the trunk sewer attributable to the residents.

Page 3

On August 28, 2020 the Provincial Places to Grow Act was updated and the future sanitary trunk sewer in question along Yonge Street is intended to accommodate the sanitary flows for the Muirhead community as well as future development.

SREIS.14.004 Servicing of Muirhead Crescent Area that explored the feasibility of servicing the Muirhead community was received for information and identified that the City previously undertook an Urban Master Environmental Servicing Plan (MESP) for the growth and intensification areas defined by the Official Plan along the Yonge Street corridor. That MESP identified that a new local trunk sanitary sewer will be required to service the growth areas established in the Official Plan as Regional Mixed-Use Corridor near Muirhead Crescent and that can accommodate the sanitary flows from the Muirhead properties.

Accommodating future growth is critical component of the trunk sewer. The model previously referenced in 2014 to appropriately size the trunk servicing is in the process of being updated. The Province recognized in their updated documents the challenges to increased demand for major infrastructure investments driven by population growth and the need to renew aging infrastructure, which resulted in an update to the Growth Plan for the Greater Golden Horseshoe area. The latest growth plan came into effect on August 28, 2020 and provides that regional planning forecast growth to 2051 rather than 2041 to enable better long term planning for major infrastructure.. This is a significant development since the Muirhead Crescent/Stouffville Road Local Improvement project gained status in 2016. The future sanitary trunk sewer is intended to accommodate the sanitary flows for the Muirhead community as well as future development.

Therefore the growth projections in the model used for the MESP require updating in accordance with the new Growth Plan and ensuing population and employment forecasts that are being prepared by the Region as part of their Municipal Comprehensive review to inform the external trunk servicing. This information is pending from the Region. The City Official Plan and the Urban Master Environmental Servicing Plan are estimated to be completed early in 2021. These two plans will inform and update the future development needs for this area and will allow verification that the mainline infrastructure is still appropriately sized to accommodate this planned growth or if it needs to be upsized.

The above noted developments may alter the demand for servicing allocation, and primarily impacts the design of the trunk sewers. In this scenario, the servicing for Muirhead Crescent (assuming the areas remains single family residential as it is today) would remain unchanged. However, by proceeding, the City could be installing the trunk infrastructure that may become obsolete, and not be able to accommodate the future growth in this area. In view of this new information, it would be in the best public interest to postpone delivery to ensure the pipe be sized appropriately since this portion of the project is funded by the City Development Charges. Should the design and construction proceed absent these updates the City would be responsible for costs for future alterations needed to support future growth.

Recent local area development potential

During detail design, staff became aware of a disclosure for perspective expressions of interest for development in the area. In this regard, a *Pre-Submission Meeting* held with City Planning staff concerning specific properties in the Stouffville Road/Muirhead

Page 4

Crescent area also included a concept plan providing input on how the broader area could be redeveloped with higher density buildings. At the time of preparation of this report, the development applications required to facilitate such development had not yet been received by the City.

Similarly Engineering staff were contacted by the developers' engineering consultant upon becoming aware of the local improvement project and shared their preliminary functional servicing plan for Muirhead Cres./Stouffville Road and the external trunk sewers on Yonge St. This demonstrated a potential for conflict with the City's current design and the proposal and staff continued to perform their due diligence to try to determine how the advancement of these plans would affect the City's project.

The imminence of that submission is unknown at this time, however should this development or any other future development proceed it may affect the design of the servicing for Muirhead Crescent beyond those previously identified from MESP updates.

Increase in project costs have resulted through the design process

The estimate provided as part of SREIS14.004 identified an earlier delivery date in the 10-year capital plan and the full extent of the project constraints are refined through the detail design process. The estimate is approximately 7 years old and is considered out of date.

Ontario Regulation 586/06 for Local Improvement Charges provides the ability for municipalities to recover costs associated with work performed for directly benefiting property(s). The amount that the municipality can recover for the work performed includes the following costs:

- Construction
- Engineering
- Land
- Reasonable administrative costs
- Interest in short and long term borrowing
- The estimate cost of incurring long-term debt

The variances are attributed to a deeper sewer system required to achieve gravity flow from the existing dwellings to the outfall trunk sewer on Jefferson Sideroad, which are more than double that of typical sewers, up to 11 metres. In order to construct this outfall trunk sewer, installation by micro-tunneling is required, a more costly method for the design and construction installation in comparison to typical open-cut method of installation. The current estimated construction cost for the trunk sanitary sewer from Muirhead Crescent to Jefferson Sideroad is \$5.74M of which 90% would be upfront costs borne to the City through development charges. The residents are responsible for 10% of the trunk sewer cost to design and construct this project and 100% of the internal servicing costs. The challenges presented in constructing the infrastructure on a Regional road allowance at significant depth, achieves slower rate of production and increases costs. The external connections to York Region's concrete pressure pipe watermain in the middle of Yonge St. also present challenges are reflected in the updated estimates. Therefore through the detail design process, the estimates at the

Page 5

60% milestone have been updated and reflect an increase in cost per property to \$91,600.

