

Report to: General Committee Meeting Date: October 22, 2024

SUBJECT: Award of Proposal 142-R-24 - Consulting Services for Pre-

Design and Detailed Design for Elgin Mills Road Widening -

Woodbine Avenue to Warden Avenue

PREPARED BY: Alice Kam, Capital Works Engineer, Ext. 2014

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Projects, Ext. 2360

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RECOMMENDATION:

- 1) That the report entitled "Award of Proposal 142-R-24 Consulting Services for Pre-Design and Detailed Design for Elgin Mills Road Widening Woodbine Avenue to Warden Avenue" be received;
- That the contract for consulting engineering services for pre-design and detailed design for Elgin Mills Road widening from Woodbine Avenue to Warden Avenue be awarded to the highest ranked, lowest priced proponent, WSP Canada Inc. in the amount of \$1,972,952.11 inclusive of HST;
- That allowances in the amount of \$825,649.71 inclusive of HST, be established for subsurface utility engineering investigations during the design, permit to take water, environmental monitoring, CCTV inspection, additional engineering survey, utility relocation, overall benefit plan for permitting for Redside Dace, technical memorandums, Yorknet fiber optic conduit design, additional public consultation, tree clearing, Stage 3 archaeological investigation, foundation investigation and soil quality sampling which may be required and approved by the Director of Engineering;
- 4) That a 10% contingency in the amount of \$279,860.18 inclusive of HST, be established to cover any additional consulting services to deliver the project and that authorization to approve expenditures of this contingency amount up to the specified limit be in accordance with the Expenditure Control Policy;
- That the Engineering Department Capital Administration fee in the amount of \$277,061.58 be transferred to revenue account 640-998-8871 (Capital Administration Fee);
- 6) That the cost in the amount of \$3,355,523.58 (\$1,972,952.11+ \$825,649.71+ \$279,860.18 + \$277,061.58) be funded from capital account 083-5350-21181-005 and York Region with available budget of \$2,418,661.00;
- 7) That additional allowances in the amount of \$200,000.00 be established for engagement with Indigenous communities, permit applications and additional consultation with the public, FUA developers and regulatory agencies

- 8) That the budget shortfall in the amount of \$1,136,862.58 be funded from the Development Charges Reserve; and,
- 9) That Staff be authorized and directed to do all things necessary to give effect to this resolution

PURPOSE:

The purpose of this report is to obtain Council approval to award the contract for predesign and detailed design services for the Elgin Mills Road Widening from Woodbine Avenue to Warden Avenue, including approval of additional funding for the award and allowances for Indigenous engagements, permit applications and additional consultation with the public, FUA developers and regulatory agencies.

BACKGROUND:

Elgin Mills Road East from Woodbine Avenue to McCowan Road is an existing collector road that is approximately 6.8 km in length with a 20.0m right-of-way. This section of road includes the Hamlet of Victoria Square and is within the Markham's Future Urban Area (FUA). The section of Elgin Mills East Road west of Victoria Square Boulevard is under York Region's jurisdiction and the section east of Victoria Square Boulevard is under City of Markham's jurisdiction.

In May 2018, staff prepared a report to the Development Services Committee titled "Municipal Road Transfer – Elgin Mills Road Transfer and Donald Cousens Parkway Extension Transportation Planning Study (Wards 2, 5 and 6)" and received Council approval to request York Region to assume Elgin Mills Road between Victoria Square Boulevard and York-Durham Line into the York Region Road system. However, at that time York Region had advised Markham staff that the Elgin Mills Road widening could only be accommodated in the later part of their 10-year capital program. The Region added that there are priority projects within the York Region that are included in their 10-year capital program that have been already approved. As the Region's timeline would not be able to meet the future growth demands in the area, Markham staff prepared a report to the Development Services Committee in June 2019 titled "Elgin Mills Road Municipal Class Environmental Assessment (MCEA) (Wards 2, 5 and 6)" and received approval to undertake the Elgin Mills Road EA, design and construction before transferring Elgin Mills Road to York Region.

Environmental Assessment Study

In October 2019, the city initiated a Schedule C MCEA (EA) study for the widening of Elgin Mills Road. The approved scope of work for the Elgin Mills Road Widening EA was from Victoria Square Boulevard to McCowan Road. At the commencement of the EA, York Region requested that the city include the section of Elgin Mills Road from Woodbine Avenue to Victoria Square Boulevard in the study. This section of Elgin Mills Road is within the York Region's jurisdiction. York Region provided the city with a purchase order to cover the cost of this additional work as part of the EA Study.

An Environmental Study Report (ESR) entitled "Elgin Mills Road, Schedule C Municipal Class Environmental Assessment (EA) Study (Wards 2, 5 and 6)" was prepared as part of the EA study. The preferred alignment and design concept of Elgin Mills Road from Woodbine Avenue to McCowan Road, as set out in the ESR was presented to and endorsed by the City's council in December 2023. City staff were authorized to issue a Notice of Study Completion and file the EA Study with the Ministry of the Environment, Conservation and Parks (MECP). The Notice of Completion was sent out on January 12, 2024, and the ESR was posted for public review for a 30-day review period that ended on February 12, 2024.

