

Date: 2021-10-04

Subject: Request to Begin Procurement for Engineering Services for the Improvements on McVean Drive between Castlemore Road and Countryside Drive – Ward 8 & 10

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Report Number: Public Works & Engineering-2021-1080

Recommendations:

1. That the report titled: Request to Begin Procurement for Engineering Services for the Improvements on McVean Drive between Castlemore Road and Countryside Drive – Ward 8 & 10 to the Committee of Council Meeting of October 27, 2021, be received; and,
2. That the Purchasing Agent be authorized to commence procurement to provide Engineering Services for the Improvements on McVean Drive between Castlemore Road and Countryside Drive.

Overview:

- The City of Brampton Transportation Master Plan (2015) identified the section of McVean Drive between Castlemore Road and Countryside Drive for widening from a 2-lane rural cross-section to a 4-lane urban cross-section.
- An Environmental Assessment (EA), completed in 2017, assessed capacity improvements on McVean Drive between Castlemore Road and Countryside Drive. The approved EA recommends reconstruction of McVean Drive from a 2-lane rural cross-section to a 4-lane urban cross-section.
- Based on further evaluation done in 2021, staff recommend additional modifications consistent with Complete Streets and Vision Zero principles to improve safety for all users and to support people moving capacity by promoting sustainable transportation modes. The design will include reduction of vehicular lane widths and curb radii, lowering design

and posted speeds, installing multiuse paths on both sides of the road and cross rides (dedicated bicycle crossings) at signalized intersections, and enhanced streetscaping and landscaping.

- **The detailed design services are anticipated to start in spring 2022, followed by property acquisition, utility relocation, completion of detailed design, approvals and obtaining permits from regulatory agencies. Construction is planned for 2025, subject to budget approval by Council.**

Background:

The City of Brampton 2006 Official Plan classifies the section of McVean Drive between Castlemore Road and Countryside Drive as a minor arterial road with an ultimate right-of-way (ROW) width of 36 meters.

The City's Transportation Master Plan (2015) identified this section of McVean Drive for a 4-lane urban cross-section from the current 2-lane rural cross-section. A Class Environmental Assessment (EA) completed in 2017 recommended that this section be upgraded to a 4-lane urban cross-section.

In preparation for detailed design, staff reassessed the long-term projected vehicular demands for the corridor that were presented in the EA using an updated and refined travel demand forecasting model for the 2031 and 2041 horizon years to inform the decision on adding new lanes.

The reassessment was also informed by the City's shift in policy direction arising from Vision 2040, transportation best practices around "complete streets" and the Vision Zero initiative, to prioritize the needs of vulnerable users and sustainable transportation modes, and to plan our communities around people rather than cars.

Further to this reassessment, staff recommended the following improvements to address capacity and safety needs for all road users: complete streets design considerations, incorporating two vehicular lanes per direction, structure improvements, new storm sewer, intersection improvements, urban cross-section, multiuse paths on both sides of road, new streetlights, bicycle and pedestrian detection system and landscape/streetscape enhancements.

The preliminary detailed design from the 2017 EA has been updated to reflect the City's 2040 Vision and objectives regarding Vision Zero. Supportive design elements to moderate vehicular speeds (and improve safety of all road users) include narrower vehicular lane widths, reduced curb radii, and lowered design and posted speeds. This will help ensure the provision of an integrated transportation network (including walking, cycling and transit). The detailed design for multimodal capacity and safety improvements on McVean Drive is anticipated to start in spring 2022.

Current Situation:

Informed by the 2015 Transportation Master Plan, the 2017 McVean Drive EA and the ten-year capital program endorsed by Council in 2018, the improvement of McVean Drive between Castlemore Road and Countryside Drive to an urban cross-section includes enhanced landscaping, streetscape improvements, multiuse paths on both sides, and four vehicular lanes. Construction is scheduled to start in 2025.

Given the complexity of the project and limited internal resources to proceed, staff are recommending that an external consultant lead the detailed design work. The following scope is required: traffic signal, street light, pavement markings/signage, update to storm water management, landscape, archeological, structural, sub surface utility engineering, geotechnical, pavement evaluation, excess soil management and environmental (hydraulics, geomorphology and terrestrial) investigation.

This report seeks Council's authorization to commence procurement for Engineering Services to undertake detailed design for capacity improvements on McVean Drive between Castlemore Road and Countryside Drive as recommended in the Environmental Study Report. A key plan showing the project limits is attached part of this report as Appendix "A".

Scope of Project:

The scope of work for this project is summarized as follows:

- Detailed design of the McVean Drive improvement including but not limited to the following: civil (road and storm sewers) design utilizing multiuse paths on both sides of road, structural, storm sewers (major and minor flow), traffic signal, streetlight, pavement marking/signage, update to storm water management, archeological, environmental (hydraulics, geomorphology and terrestrial), and landscaping design, geotechnical and subsurface utility engineering investigation;
- Coordination with the existing adjacent subdivisions' grading and driveways to ensure compatibility;
- Coordination of proposed underground services within the project limits with the Region of Peel, Trans Canada Pipe Line, National Energy Board and other utilities providers;
- Development of construction staging and traffic management plans;
- Obtaining approvals for watercourse crossings/relocation/expansion from relevant approving agencies;
- Preparation of new street light design, temporary and permanent traffic signals complete with active transportation infrastructure, signage and pavement marking plans;
- Early identification of property acquisitions for all utility relocation/installation and road works requirements;

- Review of the existing stormwater management (SWM) requirements and confirmation of its suitability for the anticipated works;
- Coordination with utility relocation and ensuring completion prior to project tender;
- Provision of Archaeological Assessment Stage 2 study and consecutive assessments, if required, with necessary clearance;
- Preparation of Heritage Impact Assessments for cultural heritage resources identified in the 2016 ESR;
- Consultation with Indigenous Communities if required part of the archeological investigation;
- Review the need for City owned fiber optics lines (PSN).

Project Timing:

The anticipated project schedule is as follows:

Council Approval	Oct 27 2021
Issue RFP documents	Winter 2021
Issue Purchase Order	Beginning of 2022
Property acquisition commences	Summer 2022
Utility relocation commences	Beginning of 2024
Utility relocation completion	End of 2024
Finalize design and tender documents	Spring 2025
Tendered for construction	Spring 2025

Corporate Implications:

Financial Implications:

Sufficient funding is available within the Public Works & Engineering approved Capital Budget for this initiative.

Purchasing Implications:

A public procurement process will be conducted and the Bid submissions shall be evaluated in accordance with the published evaluation process within the Bid Document. Purchase approval shall be obtained in accordance with the Purchasing By-law.

All communication with Bidders involved in the procurement must occur formally, through the contact person identified in the Bid Document.

Term of Council Priorities:

This reconstruction of McVean Drive from Castlemore Road to Countryside Drive aligns with Brampton's 2040 Vision – Transportation and Connectivity, and Vision Zero initiative.

Conclusion:

The report summarizes the scope of the McVean Drive capacity improvement project, available funding and the tentative schedule for the detailed design and construction of the project.

This report recommends that the Purchasing Agent be authorized to commence the procurement as described in this report.

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Attachments: Appendix 'A' – Key Plan