

Report to Civic Works Committee

To: Chair and Members
Civic Works Committee

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

Subject: Contract Award: Tender RFT-2023-016 Dingman Drive
Improvements

Date: May 24, 2023

Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** with respect to the Dingman Drive improvements, from east of Wellington Road South to the east of the Highway 401 overpass (Tender RFT-2023-016):

- (a) The bid submitted by Bre-Ex Construction Inc., at its tendered price of \$9,996,424.25, excluding HST, **BE ACCEPTED**; it being noted that the bid submitted by Bre-Ex Construction Inc. was the lowest of six bids received and meets the City's specifications and requirements;
- (b) AECOM Canada Ltd., **BE AUTHORIZED** to complete the contract administration and construction inspection for this project in accordance with the estimate, on file, at an upset amount of \$633,819.00, excluding HST;
- (c) in accordance with the Drainage Act, the 2023 Cousins Drain Report by Spriet Associates **BE ACCEPTED** attached, hereto, as Appendix B;
- (d) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached, hereto, as Appendix A;
- (e) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (f) the approvals given, herein, **BE CONDITIONAL** upon the Corporation entering into a formal contract with the consultant for the work;
- (g) the approvals given, herein, **BE CONDITIONAL** upon the Corporation entering into a formal contract for the material to be supplied and the work to be done relating to this project (RFT-2023-016); and,
- (h) the Mayor and the City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

Linkage to the Corporate Strategic Plan

Municipal Council's new Strategic Plan identifies "Mobility and Transportation" as a strategic area of focus. This report supports the Strategic Plan by identifying the building of infrastructure that provides safe, integrated, connected, reliable and efficient transportation choices.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

- June 19, 2012 - Civic Works Committee – London 2030 Transportation Master Plan
- September 7, 2016 - Civic Works Committee - London ON Bikes Cycling Master Plan
- May 6, 2019 – Strategic Priorities and Policy Committee - Approval of 2019 Development Charges By-Law and DC Background Study
- February 5, 2019 – Civic Works Committee - Dingman Drive East of Wellington Road to Highway 401 and Area Intersections Improvements Environmental Assessment - Appointment of Consulting Engineer
- June 23, 2020 – Civic Works Committee - Dingman Drive East of Wellington Road to Highway 401 and Area Intersections Improvements - Environmental Study Report
- March 2, 2021 – Civic Works Committee – Dingman Drive Improvements – Appointment of Consulting Engineer – Detailed Design and Tendering

1.2 Purpose

This report recommends award of the construction tender, RFT-2023-016, for the Dingman Drive improvements from 150 m east of Wellington Road South to the east of the Highway 401 overpass to Bre-Ex Construction Inc. It also recommends that the existing engineering agreement with AECOM Canada Ltd. be extended to include the contract administration and construction supervision that is required for the project.

1.3 Background

Dingman Drive is an east-west Civic Boulevard and currently consists of a two-lane rural cross section with no sidewalks or cycling facilities. With ongoing and future growth and increasing traffic forecasted in the area, this project will reconstruct Dingman Drive to meet current design standards and will support safe and comfortable mobility for all modes of transportation.

An Environmental Assessment (EA) for the Dingman Drive corridor has been completed and an Environmental Study Report (ESR) for Dingman Drive and the Dingman Drive and White Oak intersection was approved by Council in June 2020. The ESR identified the transportation infrastructure needs for the Dingman Drive corridor and recommended that this work be completed in the following phases:

- Phase 1 – Dingman Drive from east of Wellington Road South to the east of the Highway 401 overpass (this report pertains to this phase)
- Phase 2 – Dingman Drive and White Oak Road Intersection Improvements

A map of the Dingman Drive corridor phases are shown below.



Figure 1: Map of the Dingman Drive Corridor EA Phases

The Dingman Drive corridor improvements will result in improved safety for all road users while accommodating ongoing and future growth in the area. The improvements will enhance the overall network and provide better connectivity to adjacent communities by following the City's Complete Streets Design Manual. The improvements were identified as a priority in the last Transportation Development Charges Background Study.

