

Contract Award of Ariba Document Number 3751442529 for Professional Engineering Services to R.V. Anderson Associates Limited for Lawrence Park Neighbourhood Road Reconstruction and Basement Flooding Improvements

Date: May 15, 2023

To: General Government Committee

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

Wards: 15 (Don Valley West)

SUMMARY

The purpose of this report is to advise of the results of Request for Proposal, Ariba Document Number 3751442529, Contract Number RFP-22ECS-LU-03FP, for professional engineering services and request the authority to enter into agreements with R.V. Anderson Associates Limited. The scope of work includes preliminary and detailed design, construction administration and post construction services for Lawrence Park Neighborhood Road Reconstruction, Basement Flooding Protection Program Assignments 20-02, 20-03 and 20-05, and for Road Drainage Assignment 20-06, in the amount of \$28,244,663 net of all applicable taxes and charges (\$28,741,769 net of Harmonized Sales Tax recoveries). The total duration of this contract is 10 years with completion anticipated in 2033.

RECOMMENDATIONS

The Interim 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 195-8.4A of the Toronto Municipal Code Chapter 195 (Purchasing By-Law), grant authority to the Interim Chief Engineer and Executive Director, Engineering and Construction Services to negotiate and enter into an agreement with R.V. Anderson Associates Limited, being the highest overall scoring proponent meeting the requirements of Request for

Award of Ariba Document Number 3751442529 for Professional Engineering Services to R.V. Anderson Associates Limited for Lawrence Park Neighbourhood Road Reconstruction and Basement Flooding Improvements

Proposal, Ariba Document Number 3751442529 to provide preliminary design, detailed design, services during construction and post construction for Lawrence Park Neighborhood Road Reconstruction, Basement Flooding Protection Program Assignments 20-02, 20-03 and 20-05, and Road Drainage Assignment 20-06, under Phase 4 of the Basement Flooding Protection Program, in the total amount of \$28,244,663 net of all applicable taxes, \$28,741,769 net of Harmonized Sales Tax recoveries as follows:

- a) Preliminary design, in an amount not to exceed \$2,747,500 net of all applicable taxes and charges (\$2,795,856 net of Harmonized Sales Tax recoveries), including labour, disbursements, provisional allowances and contingency amounts.
- b) Detailed design, in an amount not to exceed \$8,906,182 net of all applicable taxes and charges (\$9,062,931 net of Harmonized Sales Tax recoveries), including labour, disbursements, provisional allowances and contingency amounts.
- c) Construction administration, in an amount not to exceed \$16,237,250 net of all applicable taxes and charges (\$16,523,026 net of Harmonized Sales Tax recoveries), including labour, disbursements, provisional allowances and contingency amounts.
- d) Post construction services, in an amount not to exceed \$353,730 net of all applicable taxes and charges (\$359,956 net of Harmonized Sales Tax recoveries), including labour, disbursements, provisional allowances and contingency amounts.

All in accordance with the terms and conditions as set out in the Request for Proposal and any other terms and conditions satisfactory to the Interim Chief Engineer and Executive Director, Engineering and Construction Services and in a form satisfactory to the City Solicitor.

FINANCIAL IMPACT

The total potential award identified in this report to R.V. Anderson Associates Limited is \$28,244,663 net of all applicable taxes and charges, and \$31,916,469 including all applicable taxes and charges. The total potential cost to the City is \$28,741,769 net of Harmonized Sales Tax recoveries.

The engineering estimate for this project was \$27,471,925 net of all applicable taxes and charges (\$27,955,432 net of Harmonized Sales Tax recoveries).

Funding is available in the Approved 2023-2032 Capital Budget and Plan for Toronto Water and in the 2023-2032 Approved Capital Budget and Plan for Transportation Services. Toronto Water forecasted expenditures (Account Number CWW421-15-21 Basement Flooding Design - Group 4), and Transportation Services forecasted expenditures (Account Number CTP315-07 Local Road Rehabilitation, Account

Number CTP419-01 RSP Missing Link Sidewalk and Account Number CTP315-09 General Pooled Contingency) are shown in Table 1.

