

NO: R081

COUNCIL DATE: May 13, 2019

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **May 9, 2019**

FROM: **General Manager, Engineering**

FILE: **2320-20 (Sewer
Inspection)**

SUBJECT: **Award of Contract No. 1220-040-2019-13
2019 Storm Sewer Video Inspection Program**

RECOMMENDATION

The Engineering Department recommends that Council:

1. Award Contract No. 1220-040-2019-013 to Rapid Sewer Data Corporation (“Rapid Sewer”) for the 2019 Storm Sewer Video Inspection Program at the Term 1 locations illustrated in Appendix “I”, for an annual cost in year one of \$263,488.39 (including GST);
2. Approve the option to extend Contract No. 1220-040-2019-013 for two additional one-year terms at the City’s discretion to provide video inspection services for the Terms 2 to 3 locations illustrated in Appendix “I”. The cumulative three-year cost for Contract No. 1220-040-2019-013 is \$823,226.22 (including GST);
3. Set the annual expenditure authorization limit for Contract No. 1220-040-2019-013 at \$300,000.00 (including GST and contingency); and
4. Authorize the General Manager, Engineering to execute Contract No. 1220-040-2019-013 and approve all extensions and change orders related to Contract No. 1220-040-2019-013 within the approved annual expenditure authorization limit.

INTENT

The intent of this report is to seek Council’s approval to award Contract No. 1220-040-2019-013 to Rapid Sewer for the 2019 Storm Sewer Video Inspection Program. The contract also includes options for the City to extend the contract for two additional one-year terms at the City’s sole discretion. Staff will consider the award of these one-year extensions, subject to satisfactory performance of the contractor and any other relevant considerations.

BACKGROUND

The primary purpose of this contract is to quickly and efficiently video inspect a large quantity of storm sewer infrastructure to identify structural, operational and maintenance issues. The inspections will focus on infrastructure of higher risk and significant age. From this contract, the City will be able to initiate preventative maintenance programs, potentially avoid costly emergency work, and provide better service to residents. In addition, the inspections will aid in formulating a replacement plan for aging and failing infrastructure before complete failures occur.

Prior to 2017, the inspections of storm sewers were conducted on smaller targeted areas and on a demand basis when a drainage issue occurred (i.e., back-ups or flooding). In 2017, the City implemented a more proactive and comprehensive storm sewer video inspection program aligned with the existing video inspection program for sanitary sewer. The inaugural storm sewer video inspection contract was conducted in the Cloverdale area, using conventional video inspection methods. From this first contract, staff learned that conventional video inspection was not the most efficient method for inspecting a large amount of storm sewer infrastructure. Furthermore, it would take the City approximately 40 years to inspect the entire drainage system (mains and manholes only) using conventional inspection methods.

Based on recent experience and the availability of rapid scan (zoom camera) video inspection technology, the City conducted a pilot project in 2017 to explore the rapid scan inspection approach with a contractor, A&S Roadworks (now known as Rapid Sewer), that had experience in providing the rapid scan video inspection service.

Rapid scan video inspection technology utilizes a zoom video camera mounted on a telescopic pole to view deep within pipes from an adjacent manhole, as well as to inspect the manhole itself. The technology uses high-powered optics and focused illumination. Sewer lines do not need to be cleaned before a rapid scan inspection, and therefore can be assessed quickly by a single operator.

The pilot project demonstrated that rapid scan inspection is a very efficient method of identifying structural, operational and maintenance defects and deficiencies. The City discovered that suitable video inspections could be completed at a fraction of the time and cost using this new inspection approach compared to conventional video inspection methods. The cost for rapid scan video inspection is approximately \$0.60 per metre compared to \$5.00 per metre for conventional video inspection, equating to approximately an 88% cost savings. Following the success of the pilot project, the City implemented and completed the 2018 Storm Sewer Inspection Program using the same rapid scan method with the same level of success. The 2018 inaugural Rapid Scan Video Inspection contract was successfully completed by Rapid Sewer.

DISCUSSION

In accordance with the *Purchase and Expenditure Authorization Bylaw*, a Request for Quotations (“RFQ”) was posted on the BC Bid and City of Surrey websites. Staff also directly notified contractors who were viewed as having the necessary expertise and equipment.

Quotations for the subject contract were opened on April 3, 2019, with the following results:

	Contractor	Year 1 Quotation including GST	Year 2 Quotation including GST	Year 3 Quotation including GST	3-Year Total including GST	Corrected 3-Year Total including GST
1.	Rapid Sewer Data Corp.	\$263,488.39	\$274,894.41	\$284,843.42	\$823,226.22	No Change
2.	Mar-Tech Underground Services Ltd.	\$473,337.06	\$491,608.53	\$502,208.07	\$1,467,153.66	\$1,599,201.66

The City’s pre-quotation estimate was \$792,768.46 for the three-year total, including GST.

EVALUATION

The RFQ evaluation team, which included staff from both the Engineering Department and Finance Department, reviewed the quotations for accuracy and completeness. Addition and multiplication errors, as well as missing totals, were found and corrections were made to one quotation, as indicated below:

- Mar-Tech Underground Services Ltd.’s quote was missing the amount for 120 days of traffic control at \$1,048 per day (based on Mar-Tech’s price list), plus GST, for a total of \$132,048.

The Contract does not include an option for contractors to work 24-hours a day, 7-days a week, as there were no financial savings or time savings expected. However, the Contract permits construction between 7:00 a.m. and 10:00 p.m., and it allows for construction at night-time where necessary in order to provide the best balance between traffic disruptions and disruptions to residents and businesses, while completing the works within the shortest duration possible.

