

**TOWNSHIP OF WEST LINCOLN
OPERATIONS COMMITTEE
AGENDA**

MEETING NO. THREE

Monday, May 12, 2025, 7:30 p.m.

Township Administration Building

318 Canborough Street, Smithville, Ontario

NOTE TO MEMBERS OF THE PUBLIC: All Cell Phones, Pagers and/or PDAs to be turned off. Members of the public who are attending and participating virtually are reminded to keep their microphones muted until they are acknowledged to speak. Additionally, for your information, please be advised that this meeting will be livestreamed as well as recorded and will be available on the Township's website.

Pages

1. CHAIR - Councillor William Reilly

Prior to commencing with the Operations Committee meeting agenda, Chair Reilly noted the following:

1. Comments can be made from members of the public for a matter that is on the agenda by advising the Chair during the "Request to Address an Item on the Agenda" Section of the agenda.
2. The public may submit written comments for matters that are on the agenda to jpaylove@westlincoln.ca before 4:30 p.m. on the day of the meeting for consideration by the Committee. Comments received after 4:30 p.m. on the day of the Committee meeting will be considered at the following Council meeting. Comments submitted are included in the record.
3. This meeting will be livestreamed as well as recorded and available on the Township's website.

2. LAND ACKNOWLEDGEMENT STATEMENT

The Township of West Lincoln, being part of Niagara Region is situated on treaty land. This land is steeped in the rich history of the First Nations such as the Hatiwendaronk, the Haudenosaunee, and the Anishinaabe, including the Mississaugas of the Credit First Nation. There are many First Nations, Métis, and Inuit from across Turtle Island that live and work in Niagara today. The Township of West Lincoln, as part of the Regional Municipality of Niagara,

stands with all Indigenous people, past and present, in promoting the wise stewardship of the lands on which we live.

3. CHANGE IN ORDER OF ITEMS ON AGENDA

4. DISCLOSURE OF PECUNIARY INTEREST AND/OR CONFLICT OF INTEREST

5. APPOINTMENTS

There are no appointments/presentations.

6. REQUEST TO ADDRESS ITEMS ON THE AGENDA

NOTE: Procedural By-law Section 10.13(5) – General Rules

One (1) hour in total shall be allocated for this section of the agenda and each individual person shall only be provided with **five (5) minutes** to address their issue (some exceptions apply). A response may not be provided and the matter may be referred to staff.

Chair to inquire if there are any members of the public present who wish to address any items on the Operations Committee agenda.

7. CONSENT AGENDA ITEMS

7.1 ITEM OC13-25

There are no consent agenda items.

8. COMMUNICATIONS

There are no communications.

9. STAFF REPORTS

9.1 ITEM OC14-25

5

Manager, Operations, (Tray Benish) and Director, Infrastructure, (Mike DiPaola)

Re: Information Report O-15-2025 - 2024 CLI-ECA Annual Performance Reports

RECOMMENDATION:

1. That, Information Report O-15-2025 titled, "2024 CLI-ECA Annual Performance Reports", dated May 12, 2025, be received.

9.2 ITEM OC15-25

22

Director, Infrastructure, (Mike DiPaola)

Re: Recommendation Report O-13-2025 - Vision Zero Automated Enforcement Program Revenue – Road Safety Action Plan

RECOMMENDATION:

1. That, Recommendation Report O-13-2025, titled "Vision Zero Automated Enforcement Program Revenue – Road Safety Action Plan", dated May 12, 2025 be received; and,
2. That, Council approve the proposal to utilize the Township's share, totalling \$56,954, of the Automated Enforcement Program

revenue to develop and issue a Request for Proposal to retain a qualified consultant to create a comprehensive Road Safety Action Plan; and,

3. That, Budget Amendment BA2025-05 reflecting a project budget of \$56,954, with funding from the Vision Zero Program revenues, be approved.

9.3 ITEM OC16-25

27

Manager, Civil Land Development, (Jennifer Bernard) and Director, Infrastructure, (Mike DiPaola)

Re: Information Report O-14-2025 - Ownership Change of Kimbo Road

RECOMMENDATION:

1. That, Information Report O-14-2025 titled, "Ownership Change of Kimbo Road", dated May 12, 2025, be received.

9.4 ITEM OC17-25

31

Manager, Operations, (Tray Benish), and Director, Infrastructure, (Mike DiPaola)

Re.: Recommendation Report O-09-2025 - Small Container Water Fill Station

RECOMMENDATION:

1. That, Recommendation Report O-09-2025 titled, "Small Container Water Fill Station", dated May 12, 2025, be received; and
2. That, Administration proceed with Option _____.

9.5 ITEM OC18-25

35

Director, Infrastructure, (Mike DiPaola)

Re: Information Report O-07-2025 - Pavement and Bridge Management Systems - Status Report

POWERPOINT PRESENTATION

RECOMMENDATION:

1. That, Information Report O-07-2025 titled, "Pavement and Bridge Management Systems – Status Report" dated May 12, 2025, be received for information.

10. OTHER BUSINESS

10.1 ITEM OC19-25

Members of Council

Re: Other Business Items of an Informative Nature

11. NEW BUSINESS

NOTE: Only for items that require immediate attention/direction and must first approve a motion to introduce a new item of business. (Motion Required)

12. CONFIDENTIAL MATTERS

There are no confidential matters.

13. DISCLOSURE OF CONFIDENTIAL MATTERS

14. ADJOURNMENT

The Chair to declare the meeting adjourned at the hour of [time]

DATE: May 12, 2025
REPORT NO: O-15-2025
SUBJECT: **2024 CLI-ECA Annual Performance Reports**
CONTACT: Tray Benish, ORO, Manager, Operations
Mike DiPaola, P.Eng, Director, Infrastructure

OVERVIEW:

- The 2024 Annual Performance Reports for both the sanitary sewer and stormwater management systems have been prepared in compliance with the Ministry of Environment, Conservation and Parks' Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA) program requirements.
- These reports summarize system monitoring, environmental performance, operational issues, inspections, equipment calibration, complaints, system alterations, and any corrective actions taken.
- Report must be publicly accessible at no cost and published on the Township's website by June 1, 2025.
- Administration continue to uphold system performance through regular monitoring and maintenance, with no major system modifications required at this time.

RECOMMENDATION:

1. That, Information Report O-15-2025 titled, "2024 CLI-ECA Annual Performance Reports", dated May 12, 2025, be received.

ALIGNMENT TO STRATEGIC PLAN:

Theme #1

- **Build** – a safe and connected, caring, and active community

BACKGROUND:

In July 2023, Council received report PW-22-2023 which provided a detailed overview of the recent regulatory changes to the environmental permissions framework that govern the approval process for sewage works, now known as Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA).

The primary impact of the CLI-ECA program was the changes to the scope of requirements and municipal responsibility that the ECA covers, including the introduction of updated system-wide operating conditions that each municipality must fulfil.

As part of the new CLI-ECA program administered by the Ministry of Environment, Conservation and Parks (MECP) in 2022, municipalities are required to prepare Annual Performance Reports (APRs) pertaining to annual activity, performance, and alterations to public sanitary sewer and stormwater management systems.

The APRs must be made available to members of the public who are serviced by the systems upon request and without charge, and also made available to members of the general public without charge by publishing the report on the Town's website by June 1st of the same year.

CURRENT SITUATION:

The 2024 Annual Performance Reports for sanitary sewer and stormwater management systems (Schedules A&B) were prepared in support of the Ministry's compliance requirements, and contain the following information:

- Summary of all monitoring data and an overview of the condition and operational performance of the system.
- Summary and interpretation of the environmental trends.
- Summary of operating problems encountered, and corrective actions taken.
- Summary of all inspections, maintenance, and repairs.
- Summary of the calibration and maintenance on all monitoring equipment.
- Summary of any complaints and any steps taken to address the complaints.
- Summary of all Alterations to the Authorized Systems.
- Summary of all spills or abnormal discharge events.
- Summary of actions taken, including timelines, to improve or correct performance of any aspect of the Authorized Systems.
- Summary of the status of actions for the previous reporting year.

Township staff observe and monitor the sanitary sewer and stormwater infrastructure regularly during routine checks and while performing scheduled inspections and preventative maintenance activities. Staff continuously exercise due diligence in ensuring the facilities are properly operated and maintained, ensuring that observations are recorded, and appropriate actions are taken to maintain the infrastructure. At this time, there are no major modifications required to the systems. Continuous improvement, optimization, and efficiency remain the priority for the Town and its staff.

Both reports have been posted on the Township's website for public viewing.

FINANCIAL IMPLICATIONS:

There are no financial implications as a result of this report.

INTER-DEPARTMENTAL COMMENTS:

This report has been reviewed by the CAO, the Director of Corporate Services/CFO, and the Legislative Division.

CONCLUSION:

The preparation and submission of the 2024 Annual Performance Reports for the Township’s sanitary sewer and stormwater management systems demonstrates West Lincoln’s ongoing commitment to regulatory compliance, environmental stewardship, and infrastructure accountability under the CLI-ECA framework. These reports reflect the proactive work of staff in monitoring, maintaining, and optimizing system performance, and confirm that no significant deficiencies or modifications are currently required. The Township remains dedicated to continuous improvement, transparency, and the responsible operation of its linear infrastructure.

SCHEDULE(S)

Schedule A – 2024 Sanitary Sewage System Performance Report

Schedule B – 2024 Stormwater Management System Performance Report

Prepared & Submitted by:

Approved by:

Tray Benish, ORO
Manager, Operations

Truper McBride
Chief Administrative Officer

Mike DiPaola, P.Eng.
Director, Infrastructure

West Lincoln

Your Future Naturally

West Lincoln Township Sanitary Collection System

The Corporation of the Township of West Lincoln

2024 Annual Performance Report

January 1 to December 31, 2024

Ministry of the Environment, Conservation and Parks

ECA # 077-W601

West Lincoln Township Sanitary Collection System – 2024 Performance Report

This report summarizes the annual performance of the West Lincoln Township Sanitary Collection System (West Lincoln Sanitary System) in accordance with Environmental Compliance Approval #077-W601, Schedule E Condition 4.6 from January 1 to December 31, 2024.

Description of Sanitary Sewage System

The West Lincoln Sanitary System is a stand-alone municipal sewage collection system which conveys one hundred percent (100%) of its wastewater to the Region of Niagara's (Region) Baker Road Wastewater Treatment Plant (Baker Road WWTP). The West Lincoln Sanitary Sewage System and the Baker Road WWTP are components of the larger Baker Road Wastewater System (Baker Road System).

The Baker Road System services the community of Smithville within the Township of West Lincoln, along with the Town of Grimsby and the Town of Lincoln. The Baker Road System services a population of 55,800 people. The Baker Road System is a two-tier wastewater treatment and collection system. The Niagara Region is responsible for the treatment and trunk conveyance of flow through the Region's network of pumping stations, forcemains, and major trunk sewers. The lower tier municipalities (West Lincoln, Lincoln and Grimsby) are responsible for the collection of wastewater flows from customers through the municipally owned and operated local collection system(s), with the West Lincoln Sanitary System being one of them.

The West Lincoln Sanitary System collects wastewater from approximately 7,000 customers within the Town of Smithville and consists of approximately 32km of Town-owned mainline sewers ranging in size from 150mm to 450mm in diameter.

Report Distribution

As required under Schedule E – Condition 4.7 of ECA 077-W601, the annual 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.

Summary of Monitoring Data (if applicable)

The West Lincoln Sanitary System is overseen by the Public Works Department, and are responsible for the day-to-day operation and maintenance (i.e. sewer flushing programs, maintenance hole inspections, sewer lateral inquiries, etc.) and the Engineering Division manages long term programs (i.e. asset condition assessments, capital projects, rehabilitation programs, etc.).

Annual Sewer Inspection Program

The Town performs an annual flushing and inspection program for the West Lincoln Sanitary System, consisting of sanitary sewer mainline flushing and camera (CCTV) inspections. The purpose of these inspections is to identify infrastructure that have structural or other noted deficiencies. Information collected during the inspections is reviewed and analyzed by a CCTV contractor. An assessment condition rating report is provided to the Town to support future infrastructure repairs and replacement projects. Deficiencies found during the CCTV inspections are prioritized and addressed through the rehabilitation programs. The Town’s level of service for the inspection program is to have all mainline sewers inspected once every 5 years.

Sewer Flushing Program

Semi-annual flushing is performed in areas of the system that have been identified as “problematic” through past incidents and inspections. Flushing is conducted using a hydrovac/water flushing truck. High-pressure, high-volume water and specially designed nozzles are used to clear the system of built-up debris that has the potential to reduce system efficiency. During the flushing program, operators inspect each maintenance hole that is being accessed for flushing. Any deficiencies that are identified are prioritized for future rehabilitation programs.

Summary of Monitoring Programs

Table A details the monitoring activities performed by West Lincoln staff during the reporting period. Based on the data collected and reviewed, it has been determined that the system is performing effectively and as designed. At this time there are no major modifications required for the collection system.

Table A – Summary of Monitoring Program

Program Title	Program Description	Program Data from Reporting Period
Semi-annual Sewer Flushing	Flushing of mainline sewers in problematic areas (obstructions, sags, grease build-up, etc.).	Staff completed semi-annual flushing activities in problematic areas.
Maintenance Hole (MH) Inspections	MH inspections are completed throughout the year.	Staff inspected 78 maintenance holes during the reporting period.
CCTV Inspections	CCTV inspection program is completed so that all mainline sewers are inspected once every 5 years. Mainline sewer pipes are flushed as part of the inspection process.	Approximately 550 metres of mainline sewers were inspected in 2024 by the Town’s contractor and reports were provided to the Engineering Division.

Operational Issues and Corrective Actions

All maintenance was performed on behalf of the Owner, by licensed Operators or qualified contracted service providers who exercise due diligence in ensuring the works, and the related equipment, are properly operated and maintained to achieve compliance with the Town's license.

As noted in Table B, there were no operational issues identified during the reporting period.

Table B – Summary of Operational Issues and Corrective Actions

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

Major Structure & Equipment Calibration, Maintenance and Repairs

Table C provides a summary of activities carried out on major structures and collection system works that were not covered under the operational issues section of this report.

Table C – Major Structure & Equipment Calibration, Maintenance and Repairs

Major Structure or Equipment	Summary of Work performed in 2024
Maintenance Holes	Staff completed repairs on maintenance holes as required during the reporting period. Examples of repairs completed include lid replacement, parging repairs, and raising of manholes to grade.
Fall Arrest Equipment	All fall arrest and lifting devices were inspected during the reporting period.
Air Quality Monitoring Devices	All portable air quality monitoring devices were inspected and calibrated during the reporting period. Monthly testing along with an annual calibration were performed.
Trench Box	The trench box was inspected during the reporting period.
Property Laterals	Three (3) properties in the Town had a sewer lateral repaired/replaced during the reporting period.

Inquiries and Complaints

The Town received Fifteen (15) complaints during the reporting period, related to the West Lincoln Sanitary System. The types of complaints and corresponding steps taken to address them, are described in Table D.

Table D – Summary of Complaints

Complaint Type	Location of Issue (Owner)		Resolution
	Public	Private	
Home Sewer – Backup	6	4	<p>Operations staff investigate complaints by using several methods, including CCTV.</p> <p>Where blockages are found on public portion of the lateral, methods such as augering/snaking and flushing are used to clear blockage. Excavation and repairs are completed where necessary.</p> <p>Where blockages are found on the private portion of the lateral, property owners are advised to contact a professional service provider.</p>
Home Sewer – Odour	-	2	Operations staff investigate complaints of sewer odours using several methods, including CCTV. Property owners are advised of the findings when the cause of the odour is identified on private property.
Main Sewer - Odour	2	1	Operations staff investigate complaints of sewer odour using several methods, including area inspections.
Main Sewer - Maintenance	-	-	Operations staff investigate complaints and complete repairs as necessary.

Summary of Alterations to the Authorized System

Table E summarizes the projects that saw alterations to the collection system. There were no authorized alterations to the Sanitary System in 2024. Capital projects from the reporting period were related to water and road infrastructure.

Table E – 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

Summary of Collection System Overflows and Spills

There were five (5) environmental incidents such as overflows, by-passes, or abnormal discharges from the collection system to be reported for 2024. There were zero (0) spills related to the collection system.

Table F – Summary of Collection System Overflows or Spills of Sewage

Overflow or Spill Location	SAC Incident Number	Date mm-dd-yyyy	Volume (m3) and Duration (Estimate)	Loadings (TSS, BOD, TP, KJN, E. Coli)	Disinfection (if applicable)	Adverse impacts / Corrective Actions
214 St Catharines Street	1-4KPGP2	January 9, 2024	7005.60m3 30 hours	Ammon. 8.4 CBOD 69 Phos. 1.9 KJN 20.3 TSS 97	N/A	N/A
214 St Catharines Street	1-4M7F7F	January 26, 2024	6910.20m3 30 hours	Ammon. 3.4 CBOD 24 Phos. 1.6 KJN 7.0 TSS 69	N/A	N/A
214 St Catharines Street	1-5023EY	April 12, 2024	1751.4 m3 17 hours	Ammon. 4.5 CBOD 80 Phos. 2.4 KJN 19.0 TSS 75	N/A	N/A
214 St Catharines Street	1-90UOBA	July 17, 2024	6804 m3 16 hours	Ammon. 4.5 CBOD 66 Phos. 3.2 KJN 18.3 TSS 83	N/A	N/A
214 St Catharines Street	1-FC8CRO	December 29, 2024	680.4 m3 11 hours	Ammon. 6.1 Phos. 1.4 KJN 12.2 TSS 50		

Efforts to Reduce Overflows and Bypasses

Table G below summarizes the efforts made to reduce overflows, spills, and bypasses in 2024.

Table G – Summary of Efforts Made to Reduce Overflows, Spills and Bypasses

Overflow/Spill/Bypass Reduction Project	Project Description	Does this Project Pose a Significant Drinking Water Threat (SDWT)?

I&I Reduction Projects	Various projects to reduce I&I in the Sanitary System to reduce overflows at the CSO. Sewermain relining, grouting, spot repairs.	N/A
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Baker Road Master Servicing Plan and Pollution Prevention Control Plan

In 2021 the Region of Niagara, in cooperation with Grimsby, Lincoln and West Lincoln, completed the Baker Road PPCP. The PPCP was completed as part of the Region’s larger Master Servicing Plan (MSP) study, which was completed in 2023. The MSP is intended to support the community’s growth, while meeting the Ministry of Environment Conservation and Parks (MECP) goals of the F-5-5 Procedure, to reduce combined sewer overflow pollution to the environment. The PPCP and MSP assessed both the existing and future state system performance to determine the nature, cause, and extent of issues, reviewed alternative solutions, and recommended a capital plan for the Region and lower-tier municipalities.

Infiltration and Inflow Reduction

The PPCP and MSP included a remediation plan for Infiltration and Inflow (I&I). The remediation plan included recommendations for the lower-tier municipalities to carry out sewer flow monitoring and field investigations in an effort to identify areas of the system with high I&I, and subsequently develop a plan to help reduce I&I.

In 2022, the Township of West Lincoln began implementing an I&I program in order to move forward on the recommendations of the PPCP and MSP. The program started with the Town completing CCTV/Flushing work in 2021 followed by Fog and Dye Testing the same year. Using that data flow monitoring was completed in 2023 in the areas with high I&I. Mainline sewer relining and spot repairs were completed in 2023 as well. Table H outlines the various tasks which have been completed as part of the Town’s I&I program.

Table H – Summary of Infiltration and Inflow Reduction Program Tasks

Program Title	Program Description	Status
CCTV Inspections (2021)	Inspection of mainline sewers.	This project included the inspection of 28km of sewer mains. Completed.
Fog and Dye Testing (2021)	Fog and Dye pumped into sewer mains to check for cross connections / eaves trough connections.	This project included fog and dye testing of mainline sewers in areas with high I&I. Completed.
Flow Monitoring (2023)	Flow monitoring in areas with high I&I.	Based on the CCTV inspections, high I&I areas were identified. Ten (10)

		Flow monitors were installed in these areas for 3 months to capture data. Completed.
Sewer Main Relining and Spot Repairs (2022/2023)	Installation of full length Cured in Place Pipe (CIPP) and spot repairs in sewer mains with high I&I.	This project included the relining of mainline sanitary sewers measuring 1.15km of sewer, along with 20 spot repairs. Completed.

Public Reporting

The Sanitary System Report will be communicated to the system owner (Council) and posted on the Town’s website and made available for public review (free of charge) at Town Hall.

Report Date: March 28, 2025

Tray Benish

Manager of Operations

West Lincoln

Your Future Naturally

West Lincoln Township Stormwater Management System

The Corporation of the Township of West Lincoln

2024 Annual Performance Report

January 1 to December 31, 2024

Ministry of the Environment, Conservation and Parks

ECA # 077-S701

West Lincoln Township Stormwater Management System – 2024 Performance Report

This report summarizes the annual performance of the West Lincoln Township Stormwater Management System (West Lincoln Stormwater System) in accordance with Environmental Compliance Approval #077-S701, Schedule E Condition 5.2 from January 1 to December 31, 2024.

Description of Stormwater Management System

The West Lincoln Township Stormwater Management System is a municipal stormwater management system which conveys stormwater to the final receiver, Lake Ontario.

The Stormwater Management System serving the Township of West Lincoln is a separate system for stormwater within the Lake Ontario watershed. The system consists of storm sewers, culverts, ditches, management facilities and outlets to Lake Ontario. All privately and regionally owned connections and systems, as well as any municipal drains (constructed under the Ontario Municipal Drainage Act) are not covered under the Town's CLI-ECA and are not discussed in this report. Overall, the system consists of conveyance pipe, ditches, and various treatment types including ponds and oil and grit separators before runoff is discharged to its final receiver in Lake Ontario. Much of the existing system has predated contemporary stormwater management standards, hence the Town is continuously evaluating opportunities to improve quality and quantity control of the system to lessen the impacts during major events.

The West Lincoln Stormwater System (Town owned) consists of approximately twenty two (22) kilometres (km) of conveyance pipe, sixteen (16) kilometres of ditches/swales, four (4) Oil and Grit Separators, and nine (9) Dry/Wet Storm Ponds.

Report Distribution

As required under Schedule E – Condition 5.3 of ECA 077-S701, the annual 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.

Summary of Monitoring Data (if applicable)

The West Lincoln Stormwater System is overseen by the Public Works Department, with the Public Works Staff being responsible for the day-to-day operation and maintenance (i.e. mainline sewer flushing, ditch maintenance, small culvert installations/replacements, etc.) and the Engineering Division managing long term programs (i.e. annual facility assessments, asset condition assessments, rehabilitation programs, etc.).

Sewer Inspection Program

The Town completed a flushing and inspection program for the West Lincoln Stormwater System consisting of storm sewer mainline flushing and camera (CCTV) inspections. The purpose of these inspections is to identify infrastructure that have structural or other noted deficiencies. Information collected during the inspections is reviewed and analyzed by a CCTV contractor. An assessment condition rating report is provided to the Town to support future infrastructure repairs and replacement projects. Deficiencies found during the CCTV inspections are prioritized and addressed through rehabilitation programs.

Sewer Flushing Program

Semi-annual flushing is performed in areas of the system that have been identified as “problematic” through past incidents and inspections. Flushing is conducted using a hydrovac/water flushing truck. High-pressure, high-volume water and specially designed nozzles are used to clear the system of built-up debris that has the potential to reduce system efficiency. During the flushing program, operators inspect each maintenance hole that is being accessed for flushing. Any deficiencies that are identified are prioritized for future rehabilitation programs.

Summary of Monitoring Programs

Table A details the monitoring activities performed by West Lincoln staff during the reporting period. Based on the data collected and reviewed, it has been determined that the system is performing effectively and as designed. At this time there are no major modifications required for the collection system.

Table A – Summary of Monitoring Program

Program Title	Program Description	Program Data from Reporting Period	Adverse Effects on the Natural Environment
Storm Sewer Flushing	Reactive flushing due to obstructions or other CCTV findings.	Approximately 300 metres of mainline sewer were flushed in 2024 by the Town’s contractor.	No
Oil/Grit Separators	Annual inspection and cleaning program.	Post annual inspection, 4 OGS units were cleaned in 2024.	No
Ditches and Culverts	Routine inspections and maintenance.	Inspections performed during routine road patrols. Operational issues addressed as required.	No
Inlet and Outlet Inspections	Routine and pre/post significant weather	Staff performed inspections in response to weather report	

	event inspections and maintenance.	assessments. Post-event inspections completed after all significant weather events.	No
SWM Ponds	Routine inspections and maintenance. Additional condition assessment project.	Routine inspections were performed, and maintenance including seasonal management of vegetation.	No
Catch Basins	Annual inspection and cleaning program.	Eighty (80) Catchbasins were inspected in 2024.	No

Operational Issues and Corrective Actions

All maintenance was performed on behalf of the Owner, by qualified Operators or qualified contracted service providers who exercise due diligence in ensuring the works, and the related equipment, are properly operated and maintained to achieve compliance with the Approval.

As noted in Table B, there were no operational issues identified during the reporting period.

Table B – Summary of Operational Issues and Corrective Actions

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

Major Structure & Equipment Calibration, Maintenance and Repairs

Table C provides a summary of activities carried out on major structures and collection system works that were not covered under the operational issues section of this report.

Table C – 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.
Stormpond and OGS Inspections	All OGS, as well as Dry/Wet Stormponds were inspected by a consultant as part of a 2023 project. A condition assessment was completed for all Dry/Wet Ponds.

Inquiries and Complaints

The Town received Twenty Seven (27) complaints during the reporting period, related to the West Lincoln Stormwater System. The types of complaints and corresponding steps taken to address them, are described in Table D.

Table D – Summary of Complaints

Complaint Type	Location of Issue (Owner)		Resolution
	Public	Private	
Catch basin blockage	14	-	Staff responded and removed debris as required.
Culvert blockage	4	-	Staff responded and removed debris as required.
Culvert replacement	3	-	Staff inspected culverts and replaced as required.
Ditch blockage	6	-	Staff responded and removed debris as required.

Summary of Alterations to the Authorized System

Table E summarizes the projects that saw alterations to the collection system. There were no authorized alterations to the Stormwater System in 2024. Capital projects from the reporting period were related to water and road infrastructure.

Table E – 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

Summary of Spills or Abnormal Discharges

There were zero (0) environmental incidents such as spills or abnormal discharges from the stormwater system to be reported for 2024.

Table F – Summary of Stormwater Spills or Abnormal Discharges

Overflow or Spill Location	SAC Incident Number	Date mm-dd-yyyy	Volume (m3) and Duration (Estimate)	Adverse impacts / Corrective Actions
N/A	N/A	N/A	N/A	N/A

Summary of Actions Taken to Improve System Performance

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

Table G – Summary of Performance Improvements

System Performance Improvement	Project Description
Stormwater Management Facilities and Oil and Grit Separator Sediment Assessments	<p>A consultant was retained to undertake sediment surveys and condition assessments at Town owned Stormwater Management Facilities (SWMFs) and Oil and Grit Separator (OGS) units in a 2023 project.</p> <p>The objective of the assessment was to determine sediment removal and maintenance requirements.</p>

Previous Reporting Year Update

This section of the report highlights the ongoing work within the Township of West Lincoln to improve its stormwater management system. A project was completed in 2023 to undertake sediment surveys and condition assessments at Town owned Stormwater Management Facilities and Oil and Grit Separator Units.

Public Reporting

The Stormwater Management System Performance Report will be communicated to the system owner (Council) and posted on the Town’s website and made available for public review (free of charge) at Town Hall.

Report Date: March 28, 2025

Tray Benish
 Manager of Operations

DATE: May 12, 2025

REPORT NO: O-13-2025

SUBJECT: **Vision Zero Automated Enforcement Program Revenue – Road Safety Action Plan**

CONTACT: Mike DiPaola, P.Eng, Director, Infrastructure

OVERVIEW:

- The Niagara Region’s Vision Zero Program aims to eliminate traffic fatalities and serious injuries on regional roads through measures such as Automated Speed Enforcement (ASE) and Red Light Cameras (RLC).
- Any net revenues are split 50/50 between the Region and the Local Area Municipalities (LAMs), including the Township of West Lincoln.
- The revenue received by the Township is to be reinvested into road safety related programs and educational initiatives.
- The Township’s share of the Automated Enforcement Program revenue for 2024 of \$56,954 presents a valuable opportunity to enhance local road safety.
- Administration recommends that the revenue received be used to develop and issue a Request for Proposal (RFP) to solicit qualified consultants to create a comprehensive Road Safety Action Plan.
- Administration recommends that Budget Amendment (BA2025-05) be approved to reflect a project budget of \$56,954, with funding from the Vision Zero Program revenues.
- The Road Safety Action Plan will outline strategies, initiatives, and action steps to improve road safety across urban and rural areas, with the goal of creating safer roads and promoting safe driving behaviors.

RECOMMENDATION:

1. That, Recommendation Report O-13-2025, titled “Vision Zero Automated Enforcement Program Revenue – Road Safety Action Plan”, dated May 12, 2025 be received; and,
2. That, Council approve the proposal to utilize the Township’s share, totalling \$56,954, of the Automated Enforcement Program revenue to develop and issue a Request for Proposal to retain a qualified consultant to create a comprehensive Road Safety Action Plan; and,
3. That, Budget Amendment BA2025-05 reflecting a project budget of \$56,954, with funding from the Vision Zero Program revenues, be approved.

ALIGNMENT TO STRATEGIC PLAN:

Theme #1

- **BUILD** – a safe, connected, caring and active community.

BACKGROUND:

The Niagara Region's Vision Zero Road Safety Program aims to eliminate traffic fatalities and serious injuries on regional roads through measures such as Automated Speed Enforcement (ASE) and Red Light Cameras (RLC). Any net revenues are split 50/50 between the Region and the Local Area Municipalities (LAMs), including the Township of West Lincoln, to be reinvested into road safety-related programs and educational initiatives. This is in accordance with the Niagara Region Courts Inter-Municipal Agreement.

CURRENT SITUATION:

The Township's share of the Automated Enforcement Program revenue presents a valuable opportunity to enhance local road safety. Developing a Road Safety Action Plan aligns with the Region's Vision Zero objectives, complies with the Niagara Region Courts Inter-Municipal Agreement, and addresses recommendations from the Township's Transportation Master Plan related to road safety initiatives.

Administration is recommending that the revenue received from the Region's Automated Enforcement Program be used to develop and issue a Request for Proposal (RFP) to solicit qualified consultants to conduct a Road Safety Action Plan for the Township of West Lincoln. The plan will outline strategies, initiatives, and action plans to improve road safety across the urban and rural areas, with the goal of creating safer roads and promoting safe driving behaviours. In general terms, the RFP work plan is summarized below:

RFP Scope of Work / Work Plan

- Assessment & Data Collection:
 - Review and analyse current traffic safety data, accident history, and traffic patterns for urban and rural areas in West Lincoln.
 - Conduct a review of existing industry policies, regulations, and road safety/traffic calming measures currently in place throughout Niagara Region municipalities.
 - Gather community input through surveys, consultations, and public meetings to identify concerns and priorities.
- Development of Road Safety Initiatives and Action Plan:
 - Reducing Speeds in Urban Subdivisions
 1. Develop a pilot project to reduce speed limits to 40 km/hr in a select urban subdivision.
 2. Provide a strategy for full-scale implementation across all relevant subdivisions based on data and pilot project outcomes.

- Road Safety Campaign
 1. Design a comprehensive public education and awareness campaign aimed at promoting road safety among drivers, pedestrians, and cyclists.
 2. Develop materials such as signage, brochures, and social media content.
 3. Recommend methods for engaging the public and fostering long-term behavioural change.
- Road Safety Measures for Rural Area
 1. Propose strategies for reducing operating speeds in high-risk rural areas (pavement markings, signage, etc.).
 2. Identify specific intersections or areas requiring enhance street lighting to improve visibility and reduce accidents and develop/recommend a rural street lighting policy for West Lincoln's rural area.
- Road Safety Action Plan
 1. Develop a formal Township Road Safety Action Plan that will guide future decisions, funding allocation (capital and operating), and capital improvement plans with standard design standards for specific road safety and traffic calming measures.
 2. The Action Plan should reflect best practices, align with Vision Zero principles, and provide clear objectives for measurable road safety improvements.
- Public Engagement and Consultation:
 - Facilitate public engagement through community meetings, focus groups, or online surveys to gather feedback on proposed safety initiatives, pilot projects, measures and solicit input from stakeholders such as residents, community organizations, and local businesses.
 - Ensure that the public consultation process is inclusive, accessible, and transparent.
- Implementation Strategy:
 - Develop a phased implementation plan for each initiative, considering available funding and timeline constraints.
 - Identify potential funding sources beyond the Niagara Region's Vision Zero initiative, including grants, partnerships, or other opportunities.
 - Recommend timelines, deliverables, and key performance indicators to monitor and assess the progress and effectiveness of each initiative.

Based on the amount of funding received (\$56,954), the above RFP scope of work may all be completed in one assignment, pending proposals and pricing that will be received; or completed over a two-year period as more revenue is received from Niagara Region's Vision Zero program. The RFP will be structured and awarded as such.

The successful consultant will provide the following deliverables as part of this project:

Deliverables:

- Inception Plan / Presentation to Township Council
- Draft Road Safety Initiatives & Action Plan
- Public Engagement Report
- Final Road Safety Master Plan
- Final Presentation to Township Council

The Road Safety Action Plan will play a critical role in improving road safety across the Township of West Lincoln. Administration is eager to work with a qualified consultant who shares the commitment to creating a safer environment for all road users and advancing the goals of Vision Zero.

FINANCIAL IMPLICATIONS:

In late February 2025, Niagara Region provided a memorandum outlining the 2024 year-end results for net revenues related to automated enforcement as part of the Vision Zero Road Safety Program and the results on revenue distributions to the local area municipalities. This report showed that the Township will receive funding of \$56,954, based on an apportioned 3.8% of the 2024 net revenues.

Administration recommends approval of Budget Amendment (BA2025-05) to establish a budget of \$56,954, to be used towards a Road Safety Action Plan, reflecting the utilization of the Vision Zero Road Safety Program revenues.

Using the funds for this initiative ensures that funds are allocated to projects that directly enhance road safety, in line with the program's objectives, and complies with the Niagara Region Courts Inter-Municipal Agreement. The consultant's fees and associated costs to deliver the RFP work plan/objectives will be covered by the Township's share of the program revenue.

INTER-DEPARTMENTAL COMMENTS:

This report has been reviewed by the CAO, Director of Corporate Services/CFO, and the Legislative Division.

CONCLUSION:

Investing in a Road Safety Action Plan is a proactive step toward improving road safety in the Township of West Lincoln. Aligning this initiative with the Vision Zero program and the Township's Transportation Master Plan ensures a comprehensive and strategic approach to addressing road safety. Therefore, Administration recommends that Council approve the proposal to utilize the Township's share of the Automated Enforcement Program revenue to develop and issue a Request for Proposal to retain a qualified consultant to create a Road Safety Action Plan. Further, Administration recommends approval of Budget Amendment (BA2025-05) for \$56,954 to establish a budget for this project, utilizing the Township's share of 2024 net program revenues.

SCHEDULE(S)

N/A

Prepared & Submitted by:

Approved by:

Mike DiPaola, P.Eng
Director, Infrastructure

Truper McBride
Chief Administrative Officer

DATE: May 12, 2025
REPORT NO: O-14-2025
SUBJECT: **Ownership Change of Kimbo Road**
CONTACT: Jennifer Bernard, C.E.T., Manager, Civil Land Development
Mike DiPaola, P.Eng., Director, Infrastructure

OVERVIEW:

- During a Site Plan application review it was determined that the Niagara Region is the registered owner of Kimbo Road.
- Kimbo Road functions as a local road and is inspected and maintained by the Township.
- Administration recommends that the Niagara Region downloads Kimbo Road to the Township.

RECOMMENDATION:

1. That, Information Report O-14-2025 titled, “Ownership Change of Kimbo Road”, dated May 12, 2025, be received.

ALIGNMENT TO STRATEGIC PLAN:

Theme #1

- **BUILD** a safe, connected, caring and active community.

Theme #4

- **FOUNDATIONAL** – Advance organizational capacity and effectiveness.

BACKGROUND:

During a Site Plan application review for a property on Kimbo Road, Regional staff found that the Niagara Region is the registered owner of Kimbo Road. On January 8, 2025, Administration was notified of this and the Niagara Region requested that the ownership be changed to the Township of West Lincoln.

CURRENT SITUATION:

Kimbo Road is located in Ward 1 and connects to Regional Road 20, see Schedule “A” – Reference Map. Administration confirms that Kimbo Road functions as a local road and the earliest existing records for road maintenance show that it has been inspected and maintained with the Township’s road network.

This road does not meet the requirements of a Regional Road and Administration agrees that the road should be downloaded to the Township.

The Niagara Region prepared a survey that identifies the parts of the Kimbo Road and Regional Road 20 road allowances. Reference Plan No. 30R-16397, dated April 10, 2025, is included as Schedule “B”. The lands labelled as Parts 1, 4 and 5 on the Reference Plan will be downloaded to the Township.

The Niagara Region’s Transportation Department will present a report and By-law to Regional Council to download Kimbo Road to the Township. Under the *Municipal Act*, once the Region removes Kimbo Road from their road inventory, the road automatically becomes the jurisdiction of the Township.

Registration with the Land Registry Office to complete the ownership change will then be completed by legal counsel for the Township.

FINANCIAL IMPLICATIONS:

The Township will be responsible for the legal fees associated with the change of ownership which is estimated to be under \$3,000.00. This cost can be accommodated in the roads operating budget.

INTER-DEPARTMENTAL COMMENTS:

This report has been reviewed by the Legal & Legislative Services Department, the CAO, and Corporate Services Department.

CONCLUSION:

In summary, this report is providing notice to Council of the download of Kimbo Road in advance of it being removed from the Regional Road System. Administration will continue to work with the Niagara Region to download Kimbo Road to the Township of West Lincoln.

SCHEDULE(S)

Schedule “A” – Reference Map

Schedule “B” – Reference Plan No. 30R-16397

Prepared & Submitted by:

Jennifer Bernard C.E.T.,
Manager, Civil Land Development

Mike DiPaola, P.Eng.,
Director, Infrastructure

Approved by:

Truper McBride, CAO
Chief Administrative Officer

KIMBO ROAD MAP



Grassie Road

Young Street

Highway 20

Kimbo Road


South Grimsby Road 10


Range Road 1


Legend

 Kimbo Road

Roads

 West Lincoln

 Private

 Region

Scale: 1:10,000

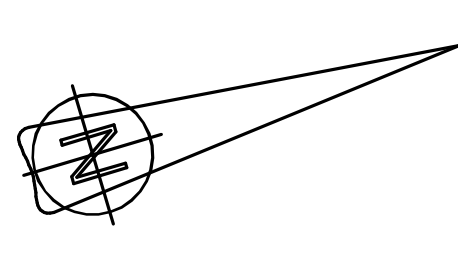
West Lincoln
Your Future Naturally

Date: May 2025

Schedule "B" - O-14-2025

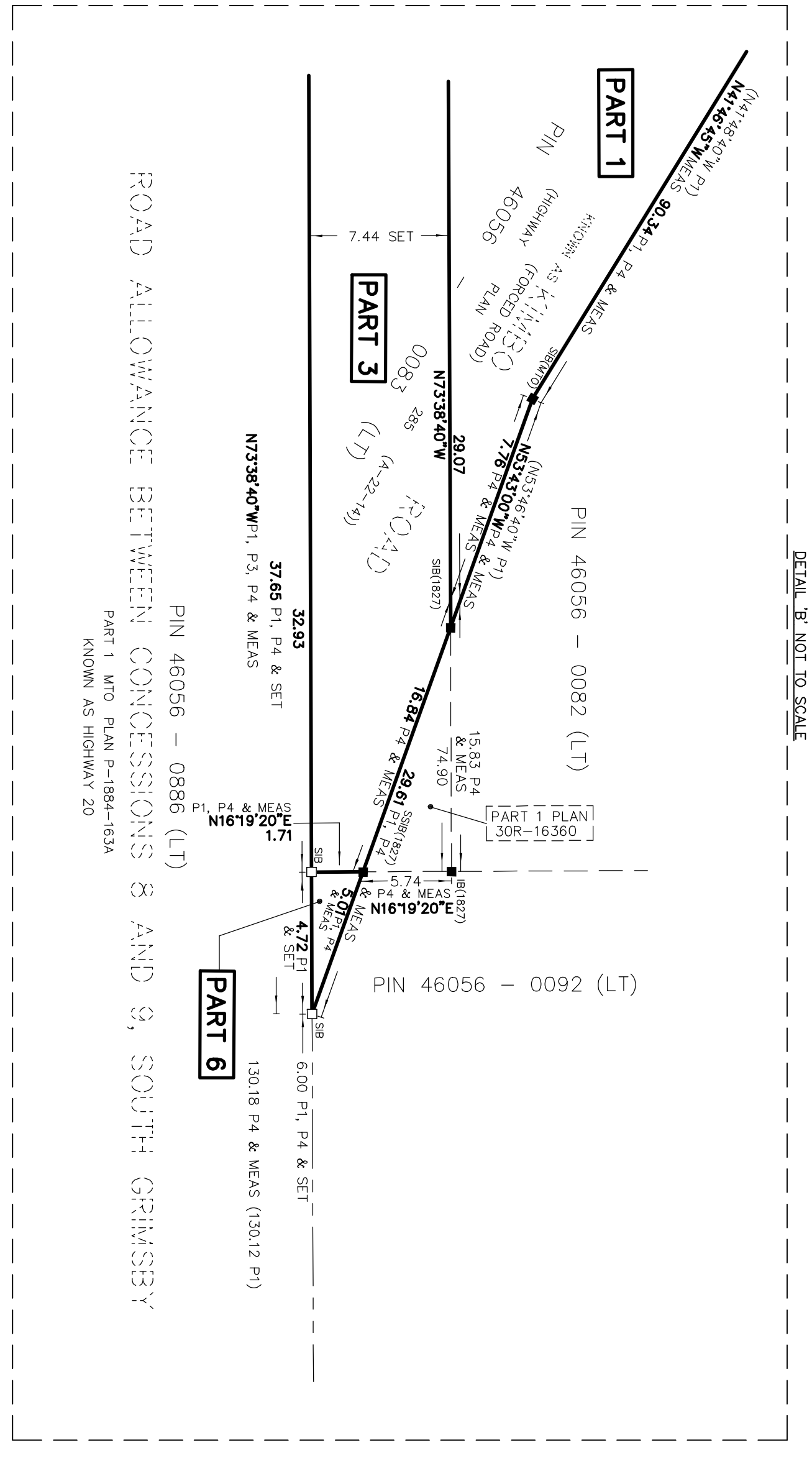
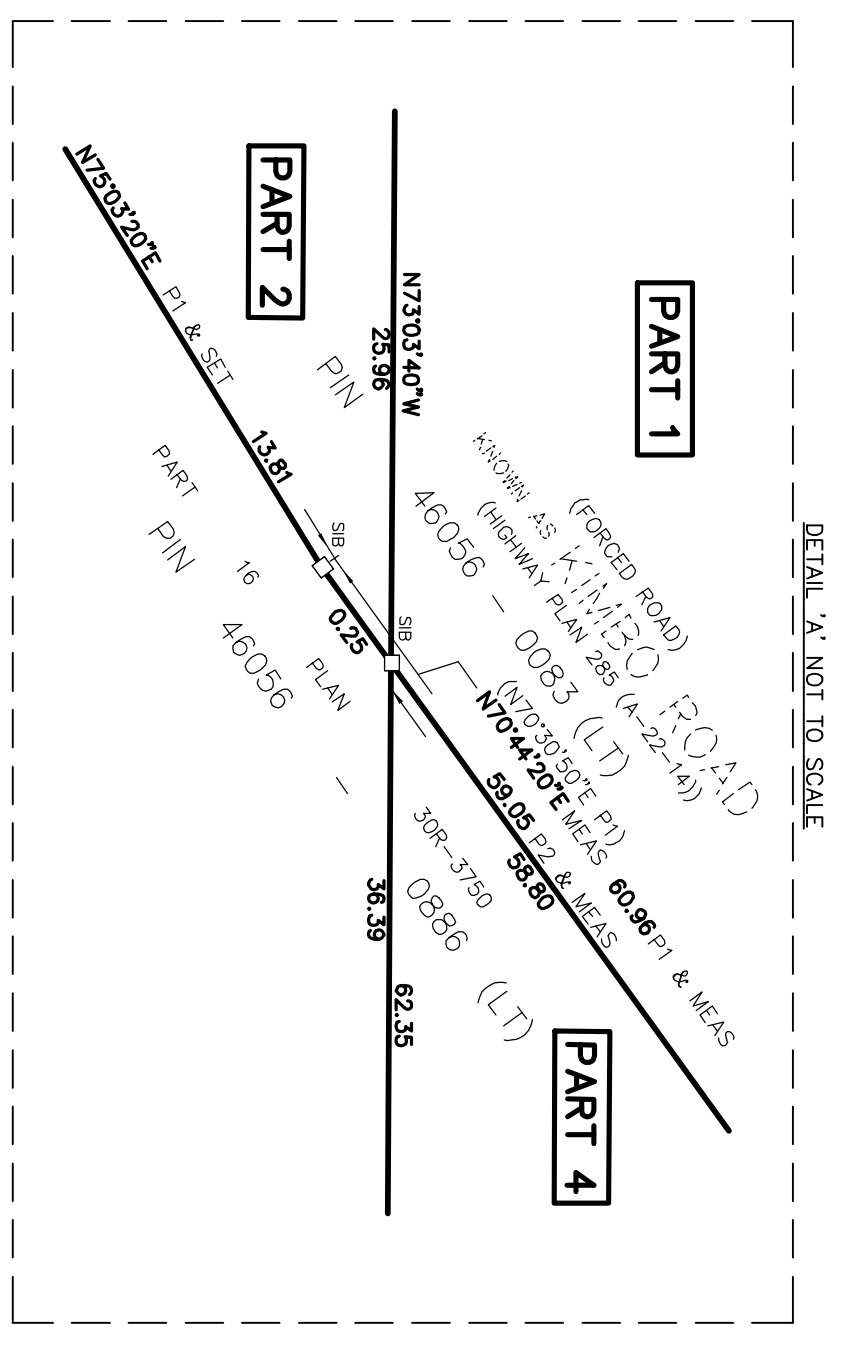
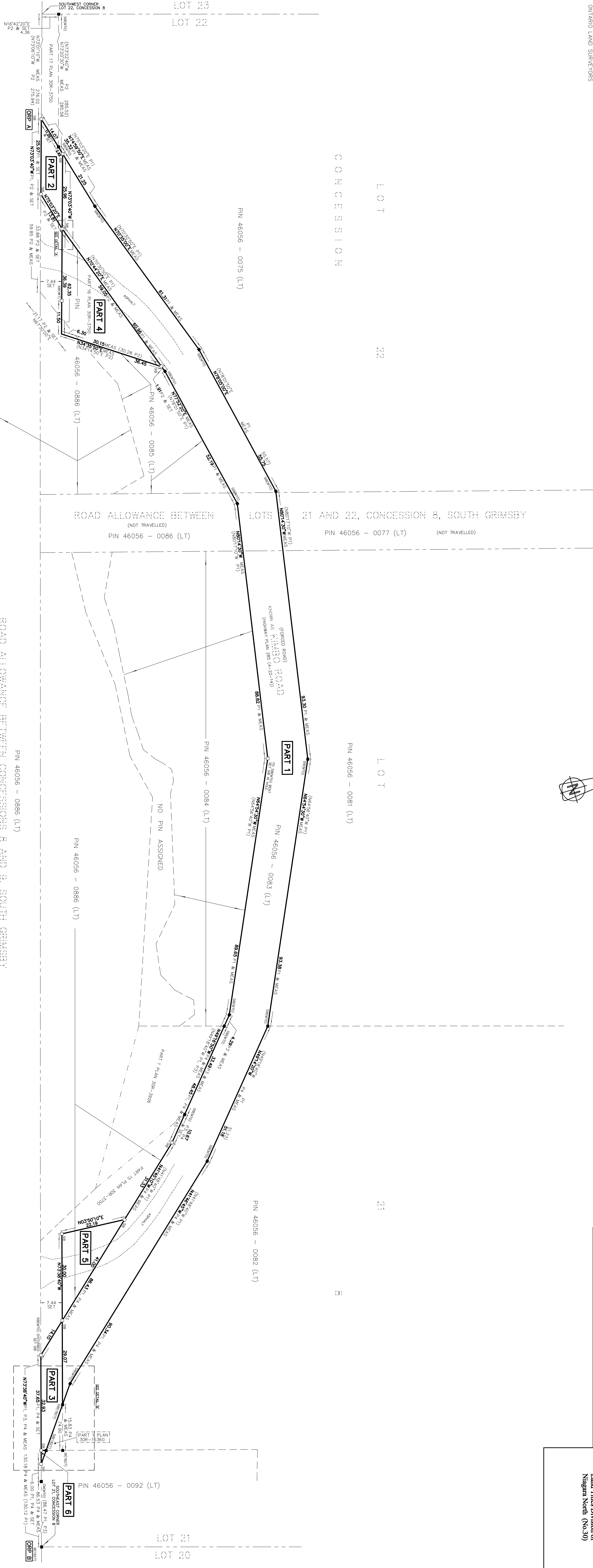
PLAN OF SURVEY OF
PART OF LOTS 21 AND 22
PART OF THE ROAD ALLOWANCE
BETWEEN LOTS 21 AND 22
CONCESSION 8
GEOGRAPHIC TOWNSHIP OF SOUTH GRIMSBY
TOWNSHIP OF WEST LINCOLN
 REGIONAL MUNICIPALITY OF NIAGARA

THE INTENDED LOT SIZE OF THIS PLAN IS 1500m N WIDTH BY 600m E HEIGHT WHEN PLOTTED AT A SCALE OF 1:500
 ON TARIO LAND SURVEYS



SCHEDULE			
PART	LOT	CONCESSION	AREA
1	PART OF LOTS 21 AND 22	CONCESSION 8	0.680 Ha
2	PART OF THE ROAD ALLOWANCE BETWEEN LOTS 21 AND 22	CONCESSION 8	193.4 sq m
3	PART OF LOT 21	CONCESSION 8	241.5 sq m
4	PART OF LOT 22	CONCESSION 8	632.1 sq m
5	PART OF LOT 21	CONCESSION 8	325.0 sq m
6	PART OF LOT 21	CONCESSION 8	4.0 sq m

PLAN 20R-16397
 Received and deposited
April 10, 2025
Jahagor Jhari
 Representative for the
 Land Titles Division of
 Niagara North (No.30)



LEGEND

- C — DENOTES SURVEY MONUMENT PLANTED
- S — DENOTES SURVEY MONUMENT FOUND
- SB — DENOTES SHORT SPLICED FROM BAR (25mm x 25mm x 100mm)
- SD — DENOTES SHORT SPLICED FROM BAR (25mm x 25mm x 60mm)
- R — DENOTES ROUND IRON BAR (20mm DIA X 60mm)
- O — DENOTES CONCRETE MONUMENT
- W — DENOTES WOODEN MONUMENT
- P — DENOTES PROPERTY IDENTIFIER NUMBER
- R — DENOTES ROAD RIGHT-OF-WAY (20m)
- H — DENOTES HIGHWAY RIGHT-OF-WAY (30m)
- M — DENOTES METRE
- F — DENOTES FEET
- N — DENOTES NORTH
- S — DENOTES SOUTH
- E — DENOTES EAST
- W — DENOTES WEST

DISTANCES ARE ADJUSTED AROUND DISTANCES AND CAN BE AVERAGE COMBINED SCALE FACTOR (CSF = 0.999725)

INTEGRATION DATA		
POINT ID	NORTHING	EASTING
OPR A	4775429.01	613460.03
OPR B	4775429.01	613460.03

METRIC NOTE
 DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

BEARING NOTE
 BEARINGS ARE GIVEN IN DEGREES, MINUTES AND SECONDS (DMS) TO THE NEAREST SECOND AND ARE REFERRED TO THE PREVIOUS POINT UNLESS OTHERWISE NOTED.

ROTATION NOTE
 FOR COMPASSION PURPOSES, THE ASTRONOMIC BEARINGS SHOWN ON THIS PLAN HAVE BEEN CONVERTED TO MAGNETIC BEARINGS.

SURVEYOR'S CERTIFICATE

I, **Harold D. Hyde**, being duly sworn, do hereby certify that I am a duly qualified and licensed Surveyor in the Province of Ontario and that I have personally supervised the execution of the above described survey and that the same has been completed in accordance with the provisions of the Survey Act and the Regulations made thereunder.

MARCH 21, 2025

Harold D. Hyde
 HAROLD D. HYDE
 ONTARIO LAND SURVEYOR

THIS PLAN OF SURVEY RELATES TO A.L.S. PLAN SUBMISSION FROM V-98842

RASCH + HYDE LTD.
 Ontario Land Surveyors
 P.O. Box 61331, Toronto, ON M5G 1K6
 Telephone: 905-774-8500
 Fax: 905-774-8500
 HAROLD D. HYDE O.L.S.
 SURVEY # 25-036

DATE: May 12, 2025
REPORT NO: O-09-2025
SUBJECT: **Small Container Water Fill Station**
CONTACT: Tray Benish, Manager, Operations, ORO
Mike DiPaola, P. Eng., Director, Infrastructure

OVERVIEW:

- During the February 18, 2025 Corporate Services Committee meeting, the topic of the small container water fill station, located at the Operations Department yard (6218 London Road), was discussed.
- Administration have gathered the historical background on this water fill station, and have presented it in this report.
- Administration have looked into three different service options in regards to this water fill station and the possible financial/administrative implications each one poses.

RECOMMENDATION:

1. That, Recommendation Report O-09-2025 titled, “Small Container Water Fill Station”, dated May 12, 2025, be received; and
2. That, Administration proceed with Option _____.

ALIGNMENT TO STRATEGIC PLAN:

Theme #4

- **Advance** – organizational capacity and effectiveness

BACKGROUND:

The small container water fill station is located at 6218 London Road in Smithville, as part of the Operations Departments property. It is a small building separate from the main Operations building. The building is used by the Water Department to store parts/supplies.

A water line was installed to this building sometime in the 1990’s to supply free water for the rural residents of West Lincoln to use. The water line flows through a water meter and backflow preventer inside the building, then proceeds out the southern wall to a spout. There is a switch located outside the building, next to the spout, for residents to turn on/off the water feed as they fill containers.

There is currently no tracking feature associated with this setup to see who is using it. Water consumption volumes are tracked by the water meter on a quarterly basis.

Administration have determined that the free water service was initially setup for the rural residents in the industrial park area of West Lincoln to utilize, as there were water quality concerns from those well users. This service has continued since that time.

CURRENT SITUATION:

Administration have gathered what the usage and annual costs were to the Township by providing this free water service to residents. In 2024 the water consumption totalled 787 m³ at a total cost to the Township of \$3,467.38 (based on 2024 water and wastewater rates). Data was collected for the previous 25 years, going back to 1999. The data shows the water consumption annual average is 725.46m³.

Administration have explored three possible options, and the cost/service impacts each one has, in determining the best route to move forward with this service.

Option 1:

Leaving the water service as is with no changes. There will continue to be a small cost each year to provide the service free of charge, and this option has no impact on the residents currently using it.

Option 2:

Remove the water service completely. This will eliminate the annual cost to the Township, but may raise concerns from residents that currently use this service.

Option 3:

Installing a “Pay Station” similar to the station located at the large bulk water hauler station located at corner of London Road and Thompson Road. This option could provide a small revenue stream for the Township of approximately \$1,735 per year based on the historical consumption data of 725.46m³ per year, multiplied by the 2025 average bulk water rates. It is important to note that the annual consumption amounts will most likely be lower than the historical averages as a result of this pay station being implemented, as some residents will not want to pay for the water that was previously provided at no cost.

There will be a significant upfront cost of approximately \$3,000 - \$5,000 to install the station outside the building. The pay-back period under this option/scenario is approximately 2 to 3 years, assuming that the revenue levels remain consistent. This will also increase the demand on Administration in setting up/managing the small water fill station accounts, which will add additional pressure to existing Township resources. With the anticipated reduction in use, the pay-back period for the initial upfront cost is likely to be extended.

Administration Recommendation:

Administration supports either Option 1 or Option 2 listed above.

For Option 1, continuing to provide the water service free of charge ensures consistent, equitable access to safe drinking water for all residents, particularly those who rely on it most. With average annual costs remaining relatively low and predictable over the past 25 years, this option represents a minimal financial impact to the Township while preserving a valued community service. Maintaining the status quo avoids the upfront costs, administrative burden, and potential public dissatisfaction associated with implementing fees or removing the service entirely.

For Option 2, removing this service will eliminate the annual cost to the Township, but may raise concerns from residents that currently use this service. By eliminating this service, it will also mitigate any potential liability risk/concerns as outlined below:

Property Damage; if a resident or visitor uses this fill station and accidentally causes damage to the Township's property, the Township could potentially be held responsible for repair or even legal cost.

Personal Injury or Accidents; If someone were to get injured while using the fill water station, through trip and falls or accidents involving vehicles, the Township could be held liable.

Negligence Claims; Negligence could occur if the Township fails to properly maintain the site and/or station, leading to unsafe conditions. For instance, if the equipment malfunctions or not checked for cleanliness and someone becomes sick from it, there could be a claim against the Township for negligence.

FINANCIAL IMPLICATIONS:

If Option 1 is decided on, there will be an estimated annual cost of approximately \$3,500 to continue the supply of water.

If Option 2 is decided on, there will be a total approximate cost of \$500 in order to decommission the existing water service to the building.

If Option 3 is decided on, there will be an upfront cost of \$3,000-\$5,000 to establish a pay-per-use station. The Township may be able to recover these costs through revenue generation at the station, however the potential revenue and length of pay-back period is currently unknown, as water consumption is likely to decrease under this Option.

INTER-DEPARTMENTAL COMMENTS:

This report has been reviewed by the CAO, the Director of Corporate Services/CFO, and the Legislative Division.

CONCLUSION:

After a thorough review of the historical data, current usage, and potential future impacts, Administration recommends either Option 1 (continuing the existing free water service) or Option 2 (removing the water service) at the small container fill station.

SCHEDULE(S)

N/A

Prepared & Submitted by:

Approved by:

Tray Benish, ORO
Manager, Operations

Truper McBride
CAO

Mike DiPaola, P. Eng.
Director, Infrastructure

DATE: May 12, 2025
REPORT NO: O-07-2025
SUBJECT: Pavement and Bridge Management Systems – Status Report
CONTACT: Mike DiPaola, P.Eng
Director, Infrastructure

OVERVIEW:

- Preserving our Township pavement infrastructure is paramount to insuring viable transportation of people and goods.
- At present, the average condition (PCI – Pavement Condition Index) of the Township road network (consisting of 276 centreline kms of hard top pavements) is 72 out of 100.
- The optimal annual resurfacing and reconstruction budget to attain and sustain the network in its current condition is \$2 million per year.
- The funding needed to maintain the Township’s existing bridge inventory (91 Structures) over the next 10 years is forecasted to be \$800,000 per year.
- A strong commitment to these budget levels is desirable to ensure sustainable capital renewal.
- Regular updates to the pavement and bridge condition inspections and the ongoing review of funding levels, results in a sustainable capital renewal program, which ensures that the overall Township road network remains in good repair.

RECOMMENDATION:

1. That, Information Report O-07-2025 titled, “Pavement and Bridge Management Systems – Status Report” dated May 12, 2025, be received for information.

ALIGNMENT TO STRATEGIC PLAN:

Theme # 1

- **Build** a safe, caring, and active community

Theme # 4

- **Foundational:** Advance organizational capacity and effectiveness

BACKGROUND:

Historically, pavement conditions inspections were completed once every five (5) years, with the last inspection taking place in 2019. In 2022, Administration changed this process by undertaking regular pavement inspections each year to implement a more robust pavement management system.

Starting in 2022, pavement condition inspections were completed for one third (1/3rd) of the Township road network each year. Historical condition inspection ratings are used in the Pavement Management System to develop performance prediction models for the deterioration of the pavements. Condition ratings for sections that are not inspected in a particular year are developed from the last available rating and prediction models to estimate the current condition rating for all sections in the Township's pavement database each year. These inspections of the third of the network took place in 2022, 2023, and 2024, so now the entire network had been inspected. Regular yearly inspections provide better information compared to once every 5 years and ensures the development of a sustainable funding models to keep the network in optimal condition.

In addition to our annual Pavement Management System update, biennial (once every 2 years) bridge and major culvert condition inspections and appraisals are preformed to update the Township's Bridge Management System. These biennial inspections are a mandatory requirement for all structures with a span greater than 3 metres and falls under Regulation 104/97.

This report provides the results of the 2024 Pavement Management System update, as well as the 2023 Bridge and Major Culvert inspections / appraisals.

CURRENT SITUATION:

Pavements

The current average condition rating of our pavement network (based on overall pavement area) is 72 out of 100. This rating is referred to as a Pavement Condition Index (PCI).

Schedule A provides a table listed as Table A-1 which provides the ranges of the PCI for each condition category from poor to very good. Figure A-1, also found in Schedule A, shows the distribution ratings (% of overall pavement area for both asphalt & surface treated roads) for the past 3 years (2024, 2023, & 2022). In 2022, only a third (1/3rd) of the network was inspected, while the condition of the other two thirds (2/3rd) of the network were predicted based on the last inspection data that was completed in 2019. As such, the data improved each year, as the next third of the network was inspected, until 2024 when the final third (1/3rd) of the network was inspected. Based the information provided in Schedule A, 43% of the Township's road network is considered to be Very Good, with a PCI above 76. It is important to keep performing these annual inspections each year to

obtain accurate condition inspections and regular updates of our Pavement Management System.

Forecasted analysis, within the Pavement Management System, is used to review alternatives and help estimate either the network condition for set budgets, or the required budget for a set condition. The first analysis (Schedule B) estimates the budget necessary to address “all needs” and assumes that an unlimited budget is available. In this scenario, work would be carried out for all pavements that qualify for “resurfacing” when a critical pavement condition index (PCI) level of 60 is reached. Similarly, construction work for roads qualifying for reconstruction would be undertaken once a minimum PCI of 45 is reached.

This type of analysis is used to assess work backlog and assists in estimating long-term network budget needs. The information, from the 2024 Pavement Management System consultant’s work, is provided in Schedule B shows a current 2025 reconstruction and resurfacing need in the order of \$7 million and \$6 million respectively, for a total of \$13 million. It is important to note that the roads reconstruction and resurfacing allocation 2025, included within the 2025 Capital Budget, is \$3 million and \$1.2 million respectively. This shortfall for this specific year is a result of the overall corporate budget constraints and pressures. The table, as provided through the 2024 Pavement Management System consultant’s work, in Schedule B also summarizes (by year) the total 10-year reconstruction and resurfacing need in the order of \$32.5 million.

The second analysis, as provided by the 2024 Pavement Management System consultant’s work, is a 10-year pavement condition forecast based on different funding scenarios. Schedule C presents 10-year budget scenarios based on different funding increments. From this Schedule, as calculated by the consultant, it can be seen that an annual road budget of \$2 million results in an average PCI of 68 by year 2034. The target PCI of high 60s to low 70s across the entire Township road network would be appropriate for a road network of this type and size.

Bridges & Major Culvert Structures

Based on the 2023 inspections performed by the consultant, the table below summarizes the Bridge Management System maintenance, rehabilitation, and replacement priority needs in the following categories:

- NOW Needs
- 1 to 5 YEAR Needs
- 6 to 10 YEAR Needs
- ADEQUATE

	NOW Needs	1-5 YR Needs	6-10 YR Needs	TOTAL Needs
Total	\$2.9 M	\$9.4 M	\$4.0 M	\$16.3 M

These needs translate to an average annual funding level of \$1.63 million over the 10-year period, for a total of \$16.3 million. Just like the pavement management system, this total \$16.3 million assumes an unlimited budget is available to address “all needs”. This amount is used to assess the “backlog”.

After each biennial inspection and update to the Bridge Management System, Administrations review each bridge structure and develops a sustainable capital budget forecast to address high priority recommendations for each structure. The 10-year capital program is then developed and refined after each biennial inspection. The total 10 year capital funding allocation that was presented during the 2025 Capital Budget forecast totals \$8 million, which translates to an annual allowance of \$800,000.

The consequences of not implementing a proactive plan and sustainable levels of funding for the Township’s bridge and major culvert assets include:

- Further aging of the Township’s structural infrastructure
- An increase in the amount of backlog work to be completed
- Increased capital expenditures at the time of rehabilitation or replacement
- Unexpected emergency bridge closures affecting the travelling public, businesses, and emergency services
- The possibility of bridge and structure failures

FINANCIAL IMPLICATIONS:

Based on the most recent 2024 Pavement Management System update, the consultant has recommended the funding needed to maintain the Township’s existing pavement inventory over the next 10 years is approximately \$20 million. This translates to an annual allowance of \$2 million applied to a combination of resurfacing and reconstruction. Based on the most recent Bridge Management System update, the funding needed to maintain the Township’s existing bridge inventory over the next 10 years is forecasted to be \$8 million, or \$800,000 per year.

The 10 Year Capital Plan related to the existing road and bridge network, as presented during the 2025 Budget, provides a funding envelop that accommodates the current investment levels as outlined in this report.

In addition to the recommended funding levels noted above, the 10 Year Capital Plan forecast also has an allowance for other capital projects such as capacity expansions, transportation assets, equipment/fleet, and intersection improvements. Therefore, any increase in the road network would result in an additional funding to sustain our infrastructure.

Administration will continue to analyse the results annual Pavement Management System update and biennial bridge inspections (Bridge Management System) and various funding scenarios on an ongoing basis as part of our annual capital budget and forecast process in conjunction with other corporate planning and asset management initiatives.

INTER-DEPARTMENTAL COMMENTS:

This report has been reviewed by the CAO, Director of Corporate Services/CFO, and the Clerk's office.

CONCLUSION:

The results of the Pavement Management System and Bridge Management System updates are used to guide the long-term planning for the road system. Review of specific road segments and bridge/culvert structures are subsequently undertaken in order to prioritize needs within the identified funding envelopes. These reviews incorporate consideration such as:

- Pavement and Bridge Condition Ratings
- Condition of Underground Assets (Watermain, Sanitary & Storm Sewers, etc.)
- Partnerships and/or Commitments with other Agencies (Niagara Region, Neighbouring Municipalities, etc.)
- Transportation Strategy (Masterplans, Strategic Initiatives, etc.)
- Capacity Deficiencies and/or Safety Improvements
- Geometric & Structural Deficiencies
- Overall Community / Network Benefit
- Development / Growth

In order to achieve network sustainability, a strong commitment to these budget levels is desirable to ensure the Township's road and bridge network remain in good condition and that the backlog needs do not increase. Project specific details are presented in the year of budget approval, along with the capital budget forecast, through the annual budget process prior to these investments proceeding.

SCHEDULE A – Current Pavement Condition

SCHEDULE B – Pavement Management System: Unlimited Budget Analysis

SCHEDULE C – Pavement Management System: Various Funding Analysis

Prepared & Submitted by:

Approved by:

Mike DiPaola, P.Eng
Director, Infrastructure

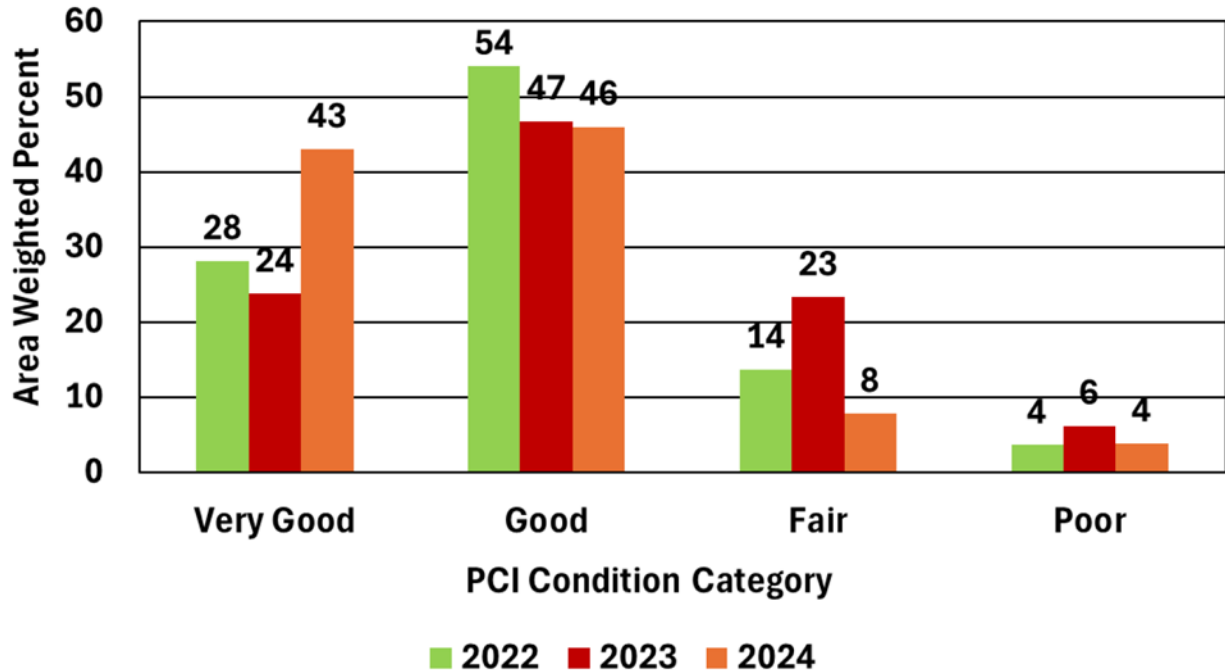
Truper McBride
Chief Administrative Officer

SCHEDULE A – CURRENT PAVEMENT CONDITION

Table A-1: Pavement Condition Distribution Ranges

PCI Range	Condition
76 - 100	Very Good
61 – 75	Good
51 – 60	Fair
0 – 50	Poor

Fig A-1: Pavement Distribution for Pavement Sections – Entire Network

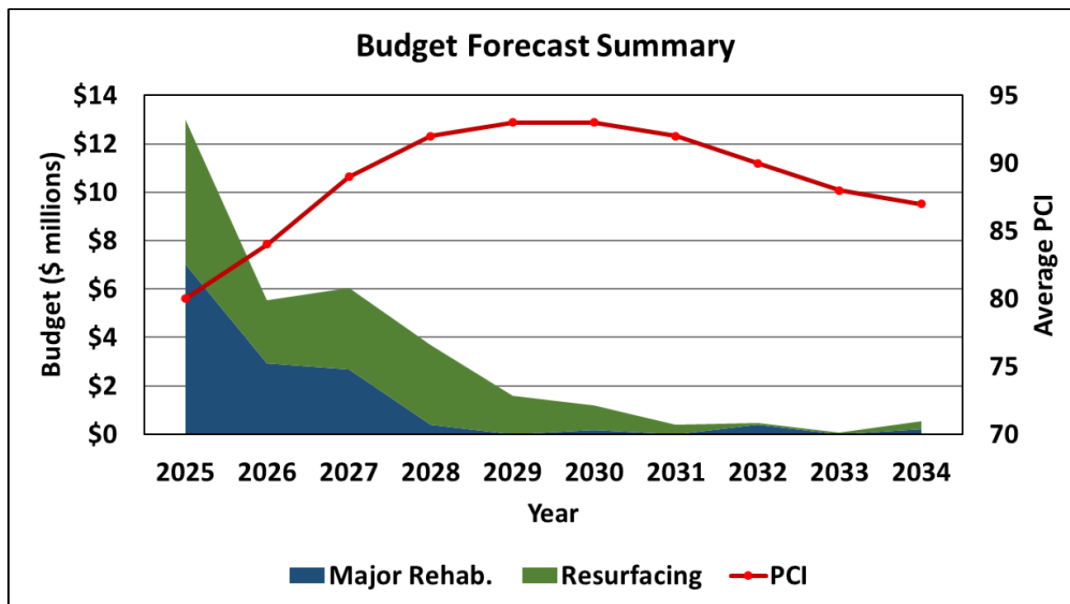


SCHEDULE B – PAVEMENT MANAGEMENT SYSTEM UNLIMITED BUDGET ANALYSIS

Table B-1: Summary of Major Rehabilitation & Resurfacing Needs - Unlimited Budget

Year	Major Rehab / Reconstruction	Resurfacing	Total	PCI
2025	7,015,828	5,992,259	13,008,087	80
2026	2,919,515	2,620,828	5,540,343	84
2027	2,667,368	3,378,261	6,045,629	89
2028	384,030	3,294,865	3,678,896	92
2029	-	1,594,303	1,594,303	93
2030	186,480	992,188	1,178,668	93
2031	-	379,338	379,338	92
2032	388,080	98,160	486,240	90
2033	-	81,360	81,360	88
2034	208,530	328,049	536,579	87
Total	\$ 13,769,831	\$ 18,759,611	\$ 32,529,442	

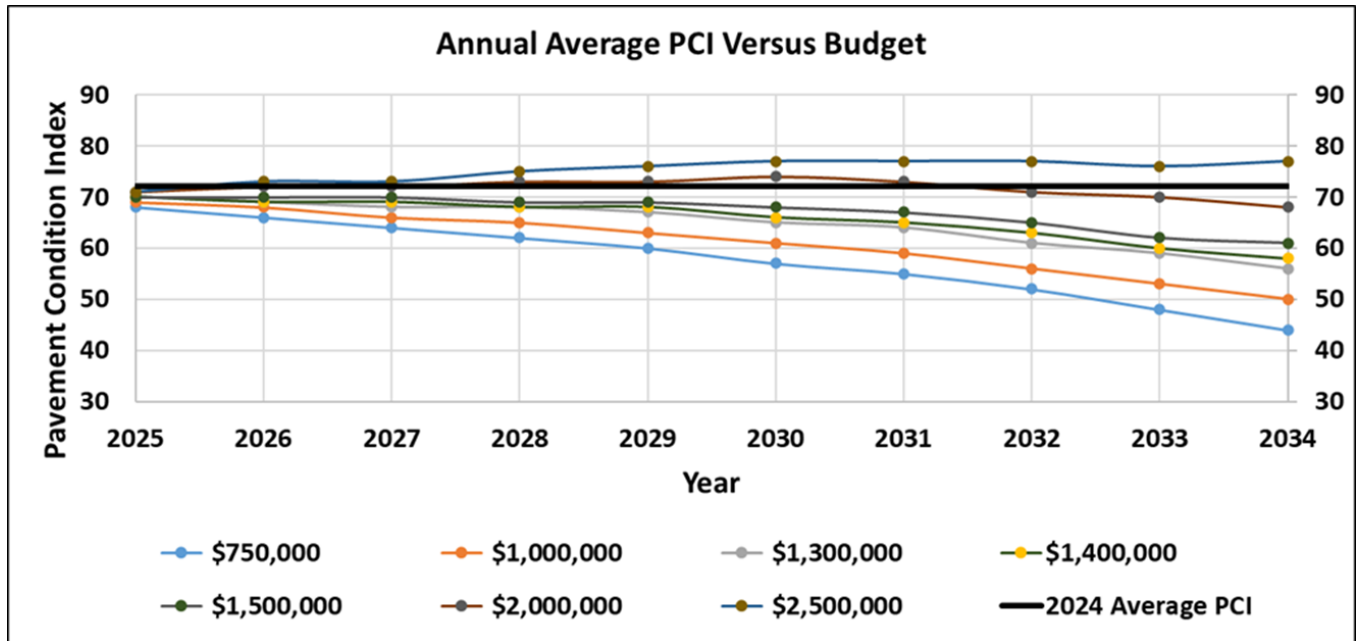
Fig B-1: Summary of Major Rehabilitation & Resurfacing Needs - Unlimited Budget



SCHEDULE C – PAVEMENT MANAGEMENT SYSTEM

VARIOUS FUNDING SCENARIOS

Table C-1: Overall Summary of Annual Budget vs Network Condition (PCI)





Pavement Management System & Bridge Appraisal Status Report

Operations Committee

May 2025

Pavement / Bridge Management Systems

- Overview Pavement Management System
- Overview Bridge Management System

Pavements

- Current Network Condition
- Sustainable Funding to Maintain Pavements in Optimal Condition

Bridge & Major Culverts

- Current Condition
- Rehabilitation / Replacement Needs
- Sustainable Funding to Maintain Bridges in Optimal Condition

Overview of the Pavement Network & Pavement Management System



Network

Section

Surface Defects | Associated Feature Conditions

Surface



Surface



Single



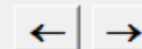
Transverse Half, Full and Multiple Cracking

Alligator Cracking

	Longitudinal Wheel Track Alligator Cracking	<input type="text" value="3"/>
	Centreline Alligator Cracking	<input type="text" value="3"/>
	Pavement Edge Alligator Cracking	<input type="text" value="2"/>
	Transverse Alligator Cracking	<input type="text" value="2"/>

Others

	Meander and Midlane Cracking	<input type="text" value="2"/>
	Map Cracking	<input type="text" value=""/>



Rating

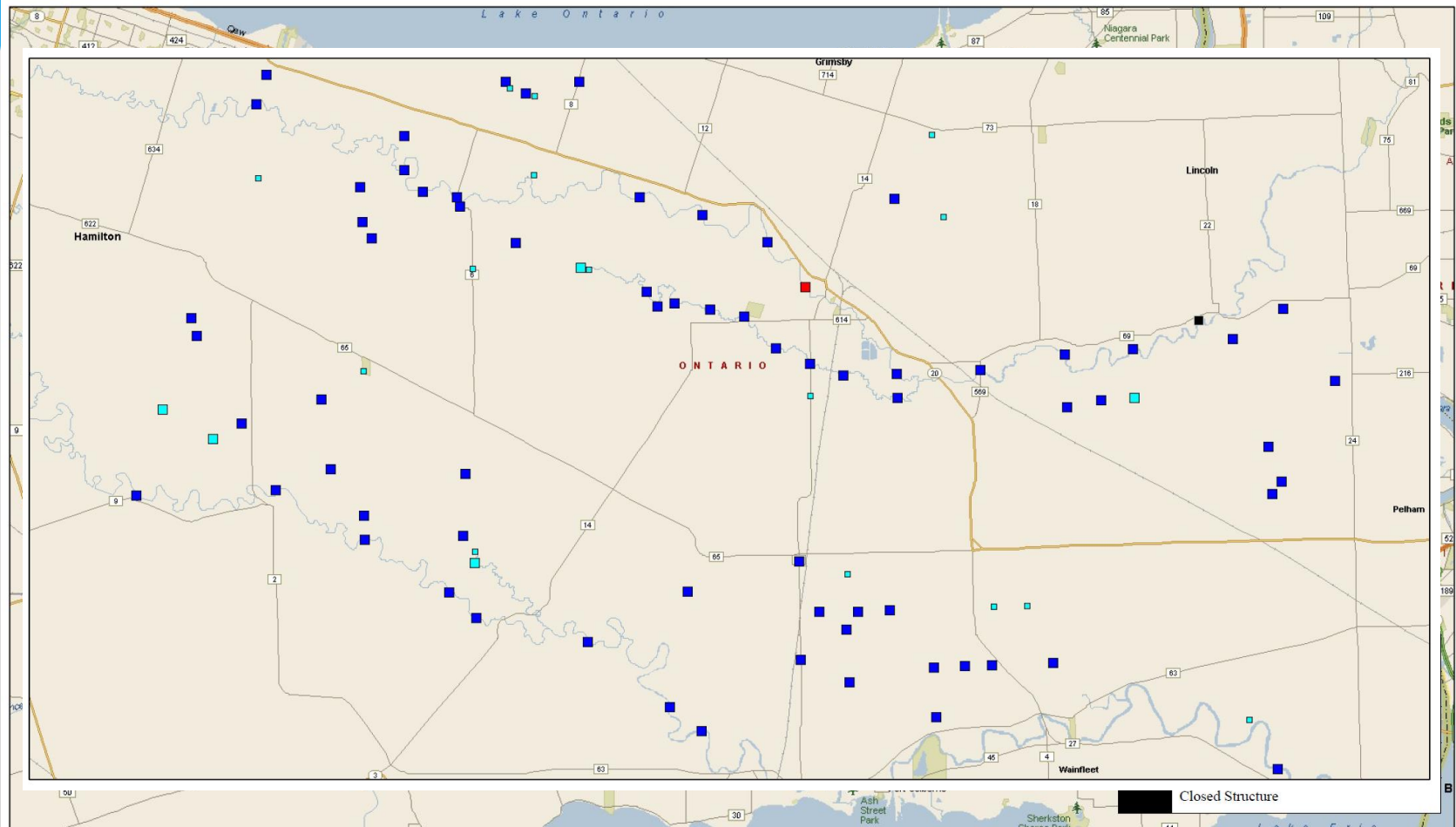
RCR

PCI 45

Inspected by

Comments

Overview of Bridge Network & Bridge Management System



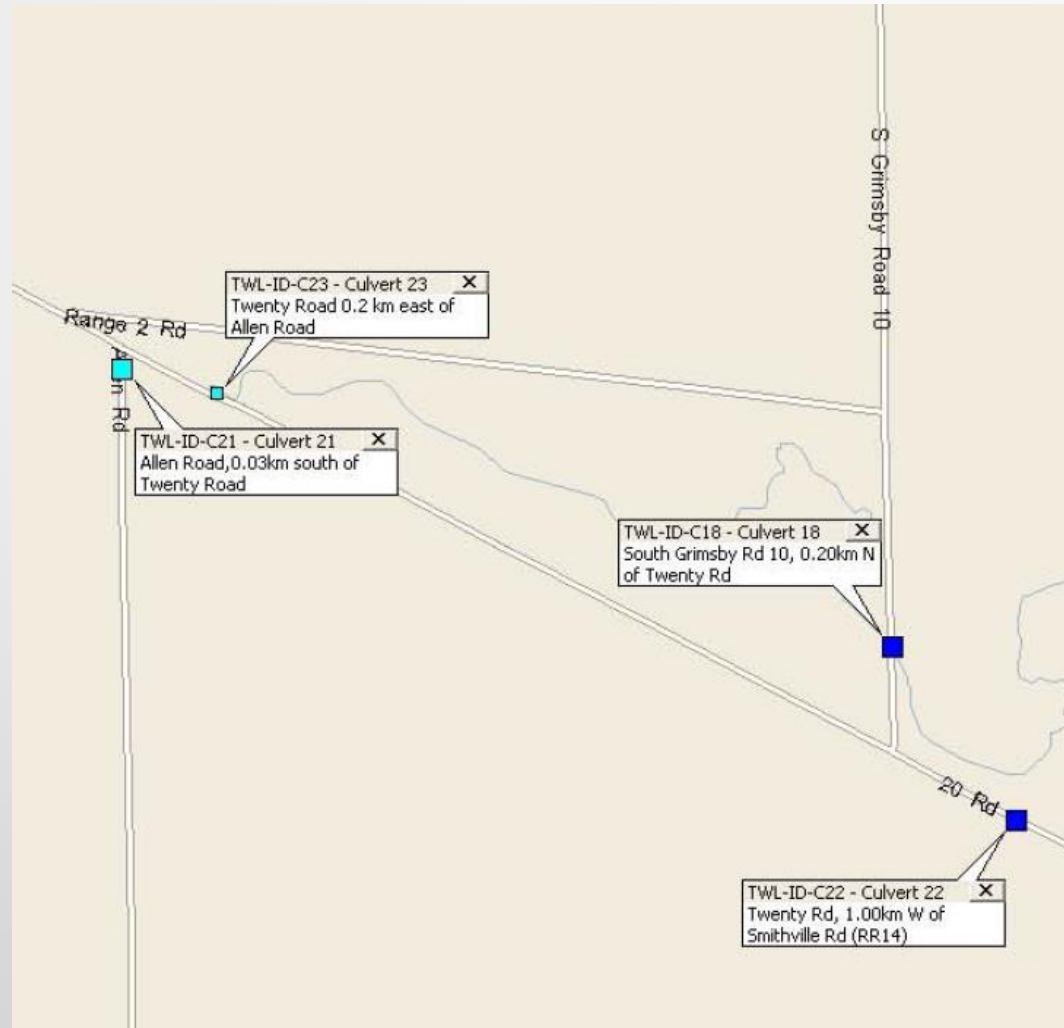
- 91 Structures (Replacement Value of \$96 Million)
- 72 Bridges & 19 Major Culverts

NOTE:

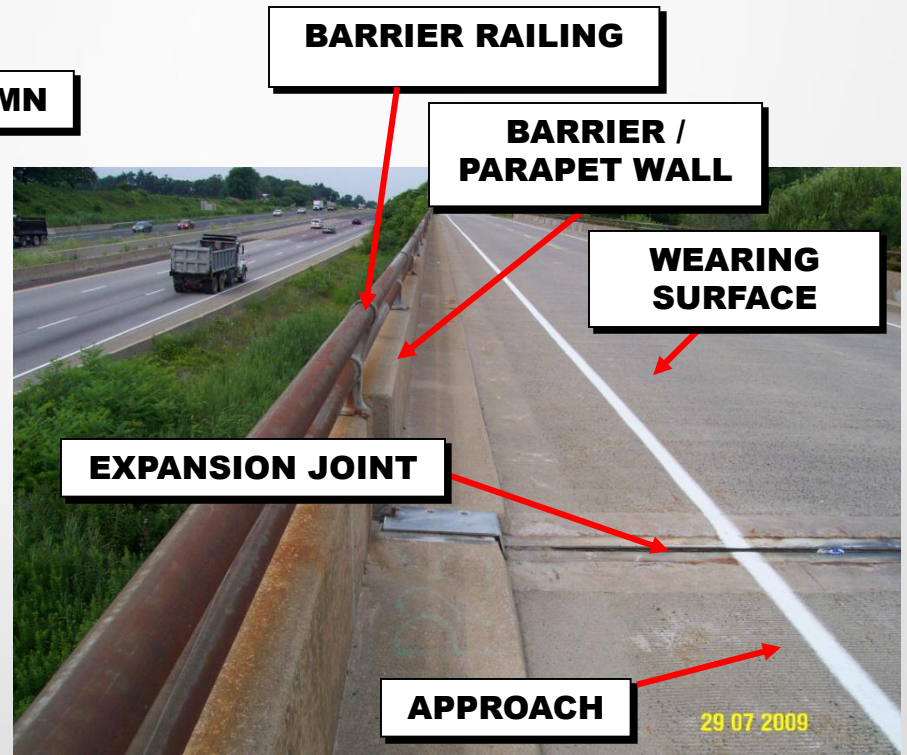
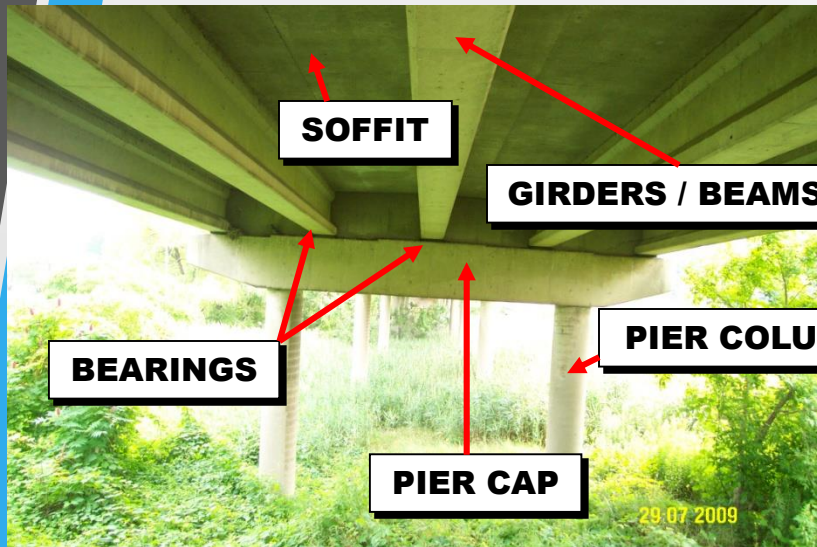
Bridge = Box or open type structure with span 3.0m and greater with less than 0.6m of cover.

Culvert = Greater than 0.6m of cover. Also includes corrugated steel pipe (CSP), soil steel multi plate (SSMP), corrugated plastic pipe (CPP), concrete pipe (CP).

All Township Structures are identified using "Structure ID's"



Elements of a Bridge



Township of West Lincoln

2023 Structure Inspection Program - Rehabilitation/Replacement Needs

Structure Name	Campbell Bridge	ID Number	TWL-ID-B04
Classification	<input checked="" type="checkbox"/> Bridge <input checked="" type="checkbox"/> Structure <input type="checkbox"/> Culvert <input type="checkbox"/> Municipal	Previous ID Number	N/A
Type of Location	<input checked="" type="checkbox"/> Roadway <input type="checkbox"/> Driveway <input type="checkbox"/> Other	Number of Spans	1
Location	South Grimsby Road 16, 0.10km north of Twenty Road	Span Lengths (m)	16.7
Structure Type	RF	Deck Area (m2)	159
Yr Constructed	1962	Load Posting	No Posting
Yr Rehabilitated	N/A	Current AADT	75
Inspection Date	03-Nov-23	Date AADT	
Previous Inspection	26-Apr-21	Board Order/ Agreement	<input type="checkbox"/>
Next Inspection	2025	Drone Inspection	<input type="checkbox"/>

Effects of Deterioration

The north approach roadway is gravel and is in fair condition with settlement and light settlement and medium potholes at the extent of the structure. The asphalt paved roadway over the structure is in good condition. There are steel beam guiderails at all four corners of the structure with extruders at the north ends and roundings at the south ends, which are in good condition. The steel barrier railings and posts over the structure are in fair to poor condition with areas of medium surface corrosion throughout. The coating system on the railings has failed. The concrete curbs are generally in good condition with isolated wide cracks. Short sections of concrete barrier wall have been added at the four corners of the structure to connect the steel beam guiderails. The concrete barriers are in good condition.

The bridge deck soffit is generally in good condition. There is narrow to medium sized cracking with efflorescent staining along the centre of the soffit extending to the abutment sidewalls. The 2022 condition survey noted delamination in the soffit along the centreline and at the deck drain locations. The deck drains appear to be cored through the bridge deck. There is water staining on the bridge deck soffit at all deck drains. The concrete abutments are generally in good condition with light scour at the waterline and isolated narrow vertical cracks. The concrete wingwalls are generally in good condition. There is light erosion at all four corners.

Recommendation

Following the results of the 2022 condition survey, we recommend rehabilitating the structure NOW. The rehabilitation work includes the following: concrete patch repairs, waterproofing and paving the bridge deck, replace steel barrier railings and posts with concrete parapet walls, and replacing the deck drains.

General Overall Condition	Good	Priority Rating	NOW	Current BCI	74
Estimated Total Cost	\$517,500.00	Implementation Ranking	Medium	Previous BCI	75

Example of a Bridge Inspection Report

Township of West Lincoln

2023 Structure Inspection Program - Rehabilitation/Replacement Needs

Structure Name	Campbell Bridge	ID Number	TWL-ID-B04
-----------------------	-----------------	------------------	------------

Recommended Rehabilitation

- RSP - Rehabilitate Superstructure
- RSB - Rehabilitate Substructure
- RIR - Railing Improvement/Replacement
- PWP - Patch Waterproof and Pave

MIS - Miscellaneous - Other Work

Replace Deck Drains

Engineering Cost

Engineering - PWP, RIR, RSB, RSP, MIS	\$67,500.00
	\$0.00
Sub Total	\$67,500.00

Construction Cost

Replace Railings and Posts - RIR	\$100,000.00
Replace Deck Drains - MIS	\$25,000.00
Patch, Waterproof, Pave - PWP	\$250,000.00
Concrete Patch Repairs - RSB, RSP	\$75,000.00
	\$0.00
Sub Total	\$450,000.00
Total	\$517,500.00

Inspected By	Darryl Bakker, P. Eng. and Emma Stephenson of ELLIS Engineering Inc.
Photos	0342-0475
Measurements	Span = 16.7m Width = 9.5m
Additional Notes	Previous Structure Name: South Grimsby Con 9 Lot 32/33, "Campbell Bridge"

Maintenance/Rehabilitation Work:
c.2000: SBGR and concrete barrier installed.

Access Requirements None.

Campbell Bridge
TWL-ID-B04



Photograph No. 1: 0362: Roadway over the structure looking south.

Campbell Bridge
TWL-ID-B04



Photograph No. 3: 0442: Underside of the structure looking south.



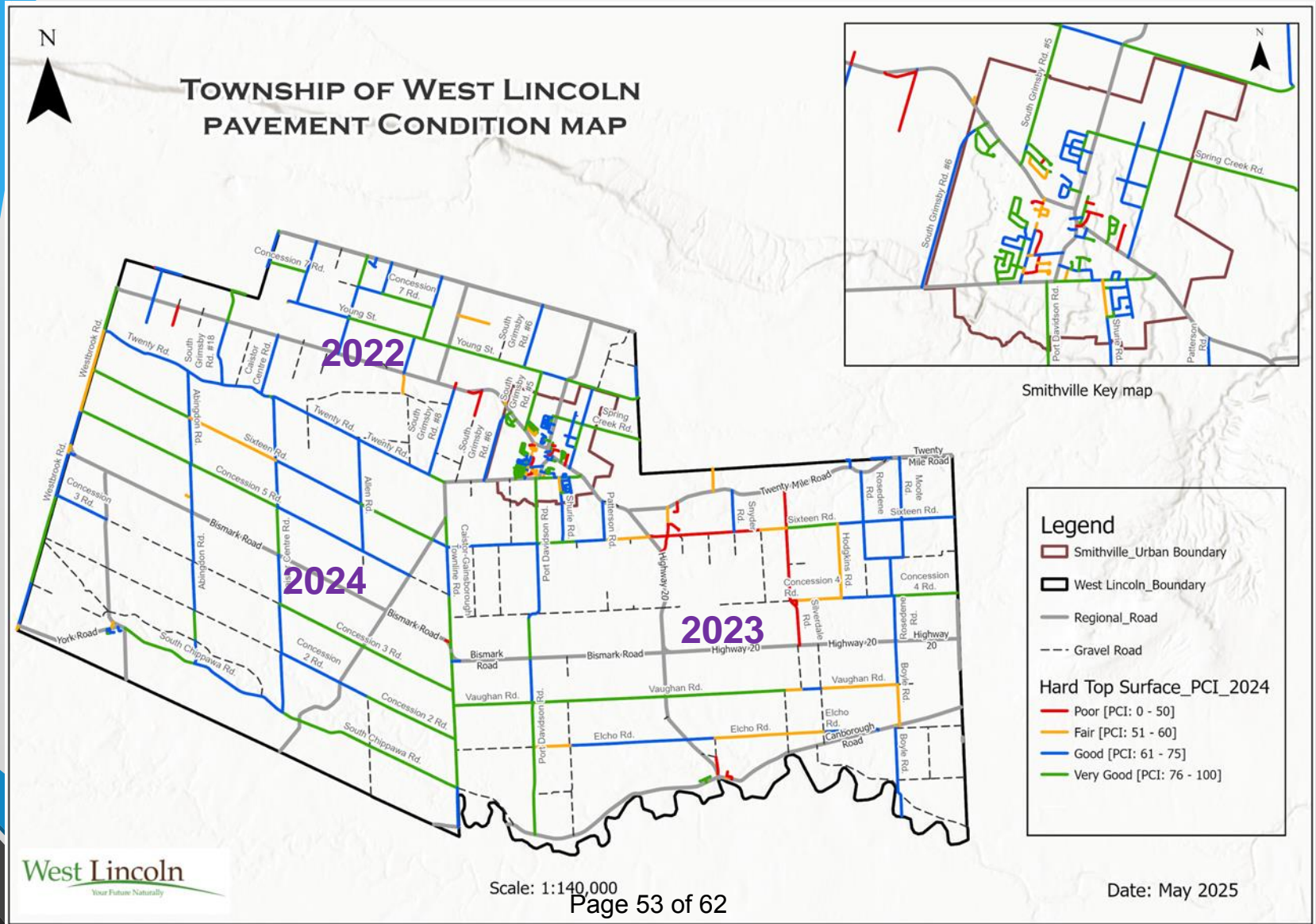
Photograph No. 2: 0433: East elevation.



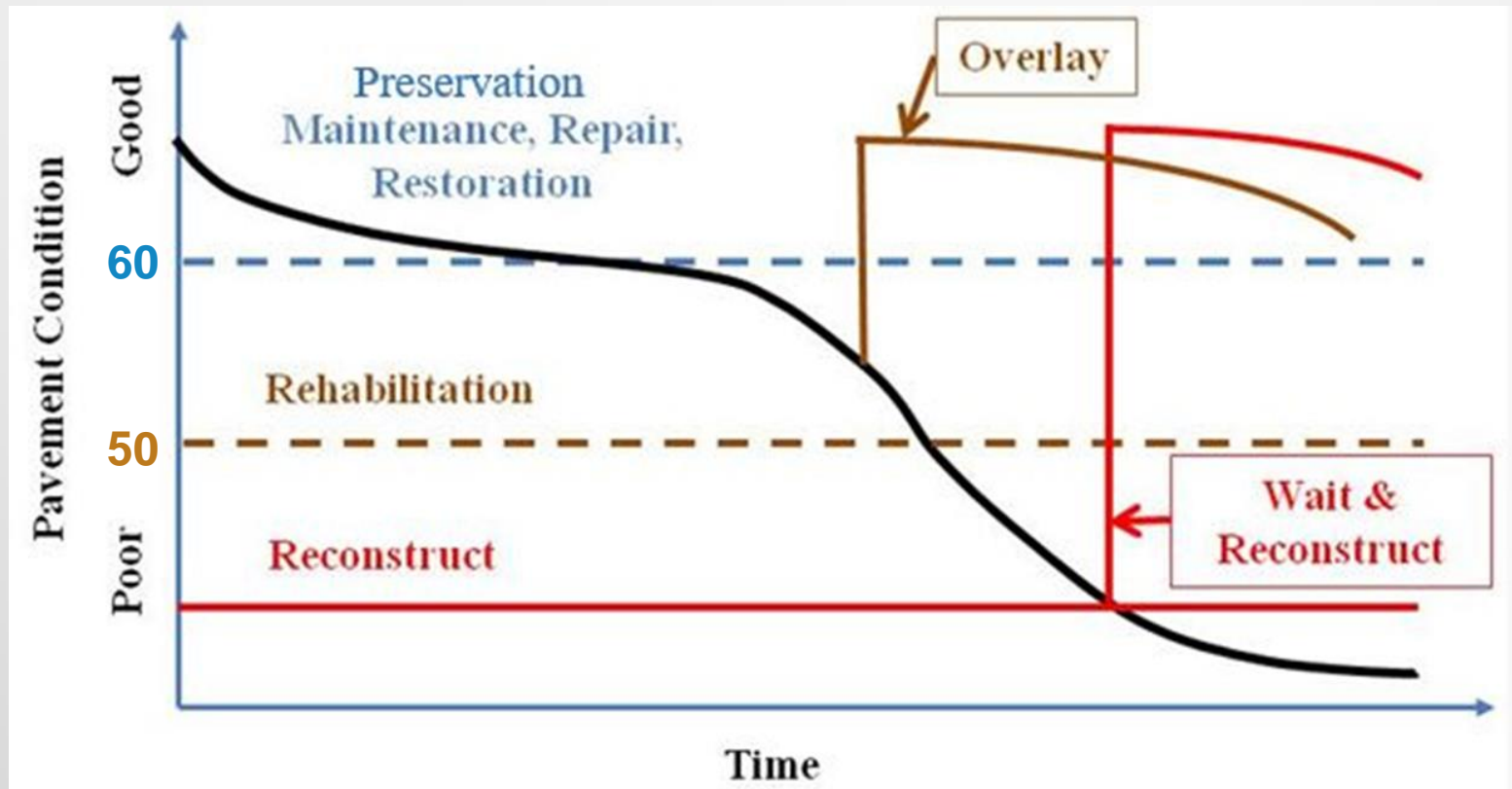
Photograph No. 4: 0418: Corrosion in railing (typ).

Pavement Network - Current Condition

Distribution of Pavement Condition Index for Road Network (based on area)



Pavement Network - Current Condition

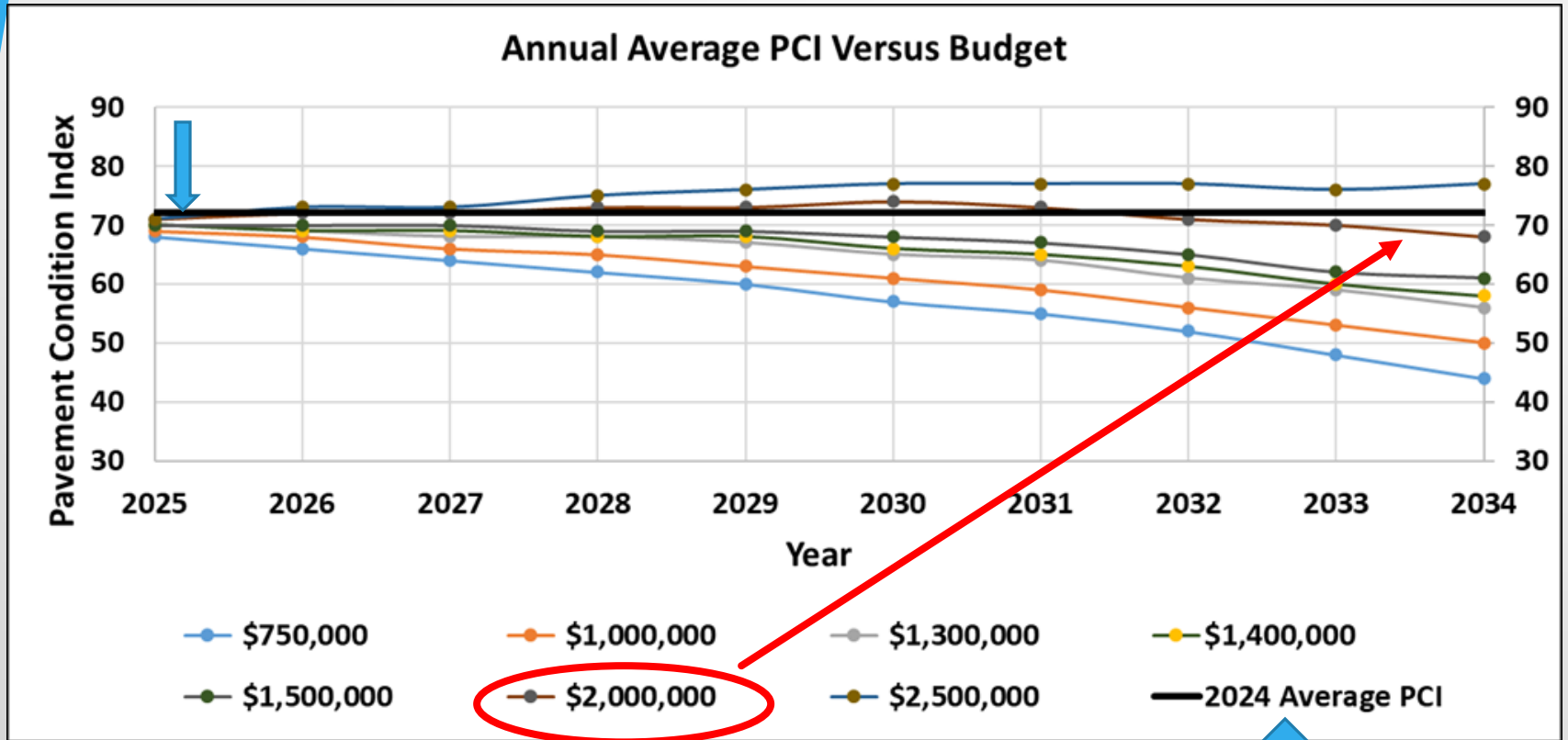


- Roadways with a condition rating <50 are typically programmed for major rehabilitation or reconstruction. (For both LCB & HCB Pavements)
- LCB - Roadways with a FAIR condition (PCI 50-60) are programmed for resurfacing & GOOD condition (PCI 61-75) are typically programmed for preventative maintenance
- HCB - Roadways with a GOOD condition (PCI 60 +/-) are programmed for resurfacing

Summary of Reconstruction & Resurfacing Needs Based on UNLIMITED BUDGET

Year	Major Rehab / Reconstruction	Resurfacing	Total	PCI
2025	7,015,828	5,992,259	13,008,087	80
2026	2,919,515	2,620,828	5,540,343	84
2027	2,667,368	3,378,261	6,045,629	89
2028	384,030	3,294,865	3,678,896	92
2029	-	1,594,303	1,594,303	93
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Total	\$ 13,769,831	\$ 18,759,611	\$ 32,529,442	

Future Road Network Condition



Average Pavement Condition Index for Various Funding Scenarios

Sustainable Funding Amount - Pavements

Budget Forecast Summary

\$2.5

100

Year	Major Rehab. (\$)	Resurfacing (\$)	Yearly Total (\$)	Network PCI
2025	316,080	1,638,974	1,955,054	71
2026	-	1,980,285	1,980,285	72
2027	-	1,958,848	1,958,848	72
2028	-	1,983,123	1,983,123	73
2029	-	1,767,507	1,767,507	73
2030	-	1,979,593	1,979,593	74
2031	913,590	1,084,396	1,997,986	73
2032	1,942,177	-	1,942,177	71
2033	1,826,127	148,908	1,975,035	70
2034	1,067,401	639,680	1,707,081	68
Total	\$ 6,065,376	\$ 13,181,313	\$ 19,246,689	

■ Major Rehab. ■ Resurfacing ■ PCI

- The Optimal resurfacing and reconstruction budget to maintain our PCI condition is \$2 million / year. This funding would be split between resurfacing & reconstruction as needed.

Bridge Network – Current Condition

The “2023 Municipal Bridge Appraisals” and BMS indicate the following:

- 46% of structures are considered “very good”
 - (do not require any work in the next 10 years)
- 11% of structures are considered to be in “good” condition
 - (requiring only maintenance work);
- 21% are in “fair” condition
 - (requiring minor rehabilitation and repair work within the next 10 years);
- 18% are in “poor” condition
 - (requiring major rehabilitation or replacement within the next 10 years).

Bridge Rehabilitation / Replacement Needs

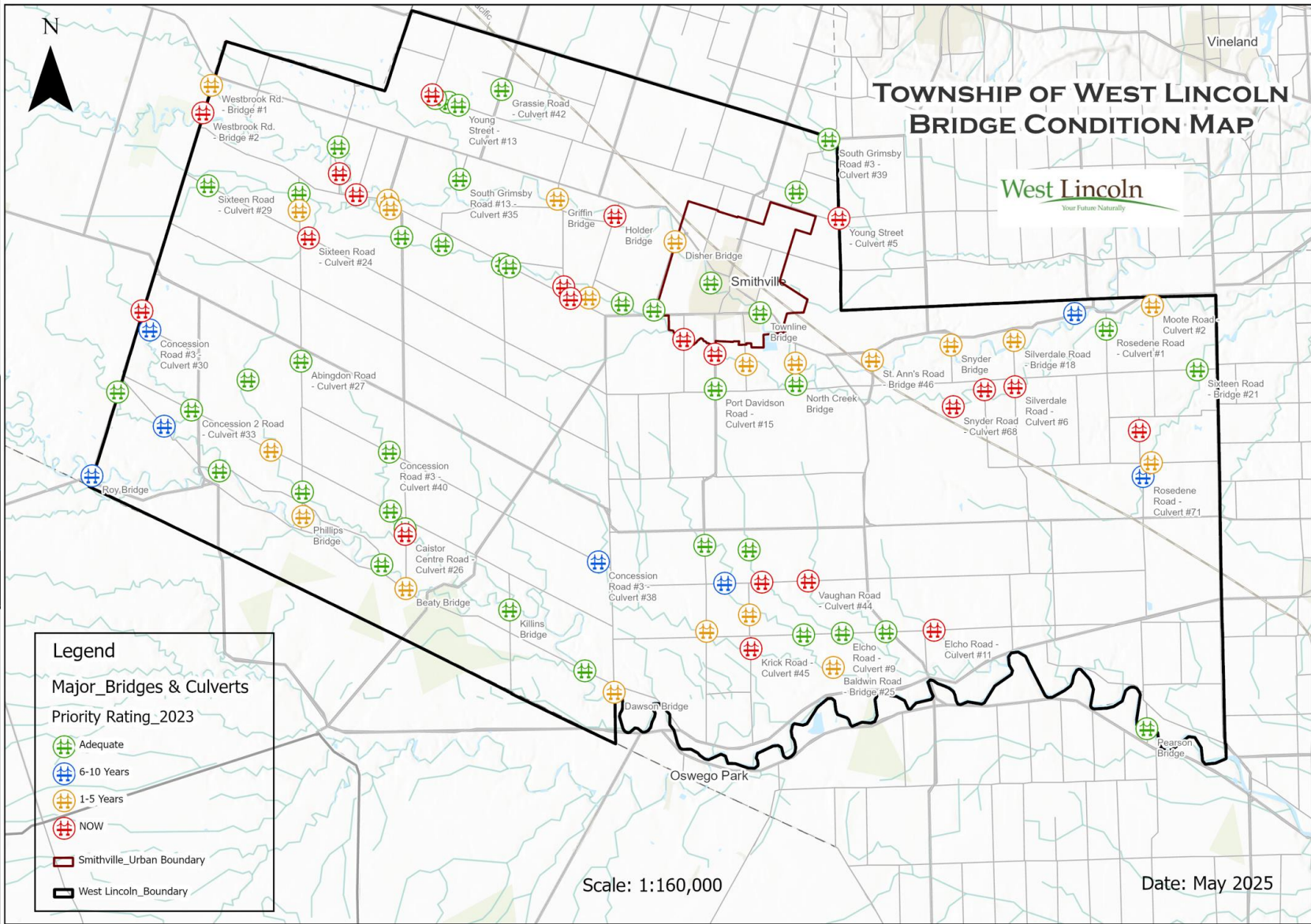
The biannual inspections and BMS prioritizes the maintenance, rehab / replacement needs in the following categories:

- NOW Needs
- 1 to 5 Year Needs
- 6 to 10 Year Needs
- Adequate

The table below summarizes our funding needs based on the 2023 Inspections:


	NOW Needs	1-5 YR Needs	6-10 YR Needs	TOTAL Needs
Total	\$2.9 M	\$9.4 M	\$4.0 M	\$16.3 M

- The total needs for the 10 year forecast amounts to \$16.3 million which translates to \$1.63 million per year.
- The Township's 2025 Capital Budget Forecast has an average of \$800,000 per year allocated.



SUMMARY – SUSTAINABLE FUNDING

- The Township is responsible for 387 (+98 gravel road) lane km of pavements & 91 structures.
- Based on the 2024 PMS update, funding needs on an annual basis to sustain the current pavement condition is in the order of \$2 million per year.
- Based on the recent biannual bridge and major culvert inspections/appraisals (2023), funding on an annual basis to address the total needs is in the order of \$1.63 million per year.
- The approved 2025 Budget and Forecast provides **\$2,000,000** and **\$800,000** per year for pavements and bridge structures respectively to keep the Pavement & Bridge Network in Optimal Condition.



Thank You

Questions ?