

Report to: General Committee Meeting Date: February 27, 2024

SUBJECT: 289-T-23 Markham Village Phase 1A - Storm Sewers and

Watermain Upgrades

PREPARED BY: Prathapan Kumar, Senior Manager - Infrastructure,

Environmental Services, Ext. 2989 Flora Chan, Senior Buyer, Ext. 3189

RECOMMENDATION:

1) That the report entitled "289-T-23 Markham Village Phase 1A - Storm Sewers and Watermain Upgrades" be received; and,

- 2) That the contract for 289-T-23 Markham Village Phase 1A Storm Sewers and Watermain Upgrades be awarded to the lowest priced Bidder, Drainstar Contracting Ltd. in the amount of \$18,746,673.19, inclusive of HST; and,
- 3) That a 15% contingency in the amount of \$2,812,000.98 inclusive of HST, be established to cover any additional construction costs and that authorization to approve expenditures of the contingency amount up to the specified limit be in accordance with the Expenditure Control Policy; and,
- 4) That the construction award in the amount of \$21,558,674.17 (\$18,746,673.19 + \$2,812,000.98) be funded from the account 058-6150-23468-005 "Markham Village Flood Control Phase 1A Construction" as outlined under the Financial Considerations Section in this report; and,
- 5) That funding of \$350,000.00 be retained in the account for other services as described under Financial Considerations Section; and
- That the remaining funds from this tender relating to project #23468 "Markham Village Flood Control Phase 1A Construction" in the amount \$53,543.83 (\$21,962,218.00 \$21,558,674.17-\$350,000.00) be returned to the Stormwater Fee Reserve; and,
- 7) That a 5-year moratorium be placed on any major servicing and utility installation along restored areas of the following streets:
 - Church Street (from Maple Street to 9th Line);
 - Jack Court:
 - Judy Court;
 - Jill Court:
 - Sir Isaac Gate:
 - King Arthur Court; and
 - Rose Way; and
- 8) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

EXECUTIVE SUMMARY:

Not Applicable

PURPOSE:

The purpose of this report is to obtain Council approval to award the contract for 289-T-23 Markham Village Phase 1A – Storm Sewers and Watermain Upgrades.

BACKGROUND:

Markham Village and Unionville Stormwater Flood Remediation Feasibility Study was approved by Council on September 13, 2021.

The anticipated implementation schedule is outlined in the table below:

Phasing		Proposed Implementation Schedule
Phase 1A:	Markham Village: Church Street, Jack Court, Judy Court, Jill Court, Sir Isaac Gate, King Arthur Court, Rose Way	2024 - 2026
Phase 1B:	Markham Village: Wooten Way North, Sir Lancelot Drive, Sir Tristram Place, Parkway Ave (part), Sir Kay Drive, Sir Gareth Court, Sir Gawaine Place, Sir Pellias Terrace, Sir Brandiles Place	2025 - 2026
Phase 1C:	Markham Village: Parkway Ave, Sir Galahad Place, Strathroy Crescent, Elm Street, Paramount Road, Sir Bedevere Place, Sir Ector Court, Sir Percival Court, Sir Constantine Drive, Sir Caradoc Place, Sir Galahad Place, Sir Bodwine Place	2026 - 2027
Phase 2:	Markham Village: Ramona Boulevard, Daniel Court, Fincham Road	2027 - 2028
Phase 3:	Markham Village/ Unionville: Pomander Road, Gainsville Avenue, Fred Varley Drive, Friar Tuck Road	2028 - 2030
Phase 4:	Markham Village: Milne Lane, Rouge Street, Major Buttons Drive/ Squire Bakers Lane, John Dexter Place, Senator Reesor's Drive	2030 - 2032

In February 2013, Council approved a 30-year Flood Control Program, which provides funding to improve the level of service of drainage systems, including a 100-year level of service for storm sewer systems. The Markham Village and Unionville Area Study was accelerated after the significant flooding that occurred in the summer of 2017. The area was

developed prior to 1978, when the City's storm drainage design standards were increased from a 5-year level of service to 100-year level of service.

