
REPORT TITLE: Request for Additional Funds and Award of Contract for Widening and Improvement of Bovaird Drive West from Creditview Road to Worthington Avenue, City of Brampton, Wards 5 and 6

FROM: Andrew Farr, Interim Commissioner of Public Works

RECOMMENDATION

That the contract (Document 2020-534T) for the widening and improvement of Bovaird Drive from Creditview Road to Worthington Avenue, City of Brampton, be awarded to Graham Bros. Construction Limited in the amount of \$20,382,387.24 (excluding applicable taxes), in accordance with Procurement By-law 30-2018, as amended;

And further, that the remaining budget for Capital Project 12-4040 for the widening and improvement of Bovaird Drive from Creditview Road to Worthington Avenue be increased by \$4,800,000, financed 85 per cent from Development Charge Reserve Fund R3505 and 15 per cent from Roads Reserve R0210 in order to proceed with award of the construction tender.

REPORT HIGHLIGHTS

- Project 12-4040 for the widening and improvement of Bovaird Drive from Creditview Road to Worthington Avenue is an approved project from the 2005 Long Range Transportation Plan and includes replacement of the existing westbound bridge over the Canadian National Railway (CN Rail) corridor with a widened and improved structure, complete with multi-use pathways.
 - Following detailed design, property acquisitions, utility relocations and complex negotiations with CN Rail, the Region of Peel issued a Request for Tender for project construction services, which closed on August 19, 2020. All eight bids exceed the approved project budget.
 - Additional funds are required in the amount of \$4,800,000 to allow the construction contract to be awarded to the lowest compliant bidder, Graham Bros. Construction Limited.
 - Four unanticipated factors contributed to the current budget shortfall: additional requirements from CN Rail, changes in legislation regarding excess soils management, an increase in material costs, and premiums for workplace health and safety practices related to Covid-19.
 - Agreements in place with CN Rail forecast construction will commence in fall 2020. Should the project be deferred, other Region infrastructure initiatives would also be delayed due to CN Rail policies that limit work volumes along railway corridors.
-

Request for Additional Funds and Award of Contract for Widening and Improvement of Bovaird Drive West from Creditview Road to Worthington Avenue, City of Brampton, Wards 5 and 6

DISCUSSION

1. Background

Bovaird Drive is a major east-west arterial road within the Region of Peel's transportation system and is a goods movement corridor within the City of Brampton. The widening and improvements required on Bovaird Drive from Creditview Road to Worthington Avenue were originally identified in the 2005 Long Range Transportation Plan as one component of a multiphase build-out strategy. The project builds on the 2019 completed Bovaird Drive rehabilitation works to the east between Worthington Avenue to Van Kirk Drive, and will precede future planned phases to the west of Creditview Road beyond to Heritage Road.

This project phase involves replacement of the aging two-lane westbound grade separation structure over the CN Rail corridor with an improved three lane structure complete with multi-use pathway. An agreement and proposed construction schedule were established with CN Rail to enable resource planning and financial recovery from CN Rail in support of the Region's execution of the project in accordance with Canadian Transportation Agency guidelines.

In May 2015, the Region of Peel awarded a contract to SNC-Lavalin Inc. to provide professional engineering services for detailed design and contract administration services for the road widening and improvement works.

In July, 2020, following detailed design, real estate acquisitions, utility relocations, complex negotiations with CN Rail and prequalification of bidders, a Request for Tender was issued to retain a vendor to complete the construction of 1,400 metres of roadway, including a new low impact stormwater system, new multi-use pathways, and replacement of the original westbound grade separation structure over CN Rail.

2. Procurement Process

The two-stage prequalification and procurement process resulted in eight tender submissions as follows:

Vendor	Bid Price
Graham Bros. Construction Limited	\$20,382,387.24
Fermar Paving Limited	\$21,249,825.64
Dagmar Construction Inc.	\$22,946,072.45
KAPP Infrastructure Inc.	\$23,193,925.68
Dufferin Construction Company, A division of CRH Canada Group Inc.	\$24,288,888.00
Grascan Construction Ltd.	\$24,890,000.00
Brennan Paving & Construction Ltd.	\$25,558,175.29
Aecon Construction and Materials Limited	\$28,881,118.22

Graham Bros. Construction Limited submitted the lowest compliant bid at \$20,382,387.24 which is higher than the current available project budget of \$15,686,240.18.

Request for Additional Funds and Award of Contract for Widening and Improvement of Bovaird Drive West from Creditview Road to Worthington Avenue, City of Brampton, Wards 5 and 6

Tender submissions were reviewed by SNC-Lavalin and Region Staff in detail to determine why the bid prices varied from the original estimate, which was provided by SNC-Lavalin in 2019 and used to inform the 2020 budget. The review revealed the following four main areas contributing to the variance from estimate to bidder pricing:

New Requirements from CN Rail Identified During the Tender Period

New information regarding costs associated with working in the live CN Rail corridor next to Mount Pleasant Go Station came to light during the tender period, including reduced working times, CN Rail flagging constraints, and submittal requirements. These changes were identified via addenda to the tender and resulted in approximately \$2.2M of the \$4.8M difference between budget estimate and bid price.

