

Date: May 10, 2021	Originator's files:
To: Chair and Members of General Committee	
From: Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works	Meeting date: May 26, 2021

Subject

Increase to Contract with Matrix Solutions Inc. for the Dixie-Dundas Flood Mitigation Study (Wards 1 and 3)

Recommendations

1. That the Purchasing Agent or designate be authorized to increase the contract with Matrix Solutions Inc. (Procurement No. PRC001249) to include additional Consulting services for the Dixie-Dundas Flood Mitigation Study by an estimated additional amount of \$520,000 to an estimated revised total contract value of \$1,020,000 (excluding taxes);
2. That funding of \$520,000 be transferred from the Stormwater Capital Reserve Fund (35992) to PN18-015, Little Etobicoke Creek Channel Improvement Dixie/Dundas Area, for a revised net budget of \$1,220,000; and
3. That all necessary bylaw(s) be enacted.

Background

The City of Mississauga has previously experienced extreme rainfall events which have caused flooding-related incidents and associated damages to private properties, municipal infrastructure in the form of watercourse erosion, trail damage and flooding at City facilities and infrastructure under other jurisdictions.

The community in the Dixie Road and Dundas Street East area within the Little Etobicoke Creek watershed has been one of the focal points for flooding resulting from water overtopping the banks of the creek. There have been documented incidents of water spilling onto nearby Queen Frederica Drive during extreme storm events causing flooding and creating difficult conditions for vehicular and pedestrian traffic.

In 2019, the City retained a consultant team led by Matrix Solutions Inc. ("Matrix") and initiated the Dixie-Dundas Flood Mitigation Study (Procurement No. PRC001249) to address flooding from Little Etobicoke Creek, and in doing so protect existing residences and businesses.

Recommendations resulting from this study may also enable future urban growth and intensification along the Dundas Street corridor as envisioned in the Dundas Connects Master Plan. The Flood Mitigation Study is comprised of two stages. The first stage includes a feasibility investigation to narrow down viable technical solutions that could be implemented to address flooding. The second stage, currently underway, involves undertaking a Municipal Class Environmental Assessment, culminating in a preferred solution and the subsequent completion of a preliminary design.

Over the course of the Environmental Assessment process, it was determined that, given the complexity of the flooding issues, additional analysis above the originally planned works would be required to ensure adequate and full consideration of project impacts. As this is outside the scope of consulting services being provided by Matrix, this report is to seek authority from Council to increase the contract amount with Matrix in accordance with Purchasing By-law No. 374-2006.

Comments

Through the work carried out to date in the Dixie-Dundas Flood Mitigation Study the Dixie Road crossing at Little Etobicoke Creek has become a key area of focus. Preliminary hydraulic modelling revealed that the proposed solutions currently being considered in this area are complex and may have impacts all the way downstream to Dundas Street East if not carefully thought out. Based on these findings, an expansion of the current Environmental Assessment study is necessary to seek solutions that would properly address flooding as well as other stormwater-related issues within this community. As such, the following additional study components, outside of Matrix's original consulting assignment, are being proposed:

- Identification and assessment of improvements at the Dundas Street crossing of Little Etobicoke Creek, including tasks such as stakeholder engagement, technical studies, hydraulic modelling, developing alternative solutions, selecting a preferred solution and preliminary design;
- Identification and assessment of watercourse erosion control solutions for Little Etobicoke Creek upstream and downstream of Dundas Street, including tasks similar to the above component; and,
- Additional detailed assessment of improvements at the Dixie Road crossing of Little Etobicoke Creek, including hydraulic modelling and developing alternative solution designs.

It should be noted that the proposed watercourse erosion control works identified above are scheduled in the 2021 Capital Budget and Forecast for design in 2023. By expanding the focus of this study to include the design component of this watercourse erosion control project, substantial cost and time efficiencies would be realized.

The Matrix team has assisted in effectively managing the project to this stage. In order to satisfactorily administer the contract, additional consulting services are required as outlined in Appendix 1. This team has specialized knowledge of all facets of the project and is well positioned to see the project to completion in a cost-effective manner. Staff recommends that Matrix undertake this additional work on a single source basis, as provided for in Schedule 'A' of the Purchasing By-law, Section 1 (b) (iv) *the solicitation of competitive Bids would not be economical to the City*. The Purchasing By-law also requires Council approval if the amendment is of a value that, on its own or if added together with any and all previous amendments made to the Original Commitment is greater than 20% of the Original Commitment and greater than \$100,000.

It is recommended that the existing contract with Matrix be amended to include the additional consulting services for the Dixie-Dundas Flood Mitigation Study in accordance with Purchasing By-law Section 18(d) for amendments to High Value Acquisition Commitments.

Strategic Plan

The development of this flood mitigation study falls within the *Connect* Strategic Pillar under its strategic goal to *Build and Maintain Infrastructure*.

Financial Impact

PN18-015, Little Etobicoke Creek Channel Improvement Dixie/Dundas Area, requires additional funding of \$520,000 to increase the existing Matrix consulting contract. Funding is available within the Stormwater Capital Reserve Fund (35992). The additional funding will increase the current net budget of PN 18-015 from \$700,000 to \$1,220,000.

Conclusion

An increase to the existing contract with Matrix is required for additional consulting services that involves expansion of the Dixie-Dundas Flood Mitigation Study to include the investigation of potential improvements to the Dundas Street crossing and channel corridor. The contract with Matrix was established competitively and continues to represent good value while Matrix is well-resourced to accommodate such additional work.

Attachments

Appendix 1: Dixie-Dundas Flood Mitigation Study – Additional Consulting Services Budget



Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works

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