



Capital Business Case

Variable Frequency Drive Replacement

2023 Budget

Cardinal WPCP Variable Frequency Drive Replacement

Executive Summary

The Cardinal WPCP utilizes two Seepex pumps and variable frequency drives to pump unthickened biosolids from a holding tank to the Gravity Belt Thickener. The pumps and variable frequency drives have been in operation for 25 years.

Business Need

The Variable Frequency Drive for Seepex Pump # 1 has been serviced multiple times and rebuilt since start up. The VFD randomly enters fault conditions causing the pump to stop operating. IECBL has serviced the unit however this issue persists.

Options or Solutions Analysis

Option 1: Contract IECBL to supply and install a new VFD.

Option 2: Continue to operated existing VFD.

Financial and/or Non Financial Benefits

IECBL quoted \$8989.60 to supply and install a new VFD.

Risk Analysis

Failure of the VFD would result in one pump being out of service and we would lose redundancy.

Recommendation

Option 1: Purchase and replace the Variable Frequency Drive in Seepex Pump # 1.

Implementation Plan

Contract IECBL to supply and install VFD.

Documentation

Quotation attached.

Acceptance Sign-off

Lead Department

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

Date: 01-20-2023

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*