



REPORT FOR ACTION

Amendment to Purchase Order No. 6042538 for Engineering Services for Pre-Design and Detailed Design for the Rosehill Reservoir Rehabilitation

Date: June 29, 2018
To: Public Works and Infrastructure Committee
From: Chief Engineer and Executive Director, Engineering and Construction Services
Chief Purchasing Officer
Wards: Ward 22 (St. Paul's); Ward 27 (Toronto Centre - Rosedale)

SUMMARY

The purpose of this report is to request authority to amend Purchase Order No. 6042538, issued to Associated Engineering (Ont.) Ltd., to provide additional professional engineering services for the preliminary design and detailed design of improvements to David A. Balfour Park as part of the Rosehill Reservoir Rehabilitation project. The value of the amendment is \$450,000 net of all taxes and charges (\$457,920 net of HST recoveries), revising the current purchase order value from \$1,441,998 to \$1,891,998 net of all taxes and charges (\$1,925,298 net of HST recoveries).

RECOMMENDATIONS

The Chief Engineer and Executive Director of Engineering and Construction Services and the Chief Purchasing Officer recommend that:

1. The Public Works and Infrastructure Committee, in accordance with Section 71-11.1.C of the City of Toronto Municipal Code Chapter 71 (Financial Control Bylaw), grant authority to amend Purchase Order No. 6042538 with Associated Engineering (Ont.) Ltd., to provide additional professional engineering services for preliminary design and detailed design for Contract No. 17ECS-MI-03WA in the amount of \$450,000 net of all taxes (\$457,920 net of HST recoveries), revising the purchase order value from \$1,441,998 to \$1,891,998, net of all taxes and charges (\$1,925,298 net of HST recoveries).

FINANCIAL IMPACT

The amendment of Purchase Order No. 6042538 for an additional amount of \$450,000 net of all taxes, \$508,500 including HST and all applicable charges (\$457,920 net of HST recoveries), will increase the current Purchase Order value from \$1,441,998 to \$1,891,998 net of all taxes and charges (\$1,925,298 of HST recoveries). Funding is included in the Parks, Forestry and Recreation 2018 Approved Capital Budget and 2019-2027 Approved Capital Plan in the account CPR-117-48-45. Funding details are provided in Table 1 below (all values are net of HST recoveries).

Table 1: Projected Cash Flow for Amendment to Purchase Order No. 6042538

WBS Element	2018	2019	Total
CPR117-48-45	\$400,000	\$57,920	\$457,920

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

DECISION HISTORY

At its meeting of September 25, 2015, Bid Committee granted authority to enter into an agreement with Associated Engineering (Ont.) Ltd., for the provision of Professional Engineering Services during design, construction and post construction for the Rehabilitation of Rosehill Reservoir, being the highest scoring proponent meeting the requirements of Request for Proposal (RFP) 9117-15-7031, through the issuance of three purchase orders: (1) preliminary design and detailed design, in an amount not to exceed \$991,690 net of taxes and charges; (2) professional services during construction including construction contract administration and site supervision, in an amount not to exceed \$1,001,219 net of all taxes and charges for a construction period of up to 104 weeks; and, (3) post-construction services, in an amount not to exceed \$33,420 net of all taxes and charges. A copy of the Bid Committee Decision Document can be found at:

<https://www.toronto.ca/legdocs/mmis/2015/bd/bgrd/backgroundfile-83845.pdf>

At its meeting of November 29, 2017, the Public Works and Infrastructure Committee authorized the award of Contract No. 17ECS-MI-03WA, Tender Call No. 265-2017, for the Rehabilitation of the Rosehill Reservoir to Bennett Mechanical Installations (2001) Ltd., in the amount of \$34,607,700 net of all taxes and charges (\$35,216,796, net of HST recoveries), for a construction contract duration of 125 weeks. Additionally, the Public Works and Infrastructure Committee authorized an amendment to Purchase Order No. 6045909 for Associated Engineering (Ont.) Ltd., for services during construction, increasing the contract administration budget by \$252,968 net of all taxes and charges, from \$1,001,218 to \$1,254,186, net of all taxes and charges, to cover the cost of the extended construction schedule. The Public Works and Infrastructure Committee decision can be found at:

<https://www.toronto.ca/legdocs/mmis/2017/pw/bgrd/backgroundfile-109148.pdf>

City Council, at its meeting of February 12, 2018, adopted Parks, Forestry and Recreation's 2018 Capital Budget through item EX31.2 (20.a.i.). Funds in the amount of \$6,000,000 were included for the Rosehill Reservoir Park Improvements with Toronto Water (TW) sub-project. The City Council decision can be found at:
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.EX31.2>

At its meeting of June 26, 27 and 28, 2018, City Council approved a recommendation to amend the approved 2018-2027 Capital Budget and Plan for Parks, Forestry and Recreation by accelerating \$400,000 from 2020 to 2018 for the Rosehill Reservoir Park improvements shared-use project with Toronto Water. The City Council decision can be found at:
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.MM43.13>

COMMENTS

Background

The Rosehill Reservoir is a large concrete structure situated underground within David A. Balfour Park (as shown in Figure 1), which is located at 75 Rosehill Avenue. The Rosehill Reservoir facility dates back to the 1800's, when it was first put into operation. It is the City's oldest and largest potable water reservoir, with a current storage capacity of 270 mega litres, serving a population of approximately 600,000.