This Request for Proposal is for the detailed design of the Elgin Mills Road widening from Woodbine Avenue to Warden Avenue (Phase 1). Detailed Design for the section from Warden Avenue to McCowan Road (Phase 2), is tentatively planned to start in 2026/2027, pending budget approvals.

Bid Information (RFP 142-R-24):

Bids closed on	June 21, 2024
Number picked up the Bid document	9
Number responded to the Bid	3

Proposal Evaluation:

The evaluation team was comprised of staff from the Engineering Department and facilitated by staff from the Procurement Division. The city released this RFP utilizing a two-stage evaluation process.

Stage 1 – Mandatory and Technical Evaluation

Under Stage One, proponents were required to demonstrate their experience based on the following mandatory requirements:

- 3 projects showcasing urban sewer and/or watermain experience based on a construction value ≥ \$10.0 M each;
- 3 projects showcasing combined roadway and/or sewer/watermian experience based on a construction value ≥ \$25.0 M each;
- 2 roadway projects showcasing road widening and/or road reconstruction based on a construction value ≥ \$10.0 M each;
- 2 projects with structural rehabilitation, replacement and/or new structure based on a construction value ≥\$10M each);
- Management of a minimum of 2 multi-year projects with multiple design components;
- 2 surface stormwater management facilities (wet or dry ponds)
- 2 projects that required hydraulic modeling;
- The Design Lead / Project Manager must be a Professional Engineer with a minimum 7
 - years' experience in the design of municipal linear projects of a similar size and complexity and have project management experience on at least 3 projects with

- multiple design components with multiple stakeholders of similar size and complexity;
- The Modeling/Hydraulics Specialist must have a minimum 7 years' experience in Stormwater / CSO management;
- The Structural Specialist must be a Professional Engineer with a minimum 7 years' experience in structural engineering design especially water-crossing structures;
- The Geotechnical Specialist must be a Professional Engineer with a minimum 7 years' experience in geotechnical and foundation engineering with proven experience in foundations adjacent to water courses;
- The Environmental Planner must have a minimum 5 years' experience in environmental planning with extensive knowledge in First Nations consultation, Endangered Species Act, and required environmental permits; and
- The Transportation Specialist must have a minimum 7 years' experience in transportation planning and traffic engineering

All 3 proponents met the mandatory evaluation criteria and were further evaluated under the technical evaluation. Under the technical evaluation, proponents were assessed based on pre-established evaluation criteria as outlined in the Request for Proposal (RFP); 25% corporate experience, project team and structure, 25% project understanding and approach, 20% project resources and workplan, and 5% proposal structure and quality. Proponents that did not achieve a technical score of 56.25 out of 75 points (75%) would not proceed any further and their financial proposal would remain sealed in the bidding system. Two proponents achieved the minimum technical score to proceed to Stage 2 – Financial Evaluation.

Stage 2 – Financial Evaluation

Under Stage 2 – Financial Evaluation, Proponents were assessed based on their Bid Price exclusive of HST. The highest ranked proponent was determined by adding the points awarded under Stage 1 Technical Evaluation and Stage 2 Price Evaluation.

Proponent	Technical Score	Financial Score	Total Score (out of 100)
WSP Canada Inc.	72.00	25.00	97.00

Bid prices ranged from \$2,798,601 to \$3,268,621 inclusive of allowances and HST.

DISCUSSION:

As multiple FUA developers are moving forward with their developments, it is crucial for the city to widen Elgin Mills Road to meet the future growth demands in the area. The city is currently planning to start the detailed design for phase 1 (Elgin Mills Rd – Woodbine Avenue to Warden Avenue) by November 2024 and start construction by May 2027. The budget shortfall can be attributed to the following three factors:

1. Time Gap between Requesting Detailed Design Budget and Award:

The EA study for the widening of Elgin Mills Road was awarded in March 2020 with an initial estimated completion date of Q4 2021, and hence the budget request for

detailed design was requested in 2021 to immediately start after EA completion. The EA completion was delayed due to several unforeseen challenges including; the COVID-19 global pandemic, design challenges and changes to address issues with FUA developers, co-ordination with York Region's Kennedy Road and Warden Avenue Widening at the overlapping intersections on Elgin Mills Road and design changes to accommodate adjacent property owners' requests (e.g. Impacts to driveways), coupled with City's staff turnover and resource issues from the EA Design Consultant. The EA study was finally completed in Q1 2024. Pre-design and detailed design could only be finalized with a confirmed EA and recommended design. Despite efforts to fast-track the RFP process, the EA was delayed for several years and during the past couple of years, there has been inflation and significant cost increase of engineering services. The time gap between requesting the detailed design budget and the award is thus the largest contributing factor of the budget shortfall.

