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DATE: July 15, 2024

TO: Wade Bryson, Chair
Public Works and Facilities Committee

THROUGH: Denise Koch, Director of Engineering and Public Works

FROM: John Bohan, Chief CIP Engineer

cc. Brian McGuire, Utilities Superintendent

SUBJECT: Funds Transfer of \$125,000 to Drinking Water Pipeline Assessment CIP

Staff requests the transfer of \$125,000 from two Water Utility CIPs, W75-068 – Douglas Water System assessment (\$25k) and W75-077 – Aurora Vault Removal (\$100k), to CIP W75-071 – Water Pipeline Assessment. These funds will be used to continue the mapping and life expectancy testing of the drinking water system.

Background

In 2023, the Water Utility and Engineering began a project to test the older water main piping to determine the remaining service life. The technology being used is nondestructive and noninvasive, utilizing sound waves to measure the average wall thickness of each pipe segment tested. The analysis compares the measured thickness via the soundwaves to the original wall thickness of the pipe when installed to provide an approximation of the remaining life in the pipe. Water Distribution and Engineering staff gather GPS coordinates for the water infrastructure (mapping) and collect the field information through the sound waves. The data is sent to Mueller Echologics Technologies for analysis with the remaining service life calculated and reported back to CBJ. Gathering this information is vital to helping the Water Utilities and Street Department prioritize their CIP projects and hopefully avoid catastrophic failures. Just under 6 miles of piping was mapped and tested during the inaugural year (2023), and there are currently just over 8 miles scheduled for testing this summer, with hopefully more next summer.

The work within the Douglas Water System assessment CIP (which was the initial investigation of this technology) is complete and this CIP will be closed with this transfer. The Aurora Vault Removal work was successfully undertaken by Water Utility Staff at far less cost than was expected when the project was budgeted, without the need for contractors – KUDOS to the Water Distribution Staff! The \$100k transfer will not deplete the funds in the Aurora Vault Removal CIP, and approximately \$97k will remain to be transferred (to close this CIP) to the next priority for the Water Utility at one of the next upcoming meetings.

Action Requested

Staff requests the transfer of \$25,000 from the W75-068 Douglas Water System assessment and \$100,000 from W75-077 Aurora Vault Removal to CIP W75-071 Water Pipeline Assessment be forwarded to the full Assembly for approval.