

# Report to Council



**Date:** January 24, 2022  
**To:** City Council  
**From:** City Manager  
**Subject:** Water Street DCC Force Main Project Budget  
**Department:** Infrastructure Delivery

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## **Recommendation:**

THAT Council receives for information, the report from the Infrastructure Delivery Department dated January 24, 2022, regarding the additional budget required for the Water Street DCC Force Main Project;

AND THAT the 2021 Financial Plan be amended to include the addition of \$477,260 from the Wastewater DCC Reserve and the transfer of \$12,740 from the Pipe Replacement program to the Water Street DCC Force project as noted in the Financial/Budgetary Considerations section below.

## **Purpose:**

To increase budget for the Water Street DCC Force Main wastewater project to meet financial requirements to complete the works.

## **Background:**

The Water Street Sewer Lift Station is a key component for the wastewater collection system serving the downtown area. The force main that carries the pumped flow from the lift station to Ethel Street is vulnerable due to age and shallow depth of cover. This project provides a second force main that provides additional capacity and redundancy to better ensure no interruptions to this critical service. The additional capacity is essential for planned downtown intensification. The project was initially budgeted in 2019 and supplemented with additional funding in 2020. Construction was initiated in 2020 by City Construction staff and is nearing completion. Final restoration and commissioning will occur in Spring 2022.

## **Discussion:**

Unforeseen construction related issues are causing the project to be over the estimated budget. The major items are summarized as follows:

1. The original alignment and schedule were to coincide with other transportation and utility projects in the vicinity. That turned out to be more difficult than anticipated, so the alignment shifted and some potential savings were not realized. This change also resulted in investigation

- and design costs that drained contingency funds. Estimated additional costs due to the unrealized savings is \$50,000.
2. From the time when the project was originally scoped and budgeted, to the point of ordering materials for constructions, the supplier cost of pipe, fittings and valves increased significantly due to construction cost inflation. Estimate cost impact is \$60,000 (+2%).
  3. The poor soil conditions and higher than expected groundwater resulted in additional dewatering, wider trenches due to sloughing and additional drain rock in the pipe zone. Estimate cost impact is \$115,000.
  4. The scope of work assumed that 50% of the native soils could be reused for backfill. Unfortunately, the soils were worse than expected and 85-90% had to be removed and replaced with imported gravel. Estimate cost impact is \$150,000.
  5. The installation resulted in two gas line strikes resulting in costly repairs, including WorkSafeBC shutdowns and loss of production time. In each case there were extenuating circumstances, but still did not change the costly outcome. Estimated extra cost was \$20,000.
  6. A lengthy portion of pipe excavation on Richter Street uncovered significant amounts of abandoned wood stave and asbestos concrete pipe that was not indicated on City records. Due to the constraints of the alignment, this material had to be removed and disposed of. Estimate impact is \$80,000.
  7. When excavating around the convenience store at the corner of Richter and Glenwood the crew encountered two separate localized contaminated soil sites. This caused disruption to the project requiring the crews to stop with installation, setup a containment area, and send soil samples away for testing. Once a solution was determined, the material had to be triple handled in order to properly address concerns. Estimate impact is \$15,000.

### **Financial/Budgetary Considerations:**

#### Summary of Estimated Budget Transfer Requirements

Original Budget \$944,000 (2019) + \$312,300 (2020)	= \$ 1,256,300
Current Estimate to Completion	= \$ 1,746,300
Additional Budget Required	= \$ 490,000

The Water Street DCC Force Main project is a DCC project that is funded 97.4% DCC and 2.6% Wastewater Utility. It is recommended that the 2021 Financial Plan be amended to include the addition of \$477,260 from the Wastewater DCC Reserve and the transfer of \$12,740 from the Pipe Replacement program to the Water Street DCC Force Main project (#3458) to cover the budget needs listed above. Projects within the 2021 Pipe Replacement program (#3545) have completed under budget due to efficiencies found in combining them with larger capital projects.

**Internal Circulation:**

Budget  
Capital Planning  
Financial Planning  
Utility Planning  
Utility Services

**Considerations not applicable to this report:**

Alternate Recommendation:  
Communications Comments:  
Existing Policy:  
External Agency/Public Comments:  
Legal/Statutory Authority:  
Legal/Statutory Procedural Requirements:  
Personnel Implications:

Submitted by:

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**Approved for inclusion:** M. Logan, Infrastructure General Manager

cc: G. Davidson, Divisional Director, Financial Services