

Report to Civic Works Committee

To: Chair and Members
Civic Works Committee

From: Kelly Scherr, P.Eng., MBA, FEC
Deputy City Manager, Environment and Infrastructure

Subject: Appointment of Consulting Engineers for Contract
Administration Services: 2023 Infrastructure Renewal
Program and Huron Street Steel Watermain Cathodic
Protection Project

Date: April 12, 2023

Recommendation

That on the recommendation of Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** with respect to the appointment of consulting engineers for the 2023 Infrastructure Renewal Program:

- (a) The following consulting engineers **BE APPOINTED** to carry out consulting services for the identified 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(g) of the City of London's Procurement of Goods and Services Policy:
 - (i) IBI Group (IBI) **BE APPOINTED** consulting engineers to complete the resident inspection and contract administration of 2023 Infrastructure Renewal Project Lyle Street and Elizabeth Street, in the total amount of \$318,054.00 (including contingency), excluding HST;
 - (ii) GM BluePlan Engineering Limited (GM BluePlan) **BE APPOINTED** consulting engineers to complete the resident inspection and contract administration of 2023 Infrastructure Renewal Project Whitehall Drive, in the total amount of \$282,353.50 (including contingency), excluding HST;
 - (iii) R.V. Anderson Associates Limited (RVA) **BE APPOINTED** consulting engineers to complete the resident inspection and contract administration of 2023 Infrastructure Renewal Project McKenzie Avenue, Baker Street, Windsor Avenue, and Belgrave Avenue, in the total amount of \$578,610.00 (including contingency), excluding HST;
 - (iv) R.V. Anderson Associates Limited (RVA) **BE APPOINTED** consulting engineers to complete the resident inspection and contract administration of Huron Street Steel Watermain Cathodic Protection Project, in the total amount of \$79,112 (including contingency), excluding HST
- (b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached, hereto, as Appendix 'A';
- (c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (d) the approval given, herein, **BE CONDITIONAL** upon the Corporation entering into a formal contract; and
- (e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

Executive Summary

Purpose

The purpose of this report is to award engineering consultant appointments for the resident inspection and contract administration for three projects which are part of the 2023 Infrastructure Renewal Program as well as the Huron Street Steel Watermain

Cathodic Protection Project. These consultant appointments will lead to construction projects in 2023.

Context

The Infrastructure Renewal Program is an annual program intended to maintain the lifecycle and operation of municipal infrastructure at an acceptable level of service. The engineering consultants work with city staff to complete the Infrastructure Renewal Program projects to meet the challenging infrastructure lifecycle replacement needs. The engineering consulting work recommended for the Infrastructure Renewal Program will support the reconstruction of an estimated \$11,200,000 of capital infrastructure.

The Huron St. Trunk Watermain Cathodic Protection Upgrades work involves refurbishment of the Cathodic protection system for this steel watermain by replacing the existing rectifier system which is no longer functioning and installing a new passive cathodic protection system for this watermain. The Cathodic Protection System provides corrosion protection for this watermain, extending its life. This section of 600mm diameter steel watermain on Huron Street extends from the intersection of Adelaide Street east to approximately 100 m east of the Clarke Road intersection. The construction cost of these upgrades is estimated at \$840,000.

Linkage to the Corporate Strategic Plan

This recommendation supports the following 2019-2023 Strategic Plan areas of focus:

- Building a Sustainable City:
 - London's infrastructure is built, maintained, and operated to meet the long-term needs of our community by replacing aged and failing infrastructure with new materials and sizing new infrastructure to accommodate future development.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

- CWC – September 22, 2020 – Appointment of Consulting Engineers Infrastructure Renewal Program
- CWC – October 20, 2020 – Appointment of Consulting Engineers Infrastructure Renewal Program

2.0 Discussion and Considerations

2.1 Work Description

The Infrastructure Renewal Program projects include watermain and sewer replacement, 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. Full road reconstruction will be part of the overall projects.

Cathodic protection is the installation of a corrosion protection system on the watermain. Excavation is required to install the system at key locations along the watermain but will not involve full road reconstruction.

