

From: "Johnston, Sadhu" <Sadhu.Johnston@vancouver.ca>

To: "Direct to Mayor and Council - DL"

CC: "City Manager's Correspondence Group - DL"

"Pickard, Gail" <Gail.Pickard@vancouver.ca>

"Nelms, Cheryl" <Cheryl.Nelms@vancouver.ca>

Date: 10/22/2019 12:55:21 PM

Subject: Memo - Granville Bridge Upcoming Traffic Impacts

Attachments: Memo to Mayor & Council - ENG - Granville Bridge Upcoming Traffic Impact....pdf
Appendix A - Memo to Mayor & Council - ENG - Granville Bridge Upcoming T....pdf

Dear Mayor and Council,

Please see the attached memo from Cheryl Nelms regarding Granville Bridge Upcoming Traffic Impacts. A short summary of the memo is as follows:

- ☐ Structural repairs and seismic upgrades starting on Granville Bridge with effect from Oct 28st, 2019.
- ☐ Repairs would replace or fix corroded/failed/broken components, increasing asset lifespan up to 50 years.
- ☐ Traffic impact - at all-times a minimum of one lane would be maintained in all directions on Granville bridge.

If you have any questions, please feel free to contact Cheryl Nelms, Acting GM of Engineering Services, at Cheryl.nelms@vancouver.ca or 604-873-7348.

Best,
Sadhu

Sadhu Aufochs Johnston | City Manager
Office of the City Manager | City of Vancouver
604.873.7627 | sadhu.johnston@vancouver.ca

Pronouns: he, him, his



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the Musqueam, Squamish, and Tsleil-Waututh peoples.

MEMORANDUM

October 22, 2019

TO: Mayor and Council

CC: Sadhu Johnston, City Manager
Paul Mochrie, Deputy City Manager
Lynda Graves, Administration Services Manager, City Manager's Office
Rena Kendall-Craden, Civic Engagement and Communications Director
Katrina Leckovic, City Clerk
Neil Monckton, Chief of Staff, Mayor's Office
Alvin Singh, Communications Director, Mayor's Office
Anita Zaenker, Chief of Staff, Mayor's Office

FROM: Cheryl Nelms
Acting General Manager, Engineering Services

SUBJECT: Granville Bridge Rehabilitation Project – Construction starting Oct 28, 2019

This memo is to inform Mayor and Council that structural repair and seismic upgrades to the Granville Bridge will begin on Monday Oct 28, 2019. To conduct this work, Council approved staff recommendations to enter into a \$14.29M contract with Graham Inc., as the lowest qualified bidder, on June 25, 2019, Appendix A. Early work to coordinate with development on the north approach approved by Council on Oct 30, 2018 is now complete.

Structural repair and seismic upgrade work is separate from the "Granville Bridge Connector" project which will be presented to Council in the New Year.

Background

The Granville Street Bridge is an eight lane bridge spanning False Creek, and opened in 1954. This is an aging piece of infrastructure and showing signs of deterioration typical to bridges similar in size and age. Granville Bridge is a critical asset, and a major arterial route into and out of the downtown core, facilitating 25,000 transit and 65,000 daily motor vehicles trips.

The bridge is inspected annually by City staff, and condition assessments are completed by external consultants every five years as part of the City's bridge inspection program. Recent condition assessments identified several areas which require immediate attention, including structural repairs to replace or repair damaged components of the bridge and prevent further accelerated deterioration, including:

- Failed expansion joints;
- Localized deteriorated concrete (piers, girders, bridge deck);

- Localized corroded steel (girders, bracing);
- Localized deteriorated coating;
- Drainage piping.

The seismic upgrade work includes bearing replacements and strengthening of cross bracing. Once completed the steel portion of the bridge will become base isolated and the seismic performance enhanced to meet a design 1/475 level earthquake.

Completion of this project addresses the most apparent rehabilitation issues. In the future, more rehabilitation work will be required and will form part of future capital plan budget requests. Of note, the 4th Avenue, Fir and Hemlock ramps are not addressed through this project, nor is the overall coating renewal for the bridge.

In addition there are other items that are currently being investigated. These items are the installation of debris netting, additional concrete repairs and increased coating renewal. External cost sharing funding programs are being explored to support advancing these items.

Construction Impacts

Repairs will start on the south approach expansion joints. To complete this, the contractor will occupy the central two lanes in both north and south bound directions and will require one lane to safely transition traffic on the Hemlock ramp. A traffic plan detailing this condition can be seen in Figure 1.

