



THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

- A G E N D A -

Monday January 26, 2026

REGULAR MEETING OF COUNCIL

7:00 p.m., Council Chambers, Fingal/Via Video Link

1. CALL TO ORDER

2. ADDENDUM TO AGENDA

3. DISCLOSURE OF PECUNIARY INTEREST

CLOSED SESSION

- (a) 239(2)(a) the security of the property of the municipality or local board;
(IT Security)

4. ADOPTION AND REVIEW OF MINUTES

- (a) Draft Minutes of the Regular Council Meeting of January 12, 2026
- (b) Draft Minutes of the Court of Revision Meeting of January 12, 2026
- (c) Draft Minutes of the Winterfest Committee Meeting of January 14, 2026

5. DELEGATION

- (a) **7:30 p.m.** Tena Marie Moore, Old Timers Euchure **RE: Fee Reduction the use of the Keystone Complex**
- (b) **8:00 p.m.** OPP Detachment Commander Tyler Holmes and OPP Detachment Board Member Ida McCallum **RE: OPP Detachment Board Report 2025**

6. DRAINAGE

7. PLANNING

- (a) PLA 2026-01 Consent Application E12-26 11135 Sunset Road
- (b) PLA 2026-02 Consent Applications E13-26, 10882 Sunset Road/E14-26, 40684 Talbot Line

8. REPORTS

- (a) CBO 2026-03 Zero Waste Committee
- (b) FIN 2026-04 Budget Report #4
- (c) **8:30 p.m.** - Asset Management Plan Draft Report

9. CORRESPONDENCE

- (a) Fee Waiver Request – Shedden Soccer
- (b) ROMA RE: Ontario Court of the Drainage Referee Rules Drainage Act Applies to Railways

10. BY-LAWS

- (a) By-law No. 2025-67, a by-law to provide for drainage works- Edison Drain, third and final reading
- (b) By-law No. 2026-08, a by-law to submit an application to the Ontario Infrastructure and Lands Corporation (OILC) for certain financial works
- (c) By-law No. 2026-09, being a by-law to confirm the resolutions and motions of the Council of the Township of Southwold, which were adopted on January 26, 2026

11. OTHER BUSINESS *(For Information Only)*

12. CLOSED SESSION

- (a) 239(2) (c) a proposed or pending acquisition or disposition of land by the municipality or local board (Multiple properties)
- (b) 239(2) (h) information explicitly supplied in confidence to the municipality or local board by Canada, a province or territory or a Crown agency of any of them; (Ministry of Infrastructure)
- (c) 239(2) (b) personal matters about an identifiable individual, including municipal or local board employees (HR Matters)

13. ADJOURNMENT:

NEXT REGULAR MEETING OF COUNCIL

Monday February 9, 2026 @ 7:00 P.M.

Council Chambers, Fingal/Via Video Link



THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

MINUTES

Regular Council Meeting
Monday January 12, 2026
7:00 p.m. Council Chambers, Fingal, Shedden/Via Video Link

COUNCIL PRESENT: Mayor Grant Jones
Deputy Mayor Justin Pennings
Councillor Sarah Emons
Councillor Scott Fellows

ALSO PRESENT: Jeff Carswell, CAO/Clerk
Michele Lant, Director of Corporate Services/Treasurer
Aaron Van Oorspronk, Director of Infrastructure and Development
Services
Corey Pemberton, Director of Building and Community
Services/Chief Building Official
Jeff McArthur, Director of Emergency Services/Fire Chief
June McLarty, Deputy Clerk

REGRETS: Councillor John Adzija

Mayor Jones called the meeting to order at 7:00 p.m.

ADDENDUM TO AGENDA: None

DISCLOSURES: None

ADOPTION OF MINUTES:

Council Minutes – Adopt

2026-03 Deputy Mayor Pennings – Councillor Emons

RESOLVED THAT the Minutes of the Regular Council Meeting of
December 8th, 2025 are hereby adopted.

CARRIED

Committee Minutes – Review

2026-04 Councillor Fellows – Deputy Mayor Pennings

RESOLVED THAT Council had reviewed the draft Minutes of the War Memorial Committee Meeting of November 20th, 2025 and the draft Minutes of the Young at Heart Committee Meeting of December 11th, 2025

CARRIED

DELEGATION:

7:02 p.m. – 7:29 p.m.

Suday Jain, Watson & Associates Economists Ltd, **Asset Management Plan Additional Review**

Mr. Jain presented Council with additional information on the proposed Asset Management Plan. This information included two possible scenarios of having the Asset Management Plan phase-in period extending from either 10 years or 15 years. Mr. Jain also reported that once Council makes a decision on what period the plan is to include, a final report will be brought back for approval.

DRAINAGE:

Court of Revision – Edison Drain 2025

Appoint Members for Court of Revision

2026-05 Deputy Mayor Pennings – Councillor Emons

RESOLVED THAT Council of the Township of Southwold appoints Grant Jones as Chairman, Justin Pennings and Sarah Emons as members of the Court of Revision for the Edison Drain 2025.

AND THAT Council adjourn and form the Court of Revision for the Edison Drain 2025 at **7:30 p.m.**

CARRIED

Adjournment of Court of Revision

2025-06 Councillor Emons – Deputy Mayor Pennings

RESOLVED THAT the Court of Revision for the Edison Drain 2025 adjourns at **7:33 p.m.**;

AND THAT the regular meeting of Council reconvenes.

CARRIED

Appointment of Engineer – Burwell Drain

2026-07 Deputy Mayor Pennings – Councillor Emons

RESOLVED THAT Council received the request for a major improvement under Section 78(1.1) of the Drainage Act for the Burwell Drain and has decided to proceed with the project; and,

THAT Council now appoints the engineering firm Spriet Associates to prepare the necessary reports: and,

THAT notice will be sent to all required to be notified under the Drainage Act of Council's actions.

CARRIED

REPORTS:

FIR 2026-01 Activity Report – December 2025

Jeff McArthur, Director of Emergency Services/Fire Chief presented this report to Council for information purposes.

FIR 2026-02 Shedden Station 4th Bay

2026-08 Councillor Emons – Deputy Mayor Pennings

RESOLVED THAT Report FIR 2026-02 relating to the Shedden Station 4th Bay, be received for information; and,

THAT approval be given for staff to proceed with the pre-construction agreement as submitted by Westbuilt Structures Inc.

CARRIED

FIR 2026-03 Talbotville Station Technical Advisory Committee Update

2026-09 Councillor Fellows – Councillor Emons

RESOLVED THAT Report FIR 2026-03 relating to the TSTAC be received for information; and,

THAT the Talbotville Station Technical Advisory Committee (TSTAC) be dissolved.

CARRIED

IDS 2026-01 Activity Report – December 2025

Aaron VanOospronk, Director of Infrastructure and Development Services presented this report to Council for information purposes.

IDS 2026-02 Membrane Filter Replacement

2026-10 Deputy Mayor Pennings – Councillor Emons

RESOLVED THAT Report IDS 2026-02 relating to the membranes at the Talbotville Wastewater Treatment Plant, be received for information; and,

THAT the Mayor and Council of the Township of Southwold accept the Proposal from Newterra at a cost of \$207,044.00 (plus applicable taxes) to replace the Train one MicroClear cassettes with Zeeweed technology.

CARRIED

IDS 2026-03 2025 Drainage Reapportionment Confirmations

2026-11 Councillor Fellows – Deputy Mayor Pennings

RESOLVED THAT Council for the Township of Southwold hereby accepts the drainage reapportionment undertaken for the Consent Applications E29/24, E6/25, E16/25, E17/25, E21/25, E29/25 and E33/25 ; and,

THAT these reapportionments will become effective upon stamping of the applicable deed; and,

THAT a copy of this resolution and drainage reapportionment be filed in each applicable drain file.

CARRIED

FIN 2026-02 OPP Estimate

2026-12 Councillor Fellows – Deputy Mayor Pennings

RESOLVED THAT the 2026 OPP Cost Estimate be received for information.

CARRIED

FIN 2026-03 Financial Indicator Review

Michele Lant, Director of Corporate Services/Treasurer presented this report to Council for information purposes.

CBO 2026-01 Activity Report – December 2025 and Year-End Comparison

Corey Pemberton, Director of Building and Community Services presented this report to Council for information purposes.

CBO 2026-02 Memorial Forest

2026-13 Councillor Fellows – Councillor Emons

RESOLVED THAT Council adopt the recommendations of the Lower Thames Valley Conservation Authority regarding management of the Keystone Complex Memorial Forest; and,

THAT Director of Building and Community Services/CBO be directed to manage the Memorial Forest as set out in the recommendations; and,

THAT the Memorial Forest Management Plan be provided to the Keystone Complex Committee for information.

CARRIED

CAO 2026-01 Activity Report – December 2025

Jeff Carswell, CAO/Clerk presented this report to Council for information purposes.

CORRESPONDENCE:

- AMO RE: OMERS Governance Changes & Bill 68 Municipal Resource Toolkit
- Municipality of Central Elgin RE: Regional Consolidation of Conservation Authority
- Province of Ontario RE: Conservation Authority Engagement Session

Overview

- Kettle Creek Conservation Authority RE: Proposed Boundaries for the Regional Consolidation of Ontario's Conservation Authorities
- Township of O'Connor RE: Support for Township of Southwold's Consolidation of Conservation Authorities Resolution.

OMERS Governance Changes & Bill 68

2026-14 Councillor Emons – Councillor Fellows

WHEREAS the Ontario Municipal Employees Retirement System (OMERS) Pension Fund serves over 1,000 employers and over half a million employees and retirees from diverse groups including: municipal governments, school boards, libraries, police and fire departments, children's aid societies, and electricity distribution companies; and

WHEREAS the long-standing jointly-sponsored governance model with two corporate boards has provided stability, accountability, and fairness for both plan members and employers for more than two decades; and

WHEREAS the Government of Ontario has passed legislative changes to OMERS' governance structure through Bill 68; and

WHEREAS these changes would replace the current OMERS Sponsors Corporation with a new Sponsors Council that would lose its corporate status and independent resources; and

WHEREAS the proposed model could allow pension decisions affecting municipal employers and employees to be made without meaningful municipal oversight, increasing financial risk for municipalities and local taxpayers; and

WHEREAS municipalities are already under significant fiscal strain and cannot absorb additional pension costs without consequences for property taxes or local services;

THEREFORE BE IT RESOLVED THAT the Township of Southwold does not support the legislative changes to the OMERS Act contained in Bill 68 and requests that the Government of Ontario reconsider the advisability of proceeding with these changes;

FURTHER BE IT RESOLVED THAT the Township of Southwold's Council supports the Association of Municipalities of Ontario (AMO) in calling on the

Government of Ontario to:

1. Ensure Sponsors retain full control without restrictions over their appointments to the new Sponsors Council and Administration Corporation;
2. Guarantee the Sponsors Council's independence from the plan administrator and access to resources needed to perform its duties; and
3. Limit the Minister's regulation-making authority over plan design and the Sponsors Council's internal affairs.

BE IT FURTHER RESOLVED THAT this resolution be circulated to:

- The Honourable Rob Flack, Minister of Housing and Municipal Affairs;
- The Honourable Peter Bethlenfalvy, Minister of Finance; and,
- The Association of Municipalities of Ontario (AMO).

CARRIED

Council reviewed the other items under Correspondence.

BY-LAWS:

- By-law No. 2026-02, being a by-law to authorize borrowing from time to time to meet current expenditures during the fiscal year ending December 31st, 2026.
- By-Law No. 2026-03, being a by-law to provide for an interim tax levy, to provide for the payment of taxes and to provide for penalty and interest of 1.25 percent.
- By-law No. 2025-04, being a by-law to enter into an amending agreement with Infrastructure Ontario
- By-law No. 2026-05, being a by-law to execute an agreement with the Solicitor General – Fire Protection Grant
- By-law No. 2026-06, being a by-law to appoint a Committee of Adjustment

By-laws

2026-15 Councillor Emons – Deputy Mayor Pennings

RESOLVED THAT By-laws No. 2026-02, 2026-03, 2026-04, 2026-05 and 2026-06 be read a first and second time, considered read a third time and finally passed this 12th day of January, 2026.

CARRIED

OTHER BUSINESS

- Notice of Elgin County Transportation Master Plan

STAFF DIRECTION

Staff was given direction from Council to provide comments to the County on the Transportation Master Plan.

Asset Management Plan

Council further discussed the options for the Asset Management Plan.

CLOSED SESSION:

2026-16 Councillor Fellows – Deputy Mayor Pennings

RESOLVED THAT Council of the Township of Southwold now moves again into a session of the meeting that shall be closed to the public at **8:34 p.m.** in accordance with Section 239 (2) of the Municipal Act, S.O. 2001, c. 25 for discussion of the following matters;

- 239(2) (c) a proposed or pending acquisition or disposition of land by the municipality or local board (Multiple properties)
- 239(2) (h) information explicitly supplied in confidence to the municipality or local board by Canada, a province or territory or a Crown agency of any of them; (Ministry of Infrastructure)
- 239(2) (b) personal matters about an identifiable individual, including municipal or local board employees (HR Matters)

CARRIED

Adjournment of Closed Session

2026-17 Deputy Mayor Pennings – Councillor Fellows

RESOLVED THAT Council of the Township of Southwold adjourns the Closed Session of the Regular Council meeting at **10:35 p.m.**

CARRIED

STAFF DIRECTION

Staff was directed by Council to the items that were discussed in the Closed Session.

Confirmation By-law

2026-18 Councillor Emons – Deputy Mayor Pennings

RESOLVED THAT By-law No. 2026-07 be read a first and second

time, considered read a third time and finally passed this 12th day of January, 2026.

CARRIED

ADJOURNMENT:

2026-19 Deputy Mayor Pennings – Councillor Emons

RESOLVED THAT Council for the Township of Southwold adjourns this Regular meeting of Council at **10:37 p.m.**

CARRIED

Mayor
Grant Jones

CAO/Clerk
Jeff Carswell



Meeting of the Court of Revision

Edison Drain 2025

Monday January 12, 2026

**Held at the Council Chambers, 35663 Fingal Line, Fingal, Ontario/Via
Video Link**

Members – Court of Revision Edison Drain 2025

C of R 2026-01 **MOVED BY:** Justin Pennings
 SECONDED BY: Sarah Emons

THAT Council of the Township of Southwold appoints Grant Jones as Chairman, Justin Pennings and Sarah Emons as members of the Court of Revision for the Edison Drain 2025.

AND THAT Council adjourn and form the Court of Revision for the Ryan Drain 2024 at **7:30 p.m.**

CARRIED

Chairman Jones stated that this is a Court of Revision as required by the Drainage Act to afford any person assessed on the Edison Drain 2025 provisionally adopted by By-law 2025-67 on Monday November 24, 2025 to make an appeal with respect to their assessments.

Chairman Jones asked if everyone was notified in an appropriate way that is required to be notified under the Drainage Act. The Clerk responded yes. On November 25, 2025 all parties required to be notified under Section 46 of the Drainage were sent by regular mail or email a copy of the Provisional By-law with a Notice of the Sitting of this Court of Revision. A second notice of the first sitting of the Court of Revision was sent out on December 16, 2025. This notice also informed all landowners of the Drainage Acts requirement to notify the Clerk in writing, of an appeal to the Court of Revision 10 days before the first sitting of the Court of Revision.

The notice sent to the developer contained a letter from the engineer and an updated drawing for the drain. The letter confirmed that the developer was responsible for all costs of the report and the updated drawing specified the access location to the drain for future maintenance

Chairman Jones asked the Clerk if any appeals were received in writing 10 days prior to this sitting of this Court of Revision from any assessed landowners. The Clerk responded no.

Chairman Jones stated that hearing no appeals to the Court of Revision may I have a resolution to adopt the assessment schedule contained in the report for the Edison Drain 2025.

C of R 2026-02 MOVED BY: Justin Pennings
SECONDED BY: Sarah Emons

RESOLVED THAT the Court of Revision adopts the assessment schedule contained in the report dated September 19, 2025 for the Edison Drain 2025

CARRIED

Adjournment Court of Revision – Edison Drain 2025

C of R 2026-03 MOVED BY: Sarah Emons
SECONDED BY: Deputy Mayor Pennings

RESOLVED THAT the Court of Revision for the Ryan Drain 2024 adjourns at **7:33 p.m.;**

AND THAT the regular meeting of Council reconvenes.

CARRIED

Chairperson

Secretary-Treasurer



Southwold Winterfest Committee

Minutes

Winterfest Committee Meeting

Wednesday, January 14th , 2025, at 6:30 pm

Keystone Complex, Shedden

Committee Member Present:

Councillor Scott Fellows

Jane Cox

Scott Young

Joe McKinnon

Darlene Wadsworth

Regrets:

Abi Drewitt

Councillor John Adzija

Darryl Adams

Lizanne Kerkvliet

Staff Present: Lori Redman

1. Meeting to Order and Welcome

The meeting was called to order at 6:43 pm by Co-Chairperson Scott Fellows.

Motioned: Jane Cox

Seconded: Darlene Wadsworth

CARRIED

2. Approval of the Agenda

The Agenda for the January 14th, 2026 meeting be approved.

Motioned: Darelene Wadsworth

Seconded: Jane Cox

CARRIED

3. Approval of the Minutes from the Previous Meeting

The Minutes of November 12th, 2025, Winterfest Committee Meeting were approved.

Motioned: Jane Cox

Seconded: Scott Young

CARRIED

4. 2026 Event Planning

Event Space/Item	Assigned To	Considerations
Site Plan	Committee	Snow Removal - planning for adverse weather Event. Create a map to highlight <ul style="list-style-type: none">• the parking area• the ice rink• Games and play area (which will remain in the same positions)• Food tables (which will remain in the same positions)
Entertainment	Scott Fellows Scott Young	Entertainment booked. \$450.00. Fee includes live entertainment and mixed music. The committee suggested moving the entertainment stage to the pavilion so there is more protection from the wind (southwest corner) Shelter and stage for the entertainment will be provided by redemption tent.

Entertainment Schedule	Committee Steve Garvin	Entertainment 4:30 p.m. to 6:30 p.m. (2 hours) Speeches: 6:30 p.m. to 6:45 p.m. Fireworks: to follow speeches
Entertainment	Darlene Wadsworth	Bonhomme costume has been booked. \$50.00 plus \$100 deposit. Costume can be picked up on February 14th, 2026. Return by noon on February 17th, 2026. Scott Young will pick up for the event.
Advertising	Abi North	Update the Southwold Winterfest posting and include it on the Southwold website. Shuttle will not be provided for those attending.
Programs/Schedule	Scott Fellows Committee/Abi North	Attending: Southwold Mayor Jones County Warden Giguere Members of Southwold Council MP Andrew Lawton Dignitaries attending will be notified by email closer to the date. MPP Rob Flack sends his regrets
Auxiliary Police	Jane Cox	3-4 Auxiliary police booked for the event. Schedule for 4:00 pm – 7:00 pm
Hay Bales	Darlene Wadsworth	40 Bales to be provided by Collards. Scott Fellows will pick up the bales on the day of. Darlene will confirm the pickup location.
Lighting	Scott Fellows Scott Young	St Thomas Rental - 2 portable lights. 50 feet of string lights.
Food/Hot Chocolate & Orange Juice	Scott Fellows Southwold Fire Department Jane Cox	Food has been ordered through Country Grocery. 1100 hotdogs will be distributed. Drinking cups to be purchased. Hot dogs and hot chocolate will be prepared by the fire department Orange drinks will be available this year. 70 Dozen cookies have been ordered.

Food Signage	Scott Young	Signage to direct people to the condiment tables and drinks /cookies table to prevent congestion.
Volunteers	Scott Young /Committee	Scouts will help set up the children's play area and will help supervise. Volunteers have been contacted. 12:00 pm start time to help with setup.

Play Area	Scott Young	Scott Young will be bringing items for the outdoor play area. Tubes, cones, and plastic barrels. Members of the committee will bring items suitable for play.
Ice Skating	Committee	Will advertise on the poster that skating may be available weather permitting and will continue to update closer to the event.on social media.
Snow moulds	Scott Fellows	N/A
Believe in Wonder	Scott Fellows	Popcorn machine, large outdoor games, delivery & setup. Pre-packaged cotton candy & fresh spun will be provided. \$2089.93
Budget	Committee	Will forward updated budget to committee members once all receipts have been submitted.

5. Other Business

M.P.P Andrew Lawton and Warden for Elgin County Jacqueline Giguere will be attending. They would like to know when they would be speaking and for how long they would need to address those attending the event.

6. Next Meeting:

N/A

Motioned: Joe McKinnon

Seconded: Jane Cox

CARRIED

7. Adjournment:

Meeting adjourned at 8:30 pm

Motioned: Darlene Wadsworth

Seconded: Jane Cox

CARRIED

DRAFT



THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

DELEGATION REQUEST FORM

This Delegation Request Form, and any written submissions or background information for consideration by either Council or Committees of Council must be submitted to the Clerk's office by the following deadline:

12:00 NOON ON THE WEDNESDAY PRIOR TO THE REQUESTED MEETING DATE

COUNCIL/COMMITTEE/ADVISORY COMMITTEE DATE: Old Timers Euchure

SUBJECT: Euchure

NAME OF SPOKESPERSON: TeraMarie Moore

NAME OF GROUP OR PERSON(S) BEING REPRESENTED (if applicable):

Old Timers Euchure

BRIEF SUMMARY OF ISSUE OR PURPOSE OF DELEGATION:

Fee reduction for use of the Keystone Complex; as we are non-profit.

PLEASE COMPLETE THE FOLLOWING:

Have you been in contact with Municipal Staff or a Council Member regarding your matter of interest?

Yes ☒ No ☐

IF YES, WITH WHOM? Allison

DATE: Nov 26/25

I acknowledge that the Municipal Procedural By-law permits ten (10) minutes for Delegations.

**INFORMATION ON THIS PAGE OF THE FORM WILL BE
PRINTED
ON A PUBLIC AGENDA**

The Clerk's office will confirm your Delegation by telephone and/or e-mail after receiving this form. Due consideration will be given to your request.

Accommodating your request for a certain meeting date and time will depend on the length of the agenda in question. You will be advised of the earliest possible date when your delegation may be heard by Council.

CONTACT INFORMATION:

NAME: Tera Marie Moore

ADDRESS: [REDACTED] Street Address
[REDACTED]
[REDACTED] Town/City [REDACTED] Postal Code

PHONE: [REDACTED] **FAX:** _____

home and/or cell

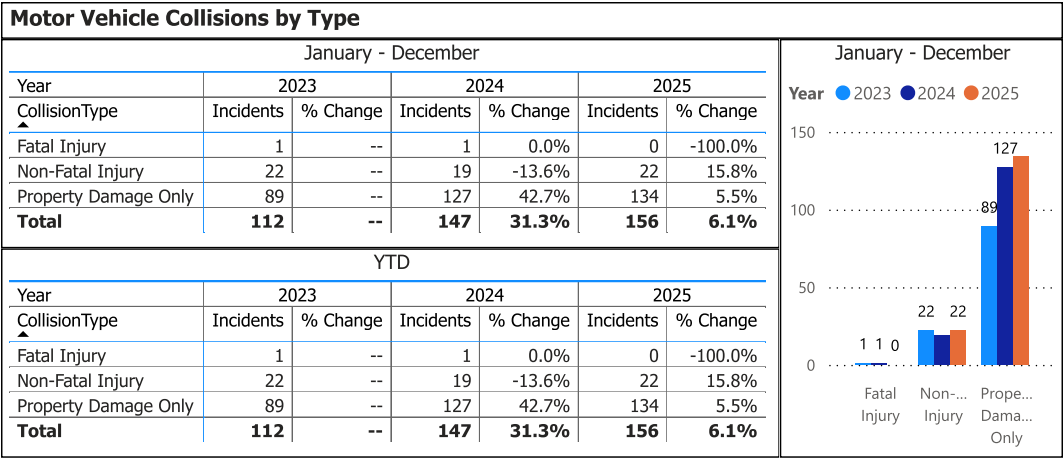
E-MAIL: [REDACTED] **WEBSITE:** [REDACTED]

DO YOU REQUIRE ANY ACCESSIBILITY ACCOMMODATION? YES ☒ NO ☐

IF YES, WHAT DO YOU REQUIRE?

Should you require assistance completing this form, please contact the Municipal Office at (519) 769-2010.

OPP Detachment Board Report
Collision Reporting System
January - December 2025



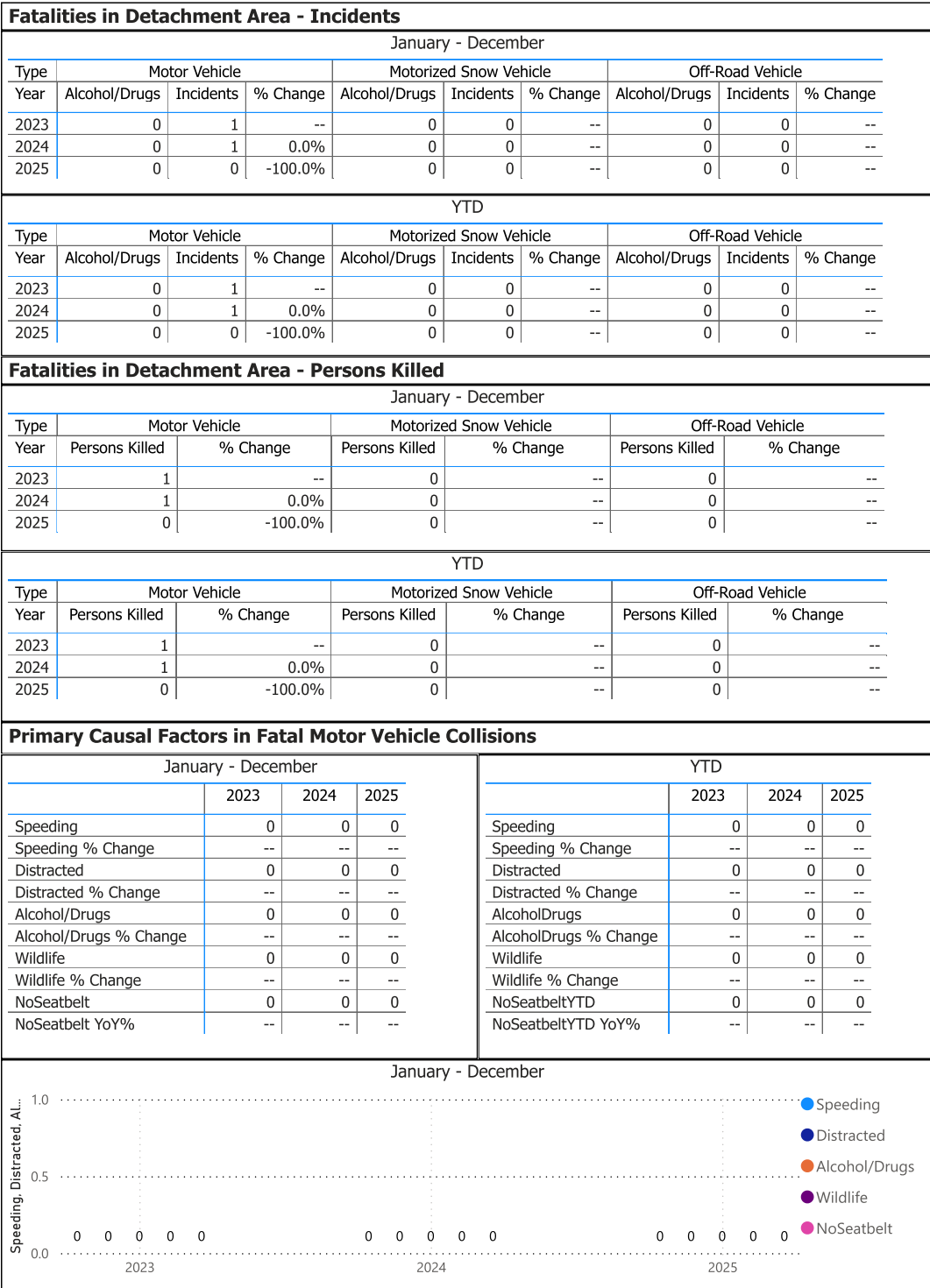
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22-Jan-2026

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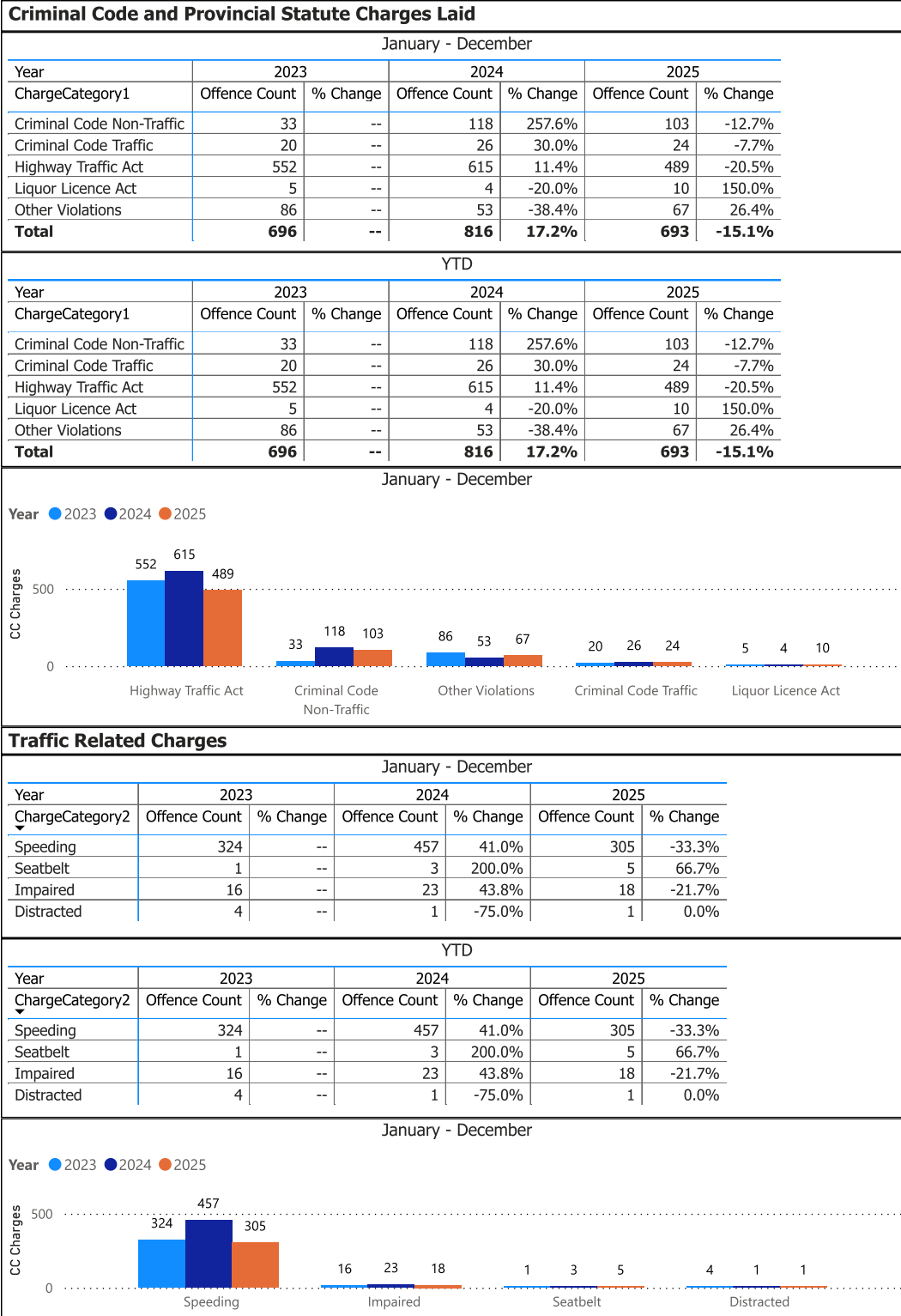
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OPP Detachment Board Report
Collision Reporting System
January - December 2025



**OPP Detachment Board Report
Records Management System
January - December 2025**



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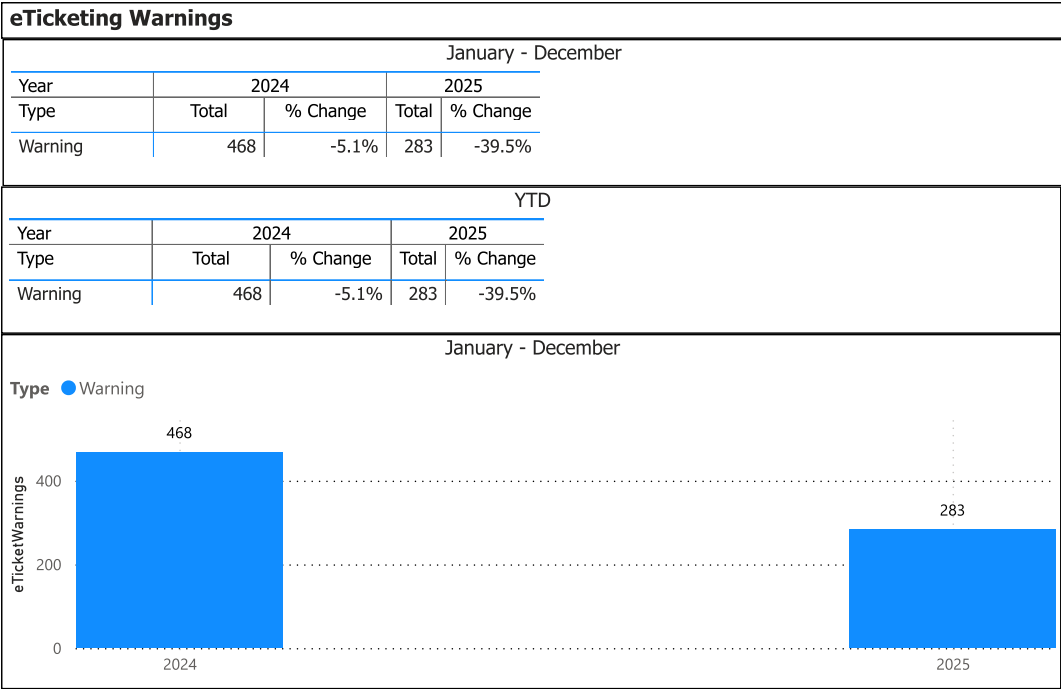
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January - December 2025

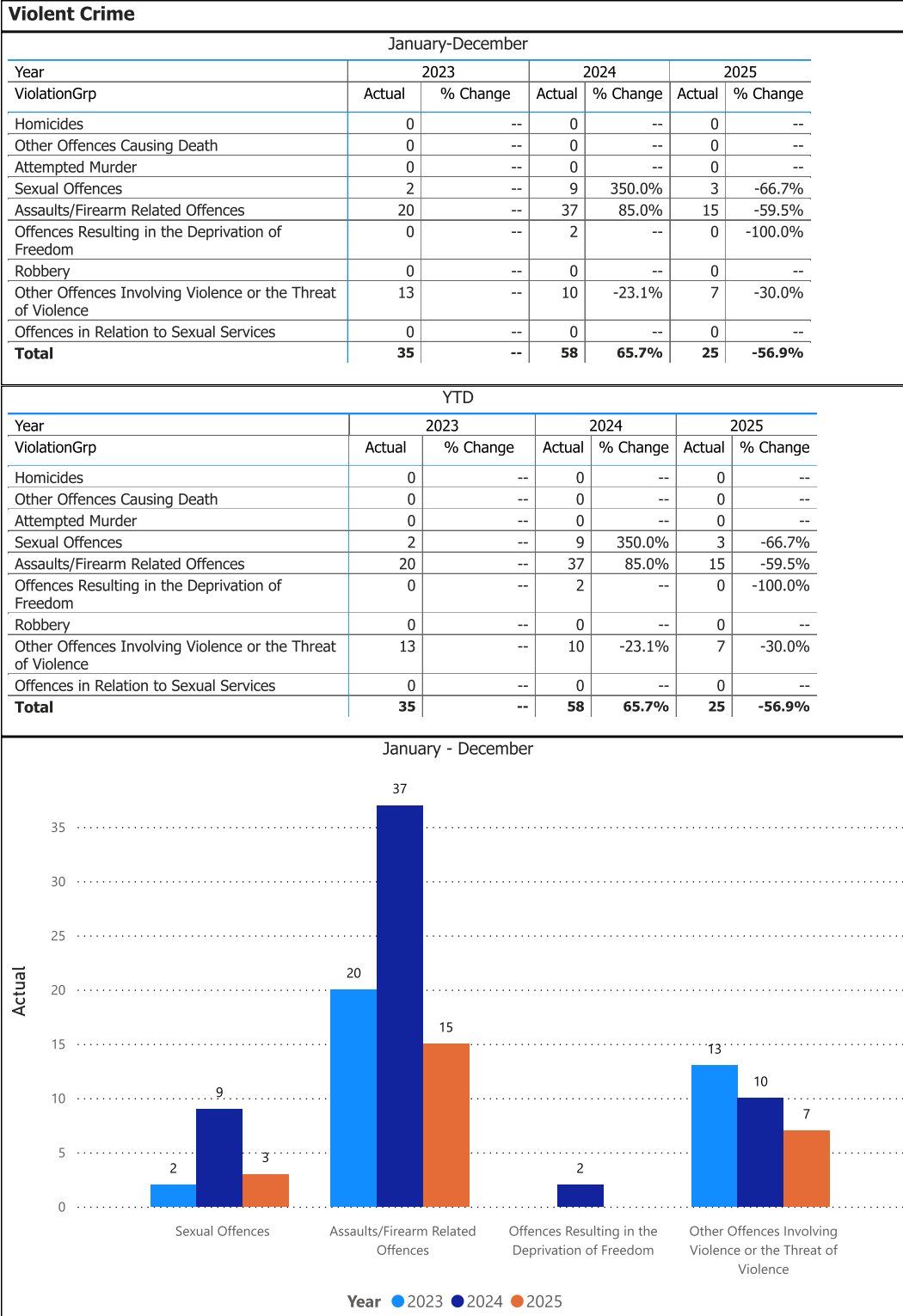


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**OPP Detachment Board Report
Records Management System
January - December 2025**



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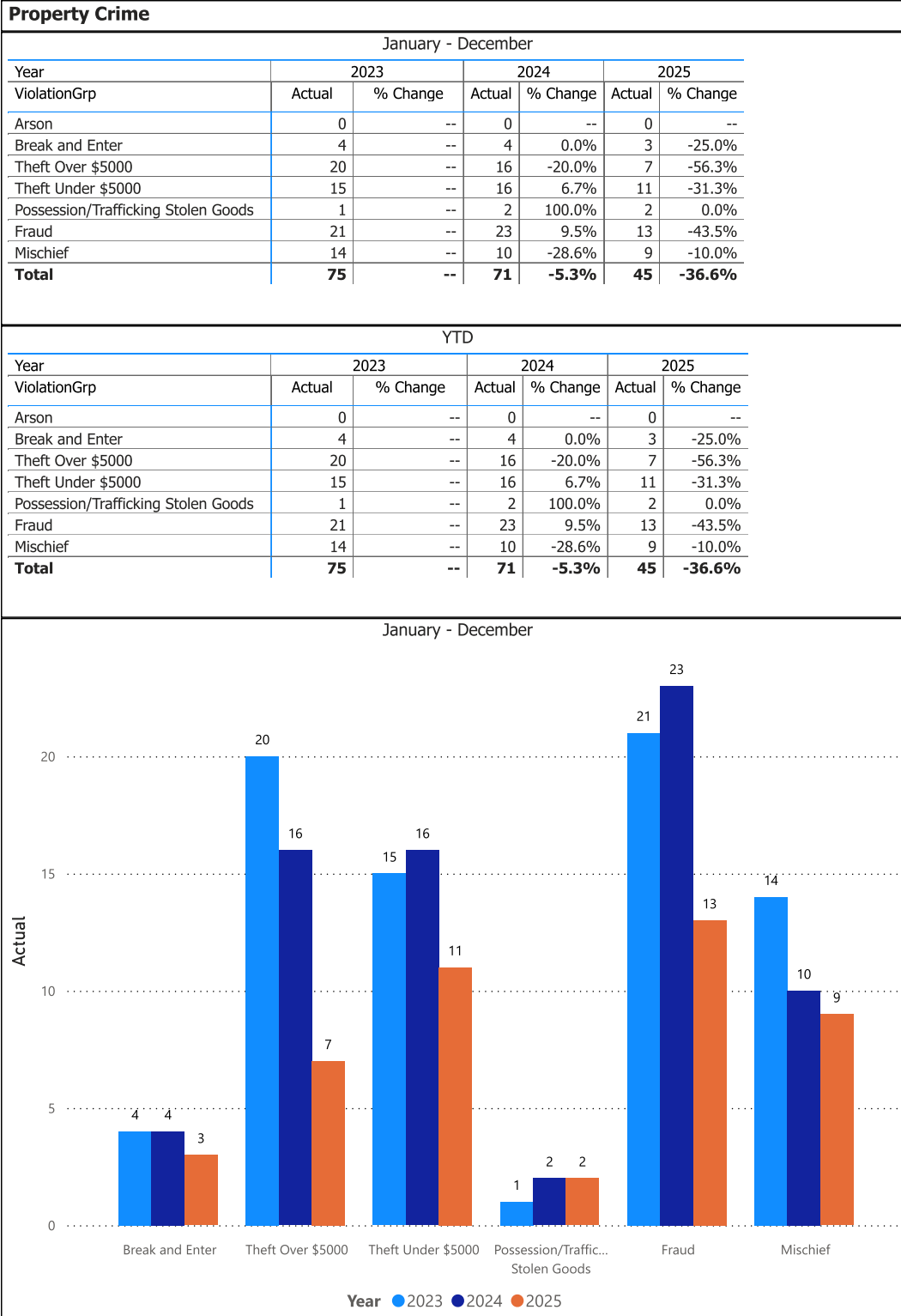
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**OPP Detachment Board Report
Records Management System
January - December 2025**



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Area(s): 6049 - Twp of Southwold

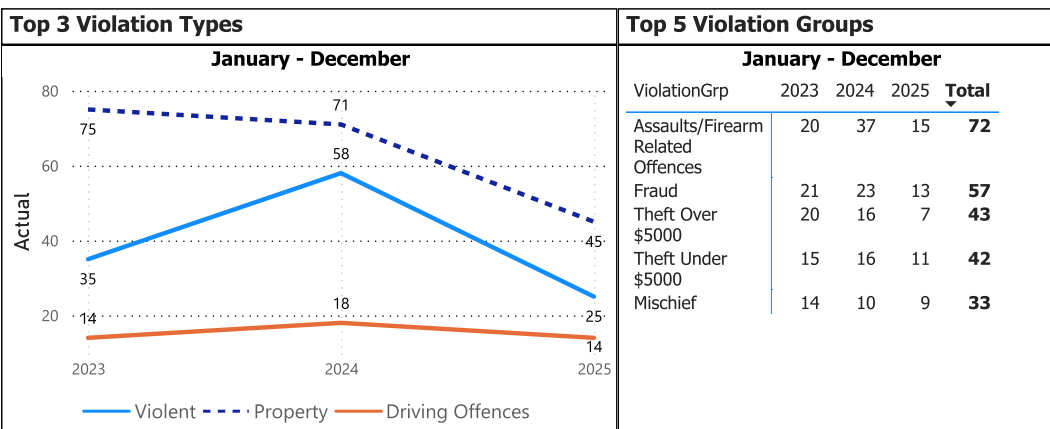
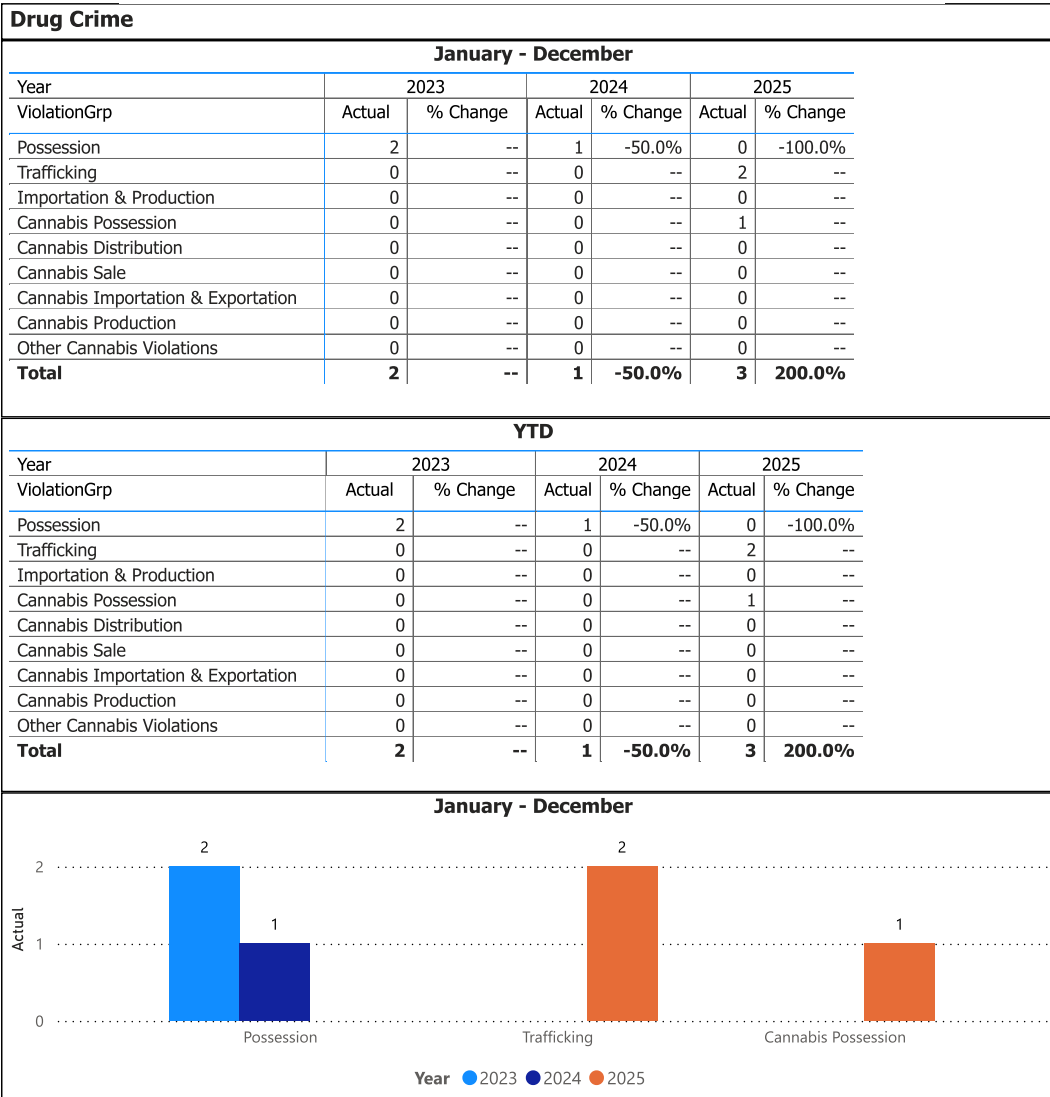
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**OPP Detachment Board Report
Records Management System
January - December 2025**



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Area(s): 6049 - Twp of Southwold

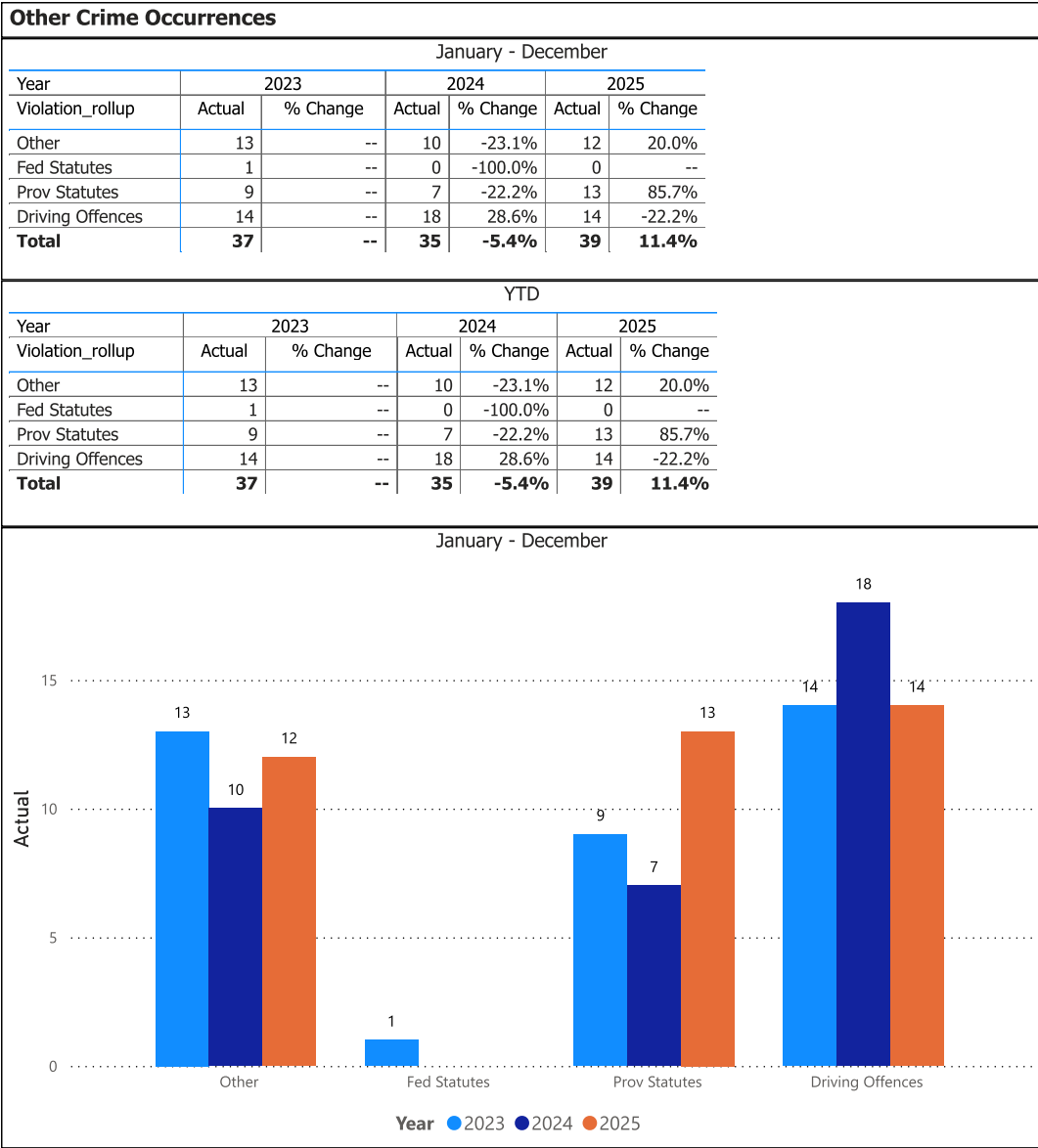
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January - December 2025

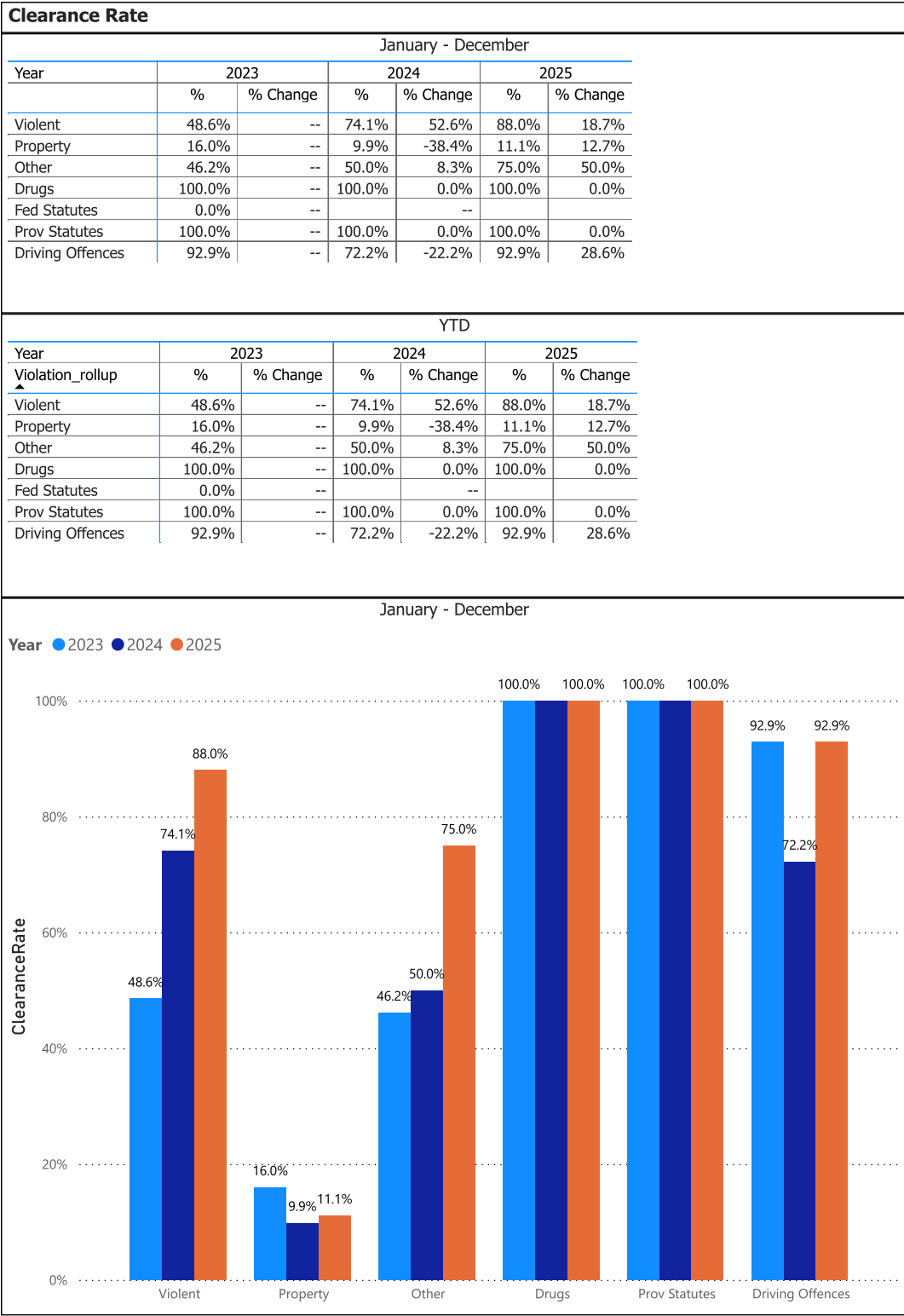


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January - December 2025

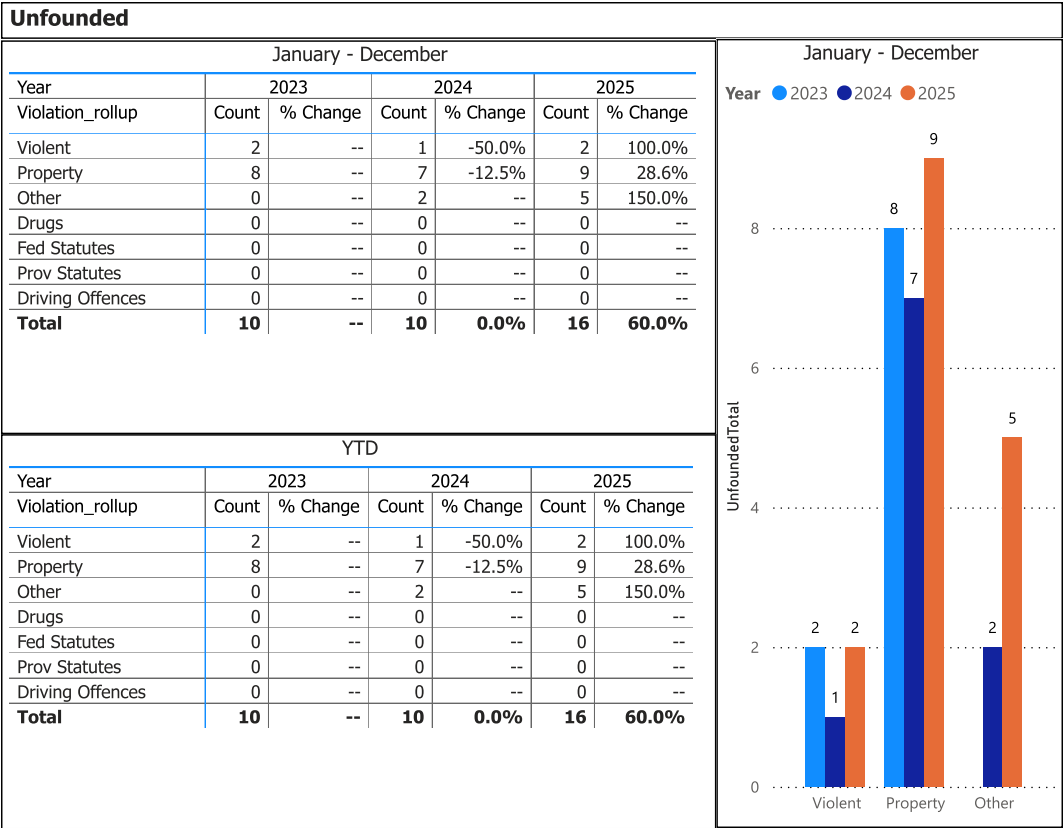


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OPP Detachment Board Report
Records Management System
January - December 2025

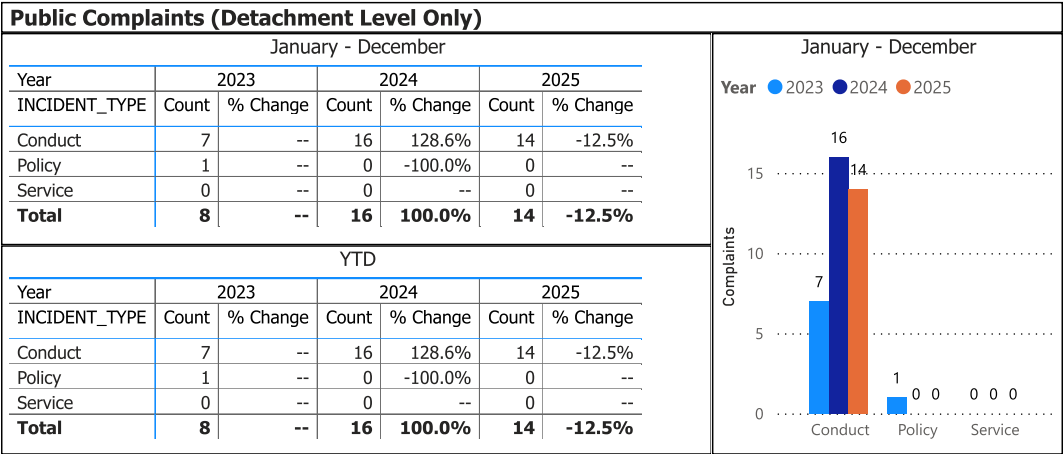


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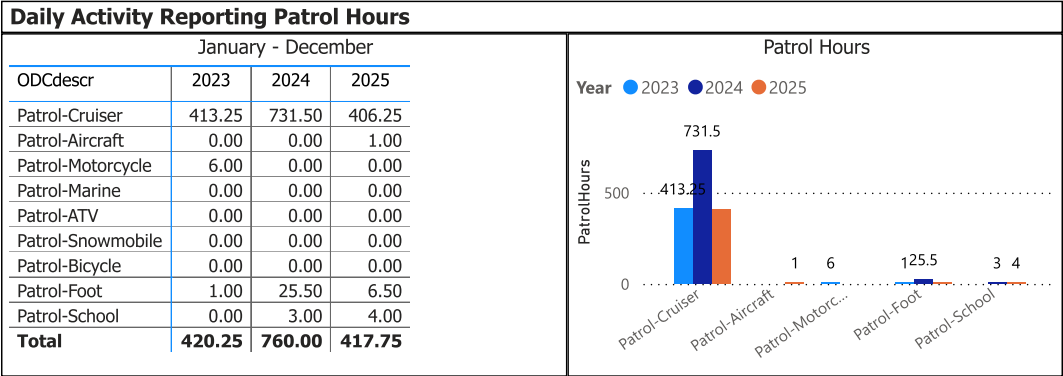
OPP Detachment Board Report
Records Management System
January - December 2025



Data source: RMS Data Feed
Ontario Provincial Police, Professional Standards Bureau Commander Reports - File Manager System

Data source date:
22-Jan-2026

Daily Activity Reporting



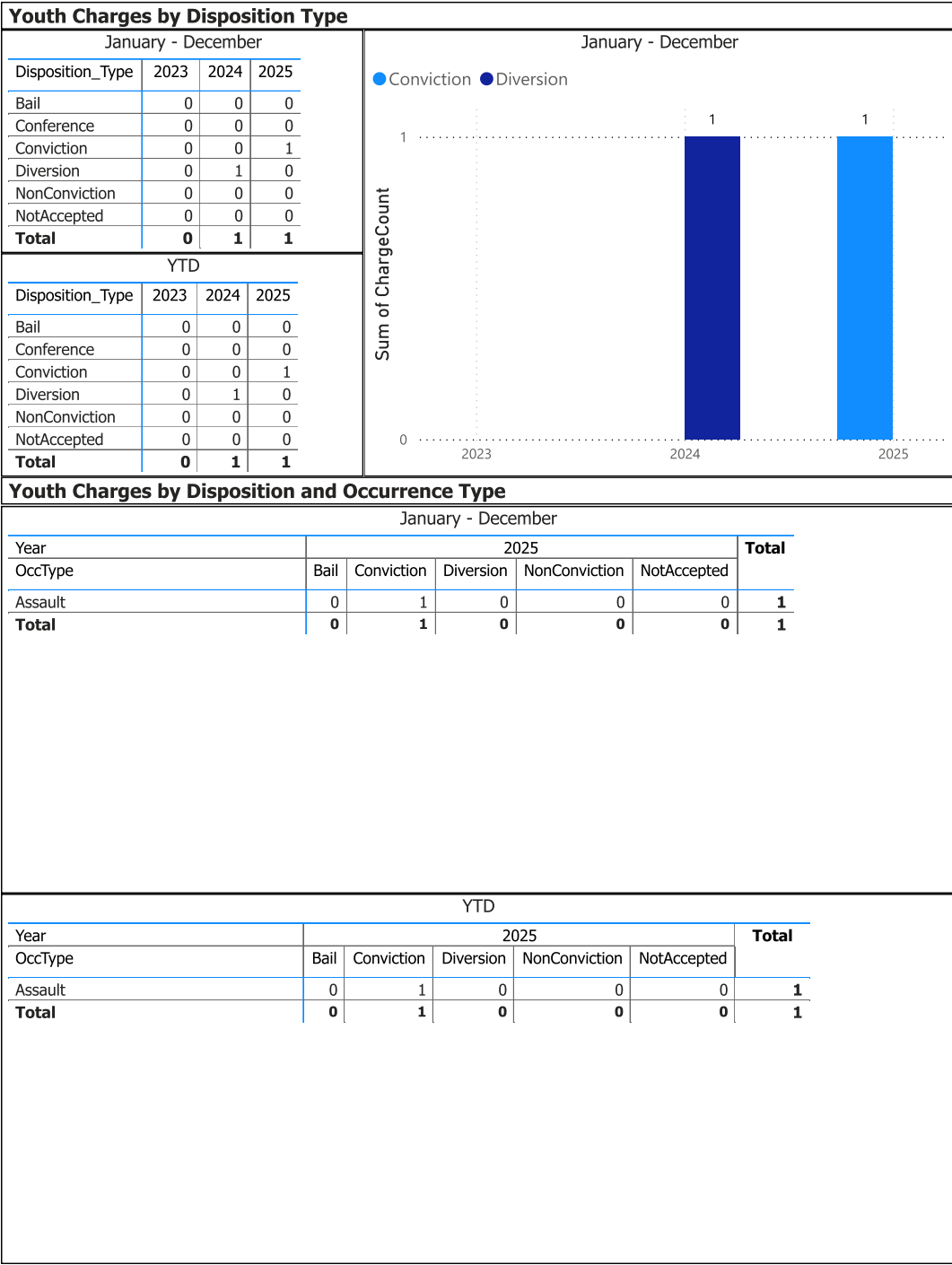
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Detachment: 6P - ELGIN COUNTY
Location code(s): 6P00 - ELGIN COUNTY

Data source date:
22-Jan-2026

Report Generated on:
22-Jan-2026 10:33:05 AM

OPP Detachment Board Report
Records Management System
January - December 2025



January - December

Year	2025					Total
OccType	Bail	Conviction	Diversion	NonConviction	NotAccepted	
Assault	0	1	0	0	0	1
Total	0	1	0	0	0	1

YTD

Year	2025					Total
OccType	Bail	Conviction	Diversion	NonConviction	NotAccepted	
Assault	0	1	0	0	0	1
Total	0	1	0	0	0	1

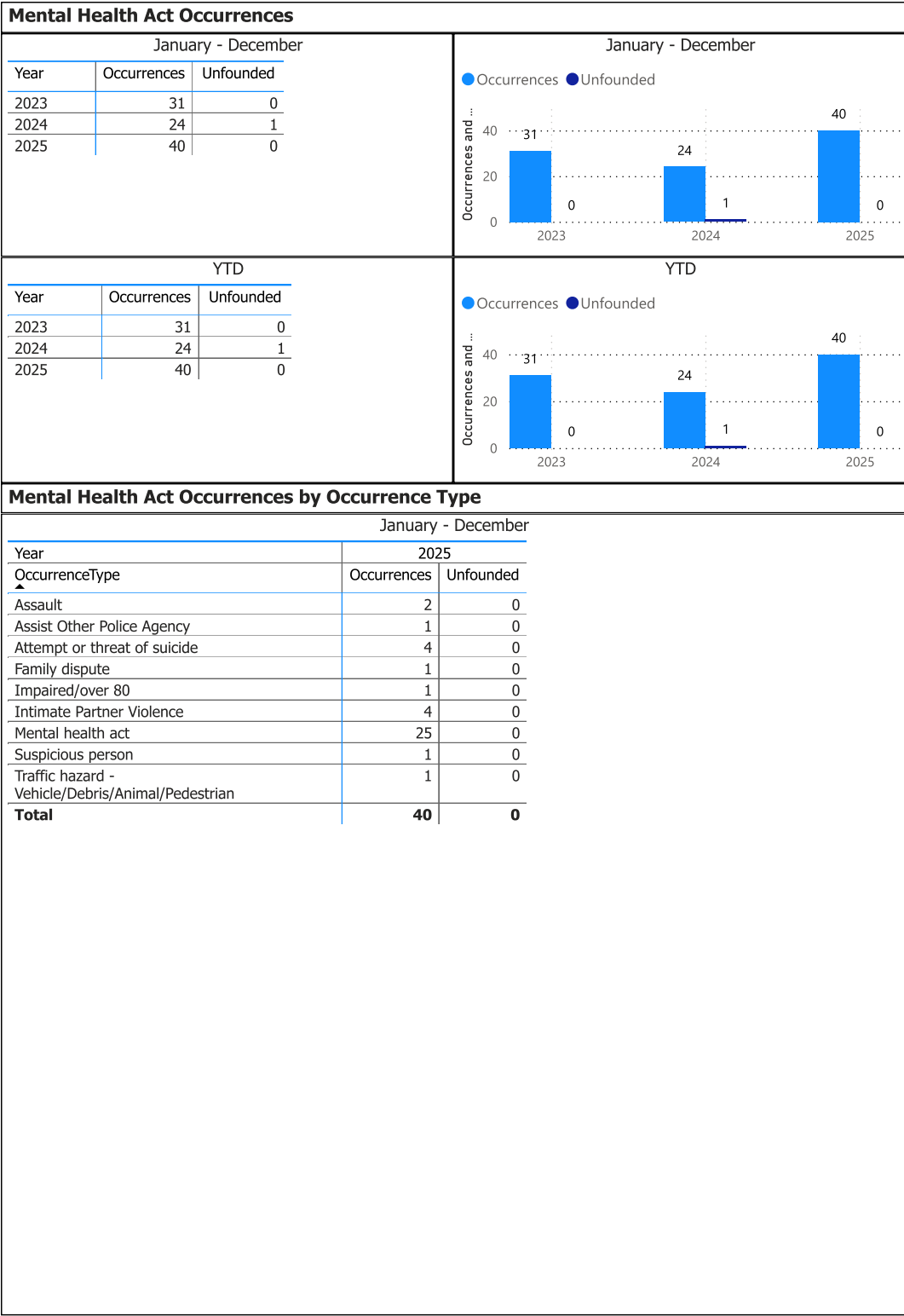
The tables and chart on this page present summarized youth charges by disposition and occurrence type that have been recorded in the OPP Niche RMS application. Of note... the Niche data sourced for this report page only lists youth charges that have had a disposition type entered against them. Therefore, please be aware that the counts of youth charges entries on this report page are under stating the potential sum of youth charges that are in OPP Niche RMS.