The following engineering assignments were previously awarded for detailed design and tender preparation. The limits for the four projects are identified as follows:

- IBI Group completed the detailed design assignment for Lyle Street and Elizabeth Street which includes Lyle Street from King Street to Dundas Street and Elizabeth Street from Dundas Street to Queens Avenue;

- GM BluePlan completed the detailed design assignment for Whitehall Drive which includes Whitehall Drive from Vancouver Street to Atkinson Boulevard;
- RVA completed the detailed design assignment for McKenzie Avenue, Baker Street, Windsor Avenue, and Belgrave Avenue which includes McKenzie Avenue from Wortley Road to Ridout Street South; McKenzie Avenue from Ridout Street South to Belgrave Avenue; Baker Street from Ridout Street South to Belgrave Avenue; Windsor Avenue from Ridout Street South to Belgrave Avenue and Belgrave Avenue from McKenzie Avenue to Baker Street;
- RVA completed the detailed design assignment for the Huron Street Steel Watermain Cathodic Protection Project which includes the watermain along Huron Street from Adelaide Street to Clarke Road.

All four projects are scheduled for construction in 2023 with the construction tenders anticipated to be awarded through the Administrative Approval of Tender Acceptance/Contract Award (AATACA), which has an upset limit of \$6 Million. Location maps are provided for each project in Appendix 'B'.

3.0 Financial Impact/Considerations

3.1 Consulting Engineer Services

Due to the knowledge and positive performance on the detailed design assignments, each consultant was invited to submit a proposal to carry out the resident inspection and contract administration for their project. A summary of the fees is included in Table 1. All values include 10% contingency and exclude HST.

Table 1: Summary of Project Assignments

Assignment	Consultant	Resident Inspection and Contract Administration Fee	Total Project Fees Including Previously Awarded Fees
Lyle Street and Elizabeth Street	IBI	\$318,054.00	\$464,926.00
Whitehall Drive	GM BluePlan	\$282,353.50	\$432,041.50
McKenzie Avenue, Baker Street, Windsor Avenue, and Belgrave Avenue	RVA	\$578,610.00	\$776,543.00
Huron Street Steel Watermain Cathodic Protection Project	RVA	\$79,112	\$173,185

Staff have reviewed the fee submissions, including the time allocated to each project task, along with hourly rates provided by each of the consultant's staff members. The submissions were found to be consistent with other project assignments of similar scope. The continued use of the identified consultant on each project for resident inspection and contract administration is of financial advantage to the City because the firm has specific knowledge of the project and has undertaken work for which duplication would be required if another firm were to be selected.

In addition to the financial advantage, there are also accountability and risk reduction benefits. The City requires a Professional Engineer to seal all construction drawings. These 'record drawings' are created based on field verification and ongoing involvement by the Professional Engineer. This requirement promotes consultant accountability for the design of these projects, and correspondingly, reduces the City's overall risk exposure. Consequently, the continued use of the consultant who created and sealed the design drawings is required in order to maintain this accountability process and to

manage risk.

In accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy, civic administration is recommending that the engineering services associated with the resident inspection and contract administration services be awarded to ensure that the City receives the product specified and associated value.

Funds have been budgeted in the Water, Sewer, and Transportation capital budgets to support the engineering work for the projects as identified in Appendix 'A', 'Sources of Financing'.

Conclusion

Replacing infrastructure at the end of its lifecycle and protecting existing infrastructure is essential to building a sustainable city. The recommended engineering consultant assignments will allow the construction projects to be completed in the best financial and technical interests of the City. All the firms recommended through this engineering consultant appointment have shown their competency and expertise with infrastructure replacement projects of this type. It is recommended that IBI, GM Blueplan, and RVA continue as the consulting engineers on their respective projects for the purpose of resident inspection and contract administration services in accordance with Section 15.2(g) of the City of London's Procurement of Goods and Services Policy.

Prepared by: **Aaron Rozentals, P.Eng.**
Division Manager, Water Engineering

Submitted by: **Ashley Rammeloo, MMSc, P.Eng.**
Director, Water, Wastewater, and Stormwater

Recommended by: **Kelly Scherr, P.Eng., MBA, FEC**
Deputy City Manager, Environment and Infrastructure

cc: D. Gough, K. Johnson, K. Chambers, P. Lupton

Appendix 'A' – Sources of Financing

Appendix 'B' – Location Map

Appendix "A"

#23069

April 12, 2023

(Appoint Consulting Engineers)

Chair and Members

Civic Works Committee

RE: Contract Administration Services: 2023 Infrastructure Renewal Program and Huron Street Steel Watermain Cathodic Protection Project

