

Amendment to Purchase Order Number 6052669 EBC Bessac Canada (FSPSTT) Joint Venture for the Construction of the Fairbank Silverthorn Storm Trunk Tunnel and Micro-Tunneled Storm Collectors for Basement Flooding Protection Program Study Area 3

Date: March 24, 2025

To: General Government Committee

From: Chief Engineer and Executive Director, Engineering and Construction Services and Chief Procurement Officer, Purchasing and Materials Management

Wards: 5 (York South-Weston), 8 (Eglinton-Lawrence), 9 (Davenport), 12 (Toronto-St. Paul)

SUMMARY

This report requests authority to amend Purchase Order Number 6052669, awarded under Doc2793902914, issued to EBC Bessac Canada (FSPSTT) Joint Venture, for construction of the Fairbank Silverthorn Storm Trunk Tunnel and Micro-Tunneled Storm Collectors in the Basement Flooding Protection Program Study Area 3, Assignment Number 3-03, which is bounded by Black Creek Drive, Vaughan Road, Rogers Road and Castlefield Avenue.

The requested amendment is for settlement of claims related to additional construction services.

The total value of the Purchase Order Amendment being requested is \$6,000,000 net of all applicable taxes and charges (\$6,105,600 net of Harmonized Sales Tax recoveries), revising the current Purchase Order value from \$202,217,400 net of all applicable taxes and charges (\$205,776,426 net of Harmonized Sales Tax recoveries) to \$208,217,400 net of all applicable taxes and charges (\$211,882,026 net of Harmonized Sales Tax recoveries).

Approximately half of the requested amendment, \$2,999,180.87 net of all applicable taxes and charges (\$3,051,966.45 net of Harmonized Sales Tax recoveries), is allocated for the settlement of claims related to additional construction services. These costs arose from unforeseen challenges, including delayed utility relocations by Bell, Rogers, and Toronto Hydro, access constraints imposed by Metrolinx, and modifications to the adit method to accelerate work and minimize community disruption.

RECOMMENDATIONS

The Chief Engineer and Executive Director, Engineering and Construction Services and the Chief Procurement Officer, Purchasing and Materials Management recommend that:

1. The General Government Committee, in accordance with section 71-11.1C of the City of Toronto Municipal Code Chapter 71 (Financial Control Bylaw), grant authority to amend Purchase Order 6052669 with EBC Bessac Canada (FSPSTT) Joint Venture, for the Construction of the Fairbank Silverthorn Storm Trunk Tunnel and Micro-Tunneled Storm Collectors for Basement Flooding Protection Program Study Area 3 by increasing the value by \$6,000,000 net of all applicable taxes and charges (\$6,105,600 net of Harmonized Sales Tax recoveries), from \$202,217,400 net of all applicable taxes and charges (\$205,776,426 net of Harmonized Sales Tax recoveries) to \$208,217,400 net of all applicable taxes and charges (\$211,882,026 net of Harmonized Sales Tax recoveries).

FINANCIAL IMPACT

Purchase Order Amendment - Fairbank Silverthorn Storm Trunk Tunnel Construction Contract

The total value of the Purchase Order Amendment identified in this report is \$6,000,000 net of all taxes and charges (\$6,105,600 net of Harmonized Sales Tax Recoveries).

Funding is included in Toronto Water's 2025 Capital Budget and 2026-2034 Capital Plan. Funding details with forecasted expenditures (net of Harmonized Sales Tax recoveries) are summarized in Table 1:

Table 1: Financial Impact Summary of Purchase Order Number 6052669

Year	Total (Net of Harmonized Sales Tax Recoveries)
2025	\$6,105,600
Total	\$6,105,600

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the information included in the Financial Impact section.

DECISION HISTORY

At its meetings of September 24, 2008, and September 21, 2011, City Council adopted criteria to prioritize and sequence recommended Basement Flooding Protection Program projects, that are identified through completed studies to protect the greatest number of properties as soon as possible, within approved budgets, as appropriate funding opportunities are available and in coordination with other capital projects and

population growth needs in the area. The Council-adopted criteria and the corresponding staff reports can be found at:

<https://secure.toronto.ca/council/agenda-item.do?item=2008.EX23.16> and <https://secure.toronto.ca/council/agenda-item.do?item=2011.PW7.6>

At its meeting of December 17 and 18, 2019, City Council adopted the 2020 Staff Recommended Capital Budget and the 2021-2029 Staff Recommended Capital Plan for Toronto Water. In support, a briefing note titled "2020 Capital Budget Briefing Note - Basement Flooding Protection Program - Program Status Update and Project List: 2020 to 2024", contains the updated planned schedule for engineering design and construction of infrastructure upgrades supporting Toronto Water's Basement Flooding Protection Program. The Council-adopted item and the briefing note can be found at:

<https://secure.toronto.ca/council/agenda-item.do?item=2020.EX19.9> and <https://www.toronto.ca/legdocs/mmis/2020/ex/bgrd/backgroundfile-158996.pdf>

At its meeting held on July 14, 2021, the City Council authorized the award of Contract Number 21ECS-LU-01TT, Doc2793902914, to EBC Bessac Canada (Fairbank Silverthorn Storm Trunk Tunnel) Joint Venture for the construction of the Fairbank Silverthorn Storm Trunk Tunnel and Micro-Tunneled Storm Collectors, and approved Item IE23.9. The Council-adopted item can be found at:

<https://secure.toronto.ca/council/agenda-item.do?item=2021.IE23.9>

COMMENTS

Background

The Fairbank Silverthorn Storm Trunk Sewer System Project includes the construction of a large diameter inline storage and conveyance storm trunk sewer (approximately 2.4 kilometre long and 4.5 metre diameter), new storm collectors constructed through micro-tunneling (approximately 1.4 kilometre long and 1.8 metre diameter), a new outfall to Black Creek and 17.0-kilometre length of new storm collectors. The project is being delivered through three (3) major construction contracts (see map in Attachment 1).