Detachment: 6P - ELGIN COUNTY
Location code(s): 6P00 - ELGIN COUNTY

Area(s): 6049 - Twp of Southwold
Data source date:
22-Jan-2026

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22-Jan-2026 10:34:09 AM

OPP Detachment Board Report
Records Management System
January - December 2025



Detachment: 6P - ELGIN COUNTY
Location code(s): 6P00 - ELGIN COUNTY

Area(s): 6049 - Twp of Southwold
Data source date:
22-Jan-2026

Report Generated on:
22-Jan-2026 10:33:05 AM

OPP Detachment Board Report
Records Management System
January - December 2025

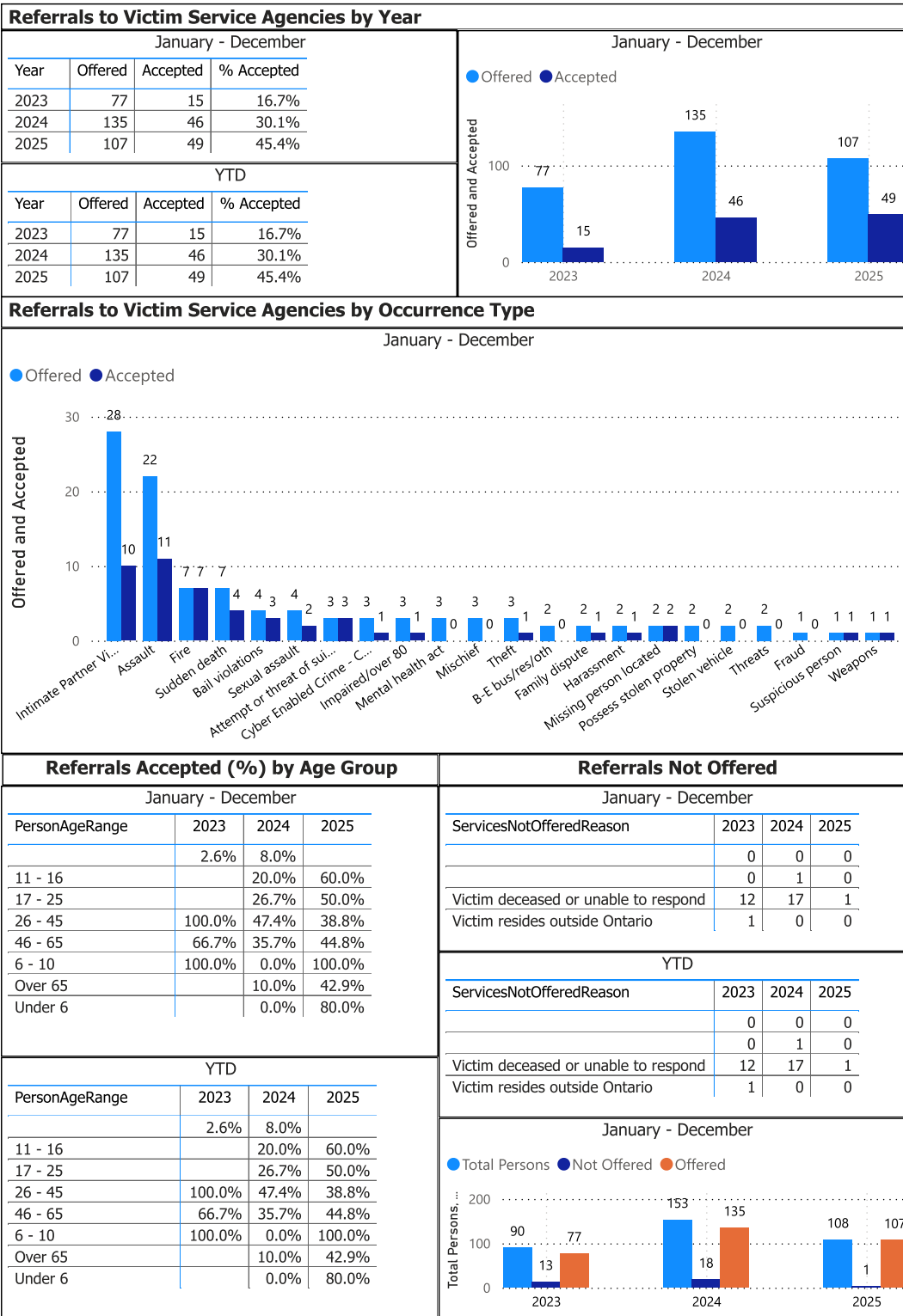


Detachment: 6P - ELGIN COUNTY
Location code(s): 6P00 - ELGIN COUNTY

Area(s): 6049 - Twp of Southwold
Data source date:
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Report Generated on:
22-Jan-2026 10:33:05 AM

OPP Detachment Board Report Records Management System January - December 2025



Detachment: 6P - ELGIN COUNTY

Location code(s): 6P00 - ELGIN COUNTY

Area(s): 6049 - Twp of Southwold

Data source date:

22-Jan-2026

Report Generated on:

22-Jan-2026 10:33:05 AM



TOWNSHIP OF SOUTHWOLD

Report to Council

MEETING DATE: January 26, 2026

PREPARED BY: Paul Clarke, Planner

REPORT NO: PLA 2026-01

SUBJECT MATTER: Consent Application E 12-26

Recommendation:

1. That Council recommend approval to the Elgin County Land Division Committee for Consent Application E 12-26 subject to the recommended conditions provided in this report.

Purpose:

The applicant proposes to sever a parcel with a frontage of 68.5m, a depth of 129.5m, and an area of 0.888ha for a surplus farm dwelling. The applicant proposes to retain a parcel with an area of 6.88ha to remain in agricultural use.

A severance sketch illustrating the proposed severances is attached to this report as Appendix 1.

Consent Applications E 12-26 have been submitted to Elgin County for lands located within the Township of Southwold.

Background:

Application No.	E 12-26
Owners:	Oegema Grains Ltd.
Agent:	Robert Brown
Address:	11135 Sunset Road
Water Supply:	Municipal Water Supply
Sewage Supply:	Private septic
Buildings/Structures	Single detached dwelling
Elgin County Official Plan	Agricultural Area
Application No.	E 12-26
Township Official Plan Designation	Agricultural

Planning Analysis:

Consent Applications E12-26 were submitted to, and declared complete, by Elgin County. Elgin County is the Approval Authority for applications considered under Section 53 of the *Planning Act*. The Township of Southwold is a commenting agency and provides a recommendation to the Land Division Committee, including conditions of approval.

Consent Applications E 12-26 was reviewed by staff with consideration to the Provincial Planning Statement (2024), Elgin County Official Plan, Township of Southwold Official Plan, and the Township of Southwold Zoning Bylaw 2011-14. A summary of the applicable planning policies and regulations, as well as the relevancy to the subject application and commentary are provided below.

Legislation	Section(s)	Relevance To Application	Comments
Provincial Planning Statement, 2024	2.6 Rural Lands in Municipalities 4.3.3 Lot Creation and Lot Adjustments	<ul style="list-style-type: none">Residential development, including lot creation, where site conditions are suitable for the provision of appropriate sewage and water servicesResidential lot creation for a surplus residence is permitted, based on lot size limits, appropriate servicing	Residential lot creation is permitted in the rural area when surplus to an agricultural operation, subject to regulations and appropriate servicing
Elgin County Official Plan	5.9 New Residential Lots in Agricultural Area	<ul style="list-style-type: none">New lots are permitted to sever surplus farm dwellings	County OP permits surplus farm dwelling severances provided lot is minimum in size and retained lands are rezoned to prohibit residential development
Township of Southwold Official Plan	5.1 Agricultural Area 7.23.4 Agricultural Consent Policies	<ul style="list-style-type: none">Existing single-detached non-farm dwellings are permittedLand severances in the Agricultural Area may be permitted for surplus	Residential lot creation for surplus farm dwellings may be permitted subject to conditions

Legislation	Section(s)	Relevance To Application	Comments
		farm dwellings, subject to conditions	
Township of Southwold Zoning Bylaw	Agricultural 1 (A1)	<ul style="list-style-type: none"> A zoning amendment is required for both the severed and retained lands. 	A zoning by-law amendment will be required to rezone the retained farm parcel to an A3 special provision zone to prohibit residential dwellings and to permit a reduced lot area and frontage. The surplus farm lot requires a special provision permitting an increased lot area.

Consultation:

Consent Applications E 12-26 was circulated internally for review and comment by Township departments. At the time of writing this report, the following comments have been received and where applicable, recommended conditions of approval have been included.

Finance	No comments
Infrastructure	Severed lot must comply with MTO access requirements
Chief Administrative Officer	No comments
Building Department	Requests septic system plan
Drainage	A drainage reapportionment completed for the James Fife, Lindsay and Talbotville Municipal Drains. That the owners enter into a Mutual Drainage Agreement in accordance with the Drainage Act, R.S.O., 1990, as amended, to the satisfaction of the Township.

Environmental Services	No comments
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Conclusion:

Planning staff recommend support of Consent Applications E 12-26, which would facilitate the severance of a dwelling which is surplus to the needs of a farming operation. This recommendation is subject to the conditions listed below to Planning Report PLA 2026-01. This report and recommended conditions of approval will be forwarded to the Elgin County Land Division Committee and should be considered in the decision-making process.

- That the Applicant must pay all fees, and satisfy all obligations required pursuant to the duly enacted by-laws of the Township of Southwold, to the satisfaction of the Municipality.
- That the Applicant successfully apply to the Township and obtain a zoning by-law amendment to rezone the retained farm parcel to an Agricultural 3 (A3) special provision zone, and the severed lot to an Agricultural 1 (A1) special provision zone.
- That, if necessary, closure and removal of the northern entrance to the proposed severed lot if it does not comply with MTO access requirements.
- That the applicant provides the Township with a plan showing the location of the septic system and setbacks from proposed lot lines.
- That the applicant has a drainage reapportionment completed for the James Fife, Lindsay and Talbotville Municipal Drains, to the satisfaction and clearance of the Township.
- That the owners enter into a Mutual Drainage Agreement in accordance with the Drainage Act, R.S.O., 1990, as amended, to the satisfaction of the Township.

Financial and Resource Implications:

Township application fees were collected in accordance with the Township's Tariff of Fees By-law, as amended from time to time.

Approval of the application will have no significant financial impact on the Township.

Strategic Plan Goals:

The above recommendation helps the Township meet the Strategic Plan Goal of:

- ☒ Managed Growth
- ☒ Welcoming and Supportive Neighbourhoods
- ☐ Economic Opportunity
- ☐ Fiscal Responsibility and Accountability

Respectfully submitted by:

Paul Clarke
Planner

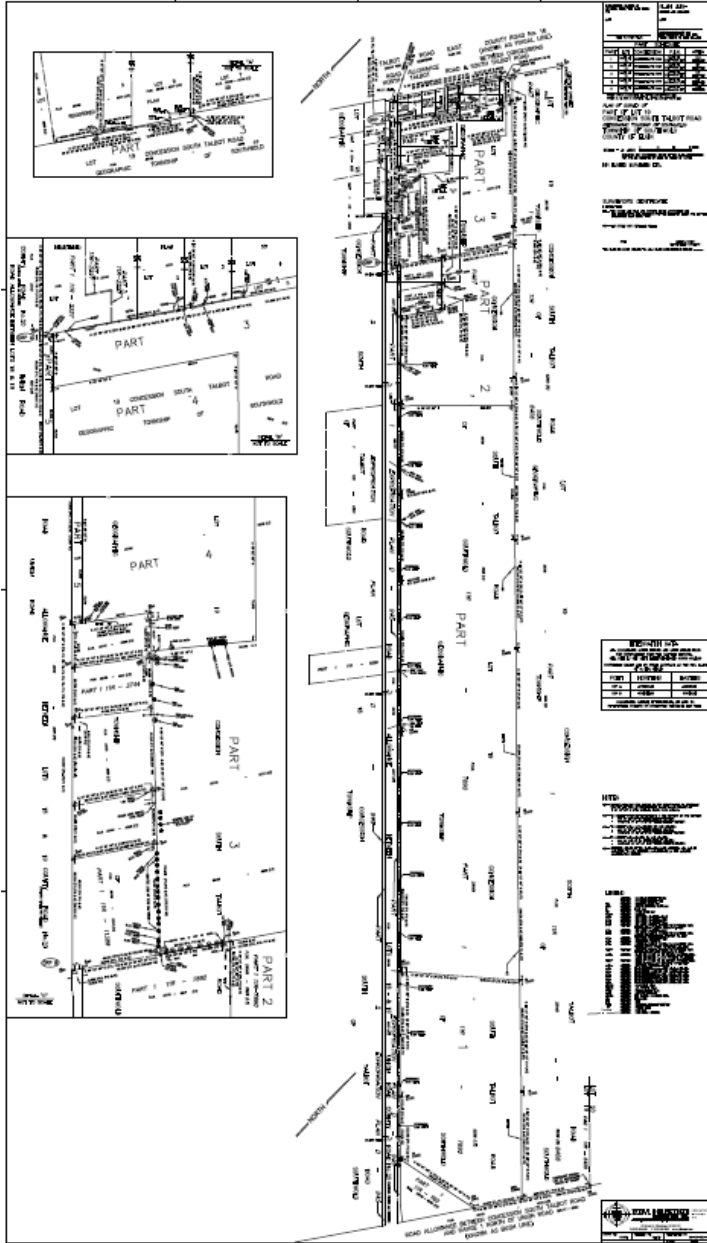
Reviewed by:

Aaron Van Oorspronk, L.E.T.
Director of Infrastructure and Development

Approved for submission by:

Jeff Carswell
CAO/Clerk

Appendix 1 – Applicant provided sketch





TOWNSHIP OF SOUTHWOLD

Report to Council

MEETING DATE: January 26, 2026

PREPARED BY: Paul Clarke, Planner

REPORT NO: PLA 2026-02

SUBJECT MATTER: Consent Applications E 13-26 & E 14-26

Recommendation:

1. That Council recommend approval to the Elgin County Land Division Committee for Consent Application E 13-26 & E 14-26 subject to the recommended conditions provided in this report.

Purpose:

The applicant proposes a land swap between two existing parcels. A parcel with an area of 43,802m² will be transferred from the farm parcel municipally known as 10882 Sunset Road to the commercial property known as 40684 Talbot Line. Two parcels, one with an area of 41,460m², and the second with an area of 2,342m² will be transferred from the commercial property to the farm parcel. The land use of both parent lots (the commercial and farm lot) will not change.

A severance sketch illustrating the proposed severances is attached to this report as Appendix 1.

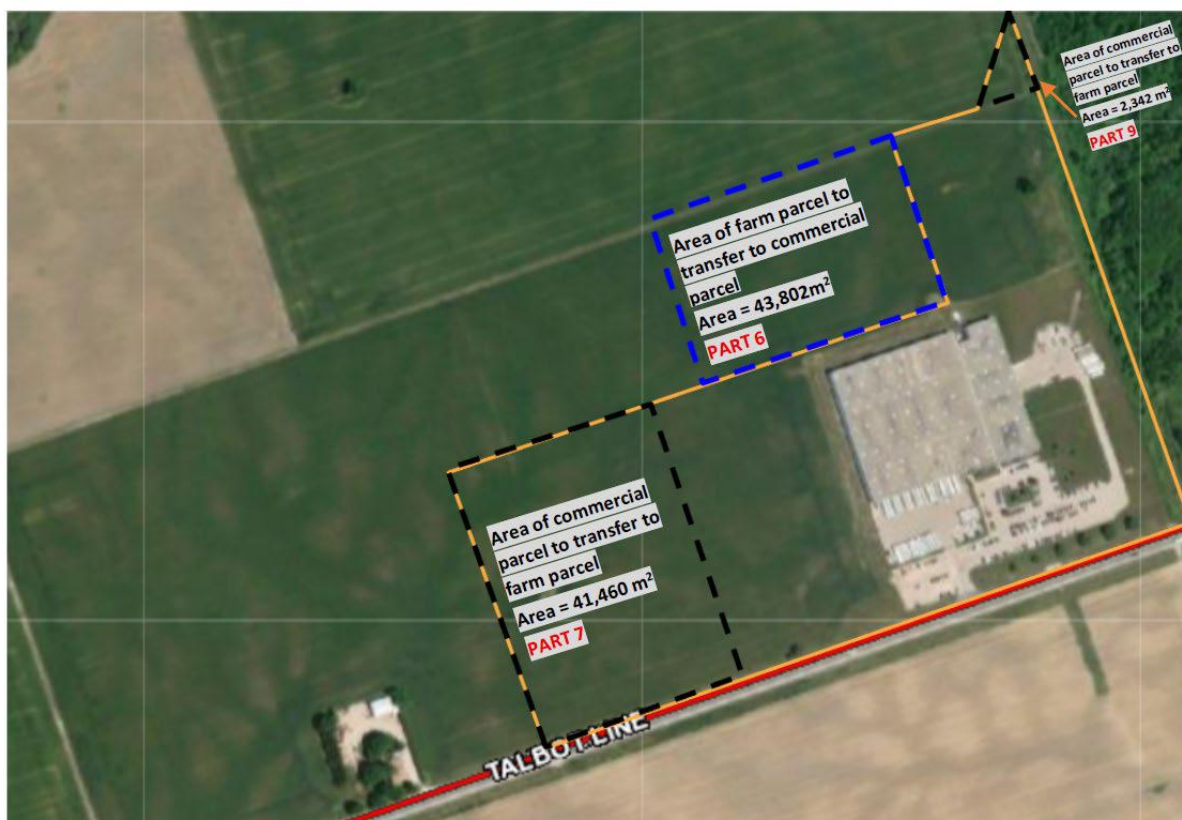
Consent Applications E 13-26 and E 14-26 have been submitted to Elgin County for lands located within the Township of Southwold.

Background:

Application No.	E 13-26 & E 14-26
Owners:	Oegema Turkey Farms Ltd. / Cornerstone Building Brands Canada Ltd.
Agent:	Rick Pennycooke
Address:	10882 Sunset Road and 40684 Talbot Line
Water Supply:	Municipal Water Supply
Sewage Supply:	Private septic
Buildings/Structures	Single detached dwelling and barns on farm parcel, warehouse on commercial property

Elgin County Official Plan	Tier 2 Settlement Area
Application No.	E 13-26 & E 14-26
Settlement Area:	Talbotville
Township Official Plan Designation	Industrial
Zoning By-law 2011-14	Agriculture 1 (A1) / Commercial-Industrial 1 (CM1) Minimum Lot Area – 40.0ha Minimum Lot Frontage – 200m Minimum Front Yard – 19m Minimum Interior Side Yard – 4.5m Minimum Rear Yard – 8.0m Minimum Lot Area – 1.6ha Minimum Lot Frontage – 30m Minimum Front Yard – 19m Minimum Interior Side Yard – 19/7m Minimum Rear Yard – 10m

Key Map



Planning Analysis:

Consent Applications E13-26 & E 14-26 were submitted to, and declared complete, by Elgin County. Elgin County is the Approval Authority for applications considered under Section 53 of the *Planning Act*. The Township of Southwold is a commenting agency and provides a recommendation to the Land Division Committee, including conditions of approval.

Consent Applications E 13-26 & E 14-26 were reviewed by staff with consideration to the Provincial Planning Statement (2024), Elgin County Official Plan, Township of Southwold Official Plan, and the Township of Southwold Zoning Bylaw 2011-14. A summary of the applicable planning policies and regulations, as well as the relevancy to the subject application and commentary are provided below.

Legislation	Section(s)	Relevance To Application	Comments
Provincial Planning Statement, 2024	2.3 Settlement Areas	<ul style="list-style-type: none">Settlement Areas should provide a variety of land uses, including employment lands	The proposed severances will not result in the creation of any new lots, and are technical in nature
Elgin County Official Plan	6.0 Settlement Areas	<ul style="list-style-type: none">Growth and development for a variety of land uses is encouraged within settlement areas	County OP permits minor technical lot boundary adjustments in all land use designations
Township of Southwold Official Plan	5.2 Settlement Area Land Uses	<ul style="list-style-type: none">Permitted uses in Settlement Areas include commercial and industrial uses	Application will not change existing land use patterns
Township of Southwold Zoning Bylaw	Agricultural 1 (A1) / Commercial-Industrial (CM1)	<ul style="list-style-type: none">Proposed land uses are unchangedProposed Lot area of both parcels will be unchanged	Both parcels will continue to meet the required zone provisions of each respective zone. A Zoning By-law Amendment will be needed to change the zoning of the

Legislation	Section(s)	Relevance To Application	Comments
			parcels being swapped to ensure they are consolidated with the respective zoning on each lot.

Consultation:

Consent Applications E 13-26 & E 14-26 were circulated internally for review and comment by Township departments. At the time of writing this report, the following comments have been received and where applicable, recommended conditions of approval have been included.

Finance	No comments
Infrastructure	No concerns
Chief Administrative Officer	No comments
Building Department	No comments
Drainage	Drainage reapportionment required.
Environmental Services	No comments

Conclusion:

Planning staff recommend support of Consent Applications E 13-26 & E 14-26, which would facilitate the exchange of approximately 44,000m² of land between two existing lots to enable the expansion of an existing light industrial business within the Talbotville employment area. This recommendation is subject to the conditions listed below to Planning Report PLA 2026-01. This report and recommended conditions of approval

will be forwarded to the Elgin County Land Division Committee and should be considered in the decision-making process.

- That the Applicant must pay all fees, and satisfy all obligations required pursuant to the duly enacted by-laws of the Township of Southwold, to the satisfaction of the Municipality.
- That the Applicant successfully apply to the Township and obtain a zoning by-law amendment to match the severed lands' zoning to the parcels they are being added to.
- That the applicants apply for a drainage reapportionment of the Auckland Drain in accordance with the Drainage Act.

Financial and Resource Implications:

Township application fees were collected in accordance with the Township's Tariff of Fees By-law, as amended from time to time.

Approval of the application will have no significant financial impact on the Township.

Strategic Plan Goals:

The above recommendation helps the Township meet the Strategic Plan Goal of:

- ☒ Managed Growth
- ☐ Welcoming and Supportive Neighbourhoods
- ☒ Economic Opportunity
- ☐ Fiscal Responsibility and Accountability

Respectfully submitted by:

Paul Clarke
Planner

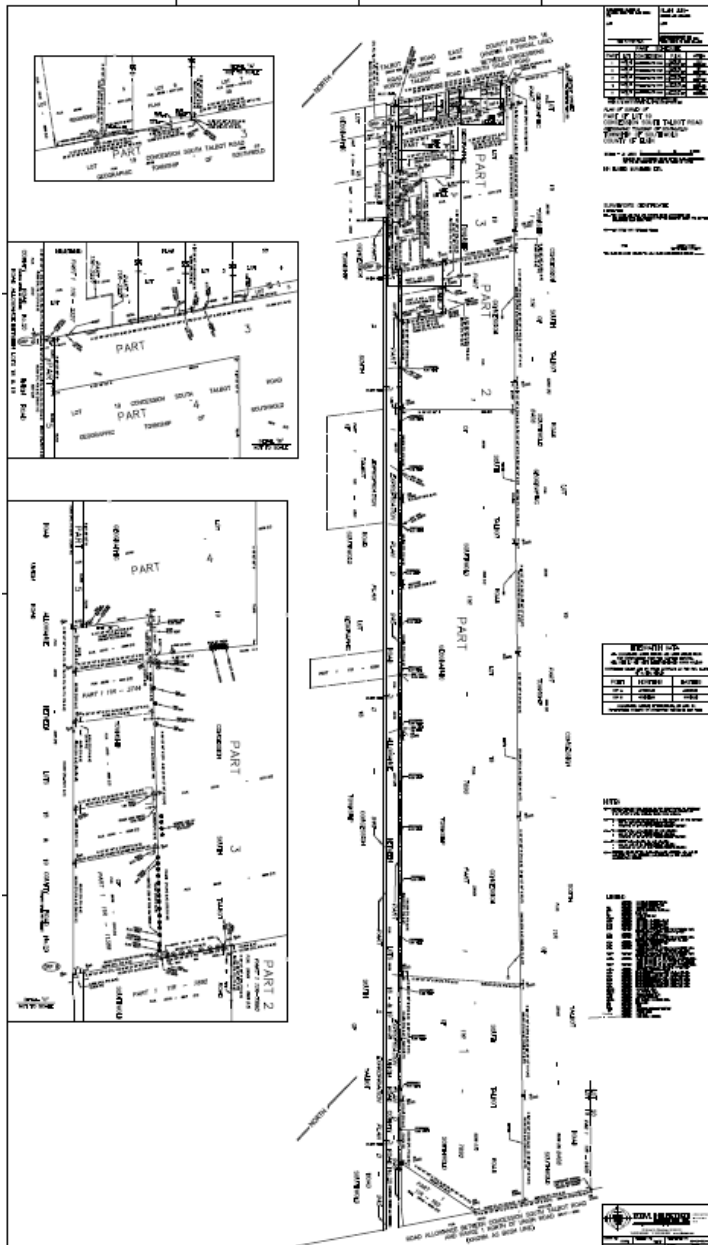
Reviewed by:

Aaron Van Oorspronk, L.E.T.
Director of Infrastructure and Development

Approved for submission by:

Jeff Carswell
CAO/Clerk

Appendix 1 – Applicant provided sketch





TOWNSHIP OF SOUTHWOLD

Report to Council

MEETING DATE: January 26, 2026

PREPARED BY: Allison Duncan, Community Services and Communications Clerk
Corey Pemberton, Director of Building and Community Services

REPORT NO: CBO 2026-03

SUBJECT MATTER: Dissolution of the Southwold Zero Waste Committee

Recommendation:

1. That Council approve the dissolution of the Southwold Zero Waste Committee

Purpose:

Council approve the dissolution of the Southwold Zero Waste Committee.

Background:

The Southwold Zero Waste Committee was established in 2020 with the objective of improving waste reduction in the municipality.

The Committee's mandate was:

- To make recommendations to Council to maximize diversion from landfill facilities and actively promote waste prevention and reduction in the Township of Southwold.
- To make recommendations to Council on resolutions, policies, and action items to reduce waste and increase diversion.
- To make recommendations to Council on policies aimed at meeting the Strategic Plan Goal of investigating progressive waste management solutions and cost evaluations of diversion programs and service levels.
- To support education and public awareness campaigns within the municipality that support the overall broader goal of achieving zero waste in the community.

Comments/Analysis:

Southwold Zero Waste Committee has completed their intended objective.

The Township now has reduced cost and complimentary composters, digesters, and green bins.

As the Staff Resource for the Southwold Zero Waste Committee, I acknowledge that the Committee has not met since April 6th, 2023.

Financial and Resource Implications:

Not at this time.

Strategic Plan Goals:

The above recommendation helps the Township meet the Strategic Plan Goal of:

- ☐ Managed Growth
- ☐ Welcoming and Supportive Neighbourhoods
- ☐ Economic Opportunity
- ☒ Fiscal Responsibility and Accountability

Respectfully Submitted by:

Allison Duncan
Community Services and
Communications Clerk

Reviewed for submission by:

Corey Pemberton,
Director of Building and Community
Services/Chief Building Official

Approved for submission by:

Michele Lant
Director of Corporate Services/
Treasurer



TOWNSHIP OF SOUTHWOLD

Report to Council

MEETING DATE: January 26, 2026

PREPARED BY: Michele Lant, Director of Corporate Services/Treasurer

REPORT NO: FIN 2026-04

SUBJECT MATTER: 2026 Budget – Report #4

Recommendations:

1. That the budget changes contained in this report be approved.
2. That the 2026 Budget Levy of \$7,768,081 be approved.
3. That staff be instructed to proceed with preparing the Budget Summary presentation and necessary by-laws and reports to implement the budget.

Purpose:

To present an update of the Draft 2026 Operating Budget and Capital Forecast based on Council direction.

Background:

Staff and Council have reviewed the draft budget documents over three meetings to date. Based on this review and direction from Council, this report consolidates the areas that Council requested changes. The Asset Management Plan update is reflected in the Capital Forecast as presented at the previous budget meeting.

Comments/Analysis:

The following comments and analysis are based on Council deliberation and direction to staff from the previous budget meetings.

1. Other Revenues – increased by \$25,000
Based on actuals over past years, projected revenues for Penalty and Interest were increased by \$25,000
2. Police – increase transfer from Reserves by \$10,000

FIN 2026-04 2026 Budget Report #4

The transfer from Reserves was increased from \$20,000 to \$30,000 to mitigate the effect of the 11% increase

3. Keystone – increase revenue by \$25,526

Fee waivers, included in Other Expenses, not previously included as a revenue, increased the Complex – Rental Income by \$25,526

4. Waste Management – increase revenue by \$4,190

The Organics Revenue was increased by \$4,190 to offset cost of organics program.

5. Planning and Development – decrease expenses by \$12,510

- GIS Legal was decreased by \$7,000 based on no expected activity
- GIS Postage was decreased by \$500 based on no expected activity
- Planning Legal was decreased by \$5,000 based on prior actuals

Other minor adjustments are included for a total decrease in the levy from these adjustments of \$90,004.

2026 Tax Levy and Tax Rates

Key Numbers	
2025 Levy	\$7,153,451
2026 Levy	\$7,768,081
Levy \$ Increase	\$614,630
Levy % Increase	8.59%
Growth Adjusted Levy \$ Increase	\$576,060
Growth Adjusted Levy % Increase	8.05%
Tax Rate Change	8.01%

The attached Appendix A contains a breakdown of the 2026 proposed budget.

At this point Staff has not received correspondence for a preliminary County Tax Rate. The education rates for 2026 remain the same as 2025. Staff will supply the overall rate change once the County rates are received.

FIN 2026-04 2026 Budget Report #4

As municipalities are at various stages of approving their 2026 budgets, staff is unable to supply a comparison at this time. It is anticipated that most municipalities will be seeing higher increases and thus the differential will be reflected in the tax rates.

Financial and Resource Implications:

None. The Budget and Capital Forecast will help establish and guide financial planning for 2026 and beyond.

Strategic Plan Goals:

The above recommendation helps the Township meet the Strategic Plan Goal of:

- ☐ Managed Growth
- ☐ Welcoming and Supportive Neighbourhoods
- ☐ Economic Development
- ☒ Fiscal Responsibility and Accountability

Respectfully submitted by:

Michele Lant
Director of Corporate
Services/Treasurer

Approved for submission by:

Jeff Carswell
CAO/Clerk

Taxation

Account	2025 YTD	2025 Budget	2026 Forecast	\$ Variance	% Variance	2027 Forecast	2028 Forecast
R - Residential	(\$3,782,613)	(\$3,782,613)	(\$4,120,827)	(\$338,215)	8.94%	(\$4,285,661)	(\$4,457,087)
C - Commercial	(\$2,427,918)	(\$2,427,918)	(\$2,628,363)	(\$200,446)	8.26%	(\$2,733,498)	(\$2,842,838)
C - Commercial - Excess Land	(\$29,102)	(\$29,102)	(\$31,433)	(\$2,331)	8.01%	(\$32,690)	(\$33,998)
C - Commercial - Vacant Land	(\$10,928)	(\$10,928)	(\$11,803)	(\$875)	8.01%	(\$12,275)	(\$12,766)
C - Commercial	(\$239)	(\$239)	(\$258)	(\$19)	8.01%	(\$269)	(\$280)
C - Commercial - CO	(\$142)	(\$142)	(\$154)	(\$11)	8.01%	(\$160)	(\$166)
X - New Commercial	\$0	\$0	\$0	\$0	0.00%	\$0	\$0
I - Industrial	(\$12,625)	(\$12,625)	(\$13,636)	(\$1,011)	8.01%	(\$14,181)	(\$14,748)
I - Industrial	(\$100)	(\$100)	(\$108)	(\$8)	8.01%	(\$112)	(\$117)
I - Industrial - Excess Land	(\$310)	(\$310)	(\$334)	(\$25)	8.01%	(\$348)	(\$362)
I - Industrial - Vacant Land	\$0	\$0	\$0	\$0	0.00%	\$0	\$0
L - Large Industrial	(\$109,709)	(\$109,709)	(\$118,587)	(\$8,879)	8.09%	(\$123,331)	(\$128,264)
P - Pipeline	(\$41,091)	(\$41,091)	(\$43,580)	(\$2,489)	6.06%	(\$45,323)	(\$47,136)
F - Farmland	(\$735,624)	(\$735,624)	(\$795,544)	(\$59,920)	8.15%	(\$827,366)	(\$860,460)
T - Managed Forest	(\$3,052)	(\$3,052)	(\$3,452)	(\$401)	13.13%	(\$3,590)	(\$3,734)
Total	(\$7,153,451)	(\$7,153,451)	(\$7,768,081)	(\$614,630)	8.59%	(\$8,078,804)	(\$8,401,956)

Budget Summary

Account	2025 Budget	2026 Forecast	\$ Variance	% Variance	2027 Forecast	2028 Forecast
Property Taxation	(\$7,153,451)	(\$7,768,081)	(\$614,630)	8.59%	(\$7,144,632)	(\$7,324,091)
Other Revenue/General Grant	(\$1,014,100)	(\$967,246)	\$46,854	-4.62%	(\$1,868,696)	(\$1,868,696)
Council	\$129,111	\$130,820	\$1,709	1.32%	\$133,436	\$136,105
Administration	\$836,251	\$1,020,131	\$183,880	21.99%	\$1,070,213	\$1,092,747
Police	\$720,115	\$737,612	\$17,497	2.43%	\$762,964	\$841,261
Conservation Authority	\$115,837	\$124,716	\$8,879	7.66%	\$127,210	\$129,754
By-law, Canine, Livestock	\$56,843	\$67,977	\$11,134	19.59%	\$33,542	\$34,208
Waste Management	\$306,225	\$308,433	\$2,208	0.72%	\$313,299	\$314,047
Cemeteries	\$22,631	\$33,435	\$10,804	47.74%	\$34,399	\$35,087
Fire Department	\$1,351,534	\$1,007,262	(\$344,272)	-25.47%	\$1,150,008	\$1,168,096
Building	(\$0)	(\$0)	(\$0)	64.41%	\$2,005	\$2,045
Municipal Property	\$52,317	\$30,908	(\$21,409)	-40.92%	\$21,079	\$21,201
Keystone	\$102,656	\$109,715	\$7,059	6.88%	\$111,509	\$113,339
Parks	\$330,452	\$339,136	\$8,685	2.63%	\$131,316	\$137,680
Roads	\$3,867,656	\$4,530,677	\$663,021	17.14%	\$4,891,743	\$4,932,700
Planning/GIS	\$127,496	\$159,448	\$31,952	25.06%	\$94,344	\$97,032
Drainage	\$148,428	\$135,058	(\$13,370)	-9.01%	\$136,259	\$137,484
Net Surplus/Deficit	(\$0)	(\$0)	\$0	0.00%	\$0	\$0

Budget Revenue and Expense Summary

Account	2025 Budget	2026 Forecast	\$ Variance	% Variance	2027 Forecast	2028 Forecast
Tax Levy						
Property Taxation	(\$7,153,451)	(\$7,768,081)	(\$614,630)	8.59%	(\$7,144,632)	(\$7,324,091)
Other Rev/Exp						
Other Revenue/General Grants	(\$5,128,100)	(\$4,071,246)	\$1,056,854	-20.61%	(\$2,028,696)	(\$2,028,696)
Other Expenses	\$3,184,000	\$2,109,000	(\$1,075,000)	-33.76%	\$35,000	\$35,000
Net Other Revenue/General Grants	(\$1,944,100)	(\$1,962,246)	(\$18,146)	0.93%	(\$1,993,696)	(\$1,993,696)
Departmental Operating Revenue						
Council	\$0	\$0	\$0	0.00%	\$0	\$0
Administration	(\$94,150)	(\$160,600)	(\$66,450)	70.58%	(\$76,882)	(\$72,670)
Police	\$0	(\$30,000)	(\$30,000)	0.00%	(\$20,000)	(\$20,000)
Conservation Authority	\$0	\$0	\$0	0.00%	\$0	\$0
By-law, Canine, Livestock	(\$405)	(\$255)	\$150	-37.04%	(\$255)	(\$255)
Waste Management	(\$69,425)	(\$84,940)	(\$15,515)	22.35%	(\$88,341)	(\$95,626)
Cemeteries	\$0	\$0	\$0	0.00%	\$0	\$0
Fire Department	(\$228,984)	(\$225,144)	\$3,840	-1.68%	(\$229,386)	(\$229,386)
Building	(\$368,395)	(\$388,250)	(\$19,855)	5.39%	(\$391,010)	(\$398,830)
Municipal Property	(\$97,403)	(\$84,699)	\$12,704	-13.04%	(\$81,696)	(\$83,330)
Keystone	(\$43,100)	(\$38,276)	\$4,824	-11.19%	(\$39,042)	(\$39,822)
Parks	(\$20,900)	(\$22,850)	(\$1,950)	9.33%	(\$236,900)	(\$236,900)
Roads	(\$619,798)	(\$627,173)	(\$7,375)	1.19%	(\$639,132)	(\$651,331)
Planning/GIS	(\$190,284)	(\$137,456)	\$52,828	-27.76%	(\$50,000)	(\$49,999)
Drainage	(\$96,430)	(\$98,359)	(\$1,929)	2.00%	(\$100,326)	(\$102,332)
Total Revenue	(\$1,829,275)	(\$1,898,002)	(\$68,728)	3.76%	(\$1,952,970)	(\$1,980,482)

Account	2025 Budget	2026 Forecast	\$ Variance	% Variance	2027 Forecast	2028 Forecast
Departmental Operating Expenses						
Council	\$129,111	\$130,820	\$1,709	1.32%	\$133,436	\$136,105
Administration	\$872,401	\$1,120,231	\$247,830	28.41%	\$1,086,595	\$1,102,417
Police	\$720,115	\$767,612	\$47,497	6.60%	\$782,964	\$861,261
Conservation Authority	\$115,837	\$124,716	\$8,879	7.66%	\$127,210	\$129,754
By-law, Canine, Livestock	\$57,248	\$68,232	\$10,984	19.19%	\$33,797	\$34,463
Waste Management	\$375,650	\$393,373	\$17,723	4.72%	\$401,640	\$409,673
Cemeteries	\$22,631	\$33,435	\$10,804	47.74%	\$34,399	\$35,087
Fire Department	\$855,518	\$902,406	\$46,888	5.48%	\$904,394	\$922,482
Building	\$368,395	\$388,250	\$19,855	5.39%	\$393,015	\$400,875
Municipal Property	\$134,720	\$100,607	(\$34,113)	-25.32%	\$87,775	\$89,531
Keystone	\$125,756	\$127,991	\$2,235	1.78%	\$130,551	\$133,162
Parks	\$301,352	\$311,986	\$10,635	3.53%	\$318,216	\$324,580
Roads	\$2,536,498	\$2,617,023	\$80,525	3.17%	\$2,908,998	\$2,962,154
Planning/GIS	\$307,780	\$286,904	(\$20,876)	-6.78%	\$134,344	\$137,031
Drainage	\$169,858	\$158,417	(\$11,441)	-6.74%	\$161,585	\$164,817
Total Expenses	\$7,092,870	\$7,532,002	\$439,133	6.19%	\$7,638,920	\$7,843,392
Net Operating (Revenue)/Expense	\$5,263,595	\$5,634,000	\$370,405	7.04%	\$5,685,951	\$5,862,910

Account	2025 Budget	2026 Forecast	\$ Variance	% Variance	2027 Forecast	2028 Forecast
Net Cash and Capital						
Other To Tax Stabilization Reserve	\$930,000	\$995,000	\$65,000	6.99%	\$125,000	\$125,000
Council	\$0	\$0	\$0	0.00%	\$0	\$0
Administration	\$58,000	\$60,500	\$2,500	4.31%	\$60,500	\$63,000
Police	\$0	\$0	\$0	0.00%	\$0	\$0
Conservation Authority	\$0	\$0	\$0	0.00%	\$0	\$0
By-law, Canine, Livestock	\$0	\$0	\$0	0.00%	\$0	\$0
Waste Management	\$0	\$0	\$0	0.00%	\$0	\$0
Cemeteries	\$0	\$0	\$0	0.00%	\$0	\$0
Fire Department	\$725,000	\$330,000	(\$395,000)	-54.48%	\$475,000	\$475,000
Building	\$0	\$0	\$0	0.00%	\$0	\$0
Municipal Property	\$15,000	\$15,000	\$0	0.00%	\$15,000	\$15,000
Keystone	\$20,000	\$20,000	\$0	0.00%	\$20,000	\$20,000
Parks	\$50,000	\$50,000	\$0	0.00%	\$50,000	\$50,000
Roads	\$1,950,956	\$2,540,827	\$589,871	30.23%	\$2,621,877	\$2,621,877
Planning/GIS	\$10,000	\$10,000	\$0	0.00%	\$10,000	\$10,000
Drainage	\$75,000	\$75,000	\$0	0.00%	\$75,000	\$75,000
Total Net Cash and Capital	\$3,833,956	\$4,096,327	\$262,371	6.84%	\$3,452,377	\$3,454,877
Net Surplus/Deficit	\$0	\$0	\$0	0.00%	\$0	\$0
Net Operating and Capital	\$7,153,451	\$7,768,081	\$614,630	8.59%	\$7,144,632	\$7,324,091

Cash and Capital Requirements - Summary

Account	2025 Budget	2026 Forecast	\$ Variance	% Variance	2027 Forecast	2028 Forecast	Notes
Gas Tax Funding	(\$158,871)	(\$158,871)	\$0	0.00%	(\$165,226)	(\$165,226)	Apply to Roads Construction
Machine Usage	(\$350,000)	(\$350,000)	\$0	0.00%	(\$350,000)	(\$350,000)	Apply to Equipment Reserve
OCIF	(\$294,412)	(\$264,971)	\$29,441	-10.00%	(\$264,971)	(\$264,971)	Apply OCIF to Roads Construction
Tax Stabilization Reserve	\$930,000	\$995,000	\$65,000	6.99%	\$125,000	\$125,000	
Transfer to Reserve	\$0	\$0	\$0	0.00%	\$0	\$0	
GG - Working Capital	\$0	\$0	\$0	0.00%	\$0	\$0	
GG - Administration	\$10,000	\$12,500	\$2,500	25.00%	\$12,500	\$12,500	
GG - Computers	\$18,000	\$18,000	\$0	0.00%	\$18,000	\$20,000	
GG - Building Renewal	\$30,000	\$30,000	\$0	0.00%	\$30,000	\$30,000	
GG - Election Reserve	\$0	\$0	\$0	0.00%	\$0	\$0	
Fire - Apparatus	\$150,000	\$150,000	\$0	0.00%	\$150,000	\$150,000	better reflects anticipated need
Fire - Building Renewal	\$445,000	\$50,000	(\$395,000)	-88.76%	\$50,000	\$50,000	
Fire - Major Equipment	\$100,000	\$100,000	\$0	0.00%	\$100,000	\$100,000	
Fire - Communications	\$30,000	\$30,000	\$0	0.00%	\$30,000	\$15,000	
Fire - Funeral	\$0	\$0	\$0	0.00%	\$0	\$0	Current Balance \$10,500
Building - Equipment	\$0	\$0	\$0	0.00%	\$0	\$0	
Building - Fleet	\$0	\$0	\$0	0.00%	\$0	\$0	
Roads - Building Renewal	\$100,000	\$25,000	(\$75,000)	-75.00%	\$25,000	\$25,000	2026 financing TBD
Roads - Gas Tax	\$0	\$0	\$0	0.00%	\$0	\$0	
Roads - Fleet	\$0	\$0	\$0	0.00%	\$0	\$0	
Roads - Equipment	\$350,000	\$350,000	\$0	0.00%	\$350,000	\$350,000	offset above
Roads - Road Construction	\$2,130,239	\$2,465,669	\$335,430	15.75%	\$2,801,160	\$2,801,160	\$2,041,827 plus Gas Tax, OCIF - OCIF down
Roads - Bridges & Culvert	\$100,000	\$150,000	\$50,000	50.00%	\$150,000	\$150,000	
Roads - Sidewalks	\$54,000	\$54,000	\$0	0.00%	\$54,000	\$54,000	
Roads - Street Lights	\$20,000	\$20,000	\$0	0.00%	\$20,000	\$20,000	
Health - Building Renewal	\$5,000	\$5,000	\$0	0.00%	\$5,000	\$5,000	
Parks - Equipment	\$25,000	\$25,000	\$0	0.00%	\$25,000	\$25,000	
Parks-Renewal	\$25,000	\$25,000	\$0	0.00%	\$25,000	\$25,000	
Parks - Building Renewal	\$0	\$0	\$0	0.00%	\$0	\$0	
Keystone - Building Renew	\$20,000	\$20,000	\$0	0.00%	\$20,000	\$20,000	
Keystone - Equipment	\$0	\$0	\$0	0.00%	\$0	\$0	
Library - Building Renewal	\$10,000	\$10,000	\$0	0.00%	\$10,000	\$10,000	
Planning - Cycling Master Plan	\$0	\$0	\$0	0.00%	\$0	\$0	
Planning - Official Plan and Zoning Review	\$10,000	\$10,000	\$0	0.00%	\$15,000	\$15,000	
Drains	\$75,000	\$75,000	\$0	0.00%	\$25,000	\$25,000	
Total to Reserves from Tax Levy	\$3,833,956	\$3,846,327	\$12,371	0.32%	\$3,260,463	\$3,247,463	
	\$348,960	\$12,371			(\$585,864)	(\$13,000)	
	10.01%	0.32%			-15.28%	-105.08%	

Reserve Balance Forecast - No Financing

Year	Working Capital	Tax Stab	Net Land Proceeds	Admin	Fire	Roads	Drainage	Bridges	Road Facility	Road Eqp	Building	Admin Fac	Keystone	Med Bldg	Parks	Planning	Total Balance
2025	\$986,147	\$3,594,533	\$3,865,725	\$73,850	\$1,436,820	(\$136,311)	(\$48,332)	\$489,775	\$150,217	(\$200,191)	\$2,390,124	\$114,607	\$216,885	\$134,903	\$310,068	\$35,000	\$13,413,820
2026	\$986,147	\$4,589,533	\$6,368,225	\$49,350	\$1,594,120	(\$2,157,550)	(\$73,332)	(\$140,225)	\$217	\$79,809	\$2,332,624	\$44,607	\$246,885	\$49,903	\$340,068	(\$108,129)	\$14,202,252
2027	\$986,147	\$1,214,533	\$7,118,225	\$54,850	\$1,101,420	(\$4,048,390)	\$1,668	(\$290,225)	\$25,217	\$269,809	\$2,342,624	\$74,607	\$266,885	\$54,903	\$320,068	(\$143,129)	\$9,349,212
2028	\$986,147	\$1,339,533	\$7,460,725	(\$150)	\$1,298,720	(\$2,971,270)	\$26,668	(\$630,225)	\$50,217	\$169,809	\$2,352,624	\$104,607	\$261,885	\$44,903	\$432,568	(\$178,129)	\$10,748,632
2029	\$986,147	\$1,464,533	\$7,118,225	\$14,850	\$1,566,020	(\$2,026,389)	\$101,668	(\$480,225)	\$75,217	\$64,809	\$2,292,624	\$134,607	\$291,885	\$49,903	\$537,568	(\$163,129)	\$12,028,313
2030	\$986,147	\$1,614,533	\$7,118,225	(\$10,150)	\$1,833,320	(\$920,308)	\$76,668	(\$397,725)	\$217	(\$140,191)	\$2,302,624	\$64,607	\$71,885	\$54,903	\$642,568	(\$148,129)	\$13,149,194
2031	\$986,147	\$1,764,533	\$7,118,225	(\$150)	\$1,300,620	(\$224,227)	\$151,668	(\$247,725)	\$25,217	\$209,809	\$2,312,624	\$94,607	\$101,885	\$59,903	\$422,568	(\$163,129)	\$13,912,575
2032	\$986,147	\$1,914,533	\$7,118,225	\$24,850	\$817,920	\$621,854	\$126,668	(\$357,725)	\$50,217	(\$340,191)	\$2,322,624	\$124,607	\$131,885	\$64,903	\$302,568	(\$148,129)	\$13,760,956
2033	\$986,147	\$2,064,533	\$7,118,225	\$34,850	\$1,085,220	\$4,552,935	\$201,668	(\$207,725)	\$75,217	\$9,809	\$2,262,624	\$154,607	\$156,885	\$69,903	\$182,568	(\$133,129)	\$18,614,337
2034	\$986,147	\$2,214,533	\$7,118,225	\$34,850	\$1,352,520	\$8,065,016	\$201,668	(\$77,725)	\$100,217	\$359,809	\$2,272,624	\$184,607	\$186,885	\$74,903	\$62,568	(\$118,129)	\$23,018,718



Asset Management Plan

Township of Southwold

Draft Report – R1

January 22, 2025

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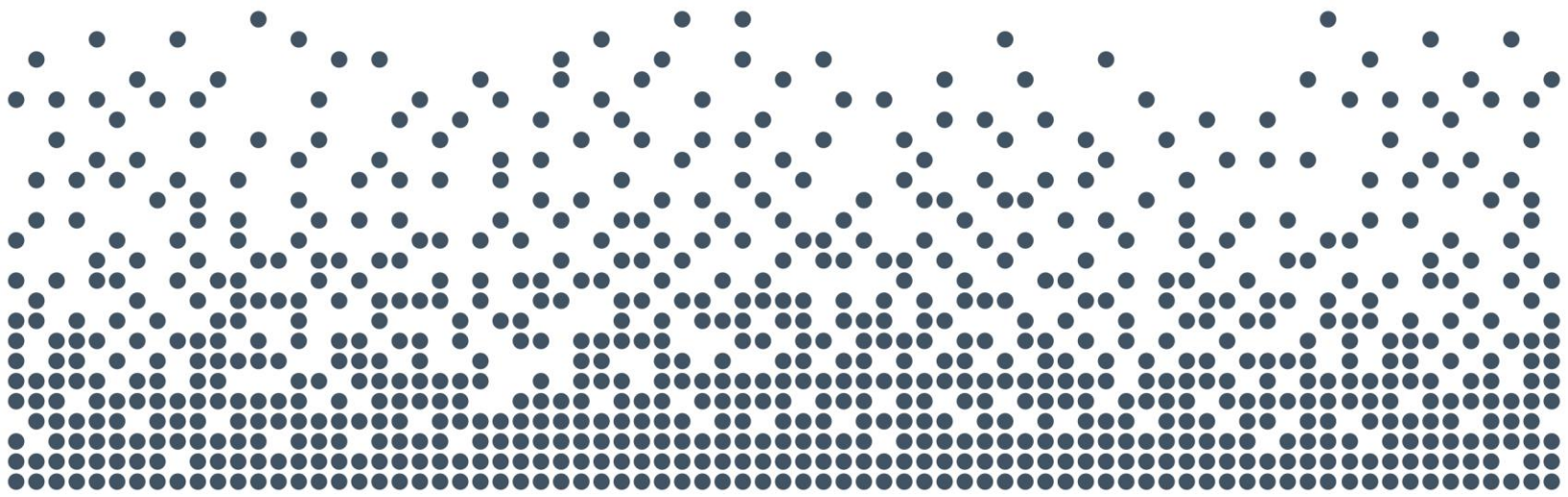
Table of Contents

	Page
1. Introduction.....	1-1
1.1 Overview.....	1-1
1.2 Legislative Context for the Asset Management Plan	1-2
1.3 Asset Management Plan Development.....	1-3
2. State of Local Infrastructure and Levels of Service	2-1
2.1 Transportation.....	2-1
2.1.1 State of Local Infrastructure	2-1
2.1.2 Condition.....	2-6
2.1.3 Levels of Service.....	2-15
2.2 Tax-funded Facilities.....	2-18
2.2.1 State of Local Infrastructure	2-18
2.2.2 Condition.....	2-21
2.2.3 Levels of Service.....	2-22
2.3 Tax-funded Fleet and Equipment.....	2-24
2.3.1 State of Local Infrastructure	2-24
2.3.2 Condition.....	2-25
2.3.3 Levels of Service.....	2-27
2.4 Parks and Recreation	2-29
2.4.1 State of Local Infrastructure	2-29
2.4.2 Condition.....	2-30
2.4.3 Levels of Service.....	2-32
2.5 Stormwater	2-33
2.5.1 State of Local Infrastructure	2-33
2.5.2 Condition.....	2-34
2.5.3 Levels of Service.....	2-36
2.6 Water	2-38
2.6.1 State of Local Infrastructure	2-38
2.6.2 Condition.....	2-39
2.6.3 Levels of Service.....	2-41



Table of Contents (Cont'd)

	Page
2.7 Wastewater.....	2-43
2.7.1 State of Local Infrastructure.....	2-43
2.7.2 Condition.....	2-44
2.7.3 Levels of Service.....	2-46
2.8 Population and Employment Growth	2-48
3. Lifecycle Management Strategies	3-1
3.1 Introduction.....	3-1
3.2 Transportation.....	3-2
3.3 Tax-funded Facilities.....	3-5
3.4 Tax-funded Fleet and Equipment.....	3-7
3.5 Parks and Recreation	3-9
3.6 Stormwater	3-11
3.7 Water	3-11
3.8 Wastewater.....	3-14
4. Financial Strategy.....	4-1
4.1 Introduction.....	4-1
4.2 Assets Funded by the General Tax Levy	4-2
4.2.1 Annual Capital Expenditure Forecast.....	4-2
4.2.2 Annual Capital Financing Forecast	4-4
4.2.3 Current Annual Lifecycle Funding Target & Infrastructure Funding Gap	4-5
4.2.4 Overall Financial Forecast and Estimated Impact on Tax Levy	4-8
4.2.5 Estimated Impact on Tax Bills (2026-2035)	4-13
4.3 Assets Funded by Water and Wastewater Rates	4-17
4.3.1 Annual Capital Expenditure Forecast.....	4-17
4.3.2 Annual Capital Financing Forecast	4-19
4.3.3 Current Annual Lifecycle Funding Target & Infrastructure Funding Gap	4-20
4.3.4 Overall Financial Forecast and Estimated Impact on Tax Levy	4-23
4.4 Assets Funded by Stormwater Rates	4-25
5. Recommendations and Next Steps.....	5-1
5.1 Recommendations.....	5-1
5.2 Next Steps	5-1
Appendix A Financial Strategy Tables for Tax-funded Assets	A-1
Appendix B Financial Strategy Tables for Water and Wastewater Assets.....	B-1



Report



Chapter 1

Introduction



1. Introduction

1.1 Overview

The main objective of an asset management plan (AMP) is to use a municipality's best available information to develop a long-term plan for capital assets. In addition, the plan should provide a sufficiently documented framework that enables continual improvement and updates, ensuring its relevancy over the long term.