2. Revisions to Design Scope

Revisions to design scope is another factor for the budget shortfall. These revisions include the addition of watermain and sanitary sewer and the need to conform with new permit requirements (excess soil, endangered species act, floodplain analysis, climate change mandate, etc.) from approval agencies as part of detailed design. In the 2021 budget request, neither watermain nor sanitary sewer was included as part of the detailed design budget request. Subsequently, the water main on Elgin Mills Road from Street 'A' to Warden Avenue was added to the project scope to support City-wide's growth. In addition, the sanitary sewer on Elgin Mills Road between Berczy Green Drive and Thomas Lynch Street and associated connections were also added to the design scope in response to the need for ongoing FUA developments. Furthermore, there have been a number of changes regarding regulations and permitting requirements from various regulatory agencies including MECP, TRCA, DFO etc. To fulfill these requirements, additional design efforts are required. One example is the change of excess soil management requirement which calls for additional reporting and material testing during design.

3. Additional Allowance

The third factor contributing to the budget shortfall is the need of additional allowance for engagement with Indigenous communities, permit applications and additional consultation with the public, FUA developers and regulatory agencies. The City's EA project team has engaged Indigenous Communities throughout the EA and will continue to engage with them during the detailed design phase. Additional budget is requested to support engagement activities during the detailed design phase including providing capacity funding to facilitate engagement as the City deems necessary, and to retain external legal counsel to provide legal advice and expertise to support the City's engagement. In addition, the allowance is required for additional consultation with the public, FUA developers and regulatory agencies including TRCA during the detailed design phase of the project.

WSP Canada Inc. have the required experience, qualifications and capability to undertake a detailed design study of this size and scope and have demonstrated a comprehensive understanding of the project requirements, reflected in the proposed detailed methodology and work plan. The bid price from WSP is comparable with other York Region projects with similar size and complexity and it is deemed reasonable. In addition, the hourly rates proposed by WSP are in line with other recently awarded City's projects. It is recommended to award the contract for the pre-design and detailed design services for the Elgin Mills Road Widening from Woodbine Avenue to Warden Avenue (Phase 1).

FINANCIAL CONSIDERATIONS

FINANCIAL CONSIDI	LIMATIONS		
Recommended	WSP Canada Inc. (Highest ranked / Lowest priced proponent)		
proponent			
Current budget	\$1,768,661.00	Elgin Mills -Victoria Sq. Blvd to McCowan Road	
available		(Design) 083-5350-21181-005	
	\$ 650,000.00	York Region*	
	\$2,418,661.00		
Less cost of award	\$1,972,952.11	Consulting Services (Incl. of HST)	
	\$ 825,649.71	Cash Allowances**	
	\$ 279,860.18	Contingency @ 10%	
	\$3,078,462.00	Cost of award (Incl. of HST)	
	\$ 277,061.58	Internal Management Fees	
	\$3,355,523.58	Total Cost	
Budget remaining	(\$936,862.58)		
after this award			
Request for	(\$200,000.00)		
Additional Allowance	(\$200,000.00)		
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Total shortfall	(\$1,136,862.58)	***	

^{*} Recovery amount expected from York Region upon completion of the project.

OPERATING BUDGET AND LIFE CYCLE IMPACT:

This award has no financial impact to the Operating Budget and Life Cycle Reserve. This award is funded by York Region and project 21181 (funded by Development Charges).

HUMAN RESOURCES CONSIDERATIONS

Not applicable

^{**} The cash allowance is for subsurface utility engineering investigations during the design, permit to take water, environmental monitoring, CCTV inspection, additional engineering survey, utility relocation, overall benefit plan for permitting for Redside Dace, technical memorandums, Yorknet fiber optic conduit design, additional public consultation, tree clearing, Stage 3 archaeological investigation, foundation investigation and soil quality sampling.

^{***} The budget shortfall in the amount of (\$1,136,862.58) will be funded from the Development Charges Reserve.

ALIGNMENT WITH STRATEGIC PRIORITIES:

The new neighborhoods and employment lands in the FUA are being planned in accordance with the City of Markham's vision of supporting sustainable growth in the City. This vision is articulated under four main themes includes protecting the natural environment, building compact and complete communities, providing sustainable travel choices, and maintaining a vibrant and competitive economy. Transportation network improvements are crucial to accommodate expansion of the designated Urban Area. Widening of Elgin Mills Road is one of the important components to ensure sufficient capacity to accommodate future travel demands through the FUA. With multiple FUA developments on-going, City needs to move forward the detailed design and construction of the Elgin Mills Road Widening to ensure our infrastructures are able to support the anticipated growth and demand

BUSINESS UNITS CONSULTED AND AFFECTED:

Finance has reviewed and approved the report.

RECOMMENDED BY:

Frank Clarizio, P.Eng Director, Engineering Arvin Prasad, MPA, RPP, MCIP Commissioner, Development Services

ATTACHMENTS:

None