

## **Award of Doc3987477359 to Bennett Mechanical Installations (2001) Ltd. for Construction Services and Amendment of Purchase Order Number 6048934 to GHD Limited for Professional Services for the Humber Treatment Plant Rehabilitation and Upgrades Project**

**Date:** June 10, 2024

**To:** General Government Committee

**From:** General Manager, Toronto Water and Chief Procurement Officer

**Wards:** 3 (Etobicoke - Lakeshore)

### **SUMMARY**

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The purpose of this report is to advise General Government Committee of the results of the negotiated Request for Proposal (nRFP) Doc3987477359, and request authority to award a construction contract for the Humber Treatment Plant Services Rehabilitation and Upgrades project and enter into an agreement with Bennett Mechanical Installations (2001) Ltd. in the amount of \$79,784,014 net of all applicable taxes and charges (\$81,188,213 net of HST recoveries).

This report also requests authority to amend Purchase Order Number 6048934 awarded under Request for Proposal Number 9117-18-7205 issued to GHD Limited for provision of Professional Services for Humber Treatment Plant Rehabilitation and Upgrades project in the amount of \$5,957,928 net of all applicable taxes and charges (\$6,062,787 net of HST recoveries). This revises the current purchase order value from \$7,532,660 net of all applicable taxes and charges \$7,665,235 net of HST recoveries) to \$13,490,588 net of all applicable taxes and charges (\$13,728,022 net of HST recoveries).

The purchase order amendment is required for additional design and contract administrative services related to drawings specific to plumbing and mechanical systems, as well improving on-site documentation at the Humber Treatment Plant. It includes associated costs with the construction phase support, evaluation and nRFP negotiations.

## RECOMMENDATIONS

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The General Manager of Toronto Water and Chief Procurement Officer recommend that:

1. The General Government Committee, in accordance with Section 195-8.4 of Toronto Municipal Code Chapter 195 (Purchasing By-Law), grant authority to the General Manager, Toronto Water to enter into an agreement with Bennett Mechanical Installations (2001) Ltd., the highest scoring supplier based on the evaluation criteria included in the Solicitation and meeting the requirements of Doc3987477359 to provide Construction Services for Humber Treatment Plant Services Rehabilitation and Upgrades, in the amount of \$79,784,014 net of all applicable taxes and charges (\$81,188,213 net of HST recoveries), all in accordance with the terms and conditions as set out in the nRFP and any other terms and conditions satisfactory to the General Manager Toronto Water, and in a form satisfactory to the City Solicitor.
2. 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 Number 6048934 with GHD Limited for Professional Services for the Humber Treatment Plant Rehabilitation and Upgrades to increase the overall value by \$5,957,928 net of all applicable taxes and charges (\$6,062,787 net of HST recoveries) to \$13,490,588 net of all applicable taxes and charges (\$13,728,022 net of HST recoveries).

## FINANCIAL IMPACT

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The total potential contract award to Bennett Mechanical Installations (2001) Ltd. Identified in this report is \$79,784,014 net of all applicable taxes and charges. The total potential cost to the City is \$81,188,213 net of HST recoveries.

Amendment of Purchase Order Number 6048934 with GHD Limited by an additional \$5,957,928 net of all applicable taxes and charges (\$6,062,787 net of HST recoveries), will increase the purchase order value from \$7,532,660 to \$13,490,588 net of all applicable taxes and charges (\$7,665,235 to \$13,728,022 net of HST recoveries).

Funding is available in the 2024 Approved Capital Budget and 2025 - 2033 Approved Capital Plan for Toronto Water. Funding details are summarized in Table 1 below.