Table 1 - Forecasted Expenditures for Contract Number RFP-22ECS-LU-03FP (Net of HST Recoveries)

Year	Account Number CWW421-15-21 (Basement Flooding Design - Group 4)	Account Number CTP315-07 (Local Road Rehabilitation)	Account Number CTP419-01 (RSP Missing Link Sidewalk)	Account Number CTP315-09 (General Pooled Contingency)	Total (Net of Harmonized Sales Tax Recoveries)
2023	\$641,073	\$884,277	\$24,652	\$0	\$1,550,002
2024	\$858,682	\$1,446,187	\$39,147	\$0	\$2,344,016
2025	\$1,082,644	\$1,991,778	\$53,584	\$0	\$3,128,006
2026	\$1,383,431	\$2,962,885	\$79,915	\$0	\$4,426,231
2027	\$1,696,085	\$3,565,395	\$96,127	\$0	\$5,357,607
2028	\$1,088,876	\$2,477,707	\$66,548	\$0	\$3,633,131
2029	\$581,654	\$1,290,705	\$34,662	\$0	\$1,907,021
2030	\$685,355	\$1,533,506	\$41,181	\$0	\$2,260,042
2031	\$444,000	\$1,139,071	\$30,588	\$0	\$1,613,659
2032	\$9,000	\$1,720,153	\$66,107	\$726,792	\$2,522,052
Total	\$8,470,800	\$19,011,665	\$532,511	\$726,792	\$28,741,769

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

DECISION HISTORY

At its meetings of September 24, 2008, and September 21, 2011, Council adopted criteria to prioritize, and sequence recommended Basement Flooding Protection Program projects that are identified through completed studies to protect the greatest number of properties as soon as possible, within approved budgets, as appropriate

Award of Ariba Document Number 3751442529 for Professional Engineering Services to R.V. Anderson Associates Limited for Lawrence Park Neighbourhood Road Reconstruction and Basement Flooding Improvements

funding opportunities are available and in coordination with other capital project and population growth needs in the area. The Council adopted criteria and the corresponding staff reports can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2008.EX23.16>

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.PW7.6>

At its meeting of September 5, 2012, the Bid Committee adopted the recommendations in the Staff Report from the Director of Purchasing and Materials Management dated August 14, 2012 and authorized the retention of Aquafor Beech Limited to provide professional engineering services for the Municipal Class Environmental Assessment for Basement Flooding Mitigation in Study Area 20; Local Road and traffic improvement in Lawrence Park Neighbourhood as per the scope of work outlined in Request for Proposal Number 9117-12-7049. The Bid Committee decision can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.BD90.1>

At its meeting of October 8-11, 2013, City Council requested that the General Manager, Toronto Water, report during the 2014 budget process on the capital and operating budget impacts of expanding the Basement Flooding Protection Program on a City-wide basis beyond the existing 34 priority study areas, including methodologies for setting priorities and resource implications, so that the program continues to address urban flooding risks in a fair, well-organized, and efficient manner. The Council decision can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.PW25.7>

At its meeting of December 16-18, 2013, City Council expanded the Basement Flooding Protection Program across the entire City, and specifically delineated seven new study areas beyond the previously identified 34 study areas to address the basement flooding impacts associated with the extreme storm event of July 8, 2013. The staff report that provides background information about expanding the Basement Flooding Protection Program can be found at:

<http://www.toronto.ca/legdocs/mmis/2013/ex/bgrd/backgroundfile-63918.pdf>

At its meeting of May 24, 2017, Council approved project recommendations from the Lawrence Park Neighbourhood Investigation of Basement Flooding (Area 20) and Road Improvement Class Environmental Assessment including roadway modifications with a curb and gutter drainage system and the replacement and/or addition of storm sewers, as well as the addition of sidewalk on five streets in the Lawrence Park neighbourhood. The Council decision can be found at:

<https://secure.toronto.ca/council/agenda-item.do?item=2017.PW21.3>

At its meeting of June 25, 2019, North York Community Council adopted the recommendation that Transportation Services staff evaluate the Lawrence Park community traffic concerns and develop a Traffic Management Plan. Once the Traffic Management Plan has been developed and agreed upon, the findings will be reported to North York Community Council for approval and then implemented in coordination with the recommended works from the Lawrence Park Neighbourhood Investigation of Basement Flooding (Area 20) and Road Improvement Class Environmental Assessment. The North York Community Council Decision can be found at:

<https://secure.toronto.ca/council/agenda-item.do?item=2019.NY7.24>

COMMENTS

Background

Since May 2000, the City has experienced multiple extreme storm events that resulted in flooding of more than 14,000 homes, erosion in ravines and watercourses and damage to City infrastructure. Following the August 2005 extreme storm event, which exceeded the 100-year design storm intensity in areas north of Highway 401, Council established the Basement Flooding Protection Program. This program was initially focused on areas impacted during the May 2000 and August 2005 storms. The Basement Flooding Protection Program was extended citywide in 2013, to address the basement flooding impacts associated with the extreme storm event of July 8, 2013.

The Basement Flooding Protection Program consists of three main components:

- Infrastructure improvements, established through Environmental Assessment Studies, which examine in detail the causes of flooding in a defined drainage area, and assess various alternatives for reducing the risk of urban flooding and sewer back-ups.
- A Basement Flooding Protection Subsidy Program, which promotes and provides financial subsidies for the installation of backwater valves, foundation drain modifications and sump pumps to reduce the risk of sewer backups and basement flooding.
- An education and outreach strategy to advise homeowners of the causes of and solutions to basement flooding.

As part of the infrastructure improvements, Toronto Water has identified 67 Basement Flooding Protection Program Study Areas across the entire City. Environmental Assessment Studies have been completed for 43 Areas and Studies are underway for the remaining 24 Areas.

Lawrence Park Neighbourhood Road Reconstruction and Basement Flooding Improvements

The Lawrence Park Neighbourhood is located in the Basement Flooding Protection Program Study Area 20 and is generally bound by Blythwood Road, Ridgefield Road and Sunnyside Crescent to the south, the Don River West Branch to the north, Mount Pleasant Road to the west, and Bayview Avenue to the east. The boundary of Study Area 20 is presented in Figure 1 of Attachment 1.

The Environment Assessment for the Lawrence Park Neighbourhood identified a number of road and infrastructure improvements to address road conditions and to reduce the risk of surface and basement flooding. These improvements include road reconstruction, road resurfacing, new sidewalks as well as sewer upgrades. Figure 2 of

Attachment 1 shows the locations of the proposed infrastructure improvements in Study Area 20. This work includes:

- 10.3 kilometres of roadway modification from rural to urban cross section including the addition of 3.6 kilometres of new storm sewers and 4.0 kilometres of upgraded storm sewers and 2.6 kilometres of new sidewalk.
- 2.1 kilometres of 300 millimetre to 1,350 millimetre diameter storm sewers, for basement flooding protection.
- 1.4 kilometres of 250 millimetre to 675 millimetre diameter sanitary sewer, as well as 2,000 millimetre by 2,000 millimetre box culverts for inline storage, for basement flooding protection.
- 140 inlet control devices for basement flooding protection.
- 700 metres of watermain replacements as part of Toronto Water's state of good repair program.
- 3.7 kilometres of road resurfacing as part of Transportation Services' state of good repair program.
- 2.4 kilometres of installation of bikeway pavement markings.
- Traffic calming elements as identified by the Lawrence Park Traffic Management Plan, currently underway by Transportation Services.

The professional engineering services for the above work will be delivered by R.V. Anderson Associates Limited with the award of this contract. They will provide preliminary and detailed design, construction administration and post construction services for Basement Flooding Protection Program Assignments 20-02, 20-03 and 20-05, and for Road Drainage Assignment 20-06. The preliminary design phase is expected to commence in Q3 of 2023, with construction planned to start in Q1 2026. Construction is expected to be completed in Q3 2031, followed by two years of post-construction services.

