



REPORT FOR ACTION

Contract Award for Tender Call No. 24-2018 for Transmission Watermain from the Scarborough Pumping Station to St. Clair Avenue East at Midland Avenue and Amendment to Purchase Order No. 6046830 for Professional Engineering Services during Construction

Date: May 24, 2018
To: Public Works and Infrastructure Committee
From: Chief Engineer and Executive Director, Engineering and Construction Services
Chief Purchasing Officer
Wards: Ward 36 (Scarborough - Southwest)

SUMMARY

The purpose of this report is to: (1) advise of the results of Tender Call 24-2018, Contract No. 17ECS-LU-05TT, for the construction of a new transmission watermain from the Scarborough Pumping Station at 21 Fishleigh Drive to St. Clair Avenue East at Midland Avenue, and the replacement of the watermain, substandard water services, and road resurfacing on Clarendon Avenue, and request authority to award the contract to Clearway Construction Inc. in the amount of \$37,410,371 net of all applicable taxes and charges (\$38,068,793 net of HST recoveries); and (2) request authority to amend Purchase Order No. 6046830 with Hatch Corporation to provide additional professional engineering services for contract administration by \$498,667 net of all taxes (\$507,444 net of HST recoveries), revising the current purchase order value from \$1,054,912 to \$1,553,579 net of all taxes (\$1,580,922 net of HST recoveries), due to the longer than originally anticipated construction schedule.

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 195-8.4 of Toronto Municipal Code Chapter 195 (Purchasing By-Law), grant authority to award Contract No. 17ECS-LU-05TT, Tender Call No. 24-2018 for the construction of a new transmission watermain from the Scarborough Pumping Station at 21 Fishleigh Drive to St. Clair Avenue East at Midland Avenue, and the replacement of the watermain, substandard water services, and road resurfacing on Claremore Avenue to Clearway Construction Inc. in the amount of \$37,410,371 net of all taxes (\$38,068,793 net of HST recoveries) having submitted the lowest compliant bid and meeting the specifications in conformance with the Tender requirements.

2. 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 By-Law), grant authority to amend Purchase Order No. 6046830 with Hatch Corporation to provide additional professional services for contract administration and site inspection services during construction for Contract No. 17ECS-LU-05TT in the amount of \$498,667 net of all taxes (\$507,444 net of HST recoveries), revising the current purchase order value from \$1,054,912 to \$1,553,579 net of all taxes (\$1,580,922 net of HST recoveries).

FINANCIAL IMPACT

The total value of the contract award for Contract 17ECS-LU-05TT, Tender Call 24-2018, for the construction of the transmission watermain from the Scarborough Pumping Station at 21 Fishleigh Drive to St. Clair Avenue East at Midland Avenue, and the replacement of the watermain, substandard water services, and road resurfacing on Claremore Avenue is \$42,273,719 including HST and all applicable charges. The total cost to the City is \$38,068,793 net of HST recoveries.

Funding is included in the Toronto Water 2018 Approved Capital Budget and 2019-2027 Approved Capital Plan in the accounts CPW066-07 and CPW544-19-06, and in the Transportation Services 2019-2027 Approved Capital Plan in the accounts CTP315-07-240 and CTP315-09-207. Funding details are provided in Table 1 below (all values are net of HST recoveries)

Table 1: Projected Cash Flow for Contract 17ECS-LU-05TT

WBS Elements	2018	2019	2020	2021	Total
CPW066-07	\$3,600,000	\$15,900,000	\$15,900,000	\$1,543,727	\$36,943,727
CPW544-19-06	\$0	\$426,159	\$200,000	\$0	\$626,159
CTP315-07-240	\$0	\$452,250	\$0	\$0	\$452,250
CTP315-09-207	\$0	\$0	\$46,657	\$0	\$46,657
Total	\$3,600,000	\$16,778,409	\$16,146,657	\$1,543,727	\$38,068,793

The amendment of Purchase Order No. 6046830 for an additional amount of \$498,667 net of all taxes, \$563,494 including HST and all applicable charges (\$507,444 net of HST recoveries) will increase the current purchase order value from \$1,054,912 to \$1,553,579 net of all taxes, \$1,755,545 including HST and all applicable charges (\$1,580,922 net of HST recoveries).