**Table 1 - Financial Impact Summary (net of HST Recoveries)**

WBS Element (Description)	CWW037-18 (HTP Rehab and Upgrades - Construction Services)	CWW037-18 (HTP Rehab and Upgrades - Professional Services)	CWW037-18 (HTP Rehab and Upgrades Total)
2024	\$15,000,000	\$2,000,000	\$17,000,000
2025	\$24,500,000	\$1,998,781	\$26,498,781

WBS Element (Description)	CWW037-18 (HTP Rehab and Upgrades - Construction Services)	CWW037-18 (HTP Rehab and Upgrades - Professional Services)	CWW037-18 (HTP Rehab and Upgrades Total
2026	\$25,000,000	\$1,000,000	\$26,000,000
2027	\$7,000,000	\$1,000,000	\$8,000,000
2028	\$9,688,213	\$64,006	\$9,752,219
<b>Total</b>	<b>\$81,188,213</b>	<b>\$6,062,787</b>	<b>\$87,251,000</b>

## DECISION HISTORY

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The Bid Award Panel adopted Item Number BA22.6 at its meeting held on April 24, 2019, thereby authorizing the award of Contract TW-CWD-19-05604, RFP Number 9117-18- 7205 for Professional Services for the Humber Treatment Plant Rehabilitation and Upgrades to GHD Limited, in the amount of \$6,232,660 net of all applicable taxes and charges, from the date of award for a 44-month period. The Bid Award Panel decision can be found at:

[Agenda Item History - 2019.BA22.6 \(toronto.ca\)](#)

Purchase Order 6048934 to GHD Limited was issued in the amount of \$6,232,660 net of all applicable taxes and charges.

The Infrastructure and Environment Committee adopted Item Number IE14.1 at its meeting held on July 9, 2020, thereby authorizing amendment of the purchase order Number 6048934 with GHD Limited for Professional Services for Humber Treatment Plant Rehabilitation and Upgrades by an additional amount of \$750,000 net of all applicable taxes and charges. The Infrastructure and Environment Committee decision can be found at:

[Agenda Item History - 2020.IE14.1 \(toronto.ca\)](#)

Purchase order 6048934 to GHD Limited was revised from \$6,232,660 to \$6,982,660 net of all applicable taxes and charges.

The Infrastructure and Environment Committee adopted Item Number IE28.1 at its meeting held on March 29, 2022, thereby authorizing amendment of the purchase order Number 6048934 with GHD Limited for Professional Services for Humber Treatment Plant Rehabilitation and Upgrades by an additional amount of 550,000 net of all applicable taxes and charges. The Infrastructure and Environment Committee decision can be found at:

[Agenda Item History - 2022.IE28.1 \(toronto.ca\)](#)

Purchase order 6048934 to GHD Limited was revised from \$6,982,660 to \$7,532,660 net of all applicable taxes and charges.

## COMMENTS

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### 1. Project Background

The Humber Treatment Plant (HTP) is the City's second largest wastewater treatment plant and is located at 130 The Queensway, near the mouth of the Humber River. The HTP is located on 41 hectares of land and serves a population of approximately 662,000, with a capacity of 473,000 m<sup>3</sup> per day. It began operating in 1960.

The City has embarked on a comprehensive project to rehabilitate and upgrade plant wide process and maintenance support services, and has retained GHD Limited to provide professional services related to this project. The scope of work includes all the engineering services related to design, construction, and post-construction engineering services for upgrades to the following existing facilities and processes: plant-wide hot water system; plant-wide HVAC system; digesters; sludge thickening; south primary clarifiers; head house; north grit building; rehabilitation and transformation of the old substation into a workshop; new boiler building, secondary treatment, and other miscellaneous related upgrades.

The duration of this project is currently estimated at eight years (2019-2026) including four years for the design phase and three years and six months for the construction phase. Additionally, there is a provisional item that allows for additional six more months of construction. The original request for proposal (RFP) identified two years for the design phase and two- and one-half years for the construction phase.

### 2. Award of Doc3987477359 for Construction Services to Bennett Mechanical Installations (2001) Ltd.

Due to the complexity of the scope of work, the City has chosen a strategic sourcing approach and utilized a Negotiated Request for Proposals (nRFP) process, which includes various evaluation stages to ensure the supplier's capability, capacity, experience, and cost competitiveness. There were total of 20 addenda issued through the open solicitation process.

