



Town of Pelham Sanitary Sewage Collection System

Corporation of the Town of Pelham

2024 Annual Performance Report

January 1 to December 31, 2024

Ministry of the Environment, Conservation and Parks

CLI ECA No. 072-W601

Table of Contents

1.0 Introduction & Purpose	Pg. 2
2.0 Description of Sanitary Collection System	Pg. 2
3.0 Operations & Monitoring	Pg. 4
4.0 Sanitary Collection System Performance	Pg. 10
5.0 Report Distribution	Pg. 11

Appendix

Appendix 1 – PW-SAN-VIS-001-001-Pelham Sanitary System	Pg. 14
Appendix 2 – PW-SAN-VIS-001-002-Sanitary Sewer Bypass (Stonegate Place)	Pg. 15

Tables

Table 1 – Summary of Monitoring Programs	Pg. 4
Table 2 – Summary of Operational Issues and Corrective Actions	Pg. 5
Table 3 – Summary of Main Sewer Emergency Response	Pg. 6
Table 4 – Summary of Sanitary Lateral Complaints	Pg. 7
Table 5 – Summary of Major Structure, Equipment Calibration, Maintenance and Repairs	Pg. 8
Table 6 – Summary of Alterations to the Authorized System	Pg. 9
Table 7 – Summary of Overflows and Spills	Pg. 9
Table 8 – Summary of Performance Improvements	Pg. 10

1.0 Introduction & Purpose

The Town of Pelham (Town) owns and operates the Town of Pelham Wastewater Collection System, which is operated under the Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA), ECA Number 072-W601, issued by the Ministry of Environment, Conservation and Parks (MECP). The Town received its first CLI ECA on December 19, 2023.

This approval is similar to the Town's Drinking Water License. It allows the Town to alter, extend or modify the sanitary collection system without requiring individual approval from the MECP or through the previous transfer review program administered by the Region for each project. The Town's approval is subject to various restrictions and requirements in the license. An annual report for the previous calendar year must be submitted to the MECP by March 31st, including the activities undertaken to improve the system, repairs and emergency response, system performance and future activities. This report will be made available to the public on the town's website by June 1st for members of the public who wish to be informed of the Town's sanitary collection system performance from the previous year.

The annual report is required to address specific criteria related to operational performance, operating concerns, maintenance activities, customer complaints, and identified alterations to the system, which are listed in Schedule E, Section 4.6 of the Town's approval.

2.0 Description of Sanitary Collection System

The Town of Pelham Sanitary Collection System is a stand-alone municipal sewage system that conveys one hundred percent (100%) of its wastewater to the Region of Niagara's (Region) Welland Wastewater Treatment Plant (WWTP). The Pelham Sanitary Collection System and the Welland Wastewater Treatment Plant are components of the larger Welland Wastewater Treatment Plant System, which includes the City of Welland and the City of Thorold.

The MECP classifies the Town of Pelham's wastewater collection system as a Class 1 System (Wastewater System Number: 120003584), which services approximately 15,900 residents.

The Town of Pelham's Wastewater Collection System consists of approximately sixty-seven (67) kilometres of nominally separated gravity sewers (including trunk sewers) and 500m of force mains.

Wastewater in Pelham is collected from residential, commercial, and industrial properties within the Town's two (2) urban areas, Fontheil and Fenwick. Depending on the location, wastewater may flow to one of five (5) pumping stations or, by gravity, to a trunk sewer main. Both urban areas within the Town's sanitary collection system flow directly to the Welland Wastewater Treatment Plant (WWTP) at 4 Cross Street North, Welland. All trunk sewer mains, pumping stations, and treatment facilities are owned and operated by the Regional Municipality of Niagara and are beyond the scope of this report. See Appendix 1 for details on the gravity-fed sanitary sewers that flow to the WWTP.

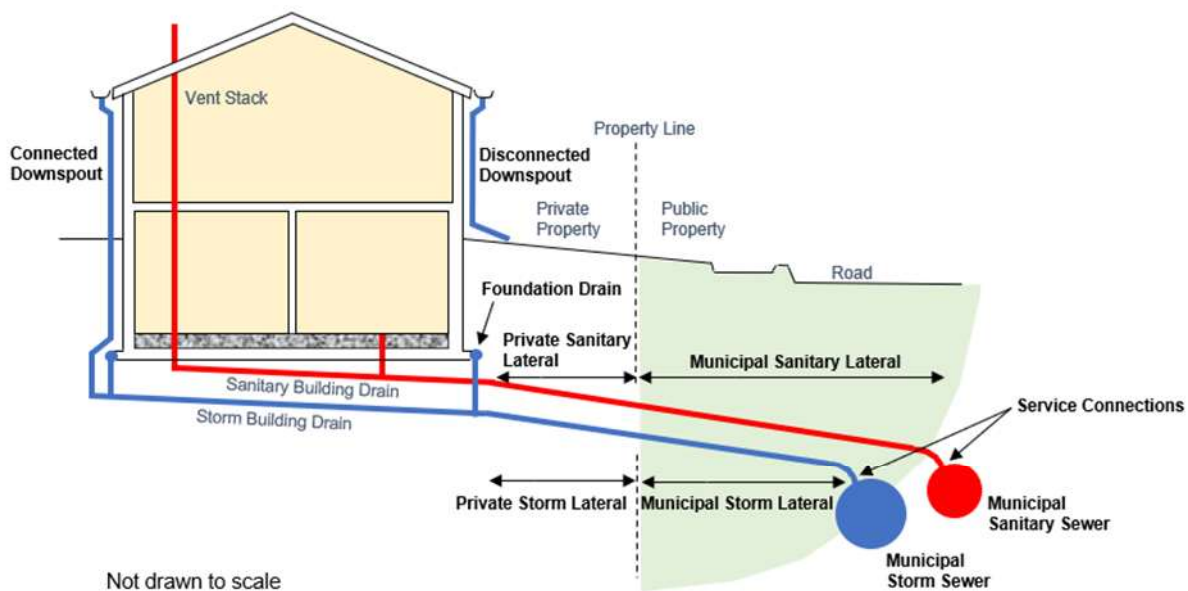


Figure 1 - Typical Separated Sewer System

3.0 Operations and Monitoring

The information reported below summarizes the current conditions of the sanitary collection system based on the Town's computerized maintenance management system (CMMS), internal records, and field notes taken by operators, supervisors, and management. The data required to be reported on the CLI ECA are listed in Schedule E, Section 4.6.

3.1 Monitoring Programs

Table 1 details the monitoring activities performed by Town staff or contractors during the reporting period. The system performs effectively and as designed based on collected and reviewed data. Currently, no major modifications are required for the collection system.

Table 1 – Summary of Monitoring Programs

Program Title	Program Description	Program Data from the Reporting Period
Maintenance Hole Inspections (MH)	MH inspections are completed throughout the year.	Staff inspected 28 MHs monthly during the reporting period.
Sanitary Sewer Flushing	Annual flushing on main sanitary sewers.	The town's contractor flushed approximately 12,000 meters of the sanitary sewer system, and reports were provided to Engineering Services.
CCTV Inspections	An annual CCTV inspection program is completed so that main sewers are inspected once every three (3) years.	The town's contractor inspected approximately 7,000 meters of sanitary sewer in 2024 and provided reports to Engineering Services.
Dry & Wet Weather Flow Assessment	Contracted GEI Consultants Inc. to conduct an updated assessment in 2023.	The final report was provided to Engineering Services.

The Sanitary Collection System CLI ECA Schedule E, Section 3.4 requires the Town to implement monitoring guidelines per the MECP guidance document within 24 months of its release. As of January 2025, the MECP has not published the guidance document.

3.2 Operational Challenges

All maintenance was performed on behalf of the Owner by a licensed Operator or qualified contracted service provider who exercised due diligence in ensuring the works and the related equipment were properly operated and maintained to achieve compliance with the Town’s license. The Town of Pelham had no operational challenges within the Sanitary Collection System.

Table 2 – Summary of Operational Issues and Corrective Actions

Date	Description	Corrective Actions
N/A	N/A	N/A

3.3 Inspections, Maintenance & Repairs to the Authorized System

In 2024, the Town of Pelham was developing an operations and maintenance manual for the sanitary collection system, as required in the CLI ECA. The manual will identify the current and proposed future inspection, maintenance, and repair activities. Its details ensure the efficient operational performance of the sanitary collection system.

Monthly Maintenance Hole Inspections

Monthly, Water/Wastewater Operators inspect twenty-eight (28) maintenance holes for evidence of backup or concerns. These maintenance holes are selected for regular maintenance due to their history of blockages or reoccurring issues. These monthly checks are tracked using an inspection form, which is then stored digitally for future records.

Flushing & Closed-Circuit Television (CCTV) Inspections

In 2024, the Town of Pelham awarded Dambro Environmental Inc. a three-year contract to perform annual closed-circuit television (CCTV) and flushing on the Town’s sanitary collection system. One-third of the Town’s sanitary collections system is inspected annually. Inspections for emergency repairs or customer concerns may also occur outside of this scheduled maintenance. During the 2024 annual inspections and maintenance, Dambro Environmental Inc. discovered on Bacon Lane that waste oils/sludges (251 L) were coming from a sanitary lateral, creating a build-up in the sewer main. This occurred twice along the same stretch of homes; residents of this area were notified by letter of the CCTV findings and advised to avoid using the

sanitary system for disposal. Dambro Environmental Inc. removed the build-up and flushed the area in both occurrences. The first contamination was identified on August 23, 2024 (MN-000525238), with the second on September 24, 2024; a manifest was not required due to the small amount found. Due to the two occurrences in 2024 and one in 2023, Bacon Lane will continue to be inspected through CCTV annually by the Town's contractor until the section is rehabbed or replaced.

Main Sewers

In 2024, the Town of Pelham had four (4) main sewer emergency responses. Two repairs were due to blockages within the main sewer pipe, and two were breaks found through the CCTV/Flushing Inspections.

Table 3 – Summary of Main Sewer Emergency Response

Date	Address	Concern	Resolution
February 5, 2024	49 Park Lane, Fonthill (Marlene Steward Streit Park)	Suspected blockage within the sanitary line from Spencer Lane to the Niagara Region Pumping Station.	The town contractor inspected the location with a camera and located a blockage. The blockage was cleared on February 6, 2024. Town staff were unable to determine what caused the blockage.
March 30, 2024	1600 Pelham St., Fonthill	Sewers surcharging at the corner of Pelham St. & Hurricane Rd.	The town contractor called for an emergency flush and clear. Wipes, diapers and gloves were the cause of blockage and surcharging. The issue was resolved on March 30, 2024.
July 12, 2024	Pancake Lane (West of Haist Street)	Broken Pipe at 32.40 meters	The CCTV contractor found a break at the high point of the segment, the last run towards the manhole. This location will need repair in future.
October 9, 2024	Pelham St. (Between Churchill & Highway 20)	Two sanitary main breaks.	The town contractor performed two spot repairs at the locations indicated by CCTV footage. While CCTV the locations, a third break was found, requiring future maintenance.

3.4 Consumer Complaints

In 2024, the Town of Pelham had seven (7) sewer-related concerns regarding sewer lateral blockages and basement flooding, and these locations and concerns are indicated in the table below.

Table 4 – Summary of Sanitary Sewer Lateral Complaints

Date	Address	Concern	Resolution
January 15, 2024	26 Hurricane Road, Fonthill	Sanitary Sewer Backup	A town contractor inspected the location with a camera, discovering tree roots and wipes within the lateral. The contractor cleared the lateral of all obstructions. It was advised that the area be inspected within a few years.
January 27, 2024	756 Quaker Road, Fonthill	Water in basement	A town contractor discovered a fully collapsed lateral requiring emergency repairs. A contractor working within the Town's ROW accidentally bored through the lateral, causing the damages. The repair was completed on February 4, 2024.
March 2, 2024	3 Willowdale Crt., Fonthill	Sewer backup	Tree roots obstruct the lateral. The town contractor flushed the location, and the lateral was cleared following the flush.
April 30, 2024	52 Highway 20, Fonthill	Sewer backup	The cleanout location in the residents' front lawn was found to have a low spot, causing repeated blockage. The town contractor excavated and repaired the lateral. Future monitoring of this location is required.
May 2, 2024	1427 Station St., Fonthill	Sewer backup	The town contractor inspected the locations with a camera and found a stick through the lateral on the Town's property. Town staff and the contractor performed a spot repair on the lateral. The camera was sent back to ensure the repair was good. The issue was resolved on May 13, 2024.

August 24, 2024	178 Beckett Cres., Fonthill	Sewer backup	A blockage was found in the roadway. The town contractor flushed the location until it cleared. On August 25, 2024, the blockage was present again. It was determined that the initial blockage was pushed to another location hung on a riser. Town staff sent a camera to the location on August 26, 2024, and found the area clean.
-----------------	-----------------------------	--------------	--

September 17, 2024	8 Highland Ave, Fonthill	Roots in sanitary lateral	A private contractor cleared the lateral of all roots. A spot repair at this address was suggested.
--------------------	--------------------------	---------------------------	---

3.5 Major Structure & Equipment Calibration, Maintenance and Repairs

Table 5 summarizes activities carried out on major structure and collection system works that were not covered under the operational challenges section of this report.

Table 5 – Summary of Major Structure & Equipment Calibration, Maintenance and Repairs

Major Structure or Equipment	Summary of Work performed in 2024
Fall Arrest Equipment	All fall arrest and lifting devices were inspected during the reporting period.
Air Quality Monitoring Devices	Portable air quality monitoring devices were inspected and calibrated during the reporting period. Monthly testing and an annual calibration were performed.
Property Laterals	Two (2) properties in the Town had a sewer lateral repair during the reporting period.

3.6 Summary of Alterations to the Authorized System

The Town had four (4) applications for Alterations within 2024. These alterations were not completed within 2024 and will be included in future Annual Performance Reports as finished alterations.

Table 6 – Summary of Alterations to the Authorized System

Alterations to the Authorized System (Project Name)	Project Details	Does this Project Pose a Significant Drinking Water Threat (SDWT)?
N/A	N/A	N/A

3.7 Summary of Overflows and Spills

In 2024, one (1) environmental incident, such as overflows, bypasses, or abnormal discharge from the collection system, was reported. There were zero (0) spills related to the collection system.

Table 7 – Summary of Overflows and Spills

Overflow or Spill Location	SAC/ MOECC Incident Number	Date: (mm-dd-yyyy)	Volume (m ³) and Duration (estimate)	Loading (TSS, BOD, TP, KJN, E.Coli)	Disinfection (if applicable)	Adverse Impacts/ Corrective Actions
Hurricane Rd (RMon Sanitary Pumping Station)	1-4M8CS7	01-24-2024	72m ³ Few Hours	N/A	Chlorine pucks placed at both the receiving storm sewer and the inlet of SWMP	Surcharging at the pumping station is due to the high volume of water due to wet weather conditions. Staff attended the locations and performed the Town's bypass procedure.

See Appendix 2 for details on the Town's Stonegate Place Bypass Procedure.

3.8 Actions Taken to Improve or Correct Performance of System

Table 8 summarizes the capital and operating projects undertaken during the reporting period.

Table 8 – Summary of Performance Improvements

System Performance Improvement	Project Description
Development of Operations & Maintenance Manuals	A consultant was retrained to develop the Sanitary Operations & Maintenance Manual, a requirement under the Town's CLI ECA. The project began in April 2024, with an estimated completion date of January 2025.

3.9 Status of Actions from Previous Years

This section includes a summary of the status of actions for the previous reporting year. Since this is the inaugural year for the new CLI ECA and the required Annual Performance Report, there are no preexisting actions to address. New goals and objectives are being developed internally, and quantifiable and tangible action items and performance improvements will be reviewed in the 2025 Annual Performance Report.

4.0 Wastewater Collection System Performance

In 2024, the Town of Pelham's contribution to the annual flow to the Welland Wastewater Treatment Plant was 1,537,348 m³. The yearly wastewater flow in Pelham has slightly increased over the last decade. These flows vary significantly over time due to several factors, including annual precipitation. Figure 2 illustrates the yearly flows to the Welland Wastewater Treatment Plant from 2014-2024.

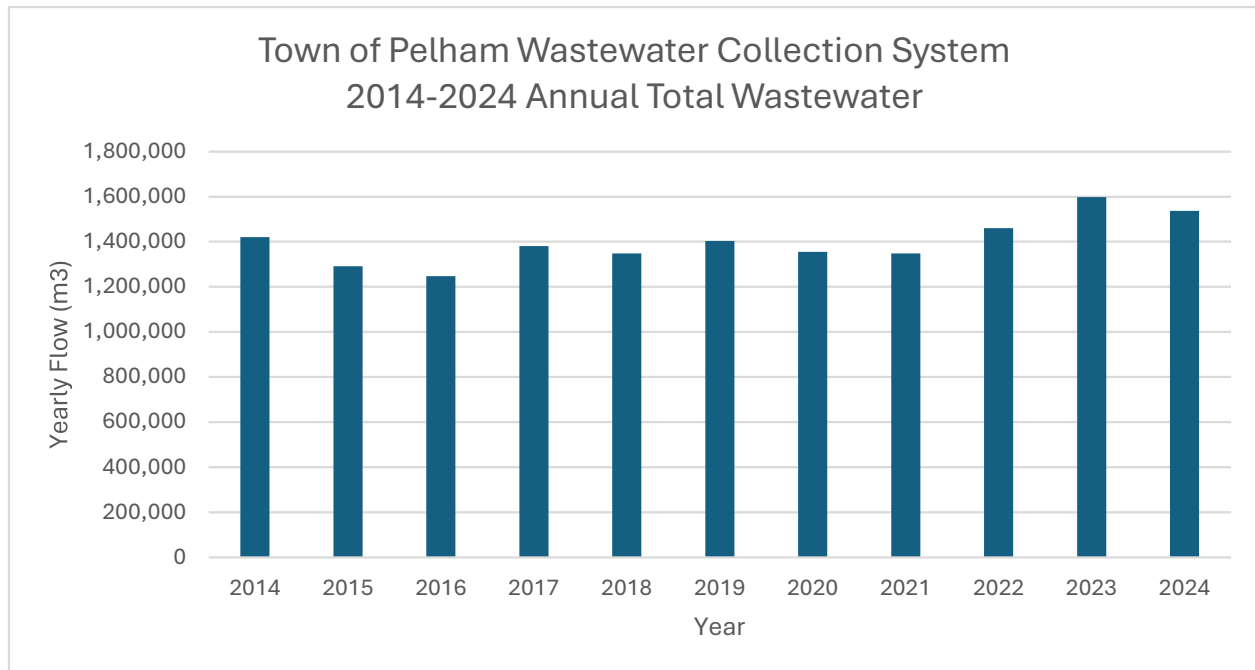


Figure 2 - Pelham Annual Wastewater Flows to Welland Wastewater Treatment Plant 2014-2024

Combined Sewers

The Town of Pelham does not own or operate any combined sewers. Therefore, per the MECP, the Town is currently not required to provide any assessments pertaining to F-5-5 or F-5-1, Wet Weather Flows Compared to Dry Weather Flows, or the Pollution Prevention Control Plan (PPCP).

5.0 Report Distribution

As required under Schedule E – Condition 4.7 of ECA 072-W601, the annual sanitary collection system performance report will be available to the public at no charge on the Town’s website or through Public Request by June 1st of the reporting year.

Report Date: March 24, 2025


Jason Marr (Mar 24, 2025 10:46 EDT)

Jason Marr, P.Eng
Director of Public Works

APPENDIX

Town of Pelham - Sanitary Collection System

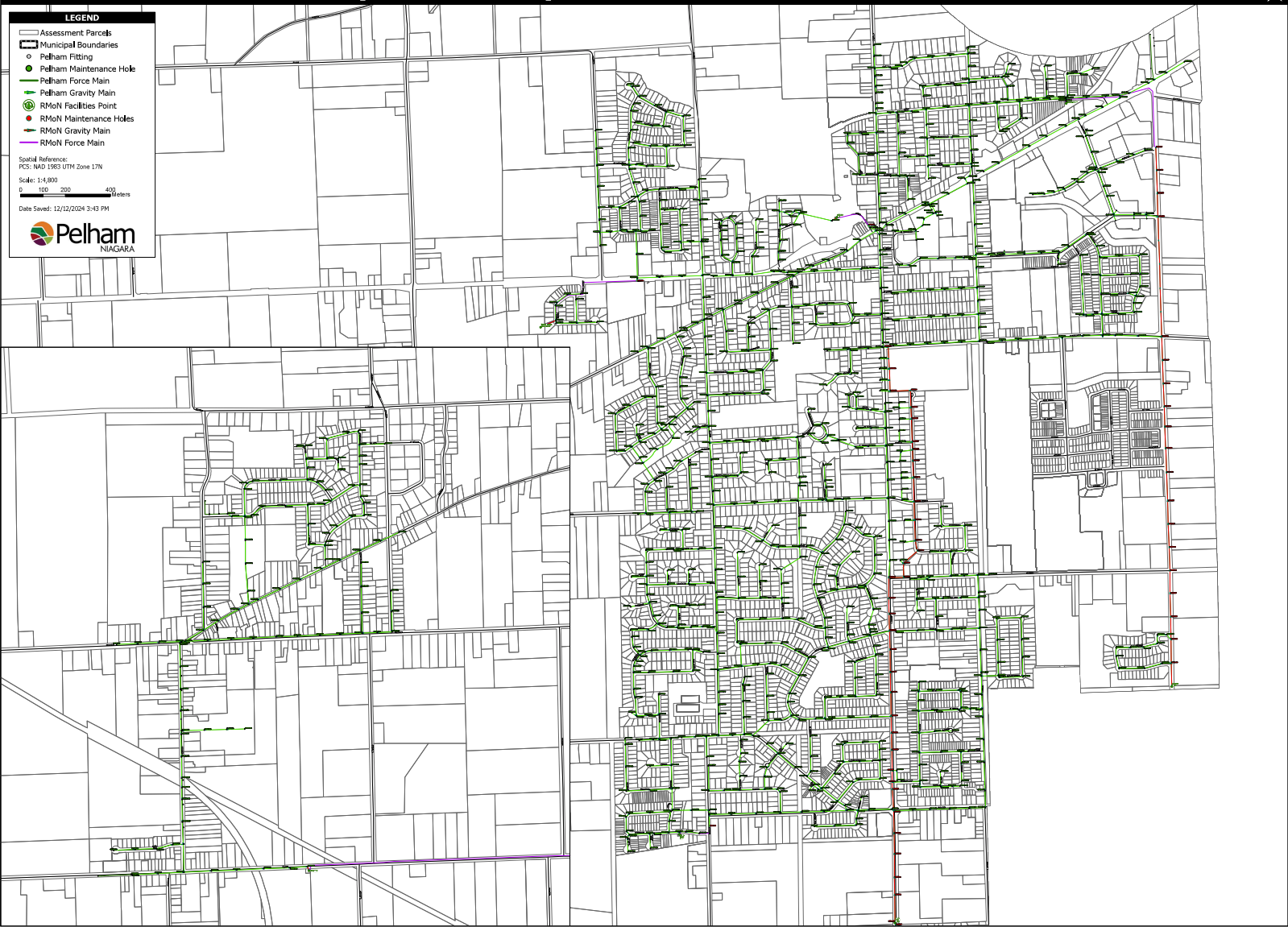


LEGEND

- Assessment Parcels
- Municipal Boundaries
- Pelham Fitting
- Pelham Maintenance Hole
- Pelham Force Main
- Pelham Gravity Main
- RMoN Facilities Point
- RMoN Maintenance Holes
- RMoN Gravity Main
- RMoN Force Main

Spatial Reference:
PCS: NAD 1983 UTM Zone 17N
Scale: 1:4,800
0 100 200 400 Meters
Date Saved: 12/12/2024 3:43 PM

 Pelham
NIAGARA



Sanitary Sewer Bypass – Stonegate Place

PW-SAN-VIS-002

Last Update: December 2024

Revision#: 0



- ▲ Niagara Region PS
- Storm Outlet
- Storm Catch Basin
- Sanitary MH
- Storm MH
- Sanitary Sewer
- Storm Sewer
- Region Sanitary Sewer
- Region Sanitary Forcemain
- Stormwater Management Facility
- Storm Water Pond
- Assessment Parcel

Streetview at Stonegate Place

