

STAFF REPORT

THE CORPORATION OF THE TOWN OF COBOURG



Report to:	Mayor and Council Members	Priority:	<input type="checkbox"/> High <input type="checkbox"/> Low
Submitted by:	Bill Peeples, Manager Environmental Services, Public Works Division bpeeples@cobourg.ca	Meeting Type:	Open Session <input checked="" type="checkbox"/> Closed Session <input type="checkbox"/>
Meeting Date:	March 7, 2022		
Report No.:	Public Works-096-22		
Submit comments to Council			

Subject/Title: Archimedes (South) Pump Repair – Plant 1

RECOMMENDATION:

THAT Council approve \$79,113 for the repair of the Archimedes (South) Pump at Water Pollution Control Plant #1. This price includes all parts, equipment, shipping, installation, non-refundable HST plus a 10% contingency; and,

FURTHER THAT Council approve the reallocation of \$30,000 from the Portable Pump capital project that will no longer be proceeding in 2022.

1. STRATEGIC PLAN

N/A

2. PUBLIC ENGAGEMENT

N/A

3. PURPOSE

To ensure the proper operation of the wastewater treatment process.

4. ORIGIN AND LEGISLATION

Environmental Services 2022 Capital Budget

5. BACKGROUND

Plant #1 has three (3) Archimedes Pumps that lift raw sewage from the Primary Clarifier to the Aeration tanks. The upper and lower bearings of these pumps have manufacturer's suggested lifespan of 6 years. The north and south pumps are 13 years old.

6. ANALYSIS

The bearings on the north Archimedes pump failed in 2021 and required emergency replacement. Given that these two pumps are the same age, it is logical to assume the bearings on the south pump will fail soon. The delivery time on the required parts is currently 9 weeks but may be longer due to COVID-related delays. It is imperative that the bearings be replaced before completely failing.

A new drive unit is also needed for this unit. The existing drive is original equipment from 1969 (53 years old).

7. FINANCIAL IMPLICATIONS/BUDGET IMPACTS

The Archimedes Pumps are only available from Spaans Babcock and must therefore be sole-sourced. The cost of parts and shipping have increased substantially since the Environmental Services Capital Budget was submitted due to the COVID pandemic. The cost and delivery times are both increasing at an alarming rate due to the pandemic. The original quotation for the drive unit in September 2021 was \$21,125. The updated quote on February 8, 2022 for this same drive unit was \$48,775.

Drive Unit	\$48,775
Upper Bearing	\$6,925
Lower Bearing	<u>\$5,150</u>
	\$60,850
On-Refundable HST	<u>\$1,071</u>
Sub-Total	\$61,921
Shipping & Installation	\$10,000
Contingency (10%)	<u>\$7,192</u>
Total Cost:	\$79,113

Council approved \$50,000 for this project in the 2022 Environmental Services Capital Budget. To enable this project to proceed in 2022, funding from a lower priority project (Portable Pump: \$75,000) will be reallocated to make up the \$30,000 difference.

8. CONCLUSION

Repair of the Archimedes pump is critical to the proper operation of the Wastewater Treatment Plant and must be completed in 2022. Funds for a lower priority capital project will be reallocated to allow this project to be completed as planned.

Report Approval Details

Document Title:	Archimedes Pump Repair (Plant 1 - South Pump) - Public Works-096-22.docx
Attachments:	
Final Approval Date:	Feb 18, 2022

This report and all of its attachments were approved and signed as outlined below:

Tracey Vaughan, Chief Administrative Officer - Feb 18, 2022 - 9:03 AM