The Township of Southwold (Township) retained Watson & Associates Economists Ltd. (Watson) to assist in developing a comprehensive AMP. The AMP covers all of the Township's infrastructure assets, with a focus on identifying proposed levels of service and developing a financial strategy to support the plan's implementation, and brings the Township into compliance with the July 1, 2025 requirements of Ontario Regulation (O. Reg.) 588/17.

The estimated current replacement cost of the Township's infrastructure assets is \$283.2 million. The three largest asset categories in terms of replacement cost, accounting for approximately 88% of the total, are transportation assets (\$140.5 million; 50%), water system assets (\$85.2 million; 30%), and tax-funded facilities (\$23.8 million; 8%). The remainder of the Township's assets are valued at \$33.7 million, accounting for the remaining 12% of the total replacement cost valuation.

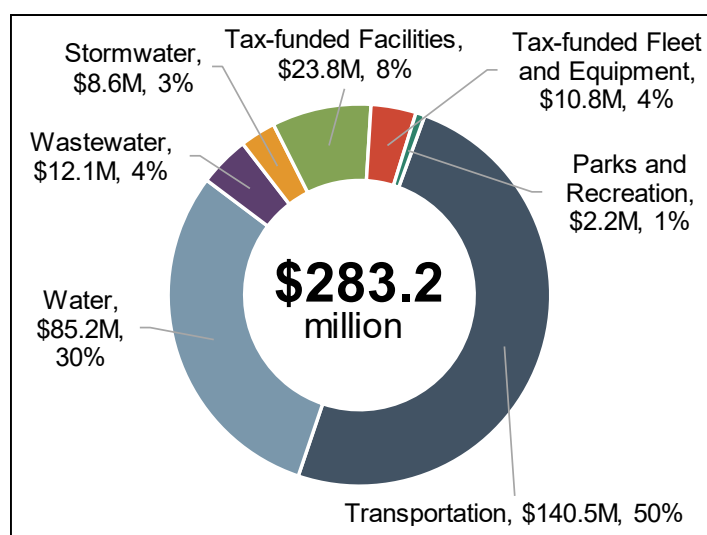
A breakdown of the replacement cost by asset category is provided in Table 1-1 and is further illustrated in Figure 1-1.



Table 1-1: Distribution of Replacement Cost by Asset Category

Asset Category	Current Replacement Cost
Transportation	\$140,544,000
Water	\$85,217,000
Wastewater	\$12,124,000
Stormwater	\$8,562,000
Tax-funded Facilities	\$23,768,000
Tax-funded Fleet and Equipment	\$10,812,000
Parks and Recreation	\$2,173,000
Total	\$283,200,000

Figure 1-1: Distribution of Replacement Cost by Asset Category



1.2 Legislative Context for the Asset Management Plan

Asset management planning in Ontario has evolved significantly over the past decade.

Prior to 2009, it was common municipal practice to expense capital assets in the year of their acquisition or construction. Consequently, this meant that many municipalities did not have appropriate tracking of their capital assets, especially with respect to any changes that capital assets may have undergone (i.e. betterments, disposals, etc.). Furthermore, this also meant that many municipalities had not yet established inventories of their capital assets, both in their accounting structures and financial



statements. As a result of revisions to *Section 3150 – Tangible Capital Assets* of the *Public Sector Accounting Board* (PSAB) handbook, which came into effect for the 2009 fiscal year, municipalities were forced to change this long-standing practice and capitalize their tangible capital assets over the term of the asset's expected useful service life. In order to comply with this revision, municipalities needed to establish asset inventories, if none previously existed.

In 2012, the Province launched the Municipal Infrastructure Strategy, which required municipalities and local service boards seeking provincial funding to demonstrate how any proposed project fits within a broader asset management plan. In addition, asset management plans encompassing all municipal assets needed to be prepared by the end of 2016 to meet Federal Gas Tax (now the Canada Community-Building Fund) agreement requirements. To help define the components of municipal asset management plans, the Province produced a document entitled *Building Together: Guide for Municipal Asset Management Plans*. This document outlined the information and analyses that were required to be included in municipal asset management plans under this initiative.

The Province's *Infrastructure for Jobs and Prosperity Act, 2015* (IIPA) was proclaimed on May 1, 2016. This legislation detailed principles for evidence-based and sustainable long-term infrastructure planning. The IIPA also gave the Province the authority to guide municipal asset management planning by way of regulation. In late 2017, the Province introduced O. Reg. 588/17 under the IIPA. The intent of O. Reg. 588/17 is to establish standard content for municipal asset management plans. Specifically, the regulation requires that asset management plans be developed that define levels of service, identify the lifecycle activities that will be undertaken to achieve those levels of service, and provide a financial strategy to support the levels of service and lifecycle activities.

1.3 Asset Management Plan Development

The development of this asset management plan was guided by asset management strategies identified through discussions with the Township's asset managers, information gleaned through reviews of long-term planning documents and studies, service-level objectives and their impacts on the management of assets identified through engagements with both staff and Council, and detailed analyses of the



Township's capital asset and financial data. The key steps in the development process of this asset management plan are summarized below:

1. Compile and update underlying asset data such as quantities, ages, condition ratings, useful service life expectations, replacement cost valuations, lifecycle activity costing, etc.
2. Develop a level of service framework which sets targets for the service levels the Township proposes to provide to the public over the long term through workshops held with staff. As part of these workshops, changes to existing lifecycle management strategies to support the proposed level of service were identified. This step resulted in the development of 10-year forecasts of capital and significant operating expenditures to achieve and sustain the proposed levels of service.
3. Determine the level of capital funding that should be provided to assets on an annual basis to sustain the proposed levels of service over the long term.
4. Analyze the Township's financial data and develop a financial strategy model to identify the funding expected to be available to undertake the capital and significant operating expenditures identified previously. The financial strategy model was also utilized to determine the financial impacts associated with providing the proposed levels of service (i.e., estimated annual tax levy and tax rate increases to achieve a sustainable level of annual capital funding, additional debt requirements, impact on reserve and reserve fund balance, etc.).
5. Present the proposed levels of service and their associated financial impacts to Council in a workshop setting. The feedback received from Council was critical to ensuring that the proposed levels of service are appropriate for the Township and in further refining the financial strategy.
6. Document the asset management plan in a formal report to inform future decision-making and to communicate planning to the public.



Chapter 2

State of Local Infrastructure and Levels of Service



2. State of Local Infrastructure and Levels of Service

2.1 Transportation

2.1.1 State of Local Infrastructure

The Township owns and manages a variety of transportation assets that enable the safe and efficient passage of vehicular and pedestrian traffic and contribute to the overall level of service provided by the Township. These assets comprise the Township's roads, bridges, culverts, and various road-related assets such as guiderails, sidewalks and streetlights. The estimated current replacement cost of the Township's transportation assets is \$140.5 million.

The Township's road network comprises roads with three surface types: asphalt, surface treatment, and gravel. The estimated current replacement cost of the Township's roads is \$125.2 million. Surface treated roads represent the largest share of replacement cost at \$47.0 million (38%), followed by gravel roads at \$42.8 million (34%), and lastly, asphalt roads at \$35.4 million (28%). The average age of the Township's roads is 18.1 years.

Table 2-1 summarizes the length, average age, and estimated current replacement cost of the Township's roads by surface type. This information is further illustrated in Figure 2-1.

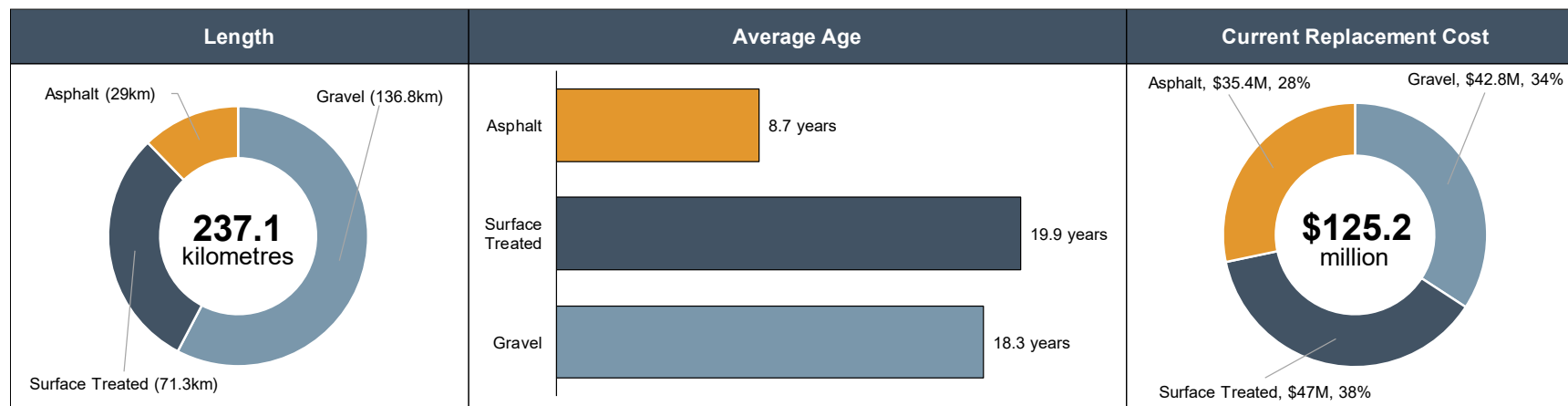
Table 2-1: Roads – Length, Average Age, and Replacement Cost by Surface Type

Surface Type	Length	Average Age ^[1]	Current Replacement Cost
Gravel	136.8 km	18.3 years	\$42,790,000
Surface Treated	71.3 km	19.9 years	\$46,955,000
Asphalt	29.0 km	8.7 years	\$35,406,000
Total	237.1 km	18.1 years	\$125,151,000

^[1]Weighted average utilizing the surface area of road segments as weights.



Figure 2-1: Roads – Length, Average Age, and Replacement Cost by Surface Type





The Township's transportation network is also supported by 26 structures comprising seven bridges and 19 culverts. The estimated current replacement cost of the Township's structures is \$12.2 million, with culverts accounting for 57% of this replacement cost (i.e., \$7.0 million) and bridges accounting for the remaining 43% (i.e., \$5.2 million). The average age of the Township's structures is 33.4 years.

Table 2-2 summarizes the quantity, average age, and estimated current replacement cost of the Township's structures by structure type. This information is further illustrated in Figure 2-2.

Table 2-2: Structures – Quantity, Average Age, and Replacement Cost by Structure Type

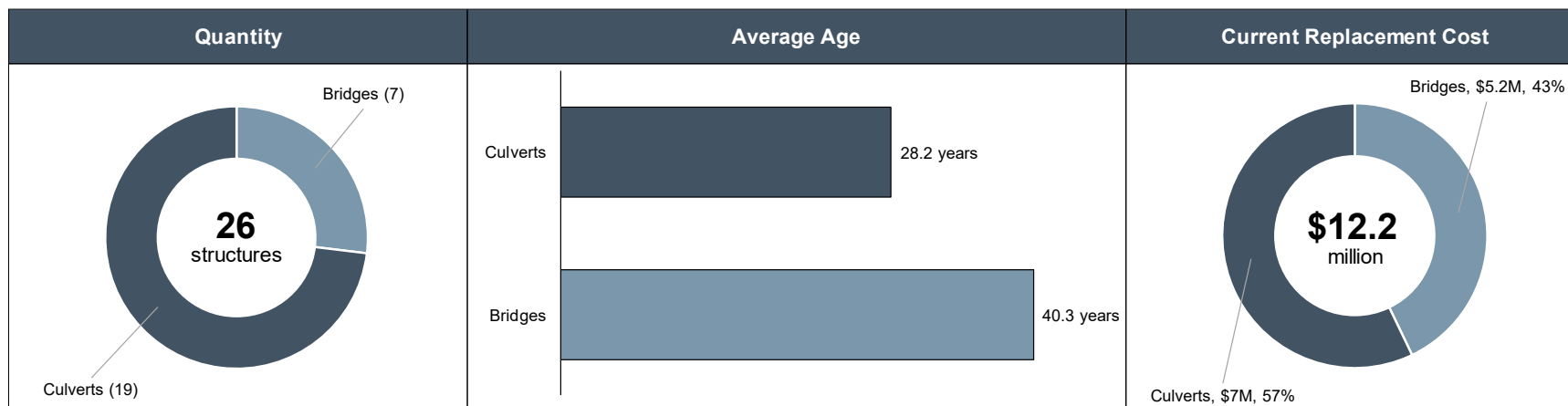
Structure Type	Quantity	Average Age ^[1]	Current Replacement Cost
Bridges	7	40.3 years	\$5,234,000
Culverts	19	28.2 years	\$6,972,000 ^[2]
Total	26	33.4 years	\$12,206,000

^[1]Weighted average utilizing the replacement cost of each structure as weights.

^[2]It is noted that since the Township's Iona Road culvert is located on a municipal boundary, for which lifecycle costs are 50% shared with the Municipality of Dutton/Dunwich, the replacement costs presented in Table 2-2 include 50% of the replacement value of this culvert.



Figure 2-2: Structures – Quantity, Average Age, and Replacement Cost by Structure Type





Lastly, the Township also owns and manages a variety of road-related assets which play a vital role in supporting its broader transportation network. These assets comprise guiderails, sidewalks, and streetlights located on the road right-of-way. The estimated current replacement cost of the Township's road-related assets is \$3.2 million.

Sidewalks represent the largest share of replacement cost at \$2.1 million (65%), followed by streetlights at \$560,000 (18%), and lastly, guiderails at \$548,000 (17%). The average age of the Township's road-related assets is 20.3 years.

Table 2-3 summarizes the quantity, average age, and estimated current replacement cost of the Township's road-related assets by asset type. This information is further illustrated in Figure 2-3.

Table 2-3: Road-related Assets – Quantity, Average Age, and Replacement Cost by Asset Type

Asset Type	Quantity	Average Age	Current Replacement Cost
Guiderails	5.80 km	27.1 years ^[1]	\$548,000
Sidewalks	9.99 km	N/A ^[2]	\$2,079,000
Streetlights	230 streetlights	13.7 years ^[3]	\$560,000
Total		20.3 years^[4]	\$3,187,000

^[1]Weighted average utilizing the length of each guiderail as weights.

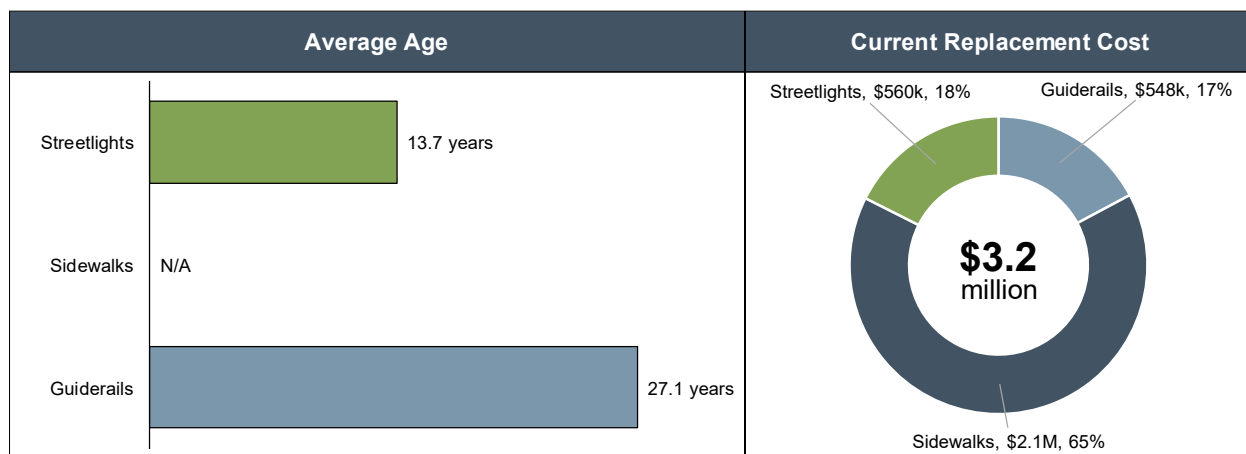
^[2]The year of construction of the Township's sidewalks is not readily available. As such, the weighted average age of these assets cannot be calculated at this time.

^[3]Weighted average utilizing the replacement cost of each streetlight as weights.

^[4]Weighted average utilizing the total replacement cost of each asset type as weights.



Figure 2-3: Road-related Assets – Average Age and Replacement Cost by Asset Type



2.1.2 Condition

The Township periodically completes condition assessments on its road network to evaluate the frequency and severity of observed base-related pavement distresses (e.g., rutting, fatigue cracking, etc.) and surface-related pavement distresses (e.g., raveling, shoving, etc.). Each assessed road segment is subsequently assigned a surface condition rating utilizing a 10-point rating scale. To better communicate the condition of the Township's roads, surface condition ratings have been segmented into qualitative condition states as summarized in Table 2-4.

Table 2-4: Roads – Definition of Qualitative Condition States

Surface Condition Rating	Condition State	Description of Expected Ride Quality ^[1]
9 < Rating ≤ 10	Very Good	No ride discomfort expected at speed limit
6 < Rating ≤ 9	Good	Minor ride discomfort expected at speed limit
3 < Rating ≤ 6	Fair	Increased ride discomfort expected at speed limit; may need to reduce speed due to safety concerns
0 ≤ Rating ≤ 3	Poor	Unable to travel at speed limit due to significant ride discomfort and safety concerns

^[1]Descriptions are adapted from the Township's 2024 Road Needs Study completed by CD Watters Engineering Ltd.



The Township most recently assessed the surface condition of its roads as part of its 2024 Road Needs Study. Based on the results of this assessment, the Township's paved (i.e., surface treated and asphalt) roads were assessed to have an average surface condition rating of 7.1. This would indicate that the Township's paved roads were in an overall 'Good' condition state (on average) at the time of the assessment and can be expected to provide a comfortable ride quality, with some minor discomfort expected when travelling at the posted speed limit.

The Township's 2024 Road Needs Study also assigned surface condition ratings to its unpaved (i.e., gravel) road segments based on their observed physical state to provide a numeric representation of their condition. The Township's unpaved roads were assessed to have an average surface condition rating of 5.8, indicating that gravel roads were in an overall 'Fair' condition state at the time of the assessment. Based on this assessment, users may experience increased discomfort when travelling at the posted speed limit on gravel roads.

It is noted that the condition of gravel roads can change rapidly and unpredictably due to factors such as weather conditions and recency of maintenance activities (e.g., re-grading, application of dust suppressant, spot applications of granular, etc.). Therefore, the current condition of the Township's gravel roads may be significantly different from what was observed as part of the 2024 Road Needs Study's assessment (and is presented herein).

Table 2-5 summarizes the average surface condition rating and associated condition states of the Township's roads by surface type.

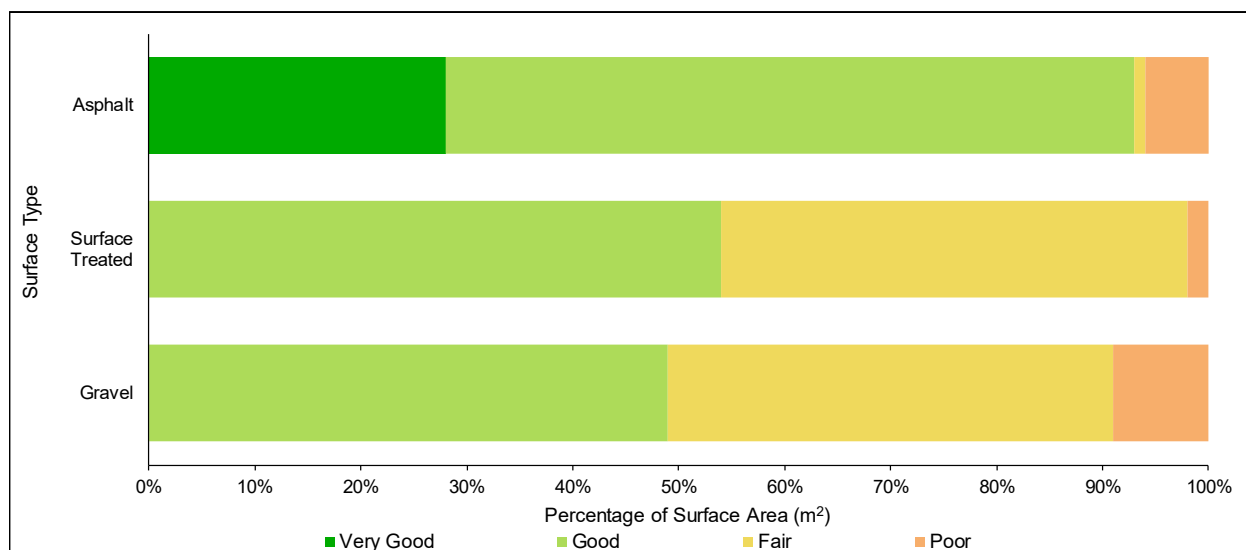


Table 2-5: Roads – Average Surface Condition Rating and Associated Condition States by Surface Type

Surface Type	Average Surface Condition Rating ^[1]	Condition State
Asphalt	8.1	Good
Surface Treated	6.6	Good
Average (Paved)	7.1	Good
Gravel	5.8	Fair
Average (Overall)	6.3	Good

The distribution (surface area) of the Township's roads by condition state and surface type is illustrated in Figure 2-4 and the distribution (surface area) of the Township's roads by condition rating range is illustrated in Figure 2-5.

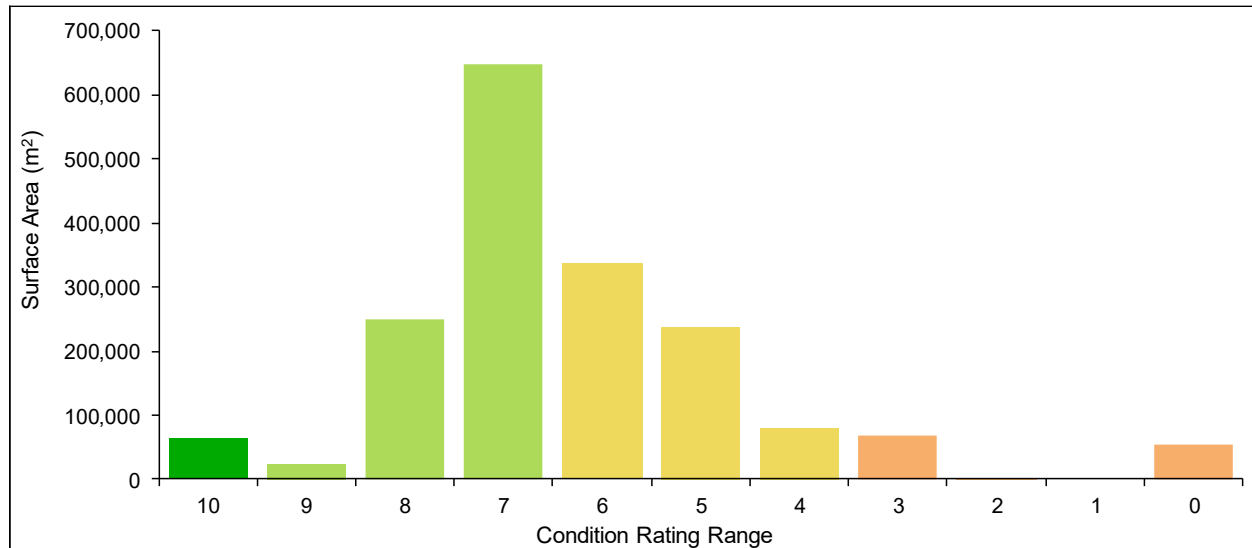
Figure 2-4: Roads – Distribution (by surface area) of Roads by Condition State and Surface Type



^[1]Weighted average utilizing the surface area of road segments as weights.



Figure 2-5: Roads – Distribution (by surface area) of Roads by Condition Rating Range



In accordance with *Ontario Regulation 104/97: Standards for Bridges* (O. Reg. 104/97), the Township completes biennial inspections of its bridges based on the *Ontario Structure Inspection Manual* (OSIM). To provide an overall measure of condition, Bridge Condition Index (BCI) ratings are calculated by assigning weighted values to the condition of various structural (e.g., deck, foundation, superstructure, substructure, girders/beams, bearings, etc.) and non-structural elements (e.g., sidewalks, curbs, handrails, barriers, signage, etc.). BCI ratings are typically represented on a scale of 0 to 100, with 100 being a bridge in new or as-new condition.

To better communicate the condition of the Township's structures, BCI ratings have been segmented into qualitative condition states as summarized in Table 2-6.



Table 2-6: Structures – Definition of Qualitative Condition States

BCI Rating Range	Condition State	Description
$70 \leq \text{BCI} \leq 100$	Good	Repair and/or rehabilitation activities are typically not required to be completed within the next five years. Routine maintenance activities (e.g., sweeping, cleaning, washing, etc.) are still recommended.
$50 \leq \text{BCI} < 70$	Fair	Repair and/or rehabilitation activities are typically required to be completed within the next five years. Structures in this condition state are ideal candidates for scheduling major lifecycle activities as further deterioration in condition often leads to uneconomical increases in repair and/or rehabilitation costs.
$0 \leq \text{BCI} < 50$	Poor	Repair and/or rehabilitation activities are typically required to be completed within the next year. However, if it is determined that replacing the structure would be a more viable, practical, or economical solution, the structure can be identified for continued monitoring and scheduled for replacement within the short-to-medium term.

Based on its 2024 OSIM Inspection Report, the Township's structures have an average BCI rating of 75.9, indicating that, on average, structures are in a 'Good' condition state.

Table 2-7 summarizes the average BCI rating and associated condition states of the Township's structures.

Table 2-7: Structures – Average BCI Ratings and Condition States by Structure Type

Structure Type	Average BCI Rating ^[1]	Condition State
Bridges	77.9	Good
Culverts	74.4	Good
Total	75.9	Good

^[1]Weighted average utilizing the replacement cost of structures as weights.



The distribution (replacement cost) of the Township's structures by condition state and structure type is illustrated in Figure 2-6 and by BCI rating range is illustrated in Figure 2-7.

Figure 2-6: Structures – Distribution (by replacement cost) of Assets by Condition State and Structure Type

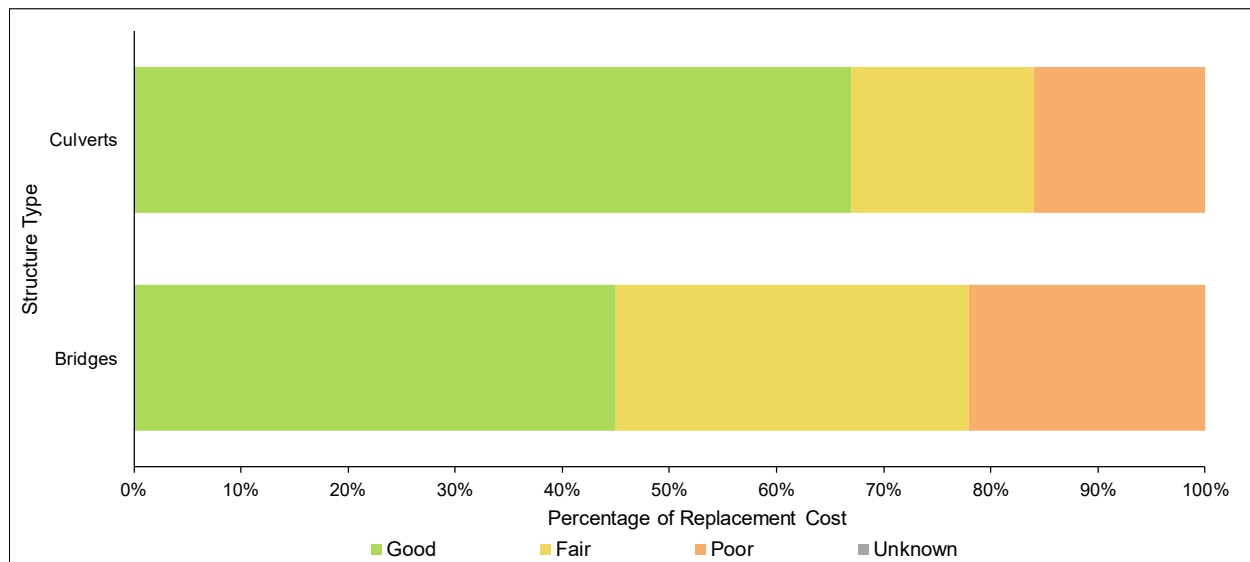
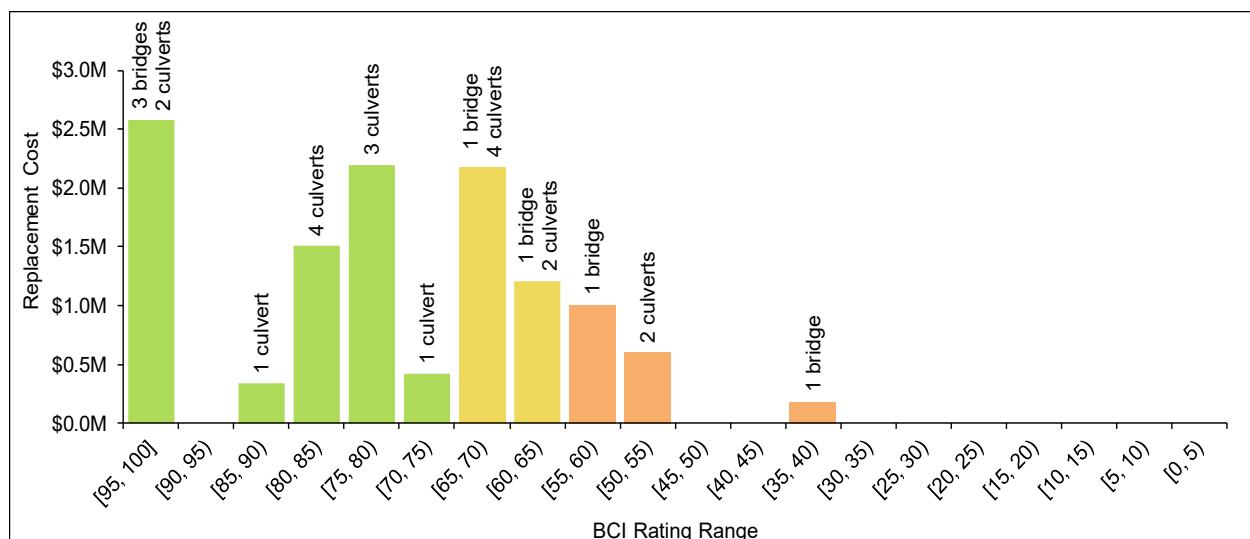


Figure 2-7: Structures – Distribution (by replacement cost) of Assets by BCI Rating Range



Similar to its roads, the Township periodically completes condition assessments on its sidewalks and assigns each assessed sidewalk segment a condition rating using a 10-



point rating scale based on the frequency and severity of observed defects. To better communicate the condition of the Township's sidewalks, condition ratings have been segmented into qualitative condition states as summarized in Table 2-8.

Table 2-8: Sidewalks – Definition of Qualitative Condition States

Condition Rating	Condition State
$8 < \text{Rating} \leq 10$	Excellent
$7 < \text{Rating} \leq 8$	Very Good
$5 < \text{Rating} \leq 7$	Good
$4 < \text{Rating} \leq 5$	Fair
$2 < \text{Rating} \leq 4$	Poor
$1 < \text{Rating} \leq 2$	Very Poor
Rating = 1	Failed

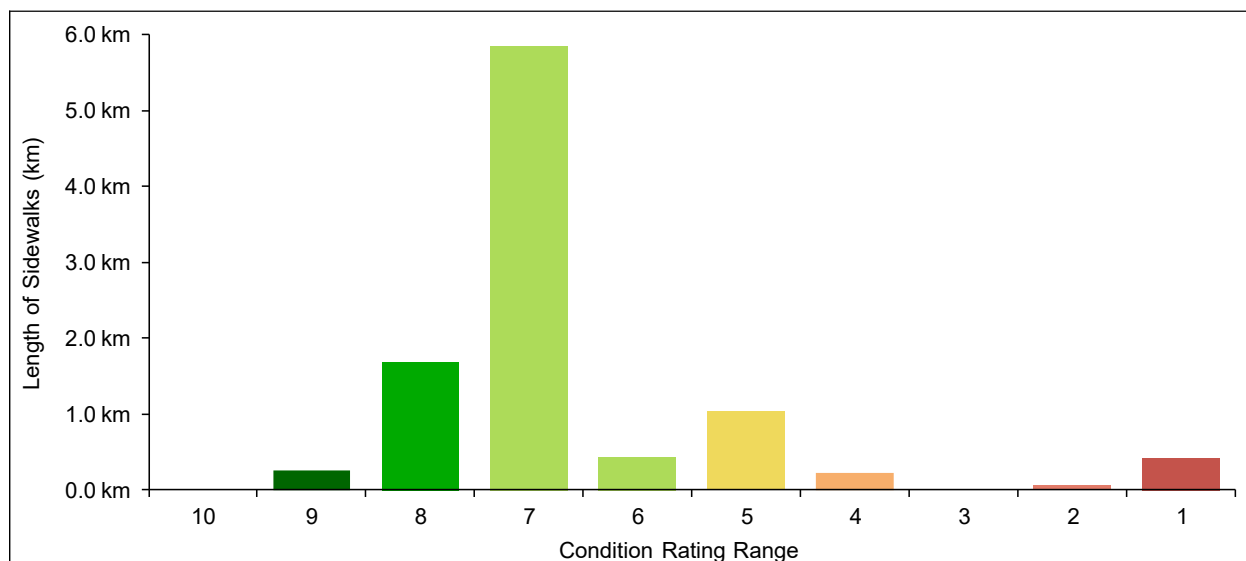
The Township most recently assessed the condition of its sidewalks as part of its 2024 Road Needs Study. Based on the results of this assessment, the Township's sidewalks were assessed to have an average condition rating of 6.6^[1]. This would indicate that the Township's sidewalks were in an overall 'Good' condition state (on average) at the time of the assessment, with some general defects such as scaling, spalling, and hairline-to-medium sized cracking observed.

The distribution (length) of the Township's sidewalks by condition rating is illustrated in Figure 2-8.

^[1]Weighted average utilizing the length of each sidewalk segment as weights.



Figure 2-8: Sidewalks – Distribution (by length) of Assets by Condition Rating Range



Lastly, the condition of the Township’s guiderails and streetlights has not been directly assessed through physical condition assessments. For the purposes of this asset management plan, condition ratings have been assigned to these assets based on their ages relative to their respective useful service life expectancies (i.e., based on the percentage of useful service life consumed (ULC%)). A brand-new asset would have a ULC% of 0%, indicating that none of the asset’s life expectancy has been utilized. Conversely, an asset that has reached the end of its life expectancy would have a ULC% of 100%. It is possible for assets to have a ULC% greater than 100%, which occurs if the asset has exceeded its typical life expectancy but continues to be in service. This is not necessarily a cause for concern; however, it must be recognized that assets near or beyond their typical useful service life expectancy are likely to require replacement or rehabilitation in the near term, may exhibit reduced reliability, and may have increasing repair and maintenance costs.

To better communicate the condition of assets, ULC% ratings have been segmented into qualitative condition states, as summarized in Table 2-9. The scale is set to show that if assets are replaced at the end of their expected useful service life, they would be in a “Fair” condition state. For assets that remain in service beyond their useful service life expectancies (i.e., $ULC\% > 100\%$), their probabilities of failure are assumed to have increased to a point where these assets would be characterized as being in a “Poor” or “Very Poor” condition state.



Table 2-9: Definition of Condition States based on ULC% Ranges

ULC%	Condition State
$0\% \leq \text{ULC}\% \leq 45\%$	Very Good
$45\% < \text{ULC}\% \leq 90\%$	Good
$90\% < \text{ULC}\% \leq 100\%$	Fair
$100\% < \text{ULC}\% \leq 125\%$	Poor
$125\% < \text{ULC}\%$	Very Poor

The Township's guiderails and streetlights have an average ULC% of 100.0%, indicating that they are currently in a 'Fair' condition state, on average. Table 2-10 summarizes the average ULC% and associated condition states of these assets by asset type.

Table 2-10: Streetlights and Guiderails – Average ULC% and Condition States by Asset Type

Asset Type	Average ULC%	Condition State
Guiderails	131.9% ^[1]	Very Poor
Streetlights	68.8% ^[2]	Good
Average	100.0%^[3]	Fair

It is noted that an age-based condition assessment (as presented above) may not always be an accurate proxy for the condition of guiderails, as they can be maintained in adequate condition for an extended period through the completion of maintenance and repair activities, which are typically conducted in coordination with planned road work.

The distribution (length) of the Township's guiderails by ULC% rating range is illustrated in Figure 2-9.

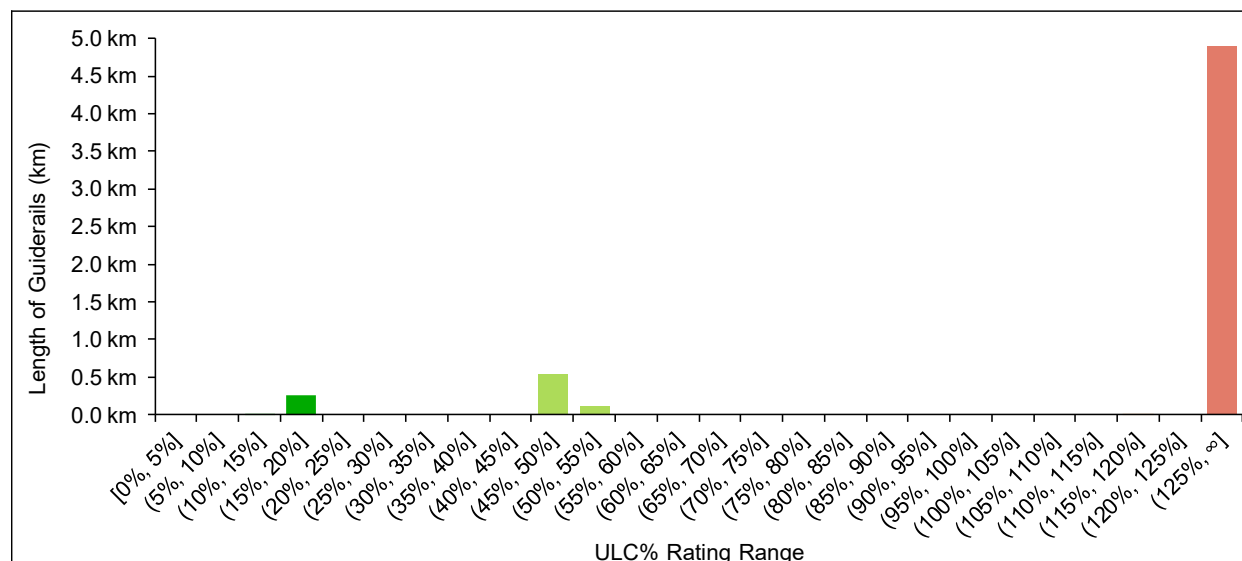
^[1]Weighted average utilizing the length of each guiderail as weights.

^[2]Weighted average utilizing the replacement cost of each streetlight as weights.

^[3]Weighted average utilizing the total replacement cost of each asset type as weights.



Figure 2-9: Guiderrails – Distribution (by length) of Assets by ULC% Rating Range





framework presented in this subsection identifies both the levels of service that assets are currently providing as well as the proposed levels of service (i.e., target performance) that the Township is striving towards. The levels of service frameworks presented in this asset management plan were developed by identifying service aspects that would be of interest to end users (and more broadly, the general public) and in consideration of available data.

The Township's levels of service frameworks are organized in tables, which are structured as follows:

- The 'Service Attribute' column in Table 2-11 indicates the high-level attribute being addressed;
- The 'Community Levels of Service' column in Table 2-11 explains the Township's intent in plain language and provides additional information about the service being provided;
- The 'Performance Measure' column in Table 2-12 describes the performance measure(s) connected to the identified service attribute;
- The 'Current Performance' column in Table 2-12 identifies the current level of service with respect to each performance measure based on the best available data; and
- The 'Target Performance' column in Table 2-12 identifies the proposed level of service with respect to each performance measure.



Table 2-11: Transportation Assets – Community Levels of Service

Service Attribute	Community Levels of Service
Scope	The Township's transportation assets enable the safe and efficient movement of people and goods within the Township and provide connectivity to regional roads. In addition to passenger vehicles, the Township's transportation assets also support commercial truck traffic, movement of agricultural equipment, and reliable emergency vehicle access to all areas of the Township. The broader transportation network also supports active transportation modes such as walking and cycling.
Quality	The Township strives to maintain its transportation assets at a level that supports the safe and efficient passage of vehicular and pedestrian traffic.
	To aid in interpreting the condition of transportation assets, descriptions of different condition states are summarized in Section 2.1.2. General descriptions of how each condition state affects the use of assets is also provided in therein.

Table 2-12: Transportation Assets – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance	Target Performance
Scope	Number of lane-kilometres of arterial roads as a proportion of square kilometres of land area of the Township.	Not Applicable ^[1]	Not Applicable
	Number of lane-kilometres of collector roads as a proportion of square kilometres of land area of the Township.	0.23 km/km ²	0.23 km/km ²
	Number of lane-kilometres of local roads as a proportion of square kilometres of land area of the Township.	0.55 km/km ²	0.55 km/km ²
	Percentage of bridges in the Township with loading or dimensional restrictions.	0%	0%

^[1]The Township does not currently own and maintain any arterial roads within its road network.



Service Attribute	Performance Measure	Current Performance	Target Performance
	Percentage (by length) of roads with an asphalt surface.	12%	12%
	Percentage (by length) of roads with surface treatment.	30%	41% ^[1]
	Percentage (by length) of roads with a gravel surface.	58%	47% ^[1]
Quality	For paved roads in the municipality, the average Pavement Condition Index value.	71 ^[2]	Maximize
	For unpaved roads in the Township, the average surface condition.	Fair	Good to Fair
	For bridges in the Township, the average bridge condition index value.	78	Maximize
	For structural culverts in the Township, the average bridge condition index value.	74	Maximize
	Average condition rating (and condition state) of sidewalks.	6.6 (Good)	Maximize
	Percentage (by length) of sidewalks in a 'Fair' or better condition state.	93%	Maximize
	Percentage (by replacement cost) of streetlights in a 'Fair' or better condition state.	90%	Maximize

2.2 Tax-funded Facilities

2.2.1 State of Local Infrastructure

The Township owns and manages 27 facilities that support the provision of the various municipal services that are funded by the general tax levy. The inventory includes

^[1]The Township plans to convert approximately 26.7 km of its gravel roads to surface treatment over the next 10 years.

^[2]As mentioned in Section 2.1.2, the Township assesses the condition of its road segments utilizing a 10-point rating scale as summarized in Table 2-4. The average surface condition rating of paved roads has been multiplied by a factor of 10 to provide an estimate of the average pavement condition index value, which is typically reported on a scale of 0 to 100.



administrative facilities (municipal office, medical centre, and library at Keystone complex), fire stations (Shedden and Talbotville fire stations), public works facilities (e.g., Public Works garage, salt and sand storage building, etc.), and recreation facilities (e.g., Keystone complex, park pavilions, concession booths, etc.).

The estimated current replacement cost of Township's facilities is \$23.8 million. Public works facilities represent the largest share of replacement cost at \$6.9 million (29%), followed by recreation facilities at \$6.6 million (28%), fire stations at \$5.9 million (25%), and lastly, administrative facilities at \$4.3 million (18%). The average age of the Township's facilities is 16.5 years.

Table 2-13 summarizes the quantity, gross floor area, average age, and estimated current replacement cost of the Township's facilities by service area. This information is further illustrated in Figure 2-11.

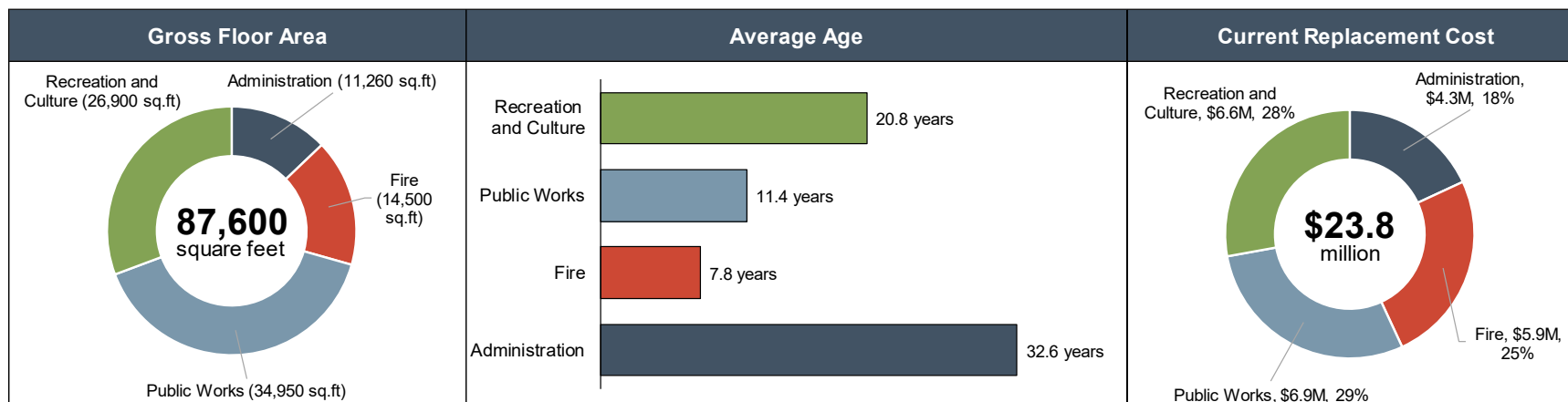
Table 2-13: Facilities – Quantity, Gross Floor Area, Average Age, and Replacement Cost by Service Area

Service Area	Quantity	Gross Floor Area	Average Age ^[1]	Current Replacement Cost
Administration	3 facilities	11,300 ft ²	32.6 years	\$4,299,000
Fire Services	2 facilities	14,500 ft ²	7.8 years	\$5,943,000
Public Works	5 facilities	35,000 ft ²	11.4 years	\$6,905,000
Recreation & Culture	17 facilities	26,900 ft ²	20.8 years	\$6,621,000
Total	27 facilities	87,600 ft²	16.5 years	\$23,768,000

^[1]Weighted average utilizing the gross floor area of each facility as weights.



Figure 2-11: Facilities – Gross Floor Area, Average Age, and Replacement Cost by Service Area





2.2.2 Condition

The condition of the Township's facilities has not been formally assessed through physical condition assessments. For the purposes of this asset management plan, condition ratings have been assigned to the various building elements comprising each facility based on each element's age relative to its respective useful service life (i.e. based on the percentage of useful service life consumed (ULC%))^[1]. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

Calculated ULC% ratings of each facility's respective building elements were subsequently averaged to provide a high-level indicator of each facility's overall condition. To better communicate the condition of facilities, these average ULC% ratings were segmented into qualitative condition states as summarized previously in Table 2-9.

The average ULC% of the Township's facilities is 30.1%, indicating that, on average, building elements are currently in a 'Very Good' condition state. Table 2-14 summarizes the average ULC% and associated condition states of the facilities by service area.

Table 2-14: Facilities – Average ULC% and Condition States by Service Area

Service Area	Average ULC% ^[2]	Condition State
Administration	37.7%	Very Good
Fire Services	22.9%	Very Good
Public Works	22.3%	Very Good
Recreation and Culture	41.0%	Very Good
Average	30.1%	Very Good

The distribution (gross floor area) of the Township's facilities by condition state and service area is illustrated in Figure 2-12 and by ULC% rating range is illustrated in Figure 2-13.

^[1]It is noted that the inventory of building elements comprising each facility is based on the Township's Citywide database. Consequently, any building elements not inventoried in the Township's Citywide database are excluded from the condition assessment presented herein.

^[2]Weighted average using replacement cost of each asset as weights.



Figure 2-12: Facilities – Distribution (by gross floor area) of Assets by Condition State and Asset Type

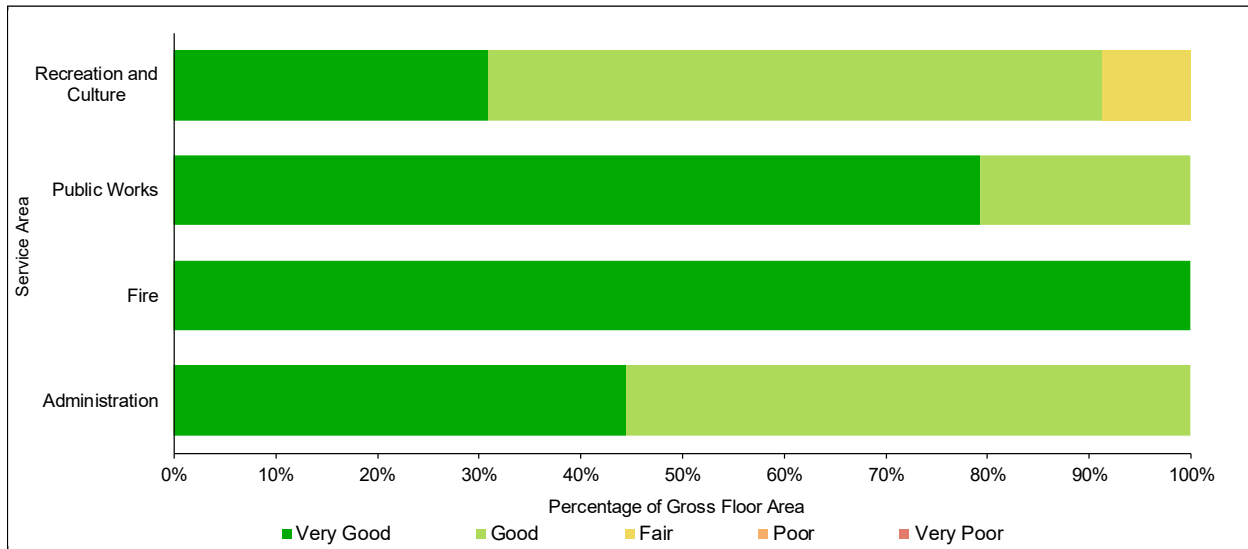
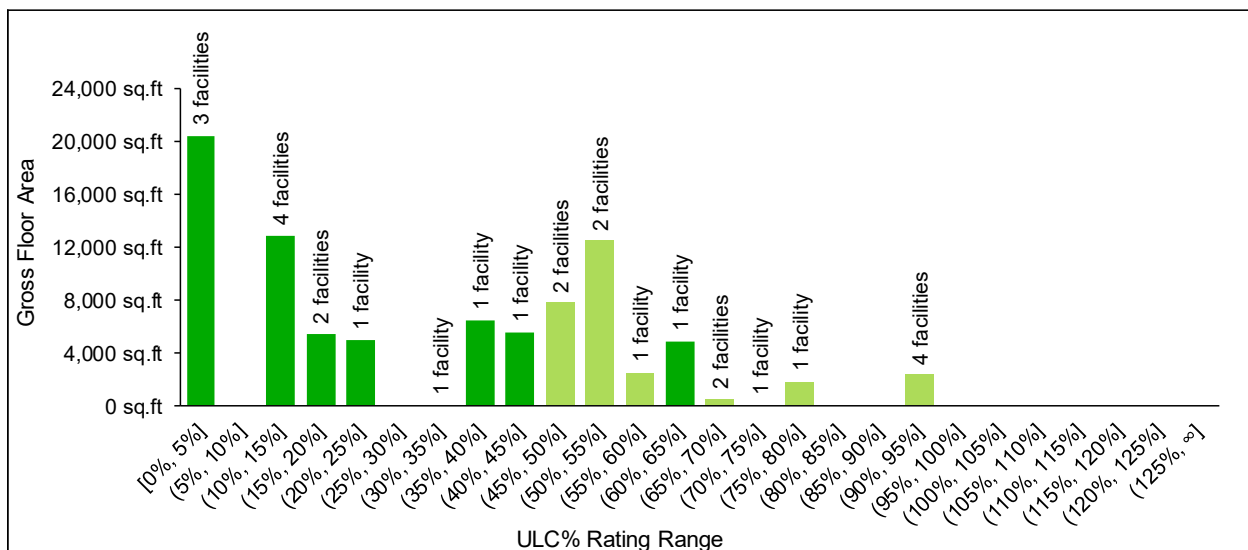


Figure 2-13: Facilities – Distribution (by gross floor area) of Assets by ULC% Rating Range



2.2.3 Levels of Service

This subsection presents the Township's levels of service framework for facilities. Table 2-15 presents the Service Attributes and Community Levels of Service while Table 2-16 presents the Technical Levels of Service (i.e., performance measures). Please refer to section 2.1.3 for further details on the Township's levels of service framework.



Table 2-15: Facilities – Community Levels of Service

Service Attribute	Community Levels of Service
Capacity	The Township strives to align the capacity of its facilities with the service demands of its community.
Quality	The Township strives to maintain its facilities in adequate condition to continue effectively supporting the provision of municipal services.

Table 2-16: Facilities – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance	Target Performance
Capacity	Gross floor area (square footage) of administrative facilities per 100 residents.	205 ft ² / 100 residents ^[1]	177 ft ² / 100 residents ^[1]
	Gross floor area (square footage) of fire stations per 100 residents.	263 ft ² / 100 residents ^[1]	228 ft ² / 100 residents ^[1]
	Gross floor area (square footage) of public works facilities per kilometre of roads.	147 ft ² / kilometre	147 ft ² / kilometre
	Gross floor area (square footage) of recreation facilities per 100 residents.	489 ft ² / 100 residents ^[1]	422 ft ² / 100 residents ^[1]
Quality	Percentage (by gross floor area) of administrative facilities in a 'Fair' or better condition state.	100%	Maximize
	Percentage (by gross floor area) of fire stations in a 'Fair' or better condition state.	100%	Maximize
	Percentage (by gross floor area) of public works facilities in a 'Fair' or better condition state.	100%	Maximize
	Percentage (by gross floor area) of recreation facilities in a 'Fair' or better condition state.	100%	Maximize

^[1]Based on population projections provided in the Township's 2020 Development Charges Background Study.



2.3 Tax-funded Fleet and Equipment

2.3.1 *State of Local Infrastructure*

The Township's inventory of fleet and equipment assets comprises vehicles ranging from light-duty pickup trucks to larger vehicles such as plow trucks, graders, and fire fleet assets such as tankers and pumpers. The inventory also includes various pieces of equipment that support public works operations, administrative functions, and fire-fighting activities.

The estimated current replacement cost of the Township's fleet and equipment assets is \$10.8 million. Public works fleet assets represent the largest share of replacement cost at \$5.9 million (55%), followed by fire fleet assets at \$2.7 million (25%), fire-fighting equipment at \$1.1 million (11%), public works equipment at \$688,000 (6%), general administrative equipment (including IT assets) at \$292,000 (3%), and lastly, vehicles belonging to Building and Community Services (BCS) at \$91,000 (1%). The average age of the Township's fleet and equipment assets is 6.9 years.

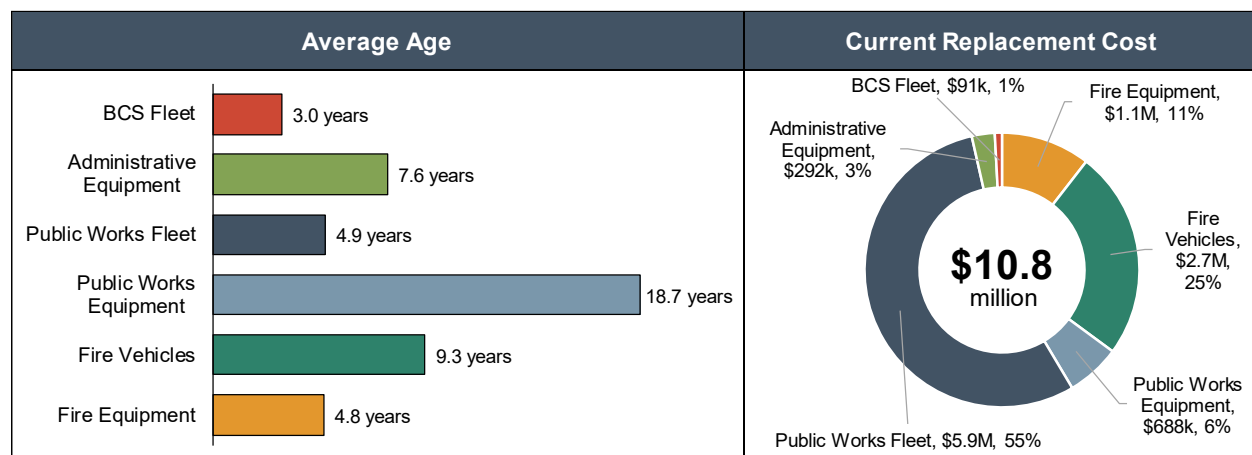
Table 2-17 summarizes the average age and estimated current replacement cost of the Township's fleet and equipment assets by asset type. This information is further illustrated in Figure 2-14.



