

<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JUNE 19, 2018</b>
<b>FROM:</b>	<b>KELLY SCHERR, P. Eng., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER</b>
<b>SUBJECT:</b>	<b>APPOINTMENT OF CONSULTING ENGINEERS INFRASTRUCTURE RENEWAL PROGRAM</b>

<b>RECOMMENDATION</b>
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That on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the appointment of consulting engineers for the Infrastructure Renewal Program:

- a) The following consulting engineers **BE APPOINTED** to carry out consulting services for the identified 2019 – 2020 Infrastructure Renewal Program funded projects, at the upset amounts identified below, in accordance with the estimate on file, and in accordance with Section 15.2(e) of the City of London’s Procurement of Goods and Services Policy:
  - (i) AECOM Canada Limited **BE APPOINTED** consulting engineers to complete the pre-design and detailed design of the 2019 Infrastructure Renewal Program Contract 1, York Street Phase 2 from Talbot Street to Clarence Street reconstruction, in the total amount of \$369,029.10 (including contingency), excluding HST;
  - (ii) Development Engineering (London) Limited **BE APPOINTED** consulting engineers to complete the pre-design, detailed design and construction administration of 2019 Infrastructure Renewal Program Contract 2, Monsarrat Avenue from Belfield Street to Gatewood Road and Roehampton Avenue, all, in the total amount of \$264,566.50 (including contingency), excluding HST;
  - (iii) Parsons Incorporated **BE APPOINTED** consulting engineers to complete the pre-design, detailed design and construction administration of 2019 Infrastructure Renewal Program Contract 3, Canterbury Road from Windermere Road to Richmond Street, Westchester Drive from Canterbury Road to Richmond Street and Windermere Road from Western Road to Canterbury Road reconstruction, in the total amount of \$532,341.70 (including contingency), excluding HST;
  - (iv) Archibald, Gray and McKay Engineering Limited **BE APPOINTED** consulting engineers to complete the pre-design, detailed design and 2019 Phase 1 construction administration of 2019 Infrastructure Renewal Program Contract 4, Devonshire Avenue from Edward Street to Wortley Road, Cathcart Street from Devonshire Avenue to Dunkirk Place Park, Devonshire Place, all, and Murray Street from Iroquois Avenue to Devonshire Avenue reconstruction, in the total amount of \$678,036.70 (including contingency), excluding HST;
  - (v) Spriet Associates (London) Limited **BE APPOINTED** consulting engineers to complete the pre-design, detailed design and construction administration of 2019 Infrastructure Renewal Program Contract 5, Wellington Street from Grosvenor Street to Victoria Street reconstruction, in the total amount of \$471,735.00 (including contingency), excluding HST;
  - (vi) Dillon Consulting Limited **BE APPOINTED** consulting engineers to complete the pre-design and detailed design of 2019 Infrastructure

Renewal Program Contract 6, Old North West Area Phase 1 (Sections of William Street, Regent Street, Maitland Street, Huron Street, Fraser Avenue) reconstruction in the total amount of \$428,428.00 (including contingency), excluding HST;

- (vii) GM Blueplan Engineering **BE APPOINTED** consulting engineers to complete the pre-design and detailed design of 2020 Infrastructure Renewal Program Contract A, Pottersburg Creek Trunk Sanitary Sewer Replacement Phase 1, Dundas Street from Pottersburg Creek to Burdick Place, Spruce Street from Dundas Street to the north end, Burdick Place from Dundas Street to the north end reconstruction, in the total amount of \$416,614.00 (including contingency), excluding HST;
- (viii) Stantec Consulting Limited **BE APPOINTED** consulting engineers to complete the pre-design and detailed design of 2020 Infrastructure Renewal Program Contract B, Argyle Community (East Lions Park Area) Phase 1, Spruce Street from Wavell Street to Haig Street and Haig Street, all, reconstruction in the total amount of \$252,083.15 (including contingency), excluding HST;
- b) Spriet Associates (London) Limited **BE APPOINTED** consulting engineers to complete the detailed design for the expanded scope of work for the 2017 Infrastructure Renewal Program Contract C, Cavendish Crescent/Charles Street/West Lions Park, in the total amount of \$285,711.42 (including contingency), excluding HST, in accordance with the estimate on file, and in accordance with Section 15.2(g) of the City of London's Procurement of Goods and Services Policy
- c) the financing for the projects identified in (a) and (b) above **BE APPROVED** in accordance with the "Sources of Financing Report" attached, hereto, as Appendix 'A';
- d) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this work;
- e) the approvals given, herein, **BE CONDITIONAL** upon the Corporation entering into a formal contract with each consultant for the respective project; and
- f) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