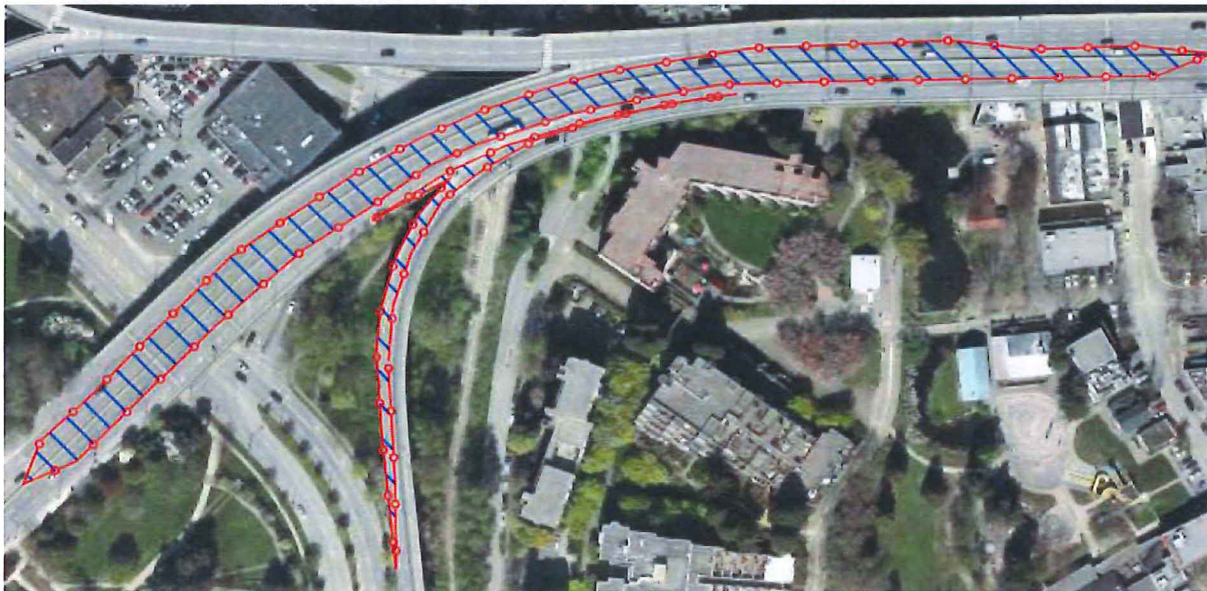


Figure 1 - Traffic plan for work on south approach expansion joints

At all-times a minimum of one lane will be maintained in all directions.

As the work progresses lane closures will shift to include center lanes followed by curb side lanes, and lane closures on the Howe on-ramp and Seymour off-ramp, with an expected

completion date of late 2020. The remaining work is on the underside of the bridge with little to no impact to traffic on the bridge.

The work is limited to the bridge and ramps with no expected impact to residences and businesses. Parking spaces on either side of the bridge will not be restricted. Only a few parking spots on the north approach under the bridge are being taken to house the construction material, and equipment.

Public Communications

Project signs and electronic message boards have been installed on either side of the bridge informing the public of the upcoming repair schedule and impacts. A project webpage with an overview of this work is available at vancouver.ca/granvilleupgrades.

If you have any questions or would like more information about this project, please contact me directly at Cheryl.nelms@vancouver.ca or 604-873-7348.

A handwritten signature in blue ink, appearing to read 'Cheryl Nelms', is positioned above the printed name and title.

Cheryl Nelms, P.Eng., PhD
Acting General Manager, Engineering Services

604.873.7348 | cheryl.nelms@vancouver.ca



ADMINISTRATIVE REPORT

Report Date: May 25, 2019
Contact: Alexander Ralph
Contact No.: 604.829.2092
RTS No.: 13154
VanRIMS No.:
Meeting Date: June 25, 2019

TO: Vancouver City Council

FROM: General Manager of the Engineering Services Department and Chief Procurement Officer

SUBJECT: Contract Award for Construction Services for the Granville Bridge Rehabilitation

RECOMMENDATION

- A. THAT Council authorize City staff to enter into a contract with Graham Infrastructure LP, for construction services for the Granville Bridge Rehabilitation, for a term of approximately twenty (20) months, with an estimated contract value of \$14,298,200.00, plus applicable taxes over the term, to be funded from the approved multi-year Granville Bridge Upgrade capital budget.
- B. FURTHER THAT the Director of Legal Services, Chief Procurement Officer and General Manager of the Engineering Services Department be authorized to execute on behalf of the City the contract contemplated by Recommendation A.
- C. THAT the current City Council be provided with a full briefing, including any in-camera considerations, on overall possible plans and options for the bridge structure including the North end loops.
- D. FURTHER THAT the construction schedule be coordinated to minimize lane closure and disruption to commuters and bridge users at peak demand times and overall throughout the work.
- E. THAT no legal rights or obligations will be created by Council's adoption of Recommendations A and B above unless and until such contract is executed by the authorized signatories of the City as set out in these Recommendations.