The nRFP closed on December 20, 2023. At the time of closing, the City received five (5) submissions. Of these five (5) submissions, one submission was deemed non-compliant. The remaining following four (4) supplier's submissions proceeded through the stages of evaluation process:

1. Alberici Constructors Ltd.
2. Maple Reinders Constructors Limited
3. Bennett Mechanical Installations (2001) Ltd
4. Torbear Contracting Inc.

One of the four remaining submissions did not meet one or more of the minimum thresholds set out in the technical evaluation requirements and did not proceed into next stages of the evaluation process. The three suppliers were invited into Commercially Confidential Meetings (CCMs) and Best and Final Offers (BAFO). Upon conclusion of the CCMs, suppliers were ranked by a combination of their technical and pricing scores as per the evaluation criteria disclosed in the solicitation. Bennett Mechanical

Installations (2001) Ltd. was the top-ranked supplier and was invited to proceed into contract negotiations.

During negotiations, the City reviewed the overall financial impact, and options available to ensure adherence to the available budget. As described in the nRFP Process, the Work was divided into eleven (11) Work Packages. As per the nRFP, the City at its discretion determined that, one (1) or all Work Packages, or any combination of Work Packages could be awarded to one (1) legal entity based on the approved project budget. As negotiations proceeded, the City determined that the budget available for this project meant that Work Packages 3, 7 and 11 would need to be removed from the award. This resulted in a reduction of the total contract price by \$20,820,394.00. Attachment 1 provides a summary of the eleven (11) Work Packages included in the scope of work under this nRFP.

The ability to leverage this option highlights the advantage of a strategic sourcing process utilizing a Negotiated Request for Proposal (nRFP) solicitation.

### **Fairness Monitor Report:**

On April 30, 2024, Fairness Monitor, P1 Consulting provided the City with the Fairness Monitor's Report confirming that, from a fairness perspective, the procurement process undertaken for the City of Toronto's nRFP for Humber Treatment Plant Services Rehabilitation and Upgrades has been conducted in a fair, open and transparent manner and the City has followed the procedures in accordance with the applicable RFP documentation. P1 Consulting approves the outcome of the process. Refer to Attachment 2 for the Fairness Monitor's Report.

### **3. Amendment of Purchase Order Number 6048934 for Professional Services to GHD Limited**

Work on this project began in 2019 and the construction phase of the project is expected to be awarded on July 2, 2024.

Under the original Purchase Order (PO), the total value of contingencies and allowances issued to GHD Limited was \$657,000 net of all taxes for both design and construction phase (10.5% of the original purchase order value).

As a result of previously approved purchase order amendments, the total value of the contingencies and provisional allowances was increased by \$1,300,000 net of all taxes, from \$657,000 net of all taxes to \$1,957,000 net of all taxes (26% of the total PO value).

At the present stage of the project, an additional amount of \$5,957,928 net of all taxes is required for additional Design Services (\$2,033,000 net of all taxes) and additional Contract Administration Services (\$3,924,928 net of all taxes). A summary of the additional services required is as follows:

#### **3.1 Design Services - Additional Scope**

(i) Review and reconciliation of as-built drawings. Record documents for each area/system were collected from multiple historic projects, including some drawings and archived data dating back to 1950's. Approximately 200 electrical drawings (out of 450 total) and 90 process and instrumentation diagrams (out of 120 total) required extensive field verifications and upgrades. The cost of this additional work is \$477,000.

(ii) Motor Control Schematics. Schematics required significant revision beyond the scope identified in the RFP. A total of 115 additional drawings were developed, two sheets for each control schematic. The cost of this additional work is \$263,000.

(iii) Plant Hot Water System. During the design there were challenges associated with the hot water system, respectively the Zone 2 and Zone 3 reheated pumping system and hot water loop circulation pump. The plant staff requested migrating the building automation system to RX3i PAC automation to allow programming of the new pumps, and to have a centralized heating system. The cost of this additional work is \$188,000.

