



Capital Business Case

Spencerville Lagoon Flow Meter Replacement

2023 Budget

Spencerville Lagoon Flow Meter Replacement

Executive Summary

The Spencerville Lagoon System was commissioned in 1989. The lagoon building utilizes a flow meter to monitor influent flow entering the lagoon cells and initiates the activation of a pump for dosing Aluminum Sulfate. The flow meter is of original vintage. Capital Controls completed annual verification of the flow meter on January 11th, 2023.

Business Need

Capital Controls could not verify and pass the flow meter during the annual verification process due to internal alarms. The flow meter is functional but can not be verified. The flow meter passed verification in previous years. Capital Controls is recommending replacing the flow meter and provided a quotation for a direct replacement.

E/S is currently investigating and developing an installation plan. The installation plan may involve draining the force main, setting up a temporary bypass or installing a valve under live conditions. Preliminary estimates to install a valve live is approximately \$17,000. Total costs including excavation, installing a valve and bypassing and the main could be upwards of \$30,000.

Options or Solutions Analysis

Option 1: Contract Capital Controls to purchase a new ABB Flow Meter and develop an installation plan. Budget \$10,000.00 to place in reserves for execution of the installation in 2024.

Option 2: Continue to operate the existing mag meter with an increased risk of failure and potential issues during future MECP compliance inspections.

Financial and/or Non Financial Benefits

Capital Controls quoted \$4620 to supply a direct replacement ABB Mag-Meter. Lead time is 14-16 weeks for delivery. This cost does not include installation.

Risk Analyses

Not implementing corrective actions when a problem is identified increases the risk of system failure and compliance issues with the MECP.

Recommendation

Option 1: Contract Capital Controls to supply a new mag meter and commission start up and Budget \$10,000.00 to place in reserves for execution of the installation in 2024.

Implementation Plan

Contract Capital Controls to supply a new ABB Mag-Meter and develop an installation plan.

Documentation

Quotation attached.

Acceptance Sign-off

Lead Department

Prepared By: [Eric Wemerman, Chief Water/Sewer Operator

Date: 01-24-2023

Signature: *Eric Wemerman*

Approved By: Sean Nicholson, Treasurer

Date: 01-30-2023

Signature: *Sean Nicholson*

Approved By: Dave Grant, CAO

Date: 01-30-2023

Signature: *Dave Grant*