



## STAFF REPORT ACTION REQUIRED

### Amendment to Purchase Order No. 6037332 F.G. Gardiner Expressway Interim Repairs, Jarvis Street to Don Roadway, Contract No. 13SE-18S

<b>Date:</b>	February 3, 2015
<b>To:</b>	Public Works & Infrastructure Committee
<b>From:</b>	Executive Director, Engineering & Construction Services Director, Purchasing & Materials Management Division
<b>Wards:</b>	Ward 28 (Toronto Centre – Rosedale) Ward 30 (Toronto Centre – Danforth)
<b>Reference Number:</b>	P:\2015\Cluster B\TEC\PW15012 (AFS # 20692)

#### SUMMARY

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The purpose of this report is to request the authority to amend Purchase Order No. 6037332 for the contract "F.G. Gardiner Expressway Interim Repairs, Jarvis Street (Bent 252) to Don Roadway (Bent 341)," Contract 13SE-18S, Tender Call No. 139-2013 for costs associated with interim, emergency repairs to the Expressway. The amendment to the Purchase Order is \$2,135,162.00 net of all taxes and charges (\$2,172,740.85 net of HST recoveries), increasing the current contract value from \$6,989,791.15 to \$9,124,953.15 net of all taxes and charges (\$9,285,552.36 net of HST recoveries).

#### RECOMMENDATIONS

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The Executive Director of Engineering & Construction Services and the Director of Purchasing & Materials Management Division recommend that the Public Works & Infrastructure Committee, in accordance with Section 71-11.1.C of the City of Toronto Municipal Code Chapter 71 (Financial Control), grant authority to:

1. Amend Purchase Order No. 6037332 with Grascan Construction Ltd./Torbridge Construction Ltd. for the contract "F.G. Gardiner Expressway Interim Repairs, Jarvis Street (Bent 252) to Don Roadway (Bent 341)," Contract 13SE-18S, Tender Call No. 139-2013, by an additional amount of \$2,135,162.00, net of all taxes and charges (\$2,172,740.85

net of HST recoveries), revising the current total value of \$6,989,791.15, net of all taxes and charges to \$9,124,953.15, net of all taxes and charges, (\$9,285,552.36 net of HST recoveries).

## **FINANCIAL IMPACT**

The amendment to Purchase Order No. 6037332 for an additional amount of \$2,135,162.00 net of all taxes and charges (\$2,172,740.85 net of HST recoveries), increases the current contract value of Purchase Order No. 6037332 from \$6,989,791.15, net of all taxes and charges, to \$9,124,953.15, net of all taxes and charges (\$9,285,552.36 net of HST recoveries). Sufficient funding is available in the 2014 Approved Capital Budget in account CTP122-06 F.G. Gardiner Expressway - Elevated Portion (funding carried forward into the 2015 Recommended Capital Budget and 2016-2024 Capital Plan) for Transportation Services.

The Deputy City Manager & Chief Financial Officer has reviewed this report and agrees with the financial impact information.

## **DECISION HISTORY**

At its meeting of May 16, 2012, the Public Works and Infrastructure Committee received a presentation from the Executive Director, Technical Services on the Condition and Rehabilitation Needs of the Gardiner Expressway. A copy of the presentation can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.PW15.13>

At its meeting of August 29, 2012, the Bid Committee awarded Tender 130-2012 for the F.G. Gardiner Expressway Structure Repair from York Street to Jarvis Street to Grascan Construction Ltd. / Torbridge Construction Ltd. in accordance with the revised Contract. The Bid Committee Report associated with this contract award can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.BD89.2>

In considering the City's 2013 Capital Budget and 2014 to 2022 Capital Plan on January 15 to 16, 2013, City Council approved a \$505 million budget for the F.G. Gardiner Expressway Rehabilitation Project. Council also directed that Capital and Repair/Maintenance cost items relating to the Gardiner Expressway east of Jarvis Street be tracked as a distinct Capital Project and that the General Manager, Transportation Services in consultation with the Executive Director of Technical Services provide, as part of the 2014 to 2023 Capital Budget and Plan submission, the financial impacts associated with the implementation of the Strategic Rehabilitation Plan for the repair and maintenance of the F. G. Gardiner Expressway. These budget allocations were identified through Recommendations 68 to 75 and can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.EX27.1>