(iv) Sump and Centralized Pumping System. Part of the GHDs base scope included the upgrade of 15 sumps across the site, including pump and electrical upgrades. The replacement of the sump control panels was not included in the base scope. However after field investigation, it was determined that most of the panels required replacement. In total, 135 additional drawings were developed by GHD. The cost of this additional work is \$190,000.

(v) Gas Detection: New control systems were developed to improve day-to-day operations and maintenance. The design included five (5) standalone control systems and five (5) integrated panels. The cost of this additional work is \$121,000.

(vi) HVAC Controls. The field investigation of the HVAC system took longer than anticipated (RFP didn't include any mechanical condition assessment), and the existing as-built drawings were incomplete. The cost of this additional work is \$134,000.

(vii) Undocumented subsurface utilities. Utilities were identified at the location of the new North Boiler Building and Maintenance Building. As a result, subsurface investigation and a new area plan was required. The cost of this additional work is \$95,000.

(viii) Process Control Narratives (PCN). Many of the existing PCNs were found to be significantly outdated and needed to be revised. The cost of this additional work is \$116,000.

(ix) Operational Considerations. Additional investigations and evaluations were required outside of the base scope. The cost of this additional work is \$93,000.

(x) Tagging. The Toronto Water tagging system changed during the design phase. GHD had to become familiar with the new standard and to revise and finalize tags. The cost of this additional work is \$33,000.

(xi) Permitting and Permit Fees. Due to the size of the project, permits were required for 11 buildings. Additional support was required to address 90 questions and revise 50 drawings for building permit approvals. The cost of this additional work is \$32,000.

(xii) Tendering Support, Evaluation of Proposals and Negotiations. The number of drawings issued for tender doubled compared with the number estimated at the time of RFP submission. The method of procurement selected by the City was the nRFP and the overall time of the process was about one year compared with a six-month tender process. Additional support was required to answer more than 550 questions associated with the posting, to review the four submissions, and participate in the negotiation process. The cost of this additional work is \$213,000.

(xiii) Disbursements. Disbursements are included in the additional scope representing 4% of the total extra work. The cost for this additional item is \$78,000.

### **3.2 Contract Administration Services - Additional Scope**

Due to complexity of the project, an additional year of contract administration and technical support services associated with the construction phase of this project is required.

The construction phase has increased from the original two years and six months to three years and six months. Additional staff members have been included in the contract administration team, including: one additional site inspector, one additional project controller in charge of monitoring progress and deviations from the baseline schedule and an additional staff member for engineering support during the construction phase.

The additional cost to provide the required services for contract administration over the three-and-a-half-year period of construction, including services associated with the two-year post-construction period is \$3,924,928 net of all taxes.

## **CONTACT**

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## SIGNATURE

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Lou Di Gironimo,  
General Manager, Toronto Water

Sabrina Dipietro,  
Acting Chief Purchasing Officer

## ATTACHMENTS

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### **Attachment 1 - Summary of the eleven (11) Work Packages included in the scope of work under negotiated Request for Proposal (nRFP) Doc3987477359**

Work Package	Description
1.	Sludge Thickening Building
2.	Engine House, North Boiler Building and Hot Water System Upgrades
3.	* New Maintenance Shop, Disinfection Building
4.	North Secondary Upgrades
5.	Filter Flushing Water Facility, High Pressure Blower Building and Return
6.	North Grit Building and House Upgrades
7.	* South Primary Upgrades
8.	Digester and Digester Gallery Upgrades
9.	Gas Compressor Building Upgrades
10.	Building HVAC Control System Upgrades (Site Wide)
11.	*Sump Upgrades (Site Wide)

\*Note - Work Packages 3,7 and 11 were removed from the award

Attachment 2 - Fairness Monitor Report on the Procurement Process. for negotiated Request for Proposal (nRFP) Doc3987477359

Award of Doc3987477359 to Bennett Mechanical Installations (2001) Ltd. and Amendment of PO 6048934 to GHD Limited