(Subledger WS21C00G) Lyle and Elizabeth Street

(Subledger WS22C00L) Whitehall Drive

(Subledger WS22C00K) McKenzie Avenue, Baker Street, Windsor Street and Belgrave Avenue

(Subledger WT220005) Huron Street Steel Watermain Cathodic Protection Project

Capital Project ES241422 - Infrastructure Renewal Program - Sanitary Sewers

Capital Project ES254021 - Infrastructure Renewal Program - Stormwater Sewers & Treatment

Capital Project EW352521 - Watermain Corrosion Protection Program

Capital Project EW376522 - Infrastructure Renewal Program - Watermains

Capital Project TS1749 - Dundas Street Old East Village Streetscape Improvements

Capital Project TS406722 - Traffic Signals - Mtce

Capital Project TS512322 - Street Light Maintenance

IBI Group - \$318,054.00 (excluding HST) - Lyle and Elizabeth Street

GM BluePlan Engineering Limited - \$282,353.50 (excluding HST) - Whitehall Drive

R.V. Anderson Associates Limited - \$578,610.00 (excluding HST) - McKenzie, Baker, Windsor and Belgrave

R.V. Anderson Associates Limited - \$79,112.00 (excluding HST) - Huron Street Steel Watermain Cathodic Protection Project

Finance Supports Report on the Sources of Financing:

Finance Supports confirms that the cost of this project can be accommodated within the financing available for it in the Capital Budget and that, subject to the approval of the Deputy City Manager, Environment and Infrastructure, the detailed source of financing is:

Estimated Expenditures	Approved Budget	Revised Budget	Committed To This Date	This Submission	Balance for Future Work
ES241422 - Infrastructure Renewal Program - Sanitary Sewers					
Engineering	2,000,000	2,000,000	1,411,349	305,784	282,867
Engineering (Utilities Share) (Note 1)	0	12,859	0	12,859	0
Construction	10,409,529	10,409,529	7,851,958	0	2,557,571
City Related Expenses	25,000	25,000	630	0	24,370
ES241422 Total	12,434,529	12,447,388	9,263,937	318,643	2,864,808
ES254021 - Infrastructure Renewal Program - Stormwater Sewers & Treatment					
Engineering	1,890,087	1,890,087	1,544,373	345,714	0
Land Acquisition	210,537	210,537	207,167	0	3,370
Construction	9,586,066	9,586,066	9,460,978	0	125,088
City Related Expenses	11,150	11,150	11,150	0	0
ES254021 Total	11,697,840	11,697,840	11,223,668	345,714	128,458
EW352521 - Watermain Corrosion Protection Program					
Engineering	80,505	80,505	0	80,505	0
Construction	841,095	841,095	354,141	0	486,954
EW352521 Total	921,600	921,600	354,141	80,505	486,954
EW376522 - Infrastructure Renewal Program - Watermains					
Engineering	2,665,658	2,665,658	1,463,953	413,610	788,095
Construction	16,378,957	16,378,957	14,565,954	0	1,813,003
City Related Expenses	395,967	395,967	395,967	0	0
EW376522 Total	19,440,582	19,440,582	16,425,874	413,610	2,601,098

Appendix "A"

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(Subledger WS22C00L) Whitehall Drive

(Subledger WS22C00K) McKenzie Avenue, Baker Street, Windsor Street and Belgrave Avenue