Basement Flooding Protection Program Assignments (grouping of projects) 20-02, 20-03 and 20-05 identified in the Environmental Assessment Studies are proceeding to preliminary design because Council adopted prioritization rules for Basement Flooding Protection Program implementation have been met thus far. As directed by Council, prioritization must be consistent with the principle that the greatest number of properties are protected within an approved funding envelope, which is currently \$68,000 per benefitting property. In the case where an Assignment's preliminary design cost estimate exceeds the cost per benefitting property threshold of \$68,000, it will not proceed to the detailed design stage under this contract.

Procurement Process

A Request for Proposal, Ariba Document Number 3751442529, was issued to select one qualified Supplier for the preliminary design, detailed design, construction administration and post construction engineering services for Lawrence Park Neighbourhood Road Reconstruction and Basement Flooding Improvements for the Engineering and Construction Services Division.

The Request for Proposal was prepared by Engineering and Construction Services in consultation with Toronto Water and Transportation Services, and in conjunction with the Purchasing and Materials Management Division. The Request for Proposal was advertised on both the City's and Ariba Discovery websites on November 18, 2022, with a closing date of January 20, 2023, and an issuance of five (5) addenda. The following four (4) Suppliers submitted proposals:

1. AECOM Canada Limited
2. T.Y.Lin International Canada Inc.*
3. R.V. Anderson Associates Limited
4. SNC-Lavalin Incorporated

*Supplier did not meet the minimum technical threshold for Envelope 2

The Request for Proposal was structured as a "two-envelope" process and the submissions included a detailed Technical Proposal (Envelope 1) and a separate sealed envelope (Envelope 2) with a Cost of Services Proposal. The selection process stipulated that the Cost of Services Proposals would not be opened until the evaluation of the Technical Proposals had been completed.

A formal evaluation team, comprised three (3) Engineering and Construction Services staff, evaluated the four (4) Technical Proposals in accordance with the pre-established criteria outlined in the Request for Proposal. A minimum threshold score of 75 percent (56.25 out of 75 points) was required for Suppliers to proceed to have their Cost of Services Proposal opened and evaluated.

Of the four (4) technical proposals submitted, three (3) successfully passed the minimum threshold score of 75 percent, which allowed them to proceed to the cost of services evaluation. The Cost of Services Proposals were scored and added to the Technical Proposal score, resulting in overall scores for the three (3) Suppliers ranging from 76.80 to 81.45.

On completion of the process, the proposal from R.V. Anderson Associates Limited was ranked first with the highest overall point score. Consequently, pursuant to the terms of the Request for Proposal, R.V. Anderson Associates Limited has been recommended for the award.

Following the review of the proposals submitted, the evaluation team concluded that the proposal submitted by R.V. Anderson Associates Limited satisfied the overall project requirements and demonstrated an appropriate level of effort for the proposed work. The Supplier's score and staff analysis of the evaluation results can be provided in an in-camera presentation if requested by members of Council.

The Fair Wage Office has reported that the recommended Supplier has indicated it has reviewed and understands the Fair Wage Policy and Labour Trades requirements and has agreed to comply fully with both.

CONTACT

Mika Raisanen, P.Eng. Director, Linear Underground Infrastructure, Engineering and Construction Services, Telephone: 416-392-0867, Email: Mika.Raisanen@toronto.ca

Marie Reid, Manager, Purchasing Client Services, Infrastructure and Development Services, Purchasing and Material Management, Telephone: 416-397-4809, Email: Marie.Reid@toronto.ca

SIGNATURE

Judy M. S. Tse, P. Eng.
Interim Chief Engineer and Executive Director, Engineering and Construction Services

Geneviève Sharkey
Chief Procurement Officer, Purchasing and Materials Management Division

ATTACHMENTS

Attachment 1 - Figure 1 Lawrence Park Neighbourhood Study Area and Figure 2 Scope of Work