Subject to Council approval, the City will proceed with construction of Phase 1, which extends approximately 1.2 km along Dingman Drive from 150 m east of Wellington Road South to the east of the Highway 401 overpass. The Phase 2 improvements to the nearby intersection of Dingman Drive and White Oak Road are currently planned for construction in 2027 and the detailed design will be initiated later.

Phase 1 of the Dingman Drive corridor improvements was reviewed using the Climate Emergency Screening Tool. This review endorsed a complete streets approach to upgrade this rural corridor to provide for missing components that support increased pedestrian, cycling, and transit activity in this growing area of the city. Reconstruction of strategic streets to a four-lane Civic Boulevard complete street standard is recommended as a cost-effective approach to enable and promote more sustainable mobility choices. The proposed drainage improvements will also increase the resiliency of the infrastructure to respond to risks associated with climate change.

2.0 Discussion and Considerations

2.1 Project Description

The Phase 1 Dingman Drive improvements, from Wellington Road South to the Highway 401 overpass, will accommodate the existing and future travel demands and improve traffic safety. Dingman Drive is an important connection to serve residential, agriculture, and industrial mobility needs in this growing area of the city.

Dingman Drive, from Wellington Road South to the Highway 401 overpass, will be reconstructed to a Civic Boulevard urban cross-section and will include the following components:

- A new four-lane urban cross-section with storm sewers and drainage improvements,
- A new multi-use path and boulevard improvements,
- Landscaping elements,
- New street lighting and traffic signal installations,
- Sanitary sewer improvements,
- All improvements will meet the current Accessibility for Ontarians with Disabilities Act (AODA) standards.

2.2 Advance Works

This project required the advance relocation of various utilities including London Hydro, Enbridge Gas, Solo Cable, and Bell Canada. Coordination with these utility companies has been underway in support of the project to ensure that the necessary utility relocations are completed in a timely and efficient manner.

Tree removals have been completed in advance of the utility relocations and the upcoming construction activities. New trees will be planted as part of this project.

2.3 Cousins Municipal Drain

Improvements to the Cousins Municipal Drain will be completed as part of this construction project which will better accommodate the existing and future storm water flows. The 2023 Cousins Drain Report recommended that an existing section of the drain, approximately 75m in length, be replaced with a new 1220 mm x 1929 mm elliptical sewer pipe including all related appurtenances and a new outlet structure. Further details are contained in the 2023 Cousins Drain Report prepared by Spriet Associates, attached as Appendix B. The Drainage Act requires that Council accept the report before construction of the municipal drain work can begin.

2.4 Traffic Management and Communications

A project update video was posted on the city website, getinvolved.london.ca on November 16, 2022, to provide project information and upcoming construction details. Property owners, residents, and businesses near the project area were invited to view the information.

A detailed traffic staging plan and pedestrian management plan has been developed in anticipation for construction. These plans balance mobility and access during all stages of construction while allowing the project to be completed in a timely and cost-effective manner. This plan also considers the recent development in the area and accommodates access to new commercial development in the area. It is anticipated that, during construction:

- Two lanes of traffic (one in each direction) will be maintained on Dingman Drive west of Wellington Road South,
- Full closure of Dingman Drive east of Wellington Road South will be required for a period of approximately two months. Detours will be in place during the closure,
- Access to homes and businesses will be maintained,
- Temporary traffic signals will be in operation at the intersections,
- Construction activities will be coordinated with London Transit Commission (LTC) and emergency services.

The traffic management plan will be communicated, monitored, and adjusted during construction based on traffic conditions.

2.5 Construction Schedule

Construction of this project is planned in 2023, subject to approvals. The construction of the Dingman Drive improvements is anticipated to be undertaken in two construction seasons with most work occurring between June and December and the placement of the final lift of asphalt and completion of any remaining minor works in the second construction season.