No bid bond was required for this quotation. All submissions were signed on the Quotation Form and Summary Sheet of the Schedule of Quantities and Prices.

Rapid Sewer submitted the lowest quotation for the three-year accumulative total and was fully compliant with the contract specifications. The City completed a review of references provided by Rapid Sewer for video inspection work. The references indicate Rapid Sewer’s past performance on similar work has been satisfactory. Rapid Sewer has no outstanding legal claims against the City. It is recommended that Rapid Sewer be awarded Contract No. 1220-040-2019-013.

SUSTAINABILITY CONSIDERATIONS

This contract supports the objectives of the City’s Sustainability Charter 2.0. In particular, the investigation of sewer mains, service connections and manholes relate to the Sustainability Charter 2.0 theme of Infrastructure. Specifically, this contract supports the following Desired Outcome (“DO”) and Strategic Direction (“SD”):

- All Infrastructure DO1: City facilities and infrastructure systems are well managed, adaptable and long lasting, and are effectively integrated into regional systems; and
- All Infrastructure SD1: Proactively manage community assets to maintain them over the long-term in a state of good repair.

FUNDING

The annual funding for these services is available from the Engineering Operations Drainage Budget.

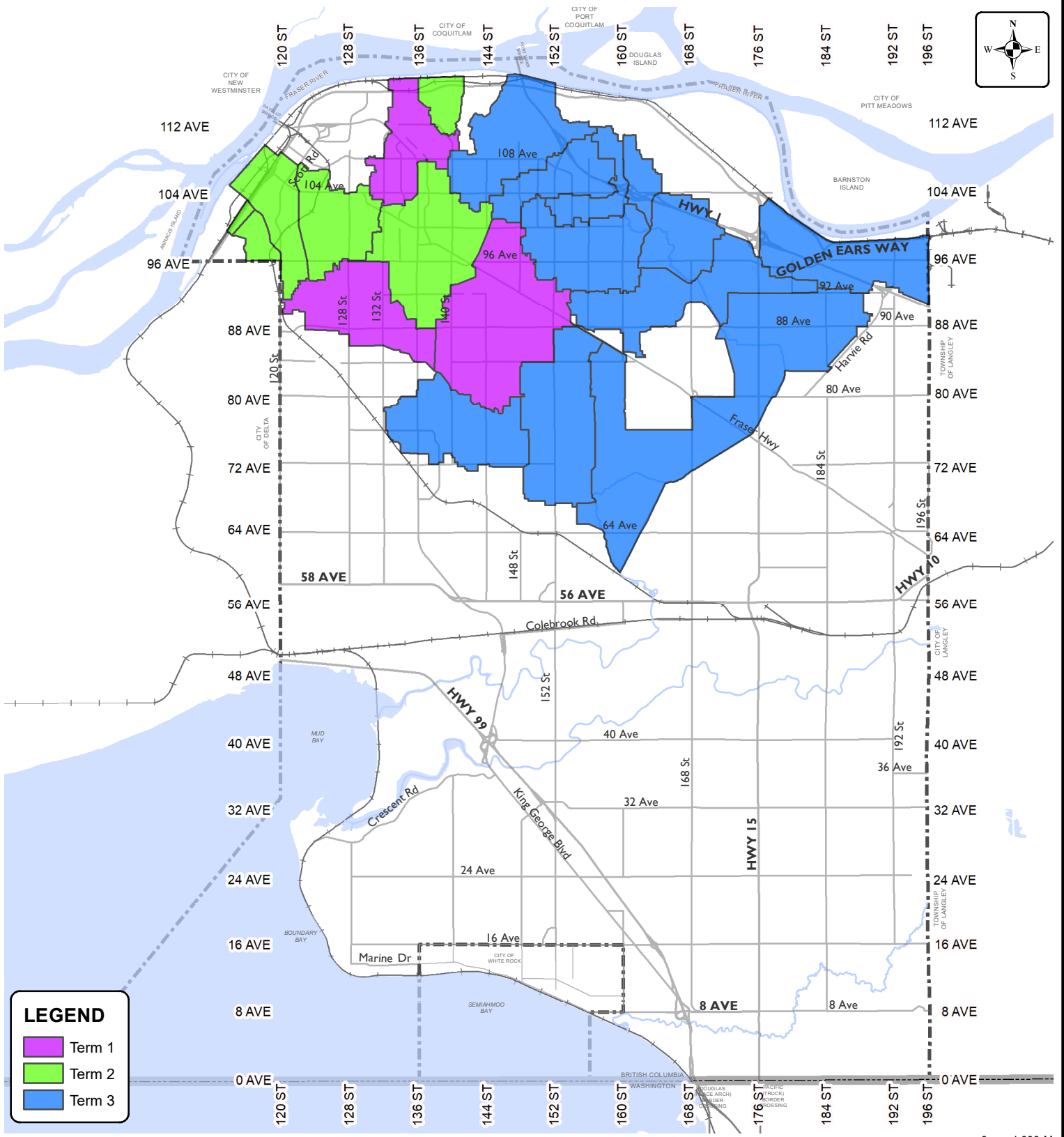
Fraser Smith, P.Eng., MBA
General Manager, Engineering

RK/cc

Appendix "I" - Project Location Overview

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APPENDIX "I"



LEGEND

- Term 1
- Term 2
- Term 3

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Storm Sewer Video Inspection Program

ENGINEERING DEPARTMENT

The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, Legal descriptions and encumbrances must be confirmed at the Land Title Office.