

Amendment of Purchase Order Number 6051143 with GHD Limited for Professional Services for Construction Contract Administration for the D Building Phase 2 Construction Project

Date: April 17, 2024

To: General Government Committee

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

Wards: 14 (Toronto-Danforth)

SUMMARY

The purpose of this report is to request authority to amend Purchase Order Number 6051143 issued to GHD Limited to provide Construction Contract Administration Services for the D Building Phase 2 Upgrades Project at the Ashbridges Bay Treatment Plant awarded under Request for Proposal 9117-17-7281.

The amendment is required for additional construction contract administration services resulting from scope additions, changes approved in the design phase and an extension to the construction duration.

The total value of the Purchase Order Amendment being requested is \$3,332,252 net of all applicable taxes and charges (\$3,390,900 net of Harmonized Sales Tax recoveries), revising the current Purchase Order value from \$1,541,111 net of all applicable taxes and charges (\$1,568,235 net of Harmonized Sales Tax recoveries) to \$4,873,363 net of all applicable taxes and charges (\$4,959,135 net of Harmonized Sales Tax recoveries).

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 71-11.1. C of the City of Toronto Municipal Code Chapter 71 (Financial Control By-Law), grants authority to amend the Purchase Order Number 6051143 with GHD Limited for providing

Professional Services for Construction Contract Administration in the amount of \$3,332,252 net of all applicable taxes and charges (\$3,390,900 net of Harmonized Sales Tax recoveries), revising the current Purchase Order value from \$1,541,111 net of all applicable taxes and charges (\$1,568,235 net of Harmonized Sales Tax recoveries) to \$4,873,363 net of all applicable taxes and charges (\$4,959,135 net of Harmonized Sales Tax recoveries).

FINANCIAL IMPACT

The total value of the Purchase Order amendment is \$3,332,252 net of all applicable taxes and charges (\$3,390,900 net of Harmonized Sales Tax recoveries). This will increase the Purchase Order value from \$1,541,111 net of all applicable taxes and charges (\$1,568,235 net of Harmonized Sales Tax recoveries) to \$4,873,363 net of all applicable taxes and charges (\$4,959,135 net of Harmonized Sales Tax recoveries).

Funding for this Purchase Order amendment is included in the 2024-2033 Approved Capital Budget and Capital Plan for Toronto Water Division.

Funding details are summarized in Table 1 below (net of Harmonized Sales Tax recoveries):

Projected Cash Flow of Purchase Order amendment for delivering Professional Services for Construction Contract Administration for Contract 23ECS-MI-03AB.

Table 1: Purchase Order Amendment 6051143

WBS Element	Date of Amendment to December 31, 2024	2025	2026	2027	Total
CWW019-34	\$1,400,000	\$1,400,000	\$560,900	\$30,000	\$3,390,900

The Chief Financial Officer and Treasurer has received this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting held on February 21, 2018, the Bid Award Panel adopted the recommendations in the staff report from the Chief Purchasing Officer, Purchasing and Materials Management dated February 12, 2018, and authorized the retention of GHD Limited to provide Professional Services for design and contract administration for the D Building Phase 2 Upgrades project at Ashbridges Bay Treatment Plant. The D Building Phase 2 Upgrades project scope included the rehabilitation and upgrade work within D

Building, addition of a chemically enhanced primary treatment facility, and addition of a freight elevator. A link to the related Bid Award Panel decision is provided below.
<http://app.toronto.ca/tmmis/viewPublishedReport.do?function=getMinutesReport&meetingId=13789>

At its meeting held on April 20, 2023, the General Government Committee granted authority to award Contract Number 22ECS-MI-03AB, Ariba Document Number 3754640010, for D Building Phase 2 Upgrades project at Ashbridges Bay Treatment Plant, in the amount of \$75,275,157 net of all applicable taxes and charges (\$76,600,000 net of Harmonized Sales Tax recoveries) to Bennett Mechanical Installations (2001) Limited having submitted the lowest compliant bid and meeting the specifications in conformance with the Tender requirements. A link to the related General Government Committee decision is provided below.
<https://secure.toronto.ca/council/agenda-item.do?item=2023.GG3.6>

COMMENTS

Background

Ashbridges Bay Treatment Plant, located at 9 Leslie Street, is the largest wastewater treatment plant in the City of Toronto and has a rated capacity of 818 millions of litres per day (MLD) for full treatment. The plant services a combined sewer system and can receive peak instantaneous flows during wet weather in excess of 3,300 MLD.

As part of the Toronto Water Capital Plan, the plant continues to undergo both expansion for planned growth as well as upgrades to replace aging equipment and provide additional equipment that will modernize and enhance the treatment process.

The D Building upgrades involve areas in the plant where the first stages of wastewater treatment occur using grit screens and three primary clarifier tanks. The D Building upgrades are being done in two phases with Phase 1 completed in 2014 and Phase 2 currently underway.