(Subledger WT220005) Huron Street Steel Watermain Cathodic Protection Project

Estimated Expenditures continued	Approved Budget	Revised Budget	Committed To This Date	This Submission	Balance for Future Work
TS1749 - Dundas Street Old East Village Streetscape Improvements					
Engineering	1,605,000	1,605,000	637,725	87,418	879,857
Construction	6,583,838	6,583,838	5,642,302	0	941,536
City Related Expenses	1,636,611	1,636,611	1,636,611	0	0
TS1749 Total	9,825,449	9,825,449	7,916,638	87,418	1,821,393
TS406722 - Traffic Signals - Mtce					
Engineering	500,000	500,000	331,620	15,947	152,433
Construction	2,656,778	2,656,778	211,644	0	2,445,134
Traffic Signals	1,185,923	1,185,923	1,185,923	0	0
TS406722 Total	4,342,701	4,342,701	1,729,187	15,947	2,597,567
TS512322 - Street Light Maintenance					
Engineering	300,000	300,000	139,242	18,208	142,550
Construction	2,510,852	2,510,852	400,939	0	2,109,913
TS512322 Total	2,810,852	2,810,852	540,181	18,208	2,252,463
Total Expenditures	\$61,473,553	\$61,486,412	\$47,453,626	\$1,280,045	\$12,752,741
Sources of Financing					
ES241422 - Infrastructure Renewal Program - Sanitary Sewers					
Capital Sewer Rates	7,934,529	7,934,529	7,934,529	0	0
Drawdown from Sewage Works Renewal Reserve Fund	2,250,000	2,250,000	0	0	2,250,000
Canada Community-Building Fund	2,250,000	2,250,000	1,329,408	305,784	614,808
Other Contributions (Note 1)	0	12,859	0	12,859	0
ES241422 Total	12,434,529	12,447,388	9,263,937	318,643	2,864,808
ES254021 - Infrastructure Renewal Program - Stormwater Sewers & Treatment					
Capital Sewer Rates	820,480	820,480	820,480	0	0
Drawdown from Sewage Works Renewal Reserve Fund	8,575,865	8,575,865	8,101,693	345,714	128,458
Canada Community-Building Fund	2,250,000	2,250,000	2,250,000	0	0
Other Contributions	51,495	51,495	51,495	0	0
ES254021 Total	11,697,840	11,697,840	11,223,668	345,714	128,458
EW352521 - Watermain Corrosion Protection Program					
Capital Water Rates	921,600	921,600	354,141	80,505	486,954

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(Subledger WS22C00L) Whitehall Drive

(Subledger WS22C00K) McKenzie Avenue, Baker Street, Windsor Street and Belgrave Avenue

(Subledger WT220005) Huron Street Steel Watermain Cathodic Protection Project

Sources of Financing continued	Approved Budget	Revised Budget	Committed To This Date	This Submission	Balance for Future Work
EW376522 - Infrastructure Renewal Program - Watermains					
Capital Water Rates	12,175,544	12,175,544	12,175,544	0	0
Drawdown from Water Works Renewal Reserve Fund	6,581,005	6,581,005	3,566,297	413,610	2,601,098
Canada Community-Building Fund	684,033	684,033	684,033	0	0
EW376522 Total	19,440,582	19,440,582	16,425,874	413,610	2,601,098
TS1749 - Dundas Street Old East Village Streetscape Improvements					
Debenture By-law No. W.-5662-111	2,186,940	2,186,940	1,677,860	23,314	485,766
Federal PTIS (Public Transit Infrastructure Stream)	3,280,000	3,280,000	2,516,476	34,968	728,556
Provincial PTIS (Public Transit Infrastructure Stream)	2,733,060	2,733,060	2,096,853	29,136	607,071
Other Contributions	1,625,449	1,625,449	1,625,449	0	0
TS1749 Total	9,825,449	9,825,449	7,916,638	87,418	1,821,393
TS406722 - Traffic Signals - Mtce					
Capital Levy	3,742,553	3,742,553	1,729,187	15,947	1,997,419
Drawdown from Transportation Renewal Reserve Fund	600,148	600,148	0	0	600,148
TS406722 Total	4,342,701	4,342,701	1,729,187	15,947	2,597,567
TS512322 - Street Light Maintenance					
Capital Levy	2,467,863	2,467,863	540,181	18,208	1,909,474
Drawdown from Transportation Renewal Reserve Fund	342,989	342,989	0	0	342,989
TS512322 Total	2,810,852	2,810,852	540,181	18,208	2,252,463
Total Financing	\$61,473,553	\$61,486,412	\$47,453,626	\$1,280,045	\$12,752,741

Financial Note: (Excluding HST)	ES241422	ES241422 Utilities	ES254021	EW352521	EW376522
Listed by Engineer and Contract					
IBI Group - Lyle and Elizabeth Street	42,207	12,859	81,446	0	62,072
GM BluePlan Engineering Limited - Whitehall	84,706	0	84,706	0	112,941
R.V. Anderson Associates Limited - McKenzie, Baker, Windsor and Belgrave	173,583	0	173,583	0	231,444
R.V. Anderson Associates Limited - Huron Street Steel Watermain Cathodic Protection	0	0	0	79,112	0
Total Per Capital Project (Excluding HST)	\$300,496	\$12,859	\$339,735	\$79,112	\$406,457

