

DATE OF MEETING APRIL 20, 2022

AUTHORED BY CHRIS LANG, PROJECT ENGINEER, ENGINEERING PROJECTS

SUBJECT PARK AVENUE SANITARY SEWER UPGRADES

OVERVIEW

Purpose of Report

To seek Council direction to allocate funds from the Sewer Operating Reserve to increase the budget for the Park Avenue Sanitary Sewer Upgrades project.

Recommendation

That the Finance and Audit Committee recommend that Council increase the budget for the Park Avenue Sanitary Sewer Upgrades project in 2022 from \$1,109,110 to \$1,504,381 with the additional \$395,271 in funding from the Sewer Operating Reserve.

BACKGROUND

The 2014 Chase River Sanitary Master Plan identified existing sanitary sewers within the catchment area that require upsizing for capacity to accommodate future growth and maintain the appropriate level of service. One of the priority mains identified in the study was the existing trunk sewer collector that runs along Park Avenue and follows the Cat Stream south of Robbins Park, before returning to the roadway (Attachment A).

Replacing this sewer online through the conventional open cut method introduces several constraints and significant construction risks due to the location. These risks include bypass pumping of sewage through a fish-bearing stream, significant environmental impacts to the creek and riparian area, very limited construction access, and the removal of concrete encased Asbestos Cement pipe.

A review of alternate replacement alignments and methods was completed with the preferred option determined to be the installation of a new 500mm dia. sanitary sewer along Park Avenue via Horizontal Directional Drilling. This technology involves drilling a small borehole underground along the new sewer alignment, and pulling the new pipe back into place at the specified grade and location. This approach would provide the required capacity for growth, and remove the operating sewer from within the Cat Stream back into the road dedication.

This project was delayed for several years due to other priority projects; however, the required upgrades are becoming critical as the existing sewer is now operating close to capacity.

DISCUSSION

A Negotiated Request for Proposal (NRFP) was issued with one response received from Milestone Contracting Ltd. with a price of \$1,399,100. Following negotiations with the contractor, savings were discovered that reduced the construction cost to \$1,367,619. A review of the tendered price was completed by a third party trenchless engineering firm who concluded that the proposed cost was in line with the current drilling industry demand and other factors such as material cost increases and increased fuel costs. Addition of a 10% contingency provides a total budget requirement of \$1,504,381.

FINANCIAL CONSIDERATIONS

The project budget is proposed to be increased by \$395,271 to \$1,504,381 with the additional funding allocated from the Sewer Operating Reserve. The revised projected 2022 closing balance for the Sewer Operating Reserve will be \$11,073,480.

OPTIONS

1. That the Finance and Audit Committee recommend that Council increase the budget for the Park Avenue Sanitary Sewer Upgrades project in 2022 from \$1,109,110 to \$1,504,381 with the additional \$395,271 in funding from the Sewer Operating Reserve.
 - The advantages of this option: Required capacity upgrades can be completed to a critical trunk sewer in a way that has the least impact on the Cat Stream.
 - The disadvantages of this option: The methodology chosen requires speciality equipment and is more expensive than anticipated. Less funds will be available in the reserve to support other sewer projects.
 - Financial Implications: The 2022 – 2026 Financial Plan will be amended to reflect the increased project budget.
2. That Council provide alternative direction.

SUMMARY POINTS

- A section of sanitary sewer along Park Avenue and through the Cat Stream is approaching capacity.
- The Park Avenue Sanitary Sewer project was tendered and one bid was received over the available budget, requiring an additional \$395,271 to complete the project.
- Approving the additional funding will allow the necessary upgrades to be completed this year and provide an acceptable level of service for the trunk sewer.

ATTACHMENTS:

Appendix A – Park Avenue Sanitary Sewer Project Area |

Submitted by:

Chris Lang
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Concurrence by:

Phil Stewart
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Poul Rosen
Director, Engineering

Bill Sims
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