In 2014, Toronto Water completed a detailed condition assessment of the Rosehill Reservoir which recommended upgrades to structural, mechanical, electrical, instrumentation, piping and buried waterproofing membrane to bring the Reservoir to a state-of-good repair. Subsequently, Associated Engineering (Ont.) Ltd., was retained in 2015 to undertake the preliminary design, detailed design and contract administration for the rehabilitation project.

During the detailed design stage, the City initiated public consultation with the affected community and local Councillors to discuss the necessary repairs and the associated impacts to David A. Balfour Park. The project was originally planned as a conventional state-of-good repair reservoir rehabilitation project with basic restoration of the existing park elements once construction of the reservoir was complete. Through extensive public consultation with local residents and park user groups, the importance of reinstating the space to meet the needs of the local community was recognized by City staff.



Figure 1. Aerial Photograph showing the location of the Rosehill Reservoir and the boundaries of the David A. Balfour Park.

It was recognized that the park improvements should be delivered under the same contract as the Rosehill Reservoir Rehabilitation contract in order to:

- Mitigate against Occupational Health & Safety Act constructor risks to the City, by precluding the need to separate work areas in time and space; and,
- Reduce the overall impact to the community (e.g., from truck traffic, noise and construction activity, and restrictions on overall park access and usage) by eliminating the requirement for contractor demobilization once the rehabilitation works for the reservoir are completed, and then re-mobilization of a second contractor to undertake the park restoration and enhancements.

Ideally, the park improvement design would have been completed prior to the tender of the reservoir contract (Contract No. 17ECS-MI-03WA, Tender Call No. 265-2017). However, it was important to take an appropriate amount of time to finalize the park improvement conceptual design with input from Parks, Forestry and Recreation and the local community. This process was initiated in early 2017 and was anticipated to be completed in spring 2018. Therefore, it was determined by City Staff that, due to the criticality of the reservoir repairs, the tender should proceed as originally scheduled so that the necessary reservoir rehabilitation work would not be delayed. Contract No. 17ECS-MI-03WA, Tender Call No. 265-2017, was issued in September 2017. The contract was awarded in December 2017 and included provisional allowances for the construction of the park improvements, on the understanding that the design for the improvements would be finalized at a later date.

Amendment to Purchase Order No. 6042538 for Additional Preliminary and Detailed Design Services

The original scope of work covered by Purchase Order No. 6042538 for Associated Engineering (Ont.) Ltd., only included basic restoration of the existing park elements which would be impacted by the reservoir rehabilitation and did not anticipate the significant level of public consultation that would be required to address local community concerns related to David A. Balfour Park. Consequently, on August 14, 2017, the Chief Engineer and Executive Director, Engineering and Construction Services, authorized an amendment to Purchase Order No. 6042538 for Associated Engineering (Ont.) Ltd., in the amount of \$450,309 net of all taxes and charges (\$458,235 net of HST recoveries), increasing the purchase order value from \$991,690 to \$1,441,998, net of all taxes and charges (\$1,467,378 net of HST recoveries). This included the cost of performing a heritage impact assessment and providing additional public consultation support related to the development of improvements to David A. Balfour Park and additional design services for the replacement of an existing watermain adjacent to the Rosehill Reservoir discovered to be at the end of its service life.

After tender and award of the construction contract, staff of Engineering and Construction Services and Parks, Forestry and Recreation continued to work with community members to develop the conceptual park improvement design, which was finalized in May 2018. Associated Engineering (Ont.) Ltd., was subsequently asked to provide a quotation to complete the preliminary design and detailed design for the finalized scope of work for the park improvements according to the conceptual design. The scope of additional design work involves several specialty sub-consultants in addition to the project management and engineering design expertise including:

landscape architects, arborists, water feature design consultants and architects. Associated Engineering's quotation of \$450,000 is an upset limit for all the required professional services. This quotation is within the estimated cost determined by Parks, Forestry and Recreation and Engineering and Construction Services staff for this scope of work and is considered to be fair, reasonable and consistent with the terms and conditions of RFP 9117-15-7031.

An amendment to Purchase Order No. 6042538 in the amount of \$450,000 net of all taxes and charges (\$457,920 net of HST recoveries) is therefore requested, revising the current purchase order value from \$1,441,998 to \$1,891,998 net of all taxes and charges, \$2,137,958 including HST and all applicable charges (\$1,925,298 net of HST recoveries). This amendment is fully funded by the Parks, Forestry & Recreation Capital Budget. Amending the purchase order for Associated Engineering (Ont.) Ltd., was determined to be the most prudent approach to ensure the park improvements can be constructed under the same contract as the reservoir rehabilitation work, thereby minimizing community impacts.

This report was prepared in consultation with staff from Parks, Forestry and Recreation Division.

CONTACT

John P. Kelly, P. Eng., Acting Director, Major Infrastructure, Engineering and Construction Services, Telephone: (416) 392-0867 e-mail: John.Kelly@toronto.ca

Jackie Kennedy, P. Eng., Acting Manager, Purchasing and Materials Management Division, Telephone: (416) 397-4801 e-mail: Jackie.Kennedy@toronto.ca

SIGNATURE

Michael D'Andrea, M.E.Sc., P.Eng.
Chief Engineer and Executive Director, Engineering and Construction Services

Michael Pacholok, JD
Chief Purchasing Officer, Purchasing and Materials Management Division