Financial Note: (Excluding and Including HST) Listed by Engineer and Contract	TS1749	TS406722	TS512322	Total Excluding HST	Total Including HST
IBI Group - Lyle and Elizabeth Street	85,906	15,671	17,893	\$318,054	\$323,425
GM BluePlan Engineering Limited - Whitehall	0	0	0	\$282,353	\$287,322
R.V. Anderson Associates Limited - McKenzie, Baker, Windsor and Belgrave	0	0	0	\$578,610	\$588,794
R.V. Anderson Associates Limited - Huron Street Steel Watermain Cathodic Protection	0	0	0	\$79,112	\$80,504
Total Per Capital Project (Including HST)	\$85,906	\$15,671	\$17,893	\$1,258,129	\$1,280,045

Appendix "A"

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(Subledger WS22C00K) McKenzie Avenue, Baker Street, Windsor Street and Belgrave Avenue

(Subledger WT220005) Huron Street Steel Watermain Cathodic Protection Project

Financial Note: Charges per Capital Project	ES241422	ES241422 Utilities	ES254021	EW352521	EW376522
Contract Price	\$300,496	\$12,859	\$339,735	\$79,112	\$406,457
Add: HST @13%	39,064	1,672	44,166	10,285	52,839
Total Contract Price Including Taxes	339,560	14,531	383,901	89,397	459,296
Less: HST Rebate	-33,776	-1,672	-38,187	-8,892	-45,686
Net Contract Price	<u>\$305,784</u>	<u>\$12,859</u>	<u>\$345,714</u>	<u>\$80,505</u>	<u>\$413,610</u>

Financial Note: Charges per Capital Project continued

	TS1749	TS406722	TS512322	Total
Contract Price	\$85,906	\$15,671	\$17,893	\$1,258,129
Add: HST @13%	11,168	2,037	2,326	163,557
Total Contract Price Including Taxes	97,074	17,708	20,219	1,421,686
Less: HST Rebate	-9,656	-1,761	-2,011	-141,641
Net Contract Price	<u>\$87,418</u>	<u>\$15,947</u>	<u>\$18,208</u>	<u>\$1,280,045</u>

Note 1: London Hydro, Rogers and Start.ca have confirmed their contributions towards this project. The expenditures have increased to accommodate their contributions.

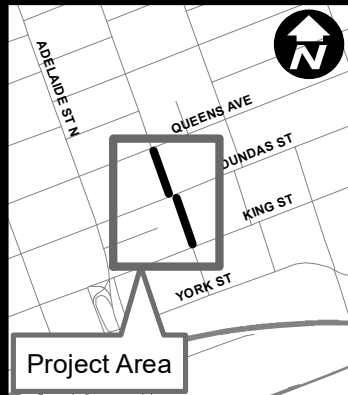
Jason Davies
Manager of Financial Planning & Policy

jg

APPENDIX 'B'



LOCATION MAP



2023 Infrastructure Renewal Program

Elizabeth Street from Queens Avenue to Dundas Street
Lyle Street from Dundas Street to King Street

