

Date: 2023-04-04

Subject: Request to Begin Procurement- CCTV Camera Services for Storm Sewer Systems

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Report Number: Planning, Bld & Growth Mgt-2023-332

Recommendations:

1. That the report titled Request to **Begin Procurement- CCTV Camera Services for Storm Sewer System** to the Committee of Council meeting of April 12, 2023 be received; and
2. THAT the Purchasing Agent be authorized to begin the procurement of CCTV Camera Services for Storm Sewer Systems

Overview:

- The City of Brampton operates over 1800 km of storm sewers, valued at \$1.4 billion, that provide vital functions to protect people and property from flooding.
- The 2022 Brampton Stormwater Asset Management Plan (AMP) was prepared by the City to meet Provincial requirements for municipal asset management, and approved by Council on June 8, 2022.
- The AMP estimated the condition of storm sewers based on asset age and recommended a Closed Circuit Camera Television (CCTV) inspection program to collect physical condition data to inform further asset management planning. The CCTV inspections will identify defects and their locations, as well as overall structural ratings and rehabilitation or replacement requirements for each pipe segment.
- The City has already completed CCTV inspection of 200 km of storm sewers. The next phase of CCTV inspections planned for 2023 to 2025 will target older areas of the remaining storm sewer network, and will examine a further 400 kilometers of storm sewers. The anticipated contract period is from June 2023 to June 2025.

Background:

The City of Brampton operates a storm sewer network with an estimated value of \$1.4 billion, including over 1800 km of storm sewers and over 25,600 manholes. The storm sewer network is an essential part of the City's infrastructure designed to safely collect and convey stormwater runoff during rain and snowmelt events. Storm sewers come in different sizes and types often dependent on the amount of stormwater runoff they are expected to convey. Storm sewers work by collecting and transporting stormwater from streets, parking lots, and other areas to stormwater ponds and ultimately to the receiving network of rivers, creeks and streams throughout Brampton.

The 2022 Brampton Stormwater Asset Management Plan approved by Council on June 8, 2022 estimated that about 15% of the City's storm sewer network is in poor condition based on looking at asset age only. Storm sewers physically deteriorate at different rates to eventual failure and loss of ability to deliver the required level of service. On average, storm sewers need to be replaced every 100 years if they are regularly maintained. The average age of the City's storm sewers is approximately 26 years while the mature segments are over 70 years old.

The City has not had a fulsome CCTV program in place that worked to collect information for all storm sewer assets. CCTV inspections have been undertaken previously in association with planned roadway construction and improvements. A comprehensive and optimal asset management plan for storm sewer assets is reliant on understanding the physical condition of the storm sewers across the entire City, identifying current or imminent areas of concern, and maintaining the accuracy and relevance of the physical condition data once collected.

The 2022 Brampton Stormwater Asset Management Plan recommended the City's CCTV inspection program be City-wide in scope to collect baseline condition data for the storm sewer network. This is a multi-year endeavour, and once fully completed the data will be refreshed periodically, such as on a 25-year cycle by collecting information for 4% of the storm network per year. The CCTV inspection program will identify segment-by-segment deficiencies needing rehabilitation to extend the pipe lifespan and will identify the pipes needing replacement. The CCTV inspection program will enable the City to make informed decisions on future stormwater infrastructure programs to postpone expensive replacement through rehabilitation and schedule replacement where necessary to avoid service disruptions.

Current Situation:

The CCTV inspections planned for 2023 to 2025 will target an estimated 400 km of storm sewers within older areas of the remaining storm sewer network. These areas are

prioritized because they have a higher risk of pipe failure and service disruption. The inspection activities are expected to take two years.

Corporate Implications:

Financial Implications:

Sufficient funding exists in the following projects:

Initiative	Project
CCTV Inspection Program	204941- 001 Stormwater Asset Management
CCTV Inspection Program	214941- 001 Stormwater Asset Management
CCTV Inspection Program	224941- 001 Stormwater Asset Management

Staff will monitor and ensure that sufficient funding is in place until the end of the contract, pending Council approval to begin procurement.

Other Implications:

A public Procurement Process will be conducted and the lowest compliant Bid will be eligible for contract award. Purchase approval shall be obtained in accordance with the Purchasing By-Law.

All communication with Bidders involved in the procurement must occur formally, through the contact person identified in the Bid Document.

Term of Council Priorities:

The recommendations of this report supports the “Brampton is a Well-Run City” Term of council direction by practicing proactive, effective and responsible management of municipal assets and services to ensure that the storm sewers are in a state of good repair.

Recommendation:

It is recommended that the Purchasing Agent be authorized to commence the procurement as described in this report.

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