

CITY OF CONCORD

New Hampshire's Main Street™

REPORT TO MAYOR AND CITY COUNCIL

DATE: November 26, 2019

To: Mayor and City Council

From: Earle M. Chesley, P.E. General Services Director

Subject: Repurpose funds from CIP #88 Fence Replacements to CIP #372 Pump Station #5

Refurbishment.

Recommendation

Accept this report and approve the attached resolution to transfer \$24,850 from CIP #88 Fence Replacement to CIP #372 Pump Station #5 Refurbishment.

Background

The City owns and operates a raw water transfer station (hereinafter "Station 5") on Broadcove Drive that transfers raw water from the Contoocook River, to Penacook Lake during dry periods.

This facility was constructed in 1981 to supplement the existing Penacook Lake watershed. The Penacook Lake watershed has a safe yield of 2.5 Million Gallons per Day (MGD) yet the average day of production is 4.0 MGD. This puts the Penacook Lake watershed at a deficit in annual pumping which led to the need for supplemental water.

Station 5 is in the process of being upgraded with Variable Frequency Drive (VFD's) to increase pumping flexibility and reliability as the current pumps are the original 1981 vintage units.

During the 2016 Sanitary Survey with NHDES the chemical room at Station 5 was noted as a significant deficiency as there was no containment for the on-site chemical which could lead to an environmental spill, or proper safety for the employees.

The upgrades were designed and bid in 2019 and are expected to be completed in early 2020.

Discussion

During the construction process it has been identified that the electrical lines and motor starter connectors that were anticipated to be re-used, are in such bad condition that replacement is necessary for safety and reliability purposes.

Not replacing the lines will lead to an unsafe and unreliable transfer station. The estimated replacement cost is \$17,200 with some additional engineering design and oversight during construction with contingencies is estimated at \$7,650. Total estimated cost is \$24,850.

Cc Water Superintendent Marco Philippon