#### **PREVIOUS REPORTS PERTINENT TO THIS MATTER**

CWC – June 8, 2016 – Appointment of Consulting Engineers, Infrastructure Renewal Program

CWC – April 17, 2018 – 2018 Infrastructure Renewal Program, Consultant Construction Supervision Awards, Cavendish Crescent and Avalon Street Projects

#### **2015 – 2019 STRATEGIC PLAN**

The following report supports the 2015 – 2019 Strategic Plan through the strategic focus area of Building a Sustainable City including:

- Robust Infrastructure 1B – Manage and improve water, wastewater, and stormwater infrastructure

## BACKGROUND

### Purpose

The purpose of this report is to award engineering consultant appointments for the Infrastructure Renewal Program. These consultant appointments will lead to infrastructure construction projects in 2019, as well as several multi-year projects. A detailed project list, including timing and project limits, is contained in Appendix 'B'. Project maps are contained in Appendix 'C'.

### Context

The Infrastructure Renewal Program is an annual program intended to maintain the lifecycle and operation of municipal infrastructure at an acceptable performance level. The engineering consultants work with city staff to complete the Infrastructure Renewal Program projects and meet the challenging infrastructure lifecycle replacement needs. The engineering consulting work recommended within this report will support the reconstruction of an estimated \$40,600,000 of capital infrastructure over three construction seasons.

## DISCUSSION

### Procurement Process: 2019 – 2020 Infrastructure Renewal Program

The engineering consultant selection for the 2019 – 2020 Infrastructure Renewal Program utilized a grouped procurement process developed in partnership with the Purchasing and Supply Division. The process is completed in two stages and includes an open, publicly advertised Request for Qualifications (RFQ), and a subsequent Request for Proposal submitted by short-listed engineering consulting firms. Based on the Request for Proposal evaluation, engineering consultants were matched with a project, and fee submissions were reviewed by city staff. This two-stage grouped procurement process is in accordance with Section 15.2(e) of the Procurement of Goods and Services Policy. This is the second year utilizing the two-stage grouped procurement process for the Infrastructure Renewal Program. The Grouped Consultant Selection Process that was approved by Council June 12, 2018 will be used for all future Infrastructure Renewal Program consultant appointments beginning in 2020.

The construction administration fee portion of the engineering consultant assignments is included for those projects of lower complexity, and for projects where construction administration fees can be reasonably estimated prior to the start of the design. Including construction administration fees as part of the initial consultant assignment reduces the number of required reports to committee and reduces the time required to award the final construction contract. Of the eight projects, the construction administration fee is included in four of the consultant assignments.

City staff have reviewed the fee submissions, in detail, considering the hourly rates provided for each consulting staff member. City staff have confirmed that hourly rates are consistent with those submitted through competitive processes. City staff have also reviewed the time allocated to each project related task. City staff can confirm that the amount of time allocated to each project task is consistent with prior projects of a similar nature. In general, all of the project assignments are found to be reasonable and in line with those that would be expected through a competitive process.

### Work Description

The Infrastructure Renewal Program projects include watermain and sewer replacement/repairs, as well as restoration of areas disturbed by the construction activity. The scope of each project varies in length and depends on the infrastructure components requiring rehabilitation or replacement.

In some cases, full road reconstruction, including traffic signal and street light replacement, will be part of the overall project.

The city infrastructure design groups within each service area work closely together to co-ordinate infrastructure repair, rehabilitation and replacement. City staff prepare a list of the highest priority projects, taking into consideration condition assessment, capacity, criticality of the infrastructure link, and the safety and social impacts should the infrastructure link fail. City staff meet regularly throughout the year to co-ordinate their respective work, with the goal of aligning construction projects so more than one infrastructure element can be renewed, which significantly reduces social disruption and saves on construction costs. Design work starts early in the budget cycle, which allows projects to tender early in the season, so the most competitive construction pricing can be realized.

