

DATE OF MEETING JANUARY 17, 2022

AUTHORED BY MIKE SQUIRE, MANAGER, WATER RESOURCES

SUBJECT MID-TOWN WATER SUPPLY PROJECT

OVERVIEW

Purpose of Report:

To provide Council with information regarding the Mid-Town Water Supply Project.

BACKGROUND

Due to the failure of a significant water supply main on Bowen Road, a refocused water supply capital plan was required to address current risks, and provide system resiliency. Water supply capital planning originates with the goals and objectives of the current Water Supply Strategic Plan. The previous Water Supply Strategic Plan goals were focused primarily on water quality objectives and meeting Canadian Drinking Water Guidelines. With the successful completion of the South Fork Water Treatment Plant and other associated water quality improvement and capacity projects, an update to the Water Supply Strategic Plan is now underway with a strong focus on building resilience into our core water infrastructure.

As part of REIMAGINE NANAIMO, the updated Water Supply Strategy will focus on identifying current system risks and will provide guidance to assist with:

- continued population growth,
- protecting the environment,
- managing aging infrastructure, and
- building resilience to climate change and emergencies.

The Mid-Town Water Supply Project fully meets the objectives of the Water Supply Strategy and mitigates our highest current risk to the water supply system.

DISCUSSION

To address current risks, the first phases of the Mid-Town Water Supply Project will construct two large water pipelines to replace the vulnerable and undersized current infrastructure that transmits potable drinking water to the central and northern areas of the City. These improvements will deliver system redundancy and a dedicated water service to the Nanaimo Regional General Hospital. The project will also support sustainable objectives by utilizing gravity to convey water to the north end reservoirs and avoid costly pumping.

To expedite this project effectively and efficiently, a procurement method of negotiated requests for proposals was selected. Recent civil construction costs have escalated due to increased materials cost and labour shortages, and it is expected with early contractor engagement, such

costs can be value engineered at an earlier stage to help identify any cost savings and efficiencies in construction.

An opportunity exists to build a future trail over sections of the water supply main access road, which will further enhance the community's active transportation network. The five year capital plant will incorporate trail funding that corresponds with phases of the water main project.

CONCLUSION

The benefits of this project will be:

- Decreased water system risk and improved strength and reliance of the water supply system in the mid-town section of the City.
- Enhanced water supply operation, improved water quality and a dedicated water service main to the Nanaimo Regional General Hospital.
- Increased water supply to accommodate future growth and improved firefighting capabilities.
- Providing a dedicated water supply main route will allow for future opportunities for a multi-purpose trail for pedestrians and cyclists. This falls in line with REIMAGINE Nanaimo objectives by integrating with park and railway master plans and active transportation goals.

The current total project budget is \$28.4 million based on 30% design, and the anticipated start of construction is the summer of 2022 with the completion by spring of 2024.

SUMMARY POINTS

- The Mid-Town Water Supply Project has been expedited due to current risk.
- The current project budget is \$28.4 million; however, recent costs for construction have increased dramatically due to increased materials cost and labour shortages.
- In an effort to expedite the project and provide value added construction measures, the procurement method for this project will allow for early contractor involvement through a negotiated Request for Proposals process.

ATTACHMENTS

Attachment A - Mid-Town Water Supply Project summary presentation.

Submitted by:

Mike Squire
Manager, Water Resources |

Concurrence by:

Laura Mercer
Director, Finance

Richard Harding
General Manager, Parks, Recreation & Culture

Bill Sims
General Manager, Engineering and Public Works