The City-wide Flood Control Program is a 30-year program with an estimated cost of \$367M - \$382M (2018 dollars). To support the program, on June 24, 2014, Council approved the structure, and introduction, of the stormwater fee rates in order to meet the annual revenue target for the first 5-year cycle of the Program. The new stormwater fee supports the 30-year initiative, to improve storm drainage capacity and limit flooding risks in urban areas.

On April 16, 2019 Council approved a \$50 annual fee per residential property for 2020 and further increase of \$1 per year up to 2024 and an increase of 2% per \$100,000 of current value assessment (CVA) and 2% annual increase thereafter for non-residential properties. Stormwater fees will be re-assessed in 2025, during the Stormwater Fee Reserve model update process.

Construction Tender for Markham Village Phase 1A

Due to the scope of the project, contractors were prequalified to ensure that they had the necessary qualifications, experience and resources to complete the work in accordance with the City's requirements and within the specified timelines. Prequalification 196-P-20 was issued in accordance with Purchasing By-law 2017-8.

Pre-Qualification Information (196-P-20)

Prequalification closed on	October 5, 2020
Number of Contractors picking up the Pre-qualification document	40
Number of Contractors responding to the Pre-qualification	31
Number of Contractors Pre-qualified	15

Construction Tender Information (289-T-23)

Bids closed on	February 5, 2024
Number picking up the Bid document	12
Number responding to the Bid	7

^{*}Out of 15 prequalified contractors, 12 picked up the bid and 7 submitted.

Price Summary

Bidder	Bid Price (Inclusive of HST)	
Drainstar Contracting Ltd.	\$ 18,746,673.19	

OPTIONS/ DISCUSSION:

Public Input

An in-person Community Information Meeting has been scheduled for February 26, 2024, prior to construction, to provide an update to the area residents and businesses, as well as to address any potential issues or concerns that the public may have on the proposed construction.

Traffic Management Plan

Church Street will be closed for through traffic from Maple Street to 9th Line in order to carry out the construction in a safely manner. The objective of the traffic management plan is to limit

the traffic within the construction zone (only local traffic and emergency vehicles will be allowed) and divert traffic onto adjacent roadways.

Construction Moratorium

In December 2023, the City's consultant, R.V. Anderson Associates Limited, advised all utility companies (e.g. Alectra Utilities, Enbridge, Rogers and Bell Canada) that all upgrades to their infrastructure be completed prior to permanent restoration of roads in May 2026 for Phase 1A area.

Environmental Services staff is requesting that Council approve a 5-year moratorium on major construction work within the roadway listed below, which is to be enforced immediately after construction is complete. Minor and emergency repairs would be permitted. The moratorium applies to the enhancement, maintenance, repair or replacement of existing plant and construction of new plant, which may undermine the integrity of the newly improved street infrastructure. The moratorium would not affect any utility projects within the boulevard area.

Exceptions

While these requirements represent the City's current policy, it is recognised that, under certain circumstances, such as emergency work, providing service to a new customer, or construction identified by the Director of Environmental Services, or designate as being necessary to ensure public safety, an exception to the moratorium may be made.

Exemptions may be made, at the sole discretion of the Director of Environmental Services or designate, provided that the Applicant has investigated and evaluated all other options and can demonstrate that they are not feasible or practical. When such exceptions are granted, the Applicant shall exhaust all trenchless methods available to minimize the number and size of cuts in the street. The City, acting reasonably, may perform more extensive site restoration than would normally be expected, at the Applicant's expense, in order to mitigate the concerns of public inconvenience and the premature degradation and aesthetics of newly improved streets.

- Church Street (from Maple Street to 9th Line)
- Jack Court:
- Judy Court;
- Jill Court;
- Sir Isaac Gate:
- King Arthur Court; and
- Rose Way

Road Closures:

Church Street will be closed for through traffic from Maple Street to 9th Line in order to carry out the construction in a safely manner. Access to Local residents and Emergency vehicles will be allowed 24/7.