In considering the City's 2013 Capital Budget and 2014 to 2022 Capital Plan on January 15 to 16, 2013, City Council reallocated \$4.41M within the Waterfront Revitalization Initiative Capital Budget for the Gardiner Expressway and Lake Shore Boulevard

Reconfiguration Environmental Assessment (EA). This budget reallocation was identified as Recommendation 84 and can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.EX27.1>

At its meeting of April 10, 2013, the Public Works & Infrastructure Committee received a presentation from the Deputy City Manager, Cluster B on Revision to the F.G. Gardiner Expressway Rehabilitation Project. The report summarized field work using ground penetrating radar completed in 2012 and prioritized areas of the Expressway require immediate attention, which included the section between Jarvis Street and the Don Roadway. Further, given Council's earlier decision to reallocate funding for the Gardiner Expressway EA wherein work to implement the preferred option would not likely commence till 2020, Council approved the reallocation of cash flow from Transportation's approved 2013 to 2022 Capital Budget and Plan which included:

- a) Deferring the full deck replacement east of Jarvis Street; and
- b) Undertaking interim repairs, including the associated detailed engineering design, of the Expressway east of Jarvis Street.

The Council Decision Document associated with this report can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.PW22.1>

At its meeting of May 29, 2013, the Bid Committee awarded Tender 139-2013, for the F.G. Gardiner Expressway - Interim Repairs - Jarvis Street to Don Roadway, to Grascan Construction Ltd. / Torbridge Construction Ltd. The Bid Committee Report associated with this contract award can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.BD126.5>

## **ISSUE BACKGROUND**

The main deck of the F.G. Gardiner Expressway between the Don Roadway and Jarvis Street is in poor to very poor condition, requiring complete replacement. The deck replacement was planned in three phases, as three separate contracts, corresponding to the following sections and timelines based on their rehabilitation needs:

1. Don Roadway to Cherry Street in years 2013 to 2014;
2. Cherry Street to Parliament Street in years 2015 to 2016; and
3. Parliament Street to Jarvis Street in years 2017 to 2018.

The engineering design for the first contract was awarded to MMM Group Ltd. (MMM), in October, 2012 and a construction contract was planned to be tendered in 2013.

The resumption of the Gardiner East EA in 2013 necessitated changes to the Gardiner Expressway rehabilitation plan. This included deferral of any plans for the full reconstruction of the easterly section of the Expressway, pending the outcome of the EA. Given that the implementation of the preferred option would likely not commence until 2020, and the urgent rehabilitation needs identified in the field survey, the engineering consulting firm MMM was issued a sole source Purchase Order for the design, contract administration and post-construction services for these repairs in April 2013. The interim

repairs consisted of: temporary timber bracing under the deck; localized concrete deck repairs; and repair and replacement of severely deteriorated parapet walls.

Given the urgency, a construction tender for the interim repairs extending from Jarvis Street to the Don Roadway was issued shortly thereafter, and on May 29 2013, Grascan Construction Ltd./Torbridge Construction Ltd was awarded Contract 13SE-18S, "F.G. Gardiner Expressway Interim Repairs, Jarvis Street (Bent 252) to Don Roadway (Bent 341)" by Bid Committee to undertake interim, emergency repairs to the substructure ("Bents"), parapet walls, underside of deck ("soffit") and associated traffic control. A Purchase Order (No. 6037332) was issued to Grascan Construction Ltd. /Torbridge Construction Ltd. for the contract in the amount of \$6,989,791.15, net of all taxes and charges and the repairs were to be completed by the end of 2014.

## **COMMENTS**

Engineering & Construction Services secured the professional engineering services of MMM as a sole-source vendor to design and oversee construction of the interim repairs. Given the urgency and tight timelines, MMM was only able to carry out localized field testing, material sampling and investigations within the accessible areas of the F.G. Gardiner Expressway. The construction quantities measured in these limited areas were extrapolated to nearby portions of the Expressway and a final estimate of construction quantities was prepared for tender documents.