Table 2-17: Fleet and Equipment – Average Age and Replacement Cost by Asset Type

Asset Type	Examples	Average Age ^[1]	Current Replacement Cost
Fire Equipment	Radios, SCBAs, bunker gear etc.	4.8 years	\$1,136,000
Fire Vehicles	Pumpers, tankers, rescue vehicles, etc.	9.3 years	\$2,659,000
Public Works Equipment	Generators, mowers, cardlock fuel system, etc.	18.7 years	\$688,000
Public Works Fleet	Plows, pickup trucks, loaders, backhoes, etc.	4.9 years	\$5,946,000
Administrative Equipment	IT hardware, office furniture, etc.	7.6 years	\$292,000
Building and Community Services Vehicles	Pickup trucks (2)	3.0 years	\$91,000
Total		6.9 years	\$10,812,000

Figure 2-14: Fleet and Equipment – Average Age and Replacement Cost by Asset Type



2.3.2 Condition

The condition of the Township's fleet and equipment assets has not been directly assessed through physical condition assessments. For the purposes of this asset management plan, condition ratings have been assigned to assets based on age

^[1]Weighted average utilizing the replacement cost of each asset as weights.



relative to useful service life (i.e. based on the percentage of useful service life consumed (ULC%)). To better communicate the condition of these assets, ULC% ratings have been segmented into qualitative condition states as summarized previously in Table 2-9. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

The Township's fleet and equipment assets have an average ULC% of 48.3%, indicating that, on average, assets are currently in a 'Good' condition state. Table 2-18 summarizes the average ULC% and associated condition states of the fleet and equipment assets by asset type.

Table 2-18: Fleet and Equipment – Average ULC% and Condition States by Asset Type

Asset Type	Average ULC% ^[1]	Condition State
Fire Equipment	49.2%	Good
Fire Vehicles	47.8%	Good
Public Works Equipment	123.4%	Poor
Public Works Fleet	36.3%	Very Good
Administrative Equipment	118.9%	Poor
Building and Community Services Vehicles	42.9%	Very Good
Average	48.3%	Good

The distribution (replacement cost) of the Township's fleet and equipment assets by condition state and service area is illustrated in Figure 2-15 and by ULC% rating range is illustrated in Figure 2-16.

^[1]Weighted average using replacement cost of each asset as weights.



Figure 2-15: Fleet and Equipment Assets – Distribution (by replacement cost) of Assets by Condition State and Service Area

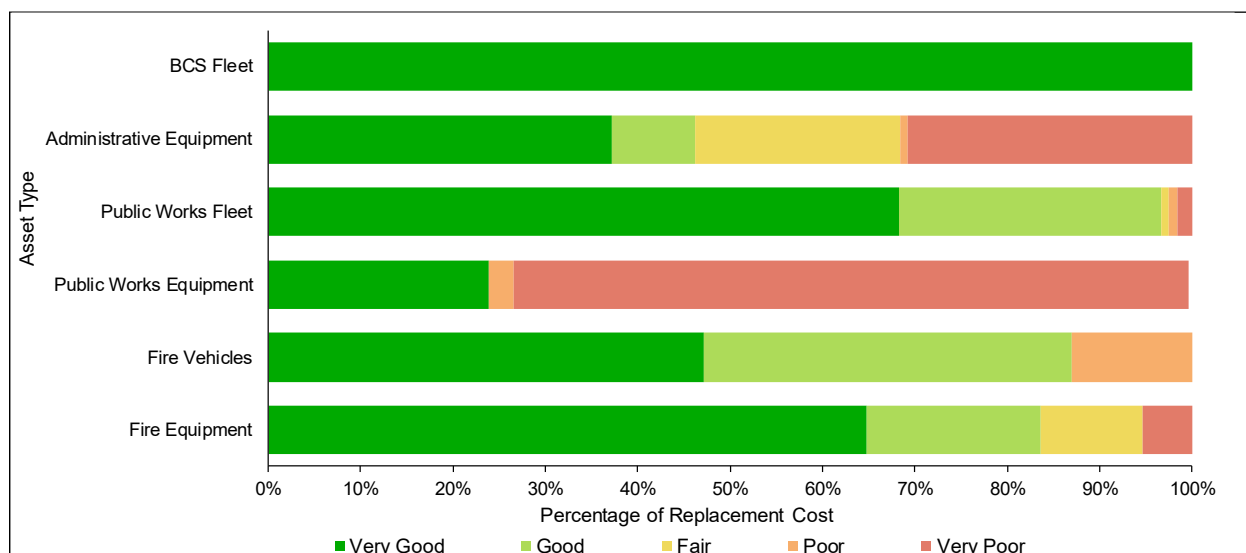
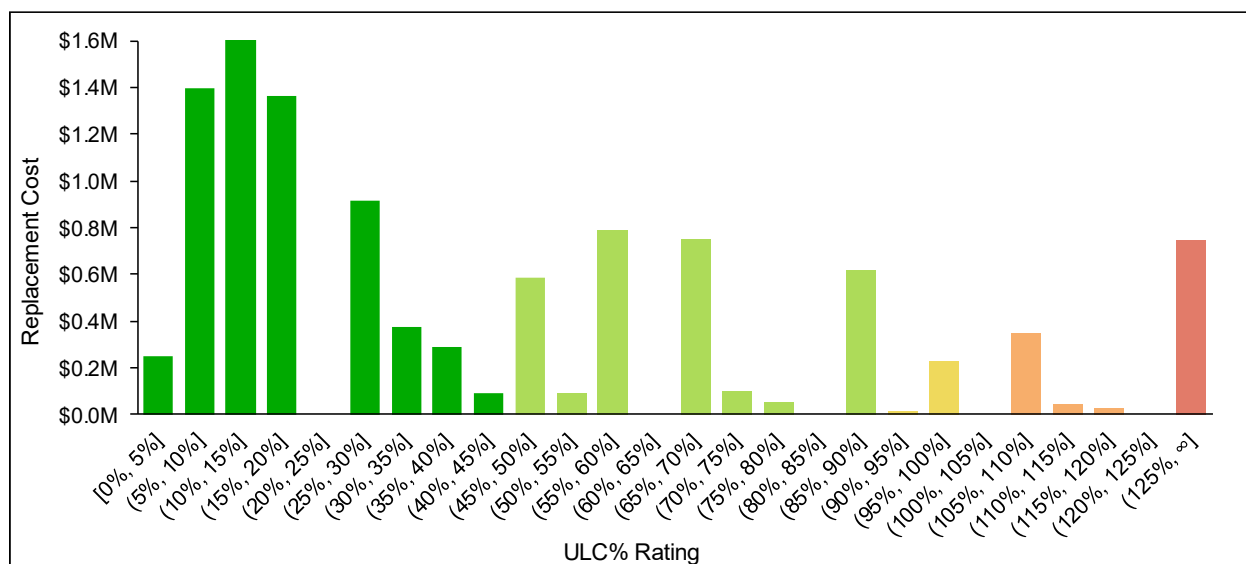


Figure 2-16: Fleet and Equipment Assets – Distribution (by replacement cost) of Assets by ULC% Rating Range



2.3.3 Levels of Service

This subsection presents the Township's levels of service framework for fleet and equipment assets. Table 2-19 presents the Service Attributes and Community Levels of Service, while Table 2-20 presents the Technical Levels of Service (i.e., performance



measures). Please refer to section 2.1.3 for further details on the Township's levels of service framework.

Table 2-19: Fleet and Equipment – Community Levels of Service

Service Attribute	Community Levels of Service
Reliability	The Township strives to minimize the number and impact of unplanned repair/maintenance activities performed on its fleet and equipment assets.

Table 2-20: Fleet and Equipment – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance	Target Performance
Reliability	Percentage (by replacement cost) of fire-fighting equipment in a 'Fair' or better condition state.	95%	Maximize
	Percentage (by replacement cost) of fire fleet assets in a 'Fair' or better condition state.	87%	Maximize
	Percentage (by replacement cost) of public works equipment assets in a 'Fair' or better condition state.	24%	Maximize
	Percentage (by replacement cost) of public works fleet assets in a 'Fair' or better condition state.	97%	Maximize
	Percentage (by replacement cost) of general administrative equipment assets in a 'Fair' or better condition state.	68%	Maximize
	Percentage (by replacement cost) of Building and Community Services vehicles in a 'Fair' or better condition state.	100%	Maximize



2.4 Parks and Recreation

2.4.1 State of Local Infrastructure

The Township owns and manages a variety of parks and recreation assets comprising ball diamonds and sport courts, lighting and fencing assets, play equipment, parking lots, and other miscellaneous equipment assets such as picnic tables, chairs, audio/video equipment, kitchen appliances, etc.

The estimated current replacement cost of the Township's parks and recreation assets is \$2.2 million. Lighting and fencing assets represent the largest share of this replacement cost at \$881,000 (41%), followed by play equipment at \$539,000 (25%), ball diamonds and sport courts at \$313,000 (14%), miscellaneous equipment assets at \$308,000 (14%), and lastly, parking lots at \$132,000 (6%). The average age of the Township's parks and recreation assets is approximately 9.8 years.

Table 2-21 summarizes the average age and estimated current replacement cost of the Township's parks and recreation assets by asset type and this information is further illustrated in Figure 2-17.

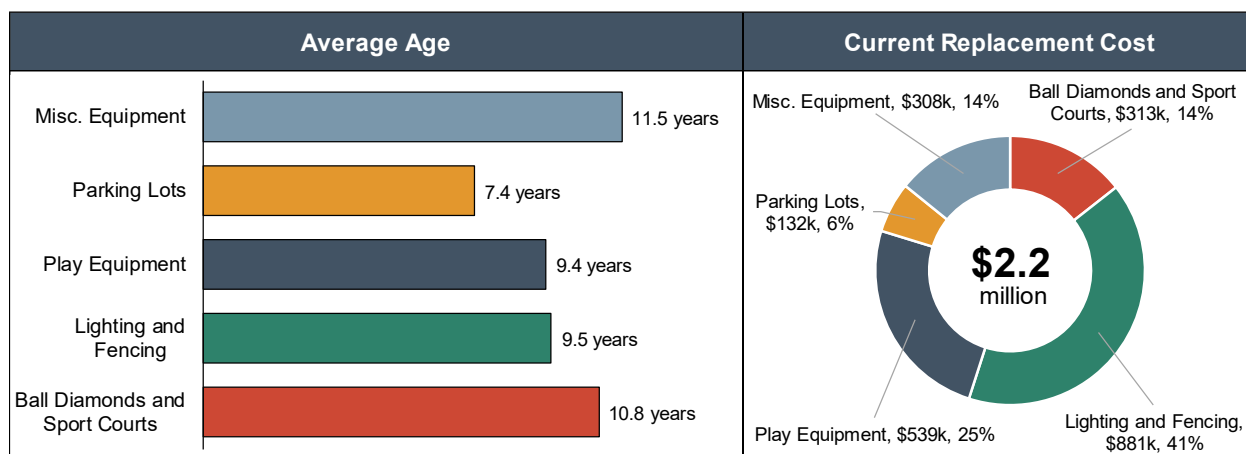
Table 2-21: Parks and Recreation – Average Age and Replacement Cost by Asset Type

Asset Type	Average Age ^[1]	Current Replacement Cost
Ball Diamonds and Sport Courts	10.8 years	\$313,000
Lighting and Fencing	9.5 years	\$881,000
Play Equipment	9.4 years	\$539,000
Parking Lots	7.4 years	\$132,000
Misc. Equipment	11.5 years	\$308,000
Total	9.8 years	\$2,173,000

^[1]Weighted average utilizing the replacement cost of each asset as weights.



Figure 2-17: Parks and Recreation – Average Age and Replacement Cost by Asset Type



2.4.2 Condition

The condition of the Township's parks and recreation assets has not been directly assessed through physical condition assessments. For the purposes of this asset management plan, condition ratings have been assigned to assets based on age relative to useful service life (i.e. based on the percentage of useful service life consumed (ULC%)). To better communicate the condition of these assets, ULC% ratings have been segmented into qualitative condition states as summarized previously in Table 2-9. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

The Township's parks and recreation assets have an average ULC% of 69.5%, indicating that, on average, assets are currently in a 'Good' condition state. Table 2-22 summarizes the average ULC% and associated condition states of the parks and recreation assets.

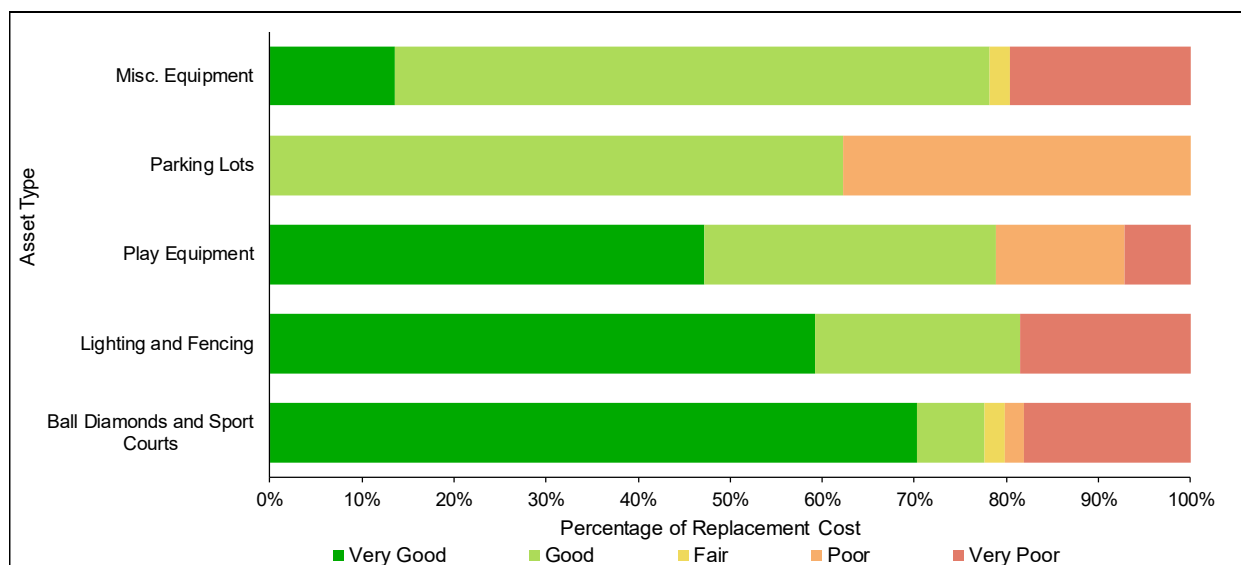


Table 2-22: Parks and Recreation – Average ULC% and Condition State by Asset Type

Asset Type	Average ULC% ^[1]	Condition State
Ball Diamonds and Sport Courts	62.0%	Good
Lighting and Fencing	59.9%	Good
Play Equipment	62.5%	Good
Parking Lots	74.1%	Good
Misc. Equipment	114.8%	Poor
Average	69.5%	Good

The distribution (replacement cost) of the Township's parks and recreation assets by condition state and asset type is illustrated in Figure 2-18 and by ULC% rating range is illustrated in Figure 2-19.

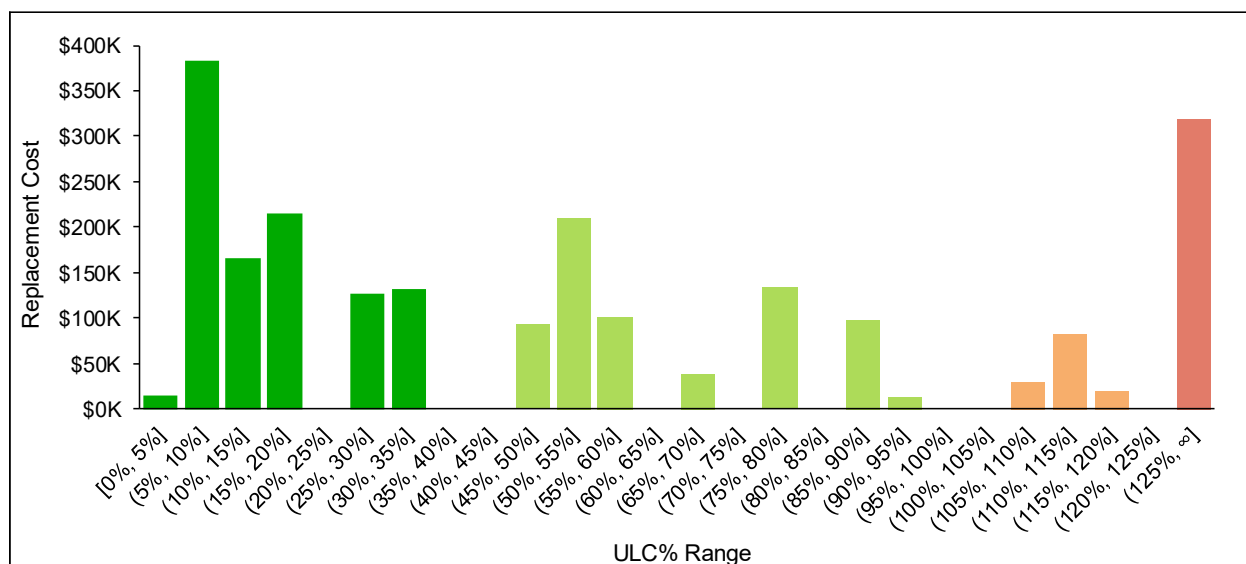
Figure 2-18: Parks and Recreation – Distribution (replacement cost) of Assets by Condition State and Asset Type



^[1]Weighted average using replacement cost of each asset as weights.



Figure 2-19: Parks and Recreation – Distribution (by replacement cost) of Assets by ULC% Rating Range



2.4.3 Levels of Service

This subsection presents the Township’s levels of service frameworks for its parks and recreation assets. Table 2-23 presents the Service Attributes and Community Levels of Service, while Table 2-24 presents the Technical Levels of Service (i.e., performance measures). Please refer to section 2.1.3 for further details on the Township’s levels of service framework.

Table 2-23: Parks and Recreation – Community Levels of Service

Service Attribute	Community Levels of Service
Reliability	The Township strives to maintain its parks and recreation assets in adequate condition to continue providing a satisfactory user experience.



Table 2-24: Parks and Recreation – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance	Target Performance
Reliability	Percentage (by replacement cost) of ball diamonds and sport courts in a 'Fair' or better condition state.	80%	Maximize
	Percentage (by replacement cost) of lighting and fencing assets in a 'Fair' or better condition state.	82%	Maximize
	Percentage (by replacement cost) of play equipment assets in a 'Fair' or better condition state.	79%	Maximize
	Percentage (by replacement cost) of parking lots in a 'Fair' or better condition state.	62%	Maximize
	Percentage (by replacement cost) of miscellaneous equipment assets in a 'Fair' or better condition state.	80%	Maximize

2.5 Stormwater

2.5.1 State of Local Infrastructure

The Township's stormwater system supports the management of stormwater runoff, provides flood protection, manages the rate of groundwater discharge while helping to recharge groundwater reserves, and helps stop contaminants from entering the water supply. The system is supported by 8.6 km of stormwater mains and numerous catch basins and manholes.

The estimated current replacement cost of the Township's stormwater system assets is \$8.6 million. Stormwater mains represent the largest share of the replacement cost at \$8.1 million (95%), followed by catch basins at \$259,000 (3%), and manholes at \$176,000 (2%). The average age of the Township's stormwater system assets is 2.1 years.

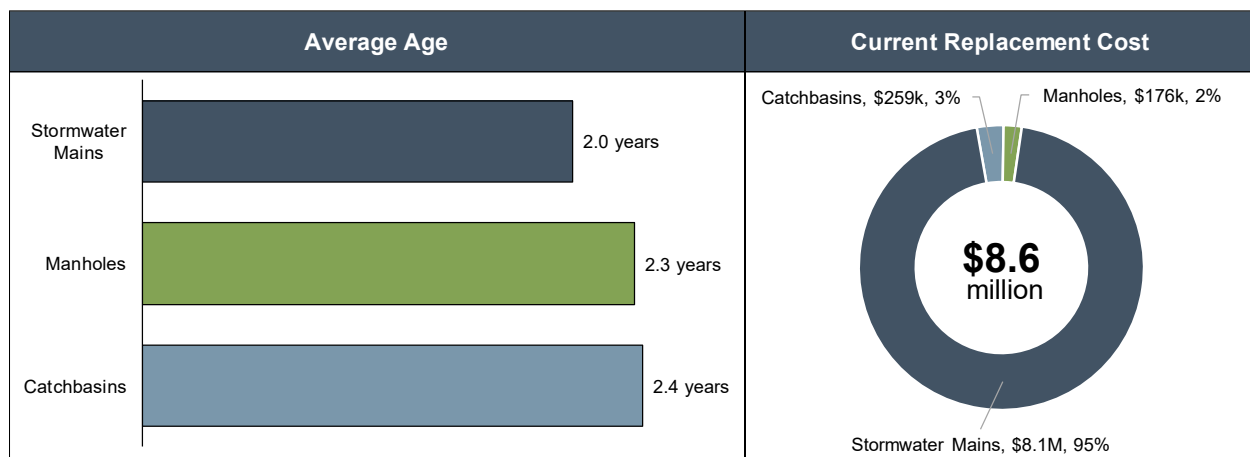
Table 2-21 summarizes the average age and estimated current replacement cost of the Township's stormwater system assets by asset type and this information is further illustrated in Figure 2-17.



Table 2-25: Stormwater – Average Age and Replacement Cost by Asset Type

Asset Type	Average Age ^[1]	Current Replacement Cost
Catch Basins	2.4 years	\$259,000
Manholes	2.3 years	\$176,000
Stormwater Mains	2.0 years ^[2]	\$8,127,000
Total	2.1 years^[3]	\$8,562,000

Figure 2-20: Stormwater – Average Age and Replacement Cost by Asset Type



2.5.2 Condition

The condition of the Township's stormwater system assets has not been directly assessed through physical condition assessments. For the purposes of this asset management plan, condition ratings have been assigned to assets based on age relative to useful service life (i.e. based on the percentage of useful service life consumed (ULC%)). To better communicate the condition of these assets, ULC% ratings have been segmented into qualitative condition states as summarized previously

^[1]Weighted average utilizing the length of stormwater mains and replacement cost of other assets as weights.

^[2]It is noted that the ages of approximately 75% (by length) of the Township's stormwater mains are not readily available. As such, these assets are excluded from the calculation of average age presented herein.

^[3]Weighted average utilizing the total replacement cost of each asset type as weights.



in Table 2-9. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

The Township's stormwater assets have an average ULC% of 2.7%, indicating that, on average, assets are in a 'Very Good' condition state. Table 2-26 summarizes the average ULC% and associated condition states of stormwater assets.

Table 2-26: Stormwater – Average ULC% and Condition States by Asset Type

Asset Type	Average ULC% ^[1]	Condition State
Catch Basins	3.2%	Very Good
Manholes	3.1%	Very Good
Stormwater Mains	2.7% ^[2]	Very Good
Average	3.2%^[3]	Very Good

The distribution (replacement cost) of the Township's stormwater assets by condition state and asset type is illustrated in Figure 2-21 and by ULC% rating range is illustrated in Figure 2-22.

^[1]Weighted average utilizing the length of stormwater mains and replacement cost of other assets as weights.

^[2]As noted earlier in Section 2.5.1, the ages of approximately 75% (by length) of the Township's stormwater mains are not readily available. As such, ULC% rating cannot be calculated for these assets at this time and these assets are excluded from the calculation of weighted average ULC%.

^[3]Weighted average utilizing the replacement cost of assets as weights.



Figure 2-21: Stormwater – Distribution (by replacement cost) of Assets by Condition State and Asset Type

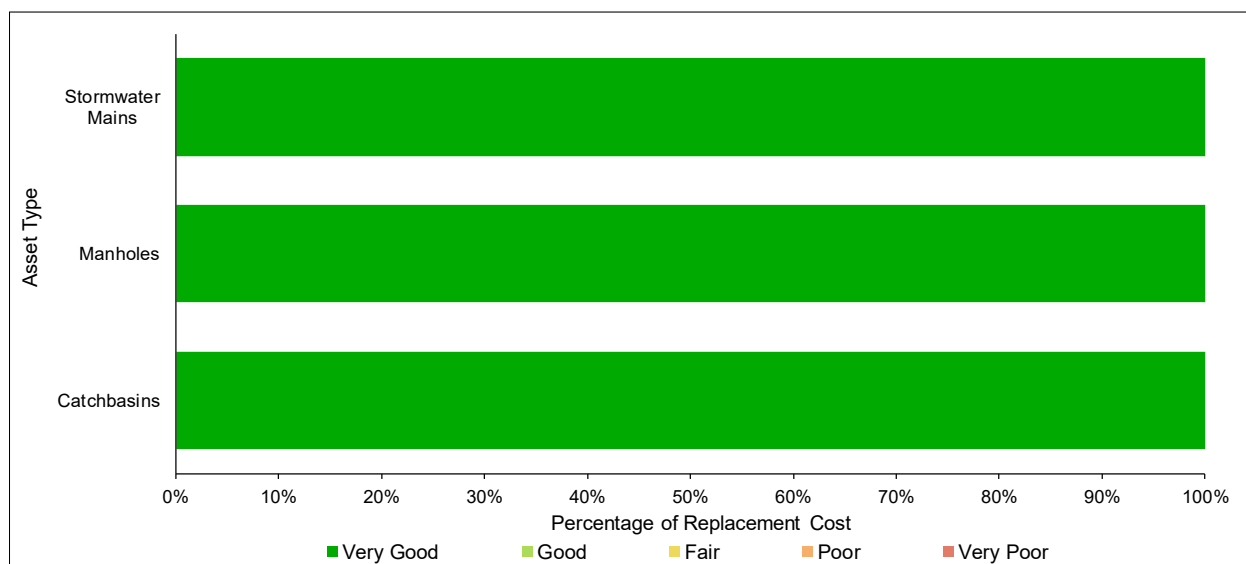
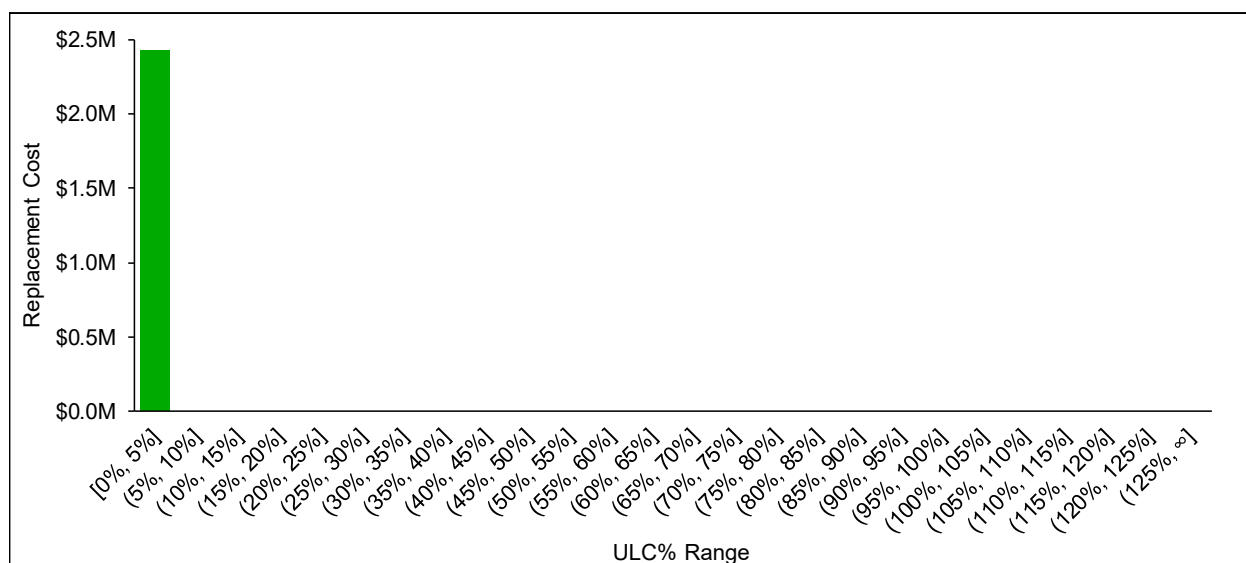


Figure 2-22: Stormwater – Distribution (replacement cost) of Assets by ULC% Rating Range



2.5.3 Levels of Service

This section presents the Township's levels of service framework for stormwater assets. Table 2-27 presents the Service Attributes and Community Levels of Service, while Table 2-28 presents the Technical Levels of Service (i.e., performance measures).



Please refer to section 2.1.3 for further details on the Township's levels of service framework.

Table 2-27: Stormwater – Community Levels of Service

Service Attribute	Community Levels of Service
Scope	The stormwater management system enables collection and retention of stormwater within the Township.
Reliability	The Township strives to maintain its stormwater system assets in adequate condition to reliably provide flood protection to properties and roads, manage the rate of groundwater discharge, and assist in reducing the level of contamination entering the natural environment.

Table 2-28: Stormwater – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance	Target Performance
Scope	Percentage of properties in municipality resilient to a 100-year storm.	15%	15%
	Percentage of the municipal stormwater management system resilient to a 5-year storm.	48%	100%
Reliability	Percentage (by length) of stormwater mains in a 'Fair' or better condition state.	100% ^[1]	Maximize
	Percentage (by replacement cost) of catch basins in a 'Fair' or better condition state.	100%	Maximize
	Percentage (by replacement cost) of manholes in a 'Fair' or better condition state.	100%	Maximize

^[1]As noted earlier in Section 2.5.2, an age-based condition assessment cannot be completed for approximately 75% (by length) of the Township's stormwater mains due to data limitations. As such, these assets have been excluded from the calculation of the current performance of this measure.



2.6 Water

2.6.1 *State of Local Infrastructure*

The Township's water distribution system provides potable water for residential and business consumption, fire suppression needs, and also for the Township's own maintenance operations and facilities. The system is supported by 245.9 km of watermains, a number of water meters, a pickup truck, and water facilities that support secondary disinfection and pressure boosting. It is noted that primary disinfection is undertaken by the Elgin Area Primary Water Supply system, which provides treated water to the Township's water distribution system. It is further noted that while the Township owns all water system assets and is responsible for funding their lifecycle requirements, the operation of the Township's water distribution system is contracted to the Ontario Clean Water Agency (OCWA).

The estimated current replacement cost of the Township's water system assets is \$85.2 million. Watermains represent the largest share of this replacement cost at \$82.7 million (97%), followed by water meters at \$1.3 million (2%), water facilities at \$1.2 million (1%), and lastly, the pickup truck at \$63,000 (0.1%). The average age of the Township's water system assets is 20.8 years.

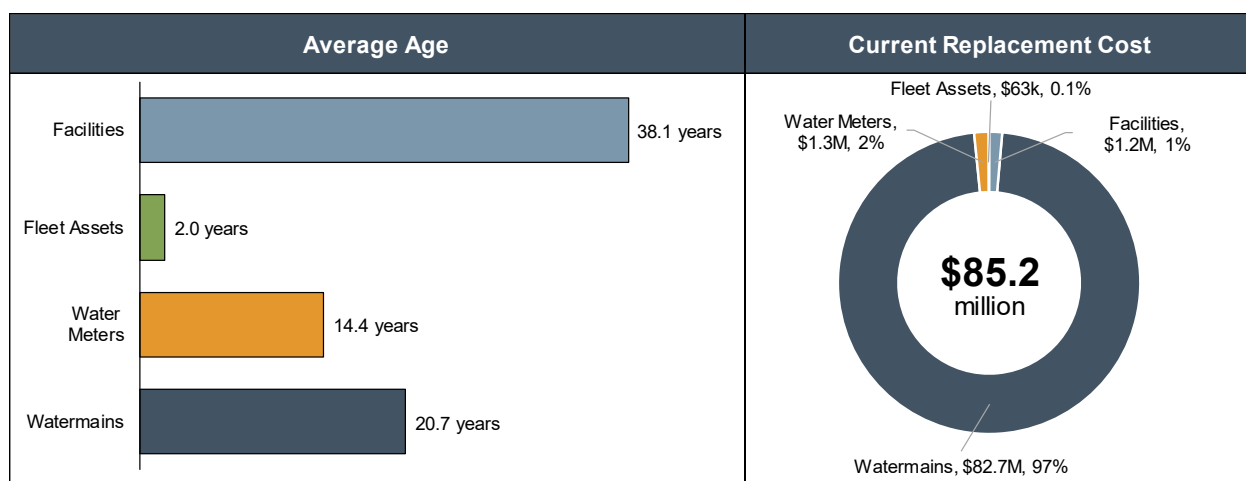
Table 2-29 summarizes the quantity, average age, and estimated current replacement cost of the Township's water system assets and this information is further illustrated in Figure 2-23.



Table 2-29: Water – Quantity, Average Age, and Replacement Cost by Asset Type

Asset Type	Quantity	Average Age ^[1]	Current Replacement Cost
Watermains	245.9 km	20.7 years	\$82,679,000
Water Meters	1,752 meters	14.4 years	\$1,314,000
Fleet Assets	1 pickup truck	2.0 years	\$63,000
Facilities	2 facilities	38.1 years	\$1,161,000
Total		20.8 years^[2]	\$85,217,000

Figure 2-23: Water – Average Age and Replacement Cost by Asset Type



2.6.2 Condition

The condition of the Township's water system assets has not been directly assessed through physical condition assessments. For the purposes of this asset management plan, condition ratings have been assigned to assets based on age relative to useful service life (i.e. based on the percentage of useful service life consumed (ULC%)). To better communicate the condition of assets, ULC% ratings have been segmented into qualitative condition states, as summarized previously in Table 2-9. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

^[1]Weighted average utilizing the length of watermains and the replacement cost of other assets as weights.

^[2]Weighted average utilizing the total replacement cost of each asset type as weights.



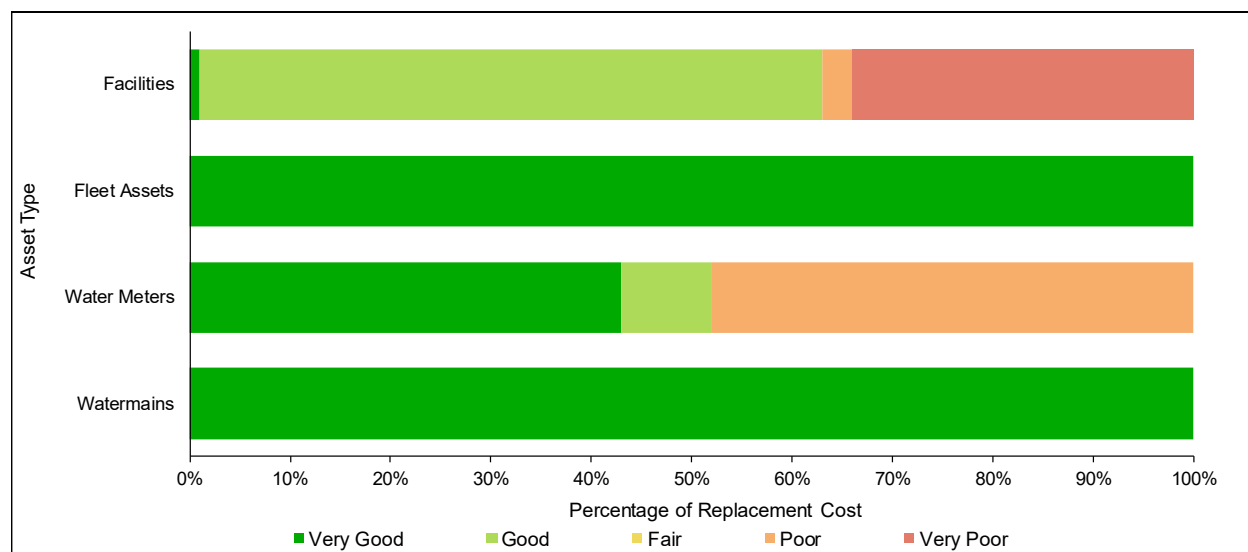
The Township's water system assets have an average ULC% of 29.2%, indicating that, on average, assets are in a 'Very Good' condition state. Table 2-30 summarizes the average ULC% ratings and associated condition states of the Township's water system assets by asset type.

Table 2-30: Water – Average ULC% and Condition States by Asset Type

Asset Type	Average ULC% ^[1]	Condition State
Watermains	27.6%	Very Good
Water Meters	71.8%	Good
Fleet Assets	28.6%	Very Good
Facilities	90.4%	Fair
Average	29.2%^[2]	Very Good

The distribution (replacement cost) of the Township's water system assets by condition state and asset type is illustrated in Figure 2-24 and the distribution (length) of the Township's watermains by ULC% rating range is illustrated in Figure 2-25.

Figure 2-24: Water – Distribution (by replacement cost) of Assets by Condition State and Asset Type

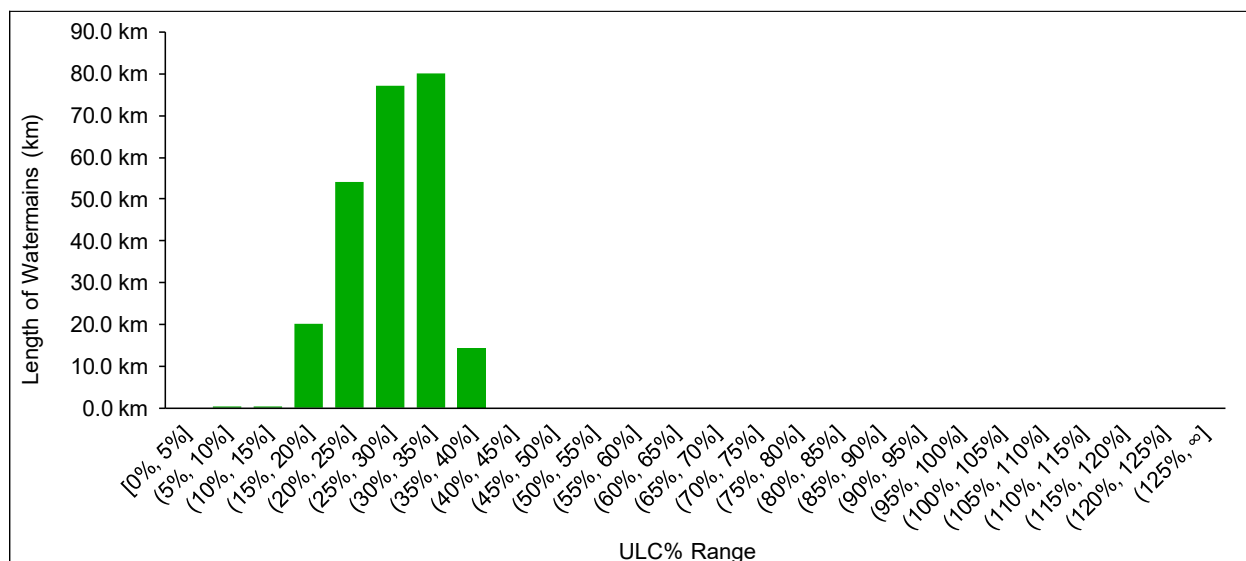


^[1]Weighted average utilizing the length of water mains and the replacement cost of other assets as weights.

^[2]Weighted average utilizing the total replacement cost of each asset type as weights.



Figure 2-25: Watermains – Distribution (by length) of Assets by ULC% Rating Range



2.6.3 Levels of Service

This subsection presents the Township's levels of service frameworks for its water assets. Table 2-31 presents the Service Attributes and Community Levels of Service while Table 2-32 presents the Technical Levels of Service (i.e., performance measures). Please refer to section 2.1.3 for further details on the Township's levels of service framework.



Table 2-31: Water – Community Levels of Service

Service Attribute	Community Levels of Service
Scope	The Township's water distribution system provides potable water for residential and business consumption, as well as for the Township's own maintenance and fire-fighting operations and its facilities. The system provides fire flow to most connected properties.
Reliability	<p>The Township manages its water distribution system with the goal of reliably delivering clean drinking water while also minimizing service interruptions and occurrences of adverse water quality events.</p> <p>Boil water advisories can be triggered by adverse water quality reports from routine water testing or from ad hoc tests done after events that may have allowed contaminants into the system (e.g., watermain breaks).</p> <p>Service interruptions can be caused by routine municipal work, including watermain replacements, water system repairs, service connection repairs, and maintenance of water system facilities.</p>

Table 2-32: Water – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance	Target Performance
Scope	Percentage of properties connected to the municipal water systems.	90% ^[1]	90%
	Percentage of properties where fire flow is available.	69% ^[2]	69%
Reliability	The number of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water systems.	3.96 connection days / connection ^[3]	0 connection days / connection

^[1]Based on the best available data, 1,850 properties out of a total of 2,059 properties in the Township are connected to the municipal water system.

^[2]It is noted that watermain segments under 150 mm (6 inch) diameter, representing approximately 24% of the Township's watermain network, do not have fire hydrants installed. As such, it is estimated that an equivalent percentage of connected properties (24% or approx. 439 properties) do not have fire flow available.

^[3]The Township issued one boil water advisory (BWA) in 2025, which was caused by a watermain break. The BWA lasted approximately four days, and all connected properties were affected.



Service Attribute	Performance Measure	Current Performance	Target Performance
	The number of connection-days per year lost due to water main breaks compared to the total number of properties connected to the municipal water systems.	0.33 connection days / connection ^[1]	0 connection days / connection
	Percentage (by length) of watermains in a 'Fair' or better condition state.	100%	Maximize

2.7 Wastewater

2.7.1 State of Local Infrastructure

The Township's wastewater collection and treatment system services primarily residential customers but also some light commercial and industrial customers in the settlement area of Talbotville. The system is supported by 2.4 km of wastewater mains and a wastewater treatment plant. It is noted that, similar to the water distribution system, while the Township owns all wastewater system assets and is responsible for funding their lifecycle requirements, the operation of the system is contracted to the Ontario Clean Water Agency (OCWA).

The estimated current replacement cost of the Township's wastewater system is \$12.1 million, with wastewater mains accounting for 53% of this replacement cost (i.e., \$6.4 million) and the wastewater treatment plant accounting for the remaining 47% (i.e., \$5.7 million). The average age of the Township's wastewater system assets is 19.2 years.

Table 2-33 summarizes the average age and estimated current replacement cost of the Township's wastewater system assets and this information is further illustrated in Figure 2-26.

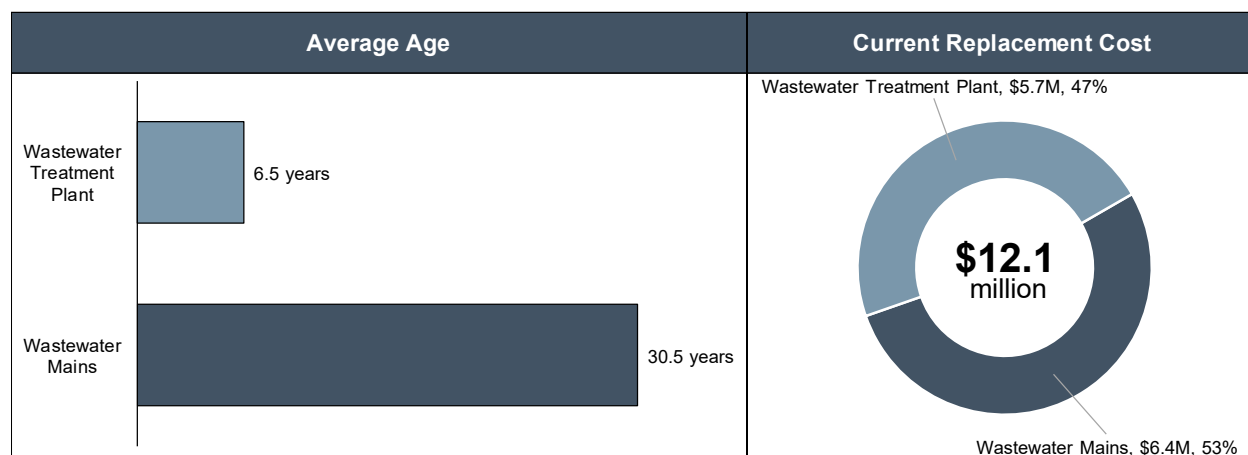
^[1]The Township experienced one watermain break in 2025, which affected all connected properties and lasted a total of eight hours. It is noted that not all properties were impacted for the entire eight-hour duration, as the break was isolated during the course of repairs.



Table 2-33: Wastewater – Average Age, and Replacement Cost

Asset Type	Average Age ^[1]	Current Replacement Cost
Wastewater Mains	30.5 years	\$6,425,000
Wastewater Treatment Plant	6.5 years	\$5,699,000
Total	19.2 years^[2]	\$12,124,000

Figure 2-26: Wastewater – Average Age, and Replacement Cost



2.7.2 Condition

The condition of the Township's wastewater system assets has not been directly assessed through physical condition assessments. For the purposes of this asset management plan, condition ratings have been assigned to assets based on age relative to useful service life (i.e. based on the percentage of useful service life consumed (ULC%)). To better communicate the condition of assets, ULC% ratings have been segmented into qualitative condition states, as summarized previously in Table 2-9. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

The Township's wastewater system assets have an average ULC% of 28.1, indicating that, on average, assets are in a 'Very Good' condition state. Table 2-34 summarizes

^[1]Weighted average utilizing the length of wastewater mains and replacement cost of wastewater treatment plant components as weights.

^[2]Weighted average utilizing the total replacement cost of each asset type as weights.



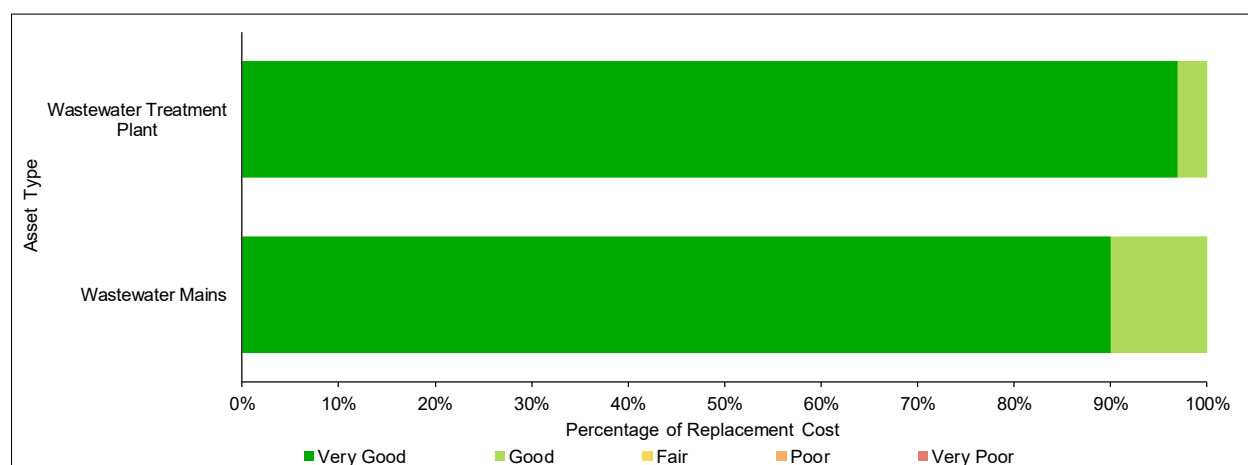
the average ULC% ratings and associated condition states of the Township's wastewater system assets by asset type.

Table 2-34: Wastewater – Average ULC% and Condition States by Asset Type

Asset Type	Average ULC% ^[1]	Condition State
Wastewater Mains	40.7%	Very Good
Wastewater Treatment Plant	14.0%	Very Good
Average	28.1%^[2]	Very Good

The distribution (replacement cost) of the Township's wastewater assets by condition state and asset type is illustrated in Figure 2-27.

Figure 2-27: Wastewater Assets – Distribution (by replacement cost) of Assets by Condition State and Asset Type



The distribution of the Township's wastewater mains and wastewater treatment plant components by ULC% rating range is illustrated in Figure 2-28 and Figure 2-29, respectively.

^[1]Weighted average utilizing the length of wastewater mains and the replacement cost of wastewater treatment plant components as weights.

^[2]Weighted average utilizing the total replacement cost of each asset type as weights.



Figure 2-28: Wastewater Mains – Distribution (by length) of Assets by ULC% Rating Range

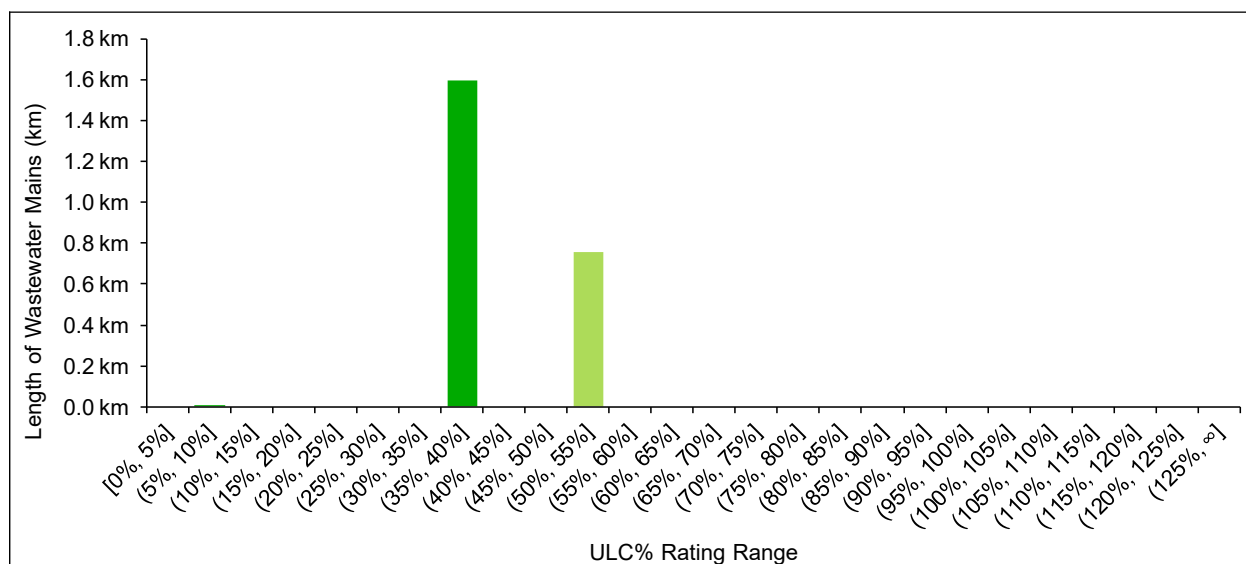
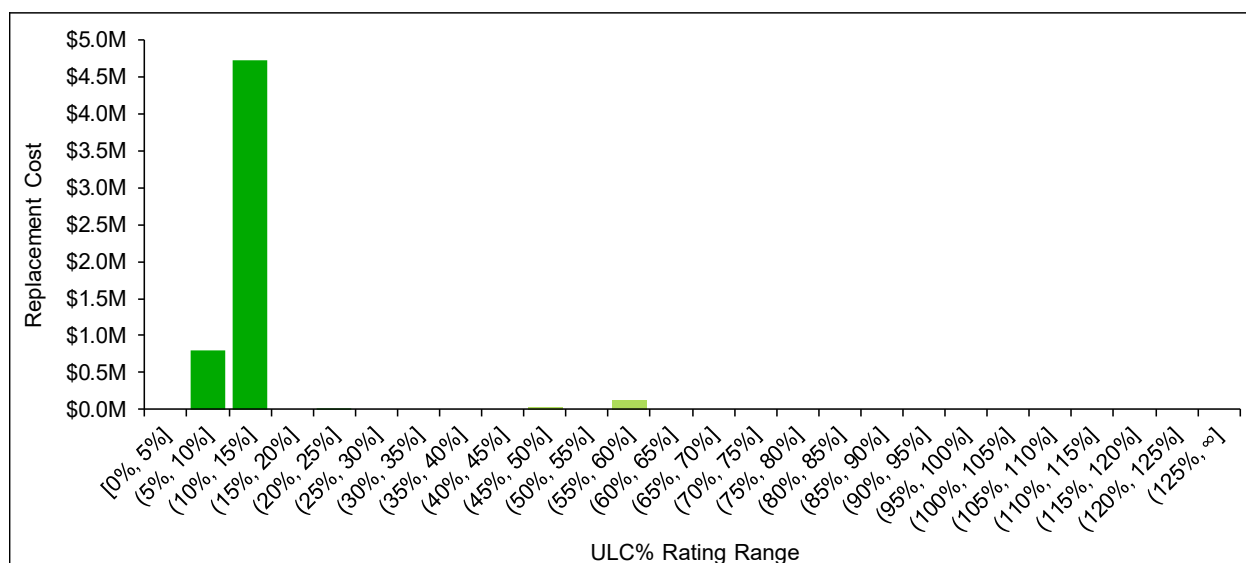


Figure 2-29: Wastewater Treatment Plant – Distribution (by replacement cost) of Assets by ULC% Rating Range



2.7.3 Levels of Service

This subsection presents the Township's levels of service frameworks for wastewater assets.



Table 2-35 presents the Service Attributes and Community Levels of Service while Table 2-36 presents the Technical Levels of Service (i.e., performance measures). Please refer to section 2.1.3 for further details on the Township's levels of service framework.

Table 2-35: Wastewater – Community Levels of Service

Service Attribute	Community Levels of Service
Scope	<p>The Township's wastewater collection and treatment system services primarily residential customers and some light commercial and industrial customers in the settlement area of Talbotville. The Township anticipates additional wastewater system demand in the settlement areas of Shedden and Fingal in the short-to-medium term. The Township plans to address this demand by constructing a new wastewater treatment plant in Shedden within the next five years.</p>
Reliability	<p>The Township's wastewater collection system is separated, meaning that sanitary and stormwater flows are carried in different mains to different destinations. At times, however, infiltration or inflow of both groundwater and stormwater can enter the wastewater collection system through numerous sources such as cracks in pipes, weeping tile connections, cross connections, catch basins, etc. The Township currently has sufficient wastewater treatment capacity to address the potential minor inflow and infiltration of groundwater and stormwater into its wastewater collection network.</p> <p>Effluent discharge is typically defined as water pollution and can be caused by outflows from wastewater treatment facilities. Effluent discharges have documented compliance limits for criteria related to flow rates, suspended solids, Biochemical Oxygen Demand (BOD), phosphorous, ammonia, and E. coli. The Township's wastewater treatment facility is operated in accordance with the Environmental Compliance Approval (ECA) issued by the Ministry of Environment, Conservation and Parks. A description of the effluent that is discharged from the wastewater treatment facility is provided in ECA No. 4845-ARSJ4R, issued January 11, 2023.</p>



Table 2-36: Wastewater – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance	Target Performance
Scope	Percentage of properties connected to the municipal wastewater system.	27% ^[1]	27%
Reliability	The number of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system.	Not Applicable ^[2]	Not Applicable
	The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system.	0 connection days / connection	0 connection days / connection
	The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system.	0 violations / connection	0 violations / connection
	Percentage (by length) of wastewater mains in a 'Fair' or better condition state.	100%	Maximize
	Percentage (by replacement cost) of wastewater treatment plant components in a 'Fair' or better condition state.	100%	Maximize

2.8 Population and Employment Growth

Based on its 2020 Development Charges Background Study, the Township's population is expected to increase at a rate of approximately 1.47% annually, growing to approximately 6,850 residents by mid-2040. Furthermore, the same study also projects

^[1]Based on the best available data, 555 properties out of a total of 2,059 properties in the Township are connected to the municipal wastewater system.

^[2]The Township's does not own and maintain any combined sewers. Its wastewater and stormwater flows are carried in separate mains.



employment within the Township to increase at a rate of approximately 1.49% annually, growing to approximately 2,400 employees by mid-2040.

Continued population and employment growth will result in incremental service demands that are expected to impact levels of service. Service impacts resulting from growth have been incorporated into the proposed levels of service targets presented earlier in this chapter. The Township assesses these service impacts through master plans and development charges background studies and imposes development charges on new development to fund growth-related infrastructure expansion and upgrades. Utilizing development charges helps alleviate the financial burden these growth-related expenditures would otherwise place on existing taxpayers.

As mentioned earlier in Section 2.7.3, the Township anticipates additional wastewater system demand in the settlement areas of Shedden and Fingal in the short-to-medium term due to growth. The Township plans to address this demand by constructing a new wastewater treatment plant in Shedden within the next five years. The estimated cost of this growth-related infrastructure investment has been incorporated into the forecasts of upcoming lifecycle activities for wastewater assets presented in Section 3.8 and the financial strategy for water and wastewater assets presented later in Section 4.3.



Chapter 3

Lifecycle Management Strategies



3. Lifecycle Management Strategies

3.1 Introduction

The lifecycle management strategies in this asset management plan identify the lifecycle activities that would need to be undertaken to achieve and sustain the proposed levels of service presented in Chapter 2. Within the context of this asset management plan, lifecycle activities are the specified actions that can be performed on an asset in order to ensure it is performing adequately, and/or to extend its service life^[1]. These actions can be carried out on a planned schedule in a prescriptive manner, or through a dynamic approach where the lifecycle activities are only carried out when specified conditions are met.

In accordance with O. Reg. 588/17, the lifecycle activities and associated costs presented in this chapter consider the full lifecycle of assets. In general terms, an asset's lifecycle starts with its initial planning and acquisition (or construction), includes both the capital and significant operating/maintenance activities the asset is expected to undergo throughout its life, and ends with its eventual disposal. The lifecycle management strategies presented in this asset management plan have been developed with the aim of identifying the set of lifecycle activities that can be undertaken at the lowest cost to achieve and sustain target service levels.

The following subsections summarize the ten-year forecasts of lifecycle activities and associated costs that would be required for the Township to provide the proposed levels of service. Brief descriptions of the methods and data sources utilized to develop the forecasts are also provided in the following subsections.

It is noted that the ten-year forecasts of lifecycle expenditures presented in this chapter do not account for unforeseen circumstances that may introduce additional costs (e.g., natural disasters, etc.). There is a level of inherent uncertainty in lifecycle forecasts, reinforcing the need to review and update this asset management plan on a regular basis.

^[1]The full lifecycle of an asset includes activities such as initial planning and maintenance which are typically addressed through master planning studies and maintenance management, respectively.



3.2 Transportation

This section presents an estimate of costs associated with providing the proposed levels of service for the Township's transportation assets presented earlier in Section 2.1.3.

In general terms, the proposed levels of service involve maintaining road surfaces in adequate quality to provide a satisfactory user experience, maintaining structures in adequate condition to enable the safe and efficient passage of vehicular and pedestrian traffic, maintaining culverts in adequate condition to efficiently convey hydraulic flows while safely supporting overlying traffic loads, and maintaining road-related assets so that they can effectively support the broader transportation network.

The lifecycle expenditure forecast for the Township's paved roads was derived based on the recommendations contained in its 2024 Road Needs Study, which were further refined through staff consultations. The Township's 2024 Road Needs Study identified upcoming lifecycle activities for its paved roads by considering several factors, including surface condition, structural adequacy of the underlying road base, maintenance demand, average daily traffic volumes, etc. Several lifecycle activities were considered as part of the road improvement strategy, including:

- Micro-surfacing;
- Resurfacing of surface treated roads (single surface treatment and double surface treatment with pulverization);
- Resurfacing of asphalt roads (asphalt resurfacing, milling and asphalt resurfacing, asphalt resurfacing with pulverization, and cold in-place recycling and resurfacing); and
- Full-depth reconstruction for both rural and urban roads.

Additionally, gravel-to-paved surface road upgrades were also considered as part of the Township's 2024 Road Needs Study. Through consultations with Township staff, it was determined that the Township plans to upgrade approximately 26.7 km of gravel roads to surface treatment within the next 10 years. The lifecycle expenditure forecast presented in this section includes the costs associated with these road surface upgrades.



The Township expects to maintain its remaining gravel roads through the timely completion of regular maintenance activities (e.g., dust suppressant applications, periodic re-grading, periodic re-application of granular, etc.), which are funded through its annual operating budgets. These activities are expected to maintain the Township's gravel roadways in adequate condition over the long term, with no capital lifecycle expenditures expected over the 10-year forecast horizon of this asset management plan. As such, the annual cost of gravel road maintenance is excluded from the lifecycle expenditure forecast presented in this section.

The Township's 2024 Road Needs Study recommended an increase to its annual gravel road maintenance budget to enable the Township to improve the condition of its gravel road network. As such, the operating budget forecast presented later in Section 4.2.4 has been adjusted to incorporate these recommendations. Additional adjustments were made to account for the expected reduction in the quantity of gravel roads following the completion of the aforementioned gravel-to-paved surface road upgrades.

