



# **2024 Annual Performance Report Sanitary Collection System**

January 1, 2024 to December 31, 2024

**Township of Wilmot – Infrastructure Services Department**

Last Revision: March 18, 2025

## Table of Contents

1 Purpose .....	2
2 Scope.....	2
3 System Overview .....	2
4 Inspections, Maintenance, Repairs and Improvements .....	3
5 Monitoring .....	4
6 Operating Problems and Corrective Actions .....	5
7 Alterations .....	5
8 Collection System Overflows and Spills of Sewage.....	5
9 Status of Actions from Previous Years.....	5

## List Of Abbreviations

Abbreviation	Definition
CCTV	Closed-Circuit Television
CLI-ECA	Consolidated Linear Infrastructure Environmental Compliance Approval
ECA	Environmental Compliance Approval
MECP	Ministry of the Environment, Conservation and Parks
O&M	Operations and Maintenance
SCADA	Supervisory Control and Data Acquisition
SOPs	Standard Operating Procedures

# 1 Purpose

As per the Township of Wilmot's Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA), the owner of the Sanitary Collection System is required to complete an annual performance report. The purpose of this report is to provide the Ministry of the Environment, Conservation and Parks (MECP), system owners, council members and users a summary of the performance of the sanitary collection system in the Township of Wilmot. This report will create a formal record of the performance of the sanitary collection system with respect to the system operation and any alterations. This report satisfies the reporting requirements required by Schedule E of the Township's CLI-ECA (#078-W601).

The information in this report will be essential in the planning of infrastructure maintenance and repairs with respect to the sanitary collection system.

This report will be submitted to the Director of the MECP by March 31st annually. It will also be made available to the public by June 1st annually by publishing the report on the Township of Wilmot website. Additionally, the report shall be made available by request and without charge to members of the public.

# 2 Scope

This annual report for the sanitary collection system includes information for the period of January 1, 2024, to December 31, 2024, for all sanitary collection infrastructure owned and operated by the Township of Wilmot. This report does not include any infrastructure currently located within unassumed development sites as these remain the responsibility of the developer to own and operate.

The following areas of the Township have sanitary collection systems in place:

- Baden
- New Hamburg
- Mannheim

# 3 System Overview

The Township owns, maintains, and operates the sanitary collection system which consists of sewers and pumping stations. The Township sanitary sewage collection system consists of 56,580m of gravity sewers and the following pumping stations:

- Forest Glen Sewage Pumping Station - SANP008 (Lift Station 1)
- Milton Byron Sewage Pumping Station - SANP001 (Lift Station 2)
- Marvin Street Sewage Pumping Station - SANPS004 (Lift Station 3)
- Baden West Pumping Station - SANPS007 (Lift Station 4)
- Milne Drive Sewage Pumping Station - SANP006 (Lift Station 5)

Treatment of the sewage from the Township's sanitary collection system is the responsibility of the Region of Waterloo. This is managed through two additional pumping stations and the New Hamburg Wastewater Treatment Facility, all owned and operated by the Region of Waterloo.

## 4 Inspections, Maintenance, Repairs and Improvements

The Township has created a Sanitary Operations and Maintenance (O&M) Manual which was finalized in January 2025. The Township of Wilmot's O&M manual was not completed or implemented during the 2024 calendar year. The O&M manual outlines procedures and schedules for inspections, maintenance and repairs. In 2024, inspections were completed as per the usual schedule, however, during the 2025 calendar year and each year going forward they will be executed in accordance with the O&M manual and associated Standard Operating Procedures (SOPs).

The Township maintains a structured collection of SOPs that explain many of the common inspection, maintenance and repair activities and how to complete them safely and effectively. These SOPs have been approved and utilized for many years and formed the basis for many of the activities performed on the wastewater distribution system in 2024 and previous years.

To remain effective, sanitary collections systems require regular inspection, maintenance and monitoring to ensure they continue to meet design objectives. This process is also crucial for maintaining acceptable public safety standards.

### 4.1 Inspection

During the 2024 calendar year, lift stations were checked every Monday and Friday according to the SOP – 1.1 Lift Station Maintenance. Pumps are pulled and inspected for problems when checks indicate there may be an issue. All pump inspections and maintenance at the lift stations were completed as per SOP – 1.16 Sanitary Lift Station Pump Inspection and Maintenance. Where potential issues are identified, work orders are generated for remedial action.