2.6 Procurement Process

The request for tenders (RFT) was published on March 30, 2023. Tenders for the Dingman Drive Improvements Phase 1 (RFT-2023-016) were opened on April 28, 2023. Six contractors submitted prices as listed below, including contingency, and excluding HST:

Contractor	Company Name	Tender Price Submitted
1.	Bre-Ex Construction Inc.	\$9,996,424.25
2.	PV-Ex Construction Ltd.	\$10,469,000.00
3.	CH Excavating (2013)	\$11,248,658.61
4.	J-AAR Excavating Limited	\$11,411,452.05
5.	Blu-Con Construction	\$11,535,000.00
6.	Birnam Excavating Ltd.	\$11,613,853.58

All tenders have been checked by the City's consultant, AECOM Canada Ltd., and the Environment & Infrastructure Service Area. No mathematical errors were found, and the bids were determined to be compliant. The submitted low bid by Bre-Ex Construction Inc. is 3% above the tender estimate that was prepared prior to the tender opening. The tender results indicate competitive pricing from the construction industry and represent good value for a project of this size, scope, and complexity recognizing current market and supply chain conditions. All tenders include a contingency allowance of \$1.3 M (excluding HST).

Funding for the project is available in the City's Transportation, Stormwater, Sewer, and Water capital budgets.

2.7 Consulting Services

AECOM Canada Ltd. was awarded the detailed design of the Phase 1 Dingman Drive improvements project by Council in March 2021, after previously completing the EA. With the consultant's knowledge and performance during the EA and detailed design phases of the project, the consultant was invited to submit a proposal to carry out the contract administration and construction supervision. Staff have reviewed the fee submission, including the time allocated to each project task, along with hourly rates provided by each of the consultant's staff members. The review of assigned personnel and hourly rates for various activities are in alignment with the original competitive procurement process and with other infrastructure assignments.

The continued use of AECOM Canada Ltd. on this project for construction administration phase 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. The City's requirement for the creation of record drawings following construction requires the reviewing professional engineer to seal the drawings based on field verification and ongoing involvement. This requirement promotes consultant accountability for the design.

In accordance with Section 15.2(g) of the Procurement of Goods and Services Policy, Civic Administration is recommending that AECOM Canada Ltd. be authorized to carry

out the remainder of engineering services, as contract administrators, and complete the project for a fee estimate of \$633,819.00 including contingency and excluding HST.

3.0 Financial Impact/Considerations

3.1 Operating Cost

Anticipated annual operating costs associated with new additional infrastructure is summarized below:

Service Area	Rationale	Increase in Annual Operating Cost
Roadway Operations	Additional maintenance required for the roadway and multi-use paths.	\$43,600
Traffic Engineering	Additional costs for streetlights, pavement markings at intersections and electrical equipment	\$74,870
Forestry and Parks Operations	Additional tree and landscaping maintenance, grass cutting.	\$20,000
Sewer Operations	Operating cost for new storm sewer and sanitary sewer improvements	\$5,400
Water Operations	Water system improvements	\$150

The property tax supported operational budget impacts will be addressed as part of the annual assessment growth case process where appropriate, while the additional water and wastewater costs will be addressed in future budget processes.

Conclusion

Civic Administration has reviewed the tender bids and recommends that the construction contract for the Dingman Drive Improvements Phase 1 project be awarded to Bre-Ex Construction Inc. in the amount of \$9,996,424.25, including contingency and excluding HST, in accordance with Section 8.5(a)ii of the City of London's Procurement of Goods and Services Policy.

It is also recommended that AECOM Canada Ltd. be authorized to carry out the contract administration and construction supervision to complete this project for a fee estimate of \$633,819.00, including contingency and excluding HST, in accordance with Section 15.2(g) of the City of London's Procurement of Goods and Services Policy, as it is in the best financial and technical interests of the City.

It is also recommended that the attached 2023 Cousins Drain Report prepared by Spriet Associates be accepted to allow improvements to be completed to the Cousins Municipal Drain, in accordance with the Drainage Act.

