



## REPORT FOR ACTION

# Amendment to Purchase Order No. 6031221 for the Construction Contract Administration for the New Construction and Rehabilitation of the Process Control Building at Highland Creek Treatment Plant

**Date:** May 9, 2018

**To:** Public Works and Infrastructure Committee

**From:** Acting General Manager, Toronto Water and Chief Purchasing Officer,  
Purchasing & Materials Management

**Wards:** 44 – Scarborough East

### SUMMARY

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The purpose of this report is to seek authority to amend Purchase Order No. 6031221 issued to Unit A Architecture Inc. for Professional Services during construction of the Process Control building project at Highland Creek Treatment Plant, awarded under Request for Proposal (RFP) 9117-09-7264. A purchase order amendment is required for additional contract administration and site inspection services. The construction project required more coordination with operational staff and more supervision of the contractor than requested by the City in the original assignment.

### RECOMMENDATIONS

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The Acting General Manager, Toronto Water and the Chief Purchasing Officer recommend that:

1. Public Works and Infrastructure Committee in accordance with Section 71-11.1.C of the City of Toronto Municipal Code Chapter 71 (Financial Control By-Law), grant authority to amend Purchase Order No. 6031221 with Unit A Architects Inc. for professional services for contract administration and site inspection services during construction of the Process Control Building at Highland Creek Treatment Plant, RFP No. 9117-09-7264 and additional amount of \$392,644.10 net of all taxes and charges (\$399,554.64 net of HST recoveries), revising the current total value from \$1,591,145.00 to \$1,983,789.10 net HST (\$2,018,703.79 net of HST recoveries) and to extend the professional services delivery date on the Purchase Order to December 31, 2019.

## FINANCIAL IMPACT

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Amendment of Purchase Order No. 6031221 by an additional \$392,644.10 net of all taxes and charges (\$399,554.64 net of HST recoveries), revising the current total value from \$1,591,145.00 to \$1,983,789.10 net HST (\$2,018,703.79 net of HST recoveries).

Funding availability is included in the Toronto Water 2018 Approved Capital Budget and 2019-2027 Approved Capital Plan as follows:

**Table 1: Funding availability is included in the Toronto Water 2018 Approved Capital Budget and 2019-2027 Approved Capital Plan**

WBS Element	Cost Element	2018 Budget	2019-2027 Capital Plan	Total (net of HST recoveries)
CWW036-01	4420	\$260,652.24	\$138,902.40	\$399,554.64

The Acting Chief Financial Officer has reviewed this report and agrees with the financial impact information.

## DECISION HISTORY

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At its meeting on June 9, 2010 Bid Committee awarded RFP No.9117-09-7264 to Unit A Architects Inc. for provision of professional services for preliminary design, detailed design, construction contract administration, and post construction services for the Rehabilitation and Upgrade of Various Buildings at Highland Creek Treatment Plant in the amount of \$1,091,160 net of all taxes. The Bid Committee decision can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2010.BD173.1>

At its meeting on May 6, 2015, Bid Committee awarded Tender Call 82-2014, Contract MCP13-19WP for construction services related to the New Construction and Rehabilitation of the Process Control Building at Highland Creek Treatment Plant to Aplus General Contractors, in the amount of \$13,504,400 net of HST. The Bid Committee decision can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.BD25.12>

At its meeting on January 19, 2018, the Public Works and Infrastructure Committee adopted without amendment report PW26.1 seeking authority to amend Purchase Order No. 6041437 for Contract No. MCP13-19WP with Aplus General Contractors Corporation by an additional amount of \$1,300,000 net of all taxes, revising the total value of from \$13,504,400 to \$14,804,400 net of all taxes. The Public Works and Infrastructure Committee decision can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.PW26.1>

## COMMENTS

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### 1. Highland Creek Treatment Plant

The Highland Creek Treatment Plant (HCTP) is one of four wastewater treatment plants operated by the City of Toronto. The former Municipality of Scarborough initiated the construction of the original plant under an agreement with the Municipality of Metropolitan Toronto in 1954 and was completed in 1956, followed by several phases of expansion over the years to meet the growth needs in the service area to its current rated capacity of 219,000 m<sup>3</sup> per day. The facility is located at the mouth of Highland Creek at 51 Beechgrove Drive and services an area bounded by Steeles Avenue on the north, Victoria Park Avenue on the west, the Rouge River on the east and Lake Ontario on the south. This area contains an estimated connected population of 533,000.