### 4.2 Maintenance

The following maintenance activities were performed in the 2024 calendar year:

- Each of the wet wells at the lift stations were cleaned and inspected in the fall of 2024.
- Flushing of 13,583m of sewer mains in New Hamburg and 805.4m of sewer mains in Baden were completed in 2024.
- Standby lift station pump generator units were automatically tested for 1 hour every Sunday and serviced once in 2024.

### 4.3 Repairs

The following repairs were performed in the 2024 calendar year:

- One pump from the Milne Drive lift station was sent out for repair at the end of 2024 and will be reinstalled in 2025 when repairs are complete.

#### 4.4 Improvements

Improvements were made to the wastewater collection system through several Township projects. Capital projects are completed to improve the function and efficiency of the sanitary system including the reduction in spills/overflows for the system.

An annual closed-circuit television (CCTV) program is completed by the Township to identify problem areas due to inflow and infiltration, blockages and infrastructure deficiencies. The CCTV program in 2024 completed surveillance on 805.4m of sanitary sewer in Baden and 6,794m of sanitary sewer in New Hamburg. The information from the CCTV program is used to identify and prioritize areas that will need improvements.

A Wastewater Servicing Report for Baden and New Hamburg was completed in 2024. This report was completed to assist Township staff in decision making for wastewater capacity within the existing networks and provide guidance for capital projects that are necessary to accommodate growth. Recommendations from this report will be utilized to determine appropriate improvements and prioritize construction projects.

## 5 Monitoring

### 5.1 Monitoring System

During the 2024 calendar year, no updates were made to the Township's monitoring system. The Township is awaiting the release of the MECP's monitoring guidance document to fully implement a monitoring plan. Updates to the monitoring system and procedures will be made accordingly as per the MECP guidance document when it is available.

Three of the pumping stations are monitored continuously using Supervisory Control and Data Acquisition (SCADA). This information can be viewed remotely, and station alarms are programmed to alert the operations staff 24 hours a day of potential issues. Operators respond to station alarms as required to ensure proper station operation. The current SCADA system does not have the capability to record and analyze data. Table 1 illustrates the instrumentation controls at the pumping stations.

**Table 1: Summary of Pumping Station Instrumentation Controls**

Component	Description
<b>Process Equipment/System Elements</b>	Pump control, on/off at Forrest Glen (lift 1), Milton Byron (lift 2), and Baden West (lift 4). These are hooked up to SCADA.
<b>Flow Measurement Locations</b>	Flow measurements at Milne (lift 5), Milton Byron (lift 2), and Baden West (lift 4).
<b>Level Measurement Locations</b>	Wet well ultrasonic level measurement at Forrest Glen (lift 1), Milton Byron (lift 2), and Baden West (lift 4).

### 5.2 Monitoring Data

No monitoring data is available for the 2024 calendar year, however, data will be available and analyzed once a formal monitoring plan has been created and implemented under the CLI-ECA system.

### 5.3 Calibration and Maintenance of Monitoring Equipment

Current equipment is calibrated and maintained as per the manufacturer's recommendations. No new monitoring equipment was installed in the 2024 calendar year.

## 6 Operating Problems and Corrective Actions

All operating problems that required corrective action are listed in the Table 2 – Operating Problems and Corrective Actions.

**Table 2: Operating Problems and Corrective Actions**

Operating Problem	Date	Location	Corrective Action
<b>Blocked sanitary lateral</b>	Jan 19, 2024	25 Boullee St, New Hamburg	Blockage removed

Complaints are received on an ongoing basis and can be made through email, phone calls or in person. Two additional complaints of blockages were received by the Township; however, it was determined that these complaints were related to private property or upon inspection, there was no blockage found.

## 7 Alterations

There were no Notice of Modifications submitted to the MECP during the reporting period. Alterations made to the sanitary system during the 2024 calendar year are recorded in Table 3.

**Table 3: Sanitary System Projects in 2024**

Project	Project Stage	Sewage Works	Significant Drinking Water Threat?
<b>Brubacher Street</b>	Commenced in 2024	Linear Sanitary Sewer Infrastructure	No
<b>Wilmot Employment Lands</b>	Commenced in 2024	Linear Sanitary Sewer Infrastructure	No

## 8 Collection System Overflows and Spills of Sewage

There were no overflow or spills of sewage in the 2024 calendar year.

In the event of a spill, the information will be reported to the MECP Spills Action Centre upon discovery.

## 9 Status of Actions from Previous Years

This is the first annual report for the Township of Wilmot's sanitary collection system. There were no actions present from any previous years that would require recording and tracking at this time.