

Municipality of Lakeshore – Report to Council

Operations

Capital Projects



To: Mayor & Members of Council

From: Wayne Ormshaw, P.Eng. Division Leader – Capital Projects

Date: May 3, 2023

Subject: Tender Award – Leffler Stormwater Pumping Station Upgrades

Recommendation

Award the tender for the Leffler Stormwater Pumping Station Upgrades to Kingdom Construction Ltd. for a total project cost of \$662,793.86 including applicable HST, with the excess amount of \$352,793.86 funded from the stormwater reserve, as presented at the May 30, 2023 Council Meeting

Background

The Leffler Stormwater Pumping Station (Leffler PS) was built in 2002 utilizing three main pumps and an emergency power take-off (PTO) pump used during power outages, when necessary. Leffler PS has an integral bypass chamber with a manual stop log sluice gate system to provide relief during high water levels in the drain. The stop logs are required to be set manually based on seasonally and forecasted lake levels, however, under high water levels, these heavy stop logs have been difficult and very cumbersome to adjust, having an automated system will adjust incrementally to suit monitored conditions of the water levels.

Phase 1 of the 2018 Stormwater Master Plan identified upgrades to the Leffler Pumping Station and the Leffler drain to reduce surface ponding on the roads. The Stormwater Masterplan recommended the following alterations to the Leffler Drain and pump station:

- Automatic sluice gate at the pump station;
- Permanent pump to replace the existing PTO pump; and
- Enclose the Leffler Drain from the railway tracks north of Country Road 46 to the pump station.

The enclosure of the Leffler Drain from the railway tracks (approximately 1,850 meters south of County Road 22) to Country Road 22 is planned to be completed as part of the Patillo Road reconstruction and widening project currently under design by Stantec Consulting. Essex Region Conservation Authority (ERCA) requires that the sluice gate upgrades to the pump station be completed prior to the widening of Patillo Road and the enclosure of the drain.

Replacement of the PTO pump with a permanent pump is not necessary until the entire length of the Leffler Drain is enclosed. As the replacement pump is costly, this will be

included in future phases of the Masterplan together with future phases of Patillo Road reconstruction.

At the April 12, 2022 Council Meeting, Stantec Consulting Ltd. were appointed to complete the design for the upgrades to the Leffler Stormwater Pumping Station Pump Station to meet the minimum requirements and Stormwater Master Plan for the Leffler Drain enclosure.

The Design of the Leffler Stormwater Pumping Station upgrades includes the following:

1. The installation of automated sluice gates
 - The new sluice gates will have the capacity to monitor lake levels and automate the lifting or dropping of the sluice gate to suit lake levels.
 - Replacement of these manual sluice gates with an automated system will limit the need for labour intensive operations and monitoring, especially prior to and during intense rain events.
 - The existing sluice gates will remain in place at the downstream end to provide a level of redundancy and backup to the new system.
2. Upgrade of the electrical system
 - The addition of electrical system to accept Supervisory Control and Data Acquisition (SCADA) was included in the scope of electrical construction work.
 - The installation of the SCADA monitoring system will utilize a cellular connection to the upcoming Municipality's SCADA mainframe system.

Comments

The Leffler Stormwater Pumping Station Upgrades Tender was publicly advertised on Bids & Tenders on Tuesday April 11, 2023.

There were two (2) vendors that provided compliant bids prior to the closing date on Friday, April 28, 2023. Below is a summary of the submissions received:

Vendor	Total tender Amount (excluding HST)	Total tender Amount (including non-recoverable HST)
Kingdom Construction Ltd.	\$456,010.44	\$464,036.23
Intrepid General Ltd.	\$466,720.80	\$474,935.08

Administration has reviewed all tender documents and has found them to be complete and compliant. Administration recommends awarding the tender for the Leffler Stormwater Pumping Station upgrades to Kingdom Construction Ltd.

Financial Impacts

The following budget approvals were provided for both Leffler Stormwater Pump Station Upgrades and Patillo road reconstruction:

- 2022 Council approved a budget of \$310,000 for the Storm Water Masterplan upgrades to Leffler Pump station.
- 2023 Council approved a budget of \$9,314,000 for the Patillo Road Phase 1 reconstruction. (For roadwork construction and administration)

The following table illustrates the estimated costs and associated funding sources for this project:

Leffler Pumping Station Upgrades	Project cost (including applicable HST)	Budget
Engineering Design	\$112,261.63	
Construction Costs Pump Station	\$464,036.23	
On-site and Contract Administration	\$86,496.00	
Total Project Costs	\$662,793.86	
Storm Water Masterplan upgrades to Leffler Pump station		\$310,000.00
Total Budget Costs		\$310,000.00
Total to be funded from the Storm Water Management		\$352,793.86

The Storm Water Reserve had a forecasted ending balance of \$1,138,283 based on the 2023 budget the following will reduce the balance to an estimated \$785,489.

Report Approval Details

Document Title:	Tender Award - Leffler Storm Water Pumping Station Upgrades.docx
Attachments:	
Final Approval Date:	May 25, 2023

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

Prepared by Wayne Ormshaw

Submitted by Krystal Kalbol

Approved by Justin Rousseau and Truper McBride