Request for Proposal 9117-17-7281 for Design and Contract Administration Services for the D Building Phase 2 Upgrades was issued in 2017 and is managed by Engineering and Construction Services Major Infrastructure Section. The Request for Proposal was awarded to GHD Limited in February 2018.

The base scope of work included rehabilitation of the primary tank travelling bridges, addition of a chemically enhanced primary treatment facility, channel aeration improvements, electrical upgrades, and a freight elevator. The capital value of the construction contract was estimated to be \$45 million with a 2-year construction duration.

During the preliminary and detailed design stages, the scope of the project was increased considerably with the addition of upgrades to address the Facility Condition Assessment Capital Plan, replacement of all primary sludge and scum pumps and

tanks, addition of air headers for channel aeration of primary clarifier influent channels, and upgrades to address National Fire Protection Association requirements.

The additional engineering and design efforts associated with these changes exhausted all funds within the design purchase order and required the reallocation of funding in the amount of \$175,000 from the construction contract administration purchase order number 6051143 to the design purchase order number 6046731. Purchase Order Number 6051143 for Professional Services for Contract Administration was decreased from \$1,716,111 net of all applicable taxes and charges (\$1,746,315 net Harmonized Sales Tax recoveries) to \$1,541,111 net of all applicable taxes and charges (\$1,568,235 net Harmonized Sales Tax recoveries).

The capital estimate was revised to \$65 million with an estimated construction duration of 2.5 years. During the tendering process, based on feedback and questions from the bidders, the planned construction duration was extended by an additional 6 months.

In May 2023, the construction contract for the D Building Phase 2 Upgrades project was awarded to Bennett Mechanical Installations 2001 Limited for \$69,704,700 (excluding contingency) and a contract duration of three years. Construction started in June 2023 and is currently approximately 15 per cent complete.

The contractor has submitted several delay claims due to unforeseen site conditions, including emergency repairs to existing plant process equipment, the discovery of a large abandoned buried concrete structure, and additional buried electrical and instrumentation cables requiring identification and relocation.

Adding to the complexity and coordination efforts for the D Building Phase 2 project are other ongoing projects at the plant which have been delayed, including the Solar PV project and the Integrated Pumping Station project.

The Solar PV project involves the installation of solar panels on the D Building roof and electrical work within D Building. Construction is nearly complete, however, there remains ongoing coordination to ensure separation in time and space of the D Building Phase 2 contract and the Solar PV project.

The Integrated Pumping Station Construction Contract 2 was initially forecast to be complete in 2022, however construction is still ongoing. The Integrated Pumping Station Construction Contract 2 is to the north of D Building and requires close monitoring and coordination of process tie-ins, laydown areas and general traffic around the sites to ensure separation in time and space of the two construction projects.

The next phase of the Integrated Pumping Station project, Construction Contract 3, is now imposing a major constraint that all D Building Phase 2 construction work upstream of the screens in the D Building be completed by the fall of 2025 to allow for a scheduled tie-in of raw sewage conduits. Ongoing construction sequencing review and the implementation of strict project monitoring to identify and mitigate potential schedule delays that may impact the Integrated Pumping Station and other projects is required and could not have been foreseen at the time of Request for Proposal award for engineering services.

Amendment for Purchase Order Number 6051143 for Contract Administration Services:

The Request for Proposal had included one (1) half-time contract administrator and one (1) full-time resident engineer / site inspector. This project now requires a full-time contract administrator and the addition of part-time discipline-specific site inspector services on an as needed basis. Additional head office support has also been added to assist the contract administrator and resident engineer with the resolution and coordination of increased technical reviews and challenges pertaining to the execution of the construction contract. The consultant's hourly rates are also to be amended, per the terms of the Request for Proposal, following six (6) years of fixed rates since the start of design in 2018.

Due to the additional scope added in design, increased project complexity and coordination with other projects, extended construction contract duration from two (2) years to three (3) years, and escalated hourly rates, a Purchase Order Amendment to GHD Limited for purchase order 6051143 is required.

At the time of award of the construction contract, the Toronto Water Capital budget did not have sufficient funds for both the award of the construction contract and for a purchase order amendment for contract administration services. The construction contract was awarded with the intent that funding would be sought in the 2024 budget for additional contract administration services. In June 2023, GHD Limited provided an estimate for additional construction contract administration services and funding in the amount of \$3,332,252 net of all applicable taxes and charges (\$3,390,900 net of Harmonized Sales Tax recoveries). This estimate was included in the 2024-2033 Approved Capital Budget and Capital Plan for Toronto Water.

This Purchase Order Amendment will increase the Purchase Order value from \$1,541,111 net of all applicable taxes and charges (\$1,568,235 net of Harmonized Sales Tax recoveries) to \$4,873,363 net of all applicable taxes and charges (\$4,959,135 net of Harmonized Sales Tax recoveries).

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SIGNATURE

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