This report recommends the appointment of engineering consultants for eight engineering design assignments as identified in Appendix 'B'. Four of the projects are scheduled for construction in 2019, two in 2020, and one will be constructed in two phases in 2019 and 2020. The projects to be constructed in 2020 are larger more complex projects and include a design phase that will span two years. One significantly more complex project, Contract 6 (Old North West Area reconstruction Phase 1), has also been included in the 2019 – 2020 Consultant Procurement Process and includes detailed design that may span several years. Due to the complexity of the project, a firm construction date has not been determined, but construction is expected by 2022. The proposed construction year and physical limits of the project assignments are summarized in Appendix 'B' and a location map is provided for each project in Appendix 'C'.

Funds have been budgeted in the transportation, water and sewer capital budgets to support the engineering design work for the projects identified in Appendix 'A', "Sources of Financing Report". The design and construction administration fees for the new projects, recommended for approval in this report, are summarized in Table 1 below. All values below include 10% contingency and exclude HST.

**Table 1 – New Project Approval Summary**

<b>Contract</b>	<b>Street</b>	<b>Consultant</b>	<b>Design Fee</b>	<b>Construction Administration Fee</b>	<b>Total Fee</b>
2019 Infrastructure Renewal Program #1	York Street	AECOM Canada Limited	\$369,029.10	-	\$369,029.10
2019 Infrastructure Renewal Program #2	Roehampton Avenue / Monsarrat Avenue	Development Engineering (London) Limited	\$126,032.50	\$138,534.00	\$264,566.50
2019 Infrastructure Renewal Program #3	Canterbury Road / Westchester Drive / Windermere Road	Parsons Incorporated	\$298,350.80	\$233,990.90	\$532,341.70
2019 Infrastructure Renewal Program #4	Devonshire Avenue & Place / Cathcart Street / Murray Street	Archibald, Gray and McKay Engineering Limited	\$444,928.00	\$233,108.70	\$678,036.70
2019 Infrastructure	Wellington Street	Spriet Associates	\$252,362.00	\$219,373.00	\$471,735.00

Renewal Program #5		(London) Limited			
2019 Infrastructure Renewal Program #6	Old North West – William Street / Regent Street / Maitland Street / Huron Street / Fraser Avenue	Dillon Consulting Limited	\$428,428.00	-	\$428,428.00
2020 Infrastructure Renewal Program 'A'	Pottersburg Trunk Sanitary Sewer Replacement Phase 1	GM Blueplan Engineering	\$416,614.00	-	\$416,614.00
2020 Infrastructure Renewal Program 'B'	Spruce Street / Haig Street	Stantec Consulting Limited	\$252,083.15	-	\$252,083.15

It is noted that an additional project, Dundas Street reconstruction (between Adelaide Street and Rectory Street), was included in the 2019 – 2020 consultant procurement process. Through the process an engineering consultant was identified to undertake pre-design and detailed design services. Two studies with public engagement components, that could have a significant impact on the design and the design scope, are currently underway. The award of this project is being deferred to later in 2018 due to the difficulty in scoping the consulting assignment at this time. This section of Dundas Street is included in the Old East Village Secondary Plan study which is currently underway, and it is also being considered by Transportation Planning and Design for an east-west bikeway. A separate CWC report will be prepared later in 2018 to recommend the appointment of the engineering consultant for the project. Construction of the project is expected to occur in 2020.

### **Expansion of Work 2017 Contract C Cavendish Crescent/Charles Street/West Lions Park**

This report also recommends appointment of Spriet Associates (London) Limited to complete the detailed design for the expanded scope of work for the 2017 Infrastructure Renewal Program Contract C project. It is recommended that the existing consultant continue with the design assignment to achieve efficiencies in the delivery and execution of this multi-phase project. The scope and complexity of the project has increased since the original terms of reference were prepared in 2016, during the completion of the initial design phase. The following additional tasks, not originally anticipated based on preliminary investigations, have been identified for this design assignment:

- Expansion in project scope to extend the work, approximately 220 m, to include the full reconstruction of Cavendish Crescent (east-west leg);
- Modification of the project assignment from a single to a multi-phase project, to address phasing of construction;
- Reconfiguration of the adjacent city works yard site, based on final trunk sewer alignment;
- Restoration of the impacted portion of the City's West Lions Park, including impacted electrical and irrigation systems, to meet current city standards;
- Expanded ecological investigations; and
- Design co-ordination related to utility relocates.