The major storm trunk tunnel contract, Contract Number 21ECS-LU-01TT, to construct a 2.4 kilometre long and 4.5 metre diameter storm trunk tunnel and 1.4 kilometre of 1.8 metre diameter storm collector sewers using micro-tunneling method, which is currently in construction. The Order to Commence was issued on October 5, 2021. Construction is ongoing with the main tunnel complete as well as the micro-tunnelling. Substantial completion is projected to be early fall of this year.

During construction of the main shaft complications arose that required modifications to the Tunnel Boring Machine launch methodology. To address these challenges, additional concrete caissons were installed in front of the shaft to ensure the successful launch of the Tunnel Boring Machine. The associated costs were covered through the existing contingency allowance, which is now close to being fully exhausted.

Amendment to Purchase Order Number 6052669

As part of the contract, coordination with utility companies was required to relocate existing infrastructure for the construction of new storm sewers. Additionally, the project scope included crossing a Metrolinx railway line. In both instances, unforeseen requirements led to additional costs, which were subsequently negotiated with EBJV.

Dry Utilities Relocation Delays

Although Enbridge completed the required utility diversion work for Contract Number 21ECS-LU-01TT prior to the issuance of the Order to Commence, outstanding relocations remained pending from Bell, Rogers, and Toronto Hydro. As a result, EBJV did not have the unimpeded access originally stipulated in the contract documents at the time of the bidding process.

To mitigate the impact of these delays, the contractor proposed an alternative sequencing approach. However, the change led to standby costs and project disruptions. Based on the negotiated settlement, the additional cost associated with these changes amounts to \$1,693,798.

Compliance with Metrolinx Requirements

The Metrolinx crossing was an established part of the project scope, as acknowledged by EBJV. However, following the issuance of the Order to Commence, additional constraints were imposed on the project by Metrolinx.

Metrolinx had instructed its own contractor to undertake work along the same section of track where EBJV, under contract with the City, was required to install instrumentation and conduct monitoring. Metrolinx prioritized its own contractor's work, creating delays and access constraints for EBJV. As a result, EBJV did not have the unimpeded access originally stipulated in the contract documents at the time of the bidding process.

Further complications arose due to differing approach to third party stakeholder consultation between Metrolinx and the City. To address these challenges, it was determined that a non-automated monitoring solution would be more appropriate and less invasive, as it would minimize environmental impact by preserving existing trees within the rail corridor. The contractor proposed a revised approach involving increased manual monitoring, which incurred additional direct costs, including Metrolinx flagging permit fees and additional labor for extended monitoring periods (evenings, nights, and weekends).

Based on the negotiated settlement the additional cost associated with these changes amounts to \$603,043.

Modified Adit Construction Method

The contract scope included rerouting stormwater flow within the community, requiring the connection of new storm sewers to the main storm trunk. These connections necessitated the construction of shafts and interconnections, referred to as adits, at four

locations throughout the contract referenced as DS-0, DS-1, DS-2, and DS-3. Early in the contract, the contractor proposed an alternative sequence to expedite the work but would require the payment of additional costs which were negotiated with EBJV.

EBJV proposed an alternative construction methodology that provided a more efficient and expedited approach while minimizing disruption to the surrounding community. This revised method allowed for accelerated construction and facilitated earlier restoration of the areas around the shafts, reducing the overall impact on local residents.

Based on negotiations with EBJV the additional cost associated with these changes amounts to \$702,341.

The total value of the Purchase Order Amendment being requested is \$6,000,000 net of all applicable taxes and charges (\$6,105,600 net of Harmonized Sales Tax recoveries), revising the current Purchase Order value from \$202,217,400 net of all applicable taxes and charges (\$205,776,426 net of Harmonized Sales Tax recoveries) to \$208,217,400 net of all applicable taxes and charges (\$211,882,026 net of Harmonized Sales Tax recoveries).

The requested amendment is for settlement of claims related to additional construction services. The amendment also includes a reserved allowance should any unknown additional work be required during the balance of construction.

CONTACT

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SIGNATURE

Jennifer Graham Harkness, P.Eng.
Chief Engineer and Executive Director, Engineering and Construction Services

Geneviève Sharkey
Chief Procurement Officer

ATTACHMENTS

Attachment 1 – Fairbank Silverthorn Project Map (Contracts in Progress)

Amendment to Purchase Order Number 6052669 to EBC Bessac Canada (FSPSTT) Joint Venture for Construction of the Fairbank-Silverthorn Storm Trunk Tunnel