Funding is included in the Toronto Water 2019-2027 Approved Capital Plan in the account CPW066-06 and in the Transportation Services 2019-2027 Approved Capital Plan in the accounts CTP315-07-241 and CTP315-09-206. Funding details are provided in Table 2 below (all values are net of HST recoveries).

Table 2: Projected Cash Flow for Amendment to Purchase Order No. 6046830

WBS Elements	2019	2020	2021	Total
CPW066-06	\$0	\$182,000	\$278,104	\$460,104
CTP315-07-241	\$39,450	\$0	\$0	\$39,450
CTP315-09-206	\$0	\$7,890	\$0	\$7,890
Total	\$39,450	\$189,890	\$278,104	\$507,444

The Regional Municipality of York is paying 22.72% of the total project cost under a cost-sharing agreement with the City and will reimburse the City for the actual cost of construction on a quarterly basis.

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

DECISION HISTORY

At its meeting of March 25, 2015, Bid Committee granted authority to enter into an agreement with Hatch Mott MacDonald Ltd. (now Hatch Corporation), for the provision of Professional Engineering Services during design, construction and post construction for a new transmission watermain from the Scarborough Pumping Station at 21 Fishleigh Drive to St. Clair Avenue East at Midland Avenue, in the amount of \$2,160,087 net of all applicable taxes and charges as a result of Request for Proposal No. 9117-14-7273. A copy of the Bid Committee Decision can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.BD18.3>

COMMENTS

Background

The City of Toronto and the Regional Municipality of York (York Region) have a long-term Water Supply Agreement, wherein Toronto Water supplies water from Lake Ontario to service parts of York Region. In 2006, Toronto Water and York Region staff completed a Joint Optimization Study (JOS) to identify the infrastructure required to satisfy water demands in the City of Toronto and York Region up to 2031. One of the recommendations of the JOS was to construct a new transmission watermain from the Scarborough Pumping Station, located at 21 Fishleigh Drive, to the intersection of St. Clair Avenue East at Midland Avenue to improve the system hydraulic performance to meet future water demands.

In 2007, through a competitive procurement process, Engineering and Construction Services retained the joint venture of Associated Engineering and The Municipal Infrastructure Group to evaluate alternatives and select a preferred route for the new transmission watermain in accordance with the Province of Ontario's Municipal Class Environmental Assessment (EA) process.

The preferred alternative, shown in Figure 1, is a three (3) kilometre transmission watermain extending from the Scarborough Pumping Station, west on Fishleigh Drive and Glen Everest Road, east on Kingston Road, north on Claremore Avenue, and northeast along the south side of the Metrolinx rail corridor to the intersection of St. Clair Avenue East at Midland Avenue. The Class EA study was completed in July 2008 and environmental assessment approval was confirmed following the required public notice period. The Class EA process included consultation with affected stakeholders and members of the public.

In December 2014, the City issued RFP 9117-14-7273 for the provision of professional engineering services for the detailed design of the new transmission watermain and to provide professional services for contract administration and site inspection services during construction and post construction. The assignment was awarded to Hatch Corporation through a competitive procurement process in May 2015.



Figure 1. Aerial photograph showing the new transmission watermain route from 21 Fishleigh Drive to St. Clair Avenue East at Midland

Contract Award for Tender Call 24-2018

Tender Call 24-2018, Contract No. 17ECS-LU-05TT, Transmission Watermain Construction from the Scarborough Pumping Station at 21 Fishleigh Drive to St. Clair Avenue East at Midland Avenue, and the replacement of the watermain, substandard water services, and road resurfacing on Claremore Avenue, was issued by the Purchasing and Materials Management Division (PMMD) and was advertised on the City's website on February 26, 2018.