Improvements to Dingman Drive are necessary as existing and planned developments in the project area will create growth along the Dingman Drive corridor. Construction of a four-lane Civic Boulevard to a complete streets standard with multi-use paths, localized turning lanes, curbs, and illumination improvements will ensure the corridor meets the long-term needs of this growing area.

Prepared by: **Garfield Dales, P.Eng.**
Division Manager, Transportation Planning and Design

Shawna Chambers, P.Eng., DPA
Division Manager, Stormwater Engineering

Submitted by: **Doug MacRae, P.Eng., MPA**
Director, Transportation & Mobility

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

Attach: Appendix A – Source of Financing
Appendix B – Cousins Drain 2023 report by Spriet Associates, dated
February 3, 2023

c: Steve Mollon, City of London
Lauren Pasma, City of London
Michelle Morris, City of London
Violetta Sypien, City of London
John Haasen, AECOM Canada Ltd
Josiah Reis, Bre-Ex Construction Inc.

Appendix "A"

#23109

May 24, 2023

(Award Contract)

Chair and Members
Civic Works Committee

RE: RFT-2023-016 Dingman Drive Improvements
(Subledger RD200008)

Capital Project ES241422 - Infrastructure Renewal Program - Sanitary Sewers

Capital Project ES304022 - Minor Surface Flooding Mitigation

Capital Project ES304023 - Minor Surface Flooding Mitigation

Capital Project EW3708 - Trunk Watermain Valve Chambers

Capital Project TS1746 - Dingman Dr. - Hwy 401 Bridge to Wellington Road

Bre-Ex Construction Inc. - \$9,996,424.25 (excluding HST)

AECOM Canada Ltd. - \$633,819.00 (excluding HST)

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 recommendation of the Deputy City Manager, Environment and Infrastructure, the detailed source of financing is:

Estimated Expenditures	Approved Budget	Committed To Date	This Submission	Balance for Future Work
ES241422 - Infrastructure Renewal Program - Sanitary Sewers				
Engineering	2,000,000	1,717,133	7,090	275,777
Engineering (Utilities Share)	12,859	12,859	0	0
Construction	10,409,529	9,609,737	111,824	687,968
City Related Expenses	25,000	630	0	24,370
ES241422 Total	12,447,388	11,340,359	118,914	988,115
ES304022 - Minor Surface Flooding Mitigation				
Engineering	31,100	0	31,100	0
Construction	349,533	35,499	314,034	0
ES304022 Total	380,633	35,499	345,134	0
ES304023 - Minor Surface Flooding Mitigation				
Construction	389,768	0	176,460	213,308
EW3708 - Trunk Watermain Valve Chambers				
Engineering	179,474	76,591	6,412	96,471
Construction	1,374,287	448,618	101,120	824,549
City Related Expenses	290,527	290,358	0	169
EW3708 Total	1,844,288	815,567	107,532	921,189
TS1746 - Dingman Dr. - Hwy 401 Bridge to Wellington Road				
Engineering	1,216,041	615,668	600,373	0
Land Acquisition	765,351	765,351	0	0
Construction	10,451,858	37,385	9,468,923	945,550
Utilities	783,000	156,367	0	626,633
City Related Expenses	50,000	0	0	50,000
TS1746 Total	13,266,250	1,574,771	10,069,296	1,622,183
Total Expenditures	\$28,328,327	\$13,766,196	\$10,817,336	\$3,744,795

Appendix "A"

#23109

May 24, 2023

(Award Contract)

Chair and Members

Civic Works Committee

RE: RFT-2023-016 Dingman Drive Improvements

(Subledger RD200008)