As construction of the interim repairs (see Attachment 2) progressed, MMM determined that the scope of the necessary repairs was much greater than was originally estimated. Specifically, additional repairs to bents, parapet walls and deck soffit were required. Additional equipment to access the underside of the expressway, protection areas and traffic control items was also required.

In the summer of 2014, MMM informed the City of the anticipated cost overruns for several items exceeded estimated tender quantities. The majority of the quantity overruns were related to removal of loose concrete and patching. Given this, City staff requested MMM to provide an anticipated total cost estimate and assess whether to complete the interim repairs or discontinue the contract.

MMM and City staff agreed that completing all the interim repair work would be most effective in favourable weather and that it would take an additional six months beyond the June 2015 Pan Am Games deadline to complete. However, demobilizing before the games and then remobilizing after the games would be costly.

While discontinuing the contract would mitigate cost overruns, additional emergency work was required to minimize risks to the structure and public safety.

An alternate approach was recommended which would reduce the cost overruns while ensuring that the structural and public safety risks were addressed, and included:

1. Removal (and repair) of concrete from only those areas with the highest structural priority;

2. Scaling concrete from areas which are delaminated and where the delamination could result in a safety risk; and
3. Issuing a separate construction tender to implement the remaining interim repairs.

Given the safety concerns identified, City staff instructed the contractor to proceed with repairing only those areas that created an immediate safety concern, and discontinue the balance of the interim repair work.

The cost of completing the repairs to address the immediate safety concern was \$2,860,162.00, of which \$725,000.00 was paid out of the contract contingency allowance. This necessitates an amendment to Purchase Order No. 6037332 with Grascan Construction Ltd./Torbridge Construction Ltd. for the contract "F.G. Gardiner Expressway Interim Repairs, Jarvis Street (Bent 252) to Don Roadway (Bent 341)," Contract 13SE-18S, Tender Call No. 139-2013, in an additional amount of \$2,135,162.00, net of all taxes and charges (\$2,172,740.85 net of HST recoveries), is required, revising the current total value of the contract from \$6,989,791.15, to \$9,124,953.15, net of all taxes and charges, (\$9,285,552.33 net of HST recoveries).

A new tender is being prepared for the completion of the remaining interim repair work, estimated at \$5,000,000.00, expected to be completed by September 30, 2016.

## CONTACT

Frank Clarizio, P.Eng.  
Director, Design and Construction  
Transportation Infrastructure  
Engineering & Construction Services  
Tel: 416-392-8412  
Fax: 416-392-8410  
Email: [fclarizi@toronto.ca](mailto:fclarizi@toronto.ca)

Joanne Kehoe  
Manager, Construction Services  
Purchasing & Materials Management  
Tel: 416-392-7323  
Fax: 416-397-7779  
Email: [jkehoe@toronto.ca](mailto:jkehoe@toronto.ca)

## SIGNATURE

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Michael D'Andrea, M.E.Sc., P.Eng.  
Executive Director  
Engineering & Construction Services