PMMD, at its Public Opening held on April 23, 2018, opened the following Tenders:

Bidders	Bid Price including HST
Clearway Construction Inc.	\$42,273,719*
Technicore Underground Inc.	\$43,553,455*
Memme Construction	\$43,627,587
Drainstar Contracting Ltd.	\$48,810,633
KAPP Contracting Inc.	\$62,209,009*

*Tender Price corrected for mathematical errors. PMMD has verified that the mathematical errors were corrected.

The submissions received from five (5) bidders in response to Tender Call 24-2018, Contract No. 17ECS-LU-05TT, were reviewed and evaluated by staff from PMMD and Engineering and Construction Services, and were found to be in conformance with the Tender requirements.

Engineering and Construction Services staff compared the bids to the pre-tender engineering estimate of \$47,538,501 including all taxes and charges. The bid price of the recommended bidder in the amount of \$42,273,719 including all taxes and charges is approximately twelve (12) percent lower than the pre-tender estimate.

The Fair Wage Office has reported that the recommended Bidder has indicated they have reviewed and understand the Fair Wage Policy and Labour Trades requirements and the recommended Bidder has agreed to comply fully.

The Tender submission from Clearway Construction Inc. for Tender Call 24-2018, Contract No. 17ECS-LU-05TT includes their agreement to complete the works within a time frame of 26 months from the date of the issuance of the written Order to Commence.

Amendment to Hatch Corporation Purchase Order No. 6046830 for Professional Engineering Services during Construction

The scope of work issued to Hatch Corporation under Request for Proposal No. 9117-14-7273 included the provision of professional engineering services for the design and construction of a new transmission watermain. During the design process, the scope of work expanded due to issues not known at the time the request for proposals was issued. These issues are described as follows:

(1) Road Resurfacing and Sidewalk Repairs on Claremore Avenue

Hatch Corporation commenced the design for the new transmission watermain in June 2015. Subsequently, Transportation Services staff identified that Claremore Avenue required road resurfacing and sidewalk repairs, as part of its state of good repair program, in 2018. To minimize both the disruption to residents on Claremore Avenue and any duplication of work, staff determined that the road resurfacing work should be coordinated with the delivery of the new transmission watermain, which extended along Claremore Avenue, under the same construction contract.

(2) Watermain Replacement and Water Service Upgrades on Claremore Avenue

Upon completion of survey and field investigations on Claremore Avenue, the project team found that the only feasible alignment for the installation of the transmission watermain, using the planned open-cut construction method, was below the sidewalk on the east side of Claremore Avenue due to conflicts with other underground utilities. This would have required injury to, or removal of, many large trees on the east side of Claremore Avenue. Engineering and Construction Services staff requested Hatch Corporation to develop options to avoid these tree impacts. Two options were developed:

- a) Constructing the transmission watermain by tunneling; and,
- b) Relocating the local watermain on Claremore Avenue to allow construction of the transmission watermain further away from the trees.

After evaluation of the two (2) alternatives and consultation with Toronto Water, Urban Forestry and Transportation Services staff, option b), relocation of the local watermain, was selected as the preferred solution as it minimized the impacts to trees and was the lower cost option. Accordingly, Hatch Corporation was directed to undertake the design to replace the local watermain.

The additional scope of work has resulted in an extended construction schedule and the need for additional professional engineering services during construction. Purchase Order No. 6046830, issued to Hatch Corporation, for professional services during construction, including construction contract administration and site supervision, was based on the 18 month construction schedule referenced in the Request for Proposals. However, as a result of the additional work described above, the estimated construction duration for Contract No. 17ECS-LU-05TT has increased from 18 months to 26 months.

An amendment to Purchase Order No. 6046830 in the amount of \$498,667 net of all taxes (\$507,444 net of HST recoveries) is therefore required, revising the current Purchase Order value from \$1,054,912 to \$1,553,579 net of all taxes (\$1,580,922 net of HST recoveries). This amendment includes a contingency allowance to provide for additional contract administration support in the event that the completion of construction is delayed by up to six (6) weeks.

The proposed fee increase was developed using the same rates established under the original contract. Engineering and Construction Services staff have reviewed the proposed fee increase and consider it to be fair and reasonable based upon the scope of the additional work.

CONTACT

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SIGNATURE

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