Major treatment processes include preliminary treatment, primary treatment, secondary treatment, phosphorous removal with ferrous chloride, final effluent disinfection using sodium hypochlorite, and final effluent dechlorinating using sodium bisulphate. Solids handling processes include sludge stabilization by anaerobic digestion followed by dewatering using high speed centrifuges. Two multiple hearth incinerators are used for the disposal of the dewatered biosolids. Numerous auxiliary systems are required for the proper operation of the plant processes and include potable water, process water, HVAC, electrical power distribution, natural gas and instrument air.

The Ministry of the Environment and Climate Control (MOECC) has classified the Highland Creek Treatment Plant as a Class IV wastewater treatment facility under Regulation 129/04.

As part of Toronto Water's 2018 to 2027 Capital Plan, the Division has budgeted \$565 million of critical construction work over the next ten-year period. The purpose of these projects is to ensure regulatory requirements are continually met, maintain infrastructure in a state of good repair and improve service (i.e. Odour Control and Compliance). The new construction and rehabilitation of the process control building is required to maintain the plant in a state of good repair.

### 2. Amendment to Purchase Order 6031221

The scope of work for RFP No. 9117-09-7264 includes the Rehabilitation and Upgrade of four (4) buildings at the Highland Creek Treatment Plant. Three buildings; Laboratory, New North Workshop and Existing North Workshop were already completed. The construction of a new Operations Control Centre from which plant operations staff will monitor and control all critical plant systems and processes is the last building to be done under the rehabilitation scope. This will include the renovation of the existing plant administration building and the construction of an adjacent parking lot. Toronto Water staff had decided that only part time construction services was needed during construction. The original scope assumed the construction of the Operations Control Centre would be completed in one phase.

As the construction work progressed, a number of difficult and unforeseen issues were discovered that required extending the construction completion to December 31, 2019.

In June 2017, Toronto Water advised Unit A Architecture Inc. the need to increase the part-time site inspector to full-time site inspector, due to the challenges in meeting various construction and operation requirements as follows:

- (i) Additional operational requirements. Additional coordination with plant operations staff was required related to shutdown permission, access entry control and maintaining area separation in order to minimize impact to plant operations.
- (ii) Additional construction supervision. Several unforeseen issues arose during construction which resulted in additional work including the replacement of existing sanitary sewer lines, removal of contaminated soil and the replacement of underground conduits for the security system. This additional work required additional contract administration and site inspection services.

As a result, Unit A Architecture Inc. was asked to provide additional services not anticipated under their original assignment as follows:

- (i) Additional full-time resident site supervision services required to complete the project by December 31, 2019 in the amount not to exceed \$256,144.10 net HST (\$260,652.24 net of HST recoveries).
- (ii) A Contingency Allowance of \$136,500.00 excluding HST (\$138,902.40 net of HST recoveries) to accommodate any additional professional services that could arise during construction.

The initial contract awarded to Unit A Architects Inc. was for \$1,091,160.00 net of all taxes through the issuance of Purchase Order No. 6031221. On August 29, 2014, a purchase order amendment was issued for \$499,985.00 for additional design requirements and contract administration services. It is now required to further amend Purchase Order No 6031221 by an additional \$392,644.10 net of all taxes and charges (\$399,554.64 net of HST recoveries). The contract value will now be revised from \$1,591,145.00 (1,619,149.15 net of HST recoveries) to \$1,983,789.10 net of all taxes (\$2,018,703.79 net of HST recoveries).

## **CONTACT**

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## **SIGNATURE**

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Frank Quarisa  
Acting General Manager, Toronto Water

Michael Pacholok  
Chief Purchasing Officer, Purchasing & Materials Management