Additionally, as part of the regulatory approval process for municipal infrastructure, York Region approval is required for any work within the right-of-way and preliminary discussions have revealed a requirement to locate the trunk sewer beyond the regional right-of-way. York Region commented on the preliminary design that the proposed infrastructure will not be allowed within the current right-of-way which would then require the City to purchase easements within private property in order to construct the trunk sewer from Muirhead Crescent to Jefferson Sideroad. This will be an additional unforeseen upfront cost to the City. Ten percent which will be borne by the benefiting residents of Muirhead Crescent and Stouffville Road.

The approximate cost to construct (include engineering) the sanitary sewers and watermain servicing represent an increase and has been revised from the 2014 Staff Report SREIS.14.004 as follows:

Location/Service	Estimated Cost	Resident Cost	Number of Lots to be Serviced	Cost/Lot
Local Sanitary Sewer Muirhead/ Stouffville	\$1,210,000	\$1,210,000	34	\$35,600
Yonge Street Sanitary Trunk Sewer	\$5,740,000	\$574,000 (10% of Total)	34	\$16,900
Sub-Total Sanitary Sewers	\$6,400,000	\$1,784,000	34	\$52,500
Muirhead and Stouffville Watermain	\$1,330,000	\$1,330,000	34	\$39,100
Easement Acquisition	TBD	TBD (10% of Total)	34	TBD
Total Cost/Lot	\$7,600,000	\$2,584,000	34	\$91,600*

**Costs are exclusive of HST, Land, administrative costs, interest in short and long term borrowing and the estimate cost of incurring long-term debt and are subject to reconciliation of final design and construction costs.*

Plan for Moving Forward

The 2016 community petition verified in staff report SREIS16.0043 had been signed by 25 of 34 residents (73.5%) approving the request for services. Since the petition, six

Page 6

properties have changed ownership and several have been listed for sale as of October 20, 2020.

The process for acquiring easements typically adds at minimum one year to a project delivery as negotiations are traditionally prolonged. In order to mitigate exposure, municipal infrastructure projects are only tendered once all regulatory approvals have been received and property matters resolved. These issues will influence schedule of delivery of design and construction. In view of the increased cost estimates, it would be beneficial to re-engage the community to verify if the community interest and support remains favourable for this local improvement.

Since several years have elapsed between the time the project gained status and approval to proceed with design, combined with the increased costs and changes in ownership it would be beneficial to re-engage the community to verify if community interest for the still exists.

Adjustments to Capital Plan

The optics of proceeding to construction, absent of growth information required by the newly approved Provincial Growth Plan Amendment (2020) independent of developments applications may not be considered prudent and consistent with the City's strategic goals. The population and employment forecasts that are being prepared by the Region as part of their Municipal Comprehensive Review that will inform the external trunk servicing.

By proceeding, the City could be installing infrastructure that may become substandard to meet future needs. The throwaway cost for this infrastructure is to be borne by the residents, which is not in the best interest of the Community.

By adjusting the construction to year 2023, the City would have sufficient time to collect and finalize required information from the Official Plan, MESP, property acquisition imposed by York Region in 2021, and determine status of any potential development as well as validate support by the community in view of time elapsed since project status and the changes in ownership. There would not be sufficient time to close the loop on on these influencing factors in time to meet the capital budget schedules to inform the 2022 budget process, therefore, 2023 would be a more realistic timeline.

Financial/Staffing/Other Implications:

There are no financial or staffing implications associated with this report.

Relationship to the Strategic Plan:

The report summarizes the design work that has been completed to prepare the area for the construction of municipal servicing and is aligned with Goal Two of the Strategic Plan – Better Choices in Richmond Hill by identifying and preparing for necessary infrastructure projects, and Goal Four of the Strategic Plan – Wise Management of Resources in Richmond Hill by serving as a role model in municipal management.

Page 7

Conclusion:

It is anticipated that the city would have all the relevant information to assess the timing, budgetary and scope implications for this project during 2021. Adjusting the timing for delivery as part of the City's Ten Year Capital Plan for Construction to 2023 will determine the best manner to proceed while re-engaging the community to validate if the interest in the project still exists in view of the property ownership changes and increases in costs to the property owners.

Attachments:

- Appendix A - SRCFS.16.003
- Appendix B - SREIS16.0043

Page 8

Report Approval Details

Document Title:	SRPI.20.022 Muirhead Crescent and Stouffville Road Watermain and Sanitary Sewer Servicing.docx
Attachments:	- Appendix A - SRCFS.16.003.pdf - Appendix B - SREIS 16 043.pdf
Final Approval Date:	Nov 3, 2020

This report and all of its attachments were approved and signed as outlined below:

Bob Levesque - Nov 3, 2020 - 10:13 AM

Paolo Masaro - Nov 3, 2020 - 10:17 AM

Kelvin Kwan - Nov 3, 2020 - 10:54 AM

MaryAnne Dempster - Nov 3, 2020 - 12:11 PM