Sources of Financing	Approved Budget	Committed To Date	This Submission	Balance for Future Work
ES241422 - Infrastructure Renewal Program - Sanitary Sewers				
Capital Sewer Rates	7,934,529	7,934,529	0	0
Drawdown from Sewage Works Renewal Reserve Fund	2,250,000	1,142,971	118,914	988,115
Canada Community-Building Fund	2,250,000	2,250,000	0	
Other Contributions (Utilities Share)	12,859	12,859	0	0
ES241422 Total	12,447,388	11,340,359	118,914	988,115
ES304022 - Minor Surface Flooding Mitigation				
Capital Sewer Rates	380,633	35,499	345,134	0
ES304023 - Minor Surface Flooding Mitigation				
Capital Sewer Rates	389,768	0	176,460	213,308
EW3708 - Trunk Watermain Valve Chambers				
Capital Water Rates	1,844,288	815,567	107,532	921,189
TS1746 - Dingman Dr. - Hwy 401 Bridge to Wellington Road				
Capital Levy	9,215	9,215	0	0
Debenture By-law No. W.-5669-63 (Note 1)	1,065,351	125,810	809,181	130,360
Drawdown from City Services - Roads Reserve Fund (Development Charges) (Note 2)	3,077,984	1,439,746	1,638,238	0
Debenture By-law No. W.-5669-63 - Serviced through City Services - Roads Reserve Fund (Development Charges) (Note 1 and 2)	9,113,700	0	7,621,877	1,491,823
TS1746 Total	13,266,250	1,574,771	10,069,296	1,622,183
Total Financing	\$28,328,327	\$13,766,196	\$10,817,336	\$3,744,795
Financial Note: Engineering				
Contract Price	ES241422	ES304022	EW3708	TS1746
	\$6,967	\$30,562	\$6,301	\$589,989
Add: HST @13%	906	3,973	819	76,699
Total Contract Price Including Taxes	7,873	34,535	7,120	666,688
Less: HST Rebate	-783	-3,435	-708	-66,315
Net Contract Price	\$7,090	\$31,100	\$6,412	\$600,373
Financial Note: Engineering continued				
Contract Price	Total			
	\$633,819			
Add: HST @13%	82,397			
Total Contract Price Including Taxes	716,216			
Less: HST Rebate	-71,241			
Net Contract Price	\$644,975			

Appendix "A"

#23109

May 24, 2023

(Award Contract)

Chair and Members
Civic Works Committee

RE: RFT-2023-016 Dingman Drive Improvements
(Subledger RD200008)

Financial Note: Construction	ES241422	ES304022	ES304023	EW3708
Contract Price	\$109,890	\$308,603	\$173,408	\$99,371
Add: HST @13%	14,286	40,118	22,543	12,918
Total Contract Price Including Taxes	124,176	348,721	195,951	112,289
Less: HST Rebate	-12,352	-34,687	-19,491	-11,169
Net Contract Price	\$111,824	\$314,034	\$176,460	\$101,120

Financial Note: Construction continued	TS1746	Total
Contract Price	\$9,305,152	\$9,996,424
Add: HST @13%	1,209,670	1,299,535
Total Contract Price Including Taxes	10,514,822	11,295,959
Less: HST Rebate	-1,045,899	-1,123,598
Net Contract Price	\$9,468,923	\$10,172,361
Total Engineering and Construction	\$10,817,336	

Note 1: Note to City Clerk: The City Clerk be authorized to increase Debenture By-law No. W.-5669-63 by \$1,358,645 from \$8,820,406 to \$10,179,051.

Note 2: Development charges have been utilized in accordance with the underlying legislation and the approved 2019 Development Charges Background Study and the 2021 Development Charges Background Study Update.

Note 3: There will be additional annual operating costs of \$43,600 for Roadway Operations, \$74,870 for Traffic Engineering, \$20,000 for Forestry and Parks Operations, \$5,400 for Sewer Operations and \$150 for Water Operations.

Jason Davies
Manager of Financial Planning & Policy

jg

COUSINS DRAIN 2023

City of London



SPRIET
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London, Ontario
February 3, 2023

COUSINS DRAIN 2023

City of London

To the Mayor and Council of
The City of London

Mayor and Council:

We are pleased to present our report on the reconstruction of portions of the Cousins Municipal Drain serving parts of Lots 14 to 17, Concessions 3 and 4 (geographic Westminster) in the City of London

AUTHORIZATION

This report was prepared pursuant to Section 78 of the Drainage Act. Instructions were received from your Municipality to initiate the report. The work was initiated and approved administratively based on the submitted work plan by Spriet Associates in accordance with the City of London procurement policy.