 Project Area

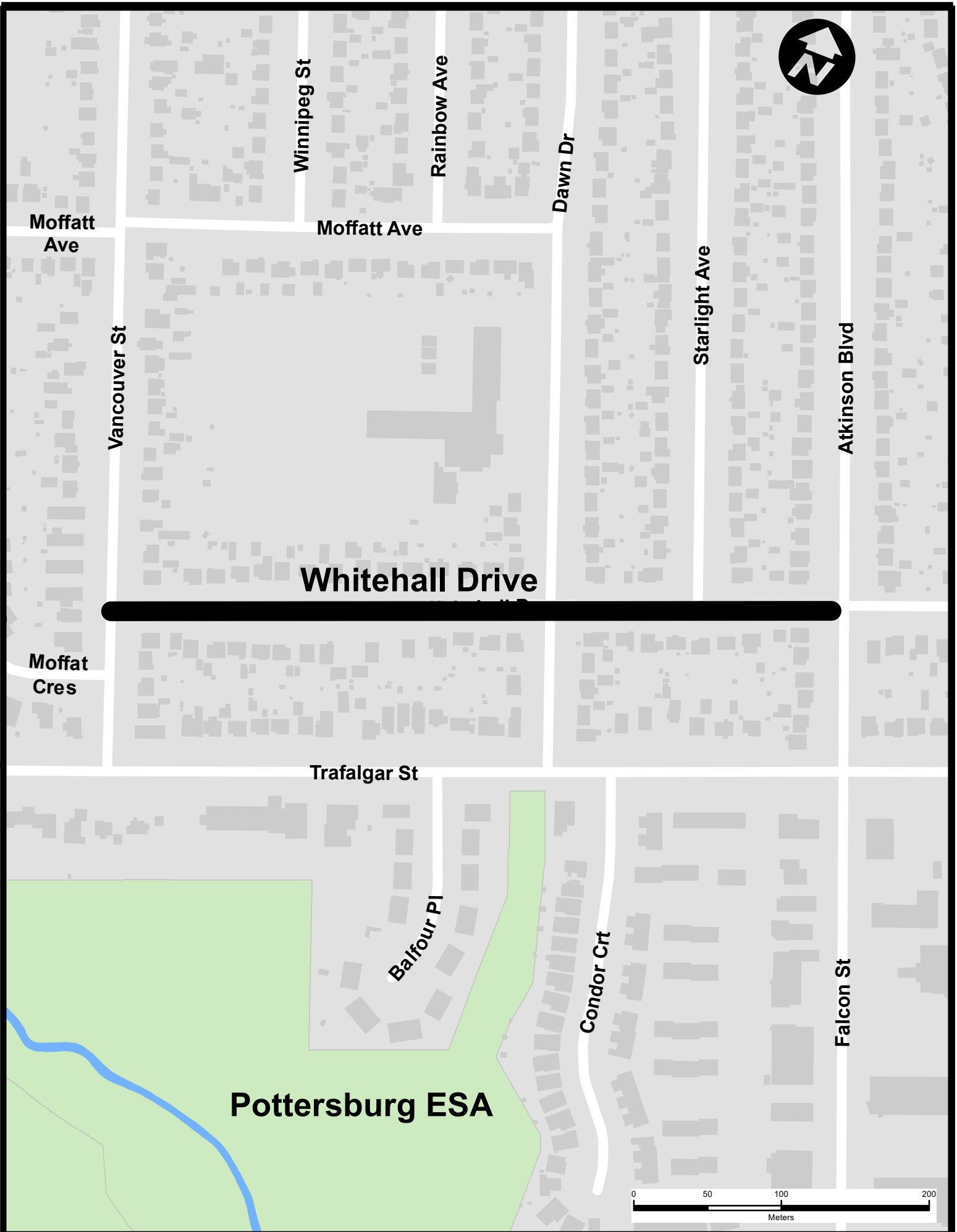
Map Produced by
the Sewer
Engineering
Division
March 7, 2023 CM



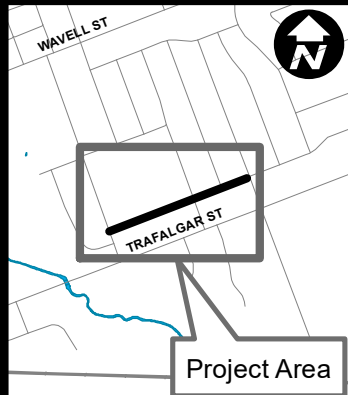
London
CANADA

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APPENDIX 'B'



LOCATION MAP



2023 Infrastructure Renewal Program

Whitehall Drive from Vancouver Street to Atkinson Boulevard

 Project Area

Map Produced by
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APPENDIX 'B'



LOCATION MAP



2023 Infrastructure Renewal Program

- McKenzie Avenue from Wortley Road to Belgrave Avenue
- Baker Street from Ridout Street South to Belgrave Avenue
- Windsor Avenue from Ridout Street South to Belgrave Avenue
- Belgrave Avenue from McKenzie Avenue to Baker Street

 Project Area

Map Produced by
the Sewer
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March 3, 2023 CM



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APPENDIX 'B'



LOCATION MAP



Huron Street Trunk Watermain Cathodic Protection Upgrades

Huron Street from Adelaide Street North to approximately 100m east of Clarke Road

 Project Area

Map Produced by
the Sewer
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March 6, 2023 CM



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