Changes in Provincial Regulation – Excess Soils Management

Unforeseen cost premiums were triggered by new provincial regulations concerning on-site and excess soil management. In 2019 the province of Ontario commenced the implementation phase of *Ontario Regulation 406/19* for enhanced handling of onsite and excess soil generated on construction projects. Earthworks tender estimates must now include cost premiums to address these requirements. The change resulted in approximately \$1.2M of the difference in budget estimate and bid price.

Increase in Material Costs for Metals/Steel

In 2019, the costs of many common construction materials increased, in particular, metals and steel. The replacement grade separation structure is made up in large part of reinforcing and structural steel. SNC-Lavalin confirms that prices, in general, have seen a marked increase due to international market fluctuations. The increase in material costs accounts for approximately \$1M of the difference of budget estimate and bid price.

COVID-19 Pandemic Health and Safety Premiums

Bid pricing related to enhanced health and safety requirements attributed to COVID-19 were higher than expected. These additional costs represent approximately \$0.4M of the difference between budget estimate and bid price.

Based on the four contributing factors outlined above, it is believed that cancelling this tender and reissuing a new tender will not achieve a materially different result. Staff have also explored descoping or phasing the work however believe a single vendor will provide the best result for such a complex, structural assignment. SNC-Lavalin and Region Staff also believe that the bid prices reflect up-to-date industry pricing and represent good value for the work being performed.

RISK CONSIDERATIONS

Should the project not proceed at this time, then there are three main risks that will require further mitigation;

Request for Additional Funds and Award of Contract for Widening and Improvement of Bovaird Drive West from Creditview Road to Worthington Avenue, City of Brampton, Wards 5 and 6

Increased Traffic Demand

Widening and improvement of Bovaird Drive was identified under the 2005 Region's Long-Range Transportation Plan as being required to satisfy current and future traffic and goods movement demands. Traffic demands along Bovaird Drive in the vicinity of the project continue to rise as development adjacent to Mount Pleasant GO Station and beyond to the north and west continues to thrive. This project strives to meet these transportation needs, connect surrounding neighborhoods and facilities such as the Mount Pleasant GO station, and to provide active transportation amenities by means of two new multi-use pathways. The risk would be mitigated through ongoing support of the Region's multimodal transportation initiatives and road user complaint management practices.

Public Safety and Escalating Maintenance Cost

The westbound two-lane grade separation structure is approaching the end of its useful service life and is due for full replacement. This was most recently illustrated by an abutment slope stability failure on July 31, 2020, causing closure of the westbound shoulder. This risk would be mitigated through additional investment in regular inspection and maintenance activities until such time as permanent repairs take place.

Project Partner Obligations

CN Rail, through a grade separation agreement and proposed construction schedule, have assigned field and engineering resources to meet the anticipated commencement of construction in Fall, 2020. Delayed commencement of the project may cause CN Rail to reprioritize availability of these resources to dates beyond the Region's control. As CN Rail limits the volume of active work at any given time along a rail corridor, a project delay could also delay other Region infrastructure initiatives along the same CN Rail corridor, such as the widening and new grade separation on Mississauga Road. The risk of not fulfilling CN Rail project timeline expectations would be mitigated through ongoing cooperative negotiations between Region Staff and CN Rail, and rescheduling of work to CN Rail's next available opportunity.

FINANCIAL IMPLICATIONS

To award the construction services to Graham Bros. Construction Limited and to account for contingencies and unforeseen issues during construction, additional funding in the amount of \$4,800,000 is required for Capital Project 12-4040 for a total budget of \$20,486,240. The additional funding of \$4,800,000 will be financed 85 per cent from Development Charge Reserve Fund R3505 and 15 per cent from Roads Reserve R0210.

Staff acknowledge the intent set out in the Financial Risk Management Strategy for the Regional Capital Program recently endorsed by Council (Resolution 2020-626), and the need to respond to current economic circumstances. Given the risks associated with delaying the widening and improvement of Bovaird drive, this project was specifically excluded from the deferral strategy, and was scheduled to proceed.

In accordance with Procurement By-law 30-2018, as amended, where the Best Value Bid exceeds the approved budget allocation, authority to approve the contract award requires Regional Council approval.

Request for Additional Funds and Award of Contract for Widening and Improvement of Bovaird Drive West from Creditview Road to Worthington Avenue, City of Brampton, Wards 5 and 6

APPENDICES

Appendix I – Project Location Map

For further information regarding this report, please contact Scott Durdle, Project Manager, Ext. 5052, scott.durdle@peelregion.ca.

Authored By: Scott Durdle, Project Manager, Capital Works, Roads, Design and Construction

Reviewed and/or approved in workflow by:

Department Commissioner, Division Director, Financial Support Unit and Procurement.

Final approval is by the Chief Administrative Officer.



N. Polsinelli, Interim Chief Administrative Officer