The capital expenditure forecast for the Township's structures was derived based on the recommendations contained in its most recent (2024) OSIM inspection report, which seek to ensure the timely completion of maintenance, rehabilitation, and replacement activities.

Lastly, the Township undertakes the replacement or reconstruction of its road-related assets in coordination with planned road work. The lifecycle expenditure forecast presented in this section includes an annual allowance to address the reconstruction/replacement requirements of road-related assets when road work is being completed. As such, the allowance varies annually based on the length of roads that are expected to be rehabilitated or reconstructed in that year.

The 10-year lifecycle expenditure forecast for the Township's transportation network is illustrated in Figure 3-1 and provided in tabular form in Table 3-1. Average annual expenditures over the forecast period have been estimated at \$2.3 million.



Figure 3-1: Transportation Assets – Lifecycle Expenditure Forecast (2025\$)

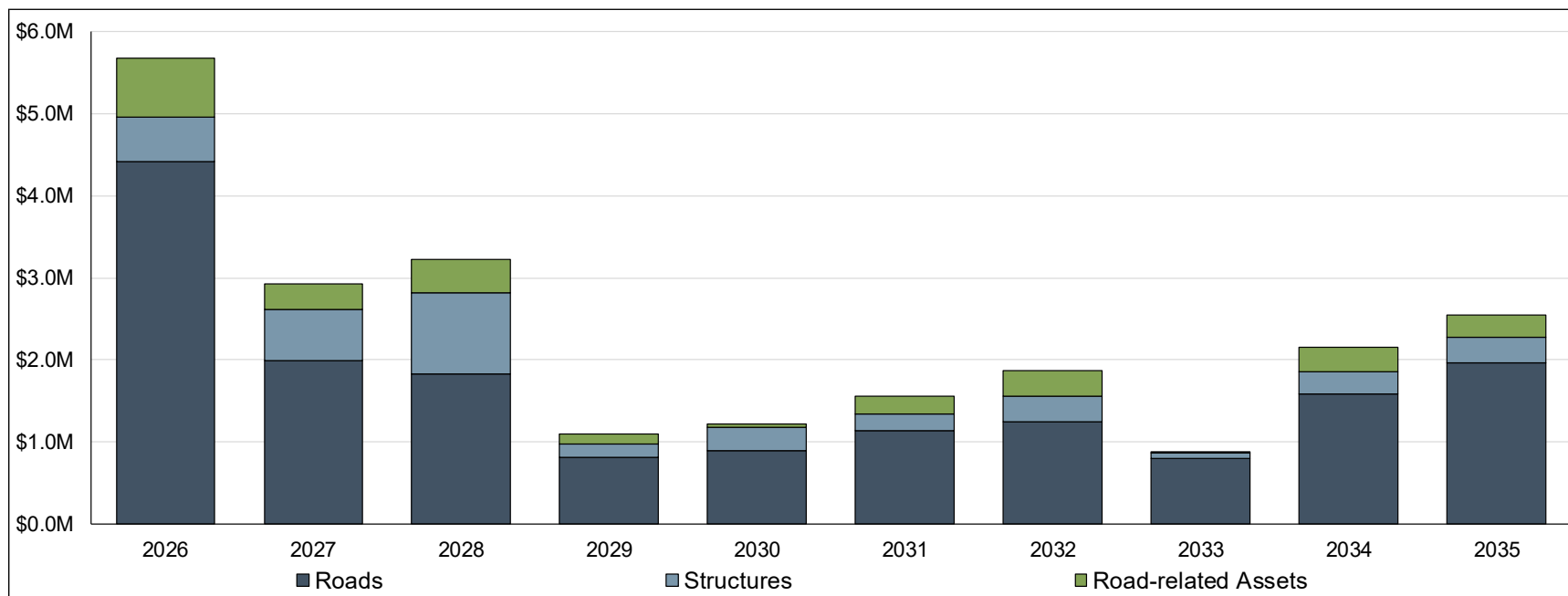


Table 3-1: Transportation Assets – Lifecycle Expenditure Forecast (2025\$)

Asset Type	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Roads	\$ 4,421,000	\$ 1,985,000	\$ 1,822,000	\$ 817,000	\$ 888,000	\$ 1,139,000	\$ 1,250,000	\$ 803,000	\$ 1,589,000	\$ 1,957,000
Structures	\$ 541,000	\$ 627,000	\$ 989,000	\$ 154,000	\$ 287,000	\$ 204,000	\$ 303,000	\$ 57,000	\$ 272,000	\$ 316,000
Road-related Assets	\$ 719,000	\$ 313,000	\$ 418,000	\$ 123,000	\$ 47,000	\$ 213,000	\$ 321,000	\$ 24,000	\$ 289,000	\$ 274,000
Total Capital Expenditures	\$ 5,681,000	\$ 2,925,000	\$ 3,229,000	\$ 1,094,000	\$ 1,222,000	\$ 1,556,000	\$ 1,874,000	\$ 884,000	\$ 2,150,000	\$ 2,547,000



3.3 Tax-funded Facilities

This section presents an estimate of costs associated with providing the proposed levels of service for the Township's tax-funded facilities presented earlier in Section 2.2.3.

In general terms, the proposed levels of service involve ensuring that the current capacity of facilities (i.e., gross floor area) is sufficient to meet the service demands of its community as well as ensuring that facilities are maintained in adequate condition to continue effectively supporting the provision of municipal services.

The lifecycle expenditure forecast for the Township's facilities presented in this section includes the cost associated with the replacement of the various building elements comprising each facility based on current best estimates of their respective remaining useful service lives^[1]. It is recommended that the Township consider completing Building Condition Assessments (BCAs) on its facilities in the near future to formally assess their upcoming lifecycle requirements. This would enable future iterations of this asset management plan to incorporate the updated lifecycle expenditure forecasts to refine the forecast presented in this section as well as the financial strategy presented later in Chapter 4.

The 10-year lifecycle expenditure forecast for the Township's facilities is illustrated in Figure 3-2 and provided in tabular form in Table 3-2. Average annual expenditures over the forecast period have been estimated at \$31,000.

^[1]It is noted that the inventory of building elements comprising each facility is based on the Township's Citywide database. Consequently, any building elements not inventoried in the Township's Citywide database are excluded from the lifecycle expenditure forecast presented herein.



Figure 3-2: Facilities – Lifecycle Expenditure Forecast (2025\$)

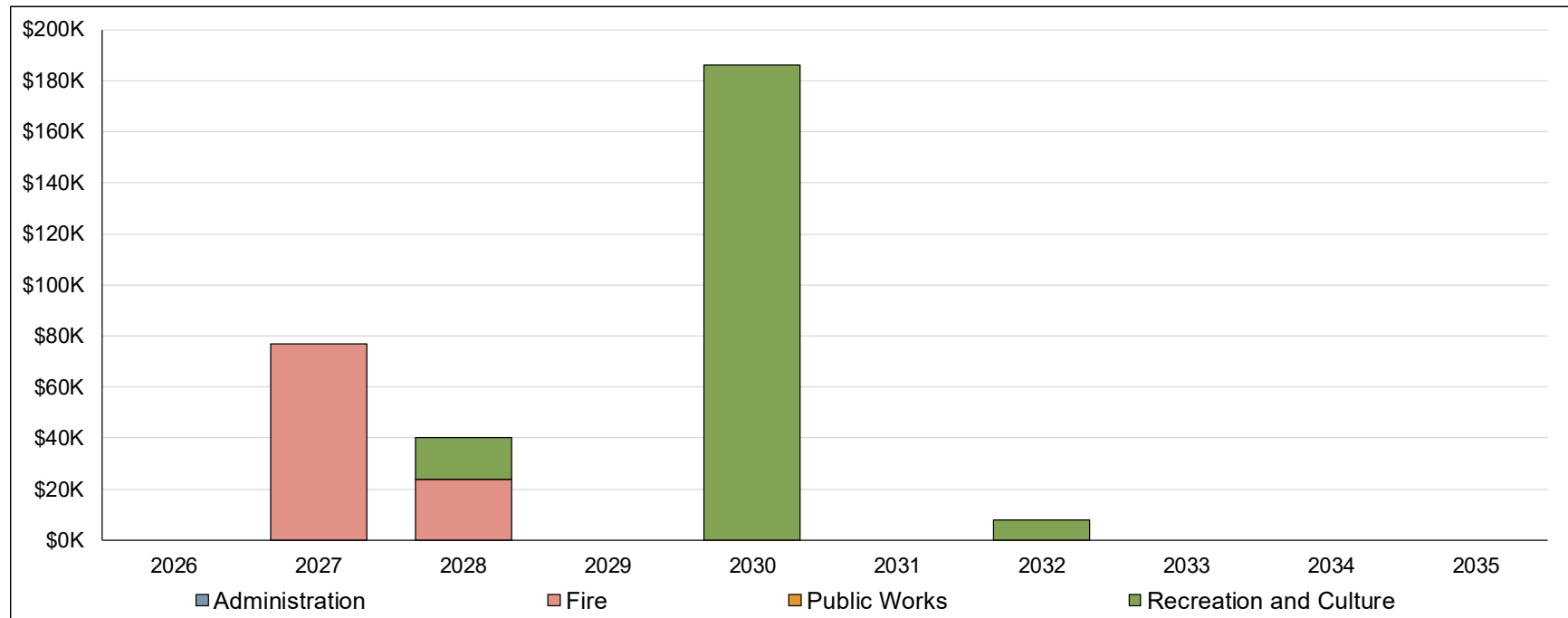


Table 3-2: Facilities - Lifecycle Expenditure Forecast (2025\$)

Service Area	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Administration	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fire	\$ -	\$ 77,000	\$ 24,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Works	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Recreation and Culture	\$ -	\$ -	\$ 16,000	\$ -	\$ 186,000	\$ -	\$ 8,000	\$ -	\$ -	\$ -
Total Capital Expenditures	\$ -	\$ 77,000	\$ 40,000	\$ -	\$ 186,000	\$ -	\$ 8,000	\$ -	\$ -	\$ -



3.4 Tax-funded Fleet and Equipment

This section presents an estimate of costs associated with providing the proposed levels of service for the Township's fleet and equipment assets presented earlier in Section 2.3.3.

In general terms, the proposed levels of service for fleet and equipment assets involve maintaining assets in adequate condition to continue performing as expected and reliably support the provision of municipal services. The Township will accomplish this by undertaking timely replacements of ageing and poorly performing assets and through the completion of regular maintenance activities. The lifecycle expenditure forecast presented in this section includes the costs associated with the replacement of assets based on current best estimates of their useful service lives.

The 10-year lifecycle expenditure forecast for the Township's fleet and equipment assets is illustrated in Figure 3-3 and provided in tabular form in Table 3-3. Average annual expenditures over the forecast period have been estimated at \$834,000.

The current backlog of the Township's fleet and equipment assets has been estimated to be approximately \$1.4 million. This represents the estimated replacement value of all fleet and equipment assets that are currently in service beyond their expected useful service lives. The current backlog is forecasted to be addressed gradually over the next five years (i.e., from 2026 to 2030).



Figure 3-3: Fleet and Equipment – Lifecycle Expenditure Forecast (2025\$)

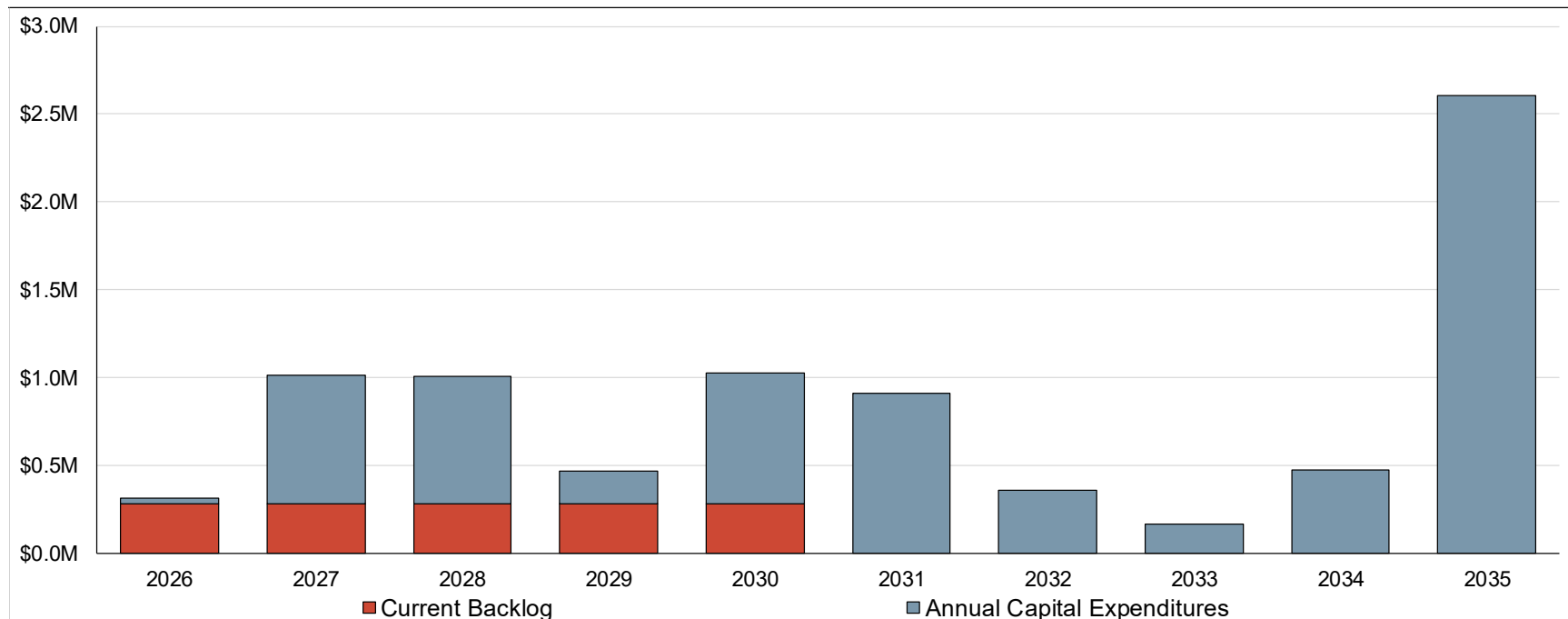


Table 3-3: Fleet and Equipment – Lifecycle Expenditure Forecast (2025\$)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Fire Equipment	\$ 13,000	\$ 75,000	\$ 36,000	\$ 67,000	\$ 267,000	\$ 111,000	\$ 70,000	\$ 96,000	\$ 71,000	\$ 588,000
Fire Vehicles	\$ -	\$ -	\$ 71,000	\$ -	\$ -	\$ 457,000	\$ -	\$ -	\$ -	\$ 603,000
Public Works Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,000	\$ -	\$ 3,000	\$ 106,000	\$ 275,000
Public Works Fleet	\$ -	\$ 640,000	\$ 597,000	\$ 25,000	\$ 343,000	\$ 303,000	\$ 270,000	\$ 31,000	\$ 291,000	\$ 989,000
Administrative Equipment	\$ 21,000	\$ 16,000	\$ 25,000	\$ 5,000	\$ 136,000	\$ 11,000	\$ 16,000	\$ 38,000	\$ 5,000	\$ 150,000
BCS Fleet	\$ -	\$ -	\$ -	\$ 91,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Allowance to Address Current Backlog	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capital Expenditures	\$ 314,000	\$ 1,011,000	\$ 1,009,000	\$ 468,000	\$ 1,026,000	\$ 909,000	\$ 356,000	\$ 168,000	\$ 473,000	\$ 2,605,000



3.5 Parks and Recreation

This section presents an estimate of costs associated with providing the proposed levels of service for the Township's parks and recreation assets presented earlier in Section 2.4.3.

Similar to fleet and equipment assets, the proposed levels of service for the parks and recreation assets aim to maintain assets in adequate condition to continue providing a satisfactory user experience. The Township will accomplish this by undertaking timely replacements of ageing and poorly performing assets and through the completion of regular maintenance activities. The lifecycle expenditure forecast presented in this subsection includes the costs associated with the replacement of these assets based on current estimates of their remaining service lives.

The 10-year lifecycle expenditure forecast for the Township's parks and recreation assets is illustrated in Figure 3-4 and provided in tabular form in Table 3-4. Average annual expenditures over the forecast period have been estimated at \$147,000.

The current backlog of the Township's parks and recreation assets has been estimated to be approximately \$400,000. This represents the estimated replacement value of all parks and recreation assets that are currently in service beyond their expected useful service lives. The current backlog is forecasted to be addressed gradually over the next five years (i.e., from 2026 to 2030).



Figure 3-4: Parks and Recreation – Lifecycle Expenditure Forecast (2025\$)

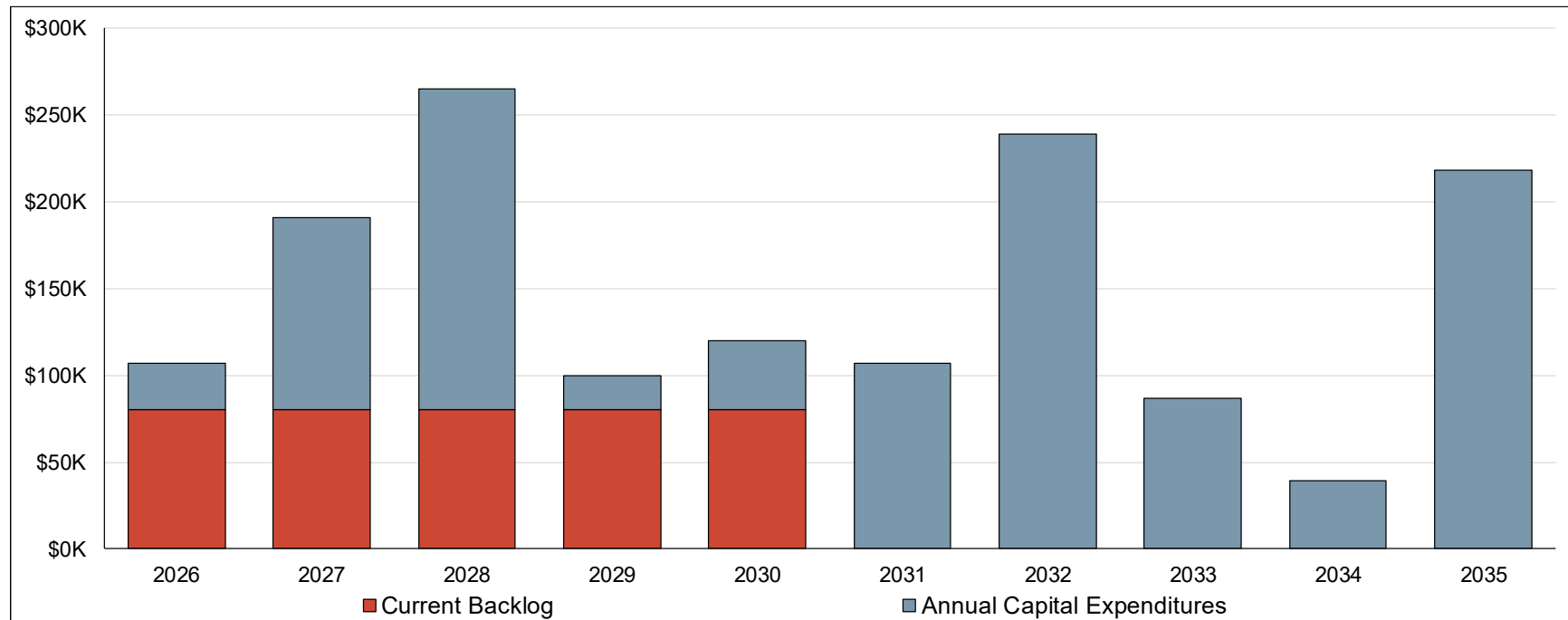


Table 3-4: Parks and Recreation – Lifecycle Expenditure Forecast (2025\$)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Ball Diamonds and Sport Courts	\$ 7,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 29,000	\$ 63,000	\$ -	\$ -
Lighting and Fencing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 197,000	\$ -	\$ 26,000	\$ 12,000
Play Equipment	\$ -	\$ -	\$ 90,000	\$ -	\$ -	\$ 81,000	\$ -	\$ -	\$ -	\$ 133,000
Parking Lots	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000
Misc. Equipment	\$ 7,000	\$ 98,000	\$ 82,000	\$ 7,000	\$ 27,000	\$ 13,000	\$ -	\$ 11,000	\$ -	\$ 60,000
Annual Allowance to Address Current Backlog	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capital Expenditures	\$ 107,000	\$ 191,000	\$ 265,000	\$ 100,000	\$ 120,000	\$ 107,000	\$ 239,000	\$ 87,000	\$ 39,000	\$ 218,000



3.6 Stormwater

This section presents an estimate of costs associated with achieving the proposed levels of service for the Township's stormwater system assets presented earlier in Section 2.4.3.

In general terms, the proposed levels of service for the Township's stormwater system assets involve maintaining assets in adequate condition to reliably provide flood protection, manage the rate of groundwater discharge, and assist in reducing the level of contamination entering the natural environment. The Township will accomplish this by ensuring the timely replacement of ageing and poorly performing assets and through the completion of regular maintenance activities.

It is noted, however, that based on their current age profiles, the Township's stormwater system assets are not expected to require any capital lifecycle activities over the 10-year forecast horizon of this asset management plan.

3.7 Water

This section presents an estimate of costs associated with providing the proposed levels of service for the Township's water system assets presented earlier in Section 2.6.3.

In general terms, the proposed levels of service for the Township's water system assets include maintaining assets in adequate condition to reliably support the provision of safe drinking water while minimizing service interruptions and occurrences of adverse water quality events. The Township will accomplish this by ensuring the timely replacement of ageing and poorly performing assets and through the completion of regular maintenance activities.

As noted earlier in Section 2.6.1, the operation of the Township's water distribution system is contracted to OCWA, which also identifies upcoming lifecycle expenditure requirements for the Township's water facilities^[1]. As such, the lifecycle expenditure forecast presented in this section for water facilities is based on OCWA's most recent

^[1]The forecast of upcoming lifecycle requirements for the Township's water facilities is provided as part of OCWA's annual major maintenance forecast.



(2025) forecast. The lifecycle expenditure forecast presented in this subsection for other water system assets (i.e., watermains, water meters, and fleet assets) includes the costs associated with the replacement of assets based on current estimates of their remaining service lives.

The 10-year lifecycle expenditure forecast for the Township's water system assets is summarized in Figure 3-5 and provided in tabular form in Table 3-5. Average annual expenditures over the forecast period have been estimated at approximately \$116,000.

The current backlog of the Township's water system assets comprises water meters that are currently in service beyond their expected useful service lives and has been estimated to be approximately \$635,000^[1]. The current backlog is forecasted to be addressed gradually over the next 10 years (i.e., from 2026 to 2035).

^[1]It is noted that 846 water meters, representing approximately 48% of the Township's total quantity of water meters, are currently in service beyond their useful life expectancies.



Figure 3-5: Water – Lifecycle Expenditure Forecast (2025\$)

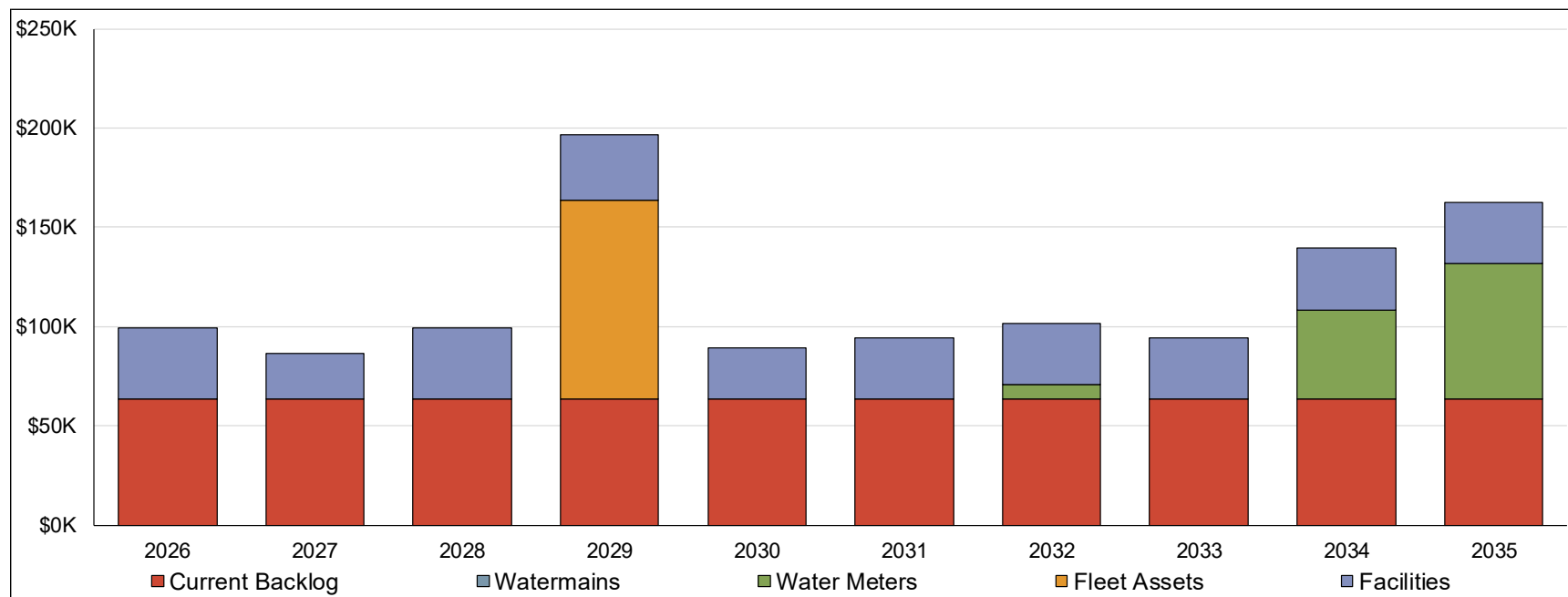


Table 3-5: Water – Lifecycle Expenditure Forecast (2025\$)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Watermains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,000	\$ -	\$ 45,000	\$ 68,000
Fleet Assets	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Facilities	\$ 36,000	\$ 23,000	\$ 36,000	\$ 33,000	\$ 26,000	\$ 31,000	\$ 31,000	\$ 31,000	\$ 31,000	\$ 31,000
Annual Allowance to Address Current Backlog	\$ 63,500	\$ 63,500	\$ 63,500	\$ 63,500	\$ 63,500	\$ 63,500	\$ 63,500	\$ 63,500	\$ 63,500	\$ 63,500
Total Capital Expenditures	\$ 99,500	\$ 86,500	\$ 99,500	\$ 196,500	\$ 89,500	\$ 94,500	\$ 101,500	\$ 94,500	\$ 139,500	\$ 162,500



3.8 Wastewater

This section presents an estimate of costs associated with providing the proposed levels of service for the Township's wastewater system assets presented earlier in Section 2.7.3.

In general terms, the proposed levels of service for the Township's wastewater system assets include maintaining assets in adequate condition to reliably support the efficient collection and treatment of sanitary flows, minimizing occurrences of wastewater backups due to failure of municipal infrastructure, and minimizing occurrences of effluent violations. The Township will accomplish this by ensuring the timely replacement of ageing and poorly performing assets and through the completion of regular maintenance activities.

As noted earlier in Section 2.7.1, the operation of the Township's wastewater collection and treatment system is contracted to OCWA, which also identifies upcoming lifecycle expenditure requirements for the Talbotville Wastewater Treatment Plant^[1]. As such, the lifecycle expenditure forecast presented in this section for this treatment facility is based on OCWA's most recent (2025) forecast. The lifecycle expenditure forecast presented in this subsection for wastewater mains includes the costs associated with the replacement of main segments based on current estimates of their remaining service lives. It is noted, however, that based on their current age profile, none of the Township's wastewater mains are expected to require replacement over the 10-year forecast horizon of this asset management plan.

As noted earlier in Section 2.7.3, the Township anticipates additional wastewater system demand in the settlement areas of Shedden and Fingal in the near term and plans to address this by constructing a new wastewater treatment plant in Shedden. The lifecycle expenditure forecast presented in this section includes the cost associated with the construction of this treatment plant, which is currently planned to occur in two phases over 2026 and 2027. This cost estimate was prepared as part of the Township's 2025 One Water Rate Study, completed by WT Infrastructure, which also estimated

^[1]The forecast of upcoming lifecycle requirements for the Talbotville Wastewater Treatment Plant is provided as part of OCWA's annual major maintenance forecast.



future lifecycle expenditure requirements for the plant. These future lifecycle expenditure requirements are also included in the forecast presented herein.

The 10-year lifecycle expenditure forecast for the Township's wastewater system assets is summarized in Figure 3-6 and provided in tabular form in Table 3-6. Average annual expenditures over the forecast period have been estimated at approximately \$4.0 million.



Figure 3-6: Wastewater – Lifecycle Expenditure Forecast (2025\$)

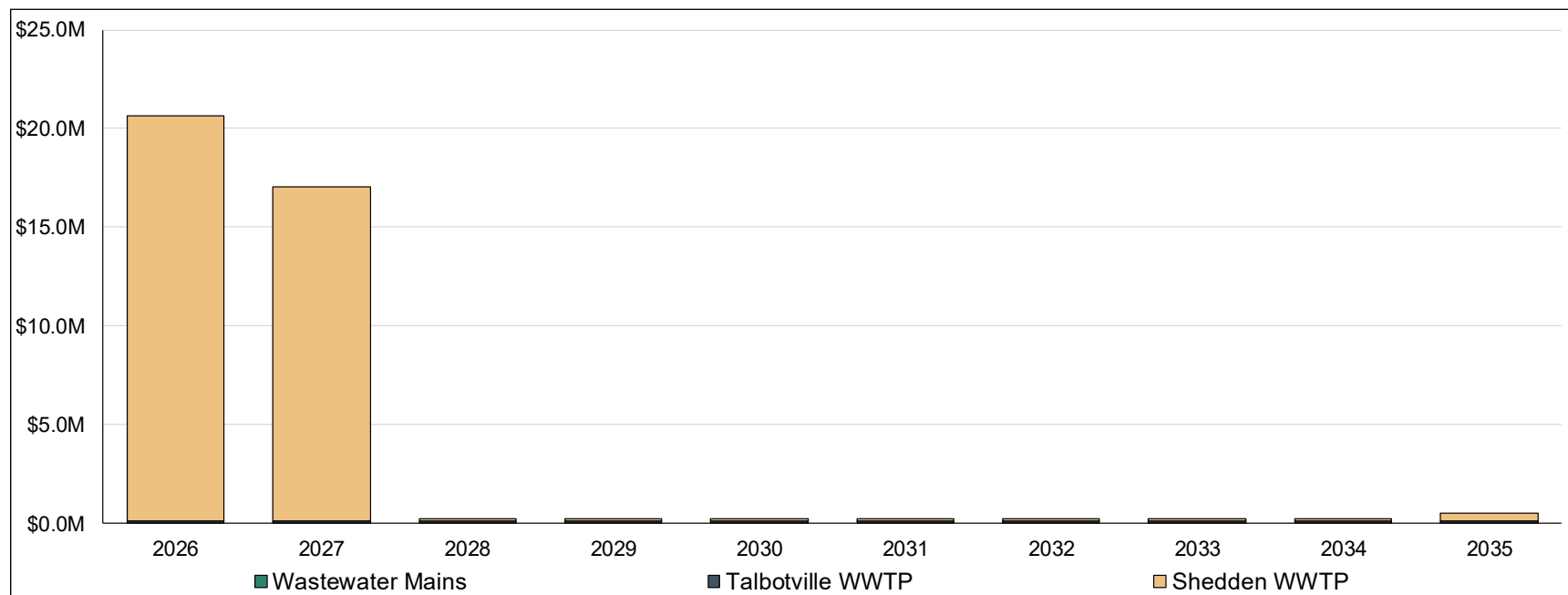


Table 3-6: Wastewater – Lifecycle Expenditure Forecast (2025\$)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Wastewater Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Talbotville WWTP	\$ 134,000	\$ 119,000	\$ 127,000	\$ 119,000	\$ 124,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
Shedden WWTP	\$ 20,533,000	\$ 16,936,000	\$ 82,000	\$ 92,000	\$ 82,000	\$ 82,000	\$ 82,000	\$ 82,000	\$ 92,000	\$ 365,000
Total Capital Expenditures	\$ 20,667,000	\$ 17,055,000	\$ 209,000	\$ 211,000	\$ 206,000	\$ 207,000	\$ 207,000	\$ 207,000	\$ 217,000	\$ 490,000



Chapter 4

Financial Strategy



4. Financial Strategy

4.1 Introduction

The financial strategy that supports this asset management plan is designed to fulfill the following key objectives:

- Identify the sources and levels of capital financing available to undertake the lifecycle activities presented previously in Chapter 3, which respond to the Township's proposed levels of service outlined earlier in Chapter 2; and
- Develop a strategy to achieve financial sustainability and intergenerational equity as it relates to the Township's infrastructure assets over the long term.

In support of these objectives, a comprehensive financial strategy model was developed utilizing the Township's financial data, which included:

- 2025 operating budget;
- 2025 capital budget;
- Reserve and reserve fund continuity schedules; and
- Debt continuity schedules.

Subsequent sections of this chapter identify how the Township will fund the forecasts of lifecycle activities presented in Chapter 3. This chapter also identifies the level of sustainable funding that should be provided to assets on an annual basis to maintain the proposed levels of service over the long term (i.e., the annual lifecycle funding target). Relative to the funding target, the Township's current annual infrastructure funding gap is identified based on the level of capital funding that was included in the Township's 2025 budget. Lastly, this chapter also identifies the financial impacts of gradually eliminating the current annual infrastructure funding gap on both the Township's financial position as well as on taxpayers and ratepayers.

The following sections of this chapter related to the Township's tax-funded assets examine the financial outlook and impact on taxpayers associated with the following two scenarios:

- Scenario 1: Eliminating the current annual infrastructure funding gap over a 10-year period (i.e., by 2035); and



- Scenario 2: Eliminating the current annual infrastructure funding gap over a 15-year period (i.e., by 2040).

It is noted that the financial strategies presented herein are suggested approaches which should be examined and re-evaluated as part of the annual budgeting process to ensure continual alignment with the Township's changing financial position and evolving asset management environment.

4.2 Assets Funded by the General Tax Levy

4.2.1 Annual Capital Expenditure Forecast

This section summarizes the expenditures associated with undertaking the lifecycle activities identified earlier in Chapter 3 for the Township's infrastructure assets that are funded through its general tax levy (i.e., transportation assets, tax-funded facilities, fleet and equipment assets, and parks and recreation assets).

Capital expenditures over the 10-year forecast horizon are expected to total \$33.3 million, an average of \$3.33 million annually, in current (2025) dollars (i.e., uninflated). Inflation on capital costs has been estimated based on the historical 20-year annual average rate of inflation as witnessed in the Statistics Canada Non-residential Building Construction Price Index and is expected to be approximately 4.50% annually. Once inflationary impacts are incorporated, lifecycle expenditures over the next 10 years are expected to total \$42.0 million.

Figure 4-1 presents the inflated capital expenditure forecast for the Township's tax-funded assets and this information is provided in tabular form in Table 4-1.



Figure 4-1: Tax-funded Assets – Overall Capital Expenditure Forecast (Inflated)

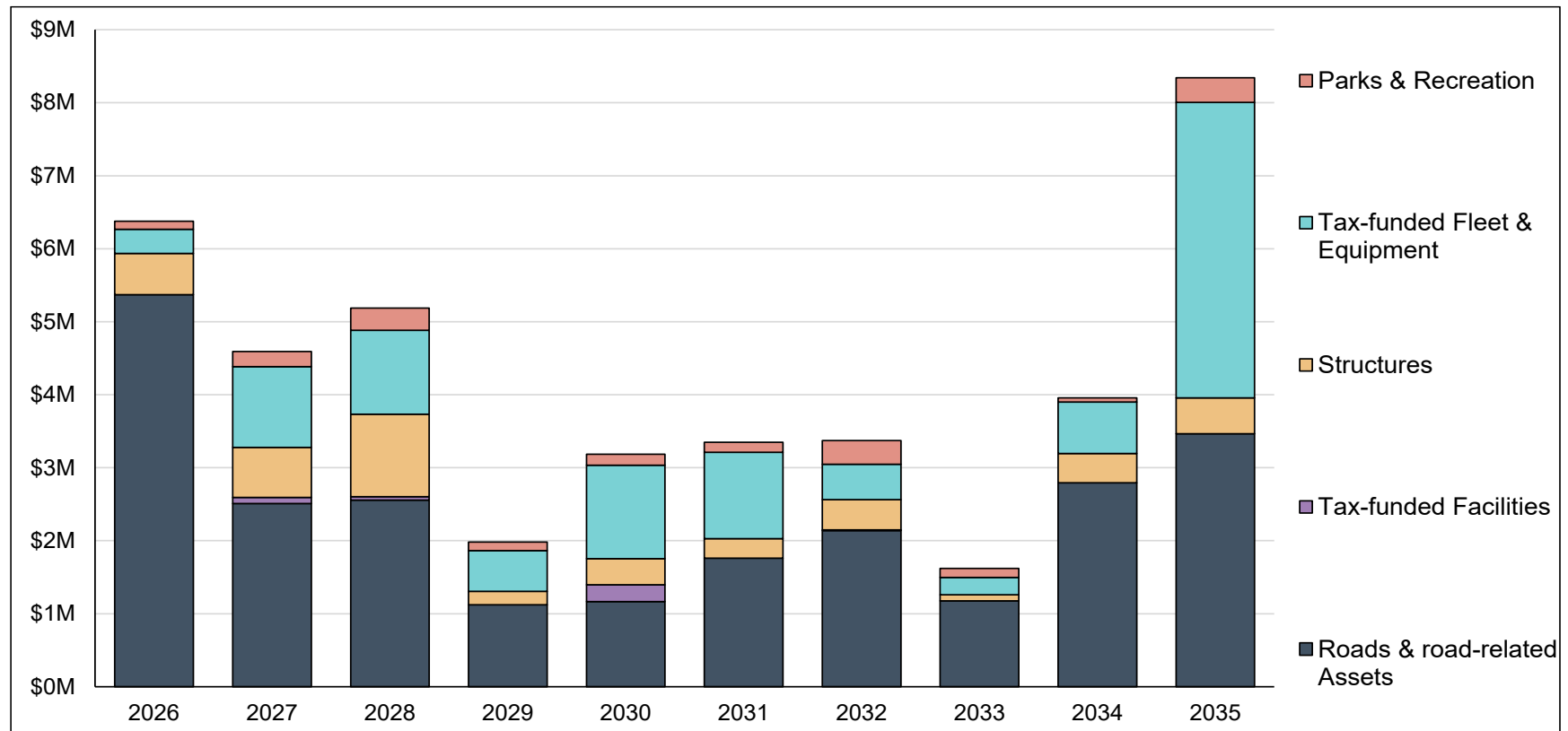


Table 4-1: Tax-funded Assets – Overall Capital Expenditure Forecast (Inflated)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Expenditures										
Capital Expenditures for Roads & Road-related Assets	\$ 5,372,000	\$ 2,510,000	\$ 2,557,000	\$ 1,121,000	\$ 1,165,000	\$ 1,761,000	\$ 2,139,000	\$ 1,177,000	\$ 2,792,000	\$ 3,466,000
Capital Expenditures for Structures	\$ 565,000	\$ 685,000	\$ 1,129,000	\$ 184,000	\$ 358,000	\$ 266,000	\$ 412,000	\$ 81,000	\$ 404,000	\$ 491,000
Capital Expenditures for Tax-funded Facilities	\$ -	\$ 84,000	\$ 46,000	\$ -	\$ 232,000	\$ -	\$ 11,000	\$ -	\$ -	\$ -
Capital Expenditures for Tax-funded Fleet and Equipment Assets	\$ 328,000	\$ 1,104,000	\$ 1,152,000	\$ 558,000	\$ 1,279,000	\$ 1,184,000	\$ 485,000	\$ 239,000	\$ 703,000	\$ 4,047,000
Capital Expenditures for Parks and Recreation Assets	\$ 112,000	\$ 209,000	\$ 302,000	\$ 119,000	\$ 150,000	\$ 139,000	\$ 325,000	\$ 124,000	\$ 58,000	\$ 339,000
Total Annual Capital Expenditures	\$ 6,377,000	\$ 4,592,000	\$ 5,186,000	\$ 1,982,000	\$ 3,184,000	\$ 3,350,000	\$ 3,372,000	\$ 1,621,000	\$ 3,957,000	\$ 8,343,000



4.2.2 Annual Capital Financing Forecast

This section summarizes the recommended strategy to finance the capital expenditures identified in Section 4.2.1. Lifecycle expenditures are expected to be financed from the following sources:

- Annual Ontario Community Infrastructure Fund (OCIF) formula-based funding. It is noted that the Ministry of Infrastructure announced a temporary increase to province-wide OCIF support in 2022, effectively doubling investment in Ontario's infrastructure for a five-year period ending in 2027. Correspondingly, it is assumed that the Township's annual OCIF funding will be reduced by 50% beginning in 2027, declining from approximately \$265,000 in 2026 to approximately \$132,500 in 2027 and held constant thereafter. It is further noted that the Ministry of Infrastructure recently shifted from using historical costs to using replacement costs in the formula used for calculating annual OCIF funding allocations. As a result of this formula change, the Township's OCIF allocation may continue to change in the coming years. The amount of OCIF funding will need to be monitored by Township staff and, if a significant variance occurs relative to the estimate provided in this asset management plan, the financial strategy may need to be updated;
- Annual Canada Community-Building Fund (CCBF) funding. CCBF funding is expected to be a stable and long-term funding source for eligible capital projects. Annual funding estimates are based on the Township's allocations for 2026 to 2028, with 4% increases for every two-year period thereafter. As such, the Township's annual CCBF funding is expected to increase from approximately \$159,000 in 2026 to approximately \$193,000 by 2035;
- Funds projected to be available in capital reserves and reserve funds. To manage risks associated with unexpected capital expenditures that may arise, the financial strategy maintains a minimum balance in capital reserve and reserve funds. The minimum balance was set at 10% of average annual capital expenditures over the forecast period, approximately \$420,000; and
- Proceeds from external debt financing. The financial strategy for Scenario 1 proposes approximately \$414,000 in additional debt financing to fund forecasted capital expenditures, while the financial strategy for Scenario 2 proposes \$1.07 million in additional debt.



Table 4-2 summarizes the capital financing forecast for the Township's tax-funded infrastructure assets under Scenario 1, while Table 4-3 summarizes the same under Scenario 2.

Table 4-2: Scenario 1 – Capital Financing by Source (2026-2035)

Capital Financing Source	Total Capital Financing
Transfer Payment Revenues (i.e., OCIF + CCBF)	\$3,212,000
Contributions from Capital Reserves and Reserve Funds	\$38,338,000
Proceeds from External Debt Financing	\$414,000
Total	\$41,964,000

Table 4-3: Scenario 2 – Capital Financing by Source (2026-2035)

Capital Financing Source	Total Capital Financing
Transfer Payment Revenues (i.e., OCIF + CCBF)	\$3,212,000
Contributions from Capital Reserves and Reserve Funds	\$37,678,000
Proceeds from External Debt Financing	\$1,074,000
Total	\$41,964,000

4.2.3 Current Annual Lifecycle Funding Target & Infrastructure Funding Gap

An annual lifecycle funding target represents the level of funding that would be required annually to fully finance a lifecycle management strategy over the long term. By planning to achieve this annual funding level, the Township would theoretically be able to fully fund capital works as they arise. In practice, however, capital expenditures are characterized by peaks and valleys and often fluctuate year-to-year based on the lifecycle activities being undertaken. By planning to achieve the lifecycle funding target over the long term, the periods of relatively low capital needs would allow for the building up of lifecycle reserve funds that could be drawn upon in times of relatively high capital needs.

Table 4-4 summarizes the modelling approaches that have been utilized to derive the annual lifecycle funding target for tax-funded assets.



Table 4-4: Modelling Approaches Utilized to Determine Annual Lifecycle Funding Targets by Asset Category

Asset Category	Modelling Approach
Transportation	<u>Roads</u> : Based on lifecycle management strategy recommended in 2024 Road Needs Study and 2022 Asset Management Plan. <u>Bridges & Culverts</u> : Annual reinvestment rate equal to 1.70% of current replacement cost <u>Road-related Assets</u> : Useful life analysis (i.e., determined by dividing the current replacement cost of each asset by its expected useful service life)
Facilities	Annual reinvestment rate equal to 2.1% of current replacement cost
Fleet and Equipment	Useful life analysis (i.e., determined by dividing the current replacement cost of each asset by its expected useful service life)
Parks and Recreation	

The annual lifecycle funding target for the Township's tax-funded assets is \$5.77 million (in 2025 dollars). A breakdown of the lifecycle funding target by asset category for illustrated in Figure 4-2 and provided in tabular form in Table 4-5.

Figure 4-2: Tax-funded Assets – Annual Lifecycle Funding Target (2025\$) by Asset Category

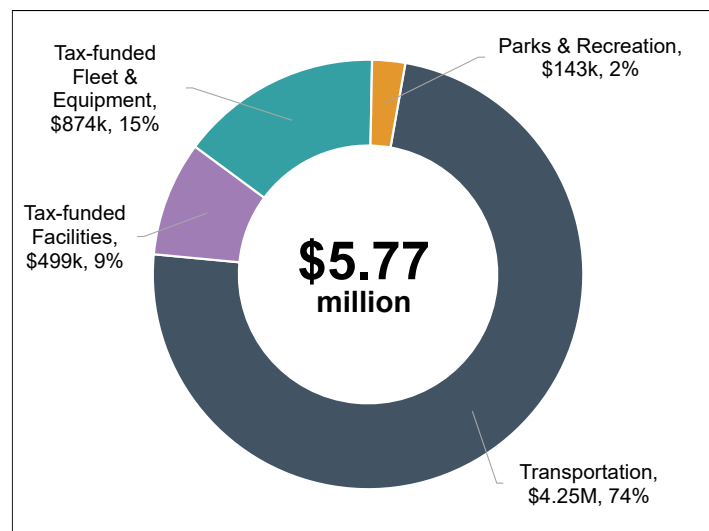




Table 4-5: Tax-funded Assets – Annual Lifecycle Funding Target (2025\$) by Asset Category

Asset Category	Annual Lifecycle Funding Target (2025\$)
Transportation	\$4,253,000
Tax-funded Facilities	\$499,000
Tax-funded Fleet & Equipment	\$874,000
Land Improvements	\$143,000
Total	\$5,769,000

Relative to this annual lifecycle funding target, the Township allocated approximately \$3.70 million in its 2025 budget towards capital-related needs for tax-funded assets. This allocation comprised approximately \$3.24 million in contributions to capital reserves and reserve funds and approximately \$453,000 in ongoing transfer payment revenues (i.e., OCIF and CCBF).

A breakdown of the capital funding budgeted in the Township's 2025 Council-approved budget for tax-supported assets is illustrated in Figure 4-3 and provided in tabular form in Table 4-6.

Figure 4-3: Tax-funded Assets – Capital Funding Included in 2025 Budget

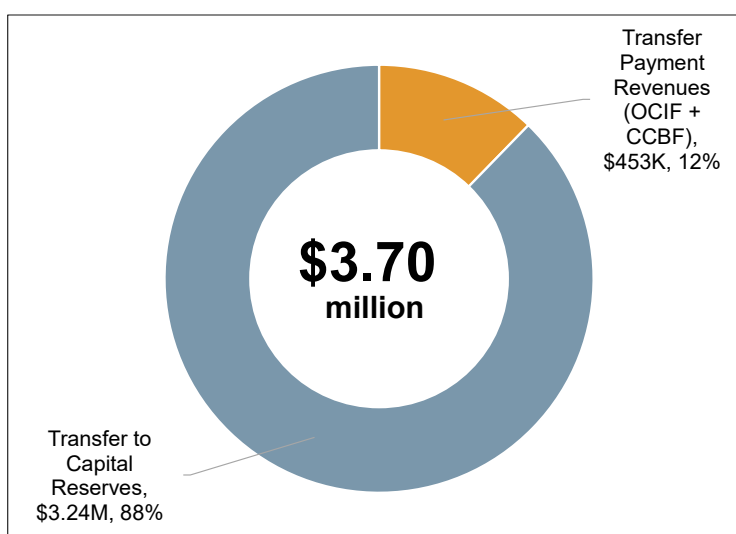




Table 4-6: Tax-funded Assets – Capital Funding Allocated in 2025 Budget

Capital Funding Source	Capital Funding Budgeted in 2025
Transfer Payment Revenues (OCIF & CCBF)	\$453,000
Contributions to Capital Reserves & Reserve Funds	\$3,244,000
Total	\$3,697,000

The difference between the annual lifecycle funding target and the currently budgeted capital funding represents the Township's annual infrastructure funding gap for its tax-funded assets. Based on this analysis, the Township is facing a tax-based annual infrastructure funding gap of \$2.07 million.

4.2.4 Overall Financial Forecast and Estimated Impact on Tax Levy

4.2.4.1 Scenario 1: 10-year AMP Phase-in Period

This section presents the overall impacts on the Township's financial position of gradually eliminating the funding gap by 2035.

As noted earlier in Section 4.2.2, the capital financing forecast proposes additional debt financing of approximately \$414,000 over the forecast period under Scenario 1. Furthermore, annual repayments on external debt (i.e., principal and interest payments) utilized to fund the tax-supported portion of construction costs of the new public works facility are expected to commence in 2026. As such, annual repayments on external debt are expected to rise from approximately \$368,000 in 2026 to approximately \$406,000 by 2035.

The Township is expected to have approximately \$5.3 million in its capital reserves and reserve funds at the end of 2025. By 2035, that balance is expected to grow to approximately \$20.9 million. A detailed continuity schedule of capital reserves and reserve funds can be found in Appendix A.

It is noted that the Township's tax levy is expected to decrease from 2025 to 2026 due to an anticipated reduction in the assessed value of a major commercial property, pending the outcome of an ongoing property assessment appeal. Following this decrease, in order to fund the recommended lifecycle management strategy and gradually eliminate the infrastructure funding gap by 2035, the Township's tax levy



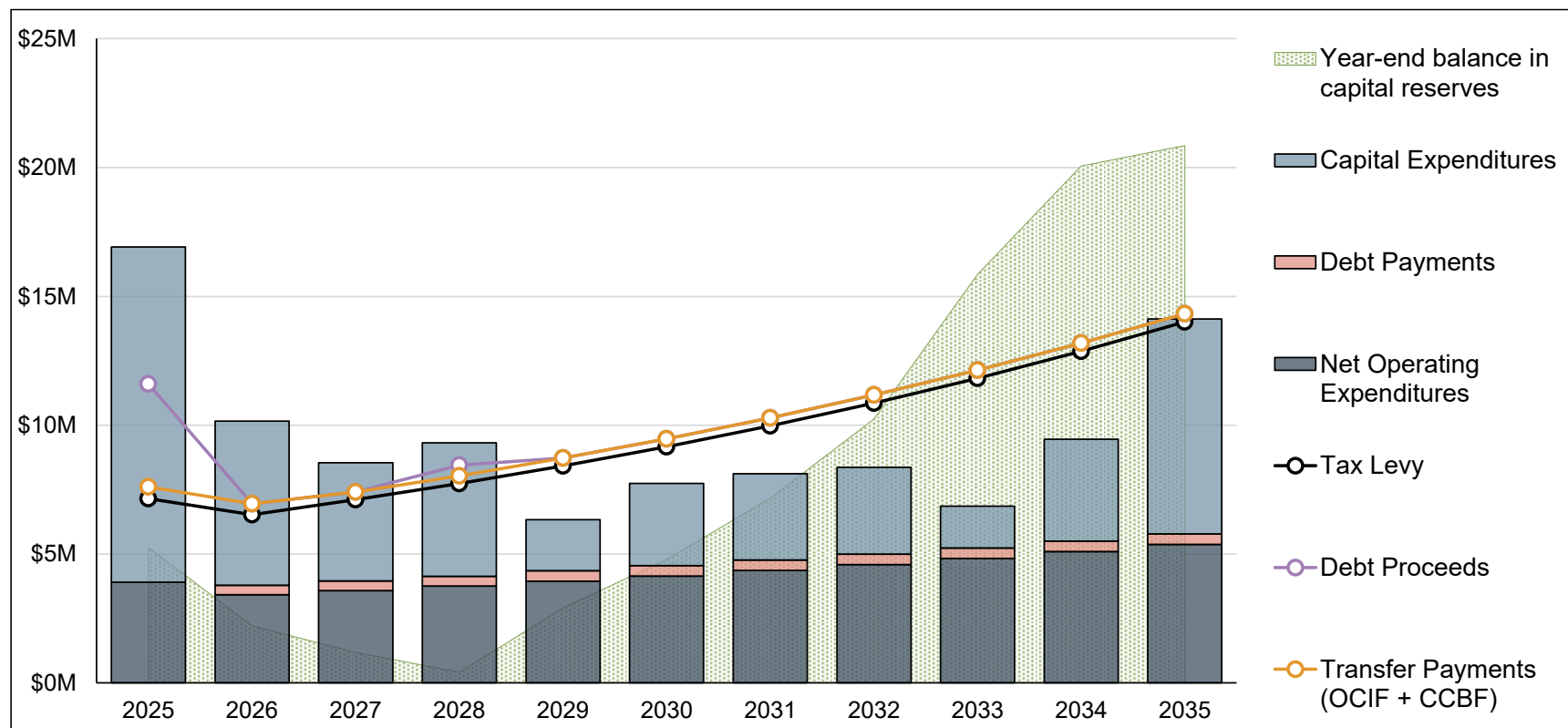
would need to increase by 8.85% annually from 2027 to 2035. The tax levy is forecasted to rise from the current level of approximately \$7.2 million in 2025 to approximately \$14.0 million by 2035.

The taxation impacts identified above include inflationary adjustments to the Township's operating costs and revenues as identified in its 2025 budget (i.e., general operating inflation of 2.22% annually).

Figure 4-4 illustrates the overall financial forecast for the Township under Scenario 1. Full details of the financial strategy are provided in Appendix A.



Figure 4-4: Scenario 1 – Overall Financial Forecast (Inflated)





4.2.4.2 Scenario 2: 15-year AMP Phase-in Period

This section presents the overall impacts on the Township's financial position of gradually eliminating the funding gap by 2040.

As noted earlier in Section 4.2.2, the capital financing forecast proposes additional debt financing of approximately \$1.07 million over the forecast period under Scenario 2. Furthermore, as noted earlier in Section 4.2.4.1, annual repayments on external debt (i.e., principal and interest payments) utilized to fund the tax-supported portion of construction costs of the new public works facility are expected to commence in 2026. As such, annual repayments on external debt are expected to rise from approximately \$368,000 in 2026 to approximately \$467,000 by 2035.

As noted earlier in Section 4.2.4.1, the Township is expected to have approximately \$5.3 million in its capital reserves and reserve funds at the end of 2025. By 2035, that balance is expected to grow to approximately \$12.0 million in this scenario. A detailed continuity schedule of capital reserves and reserve funds can be found in Appendix B.

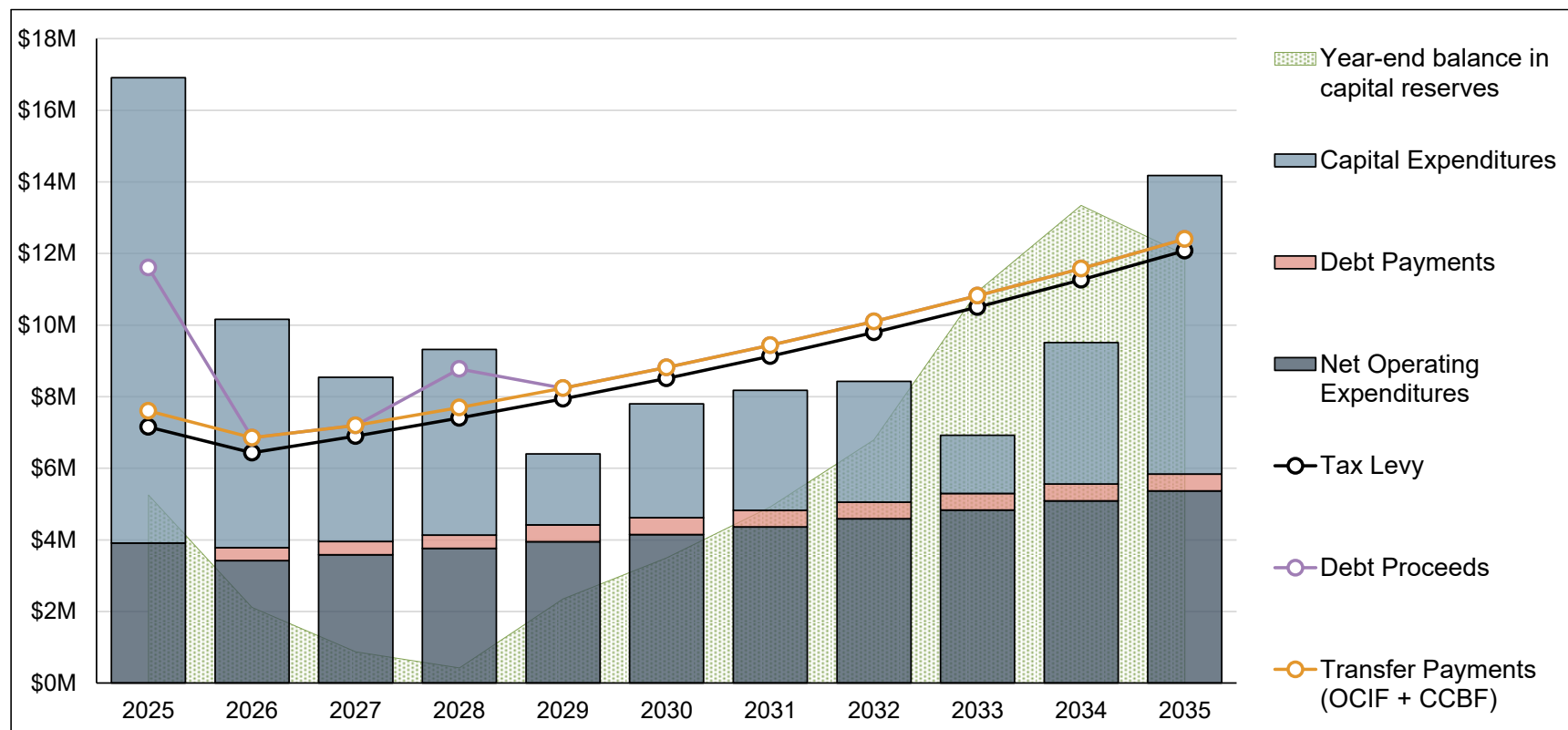
As noted earlier in Section 4.2.4.1, the Township's tax levy is expected to decrease from 2025 to 2026 due to an anticipated reduction in the assessed value of a major commercial property, pending the outcome of an ongoing property assessment appeal. Following this decrease, in order to fund the recommended lifecycle management strategy and gradually eliminate the infrastructure funding gap by 2040, the Township's tax levy would need to increase by 7.25% annually from 2027 to 2040. The tax levy is forecasted to rise from the current level of approximately \$7.2 million in 2025 to approximately \$12.1 million by 2035, and further rise to approximately \$17.1 million by 2040.

The taxation impacts identified above include inflationary adjustments to the Township's operating costs and revenues as identified in its 2025 budget (i.e., general operating inflation of 2.22% annually).

Figure 4-5 illustrates the overall financial forecast for the Township under Scenario 2. Full details of the financial strategy are provided in Appendix B.



Figure 4-5: Scenario 2 – Overall Financial Forecast (Inflated)





4.2.5 Estimated Impact on Tax Bills (2026-2035)

4.2.5.1 Scenario 1: 10-year AMP Phase-in Period

This section presents the estimated impact resulting from Scenario 1 on the annual tax bill of a typical single-family detached house in the Township with a current value assessment of \$282,000^[1].

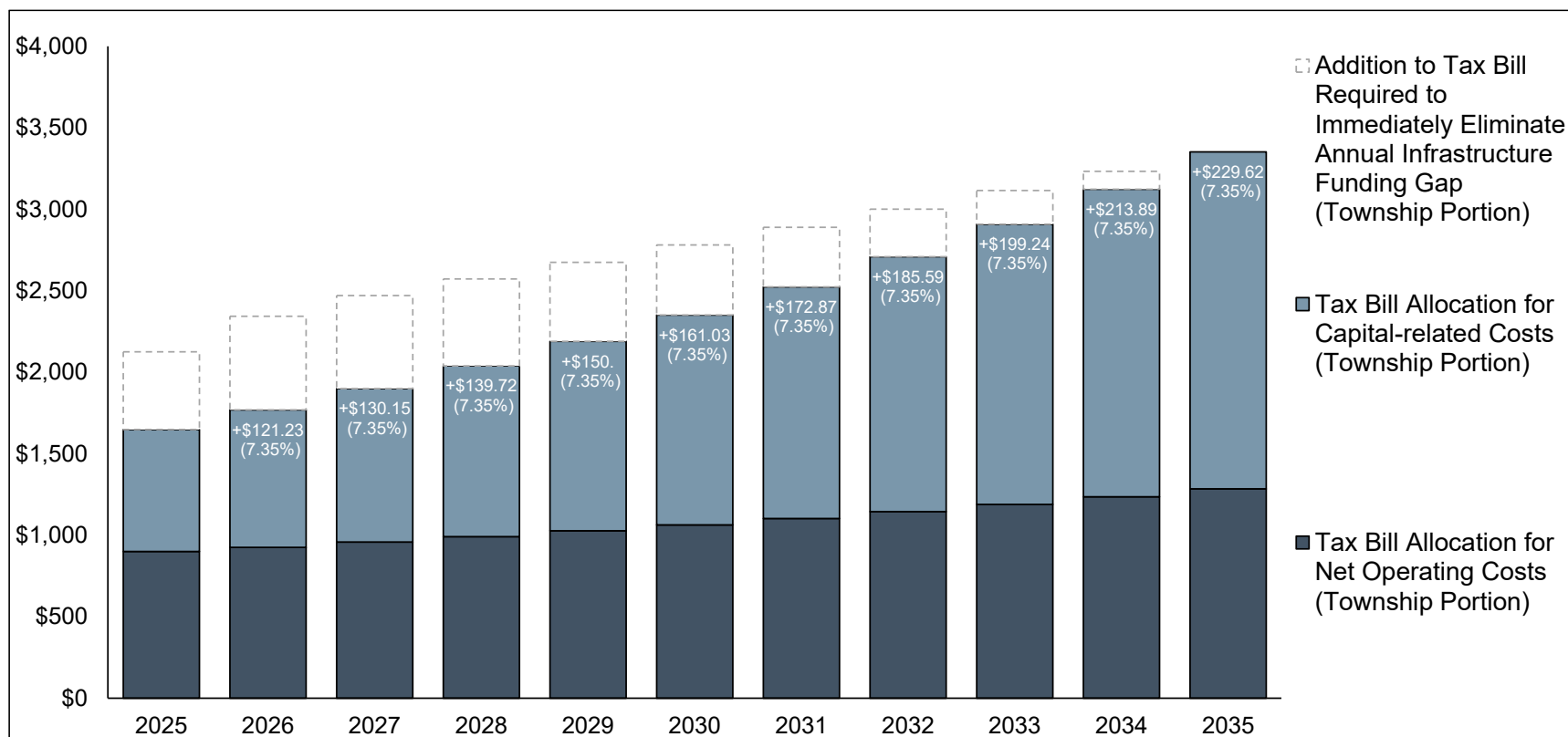
As noted in Section 4.2.4.1, the Township would need to increase its tax levy from approximately \$7.2 million in 2025 to approximately \$14.0 million by 2035. Layering on assessment increases resulting from new assessment growth, assumed to be 1.39% annually over the forecast period, the impact on the municipal portion of individual property tax bills would be increases of 7.35% annually from 2026 to 2035. A typical single-family detached house in the Township with a current value assessment of \$282,000 would see the municipal portion of its tax bill rise from approximately \$1,648 as of 2025 to approximately \$3,352 by 2035.

Figure 4-6 illustrates the estimated impact on the municipal portion of the tax bill for a typical single-family detached house with a current value assessment of \$282,000 under Scenario 1.

^[1]Current Value Assessment is determined by MPAC for taxation purposes and is not reflective of average market value.



Figure 4-6: Scenario 1 - Estimated Impact on the Municipal Portion of the Tax Bill for Typical Single-family Detached House Assessed at \$282,000 (2025-2035)





4.2.5.2 Scenario 2: 15-year AMP Phase-in Period

This section presents the estimated impact resulting from Scenario 2 on the annual tax bill of a typical single-family detached house in the Township with a current value assessment of \$282,000^[1].

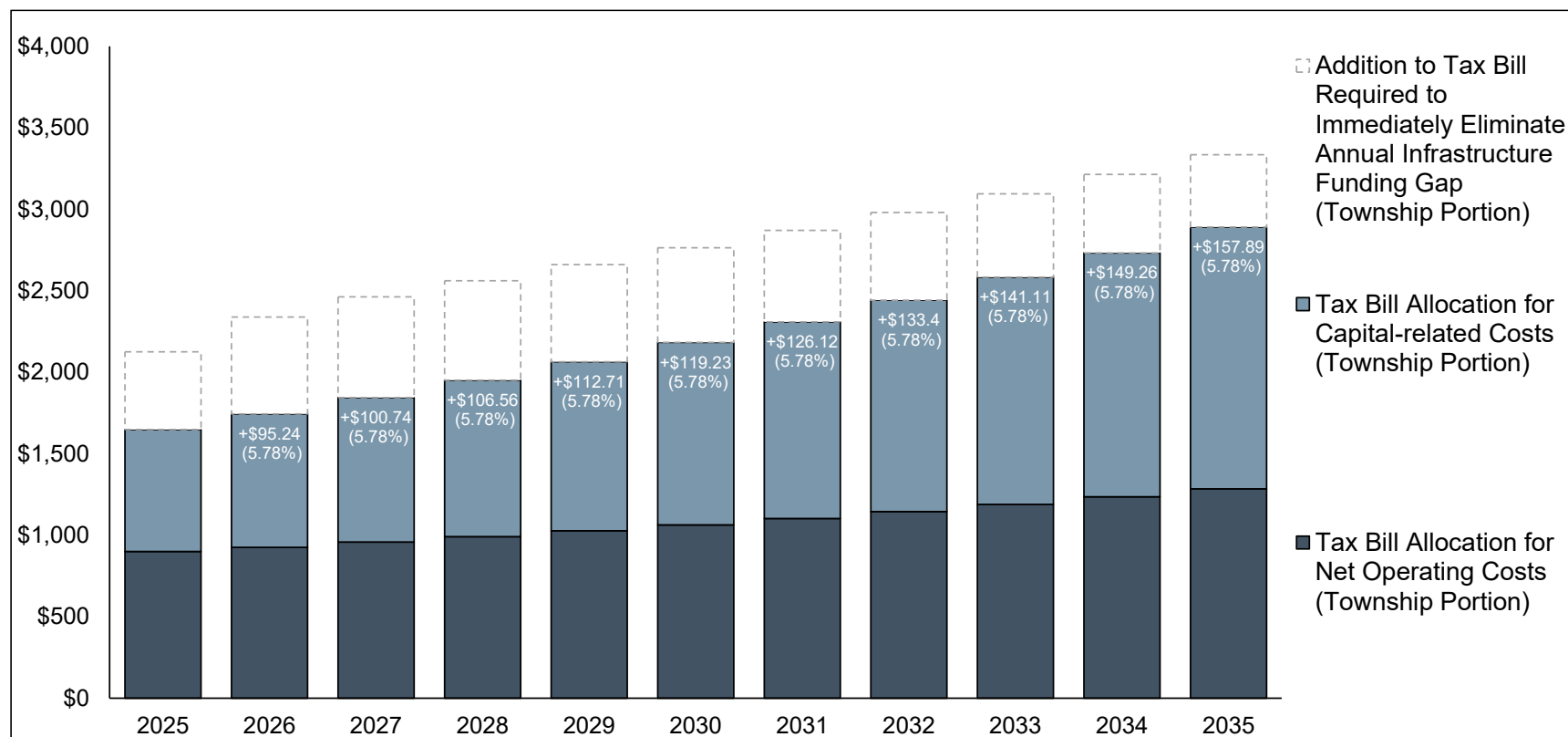
As noted in Section 4.2.4.2, the Township would need to increase its tax levy from approximately \$7.2 million in 2025 to approximately \$17.1 million by 2040. Layering on assessment increases resulting from new assessment growth, assumed to be 1.39% annually over the forecast period, the impact on the municipal portion of individual property tax bills would be increases of 5.78% annually from 2026 to 2040. A typical single-family detached house in the Township with a current value assessment of \$282,000 would see the municipal portion of its tax bill rise from approximately \$1,648 as of 2025 to approximately \$2,891 by 2035, and further increase to approximately \$3,828 by 2040.

Figure 4-7 illustrates the estimated impact on the municipal portion of the tax bill for a typical single-family detached house with a current value assessment of \$282,000 under Scenario 2.

^[1]Current Value Assessment is determined by MPAC for taxation purposes and is not reflective of average market value.



Figure 4-7: Scenario 2 - Estimated Impact on the Municipal Portion of the Tax Bill for Typical Single-family Detached House Assessed at \$282,000 (2025-2035)





4.3 Assets Funded by Water and Wastewater Rates

4.3.1 *Annual Capital Expenditure Forecast*

This section summarizes the expenditures associated with undertaking the lifecycle activities identified earlier in Chapter 3 for the Township's water and wastewater assets.

Capital expenditures over the 10-year forecast horizon are expected to total \$40.8 million, an average of \$4.1 million annually, in current (2025) dollars (i.e., uninflated). Inflation on capital costs has been estimated based on the historical 20-year annual average rate of inflation as witnessed in the Statistics Canada Non-residential Building Construction Price Index and is expected to be approximately 4.50% annually. Once inflationary impacts are incorporated, lifecycle expenditures over the next 10 years are expected to total \$44.4 million.

Figure 4-8 presents the inflated capital expenditure forecast for the Township's water and wastewater assets and this information is provided in tabular form in Table 4-7.



Figure 4-8: Water & Wastewater – Overall Capital Expenditure Forecast (Inflated)

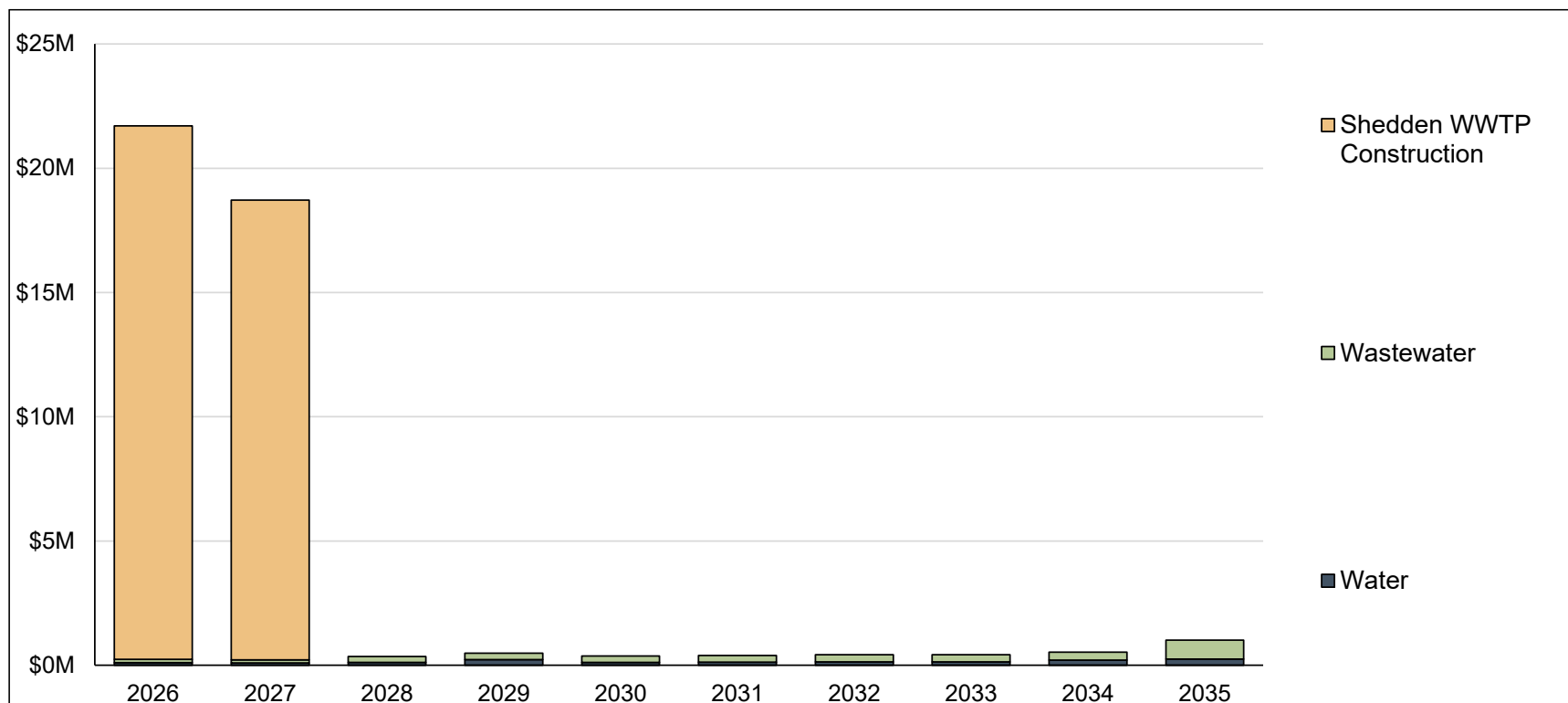


Table 4-7: Water & Wastewater – Overall Capital Expenditure Forecast (Inflated)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Expenditures										
Capital Expenditures for Water Assets	\$ 104,000	\$ 94,000	\$ 114,000	\$ 234,000	\$ 112,000	\$ 123,000	\$ 138,000	\$ 134,000	\$ 207,000	\$ 252,000
Capital Expenditures for Wastewater Assets	\$ 140,000	\$ 130,000	\$ 239,000	\$ 252,000	\$ 257,000	\$ 270,000	\$ 282,000	\$ 294,000	\$ 323,000	\$ 761,000
Capital Expenditures for Shedden WWTP Construction - Phase 1	\$ 21,458,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Expenditures for Shedden WWTP Construction - Phase 2	\$ -	\$ 18,496,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Annual Capital Expenditures	\$ 21,702,000	\$ 18,720,000	\$ 353,000	\$ 486,000	\$ 369,000	\$ 393,000	\$ 420,000	\$ 428,000	\$ 530,000	\$ 1,013,000



4.3.2 Annual Capital Financing Forecast

This section summarizes the recommended strategy to finance the capital expenditures identified in Section 4.3.1. Lifecycle expenditures are expected to be financed from the following sources:

- Funds projected to be available in capital reserves and reserve funds. To manage risks associated with unexpected capital expenditures that may arise, the financial strategy maintains a minimum balance in capital reserve and reserve funds. The minimum balance was set at 10% of average annual capital expenditures over the forecast period, approximately \$444,000;
- Grant funding received from the Housing-Enabling Water Systems Fund (HEWSF) for the construction of the Shedden Wastewater Treatment Plant. As per HEWSF's cost-sharing rules, it is expected that 73% of the overall construction costs for this project will be funded through the grant. In total, approximately \$29.2 million in HEWSF grant funding is expected to be received for this project; and
- Revenues from future connection fees. The Township anticipates funding the remaining 27% of costs associated with the construction of the Shedden Wastewater Treatment Plant through future connection fee revenues. In total, approximately \$10.8 million in future connection fee revenues is expected to be required to fund this project.

As noted above, the Township expects to fund 27% of the Shedden Wastewater Treatment Plant's construction costs from future connection fee revenues. Depending on the timing of construction-related payments (i.e., progress payments) relative to connection fee revenues, the Township may need to temporarily finance construction costs from other internal sources (e.g., existing reserves and reserve funds) or external borrowing. These cashflow matters have not been considered in the financial strategy presented herein.

Table 4-8 summarizes the capital financing forecast for the Township's water and wastewater assets.



Table 4-8: Water and Wastewater – Capital Financing by Source (2026-2035)

Capital Financing Source	Total Capital Financing
Contributions from Capital Reserves and Reserve Funds	\$4,460,000
Housing-Enabling Water Systems Fund Grant	\$29,166,000
Connection Fee Revenues	\$10,788,000
Total	\$44,414,000

4.3.3 Current Annual Lifecycle Funding Target & Infrastructure Funding Gap

The current annual lifecycle funding target for the Township's water and wastewater assets is \$1.44 million (in 2025 dollars). As noted earlier in Section 2.7.3 and Section 3.8, the Township anticipates additional growth-related wastewater system demand in the settlement areas of Shedden and Fingal in the near term and plans to address this by constructing a new wastewater treatment plant in Shedden. The construction of this plant is currently planned to occur in two phases over 2026 and 2027. Following the construction of this plant, the annual lifecycle funding target for the water and wastewater assets is estimated to rise by \$868,000 to \$2.31 million (in 2025 dollars). Please refer to Section 4.2.3 for further information on annual lifecycle funding targets.

Table 4-9 summarizes the modelling approaches that have been utilized to derive the annual lifecycle funding target for water and wastewater assets.



Table 4-9: Modelling Approaches Utilized to Determine Annual Lifecycle Funding Targets by Asset Category

Asset Category	Modelling Approach
Water	<p><u>Watermains</u>: Useful life analysis (i.e., determined by dividing the current replacement cost of each watermain segment by a 75-year expected useful service life)</p> <p><u>Water Treatment Facilities</u>: Useful life analysis (i.e., determined by dividing the current replacement cost of various building elements and treatment components by their respective useful service life expectancies)</p> <p><u>Other Assets</u>: Useful life analysis (i.e., determined by dividing the current replacement cost of assets by their respective useful service life expectancies)</p>
Wastewater	<p><u>Wastewater Mains</u>: Useful life analysis (i.e., determined by dividing the current replacement cost of each wastewater main segment by a 75-year expected useful service life)</p> <p><u>Talbotville WWTP</u>: Useful life analysis (i.e., determined by dividing the current replacement cost of various building elements and treatment components by their respective useful service life expectancies)</p> <p><u>Shedden WWTP</u>: Estimated based on the annual lifecycle funding target for the Talbotville WWTP, considering relative increases to plant size/capacity</p>

A breakdown of the lifecycle funding target by asset category is illustrated in Figure 4-9 and provided in tabular form in Table 4-10.



Figure 4-9: Water and Wastewater – Annual Lifecycle Funding Target (2025\$) by Asset Category

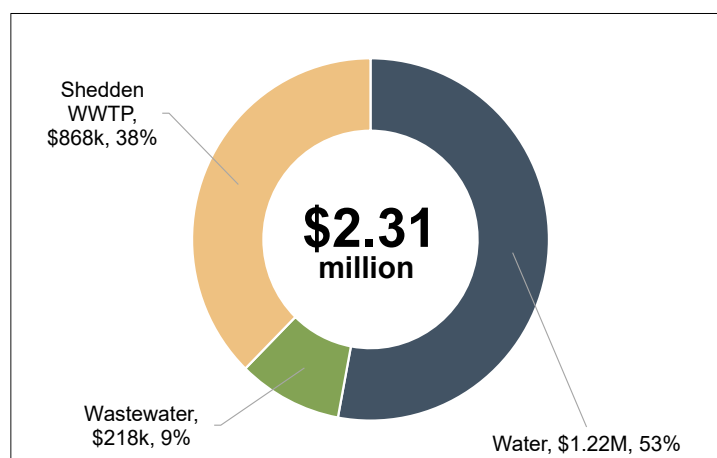


Table 4-10: Water and Wastewater – Annual Lifecycle Funding Target (2025\$) by Asset Category

Asset Category	Annual Lifecycle Funding Target (2025\$)
Water	\$1,221,000
Wastewater	\$218,000
Shedden Wastewater Treatment Plant	\$868,000
Total	\$2,307,000

The Township allocated approximately \$458,000 million towards capital-related needs in its 2025 budget for water and wastewater assets, which comprised contributions made into the Township's water and wastewater rate-funded capital reserves and reserve funds. The difference between the annual lifecycle funding target and the currently budgeted capital funding represents the Township's annual infrastructure funding gap for its water and wastewater assets.

Based on this analysis, the Township is currently facing a water and wastewater rate-based annual infrastructure funding gap of approximately \$981,000 (in 2025 dollars). Once the annual lifecycle funding needs of the Shedden WWTP are incorporated into the funding target, the annual infrastructure funding gap rises to approximately \$1.85 million (in 2025 dollars).



4.3.4 Overall Financial Forecast and Estimated Impact on Tax Levy

This section presents the overall impacts on the Township's financial position of gradually eliminating the \$1.85 million funding gap by 2035.

The capital financing forecast for water and wastewater assets does not require any additional debt financing over the 10-year forecast period. Furthermore, annual repayments on external debt (i.e., principal and interest payments) utilized to fund the water and wastewater portion of construction costs of the new public works facility are expected to commence in 2026. As such, annual repayments on external debt are expected to remain stable at approximately \$62,000 for the next 10 years. As noted previously in Section 4.3.2, there may be some debt financing required for the Shedden WWTP. However, this has not been included in the financial strategy presented herein.

The Township is expected to have approximately \$5.2 million in its water and wastewater rate-funded capital reserves and reserve funds at the end of 2025. By 2035, this balance is expected to grow to approximately \$16.6 million. A detailed continuity schedule of water and wastewater rate-funded capital reserves/reserve funds can be found in Appendix B

In order to fund the recommended lifecycle management strategy and eliminate the infrastructure funding gap for water and wastewater assets, the Township's water and wastewater rate revenues would need to increase by 10.62% annually from 2026 to 2035^[1]. Rate revenues are forecasted to rise from the current level of approximately \$2.7 million to approximately \$7.4 million by 2035.

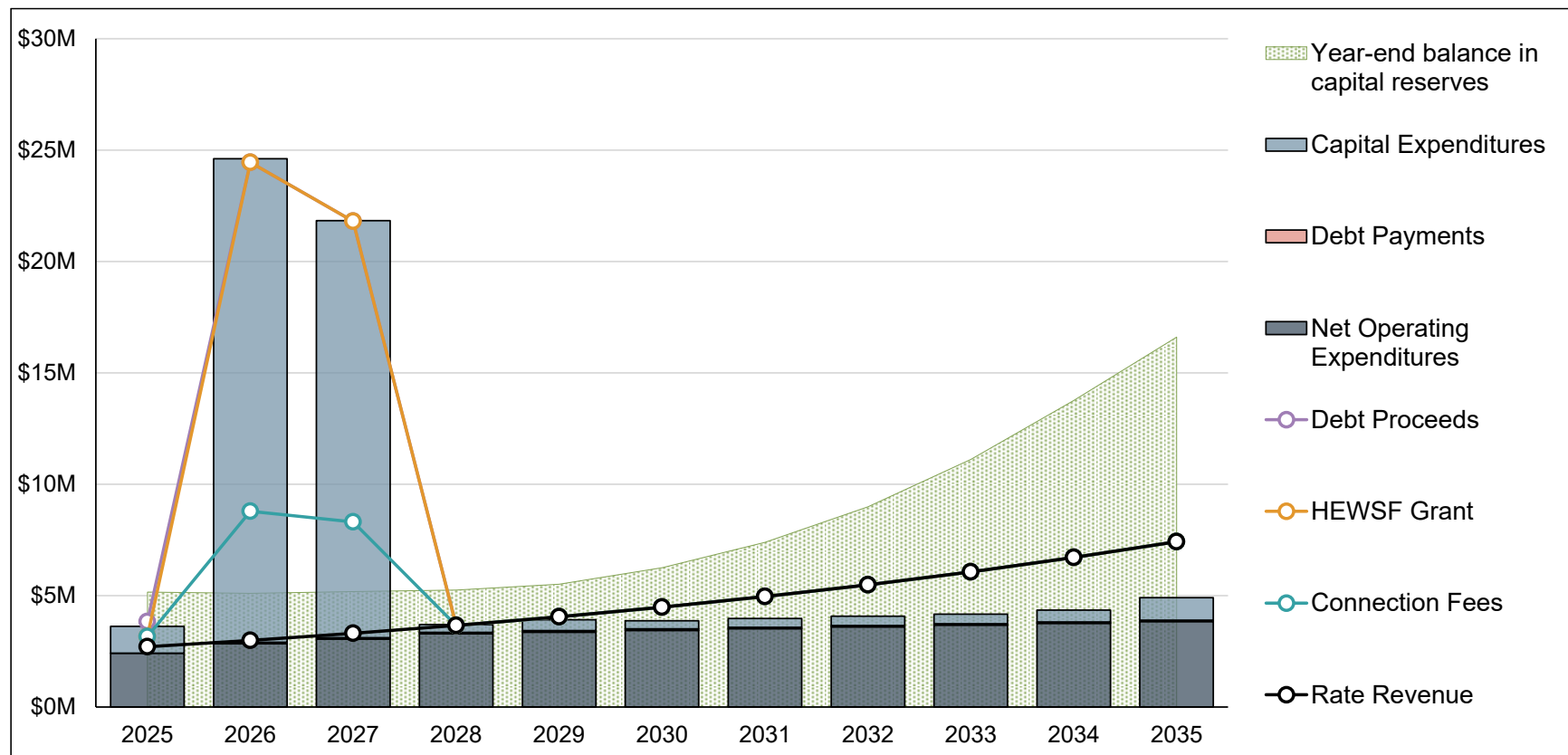
The identified rate-revenue impacts include inflationary adjustments to the Township's operating costs and revenues as identified in its 2025 budget (i.e., general operating inflation of 2.22% annually).

Figure 4-10 illustrates the overall financial forecast for the Township's rate-funded assets, with full details of the Financial Strategy provided in Appendix B.

^[1]Please note that this may not necessarily lead to an equivalent increase in the water and wastewater rates that are charged to users. The Township's water and wastewater rates are determined as part of its annual budgeting process and are dependent on other factors (such as the total number of customers and metered consumption), which are outside the scope of the analysis presented herein.



Figure 4-10: Water & Wastewater – Overall Financial Forecast (Inflated)





4.4 Assets Funded by Stormwater Rates

The Township implemented stormwater rates in July 2025 to provide a dedicated funding source for stormwater management services. Stormwater rates have been set as per the recommendations provided in the Township's 2024 One Water Rate Study^[1], with the intent to, over time, fully fund the cost of providing stormwater management services from stormwater rate revenues.

Due to the recency of the implementation of stormwater rates within the Township, there is currently insufficient data to develop an accurate and robust financial strategy for stormwater assets. In order to support the development of such a financial strategy in future iterations of this asset management plan, it is recommended that the Township:

- Refine and update its current inventory of stormwater assets; and
- Update stormwater revenue and operating cost projections based on data collected from the on-going implementation phase.

^[1]The Township's 2024 One Water Rate Study was completed by WT Infrastructure.



Chapter 5

Recommendations and Next Steps



5. Recommendations and Next Steps

5.1 Recommendations

The following recommendations are provided for the Township's consideration:

- That the Township of Southwold Asset Management Plan be received and approved by Council based on one of the following financial strategy scenarios for tax-funded assets:
 - Scenario 1: Eliminating the current annual infrastructure funding gap over a 10-year period (i.e., by 2035); or
 - Scenario 2: Eliminating the current annual infrastructure funding gap over a 15-year period (i.e., by 2040)
- That consideration be made as part of the annual budgeting process to ensure sufficient capital funding is available to implement the asset management plan.

As noted earlier in Section 4.4, due to the recency of the implementation of stormwater rates within the Township, there is currently insufficient data to develop an accurate and robust financial strategy for stormwater assets. As such, it is further recommended that the Township continue its data collection efforts from the on-going implementation phase to:

- Refine and update its current inventory of stormwater assets; and
- Update its stormwater revenue and operating cost projections.

5.2 Next Steps

Following the approval of this asset management plan by Council, the Township's asset management journey will transition from developing the plan to its operationalization.

The Township will need to establish processes and implement systems to keep asset information (e.g., condition, replacement costs, etc.) updated and relevant, so that it can be relied on to identify capital priorities and inform the annual budget process.

To ensure ongoing compliance with O. Reg. 588/17, the Township will need to start conducting annual reviews of the progress being made towards implementing the asset



management plan, with the first review required to be conducted prior to July 1, 2027. The annual reviews must identify any factors preventing progress towards full implementation and outline a strategy to address those impeding factors. Following the completion of this asset management plan, the Township should shift its focus to developing the format and content of these annual reviews to enable informed decision-making by Council and staff.

Furthermore, O. Reg. 588/17 requires updates to this asset management plan to be conducted at a minimum every five years. To maximize the reliability of the updated analyses, the Township should proactively plan to conduct updates of background studies and underlying asset data in a timely manner prior to undertaking an update of this asset management plan. The Township should also plan to proactively update the underlying data utilized to inform the current performance of the included level of service measures on a regular basis. Tracking the current performance of included measures over time relative to their targeted performance provides a key measure of success in fully implementing the asset management plan.



Appendix A

Financial Strategy Tables for Tax-funded Assets



Table A-1: Tax-supported Capital Budget Forecast for Scenario 1 (Inflated)
Township of Southwold

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Expenditures										
Capital Expenditures for Roads & Road-related Assets	\$ 5,372,000	\$ 2,510,000	\$ 2,557,000	\$ 1,121,000	\$ 1,165,000	\$ 1,761,000	\$ 2,139,000	\$ 1,177,000	\$ 2,792,000	\$ 3,466,000
Capital Expenditures for Structures	\$ 565,000	\$ 685,000	\$ 1,129,000	\$ 184,000	\$ 358,000	\$ 266,000	\$ 412,000	\$ 81,000	\$ 404,000	\$ 491,000
Capital Expenditures for Tax-funded Facilities	\$ -	\$ 84,000	\$ 46,000	\$ -	\$ 232,000	\$ -	\$ 11,000	\$ -	\$ -	\$ -
Capital Expenditures for Tax-funded Fleet and Equipment Assets	\$ 328,000	\$ 1,104,000	\$ 1,152,000	\$ 558,000	\$ 1,279,000	\$ 1,184,000	\$ 485,000	\$ 239,000	\$ 703,000	\$ 4,047,000
Capital Expenditures for Parks and Recreation Assets	\$ 112,000	\$ 209,000	\$ 302,000	\$ 119,000	\$ 150,000	\$ 139,000	\$ 325,000	\$ 124,000	\$ 58,000	\$ 339,000
Total Annual Capital Expenditures	\$ 6,377,000	\$ 4,592,000	\$ 5,186,000	\$ 1,982,000	\$ 3,184,000	\$ 3,350,000	\$ 3,372,000	\$ 1,621,000	\$ 3,957,000	\$ 8,343,000
Capital Financing										
Transfer Payment Revenues (OCIF + CCBF)	\$ 424,000	\$ 298,000	\$ 298,000	\$ 304,000	\$ 304,000	\$ 311,000	\$ 311,000	\$ 318,000	\$ 318,000	\$ 326,000
Debt Proceeds	\$ -	\$ -	\$ 414,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contribution from Capital Reserves and Reserve Funds	\$ 5,953,000	\$ 4,294,000	\$ 4,474,000	\$ 1,678,000	\$ 2,880,000	\$ 3,039,000	\$ 3,061,000	\$ 1,303,000	\$ 3,639,000	\$ 8,017,000
Total Annual Capital Financing	\$ 6,377,000	\$ 4,592,000	\$ 5,186,000	\$ 1,982,000	\$ 3,184,000	\$ 3,350,000	\$ 3,372,000	\$ 1,621,000	\$ 3,957,000	\$ 8,343,000

Table A-2: Tax-supported Schedule of Debt Payments for Scenario 1 (Inflated)
Township of Southwold

Year	Principal Borrowed	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Existing	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000
2026	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2027	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2028	\$ 414,000				\$ 38,000	\$ 38,000	\$ 38,000	\$ 38,000	\$ 38,000	\$ 38,000	\$ 38,000
2029	\$ -					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2030	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -
2031	\$ -							\$ -	\$ -	\$ -	\$ -
2032	\$ -								\$ -	\$ -	\$ -
2033	\$ -									\$ -	\$ -
2034	\$ -										\$ -
2035	\$ -										
Total Annual Debt Repayments		\$ 368,000	\$ 368,000	\$ 368,000	\$ 406,000	\$ 406,000	\$ 406,000	\$ 406,000	\$ 406,000	\$ 406,000	\$ 406,000



Table A-3: Tax-supported Schedule of Capital Reserves and Reserve Funds Continuity for Scenario 1 (Inflated)
Township of Southwold

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	\$ 5,252,000	\$ 2,212,000	\$ 1,186,000	\$ 420,000	\$ 2,903,000	\$ 4,791,000	\$ 7,169,000	\$ 10,240,000	\$ 15,863,000	\$ 20,064,000
Add: Transfer from Operating	\$ 2,745,000	\$ 3,155,000	\$ 3,606,000	\$ 4,065,000	\$ 4,611,000	\$ 5,210,000	\$ 5,865,000	\$ 6,583,000	\$ 7,368,000	\$ 8,229,000
Add: Interest Earned	\$ 168,000	\$ 113,000	\$ 102,000	\$ 96,000	\$ 157,000	\$ 207,000	\$ 267,000	\$ 343,000	\$ 472,000	\$ 572,000
Less: Transfer to Fund Capital Expenditures	\$ 5,953,000	\$ 4,294,000	\$ 4,474,000	\$ 1,678,000	\$ 2,880,000	\$ 3,039,000	\$ 3,061,000	\$ 1,303,000	\$ 3,639,000	\$ 8,017,000
Closing Balance	\$ 2,212,000	\$ 1,186,000	\$ 420,000	\$ 2,903,000	\$ 4,791,000	\$ 7,169,000	\$ 10,240,000	\$ 15,863,000	\$ 20,064,000	\$ 20,848,000
<i>Minimum Reserve Balance Threshold (10% of avg. inflated CAPEX)</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>



Table A-4: Tax-supported Operating Budget Forecast for Scenario 1 (Inflated)
Township of Southwold

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Operating Expenditures										
Council	\$ 132,000	\$ 135,000	\$ 138,000	\$ 141,000	\$ 144,000	\$ 147,000	\$ 150,000	\$ 153,000	\$ 156,000	\$ 159,000
Administration	\$ 892,000	\$ 912,000	\$ 932,000	\$ 953,000	\$ 974,000	\$ 996,000	\$ 1,018,000	\$ 1,041,000	\$ 1,064,000	\$ 1,088,000
Police	\$ 736,000	\$ 752,000	\$ 769,000	\$ 786,000	\$ 803,000	\$ 821,000	\$ 839,000	\$ 858,000	\$ 877,000	\$ 896,000
Conservation Authority	\$ 118,000	\$ 121,000	\$ 124,000	\$ 127,000	\$ 130,000	\$ 133,000	\$ 136,000	\$ 139,000	\$ 142,000	\$ 145,000
By-law, Canine, Livestock	\$ 59,000	\$ 60,000	\$ 61,000	\$ 62,000	\$ 63,000	\$ 64,000	\$ 65,000	\$ 66,000	\$ 67,000	\$ 68,000
Waste Management	\$ 384,000	\$ 393,000	\$ 402,000	\$ 411,000	\$ 420,000	\$ 429,000	\$ 439,000	\$ 449,000	\$ 459,000	\$ 469,000
Cemeteries	\$ 23,000	\$ 24,000	\$ 25,000	\$ 26,000	\$ 27,000	\$ 28,000	\$ 29,000	\$ 30,000	\$ 31,000	\$ 32,000
Fire Department	\$ 874,000	\$ 893,000	\$ 913,000	\$ 933,000	\$ 954,000	\$ 975,000	\$ 997,000	\$ 1,019,000	\$ 1,042,000	\$ 1,065,000
Building	\$ 377,000	\$ 385,000	\$ 394,000	\$ 403,000	\$ 412,000	\$ 421,000	\$ 430,000	\$ 440,000	\$ 450,000	\$ 460,000
Municipal Property	\$ 138,000	\$ 141,000	\$ 144,000	\$ 147,000	\$ 150,000	\$ 153,000	\$ 156,000	\$ 159,000	\$ 163,000	\$ 167,000
Keystone	\$ 129,000	\$ 132,000	\$ 135,000	\$ 138,000	\$ 141,000	\$ 144,000	\$ 147,000	\$ 150,000	\$ 153,000	\$ 156,000
Parks	\$ 308,000	\$ 315,000	\$ 322,000	\$ 329,000	\$ 336,000	\$ 343,000	\$ 351,000	\$ 359,000	\$ 367,000	\$ 375,000
Roads (not including loasetop maintenance)	\$ 2,135,000	\$ 2,182,000	\$ 2,230,000	\$ 2,279,000	\$ 2,330,000	\$ 2,382,000	\$ 2,435,000	\$ 2,489,000	\$ 2,544,000	\$ 2,600,000
Loasetop Maintenance	\$ 502,000	\$ 563,000	\$ 632,000	\$ 709,000	\$ 796,000	\$ 893,000	\$ 1,002,000	\$ 1,124,000	\$ 1,262,000	\$ 1,416,000
Planning	\$ 325,000	\$ 332,000	\$ 339,000	\$ 347,000	\$ 355,000	\$ 363,000	\$ 371,000	\$ 379,000	\$ 387,000	\$ 396,000
Drainage	\$ 174,000	\$ 178,000	\$ 182,000	\$ 186,000	\$ 190,000	\$ 194,000	\$ 198,000	\$ 202,000	\$ 206,000	\$ 211,000
Fee Waivers/Grants	\$ 35,000	\$ 36,000	\$ 37,000	\$ 38,000	\$ 39,000	\$ 40,000	\$ 41,000	\$ 42,000	\$ 43,000	\$ 44,000
Transfer to Operating Reserve	\$ 77,000	\$ 79,000	\$ 81,000	\$ 83,000	\$ 85,000	\$ 87,000	\$ 89,000	\$ 91,000	\$ 93,000	\$ 95,000
Adjustment for Equipment Internal Charges	\$ 355,000	\$ 360,000	\$ 365,000	\$ 370,000	\$ 375,000	\$ 380,000	\$ 385,000	\$ 390,000	\$ 395,000	\$ 400,000
Sub-total: Operating Expenditures	\$ 7,063,000	\$ 7,273,000	\$ 7,495,000	\$ 7,728,000	\$ 7,974,000	\$ 8,233,000	\$ 8,508,000	\$ 8,800,000	\$ 9,111,000	\$ 9,442,000
Capital-related Expenditures										
Transfer to Capital Reserves and Reserve Funds	\$ 2,745,000	\$ 3,155,000	\$ 3,606,000	\$ 4,065,000	\$ 4,611,000	\$ 5,210,000	\$ 5,865,000	\$ 6,583,000	\$ 7,368,000	\$ 8,229,000
Debt Repayment	\$ 368,000	\$ 368,000	\$ 368,000	\$ 406,000	\$ 406,000	\$ 406,000	\$ 406,000	\$ 406,000	\$ 406,000	\$ 406,000
Sub-total: Capital-related Expenditures	\$ 3,113,000	\$ 3,523,000	\$ 3,974,000	\$ 4,471,000	\$ 5,017,000	\$ 5,616,000	\$ 6,271,000	\$ 6,989,000	\$ 7,774,000	\$ 8,635,000
Total Annual Expenditures	\$ 10,176,000	\$ 10,796,000	\$ 11,469,000	\$ 12,199,000	\$ 12,991,000	\$ 13,849,000	\$ 14,779,000	\$ 15,789,000	\$ 16,885,000	\$ 18,077,000
Operating Revenues										
Tax Levy	\$ 6,531,000	\$ 7,108,000	\$ 7,737,000	\$ 8,422,000	\$ 9,167,000	\$ 9,978,000	\$ 10,860,000	\$ 11,821,000	\$ 12,867,000	\$ 14,005,000
Administration	\$ 97,000	\$ 99,000	\$ 101,000	\$ 103,000	\$ 105,000	\$ 107,000	\$ 109,000	\$ 111,000	\$ 113,000	\$ 116,000
Waste Management	\$ 71,000	\$ 73,000	\$ 75,000	\$ 77,000	\$ 79,000	\$ 81,000	\$ 83,000	\$ 85,000	\$ 87,000	\$ 89,000
Fire Department	\$ 234,000	\$ 239,000	\$ 244,000	\$ 249,000	\$ 255,000	\$ 261,000	\$ 267,000	\$ 273,000	\$ 279,000	\$ 285,000
Building	\$ 377,000	\$ 385,000	\$ 394,000	\$ 403,000	\$ 412,000	\$ 421,000	\$ 430,000	\$ 440,000	\$ 450,000	\$ 460,000
Municipal Property	\$ 100,000	\$ 102,000	\$ 104,000	\$ 106,000	\$ 108,000	\$ 110,000	\$ 112,000	\$ 114,000	\$ 117,000	\$ 120,000
Keystone	\$ 44,000	\$ 45,000	\$ 46,000	\$ 47,000	\$ 48,000	\$ 49,000	\$ 50,000	\$ 51,000	\$ 52,000	\$ 53,000
Parks	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000
Roads	\$ 421,000	\$ 431,000	\$ 441,000	\$ 450,000	\$ 460,000	\$ 470,000	\$ 481,000	\$ 492,000	\$ 502,000	\$ 515,000
Planning	\$ 195,000	\$ 199,000	\$ 203,000	\$ 208,000	\$ 213,000	\$ 218,000	\$ 223,000	\$ 228,000	\$ 233,000	\$ 238,000
Drainage	\$ 99,000	\$ 101,000	\$ 103,000	\$ 105,000	\$ 107,000	\$ 109,000	\$ 111,000	\$ 113,000	\$ 116,000	\$ 119,000
Interest Income	\$ 153,000	\$ 156,000	\$ 159,000	\$ 163,000	\$ 167,000	\$ 171,000	\$ 175,000	\$ 179,000	\$ 183,000	\$ 187,000
PIIs	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000
Penalty & Interest	\$ 77,000	\$ 79,000	\$ 81,000	\$ 83,000	\$ 85,000	\$ 87,000	\$ 89,000	\$ 91,000	\$ 93,000	\$ 95,000
Supplemental Taxation	\$ 87,000	\$ 89,000	\$ 91,000	\$ 93,000	\$ 95,000	\$ 97,000	\$ 99,000	\$ 101,000	\$ 103,000	\$ 105,000
OMPF	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000
Total Annual Revenues	\$ 10,176,000	\$ 10,796,000	\$ 11,469,000	\$ 12,199,000	\$ 12,991,000	\$ 13,849,000	\$ 14,779,000	\$ 15,789,000	\$ 16,885,000	\$ 18,077,000



Table A-5: Tax Levy Forecast for Scenario 1 (Inflated)
Township of Southwold

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Prior-year Tax Levy	\$ 7,153,000	\$ 6,531,000	\$ 7,108,000	\$ 7,737,000	\$ 8,422,000	\$ 9,167,000	\$ 9,978,000	\$ 10,860,000	\$ 11,821,000	\$ 12,867,000
Add: Tax Revenues from Incremental Assessment Growth	-\$ 1,070,000	\$ 91,000	\$ 99,000	\$ 108,000	\$ 117,000	\$ 127,000	\$ 139,000	\$ 151,000	\$ 164,000	\$ 179,000
Add: Tax Revenues from Existing Assessment Base	\$ 448,000	\$ 486,000	\$ 530,000	\$ 577,000	\$ 628,000	\$ 684,000	\$ 743,000	\$ 810,000	\$ 882,000	\$ 959,000
Total Tax Levy	\$ 6,531,000	\$ 7,108,000	\$ 7,737,000	\$ 8,422,000	\$ 9,167,000	\$ 9,978,000	\$ 10,860,000	\$ 11,821,000	\$ 12,867,000	\$ 14,005,000
Tax Levy Increase %		-8.71%	8.85%	8.85%	8.85%	8.85%	8.85%	8.85%	8.85%	8.85%
Tax Rate Increase %		7.35%	7.35%	7.35%	7.35%	7.35%	7.35%	7.35%	7.35%	7.35%



Table A-6: Tax-supported Capital Budget Forecast for Scenario 2 (Inflated)
Township of Southwold

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Expenditures										
Capital Expenditures for Roads & Road-related Assets	\$ 5,372,000	\$ 2,510,000	\$ 2,557,000	\$ 1,121,000	\$ 1,165,000	\$ 1,761,000	\$ 2,139,000	\$ 1,177,000	\$ 2,792,000	\$ 3,466,000
Capital Expenditures for Structures	\$ 565,000	\$ 685,000	\$ 1,129,000	\$ 184,000	\$ 358,000	\$ 266,000	\$ 412,000	\$ 81,000	\$ 404,000	\$ 491,000
Capital Expenditures for Tax-funded Facilities	\$ -	\$ 84,000	\$ 46,000	\$ -	\$ 232,000	\$ -	\$ 11,000	\$ -	\$ -	\$ -
Capital Expenditures for Tax-funded Fleet and Equipment Assets	\$ 328,000	\$ 1,104,000	\$ 1,152,000	\$ 558,000	\$ 1,279,000	\$ 1,184,000	\$ 485,000	\$ 239,000	\$ 703,000	\$ 4,047,000
Capital Expenditures for Parks and Recreation Assets	\$ 112,000	\$ 209,000	\$ 302,000	\$ 119,000	\$ 150,000	\$ 139,000	\$ 325,000	\$ 124,000	\$ 58,000	\$ 339,000
Total Annual Capital Expenditures	\$ 6,377,000	\$ 4,592,000	\$ 5,186,000	\$ 1,982,000	\$ 3,184,000	\$ 3,350,000	\$ 3,372,000	\$ 1,621,000	\$ 3,957,000	\$ 8,343,000
Capital Financing										
Transfer Payment Revenues (OCIF + CCBF)	\$ 424,000	\$ 298,000	\$ 298,000	\$ 304,000	\$ 304,000	\$ 311,000	\$ 311,000	\$ 318,000	\$ 318,000	\$ 326,000
Debt Proceeds	\$ -	\$ -	\$ 1,074,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contribution from Capital Reserves and Reserve Funds	\$ 5,953,000	\$ 4,294,000	\$ 3,814,000	\$ 1,678,000	\$ 2,880,000	\$ 3,039,000	\$ 3,061,000	\$ 1,303,000	\$ 3,639,000	\$ 8,017,000
Total Annual Capital Financing	\$ 6,377,000	\$ 4,592,000	\$ 5,186,000	\$ 1,982,000	\$ 3,184,000	\$ 3,350,000	\$ 3,372,000	\$ 1,621,000	\$ 3,957,000	\$ 8,343,000

Table A-7: Tax-supported Schedule of Debt Payments for Scenario 2 (Inflated)
Township of Southwold

Year	Principal Borrowed	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Existing	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000	\$ 368,000
2026	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2027	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2028	\$ 1,074,000				\$ 99,000	\$ 99,000	\$ 99,000	\$ 99,000	\$ 99,000	\$ 99,000	\$ 99,000
2029	\$ -					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2030	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -
2031	\$ -							\$ -	\$ -	\$ -	\$ -
2032	\$ -								\$ -	\$ -	\$ -
2033	\$ -									\$ -	\$ -
2034	\$ -										\$ -
2035	\$ -										
Total Annual Debt Repayments		\$ 368,000	\$ 368,000	\$ 368,000	\$ 467,000	\$ 467,000	\$ 467,000	\$ 467,000	\$ 467,000	\$ 467,000	\$ 467,000



Table A-8: Tax-supported Schedule of Capital Reserves and Reserve Funds Continuity for Scenario 2 (Inflated)
Township of Southwold

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	\$ 5,252,000	\$ 2,115,000	\$ 875,000	\$ 420,000	\$ 2,348,000	\$ 3,495,000	\$ 4,920,000	\$ 6,794,000	\$ 10,940,000	\$ 13,343,000
Add: Transfer from Operating	\$ 2,649,000	\$ 2,948,000	\$ 3,270,000	\$ 3,520,000	\$ 3,897,000	\$ 4,302,000	\$ 4,735,000	\$ 5,202,000	\$ 5,703,000	\$ 6,241,000
Add: Interest Earned	\$ 167,000	\$ 106,000	\$ 89,000	\$ 86,000	\$ 130,000	\$ 162,000	\$ 200,000	\$ 247,000	\$ 339,000	\$ 398,000
Less: Transfer to Fund Capital Expenditures	\$ 5,953,000	\$ 4,294,000	\$ 3,814,000	\$ 1,678,000	\$ 2,880,000	\$ 3,039,000	\$ 3,061,000	\$ 1,303,000	\$ 3,639,000	\$ 8,017,000
Closing Balance	\$ 2,115,000	\$ 875,000	\$ 420,000	\$ 2,348,000	\$ 3,495,000	\$ 4,920,000	\$ 6,794,000	\$ 10,940,000	\$ 13,343,000	\$ 11,965,000
<i>Minimum Reserve Balance Theshold (10% of avg. inflated CAPEX)</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>	<i>\$ 420,000</i>



Table A-9: Tax-supported Operating Budget Forecast for Scenario 2 (Inflated)
Township of Southwold

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Operating Expenditures										
Council	\$ 132,000	\$ 135,000	\$ 138,000	\$ 141,000	\$ 144,000	\$ 147,000	\$ 150,000	\$ 153,000	\$ 156,000	\$ 159,000
Administration	\$ 892,000	\$ 912,000	\$ 932,000	\$ 953,000	\$ 974,000	\$ 996,000	\$ 1,018,000	\$ 1,041,000	\$ 1,064,000	\$ 1,088,000
Police	\$ 736,000	\$ 752,000	\$ 769,000	\$ 786,000	\$ 803,000	\$ 821,000	\$ 839,000	\$ 858,000	\$ 877,000	\$ 896,000
Conservation Authority	\$ 118,000	\$ 121,000	\$ 124,000	\$ 127,000	\$ 130,000	\$ 133,000	\$ 136,000	\$ 139,000	\$ 142,000	\$ 145,000
By-law, Canine, Livestock	\$ 59,000	\$ 60,000	\$ 61,000	\$ 62,000	\$ 63,000	\$ 64,000	\$ 65,000	\$ 66,000	\$ 67,000	\$ 68,000
Waste Management	\$ 384,000	\$ 393,000	\$ 402,000	\$ 411,000	\$ 420,000	\$ 429,000	\$ 439,000	\$ 449,000	\$ 459,000	\$ 469,000
Cemeteries	\$ 23,000	\$ 24,000	\$ 25,000	\$ 26,000	\$ 27,000	\$ 28,000	\$ 29,000	\$ 30,000	\$ 31,000	\$ 32,000
Fire Department	\$ 874,000	\$ 893,000	\$ 913,000	\$ 933,000	\$ 954,000	\$ 975,000	\$ 997,000	\$ 1,019,000	\$ 1,042,000	\$ 1,065,000
Building	\$ 377,000	\$ 385,000	\$ 394,000	\$ 403,000	\$ 412,000	\$ 421,000	\$ 430,000	\$ 440,000	\$ 450,000	\$ 460,000
Municipal Property	\$ 138,000	\$ 141,000	\$ 144,000	\$ 147,000	\$ 150,000	\$ 153,000	\$ 156,000	\$ 159,000	\$ 163,000	\$ 167,000
Keystone	\$ 129,000	\$ 132,000	\$ 135,000	\$ 138,000	\$ 141,000	\$ 144,000	\$ 147,000	\$ 150,000	\$ 153,000	\$ 156,000
Parks	\$ 308,000	\$ 315,000	\$ 322,000	\$ 329,000	\$ 336,000	\$ 343,000	\$ 351,000	\$ 359,000	\$ 367,000	\$ 375,000
Roads (not including loasetop maintenance)	\$ 2,135,000	\$ 2,182,000	\$ 2,230,000	\$ 2,279,000	\$ 2,330,000	\$ 2,382,000	\$ 2,435,000	\$ 2,489,000	\$ 2,544,000	\$ 2,600,000
Loasetop Maintenance	\$ 502,000	\$ 563,000	\$ 632,000	\$ 709,000	\$ 796,000	\$ 893,000	\$ 1,002,000	\$ 1,124,000	\$ 1,262,000	\$ 1,416,000
Planning	\$ 325,000	\$ 332,000	\$ 339,000	\$ 347,000	\$ 355,000	\$ 363,000	\$ 371,000	\$ 379,000	\$ 387,000	\$ 396,000
Drainage	\$ 174,000	\$ 178,000	\$ 182,000	\$ 186,000	\$ 190,000	\$ 194,000	\$ 198,000	\$ 202,000	\$ 206,000	\$ 211,000
Fee Waivers/Grants	\$ 35,000	\$ 36,000	\$ 37,000	\$ 38,000	\$ 39,000	\$ 40,000	\$ 41,000	\$ 42,000	\$ 43,000	\$ 44,000
Transfer to Operating Reserve	\$ 77,000	\$ 79,000	\$ 81,000	\$ 83,000	\$ 85,000	\$ 87,000	\$ 89,000	\$ 91,000	\$ 93,000	\$ 95,000
Adjustment for Equipment Internal Charges (Transfer to Reserve)	\$ 355,000	\$ 360,000	\$ 365,000	\$ 370,000	\$ 375,000	\$ 380,000	\$ 385,000	\$ 390,000	\$ 395,000	\$ 400,000
Sub-total: Operating Expenditures	\$ 7,063,000	\$ 7,273,000	\$ 7,495,000	\$ 7,728,000	\$ 7,974,000	\$ 8,233,000	\$ 8,508,000	\$ 8,800,000	\$ 9,111,000	\$ 9,442,000
Capital-related Expenditures										
Transfer to Capital Reserves and Reserve Funds	\$ 2,649,000	\$ 2,948,000	\$ 3,270,000	\$ 3,520,000	\$ 3,897,000	\$ 4,302,000	\$ 4,735,000	\$ 5,202,000	\$ 5,703,000	\$ 6,241,000
Debt Repayment	\$ 368,000	\$ 368,000	\$ 368,000	\$ 467,000	\$ 467,000	\$ 467,000	\$ 467,000	\$ 467,000	\$ 467,000	\$ 467,000
Sub-total: Capital-related Expenditures	\$ 3,017,000	\$ 3,316,000	\$ 3,638,000	\$ 3,987,000	\$ 4,364,000	\$ 4,769,000	\$ 5,202,000	\$ 5,669,000	\$ 6,170,000	\$ 6,708,000
Total Annual Expenditures	\$ 10,080,000	\$ 10,589,000	\$ 11,133,000	\$ 11,715,000	\$ 12,338,000	\$ 13,002,000	\$ 13,710,000	\$ 14,469,000	\$ 15,281,000	\$ 16,150,000
Operating Revenues										
Tax Levy	\$ 6,435,000	\$ 6,901,000	\$ 7,401,000	\$ 7,938,000	\$ 8,513,000	\$ 9,130,000	\$ 9,792,000	\$ 10,501,000	\$ 11,262,000	\$ 12,078,000
Administration	\$ 97,000	\$ 99,000	\$ 101,000	\$ 103,000	\$ 105,000	\$ 107,000	\$ 109,000	\$ 111,000	\$ 113,000	\$ 116,000
Waste Management	\$ 71,000	\$ 73,000	\$ 75,000	\$ 77,000	\$ 79,000	\$ 81,000	\$ 83,000	\$ 85,000	\$ 87,000	\$ 89,000
Fire Department	\$ 234,000	\$ 239,000	\$ 244,000	\$ 249,000	\$ 255,000	\$ 261,000	\$ 267,000	\$ 273,000	\$ 279,000	\$ 285,000
Building	\$ 377,000	\$ 385,000	\$ 394,000	\$ 403,000	\$ 412,000	\$ 421,000	\$ 430,000	\$ 440,000	\$ 450,000	\$ 460,000
Municipal Property	\$ 100,000	\$ 102,000	\$ 104,000	\$ 106,000	\$ 108,000	\$ 110,000	\$ 112,000	\$ 114,000	\$ 117,000	\$ 120,000
Keystone	\$ 44,000	\$ 45,000	\$ 46,000	\$ 47,000	\$ 48,000	\$ 49,000	\$ 50,000	\$ 51,000	\$ 52,000	\$ 53,000
Parks	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000
Roads	\$ 421,000	\$ 431,000	\$ 441,000	\$ 450,000	\$ 461,000	\$ 471,000	\$ 480,000	\$ 492,000	\$ 503,000	\$ 515,000
Planning	\$ 195,000	\$ 199,000	\$ 203,000	\$ 208,000	\$ 213,000	\$ 218,000	\$ 223,000	\$ 228,000	\$ 233,000	\$ 238,000
Drainage	\$ 99,000	\$ 101,000	\$ 103,000	\$ 105,000	\$ 107,000	\$ 109,000	\$ 111,000	\$ 113,000	\$ 116,000	\$ 119,000
Interest Income	\$ 153,000	\$ 156,000	\$ 159,000	\$ 163,000	\$ 167,000	\$ 171,000	\$ 175,000	\$ 179,000	\$ 183,000	\$ 187,000
PIIs	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000	\$ 1,168,000
Penalty & Interest	\$ 77,000	\$ 79,000	\$ 81,000	\$ 83,000	\$ 85,000	\$ 87,000	\$ 89,000	\$ 91,000	\$ 93,000	\$ 95,000
Supplemental Taxation	\$ 87,000	\$ 89,000	\$ 91,000	\$ 93,000	\$ 95,000	\$ 97,000	\$ 99,000	\$ 101,000	\$ 103,000	\$ 105,000
OMPF	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000	\$ 501,000
Total Annual Revenues	\$ 10,080,000	\$ 10,589,000	\$ 11,133,000	\$ 11,715,000	\$ 12,338,000	\$ 13,002,000	\$ 13,710,000	\$ 14,469,000	\$ 15,281,000	\$ 16,150,000



Table A-10: Tax Levy Forecast for Scenario 2 (Inflated)
Township of Southwold

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Prior-year Tax Levy	\$ 7,153,000	\$ 6,435,000	\$ 6,901,000	\$ 7,401,000	\$ 7,938,000	\$ 8,513,000	\$ 9,130,000	\$ 9,792,000	\$ 10,501,000	\$ 11,262,000
Add: Tax Revenues from Incremental Assessment Growth	-\$ 1,070,000	\$ 89,000	\$ 96,000	\$ 103,000	\$ 110,000	\$ 118,000	\$ 127,000	\$ 136,000	\$ 146,000	\$ 156,000
Add: Tax Revenues from Existing Assessment Base	\$ 352,000	\$ 377,000	\$ 404,000	\$ 434,000	\$ 465,000	\$ 499,000	\$ 535,000	\$ 573,000	\$ 615,000	\$ 660,000
Total Tax Levy	\$ 6,435,000	\$ 6,901,000	\$ 7,401,000	\$ 7,938,000	\$ 8,513,000	\$ 9,130,000	\$ 9,792,000	\$ 10,501,000	\$ 11,262,000	\$ 12,078,000
Tax Levy Increase %		-10.05%	7.25%	7.25%	7.25%	7.25%	7.25%	7.25%	7.25%	7.25%
Tax Rate Increase %		5.78%	5.78%	5.78%	5.78%	5.78%	5.78%	5.78%	5.78%	5.78%



Appendix B

Financial Strategy Tables for Water and Wastewater Assets



Table B-1: Water and Wastewater Capital Budget Forecast (Inflated)
Township of Southwold

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Expenditures										
Capital Expenditures for Water Assets	\$ 104,000	\$ 94,000	\$ 114,000	\$ 234,000	\$ 112,000	\$ 123,000	\$ 138,000	\$ 134,000	\$ 207,000	\$ 252,000
Capital Expenditures for Wastewater Assets	\$ 140,000	\$ 130,000	\$ 239,000	\$ 252,000	\$ 257,000	\$ 270,000	\$ 282,000	\$ 294,000	\$ 323,000	\$ 761,000
Capital Expenditures for Shedden WWTP Construction - Phase 1	\$ 21,458,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Expenditures for Shedden WWTP Construction - Phase 2	\$ -	\$ 18,496,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Annual Capital Expenditures	\$ 21,702,000	\$ 18,720,000	\$ 353,000	\$ 486,000	\$ 369,000	\$ 393,000	\$ 420,000	\$ 428,000	\$ 530,000	\$ 1,013,000
Capital Financing										
Contribution from Connection Fees	\$ 5,794,000	\$ 4,994,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
HEWSF Grant	\$ 15,664,000	\$ 13,502,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contribution from Capital Reserves and Reserve Funds	\$ 244,000	\$ 224,000	\$ 353,000	\$ 486,000	\$ 369,000	\$ 393,000	\$ 420,000	\$ 428,000	\$ 530,000	\$ 1,013,000
Total Annual Capital Financing	\$ 21,702,000	\$ 18,720,000	\$ 353,000	\$ 486,000	\$ 369,000	\$ 393,000	\$ 420,000	\$ 428,000	\$ 530,000	\$ 1,013,000

Table B-2: Water and Wastewater Schedule of Debt Payments (Inflated)
Township of Southwold

Year	Principal Borrowed	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Existing	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000
2026	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2027	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2028	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2029	\$ -					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2030	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -
2031	\$ -							\$ -	\$ -	\$ -	\$ -
2032	\$ -								\$ -	\$ -	\$ -
2033	\$ -									\$ -	\$ -
2034	\$ -										\$ -
2035	\$ -										
Total Annual Debt Repayments		\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000



Table B-3: Water and Wastewater Schedule of Capital Reserves and Reserve Funds Continuity (Inflated)
Township of Southwold

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	\$ 5,159,000	\$ 5,105,000	\$ 5,188,000	\$ 5,255,000	\$ 5,511,000	\$ 6,251,000	\$ 7,391,000	\$ 8,982,000	\$ 11,112,000	\$ 13,755,000
Add: Transfer from Operating	\$ 85,000	\$ 202,000	\$ 309,000	\$ 624,000	\$ 980,000	\$ 1,380,000	\$ 1,827,000	\$ 2,332,000	\$ 2,893,000	\$ 3,524,000
Add: Interest Earned	\$ 105,000	\$ 105,000	\$ 111,000	\$ 118,000	\$ 129,000	\$ 153,000	\$ 184,000	\$ 226,000	\$ 280,000	\$ 346,000
Less: Transfer to Fund Capital Expenditures and Operating Expenditure	\$ 244,000	\$ 224,000	\$ 353,000	\$ 486,000	\$ 369,000	\$ 393,000	\$ 420,000	\$ 428,000	\$ 530,000	\$ 1,013,000
Closing Balance	\$ 5,105,000	\$ 5,188,000	\$ 5,255,000	\$ 5,511,000	\$ 6,251,000	\$ 7,391,000	\$ 8,982,000	\$ 11,112,000	\$ 13,755,000	\$ 16,612,000
<i>Minimum Reserve Balance Threshold (10% of avg. inflated CAPEX)</i>	<i>\$ 444,000</i>	<i>\$ 444,000</i>	<i>\$ 444,000</i>	<i>\$ 444,000</i>	<i>\$ 444,000</i>	<i>\$ 444,000</i>	<i>\$ 444,000</i>	<i>\$ 444,000</i>	<i>\$ 444,000</i>	<i>\$ 444,000</i>



Table B-4: Water and Wastewater Operating Budget Forecast (Inflated)
Township of Southwold

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Operating Expenditures										
Water	\$ 2,187,000	\$ 2,236,000	\$ 2,285,000	\$ 2,336,000	\$ 2,388,000	\$ 2,441,000	\$ 2,495,000	\$ 2,550,000	\$ 2,607,000	\$ 2,664,000
Wastewater	\$ 646,000	\$ 660,000	\$ 675,000	\$ 690,000	\$ 705,000	\$ 721,000	\$ 737,000	\$ 753,000	\$ 770,000	\$ 787,000
Shedden Wastewater System	\$ 377,000	\$ 523,000	\$ 712,000	\$ 728,000	\$ 744,000	\$ 761,000	\$ 778,000	\$ 795,000	\$ 813,000	\$ 831,000
Sub-total: Operating Expenditures	\$ 3,210,000	\$ 3,419,000	\$ 3,672,000	\$ 3,754,000	\$ 3,837,000	\$ 3,923,000	\$ 4,010,000	\$ 4,098,000	\$ 4,190,000	\$ 4,282,000
Capital-related Expenditures										
Transfer to Capital Reserves and Reserve Funds	\$ 85,000	\$ 202,000	\$ 309,000	\$ 624,000	\$ 980,000	\$ 1,380,000	\$ 1,827,000	\$ 2,332,000	\$ 2,893,000	\$ 3,524,000
Debt Repayment	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000
Sub-total: Capital-related Expenditures	\$ 147,000	\$ 264,000	\$ 371,000	\$ 686,000	\$ 1,042,000	\$ 1,442,000	\$ 1,889,000	\$ 2,394,000	\$ 2,955,000	\$ 3,586,000
Total Annual Expenditures	\$ 3,357,000	\$ 3,683,000	\$ 4,043,000	\$ 4,440,000	\$ 4,879,000	\$ 5,365,000	\$ 5,899,000	\$ 6,492,000	\$ 7,145,000	\$ 7,868,000
Operating Revenues										
Water and Wastewater Rate Revenue	\$ 2,994,000	\$ 3,312,000	\$ 3,664,000	\$ 4,053,000	\$ 4,483,000	\$ 4,959,000	\$ 5,486,000	\$ 6,068,000	\$ 6,712,000	\$ 7,425,000
Other Revenue - Water	\$ 263,000	\$ 269,000	\$ 274,000	\$ 280,000	\$ 287,000	\$ 294,000	\$ 299,000	\$ 307,000	\$ 314,000	\$ 321,000
Other Revenue - Wastewater	\$ 100,000	\$ 102,000	\$ 105,000	\$ 107,000	\$ 109,000	\$ 112,000	\$ 114,000	\$ 117,000	\$ 119,000	\$ 122,000
Total Annual Revenues	\$ 3,357,000	\$ 3,683,000	\$ 4,043,000	\$ 4,440,000	\$ 4,879,000	\$ 5,365,000	\$ 5,899,000	\$ 6,492,000	\$ 7,145,000	\$ 7,868,000

The Township of Southwold Waiving of Facilities Fees Application Form



Township of Southwold
35663 Fingal Line
Fingal, ON N0L 1K0
Phone: 519-769-2010
Fax: 519-769-2837
communications@southwold.ca

Name of Event:			
Planning Meeting			
Name of Group or Organization			
Shepherd Soccer			
Primary & Secondary Contact Person		Purpose of Event	
Jen Scott		Planning for upcoming events / Invite the public	
Contact Address		Postal Code	
[REDACTED]		[REDACTED]	
Phone # Primary / Secondary		Email / Website:	
[REDACTED]		[REDACTED]	
Not for Profit # or Charitable Organization Registration #:			
Activity or Event Information			
Fees to be Waived (ie: facility rental)		facility rental	
Date and Times:		Feb 23, 6-8	
Number of People expected:		Admission Fee: (If applicable)	/
10?			
Will food be served?	no	Will alcohol be served?	no

Activity or Event Description

How will your activity or event enhance community services and recreation in the Township of Southwold?

We would like to invite the community to join our meetings

The Township of Southwold Waiving of Facilities Fees Application Form



Township of Southwold
35663 Fingal Line
Fingal, ON N0L 1K0
Phone: 519-769-2010
Fax: 519-769-2837

communications@southwold.ca

Please describe the projected social, cultural, economic and environmental impact that the activity or event will have on the Township and its residents.

More community involvement

What will the impact on the activity or event be if the fee is **not** waived?

Public / community will not be able to attend

Are you seeking funding from any other sources (fundraising, grants, sponsorships, etc.)?

—

What features will you have in place to ensure that your event is accessible to all residents (residents with disabilities)?

—

Deadline for submission is November 15, for events being held the following year.

JAN 14 2026

The Township of Southwold Waiving of Facilities Fees Application Form



Township of Southwold

35663 Fingal Line

Fingal, ON N0L 1K0

Phone: 519-769-2010

Fax: 519-769-2837

communications@southwold.ca

The Township of Southwold may waive fees to eligible applicants to help offset the fee(s) that would be charged by the Township related to the delivery or presentation of festivals or events which offers an inclusive experience to a wide range of participants.

An approval of waived fees by Council, does not guarantee the availability of a reservation.

Applicants are still required to apply and sign for a park/facility rental agreement, and supply the necessary supporting documentation, such as proof of liability insurance, special occasion permit, and or special event permit.

Council reserves the right to limit the total amount of fees waived annually.

Ineligibility

Some activities are beyond the scope of this program, regardless of their merit. Fees will not be waived for:

- Festivals or events that are similar to those already being provided by the Township
- Festivals or events already funded through other programs or agreements with the Township.
- Damage deposits will not be refunded.
- Non-Township fees or expenses.

Application Checklist

Please submit one hard copy of the following documents with your application for fee reduction / waiver.

- ☐ Copy of Township rental agreement, confirming: Dates/times and location of event, and all fees associated with the event.

Applications can be submitted, in person, fax or mail to:

Township of Southwold,
Attention: Community Services & Communications Clerk
35663 Fingal Line
Fingal, ON N0L 1K0
Fax: 519-769-2837

or by email: communications@southwold.ca

Authorization for Application

On behalf of, and with the authority of, the above-mentioned organization, we certify that the information given in this application for waiving of facilities fees is true, correct and complete in every respect.

Name:	Jennifer Scott	Title:	Secretary
Signature:	[Redacted Signature]	Date:	Jan 14, 2026

ROMA Update

NEWS ALERT: Ontario's *Drainage Act* applies to all - including national railways

In an important milestone, an Ontario court has ruled that Canadian Pacific Railway is not above Ontario law. The Ontario Court of the Drainage Referee has decided that Ontario's *Drainage Act* is applicable to the federal railways and like all landowners, they must pay the cost of municipal drainage work apportioned to their property.

This decision came from litigation between Chatham-Kent and CP. ROMA, which was granted status as a legal intervenor in the case, presented the impact of railway behaviour on rural municipalities.

ROMA also argued the constitutional issue at the heart of the case – namely the responsibility of federally regulated industries to respect provincial laws.

Based on ROMA's research in 2023, unpaid maintenance costs from CP and other railways are more than \$500,000. The tab for unpaid capital construction projects is more than one million dollars. About \$1.7 million in construction projects have been delayed due to lack of cooperation by railway companies.

Noted ROMA Chair Christa Lowry: "ROMA showed compelling evidence the corporation was systematically disregarding laws that have governed drainage in Ontario for 150 years. Through collaboration with many rural municipalities, we illustrated the financial, economic, and environmental impact of this behaviour on rural communities. When rural municipalities work together we can make a real difference for our communities."

Given that CP says it will appeal the ruling, ROMA will continue to offer legal support to once again intervene on this matter and fight back against railways who say they are above Ontario law. At this point, the current Referee's decision provides a basis for municipalities to collect outstanding costs under any existing by-laws.

CONTACT: roma@roma.on.ca

***DISCLAIMER:** Any documents attached are final versions. ROMA assumes no responsibility for any discrepancies that may have been transmitted with this electronic version. The printed versions of the documents stand as the official record.

Rural Ontario Association (ROMA)

If you wish to Opt-Out of ROMA Surveys please [Opt Out](#)

155 University Ave Suite 800 | Toronto, ON M5H 3B7 CA

By-law for Municipalities Not Within a Regional Municipality, the County of Oxford or The District Municipality of Muskoka – Form 5
Drainage Act, R.S.O. 1990, c. D.17, subs. 45(1)

Drainage By-law Number 2025-67

A by-law to provide for a drainage works in the Township of Southwold
in the County of Elgin.

Whereas the council of the Township of Southwold has procured a
report under section 78 of the *Drainage Act* for the improvement
of the Edison drain;

And whereas the report dated _____ has been authored by _____
and the attached report forms part of this by-law;

And whereas the estimated total cost of the drainage work is \$236,100.00;

And whereas \$39,365.00 is the amount to be contributed by the Township
of Southwold for the drainage works;

And whereas (Complete this clause only if other municipalities are being assessed a share of the cost of the project.);

_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____

And whereas the council is of the opinion that drainage of the area is desirable;

Therefore the council of the Township of Southwold
pursuant to the *Drainage Act* enacts as follows:

1. AUTHORIZATION

The attached report is adopted and the drainage works is authorized and shall be completed as specified in the report.

2. BORROWING

The Corporation of the Township of Southwold
may borrow on the credit of the Corporation the amount of _____ being the amount necessary for
the improvement of the drainage works.

This project may be debentured.

6. CITATION

This by-law comes into force on the passing thereof and may be cited as the
" Edison Drain _____ by-law".

First reading 2025/11/24

Second reading 2025/11/24

Provisionally adopted this 24 day of November, 20 25

Name of Head of Council (Last, First Name)	Signature
<u>Jones, Grant</u>	<u>Original signed</u>

Name of Clerk (Last, First Name)	Signature
<u>Carswell, Jeff</u>	<u>Original signed</u>

Third reading 2026-01-26

Enacted this 26th day of January, 20 26

Name of Head of Council (Last, First Name)	Signature
<u>Jones, Grant</u>	

Name of Clerk (Last, First Name)	Signature
<u>Carswell, Jeff</u>	

I, Jeff Carswell

clerk of the Corporation of the Township of Southwold,
certify that the above by-law was duly passed by the council of the Corporation and is a true copy
thereof.

Name of Clerk (Last, First Name)	Signature
<u>Carswell, Jeff</u>	

EDISON DRAIN 2025
Township of Southwold



SPRIET
ASSOCIATES
ENGINEERS & ARCHITECTS
155 York Street
London, Ontario N6A 1A8
Tel. (519) 672-4100
Fax (519) 433-9351
Email: mail@spriet.on.ca
www.spriet.on.ca

EDISON DRAIN 2025

Township of Southwold

To the Mayor and Council of
The Township of Southwold

Mayor and Council:

We are pleased to present our report on the reconstruction of parts of the Edison Municipal Drain serving parts of Lot 6, Concessions 3 and 4, in the Township of Southwold. The total watershed area contains approximately 27.8 hectares.

AUTHORIZATION

This report was prepared pursuant to Section 78 of the Drainage Act. Instructions were received from your Municipality with respect to a motion of Council. The work was initiated by a request signed by the affected landowners.

HISTORY

The Edison Municipal Drain was originally constructed pursuant to a report submitted by A.J. Graham, P. Eng., dated July 6, 1967, and was a closed drain made up of a Main Drain, McKillop Branch, Middle Branch, East Branch, and two spurs. The Main Drain consists of 1,375 meters of 350mm to 125mm field tile from the outlet into the Sanders Drain at Highway 401, upstream southerly and westerly across Fourth Line, and 120 meters into the northwest part of Lot 6, Concession 4.

The Middle Branch consisted of 777 meters of 150mm to 125mm tile from the Main Drain, 20 meters upstream of the line between Lots 5 and 6, Concession 3, southerly and westerly across Fourth Line, and into the northwest part of Lot 6, Concession 4.

The McKillop Branch consists of 165 meters of 150mm to 125 mm tile from the Main Drain, 86 meters upstream of Fourth Line, south-easterly for 171 meters into the northwest part of Lot 6.

EXISTING DRAINAGE CONDITIONS

At a site meeting held with respect to the project and through later discussions the owners reported the following:

- that the drain was undersized and not providing proper drainage
- that the owners of the west part of Lot 6, Concession 4 (Roll No. 004-006) have three outlets into their property and requested that they be replaced and upgraded to today's standards



EXISTING DRAINAGE CONDITIONS (cont'd)

- that the owner of the residential property (Roll No. 004-005-01) reported that the surface culvert on the Main Drain under the Fourth Line is plugged
- that the owner of the northeast part of Lot 6, Concession 4 (Roll No 004-005) requested that the Main Drain and Middle Branch be replaced and upgraded to today's standards and that the Middle Branch be relocated around his farm buildings
- that the owners of Lot 5, Concession 3 (Roll No. 003-084) which is downstream of the Main Drain/Middle Branch junction, is satisfied with the functioning of the drain on their property. They requested that the new drain stop at their west property line and that an overflow structure be provided at that point for excess water to relieve onto the surface
- that no request was made to improve any of the remaining portions of the drain

A field investigation and survey were completed. Upon reviewing our findings we note the following:

- that the existing drains are considerably undersized by today's standards but in working condition
- that there is sufficient gradient on the Main Drain through Lot 6 and the Middle Branch to allow connection to the Main Drain at the line between Lots 5 and 6. This would require the installation of an overflow catchbasin at this location to allow any surcharge to overflow downstream into Lot 5
- that the East Branch and spurs, while undersized, are working adequately for the owners at this time

Preliminary design, cost estimates, and assessments were prepared and an informal public meeting was held to review the findings and preliminary proposals. Further input and the following request was provided by the affected owners at that time and at later dates.

- that the McKillop Branch be replaced and upgraded to today's standards

DESIGN CRITERIA AND CONSIDERATIONS

The Drainage Coefficient method contained in "DRAINAGE GUIDE FOR ONTARIO", Publication 29 by the Ontario Ministry of Agriculture, Food, and Agribusiness (OMAFRA) is typically used to design municipal drains. The Drainage Coefficient defines a depth of water that can be removed in a 24-hour period and is expressed in millimetres per 24 hours. The coefficient used to design this drain with respect to capacity was 38mm per 24 hours.

We would like to point out that there have been indications of sandy and unstable soil conditions. It should be noted that no formal soil investigation has been made, with this information being provided by the owners and Elgin County Soils mapping.

The proposed design and report have been generally completed using the "GUIDE FOR ENGINEERS WORKING UNDER THE DRAINAGE ACT IN ONTARIO" OMAFA Publication 852.



RECOMMENDATIONS

We are therefore recommending the following:

- that the existing Middle Branch, McKillop Branch, and the portion of the Main Drain from the Parisio property (Roll No. 004-006) downstream to the line between Lots 5 and 6, be replaced with a new 200mm to 450mm concrete tile and sewer pipe, including appurtenances, and that the existing tiles be destroyed where possible
- that an overflow catchbasin be constructed on the junction between the new and existing Main Drain at the line between Lots 5 and 6, to allow surcharge
- that the remaining existing portion of the Main Drain in the northwest part of Lot 6 (Roll No. 004-006) be officially abandoned as a municipal drain under Section 19 of the Drainage Act. The owners may maintain the intact portion as a private header tile if they so wish
- that the upper portion of the Middle Branch be relocated around the farm buildings on the north part of Lot 6, Concession 4 (Roll No. 004-005)
- that catchbasins be installed at various locations on the proposed drains to allow direct surface water entry into the tiles and thereby reduce surface flow and erosion
- that the existing surface pipes under Fourth Line, on both the Main Drain and Middle Branch, be cleaned out

Our design includes the wrapping of tile joints with geotextile to prevent the incursion of fine soil particles into the drain. If areas of poor soil are encountered at the time of construction, it may become necessary to install the tile on crushed stone bedding wrapped with geotextile or substitute plastic filter tile through such areas. The additional costs of such work would be an extra to the project. These areas are typically identified at the time of construction but may only become apparent after construction is completed. In this case, the extra costs for removal and reinstallation on stone bedding would be an extra to the project and if already billed become a supplementary billing.

In accordance with the principals of Section 14(2) of the Drainage Act, the existing surface waterway along the route of the tile drains shall be part of the drainage works for future maintenance. The width available for the waterway shall be equal to the maintenance working width as noted on the Contract Drawings.

It is recommended that basement, cellar, or crawlspace drains be directed to a sump and then discharged onto the ground surface well away from foundations and septic systems or should owners desire to connect these drains to the new outlet drain, then it is suggested that they not be directly connected to the drains. Rather it is suggested that such a connection be made by an indirect method such as by sump pump with an open-air connection such as a mini-catchbasin, crushed stone filled excavation connected to a storm P.D.C. and should include a check valve and be piped above foundation level. It is noted that there is still a risk of flooding even with indirect methods of connection and any/all responsibility shall be borne by the owner. Downspouts from eavestroughs should be directed onto the ground surface well away from foundations and septic systems and are **not** permitted to be connected to the Municipal Drain.



ENVIRONMENTAL CONSIDERATIONS AND MITIGATION MEASURES

Based on the information available, there are no significant wetlands, sensitive areas, or endangered species along the route of the drains. The proposed construction of the Edison Drain 2025 includes surface inlets which greatly help reduce the overland surface flows and any subsequent erosion.

SUMMARY OF PROPOSED WORK

The proposed work consists of approximately 1,597 lineal meters of 200mm to 450mm concrete field tile and HDPE sewer pipe, including related appurtenances.

SCHEDULES

Three schedules are attached hereto and form part of this report, being Schedule 'A' - Allowances, Schedule 'B' - Cost Estimate, and Schedule 'C' - Assessment for Construction.

Schedule 'A' - Allowances. In accordance with Sections 29 and 30 of the Drainage Act, allowances are provided for right-of-way and damages to lands and crops along the route of the drain as defined below.

Schedule 'B' - Cost Estimate. This schedule provides for a detailed cost estimate of the proposed work which is in the amount of \$236,100.00. This estimate includes engineering and administrative costs associated with this project.

Schedule 'C' - Assessment for Construction. This schedule outlines the distribution of the total estimated cost of construction over the roads and lands which are involved.

Drawing No.1, Job No. 224103 and specifications form part of this report. They show and describe in detail the location and extent of the work to be done and the lands which are affected.

ALLOWANCES

RIGHT-OF-WAY: Section 29 of the Drainage Act provides for an allowance to the owners whose land must be used for the construction, repair, or future maintenance of a drainage works.

For tile drains where the owners will be able to continue to use the land, the allowance provides for the right to enter upon such lands, and at various times for the purpose of inspecting such drain, removing obstructions, and making repairs. Also, the allowance provides for the restrictions imposed on those lands to protect the right-of-way from obstruction or derogation. The amounts granted for right-of-way on tile drains is based on a percentage of the value of the land designated for future maintenance. Therefore, the amount granted is based on \$9,000.00/ha. through cropped lands. This value is multiplied by the hectares derived from the width granted for future maintenance and the applicable lengths. No right-of-way was previously provided for any of the existing drains being replaced.

DAMAGES: Section 30 of the Drainage Act provides for the compensation to landowners along the drain for damages to lands and crops caused by the construction of the drain. The amount granted is based on \$5,500.00/ha for closed drains installed with a wheel machine. This base rate is multiplied by the hectares derived from the working widths shown on the plans and the applicable lengths.



ASSESSMENT DEFINITIONS

In accordance with the Drainage Act, lands that make use of a drainage works are liable for assessment for part of the cost of constructing and maintaining the system. These assessments are known as benefit, outlet liability and special benefit as set out under Sections 22 and 23 of the Act.

SECTION 22

Benefit as defined in the Drainage Act means the advantages to any lands, roads, buildings or other structures from the construction, improvement, repair, or maintenance of a drainage works such as will result in a higher market value, increased crop production, improved appearance, better control of surface water, or any other advantages relating to the betterment of lands, roads, buildings, or other structures.

Special Benefit is assessed to lands for which some additional work or feature has been included in the construction repair or improvement of a drainage works. The costs of such work are separated and assessed independently from the regular work.

SECTION 23

Outlet liability is assessed to lands or roads that may make use of a drainage works as an outlet either directly or indirectly through the medium of any other drainage works or of a swale, ravine, creek, or watercourse.

In addition, a Public Utility or Road Authority shall be assessed for and pay all the increased cost to a drainage works due to the construction and operation of the Public Utility or Road Authority. This may be shown as either benefit or special assessment.

ASSESSMENT

A modified "Todgham Method" is typically used to calculate the assessments shown on Schedule 'C'- Assessment for Construction. This entails breaking down the costs of the drain into sections along its route, where warranted, and then extracting Special Assessments and Special Benefit Assessments from each section.

The remainder is then separated into Benefit and Outlet Assessments. The Benefit is distributed to those properties receiving benefit as defined under "Assessment Definitions", with such properties usually being located along or close to the route of the drain. The Outlet is distributed to all properties within the watershed area of that section on an adjusted basis. The areas are adjusted for location along that section and relative run-off rates. Due to their different relative run-off rates forested lands are assessed for outlet at lower rates than cleared lands. Also, roads and residential properties are assessed for outlet at higher rates than cleared farmlands.

The actual cost of the work involving this report, with the exception of Special Assessments, is to be assessed on a pro-rata basis against the lands and roads liable for assessment for benefit and outlet as shown in detail on Schedule 'C' - Assessment for Construction. The Special Assessments shall be levied as noted in the Section "Special Assessment".



SPECIAL ASSESSMENT

In accordance with Section 26 of the Drainage Act, Special Assessments have been made against the Township of Southwold being the increased cost to the drainage work for installing 250mm and 300mm diameter sewer pipe, respectively, across their road allowance on the Main Drain and Middle Branch, due to the construction and operation of Fourth Line. The Special Assessments shall be made up of the actual cost of this work and both the final and estimated values of the Special Assessments are to be calculated as follows:

Drain	Cost of Work	Less Equivalent Drain Cost (Fixed)	Plus Administration Cost	Plus Interest, Contract Security, & Net H.S.T.	Special Assessment
Main Drain (250mm)	\$8,910.00	\$890.00	\$2,300.00	\$570.00	\$10,890.00
Middle Branch (300mm)	\$8,250.00	\$860.00	\$2,400.00	\$540.00	\$10,330.00

In accordance with Section 26 of the Drainage Act, a Special Assessment has been made against Enbridge Gas Inc. for the cost of locating and determining the elevation of their gasmain along Fourth Line on the Main Drain and Middle Branch, being the increased cost to the drainage works due to the construction and operation of their utilities. The Special Assessment shall be as shown on Schedule 'C'.

In accordance with Section 26 of the Drainage Act, a Special Assessment has been made against Eastlink for the cost of locating and determining the elevation of fibre optic cables along Fourth Line on the Main Drain and the Middle Branch, being the increased cost to the drainage works due to the construction and operation of their utilities. The Special Assessment shall be as shown on Schedule 'C'.

In accordance with Section 26 of the Drainage Act, a Special Assessment has been made against the Township of Southwold for the cost of locating and determining the elevation of their watermain along Fourth Line on the Main Drain and the Middle Branch, being the increased cost to the drainage works due to the construction and operation of their utilities and required larger upstream pipe size for the Middle Branch. The Special Assessment shall be as shown on Schedule 'C'.

If any additional work is required to the drainage works due to the existence of buried utilities such as gas/water/oil pipelines, communications cables, etc. or if any of the utilities require relocation or repair then the extra costs incurred shall be borne by the utility involved in accordance with the provisions of Section 26 of the Drainage Act.

GRANTS

In accordance with the provisions of Section 85 of the Drainage Act, a grant **may** be available for assessments against privately owned parcels of land which are used for agricultural purposes and eligible for the Farm Property Class Tax rate. Section 88 of the Drainage Act directs the Municipality to make application for this grant upon certification of completion of this drain. The Municipality will then deduct the grant from the assessments prior to collecting the final assessments.



MAINTENANCE

Upon completion of construction all owners are hereby made aware of Sections 80 and 82 of the Drainage Act which forbid the obstruction of or damage or injury to a municipal drain. This includes tree roots penetrating tiles from trees planted by owners or naturally occurring.

After completion, the Edison Drain 2025 shall be maintained by the Township of Southwold at the expense of all upstream lands and roads assessed in Schedule 'C' - Assessment for Construction and in the same relative proportions until such time as the assessment is changed under the Drainage Act.

After completion, the remaining existing portions of the Edison Drain (Main Drain) downstream of Sta. 0+645 shall be maintained by the Township of Southwold with 28% of the cost as benefit to the property (Roll No. 003-084) and the remainder prorated over the outlet assessments on the Main Drain in this report.

The above existing portion of the drain shall be repaired/maintained in accordance with the grades and dimensions set out in the plans and specifications contained in the repaired July 6, 1967, report.

Special Assessments shall **not** be pro-rated for future maintenance purposes but shall be applied as an actual cost special if part of the maintenance.

Repairs or improvements to any road culvert or bridge or sub-surface road crossing shall be the responsibility of the applicable Road Authority, entirely at their cost.

Respectfully submitted,

SPRIET ASSOCIATES LONDON LIMITED

M.P. DeVos, P. Eng.



MPD:kj



SCHEDULE 'A' - ALLOWANCES

EDISON DRAIN 2025

Township of Southwold

In accordance with Sections 29 and 30 of the Drainage Act, we determine the allowances payable to owners entitled thereto as follows:

CON.	LOT	ROLL NUMBER (Owner)	Section 29 Right-of-Way	Section 30 Damages	TOTALS
MAIN DRAIN					
3	S½ 5	003-084(Eldekci Farm Property Holdings)	\$ 40.00	\$ 50.00	\$ 90.00
3	S½ 6	003-087(Union Gem Inc.)	3,750.00	4,590.00	8,340.00
4	Pt.N½&S½6	004-005(J & G Luyks Farms Inc.)	1,240.00	1,520.00	2,760.00
4	SW¼ 6	004-006(G.& R. Parisio)	50.00	70.00	120.00
Total Allowances			\$ 5,080.00	\$ 6,230.00	\$ 11,310.00
TOTAL ALLOWANCES ON THE MAIN DRAIN					\$ 11,310.00
MIDDLE BRANCH					
3	S½ 6	003-087(Union Gem Inc.)	\$ 2,520.00	\$ 3,080.00	\$ 5,600.00
4	Pt.N½&S½6	004-005(J & G Luyks Farms Inc.)	4,550.00	5,570.00	10,120.00
4	Pt. N½ 6	004-005-01(J. & D. Carder)	50.00	70.00	120.00
4	SW¼ 6	004-006(G.& R. Parisio)	50.00	70.00	120.00
Total Allowances			\$ 7,170.00	\$ 8,790.00	\$ 15,960.00
TOTAL ALLOWANCES ON THE MIDDLE BRANCH					\$ 15,960.00
McKILLOP BRANCH					
4	Pt.N½&S½6	004-005(J & G Luyks Farms Inc.)	\$ 1,490.00	\$ 1,820.00	\$ 3,310.00
4	SW¼ 6	004-006(G.& R. Parisio)	50.00	70.00	120.00
Total Allowances			\$ 1,540.00	\$ 1,890.00	\$ 3,430.00
TOTAL ALLOWANCES ON THE McKILLOP BRANCH					\$ 3,430.00
TOTAL ALLOWANCES ON THE EDISON DRAIN 2025					\$ 30,700.00

SCHEDULE 'B' - COST ESTIMATE

EDISON DRAIN 2025

Township of Southwold

We have made an estimate of the cost of the proposed work which is outlined in detail as follows:

MAIN DRAIN

Mobilization of equipment	\$	900.00
Installation of the following concrete field tile including supply & installation of geotextile around tile joints		
501 meters of 250mm dia. concrete tile	\$	12,610.00
41 meters of 350mm dia. concrete tile	\$	1,110.00
20 meters of 450mm dia. concrete tile	\$	600.00
Supply of the above listed tile/pipe	\$	11,720.00
Supply & Installation of the following sewer pipe (with rubber gaskets) past tree including supply, installation and compaction of bedding and backfill materials		
13 meters of 250mm dia. sewer pipe	\$	650.00
Supply of the above listed sewer pipe	\$	440.00
Contingency amount for increased cost due to poor soil conditions:		
Installation of tile on crushed stone bedding with excavator (80 meters)	\$	3,000.00
Supply & delivery of 19mm crushed (Approx. 40 tonnes req'd)	\$	1,100.00
Contingency Allowance to install the new tile immediately adjacent to the existing tile and destroying the existing tile with a rubber tired backhoe afterwards (See General Notes on Drawings) (Approx. 566 meters)	\$	2,260.00
Strip, stockpile and releve topsoil from tile trench and adjacent working area (4m wide) specified on drawings (approx. 566m)	\$	3,400.00
20.0 meters of 250mm HDPE sewer pipe		
Supply (with rubber gaskets)	\$	660.00
Installation under Fourth Line by open cut	\$	7,500.00
Supply and install one 600mm x 600mm ditch inlet catchbasins with berm and Turfmat overflow chute and three 600mm x 600mm standard catchbasins, including grates, connection to new & exist. tiles, removal and disposal of existing catchbasins	\$	14,700.00
Clean through existing C.S.P. surface culvert under Fourth Line	\$	750.00
Clearing and grubbing	\$	300.00
Exposing and locating existing tile drains	\$	1,200.00
Exposing and locating existing utilities		
(report)	\$	470.00
(construction)	\$	450.00

SCHEDULE 'B' - COST ESTIMATE (cont'd)

EDISON DRAIN 2025
Township of Southwold**MAIN DRAIN (cont'd)**

Tile connections as noted on plan including fittings	\$ 900.00
Contract security financing	\$ 970.00
Tile connections and contingencies	\$ 2,600.00
Allowances under Sections 29 & 30 of the Drainage Act	\$ 11,310.00

MIDDLE BRANCH

Mobilization of equipment	\$ 900.00
Installation of the following concrete field tile including supply & installation of geotextile around tile joints	
722 meters of 250mm dia. concrete tile	\$ 18,180.00
48 meters of 300mm dia. concrete tile	\$ 1,250.00
34 meters of 350mm dia. concrete tile	\$ 920.00
Supply of the above listed tile	\$ 16,140.00
Contingency amount for increased cost due to poor soil conditions:	
Installation of tile on crushed stone bedding with excavator (80 meters)	\$ 3,000.00
Supply & delivery of 19mm crushed (Approx. 40 tonnes req'd)	\$ 1,100.00
Contingency Allowance to install the new tile immediately adjacent to the existing tile and destroying the existing tile with a rubber tired backhoe afterwards (See General Notes on Drawings) (Approx. 570 meters)	\$ 2,000.00
Strip, stockpile and relevel topsoil from tile trench and adjacent working area (4m wide) specified on drawings (approx. 805m)	\$ 4,700.00
18.0 meters of 300mm sewer pipe	
Supply	\$ 750.00
Installation under Fourth Line by open cut	\$ 6,750.00
9.0 meters of 250mm sewer pipe	
Supply	\$ 300.00
Installation under laneway by open cut	\$ 2,930.00
Supply and install two 600mm x 600mm ditch inlet catchbasins with berms and Turfmat overflow chutes as specified on drawing and two 600mm x 600mm standard catchbasins, including grates, connection to new & exist. tiles, removal and disposal of existing catchbasin	\$ 14,300.00
Clean through existing C.S.P. culvert under Fourth Line	\$ 750.00

SCHEDULE 'B' - COST ESTIMATE (cont'd)

**EDISON DRAIN 2025
Township of Southwold****MIDDLE BRANCH (cont'd)**

Exposing and locating existing tile drains	(report)	\$	1,220.00
Exposing and locating existing utilities	(report)	\$	470.00
	(construction)	\$	450.00
Tile connections and fittings as noted on plan		\$	1,000.00
Contract security financing		\$	1,160.00
Tile connections and contingencies		\$	3,000.00
Allowances under Sections 29 & 30 of the Drainage Act		\$	15,960.00

McKILLOP BRANCH

Mobilization of equipment		\$	200.00
Installation of the following concrete field tile including supply & installation of geotextile around tile joints			
171 meters of 200mm dia. concrete tile		\$	4,170.00
Supply of the above listed tile		\$	3,130.00
Supply and install one 600mm x 600mm ditch inlet catchbasin with berm and Turfmat overflow chute as specified on drawing including grate & connection to tiles		\$	3,900.00
Exposing and locating existing tile drains		\$	340.00
Tile connections and fittings as noted on plan		\$	100.00
Contract security financing		\$	180.00
Tile connections and contingencies		\$	400.00
Allowances under Sections 29 & 30 of the Drainage Act		\$	3,430.00

ADMINISTRATION

Conservation Authority Review Fee		\$	300.00
Interest and Net Harmonized Sales Tax		\$	6,923.00
Survey, Plan and Final Report		\$	28,043.00
Expenses		\$	1,654.00
Supervision and Final Inspection		\$	<u>6,500.00</u>

TOTAL ESTIMATED COST **\$ 236,100.00**

SCHEDULE 'C' - ASSESSMENT FOR CONSTRUCTION (Cont'd)

EDISON DRAIN 2025**Township of Southwold**

* = Non-agricultural

CON.	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	BENEFIT	OUTLET	TOTAL
MIDDLE BRANCH						
3	S½ 6	2.4	003-087(Union Gem Inc.)	\$ 17,990.00	\$ 3,446.00	\$ 21,436.00
4	Pt.N½&S½6	7.1	004-005(J & G Luyks Farms Inc.)	36,070.00	28,905.00	64,975.00
* 4	Pt. N½ 6	0.2	004-005-01(J. & D. Carder)	400.00	526.00	926.00
4	SW¼ 6	2.3	004-006(G. & R. Parisio)	1,800.00	11,007.00	12,807.00
TOTAL ASSESSMENT ON LANDS				\$ 56,260.00	\$ 43,884.00	\$ 100,144.00
=====						
Fourth Line		0.5	Township of Southwold	\$ 4,450.00	\$ 2,871.00	\$ 7,321.00
TOTAL ASSESSMENT ON ROADS				\$ 4,450.00	\$ 2,871.00	\$ 7,321.00
=====						
SPECIAL ASSESSMENT against the Township of Southwold for the increased cost of constructing a 300mm sewer pipe under Fourth Line by open cut						\$ 10,330.00
SPECIAL ASSESSMENT against Eastlink for the increased cost of locating and exposing their fibre optic cable on Fourth Line						\$ 765.00
SPECIAL ASSESSMENT against the Township of Southwold for the increased cost of locating and exposing their watermain on Fourth Line and increasing the size of the upstream tile						\$ 1,240.00
TOTAL ASSESSMENT ON THE MIDDLE BRANCH						\$ <u>119,800.00</u>
McKILLOP BRANCH						
4	Pt.N½&S½6	1.3	004-005(J & G Luyks Farms Inc.)	\$ 9,560.00	\$ 1,974.00	\$ 11,534.00
4	SW¼ 6	1.8	004-006(G. & R. Parisio)	1,590.00	5,466.00	7,056.00
TOTAL ASSESSMENT ON LANDS				\$ 11,150.00	\$ 7,440.00	\$ 18,590.00
=====						
TOTAL ASSESSMENT ON McKILLOP BRANCH						\$ <u>18,590.00</u>
TOTAL ASSESSMENT ON THE EDISON DRAIN 2025						\$ <u>236,100.00</u>

SCHEDULE OF NET ASSESSMENT

EDISON DRAIN 2025

Township of Southwold

Job No. 224103

September 19, 2025

* = Non-agricultural

ROLL NUMBER (OWNER)	TOTAL GRANTABLE ASSESSMENT	GRANT	ALLOWANCES	APPROX. NET
003-084(Eldekci Farm Property Holdings)	\$	\$	\$ 90.00	\$ -90.00
003-087(Union Gem Inc.)	57,703.00	19,234.00	13,940.00	24,529.00
004-005(J & G Luyks Farms Inc.)	96,177.00	32,059.00	16,190.00	47,928.00
* 004-005-01(J. & D. Carder)	1,632.00		120.00	1,512.00
004-006(G. & R. Parisio)	38,928.00	12,976.00	360.00	25,592.00
* Fourth Line	\$ 16,140.00	\$	\$	\$ 16,140.00
<u>Non-Proratable Special Assessments</u>				
* Fourth Line - Road Crossings	21,220.00			21,220.00
* Enbridge Gas Inc.	765.00			765.00
* Eastlink	1,530.00			1,530.00
* Southwold - Watermain	2,005.00			2,005.00
	\$ 236,100.00	\$ 64,269.00	\$ 30,700.00	\$ 141,131.00

SPECIFICATIONS FOR CONSTRUCTION OF MUNICIPAL DRAINAGE WORKS

G E N E R A L I N D E X

SECTION A	General Work	Pages 1 to 6
SECTION B	Open Drain	Pages 7 to 9
SECTION C	Tile Drain	Pages 10 to 15
STANDARD DETAILED DRAWINGS		SDD-01 to SDD-05



SECTION A - GENERAL WORK

I N D E X

<u>SECTION NUMBER</u>	<u>PAGE NO.</u>
A.1 COMMENCEMENT AND COMPLETION OF WORK.....	1
A.2 WORKING AREA AND ACCESS.....	1
A.3 ROAD CROSSINGS.....	1
A.4 SURPLUS EXCAVATED MATERIAL AND GRAVEL.....	3
A.5 FENCES.....	3
A.6 LIVESTOCK.....	4
A.7 STANDING CROPS.....	4
A.8 RAILWAYS, HIGHWAYS, UTILITIES.....	4
A.9 LOCATION OF UTILITIES.....	4
A.10 IRON BARS.....	4
A.11 STAKES.....	4
A.12 RIP-RAP.....	5
A.13 GABION BASKETS.....	5
A.14 RESTORATION OF LAWNS.....	5
A.15 RESTORATION OF ROADS AND LANEWAYS.....	6

SECTION A

GENERAL WORK

A.1 COMMENCEMENT AND COMPLETION OF WORK

The work must commence immediately after the Contractor is notified of the acceptance of his tender or at a later date, if set out as a condition of the tender. If weather creates poor ground or working conditions the Contractor may be required, at the discretion of the Engineer, to postpone or halt work until conditions become acceptable.

As noted on the drawn, the contractor must first arrange for a preconstruction meeting to be held on the site with the Contractor and affected owners attending to review in detail the construction scheduling, access and other pertinent details. The Contractor's costs for attending this meeting shall be included in his lump sum tender price. If the Contractor leaves the job site for a period of time after initiation of work, he shall give the Engineer and the Superintendent a minimum of twenty-four (24) hours' notice prior to returning to the project.

The work must be proceeded with in such a manner as to ensure its completion at the earliest possible date and within the time limit set out in the tender or in the contract documents.

A.2 WORKING AREA AND ACCESS

The working area available to the Contractor to construct the drain and related works including an access route to the drain shall be as specified on the drawings.

Should the specified widths become inadequate due to unusual conditions, the Contractor shall notify the Engineer immediately in order that negotiations with the affected owners can take place.

Where a Contractor exceeds the specified widths due to the nature of his operations and without authorization, he shall be held responsible for the costs of all additional damages and the amount shall be deducted from his contract price and paid to the affected owners by the Municipality.

A.3 ROAD CROSSINGS

.1 General

- .1 Scope: These specifications apply to all road crossings - Municipal, County, Regional, or Highway Roads. Where the word "Authority" is used, it shall be deemed to apply to the appropriate owning authority. These specifications in no way limit the Authority's Specifications and Regulations governing the construction of drains on their Road Allowance. The Authority will supply no labour, equipment or materials for the construction of the road crossing unless otherwise noted on the drawings.
- .2 Road Occupancy Permit: Where applicable the Contractor must submit an Application for a Road Occupancy Permit to the Authority and allow a minimum of 5 working days (exclusive of holidays) for its review and issuance.
- .3 Road Closure Request and Construction Notification: The Contractor shall submit written notification of construction and request for road closure (if applicable) to the Road Authority/Public Works Manager and the Drainage Engineer or Superintendent for review and approval a minimum of five (5) working days (exclusive of holidays) prior to proceeding with any work on road allowance. It shall be the Road Authority's responsibility to notify all the applicable emergency services, schools, etc. of the road closure or construction taking place.
- .4 Traffic Control: Where the Contractor is permitted to close the road to through traffic, the Contractor shall provide for and adequately sign the detour route to the satisfaction of the Road Authority. Otherwise, the Contractor shall keep the road open to traffic at all times. The Contractor shall provide, for the supply, erection and maintenance, suitable warning signs and/or flagmen in accordance with the Manual of Uniform Traffic Control Devices and to the satisfaction of the Road Authority to notify the motorists of work on the road ahead.



A.3 **ROAD CROSSINGS** (cont'd)

- .5 **Site Meeting/Inspection:** A site meeting shall be held with the affected parties to review in detail the crossing and/or its related works. The Authority's Inspector and/or the Drainage Engineer will inspect the work while in progress to ensure that the work is done in strict accordance with the specifications.
- .6 **Weather:** No construction shall take place during inclement weather or periods of poor visibility.
- .7 **Equipment:** No construction material and/or equipment is to be left within 3 meters of the edge of pavement overnight or during periods of inclement weather.

.2 **Jacking and Boring**

- .1 **Material:** The bore pipe shall consist of new, smooth wall steel pipe, meeting the requirements of H20 loading for road crossings and E80 loading for railway crossings. The minimum size, wall thickness and length shall be as shown on the drawings. Where welding is required, the entire circumference of any joint shall be welded using currently accepted welding practices.
- .2 **Site Preparation and Excavation:** Where necessary, fences shall be carefully taken down as specified in the General Conditions. Prior to any excavation taking place, all areas which will be disturbed shall be stripped of topsoil. The topsoil is to be stockpiled in locations away from the bore operation, off the line of future tile placement and out of existing water runs or ditches. The bore pit shall be located at the upstream end of the bore unless otherwise specified or approved. Bore pits shall be kept back at least 1 meter from the edge of pavement and where bore pits are made in any portion of the shoulder, the excavated material shall be disposed of off the road allowance and the pit backfilled with thoroughly compacted Granular "A" for its entire depth.
- .3 **Installation:** The pipe shall be installed in specified line and grade by a combination of jacking and boring. Upon completion of the operations, both ends of the bore pipe shall be left uncovered until the elevation has been confirmed by the Engineer or Superintendent. The ends of the bore pipe shall be securely blocked off and the location marked by means of a stake extending from the pipe invert to 300mm above the surrounding ground surface.
- .4 **Unstable Soil or Rock:** The Contractor shall contact the Engineer immediately should unstable soil be encountered or if boulders of sufficient size and number to warrant concern are encountered. Any bore pipe partially installed shall be left in place until alternative methods or techniques are determined by the Engineer after consultation with the Contractor, the Superintendent and the owning authority.
- .5 **Tile Connections:** Prior to commencement of backfilling, all tile encountered in excavations shall be reconnected using material of a size comparable to the existing material. Where the excavation is below the tile grade, a compacted granular base is to be placed prior to laying the tile. Payment for each connection will be made at the rate outlined in the Form of Tender and Agreement.
- .6 **Backfill:** Unless otherwise specified, the area below the proposed grade shall be backfilled with a crushed stone bedding. Bore pits and excavations outside of the shoulder area may be backfilled with native material compacted to a density of 95% Standard Proctor. All disturbed areas shall be neatly shaped, have the topsoil replaced and hand seeded. Surplus material from the boring operation shall be removed from the site at the Contractor's expense.
- .7 **Restoration:** The entire affected area shall be shaped and graded to original lines and grades, the topsoil replaced, and the area seeded down at the rate of 85 kg/per ha. unless otherwise specified or in accordance with the M.T.O. Encroachment Permit. Fences shall be restored to their original condition in accordance with the General Conditions.
- .8 **Acceptance:** All work undertaken by the Contractor shall be to the satisfaction of the Engineer.

A.3 **ROAD CROSSINGS** (cont'd)

.3 **Open Cut**

- .1 **Material**: The culvert or sub-drain crossing pipe material shall be specified on the drawings.
- .2 **Site Preparation and Excavation**: Where necessary, fences shall be carefully taken down as specified in the general conditions. Prior to any excavation taking place, the areas which will be disturbed shall be stripped of topsoil. The topsoil is to be stockpiled in locations away from the construction area.
- .3 **Installation**: The pipe shall be installed using bedding and cover material in accordance with Standard Detailed Drawing No. 2 or detail provided on drawings.
- .4 **Unstable Soil or Rock**: The Contractor shall contact the Engineer immediately should unstable soil be encountered or if boulders of sufficient size and number to warrant concern are encountered.
- .5 **Tile Connections**: Prior to commencement of backfilling, all tiles encountered in excavations shall be reconnected using material of a size comparable to the existing material. Where the excavation is below the tile grade, a compacted granular base is to be placed prior to laying the tile. Payment for connections not shown on the drawings shall be an extra to the contract.
- .6 **Backfill**: Backfill from the top of the cover material up to the underside of road base shall meet the requirements for M.T.O. Granular "B". The backfill shall be placed in lifts not exceeding 300mm in thickness and each lift shall be thoroughly compacted to produce a density of 98% Standard Proctor. Granular "B" road base for County Roads and Highways shall be placed to a 450mm thickness and Granular "A" shall be placed to a thickness of 200mm, both meeting M.T.O. requirements. Granular road base materials shall be thoroughly compacted to produce a density of 100% Standard Proctor.

Where the road surface is paved, the Contractor shall be responsible for placing an HL-4 Hot Mix Asphalt patch of the same thickness as the existing pavement. The asphalt patch shall be flush with the existing roadway on each side and not overlap. If specified, the asphalt patch shall not be placed immediately over the road base and the Granular "A" shall be brought up flush with the existing asphalt and a liberal amount of calcium chloride shall be spread on the gravel surface. The asphalt patch must be completed within the time period set out on the drawing.

The excavated material from the trench beyond a point 2.5 meters from the travelled portion or beyond the outside edge of the gravel shoulder, may be used as backfill in the trench in the case of covered drains. This material should be compacted in layers not exceeding 600mm.

A.4 **SURPLUS EXCAVATED MATERIAL AND GRAVEL**

Excess excavated material from open cut installation through roads, railways, laneways and lawn/grass areas, shall be removed and disposed of off-site by the Contractor as part of their lump sum installation price. If as a result of any work, gravel or crushed stone is required and not all the gravel or crushed stone is used in the construction of the works, the Contractor shall haul away such surplus gravel or stone unless otherwise approved.

A.5 **FENCES**

No earth shall be placed against fences and all fences removed by the Contractor are to be replaced by him in as good condition as found. In general, the Contractor will not be allowed to cut existing fences but shall disconnect existing fences at the nearest anchor post or other such fixed joint and shall carefully roll it back out of the way. Where the distance to the closest anchor post or fixed joint exceeds 50 meters, the Contractor will be allowed to cut and splice in accordance with accepted methods and to the satisfaction of the owner and the Engineer or Superintendent. Where existing fences are deteriorated to the extent that existing materials are not salvageable for replacement, the Contractor shall notify the Engineer or the Superintendent prior to dismantling. Fences damaged beyond salvaging by the Contractor's negligence shall be replaced with new materials, similar to those existing, at the Contractor's expense. The replacement of the fences shall be done to the satisfaction of the owner and the Engineer or Superintendent. The site examination should indicate to the Contractor such work, if any, and an allowance should be made in the tendered price.

The Contractor shall not leave any fence open when he is not at work in the immediate vicinity.

A.6 LIVESTOCK

The Contractor shall provide each property owner with 48 hours' notice prior to removing any fences along fields which could possibly contain livestock. Thereafter, the property owner shall be responsible to keep all livestock clear of the construction areas until further notified. Where necessary, the Contractor will be directed to erect temporary fences. The Contractor shall be held responsible for loss or injury to livestock or damage caused by livestock, where the injury or damage is caused by his failure to notify the property owner or through negligence or carelessness on the part of the Contractor.

The Contractor constructing a tile drain shall not be held responsible for damages or injury to livestock occasioned by leaving trenches open for inspection by the Engineer if he notifies the owner at least 48 hours prior to commencement of the work on that portion. The Contractor will be held liable for such damages or injury if the backfilling of such trenches is delayed more than 1 day after acceptance by the Engineer.

A.7 STANDING CROPS

The Contractor shall not be held responsible for damages to standing crops within the working area available and the access route provided if he notifies the owner thereof at least 48 hours prior to commencement of the work on that portion.

A.8 RAILWAYS, HIGHWAYS, UTILITIES

A minimum of forty-eight (48) hours' notice to Railways, Highways and Utilities, exclusive of Saturdays, Sundays and Holidays, shall be required by the Contractor prior to any work being performed and in the case of a pipe being installed by open cutting or boring under a Highway or Railway, a minimum of 72 hours' notice is required.

A.9 UTILITIES

The attention of the Contractor is drawn to the presence of utilities along the course of the drain. The Contractor will be responsible for determining the location of all utilities and will be held liable for any damage to all utilities caused by his operations. The Contractor shall co-operate with all authorities to ensure that all utilities are protected from damage during the performance of the work. The cost of any necessary relocation work shall be borne by the utility. No allowance or claims of any nature will be allowed on account for delays or inconveniences due to utilities relocation, or for inconveniences and delays caused by working around or with existing utilities not relocated.

A.10 IRON BARS

The Contractor shall be held liable for the cost of an Ontario Land Surveyor to replace any iron bars destroyed during the course of construction.

A.11 STAKES

At the time of the survey, stakes are set along the course of the drain at intervals of 50 meters. The Contractor shall ensure that the stakes are not disturbed unless approval is obtained from the Engineer. Any stakes removed by the Contractor without the authority of the Engineer, shall be replaced at the expense of the Contractor. At the request of the Contractor, any stakes which are removed or disturbed by others or by livestock, shall be replaced at the expense of the drain.

A.12 **RIP-RAP**

Rip-rap shall be specified on the drawings and shall conform to the following:

- .1 **Quarry Stone**: shall range in size from 150mm to 300mm evenly distributed and shall be placed to a 300mm thickness on a filter blanket at a 1.5 to 1 slope unless otherwise noted. Filter blanket to be Mirafi 160N or approved equal.
- .2 **Broken Concrete**: may be used in areas outside of regular flows if first broken in maximum 450mm sized pieces and mixed to blend with quarry stone as above. No exposed reinforcing steel shall be permitted.
- .3 **Shot Rock**: shall range in size from 150mm to 600mm placed to a depth of 450mm thickness on a filter blanket at a 1.5:1 slope unless otherwise noted. Filter blanket to be Mirafi 160N or approved equal.

A.13 **GABION BASKETS**

Supply and install gabion basket rip-rap protection as shown on the drawings.

Gabion baskets shall be as manufactured by Maccaferri Gabions of Canada Ltd. or approved equal and shall be assembled and installed in strict accordance with the manufacturer's recommendations.

The gabion fill material shall consist solely of fractured field stone or gabion stone graded in size from 100mm to 200mm (4" to 8") and shall be free of undersized fragments and unsuitable material.

A.14 **RESTORATION OF LAWNS**

- .1 **General**: Areas noted on the drawings to be restored with seeding or sodding shall conform to this specification, and the Contractor shall allow for all costs in his lump sum bid for the following works.
- .2 **Topsoil**: Prior to excavation, the working area shall be stripped of existing topsoil. The topsoil stockpile shall be located so as to prevent contamination with material excavated from the trench. Upon completion of backfilling operations, topsoil shall be spread over the working area to a depth equal to that which previously existed but not less than the following:
 - Seeding and sodding - minimum depth of 100mm
 - Gardens - minimum depth of 300mm

In all cases where a shortfall of topsoil occurs, whether due to lack of sufficient original depth or rejection of stockpiled material due to Contractor's operations, imported topsoil from acceptable sources shall be imported at the Contractor's expense to provide the specified depths. Topsoil shall be uniformly spread, graded, and cultivated prior to seeding or sodding. All clods or lumps shall be pulverized, and any roots or foreign matter shall be raked up and removed as directed.

.3 **Sodding**

- .1 **Materials**: Nursery sod to be supplied by the Contractor shall meet the current requirements of the Ontario Sod Growers Association for No. 1 Bluegrass Fescue Sod.
- .2 **Fertilizer**: Prior to sod placement, approved fertilizer shall be spread at the rate of 5kg/100m² of surface area and shall be incorporated into such surfaces by raking, discing or harrowing. All surfaces on which sod is to be placed shall be loose at the time of placing sod to a depth of 25mm.
- .3 **Placing Sod**: Sod shall be laid lengthwise across the face of slopes with ends close together. Sod shall be counter sunk along the joints between the existing grade and the new sodding to allow for the free flow of water across the joint. Joints in adjacent rows shall be staggered and all joints shall be pounded and rolled to a uniform surface.

On slopes steeper than 3 to 1, and in unstable areas, the Engineer may direct the Contractor to stake sod and/or provide an approved mesh to prevent slippages. In all cases where such additional work is required, it will be deemed an extra to the contract and shall be paid for in accordance with the General Conditions. No sod shall be laid when frozen nor upon frozen ground nor under any other condition not favourable to the growth of the sod. Upon completion of sod laying the Contractor shall thoroughly soak the area with water to a depth of 50mm. Thereafter it will be the responsibility of the property owner to maintain the area in a manner so as to promote growth.

A.14 RESTORATION OF LAWNS (cont'd)

- .4 **Seeding:** Seed to be supplied by the Contractor shall be "high quality grass seed" harvested during the previous year, and shall be supplied to the project in the supplier's original bags on which a tag setting out the following information is affixed:

- Year or Harvest - recommended rate of application
- Type of Mixture - fertilizer requirements

Placement of seed shall be by means of an approved mechanical spreader. All areas on which seed is to be placed shall be loose at the time of placing seed, to a depth of 25mm. Seed and fertilizer shall be spread in accordance with the supplier's recommendations unless otherwise directed by the Engineer. Thereafter it will be the responsibility of the property owner to maintain the area in a manner so as to promote growth.

- .5 **Settlement:** The Contractor shall be responsible during the one-year guarantee period for the necessary repair of restored areas due to trench settlement. Areas where settlement does not exceed 50mm may be repaired by top dressing with fine topsoil. In areas where settlement exceeds 50mm, the Contractor will be required to backfill the area with topsoil and restore with seeding and/or sodding as originally specified.

A.15 RESTORATION OF ROADS AND LANEWAYS

- .1 **Gravel:** Restoration shall be in accordance with the applicable standard detailed drawing or as shown on the drawings.
- .2 **Asphalt and Tar and Chip:** Prior to restoration all joints shall be neatly sawcut. Restoration shall be as a in gravel above with the addition of the following:
- .1 Roads shall have the finished grade of Granular 'A', allow two courses of hot-mix asphalt (M.T.O. 310), 80mm HL6 and 40mm HL3 or to such greater thickness as may be required to match the existing.
 - .2 Laneways shall have the finished grade of Granular 'A' allow one 50mm minimum course of hot-mix asphalt (HL3) or greater as may be required to match existing.

SECTION B - OPEN DRAIN

I N D E X

<u>SECTION NUMBER</u>		<u>PAGE NO.</u>
B.1	PROFILE.....	7
B.2	ALIGNMENT.....	7
B.3	CLEARING AND GRUBBING.....	7
B.4	EXCAVATION.....	7
B.5	EXCAVATED MATERIAL.....	7
B.6	EXCAVATION THROUGH BRIDGES AND CULVERTS.....	8
B.7	PIPE CULVERT.....	8
B.8	MOVING DRAINS OFF ROADS.....	8
B.9	TRIBUTARY OUTLETS.....	8
B.10	SEDIMENT BASINS AND TRAPS.....	9
B.11	SEEDING.....	9

SECTION B

OPEN DRAIN

B.1 PROFILE

The profile drawing shows the depth of cuts from the ground beside the stake to the final invert of the ditch in meters and decimals of a meter and also the approximate depth of cuts from the existing bottom of the ditch to the elevation of the ditch bottom. These cuts are established for the convenience of the Contractor; however, benchmarks will govern the final elevation of the drain. Benchmarks have been established along the course of the drain and their locations and elevations are noted on the profile drawing. A uniform grade shall be maintained between stakes in accordance with the profile drawing.

B.2 ALIGNMENT

The drain shall be constructed in a straight line and shall follow the course of the present drain or water run unless otherwise noted on the drawings. Where it is necessary to straighten any bends or irregularities in alignment not noted on the drawings, the Contractor shall contact the Engineer or Superintendent before commencing the work.

B.3 CLEARING AND GRUBBING

Prior to commencement of work, all trees, scrub, fallen timber and debris shall be removed from the side slopes of the ditch and for such a distance on the working side so as to eliminate any interference with the construction of the drain or the spreading of the spoil. The side slopes shall be neatly cut and cleared flush with slope whether or not they are affected directly by the excavation. With the exception of large stumps causing damage to the drain, the side slope shall not be grubbed. All other cleared areas shall be grubbed and the stumps put into piles for disposal by the owner.

All trees or limbs 150mm (6") or larger, that it is necessary to remove, shall be considered as logs and shall be cut and trimmed, and left in the working width separate from the brush, for use or disposal by the owner. Trees or limbs less than 150mm in diameter shall be cut in lengths not greater than 5 meters and placed in separate piles with stumps spaced not less than 75 meters apart in the working width, for the use or disposal of the owner. In all cases, these piles shall be placed clear of excavated materials, and not be piled against standing trees. No windrowing will be permitted. The clearing and grubbing and construction of the drain are to be carried out in two separate operations and not simultaneously at the same location.

B.4 EXCAVATION

The bottom width and the side slopes of the ditch shall be those shown on the profile drawing.