HISTORY

The Cousins Drain was last reconstructed pursuant to a report submitted by J.R. Spriet, P. Eng. dated June 14, 1988. It consisted of approximately 1,050 meters of 900mm to 1200mm diameter storm sewer and retention pond. The drain extends from an outlet in Dingman Creek in the west part of Lot 16, Concession 3, northerly across Dingman Drive and private Roxburgh Road, then easterly to its head at the west side of Wellington Road.

EXISTING DRAINAGE CONDITIONS AND DESIGN CONSIDERATIONS

At a site meeting held with respect to the project and through later discussions, the owners reported the following:

- that a short piece of the existing drain is proposed to be reconstructed as part of a road reconstruction project in the area where the drain crosses Dingman Drive at Roxburgh Road
- that the City of London will be completing the work and will cover all costs associated with this project
- that the Consulting Engineering firm AECOM has been engaged by the City to prepare the design and construction drawings which were requested to be utilized as part of this report



EXISTING DRAINAGE CONDITIONS AND DESIGN CONSIDERATIONS (cont'd)

- that AECOM also prepared a Drainage Design and Stormwater Survey report which was circulated to the required agencies

The portion of the drain crossing Dingman Drive and outletting into the Stormwater Management Facility (SWMF) is being upgraded to allow larger rain events to utilize the pipe without causing additional localized flooding upstream and across the road.

RECOMMENDATIONS

We are therefore recommending the following:

- that the above described portion of the existing drain, approximately 75 meters in length, be replaced with new 1220mm to 1920mm elliptical sewer pipe, including related appurtenances and outlet structure.

ENVIRONMENTAL CONSIDERATIONS AND MITIGATION MEASURES

Mitigation measures have been included to reduce potential impacts of the proposed construction. These measures are provided on the AECOM Drawing 33, included as part of this report.

SCHEDULES

One schedule is attached hereto and forms part of this report, being Schedule 'A' - Cost Estimate.

Schedule 'A' - Cost Estimate. This schedule provides for the estimate to prepare this report and follow the required procedures under the Drainage Act. No construction or other costs have been included, as this work is being completed and covered by the City of London through a different project.

Drawing No.'s 24 and 33, Project No. 60656496 and specifications prepared by AECOM and sealed dated January 31, 2023 form part of this report. They show and describe in detail the location and extent of the work to be done and the lands which are affected.

ALLOWANCES

The properties designated with Assessment Roll numbers 080040194110000, (private Roxburgh Road and 080040155000000 (south side Dingman Road) are affected by the construction. However, there are no Allowances provided for Damages under Section 30 of the Drainage Act since the work includes complete restoration.



ASSESSMENT

At the request of the City of London, the entire cost of this report and all associated costs of this project are assessed to the Dingman Drive Road Authority.

MAINTENANCE

Upon completion of construction, all owners are hereby made aware of Sections 80 and 82 of the Drainage Act which forbid the obstruction of or damage or injury to a municipal drain

After completion, the newly reconstructed 2023 portion of the Drain shall be maintained by the City of London at the cost of the Dingman Drive Road Authority.

The existing portions of the drain upstream of this project and the SWMF downstream constructed through the 1988 report shall be maintained in accordance with the grades and dimensions set out in the plans and specifications contained in the report dated June 14, 1988.

Respectfully submitted,

SPRIET ASSOCIATES LONDON LIMITED

M.P. DeVos, P. Eng.

MPD:dw



SCHEDULE 'A' - COST ESTIMATE

COUSINS DRAIN 2023**City of London**

The estimated cost of this report is outlined in detail as follows:

ADMINISTRATION

Interest and Net Harmonized Sales Tax	\$	111.00
Survey, Plan and Final Report	\$	3,965.00
Expenses	\$	174.00
Supervision and Final Inspection	\$	2,450.00
TOTAL ESTIMATED COST	\$	6,700.00