The recommended design fee, due to the additional design efforts and expansion in project scope, is \$285,711.42 (including contingency), excluding HST. The total fee to date for the project, including the initial design fee of \$372,375 (CWC June 8, 2016), the recommended additional design fee within this report, and phase one construction administration fee of \$243,595 (CWC April 17, 2018), is \$901,681.42 (including contingency), excluding HST. It is noted that future recommendations will be made for construction administration assignments in tandem with the award of the construction contracts for phase two and phase three.

Construction of this project is expected to take place in three phases from 2018 to 2020. It is recommended that Spriet Associates (London) Limited continue with the design assignment because of their satisfactory completion of previous work on the project, and the ensuing nature of the additional design efforts, and the expansion in project scope.

This approach is consistent with section 15.2(g) of the Procurement of Goods and Services Policy. Section 15.2(g) of the Procurement of Goods and Services Policy provides that a consulting firm, which has satisfactorily partially completed a project, may be recommended for award of the balance of a project without competition, subject to satisfying all financial, reporting and other conditions contained within this policy. This should be financially beneficial to the city because such a consultant has specific knowledge of the project and has undertaken work for which duplication would be required if another firm were to be selected.

## **CONCLUSIONS**

Replacing infrastructure at the end of its lifecycle is essential to building a sustainable city. The recommended engineering consultant assignments for the 2019 – 2020 Infrastructure Renewal Program are another step forward in replacing London's aging infrastructure. The projects discussed within this report have been identified as high priority due to the age, poor condition and associated risk of failure associated with the infrastructure.

In the spirit of continuous improvement, the process for undertaking engineering consultant appointments will continue to evolve ensuring the City achieves the best value through a transparent, fair and competitive process. All the firms recommended through this engineering consultant appointment have shown their competency and expertise with infrastructure replacement projects of this type. The Infrastructure Renewal Program will continue to ensure high value and endeavour to achieve a consistently high degree of public satisfaction.

**Acknowledgements:**

This report was prepared by Kyle Chambers, Environmental Services Engineer; and David Gough, Environmental Services Engineer.

<b>SUBMITTED BY:</b>	<b>SUBMITTED BY:</b>
<b>TOM COPELAND, P. ENG. DIVISION MANAGER WASTEWATER AND DRAINAGE ENGINEERING</b>	<b>AARON ROZENTALS, P.ENG. DIVISION MANAGER WATER ENGINEERING DIVISION</b>
<b>REVIEWED AND CONCURRED BY:</b>	<b>RECOMMENDED BY:</b>
<b>SCOTT MATHERS, MPA, P.ENG. DIRECTOR, WATER AND WASTEWATER ENGINEERING</b>	<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER</b>

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Attach: Appendix 'A' – Sources of Financing  
Appendix 'B' – Project Information List  
Appendix 'C' – Location Maps

cc. John Freeman, Manager, Purchasing and Supply  
Gary McDonald, Budget Analyst  
AECOM Canada Ltd, 410 – 250 York Street, Citi Plaza, N6A 6K2  
Dillon Consulting Ltd, 130 Dufferin Avenue, Suite 1400  
Spriet Associates, 155 York Street, N6A 1A8  
Archibald, Gray & McKay Engineering, 3514 White Oak Road, N6E 2Z9  
Parsons Corporation, 1069 Wellington Road S, London, ON, N6E 2H6  
Stantec Consulting Ltd, 800-171 Queens Avenue, London, ON, N6A 5J7  
Development Engineering Ltd., 41 Adelaide St N, Unit 71, London ON, N6B 3P4  
GM Blueplan Engineering, 235 North Centre Rd, Suite 103, London, ON N5X 4E7