REPORT SUMMARY

The City issued Invitation to Tender No. PS20190021 Construction Services for the Granville Bridge Rehabilitation (the “ITT”) in March, 2019. The ITT was advertised on the City of Vancouver website and BC Bid and the work was called in accordance with the terms and conditions of the City’s Procurement Policy ADMIN-008. City staff on the ITT evaluation committee and, subsequently, the Bid Committee, have considered the responses received and, on that basis, recommend that the City enter into contract as described above with Graham Infrastructure LP.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

The City’s Procurement Policy ADMIN-008 requires that contracts with values over \$2 million must be approved by Council following review and recommendations by the Bid Committee. The Bid Committee has considered, and recommended Graham Infrastructure LP, as the successful tenderer.

REPORT

Background/Context

The Granville Street Bridge (the “Bridge”) is an eight lane bridge spanning False Creek, and opened in 1954. The Bridge is inspected on an annual basis by City staff, and condition assessments are completed by external consultants every five years as part of the City’s bridge inspection program.

Recent condition assessments have identified numerous defects, including:

- Corroded bearings
- Failed expansion joints
- Localized deteriorated concrete;
- Localized corroded steel;

As a result of the defects, a construction contractor is needed to complete the required repairs, as well as other work that includes:

- Seismic improvements through bearing replacement and strengthening of steel cross bracing in order to meet target 1/475 earthquake repairable damage; and
- Installation of cormorant netting.

This contract aims to extend the Granville Bridge asset lifespan through structural and seismic upgrades and repairs. The rehabilitation planned as part of this project will ensure that corroded/failed/broken components are fixed or replaced, increasing asset lifespan up to 50 years.

In 2013, seismic upgrades were completed to approximately 2/3 of the steel span. The remaining third of the work will be completed as part of this project, promoting asset integrity and minimizing damage in the case of a 1:475 earthquake (and slightly higher).

The contractor will be required to produce a traffic management plan for the City prior to the commencement of the work. Two lanes of traffic will be kept open at all times throughout construction on the main bridge span, and at least one lane of traffic will be open at all times on the ramps.

The purpose of the ITT was to identify suppliers with a demonstrated capability to supply the City's estimated demand over the term of the contract with competitive pricing and meets the City's service requirements.

Strategic Analysis

The ITT was issued in the accordance with City's Procurement Policy ADMIN-008. Supply Chain Management sent notices to five (5) potential tenderers that were prequalified under Request for Pre-Qualifications No. PS20181943 Contractor Prequalification for the Granville Bridge Rehabilitation. The City received ITT responses from:

<u>Contractor</u>	<u>Tender Price</u>
Graham Infrastructure LP	\$14,298,200.00
Eiffage Innovative Canada Ltd.	\$15,537,150.00
Kingston Construction Ltd.	\$16,880,964.60
Pomerleau, Inc.	\$18,516,884.88
Surespan Construction Ltd.	\$23,127,690.00

The bid review and supplier evaluation were performed by Engineering Services Staff and Supply Chain Management with oversight from Legal Services. Consultation for service requirements and vendor review was also done by the City's consultant. The evaluation team determined that the tender submitted by Graham Infrastructure LP is compliant with the ITT specifications and provides best overall value to the City. Graham Infrastructure LP submitted the lowest, qualified bid of \$14,298,200.00 excluding applicable taxes.

Graham Infrastructure LP is qualified to perform the work required for the project as set out in the tender package based on satisfactory completion of large bridge construction projects, and references provided and checked. References were checked by the City's consultant and Supply Chain Management, and financial information was reviewed by Supply Chain Management.

Based on the overall evaluation, the team concluded that the tender submitted by Graham Infrastructure LP, best met the City's requirements and provided best overall value to the City.

Financial Implications

Finance has reviewed and confirmed that funding is available from the approved multi-year Granville Bridge Upgrade capital budget. As a result of the ITT, the City is able to achieve cost certainty for the proposed contract term.

Legal

The City's Procurement Policy requires that all contracts that have been awarded by Bid Committee plus Council will be signed by the Director of Legal Services.

CONCLUSION

In summary, City staff recommends that the City of Vancouver enter into contract with Graham Infrastructure LP for Invitation to Tender No. PS20190021 Construction Services for the Granville Bridge Rehabilitation.

* * * * *

DEPARTMENTAL APPROVAL AND REPORT CONCURRENCES

General Mgr.:

Report Date:

Author:

Date:

Phone No.:

This report has been prepared in consultation with the departments listed to the right, and they concur with its contents.

Concurring Departments: