

# Municipality of Lakeshore – Report to Council

## Operations

## Engineering



**To:** Mayor & Members of Council

**From:** Krystal Kalbol, P. Eng., Corporate Leader – Operations

**Date:** April 22, 2024

**Subject:** Denis St. Pierre Wastewater Treatment Plant and Pump Upgrades - Area of Additional Sanitary Capacity

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### Recommendation

This report is for information only.

### Strategic Objectives

The Denis St. Pierre Wastewater Treatment and Pump Station Upgrades – Area of Additional Sanitary Capacity is in line with the requirements of the following Strategic Objectives:

1b) Building and Stewarding Municipal Infrastructure - Complete infrastructure delivery plans for the Water/Wastewater Master Plan and Stormwater Master Plan, including development of a stormwater levy

### Background

The Denis St. Pierre Wastewater Treatment Plant was approved for expansion in 2021. The commissioning of the plant is complete (with commissioning and testing to end within the next couple of weeks) which included upgrades to Pump Station 8. This pump station is shown on the attached map and is located on Rourke Line in front of the Treatment Plant. This pump station pumps sewage from the conveyance system (mainly from the west of the plant) directly into the plant.

As part of the Treatment Plant expansion project, Pump Station 8 saw the replacement of the existing two (2) pump configurations (consisting of three (3) screw pumps (one lower and two upper)) as well as the placement of a third set of screw pumps (one lower and one upper) to accommodate the plant expansion capacity upgrade.

Based on the above noted plant expansion and pump upgrades, the treatment plant and conveyance system can now accommodate more flows into the plant, allowing sanitary

capacity to become available in some areas within the Denis St. Pierre Treatment Plant servicing area.

## **Comments**

The attached map indicates the area that the treatment plant and pump station upgrades have impacted, allowing for more development.

At this time Administration will accept development proposals in the area indicated on the map including subdivision proposals, site plan applications and building permits (including Additional Residential Units, "ARUs").

In allowing development to proceed, Administration will implement the following:

- Continue to undertake (at the Developers expense under the User Fee Bylaw) Sanitary Capacity and Allocation Assessments (per submission) in this area for subdivision and site plan applications to ensure there is no impact to the area within the attached map that have surcharge conditions;
- Monitor Pump Station 8 to ensure that the pump station is performing as assumed in the design and as modelled;
- Install three (3) permanent flow monitors in key locations within the provided mapping area to ensure impacts are monitored; and
- Track and add any approved individual building permits and ARU's into the model as they are issued.

These improvements are currently being assessed and determined through the updated Water Wastewater Master Plan Update (WWMP) to continue to support growth.

It should be noted that although the capacity of the plant (and pump station) has been increased significantly, the sanitary capacity for this area is not unlimited. Sanitary capacity will eventually become limited (as developments are approved to proceed in this area) until such time as additional conveyance capacity and further pump station upgrades can be completed in the mapped area.

Lakeshore continues to experience constraints related to conveyance (pump stations and sewer constraints) in the Denis St. Pierre service area outside of the mapped area and cannot accept development proposals or building permit applications at this time.

## **Others Consulted**

Jacobs was consulted as part of this report.

## Financial Impacts

Financial impacts exist for the above implementation. The costs associated with the placement and maintenance of the flow monitors for one (1) year is estimated to be approximately \$54,000.00 excluding HST.

This can be covered under the Inflow and Infiltration budget item that Council funds annually.

Any other minor costs related to implementation will be covered under the Engineering – Wastewater Consulting budget item from the 2024 budget.

## Attachments

Attachment 1 - Denis St. Pierre Wastewater Treatment and Pump Station Upgrades – Area of Additional Sanitary Capacity Map

## Report Approval Details

Document Title:	Denis St. Pierre Wastewater Treatment Plant and Pump Upgrades - Area of Additional Sanitary Capacity.docx
Attachments:	- Attachment 1 - Denis St. Pierre Wastewater Treatment and Pump Station Upgrades - Area of Additional Sanitary Capacity Map.pdf
Final Approval Date:	Apr 29, 2024

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

Prepared by Krystal Kalbol

Approved by the Corporate Leadership Team