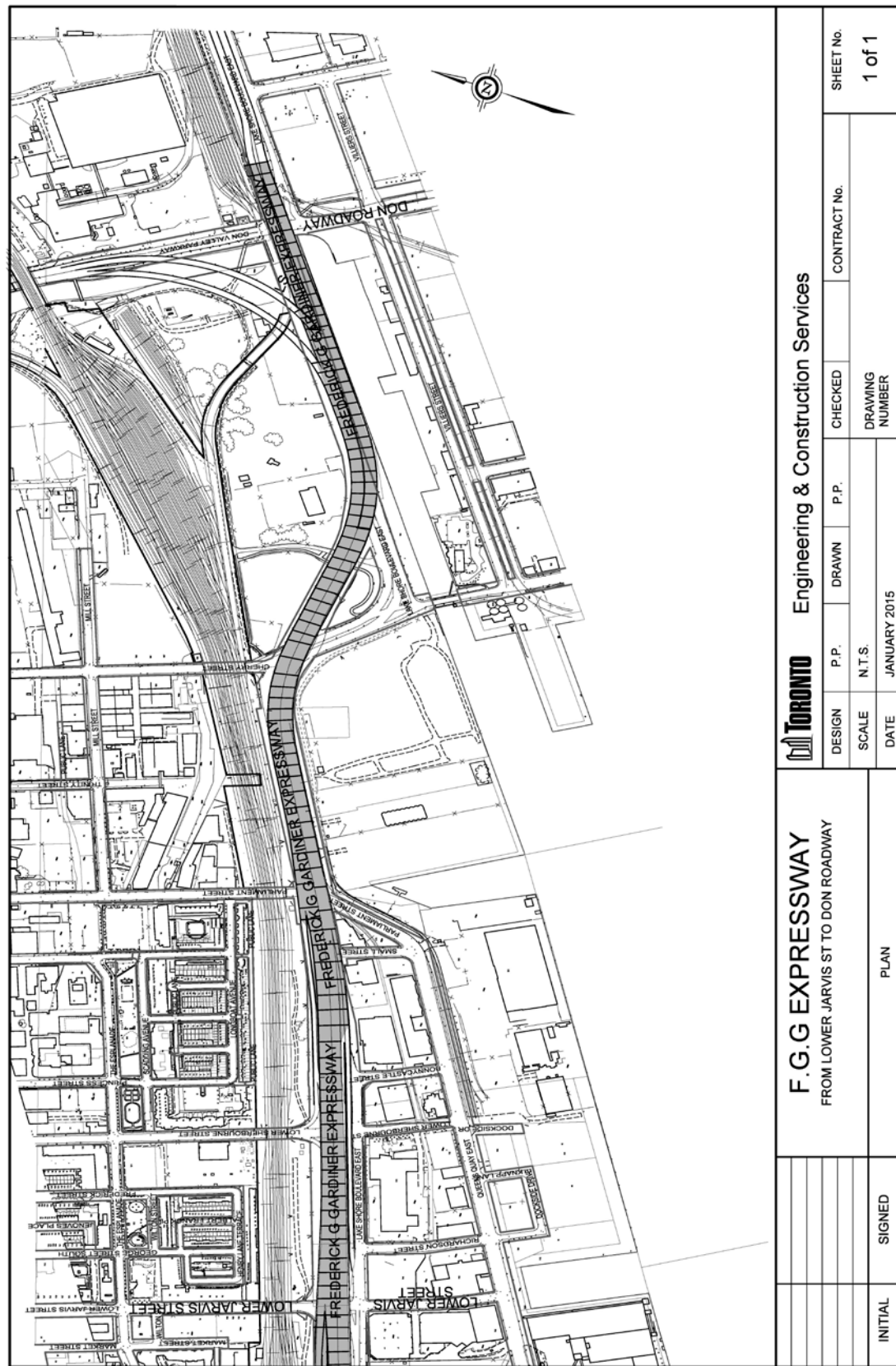
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Michael Pacholok  
Director  
Purchasing & Materials Management

## ATTACHMENTS

- Attachment 1: Limits of Interim Repairs on F.G.G. Expressway East Deck (Lower Jarvis Street to Don Roadway)  
Attachment 2: F.G.G. Expressway – Interim Repair Photo

**Attachment 1: Limits of Interim Repairs on F.G.G. Expressway East Deck  
(Lower Jarvis Street to Don Roadway)**



<b>Toronto</b> Engineering & Construction Services		SHEET No.	
		1 of 1	
DESIGN	P.P.	DRAWN	P.P.
SCALE	N.T.S.	DRAWING NUMBER	
DATE	JANUARY 2015		
<b>F.G.G EXPRESSWAY</b> FROM LOWER JARVIS ST TO DON ROADWAY		PLAN	
INITIAL	SIGNED		

**Attachment 2: F.G. Gardiner Expressway – Interim Repair**