Project Schedule for Phase 1A:

- Mid-March 2024 Issue of Purchase Order
- May 1, 2024 Commencement of work

- December 20, 2024 Completion of 45% work to base asphalt
- January to Spring 2025 Winter Shutdown
- Spring 2025 to December 2025 Completion of 50% work to base asphalt
- January to Mid-April 2026 Winter shutdown
- June 2026 Substantial completion by completing remaining 5% work
- Summer 2026 Final Pavement/ Boulevard Restoration

Communications Plan

Staff will provide regular updates to the affected stakeholders as well as early notification for any disruptions to driveway access or municipal services. The City's website will provide upto-date information, as required, on the status of the project.

FINANCIAL CONSIDERATIONS

The total budget for this project is \$23,721,300, approved by Council as a 2023 capital in-year budget addition. The project is funded from \$2 million in Canada Community Building funding (formerly Gas Tax) and the remainder from the Stormwater Fee Reserve. The below table represents the budget available for the construction component in the amount of \$21,962,218; the balance of the total budget is for contract administration and other project management costs.

	Storm Sewer (#23468)		
Budget Available for	\$ 21,962,218.00	058-6150-23468-005 Markham	
Construction component of this		Village Flood Control Phase 1A -	
Project (A)		Construction	
Less: Construction Cost (B)	\$ 18,746,673.19	Awarded to Drainstar Contracting	
Less: Construction Contingency (15%) (C)*	\$ 2,812,000.98	Ltd.	
Total Cost $(D) = (B) + (C)$	\$ 21,558,674.17		
Remaining Budget (E) = (A) – (D)	\$ 403,543.83	**	

^{*}Staff requests the standard contingency of 10% be revised to 15% to account for several factors that may arise, including the following:

- Works are within matured community and therefore, several unknown utilities within the ROW may require relocation and may delay the construction progress;
- With deep sewer, we may find unexpected soil condition that may require additional mitigation methods like continuous dewatering, customized shoring system, and additional bedding support;
- Church Street is a very busy collector road, with one high school and two secondary schools within the neighborhood. School traffic needs to be managed through traffic control persons and York Regional Police for extended periods to address complaints from local area residents and parents who drop their children at Markham District High School. This may delay the project progress;
- Additional fees associated with excess soils management O. Reg. 406/19 that has recently been enforced (fees may include but are not limited to updates to the

requirements, additional borehole testing due to updates in soil removal quantities - soil testing results etc.);

- **From the remaining construction budget balance of \$403,543.83, a total of \$350,000.00 are required to carry out the following works:
- Third party permitting/ consultation fees (TRCA/ MNRF/ MECP) \$25,000.00,
- Tree removal within the outfall area behind 7 ELM Street \$100,000.00,
- Tree re-planting/compensation \$200,000.00
- Acquiring land from 7 ELM Street to construct two outfall structures \$25,000.00.

The remaining construction budget in project #23468 "Markham Village Flood Control Phase 1A - Construction" in the amount of \$53,543.83 will be returned to the Stormwater Fee Reserve.

HUMAN RESOURCES CONSIDERATIONS

Not Applicable.

OPERATING BUDGET AND LIFE CYCLE RESERVE IMPACT

The constructed storm sewer pipes and associated infrastructure is estimated to last 100 years. There is no incremental operating budget impact.

ALIGNMENT WITH STRATEGIC PRIORITIES:

The proposed flood remediation program is aligned with City's goal to provide better quality services to the public and is consistent with the Building Markham's Future Together strategic priority on the "Growth Management" and "Environment" as it considers sustainability on the built environment.

BUSINESS UNITS CONSULTED AND AFFECTED:

The Finance department and Engineering - Transportation/ Operations - Utilities Sections on Traffic Management Plan have been consulted and their comments have been incorporated.

RECOMMENDED BY:

Eddy Wu, Director Environmental Services Morgan Jones, Commissioner Community Service

ATTACHMENTS:

- Attachment A Markham Village Phase 1A Location Map
- Attachment B Markham Village Overall Phasing Plan