Unless otherwise specified on the drawings, only the existing ditch bottom is to be cleaned out and the side slopes are not to be disturbed. Where existing side slopes become unstable because of construction, the Contractor shall immediately contact the Engineer or Superintendent. Alternative methods of construction and/or methods of protection will then be determined, prior to continuing the work.

Where an existing drain is being relocated or where a new drain is being constructed, the Contractor shall, unless otherwise specified, strip the topsoil for the full width of the drain, including the location of the spoil pile. Upon completion of levelling, the topsoil shall be spread to an even depth across the full width of the spoil.

B.5 EXCAVATED MATERIAL

Excavated material shall be deposited on either or both sides of the drain as indicated on the drawings or as directed by the Engineer or Superintendent. A buffer strip of not less than 3 meters in width through farmed lands and 2 meters in width through bush areas shall be left along the top edges of the drain. The buffer strip shall be seeded and/or incorporated as specified on the drawings. The material shall be deposited beyond the specified buffer strip.



B.5 EXCAVATED MATERIAL (cont'd)

No excavated material shall be placed in tributary drains, depressions, or low areas which direct water into the ditch so that water will be trapped behind the spoil bank. The excavated material shall be placed and levelled to a minimum width to depth ratio of 50 to 1 unless instructed otherwise. The edge of the spoil bank away from the ditch shall be feathered down to the existing ground; the edge of the spoil bank nearest the ditch shall have a maximum slope of 2 to 1. The material shall be levelled such that it may be cultivated with ordinary farm equipment without causing undue hardship on machinery and personnel. No excavated material shall cover any logs, scrub, debris, etc. of any kind.

Where it is necessary to straighten any unnecessary bends or irregularities in the alignment of the ditch, the excavated material from the new cut shall be used for backfilling the original ditch. Regardless of the distance between the new ditch and the old ditch no extra compensation will be allowed for this work and must be included in the Contractor's lump sum price for the open work.

Any stones 150mm or larger left exposed on top of the levelled excavated material shall be removed and disposed of as an extra to the contract unless otherwise noted on plans.

B.6 EXCAVATION THROUGH BRIDGES AND CULVERTS

The Contractor shall excavate the drain to the full specified depth and width under all bridges. Where the bridge or culvert pipe is located within a road allowance, the excavated material shall be levelled within the road allowance. Care shall be taken not to adversely affect existing drainage patterns. Temporary bridges may be carefully removed and left on the bank of the drain but shall be replaced by the Contractor when the excavation is completed unless otherwise specified. Permanent bridges must be left intact. All necessary care and precautions shall be taken to protect the structure. The Contractor shall notify the Engineer or Superintendent if excavation may cause the structure to undermine or collapse.

B.7 PIPE CULVERTS

Where specified on the drawings, the existing culvert shall be carefully removed, salvaged and either left at the site for the owner or reinstalled at a new grade or location. The value of any damage caused to the culvert due to the Contractor's negligence in salvage operation will be determined and deducted from the contract price.

All pipe culverts shall be installed in accordance with the standard detail drawings as noted on the drawings. If couplers are required, 5 corrugation couplers shall be used for up to and including 1200mm dia. pipe and 10 corrugation couplers for greater than 1200mm dia.

B.8 MOVING DRAINS OFF ROADS

Where an open drain is being removed from a road allowance, it must be reconstructed wholly on the adjacent lands with a minimum distance of 2.0 meters between the property line and the top of the bank, unless otherwise noted on the drawings. The excavated material shall be used to fill the existing open ditch and any excess excavated material shall be placed and levelled on the adjacent lands beyond the buffer strip, unless otherwise noted. Any work done on the road allowance, with respect to excavation, disposal of materials, installation of culverts, cleaning under bridges, etc., shall be to the satisfaction of the Road Authority and the Engineer.

B.9 TRIBUTARY OUTLETS

The Contractor shall guard against damaging the outlets of tributary drains. Prior to commencement of excavation on each property the Contractor shall contact the owner and request that all known outlet pipes be marked by the owner. All outlets so marked or visible or as noted on the profile, and subsequently damaged by the Contractor's operations will be repaired by the Contractor at his cost. All outlet pipes repaired by the Contractor under direction of the Drainage Superintendent or Engineer which were not part of the Contract shall be considered an extra to the contract price.



B.10 **SEDIMENT BASINS AND TRAPS**

The Contractor shall excavate sediment basins prior to commencement of upstream work as shown on the plan and profile. The dimension of the basin will be in a parabolic shape with a depth of 450mm below the proposed ditch bottom and the basin will extend along the drain for a minimum length of 15 meters.

A sediment trap 300mm deep and 5 meters long with silt fence placed across ditch bottom on the downstream end of the trap shall be constructed prior to and maintained during construction, to prevent silt from flushing downstream. The silt fence shall be removed and disposed of after construction.

B.11 **SEEDING**

- .1 **Delivery:** The materials shall be delivered to the site in the original unopened containers which shall bear the vendor's guarantee of analysis and seed will have a tag showing the year of harvest.
- .2 **Hydro Seeding:** Areas specified on drawings shall be hydro seeded and mulched upon completion of construction in accordance with O.P.S.S. 572 and with the following application rates:

Primary Seed (85 kg/ha.):	50% Creeping Red Fescue 40% Perennial Ryegrass 5% White Clover
Nurse Crop	Italian (Annual) Ryegrass at 25% of Total Weight
Fertilizer (300 kg/ha.)	8-32-16
Hydraulic Mulch (2000 kg/ha.)	Type "B"
Water (52,700 litres/ha.)	

Seeding shall not be completed after September 30.

- .3 **Hand Seeding:** Hand seeding shall be completed daily with the seed mixture and fertilizer and application rate shown under "Hydro Seeding" above. Placement of the seed shall be by means of an approved mechanical spreader. Seeding shall not be completed after September 30.



SECTION C - TILE DRAIN

I N D E X

<u>SECTION NUMBER</u>	<u>PAGE NO.</u>
C.1 PIPE MATERIALS.....	10
C.2 TESTING.....	10
C.3 LINE.....	10
C.4 CLEARING AND GRUBBING.....	11
C.5 PROFILE.....	11
C.6 GRADE.....	11
C.7 EXCAVATION.....	11
C.8 INSTALLATION.....	12
C.9 ROAD AND LANEWAY SUB-SURFACE CROSSINGS.....	12
C.10 BACKFILLING.....	13
C.11 UNSTABLE SOIL.....	13
C.12 ROCKS.....	13
C.13 BROKEN, DAMAGED, OR EXCESS TILE.....	13
C.14 TRIBUTARY DRAINS.....	13
C.15 OUTLET PIPES.....	14
C.16 CATCHBASINS AND JUNCTION BOXES.....	14
C.17 BLIND INLETS.....	15
C.18 GRASSED WATERWAY.....	15
C.19 BACKFILLING EXISTING DITCHES.....	15
C.20 RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEM.....	15

SECTION C

TILE DRAIN

C.1 PIPE MATERIALS

- .1 **Concrete Tile:** All tile installed under these specifications shall be sound and of first quality and shall meet all A.S.T.M. Specifications current at the time of tendering. Concrete tile shall conform to Designation C412 "Extra Quality" except that the minimum compression strengths shall be increased by 25%. Heavy Duty tile shall conform to Designation C412 "Heavy Duty Extra Quality".
- .2 **Corrugated Steel Pipe:** Unless otherwise specified, all metal pipe shall be corrugated, riveted steel pipe or helical corrugated steel pipe with a minimum wall thickness of 1.6mm (16 gauge) and shall be fully galvanized.
- .3 **Plastic Tubing:** The plans will specify the type of tubing or pipe, such as non-perforated or perforated (with or without filter material).
 - i) Corrugated Plastic Drainage Tubing shall conform to the current O.F.D.A. Standards
 - ii) Heavy Duty Corrugated Plastic Pipe shall be "Boss 1000" manufactured by the Big 'O' Drain Tile Co. Ltd. or approved equal
- .4 **Concrete Sewer Pipe:** The Designations for concrete sewer pipe shall be C14 for concrete sewer pipe 450mm (18") diameter or less; and C76 for concrete sewer pipe greater than 450mm (18") diameter. Where closed joints are specified, joints shall conform to the A.S.T.M. Specification C443.

Where concrete sewer pipe "seconds" are permitted the pipe should exhibit no damages or cracks on the barrel section and shall be capable of satisfying the crushing strength requirements for No.1, Pipe Specifications (C14 or C76). The pipe may contain cracks or chips in the bell or spigot which could be serious enough to prevent the use of rubber gaskets, but which are not so severe that the joint could not be mortared conventionally.
- .5 **Plastic Sewer Pipe:** The plans will specify the type of sewer pipe, such as non-perforated or perforated (with or without filter material). All plastic sewer pipe and fittings shall be "Boss Poly-Tite", ULTRA-RIB", "Challenger 3000" or approved equal with a minimum stiffness of 320 kpa at 5% deflection.
- .6 **Plastic Fittings:** All plastic fittings shall be "Boss 2000" or "Challenger 2000" with split coupler joints or approved equal.

C.2 TESTING

The manufacturer shall provide specimens for testing if required. The random selection and testing procedures would follow the appropriate A.S.T.M. requirements for the material being supplied. The only variation is the number of tiles tested: 200mm to 525mm dia. - 5 tile tested, 600mm to 900mm dia. - 3 tile tested. The drain will be responsible for all testing costs for successful test results. Where specimens fail to meet the minimum test requirements, the manufacturer will be responsible for the costs of the unsuccessful tests. Alternately, the Engineer may accept materials on the basis of visual inspections and the receipt in writing from the Manufacturer of the results of daily production testing carried out by the Manufacturer for the types and sizes of the material being supplied.

C.3 LINE

Prior to stringing the tile, the Contractor shall contact the Superintendent or the Engineer in order to establish the course of the drain.

Where an existing drain is to be removed and replaced in the same trench by the new drain or where the new drain is to be installed parallel to an existing drain, the Contractor shall excavate test holes to locate the existing drain (including repairing drainage tile) at intervals along the course of the drain as directed by the Engineer and/or the Superintendent. The costs for this work shall be included in the tender price.

Where an existing drain is to be removed and replaced in the same trench by the new drain, all existing tiles shall be destroyed, and all broken tile shall be disposed of offsite.



C.3 **LINE** (cont'd)

The drain shall run in as straight a line as possible throughout its length, except that at intersections of other water courses or at sharp corners, it shall run on a curve of at least a 15-meter radius. The new tile drain shall be constructed at an offset from and generally parallel with any ditch or defined watercourse in order that fresh backfill in the trench will not be eroded by the flow of surface water. The Contractor shall exercise care not to disturb any existing tile drain or drains which parallel the course of the new drain, particularly where the new and the existing tile act together to provide the necessary capacity.

C.4 **CLEARING AND GRUBBING**

Prior to commencement of drain construction, all trees, scrub, fallen timber and debris shall be cleared and grubbed from the working area. Unless otherwise specified, the minimum width to be cleared and grubbed shall be 20 meters in all hardwood areas and 30 meters in all softwood areas (willow, poplar, etc.), the width being centred on the line of the drain.

All trees or limbs 150mm (6") or larger, that it is necessary to remove, shall be considered as logs and shall be cut and trimmed, and left in the working width separate from the brush, for use or disposal by the owner. Trees or limbs less than 150mm in diameter shall be cut in lengths not greater than 5 meters and placed in separate piles with stumps spaced not less than 75 meters apart in the working width, for the use or disposal of the owner. In all cases, these piles shall be placed clear of excavated materials, and not be piled against standing trees. No windrowing will be permitted. The clearing and grubbing and construction of the drain are to be carried out in two separate operations and not simultaneously at the same location.

C.5 **PROFILE**

The profile drawing shows the depth of cuts from the ground beside the stake to the final invert of the drain in meters and decimals of a meter. These cuts are established for the convenience of the Contractor; however, benchmarks will govern the final elevation of the drain. Benchmarks have been established along the course of the drain and their locations and elevations are noted on the profile drawing.

C.6 **GRADE**

The Contractor shall provide and maintain in good working condition, an approved system of establishing a grade sight line to ensure the completed works conform to the profile drawing. In order to confirm the condition of his system and to eliminate the possibility of minor errors on the drawings, he shall ensure his grade sight line has been confirmed to be correct between a minimum of two control points (bench marks) and shall spot check the actual cuts and compare with the plan cuts prior to commencement of tile installation. He shall continue this procedure from control point to control point as construction of the drain progresses. When installing a drain towards a fixed point such as a bore pipe, the Contractor shall uncover the pipe and confirm the elevation, using the sight line, a sufficient distance away from the pipe in order to allow for any necessary minor grade adjustments to be made in order to conform to the as built elevation of the bore pipe. All tile improperly installed due to the Contractor not following these procedures shall be removed and replaced entirely at the Contractor's cost.

When following the procedures and a significant variation is found, the Contractor shall immediately cease operations and advise the Engineer.

C.7 **EXCAVATION**

- .1 **Trench:** Unless otherwise specified, all trenching shall be done with a recognized farm tiling machine approved by the Engineer or Superintendent. The machine shall shape the bottom of the trench to conform to the outside diameter of the pipe for a minimum width of one-half of the outside diameter. The minimum trench width shall be equal to the outside diameter of the tile to be installed plus 100mm (4") on each side unless otherwise approved. The maximum trench width shall be equal to the outside diameter of the tile to be installed plus 250mm (10") on each side unless otherwise approved.



C.7 **EXCAVATION** (cont'd)

- .2 **Scalping**: Where the depths of cuts in isolated areas along the course of the drain as shown on the profile exceed the capacity of the Contractor's tiling machine, he shall lower the surface grade in order that the tiling machine may trench to the correct depth. Topsoil is to be stripped over a sufficient width that no subsoil will be deposited on top of topsoil. Subsoil will then be removed to the required depth and piled separately. Upon completion of backfilling, the topsoil will then be replaced to an even depth over the disturbed area. The cost for this work shall be included in his tender price.
- .3 **Excavator**: Where the Contractor's tiling machine consistently does not have the capacity to dig to the depths required or to excavate the minimum trench width required, he shall indicate in the appropriate place provided on the tender form his proposed methods of excavation.
- Where the use of an excavator is either specified on the drawings or approved as evidenced by the acceptance of his tender on which he has indicated the proposed use of a backhoe he shall conform to the following requirements:
- a) the topsoil shall be stripped and replaced in accordance with Section .2 "Scalping".
 - b) all tile shall be installed on a bed of 19mm crushed stone with a minimum depth of 150mm which has been shaped to conform to the lower segment of the tile.
 - c) the Contractor shall allow for the cost of the preceding requirements (including the supply of the crushed stone) in his lump sum tender price unless it is otherwise provided for in the contract documents.
- .4 **Backfilling Ditch**: Where the contract includes for a closed drain to replace an open drain and the ditch is to be backfilled, the Contractor shall install the tile and backfill the trench prior to backfilling the ditch unless otherwise noted. The distance the trench shall be located away from the ditch shall be as noted on the drawings, (beyond area required for stockpiling topsoil and backfilling). After tile installation is complete topsoil (if present) shall be stripped and stockpiled within the above limits prior to backfilling of ditch. Only tracked equipment shall be permitted to cross backfilled tile trench and must be at 90 degrees to line of tile.

C.8 **INSTALLATION**

The tile is to be laid with close fitting joints and in regular grade and alignment in accordance with the plan and profile drawings. The tiles are to be bevelled, if necessary, to ensure close joints (in particular around curves). Where, in heavy clay soils, the width of a joint exceeds 10mm the joint shall be wrapped with filter cloth as below. Where the width of a joint exceeds 12mm the tile shall first be removed and the joint bevelled to reduce the gap. The maximum deflection of one tile joint shall be 15 degrees. Where a drain connects to standard or ditch inlet catchbasins or junction box structures, the Contractor shall include in his tender price for the supply and installation of compacted Granular 'A' bedding under areas backfilled from the underside of the pipe to undisturbed soil. The connections will then be grouted.

Where a tile drain passes through a bore pit, the Tile Contractor shall include in his tender price for the supply and placement of compacted Granular "A" bedding from the underside of the pipe down to undisturbed soil within the limits of the bore pit.

As above and where soil conditions warrant, the Engineer may require (or as specified on the drawings) that each tile joint be wrapped with synthetic filter cloth. The width of the filter cloth shall be 300mm wide for tile sizes of 150mm to 300mm and 400mm wide for sizes of 350mm to 750mm. The filter cloth shall cover the full perimeter of the tile and overlap a minimum of 100mm or as specified on the drawings. The type of cloth shall be Mirafi 140NL for loam soils and 150N for sandy soil. Any such work not shown on the drawings shall be considered as an addition to the contract price unless specified on the drawings.

C.9 **ROAD AND LANEWAY SUB-SURFACE CROSSINGS**

All road and laneway crossings may be made with an open cut in accordance with standard detailed drawings in the specifications or on the drawings. The exact location of the crossing shall be verified and approved by the Road Authority and the Engineer and/or Superintendent.



C.10 BACKFILLING

As the laying of the tile progresses, blinding up to the springline including compaction by tamping (by hand) is to be made on both sides of the tile. No tile shall be backfilled until inspected by the Engineer or Drainage Superintendent unless otherwise approved by the Engineer.

The remainder of the trench shall be backfilled with special care being taken in backfilling up to a height approximately 150mm above the top of the tile to ensure that no tile breakage occurs. During the backfilling operation no equipment shall be operated in a way that would transfer loads onto the tile trench. Surplus material is to be mounded over the tile trench so that when settlement takes place the natural surface of the ground will be restored. Upon completion, a minimum cover of 600mm is required over all tile. Where stones larger than 150mm are present in the backfill material, they shall be separated from the material and disposed of by the Contractor.

Where a drain crosses a lawn area, the backfilling shall be carried out as above except that, unless otherwise specified, the backfill material shall be mechanically compacted to eliminate settlement.

C.11 UNSTABLE SOIL

The Contractor shall immediately contact the Engineer or Superintendent if quicksand is encountered, such that installation with a tiling machine is not possible. The Engineer shall, after consultation with the Superintendent and Contractor, determine the action necessary and a price for additions or deletions shall be agreed upon prior to further drain installation. Where directed by the Engineer, test holes are to be dug to determine the extent of the affected area. Cost of test holes shall be considered an addition to the contract price.

C.12 ROCKS

The Contractor shall immediately contact the Engineer or Superintendent if boulders of sufficient size and number are encountered such that the Contractor cannot continue trenching with a tiling machine. The Engineer or Superintendent may direct the Contractor to use some other method of excavating to install the drain. The basis of payment for this work shall be determined by the Engineer and Drainage Superintendent.

If only scattered large stones or boulders are removed on any project, the Contractor shall haul same to a nearby bush or fence line, or such other convenient location as approved by the Landowners(s).

C.13 BROKEN, DAMAGED TILE OR EXCESS TILE

The Contractor shall remove and dispose of off-site all broken (existing or new), damaged or excess tile or tiles. If the tile is supplied by the Municipality, the Contractor shall stockpile all excess tile in readily accessible locations for pickup by the Municipality upon the completion of the job.

C.14 TRIBUTARY DRAINS

Any tributary tile encountered in the course of the drain shall be carefully taken up by the Contractor and placed clear of the excavated earth. If the tributary tile drains encountered are clean or reasonably clean, they shall be connected into the new drain. Where existing drains are full of sediment, or contain pollutants, the decision to connect those drains to the new drain shall be left to the Engineer or Superintendent. Each tributary tile connection made by the Contractor shall be located and marked with a stake and no backfilling shall take place until the connection has been approved by the Engineer or Superintendent.

For tributary drains 150mm dia. or smaller connected to new tiles 250mm dia. or larger, and for 200mm dia. connected to 350mm dia. or larger, the Contractor shall neatly cut a hole in the middle of a tile length. The connections shall be made using a prefabricated adaptor. All other connections shall be made with prefabricated wyes or tees conforming to Boss 2000 split coupler or approved equal.

Where an open drain is being replaced by a new tile drain, existing tile outlets entering the ditch from the side opposite the new drain shall be extended to the new drain. All existing metal outlet pipes shall be carefully removed, salvaged, and left for the owner. Where the grade of the connection passes through the newly placed backfill in the ditch, the backfill material below the connection shall be thoroughly compacted and metal pipe of a size compatible with the tile outlet shall be installed so that a minimum length of 2 meters at each end is extending into undisturbed soil.



C.14 **TRIBUTARY DRAINS** (cont'd)

Where locations of tiles are shown on the drawings the Contractor shall include in his tender price, all costs for connecting those tiles to the new drain regardless of length.

Where tiles not shown on the drawings are encountered in the course of the drain, and are to be connected to the new drain, the Contractor shall be paid for each connection at the rate outlined in the Form of Tender and Agreement.

C.15 **OUTLET PIPES**

Corrugated steel pipe shall be used to protect the tile at its outlet. It shall have a hinged metal grate with a maximum spacing between bars of 40mm. The corrugated steel pipe shall be bevelled at the end to generally conform to the slope of the ditch bank and shall be of sufficient size that the tile can be inserted into it to provide a solid connection. The connection will then be grouted immediately.

The installation of the outlet pipe and the required rip-rap protection shall conform to the standard detailed drawing as noted on the drawing.

C.16 **CATCHBASINS AND JUNCTION BOXES**

- .1 **Catchbasins:** Unless otherwise noted or approved, catchbasins shall be in accordance with O.P.S.D. 705.010, 705.030. All catchbasins shall include two - 150mm riser sections for future adjustments. All ditch inlet catchbasins shall include one 150mm riser section for future adjustments. The catchbasin top shall be a "Bird Cage" type substantial steel grate, removable for cleaning and shall be inset into a recess provided around the top of the structure. The grate shall be fastened to the catchbasin with bolts into the concrete. Spacing of bars on grates for use on 600mmx600mm structures shall be 65mm centre to centre. Spacing of bars on grates for use on structures larger than 600mmx600mm shall be 90mm with a steel angle frame.

The exact location and elevation of catchbasins shall be approved by the Road Authority or the Engineer/Superintendent. Catchbasins offset from the drain shall have "Boss 2000" 200mm diameter leads or approved equal unless otherwise noted and the leads shall have a minimum of 600mm of cover. The leads shall be securely grouted at the structures and the drain.

- .2 **Junction Boxes:** Junction boxes shall be the precast type unless otherwise approved. Dimensions for precast junction boxes shall conform to those for catchbasins. The inside dimensions of the box shall be a minimum of 100mm larger than the outside diameter of the largest pipe being connected. The minimum cover over the junction box shall be 600mm. Benching to spring line shall be supplied with all junction boxes.
- .3 **Connections:** Catchbasins and junction boxes shall not be ordered until elevations of existing pipes being connected have been verified in the field as indicated on the drawings. All connections shall be securely grouted at both the inside and outside walls of the structure.
- .4 **Installation:** Where the native material is clay, all catchbasins shall be backfilled with an approved granular material placed and compacted to a minimum width of 300mm on all sides with the following exception. Where the native material is sandy or granular in nature it may be used as backfill. Filter cloth shall be placed between the riser sections of all catchbasins.

Where the Contractor has over excavated or where ground conditions warrant, the structure shall be installed on a compacted granular base.

The Contractor shall include in his tender price for the construction of a berm behind all ditch inlet structures. The berm shall be constructed of compacted clay keyed 300mm into undisturbed soil. Topsoil shall be distributed to a 65mm thickness and seeded unless otherwise specified. The Contractor shall also include for regrading, shaping and seeding of road ditches for a maximum of 15 meters each way from all catchbasins.



C.17 BLIND INLETS

Where specified, blind inlets shall be installed along the course of the drain in accordance with details on the drawings.

C.18 GRASSED WATERWAY

Topsoil to be stripped from construction area and stockpiled prior to construction of waterway. Waterway to be graded into a parabolic shape to the width shown on the drawings. Topsoil to be relevelled over the waterway and other areas disturbed by construction.

Waterway to be prepared for seeding by harrowing and then seeded by drilling followed by rolling. Seeding rate to be 85 Kg/Ha with the following mixture:

- 30% Canon Canada Bluegrass
- 25% Koket Chewings Fescue
- 30% Rebel Tall Fescue
- 15% Diplomat Perennial Rye
- Plus #125 Birdsfoot Trefoil (25% of Total Weight)

C.19 BACKFILLING EXISTING DITCHES

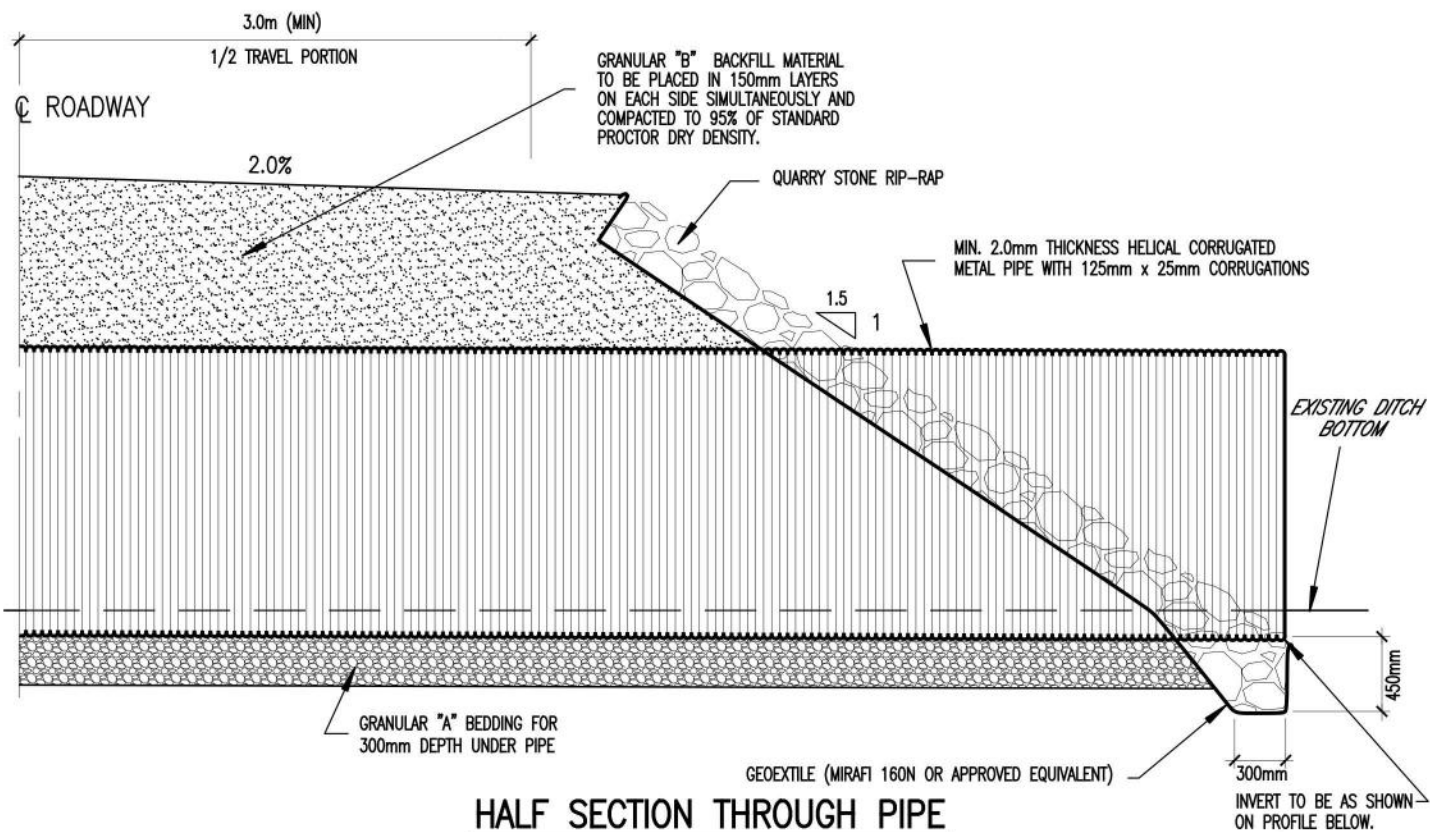
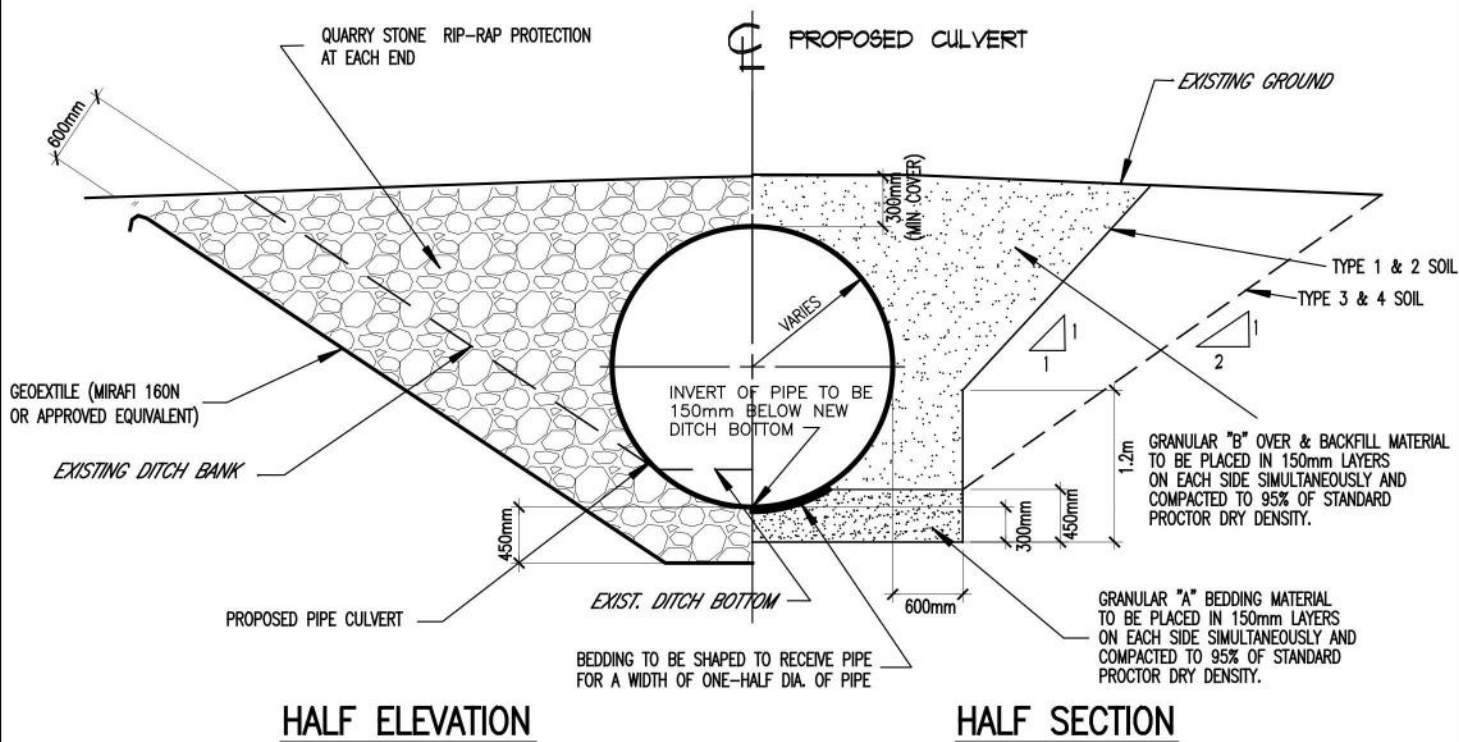
The Contractor shall backfill the ditch sufficiently for traversing by farm machinery. If sufficient material is not available from the old spoil banks to fill in the existing ditch, the topsoil shall be stripped and the subsoil shall be bulldozed into the ditch and the topsoil shall then be spread over the backfilled ditch unless otherwise specified on the contract drawings. The Contractor shall ensure sufficient compaction of the backfill and if required, repair excess settlement up to the end of the warranty period. The final grade of the backfilled ditch shall provide an outlet for surface water.

C.20 RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEM

Drainage guide for Ontario, Ministry of Agriculture, Food and Rural Affairs Publication Number 29 and its amendments, dealing with the construction of Subsurface Drainage systems, shall be the guide to all methods and materials to be used in the construction of tile drains except where superseded by other specifications of this contract.

The requirements of licensing of operators, etc. which apply to the installation of closed drains under the Tile Drainage Act shall also be applicable to this contract in full unless approval otherwise is given in advance by the Engineer.





NOTES

- 1) WHERE THE CULVERT IS TO BE INSTALLED IN POOR SOIL CONDITIONS, THE BEDDING MATERIAL SHALL BE 19mm CRUSHED STONE COMPLETELY WRAPPED IN GEOTEXTILE SUCH AS MIRAFI 160N OR APPROVED EQUIVALENT.

TYPICAL FARM CULVERT INSTALLATION DETAIL

Scale: N.T.S.

Approved by:

Date: January 1983

Drawn by: jk

M.P.D.

Revised: November 2000

ELEVATION & SECTION

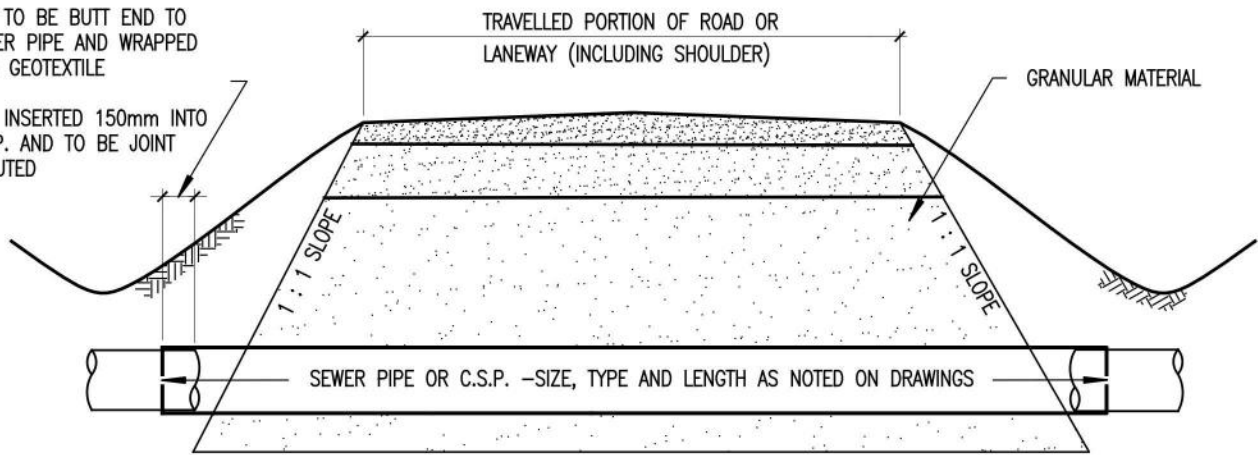


SPRIET ASSOCIATES LONDON LIMITED
CONSULTING ENGINEERS ARCHITECTS

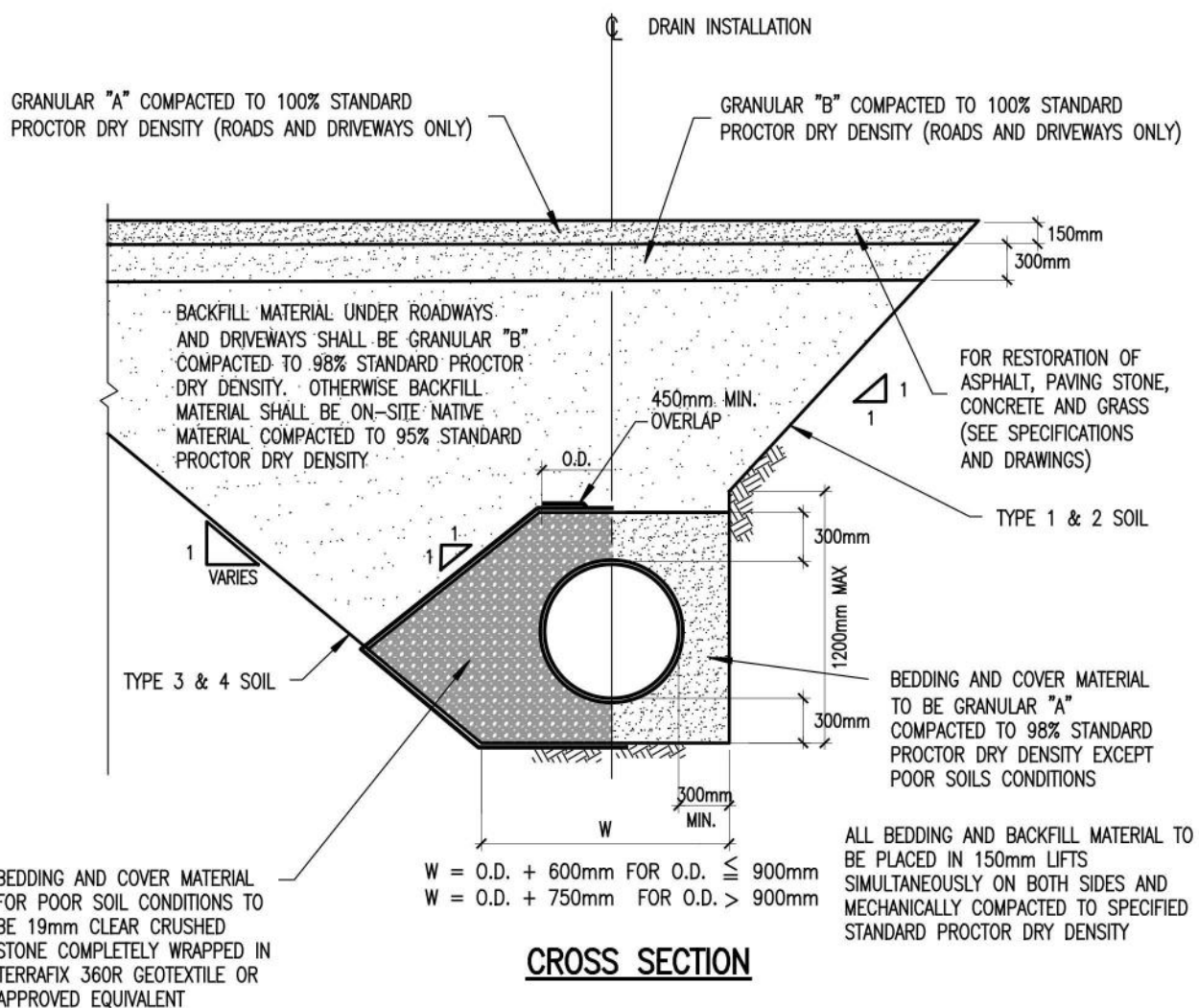
STANDARD
DETAILED
DRAWING
No. 01

1. TILE TO BE BUTT END TO
SEWER PIPE AND WRAPPED
WITH GEOTEXTILE

2. TILE INSERTED 150mm INTO
C.S.P. AND TO BE JOINT
GROUTED



SECTION THROUGH PIPE



CROSS SECTION

TYPICAL INSTALLATION DETAIL FOR SEWER PIPE UNDER DRIVEWAYS AND TRAVELLED PORTIONS OF ROADS

Scale: N.T.S.

Approved by:

Date: January 1983

Drawn by: jk

M.P.D.

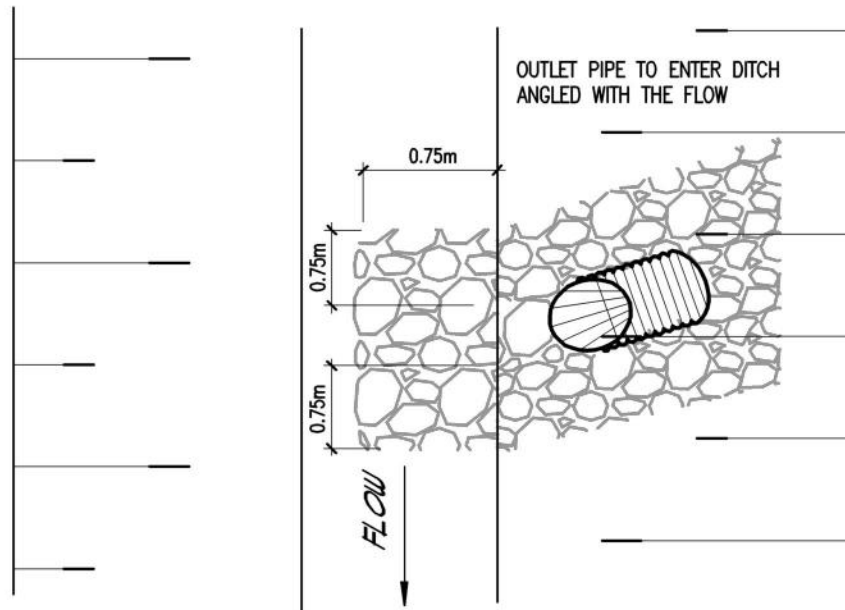
Revised: JULY 2018

ELEVATION & SECTION



SPRIET ASSOCIATES LONDON LIMITED
CONSULTING ENGINEERS ARCHITECTS

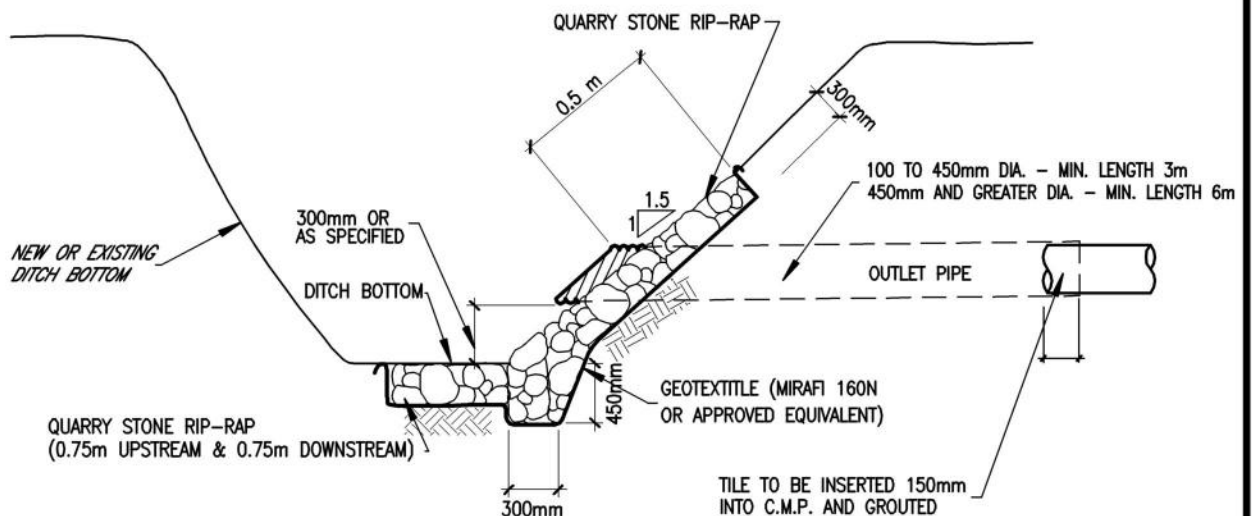
STANDARD
DETAILED
DRAWING
No. 02



PLAN

NOTES

1. WHERE THE DISTURBED AREA EXCEEDS THE MIN. WIDTHS, RIP-RAP TO EXTEND TO A MIN. OF 600mm BEYOND THE DISTURBED AREA



TYPICAL OUTLET RIP-RAP

NOTES

1. RIP-RAP TO EXTEND UP THE SLOPE 0.5 METER ABOVE TOP OF OUTLET
2. WHERE SURFACE RUN ENTERS DITCH AT OUTLET PIPE, A ROCK CHUTE SHALL BE INSTALLED (SEE S.D.D. No. 05) AND PIPE SHALL BE INSTALLED ADJACENT TO ROCK CHUTE.
3. HINGED RODENT GATE TO BE AFFIXED TO END OF OUTLET PIPE.

TYPICAL OUTLET RIP-RAP THROUGH SIDE SLOPE OF DITCH

Scale: N.T.S.

Approved by:

Date: November 2000

Drawn by: jk

M.P.D.

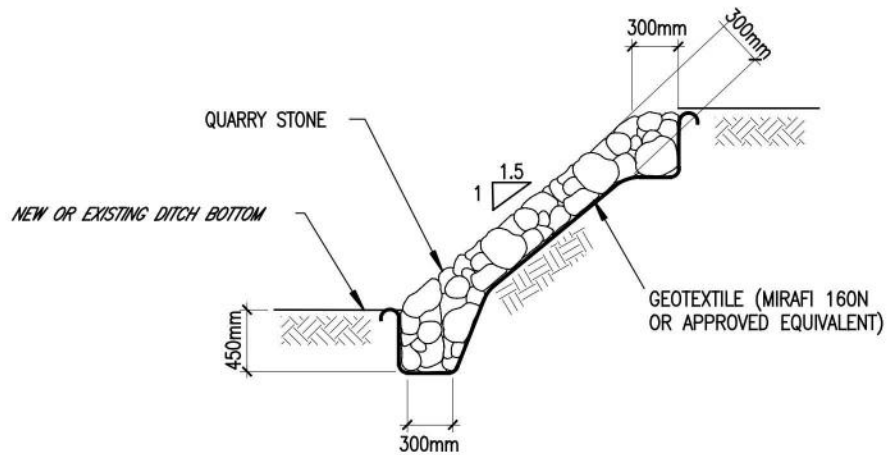
Revised: January 2009

PLAN & SECTION

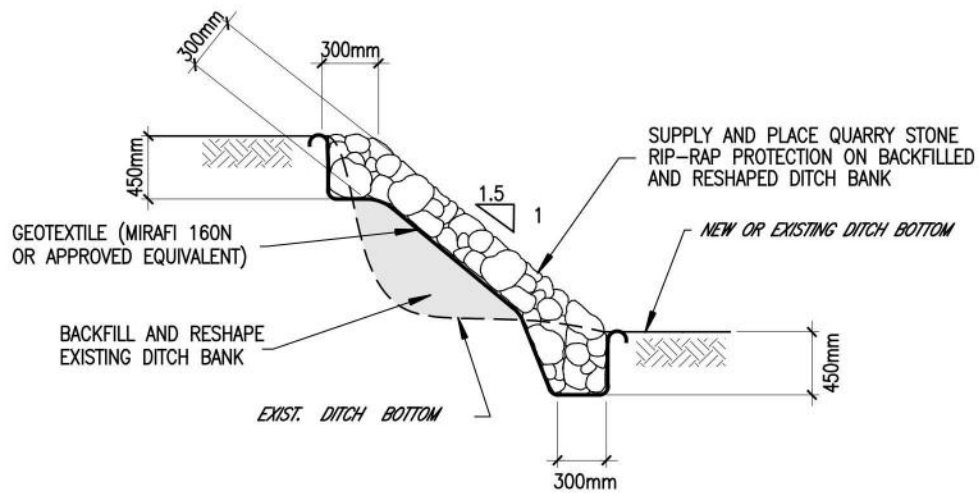


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CONSULTING ENGINEERS ARCHITECTS

STANDARD
DETAILED
DRAWING
No. 03



TYPICAL DITCH BANK RIP-RAP



**TYPICAL DITCH BANK RIP-RAP
WITH BACKFILLING OF WASHOUT**

TYPICAL DITCH BANK RIP-RAP DETAILS

Scale: N.T.S.

Approved by:

Date: July 2000

Drawn by: jk

M.P.D.

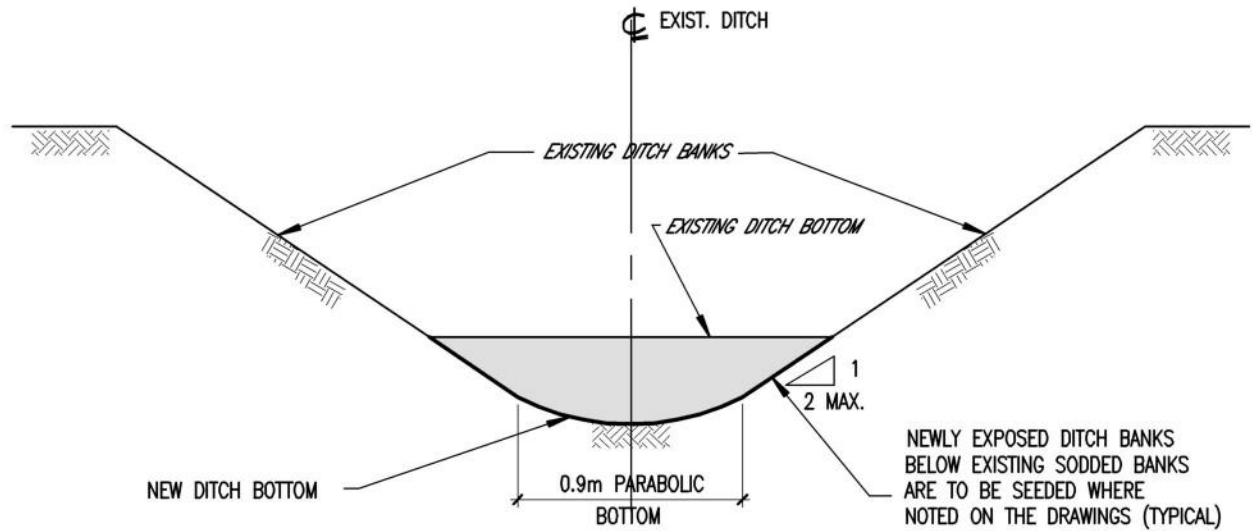
Revised: November 2000

SECTIONS

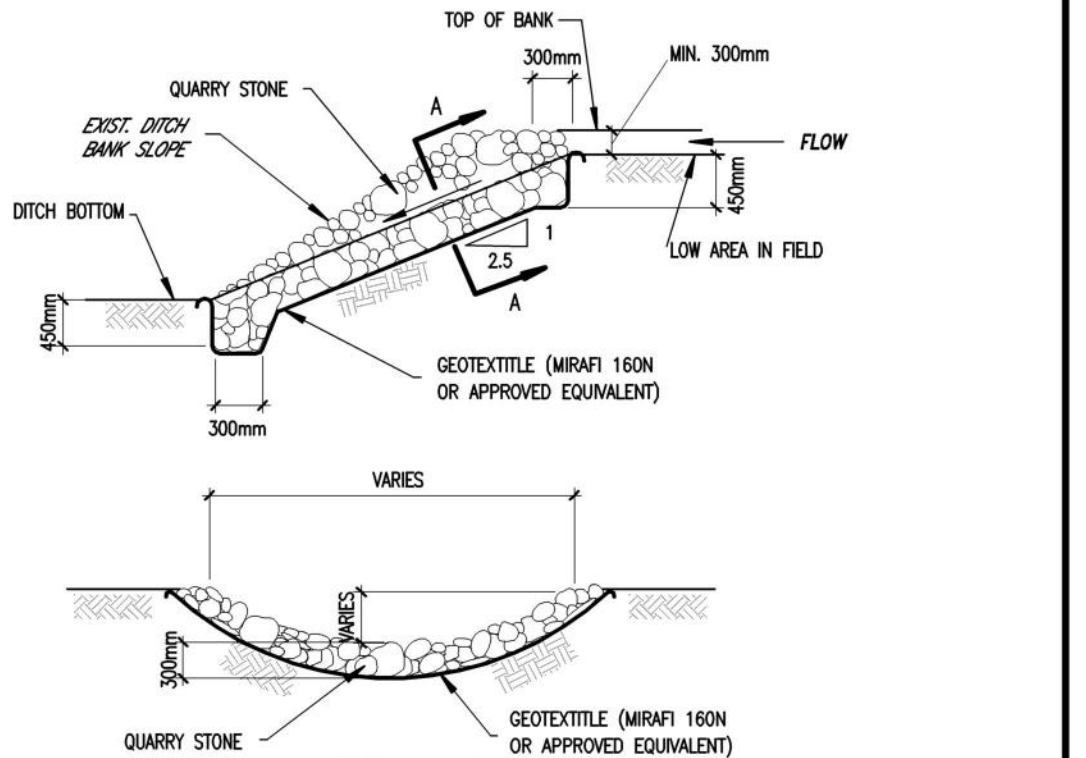


SPRIET ASSOCIATES LONDON LIMITED
CONSULTING ENGINEERS ARCHITECTS

STANDARD
DETAILED
DRAWING
No. **04**



TYPICAL DITCH BOTTOM CLEANOUT



SECTION A-A

TYPICAL ROCK CHUTE

TYPICAL DITCH BOTTOM CLEANOUT TYPICAL ROCK CHUTE CONSTRUCTION

Scale: N.T.S.

Approved by:

Date: November 2000

Drawn by: jk

M.P.D.

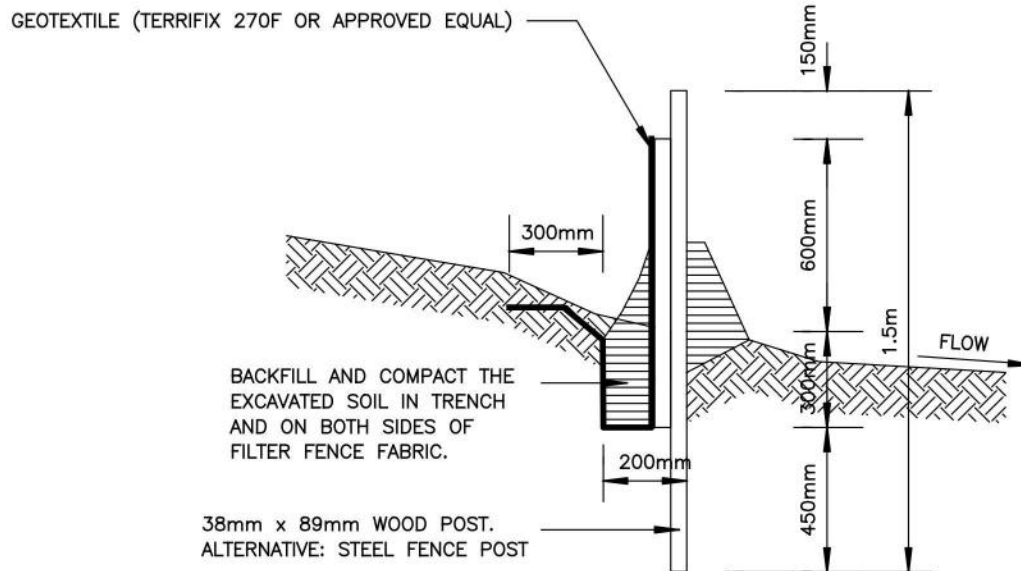
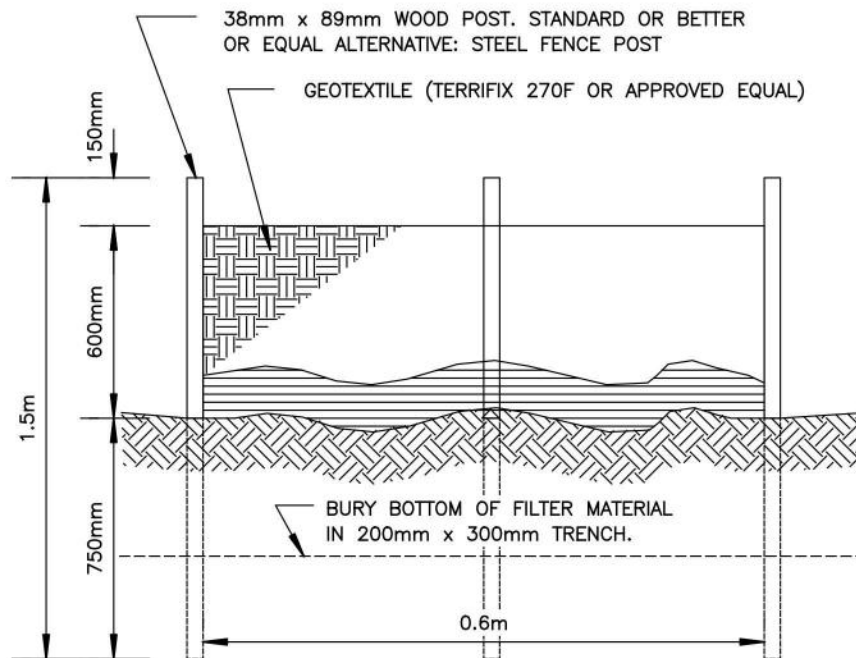
Revised:

SECTIONS



SPRIET ASSOCIATES LONDON LIMITED
CONSULTING ENGINEERS ARCHITECTS

STANDARD
DETAILED
DRAWING
No. **05**



SILT FENCE DETAIL

Scale: N.T.S.

Approved by:

Date: February 2025

Drawn by: TF

M.P.D.

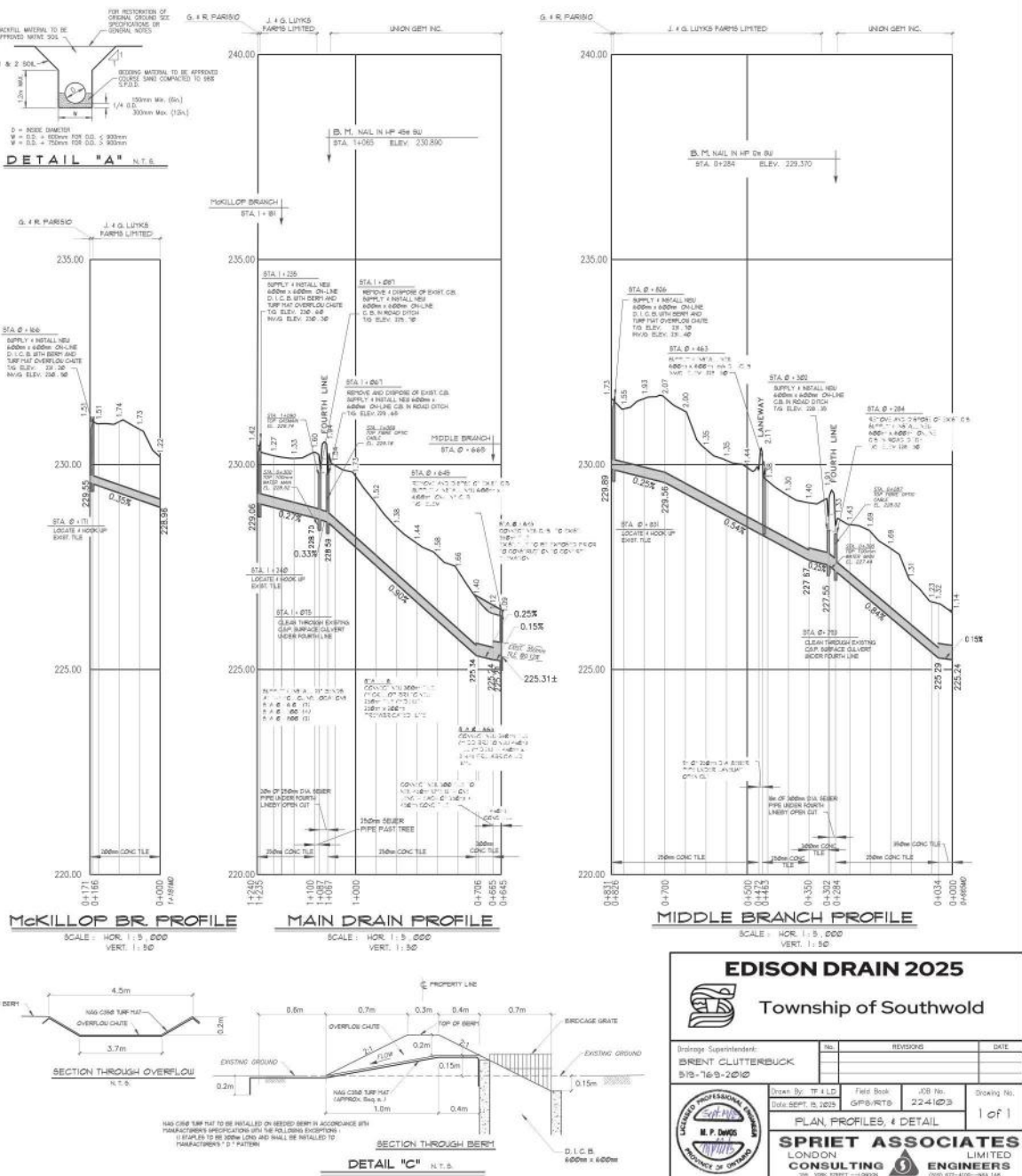
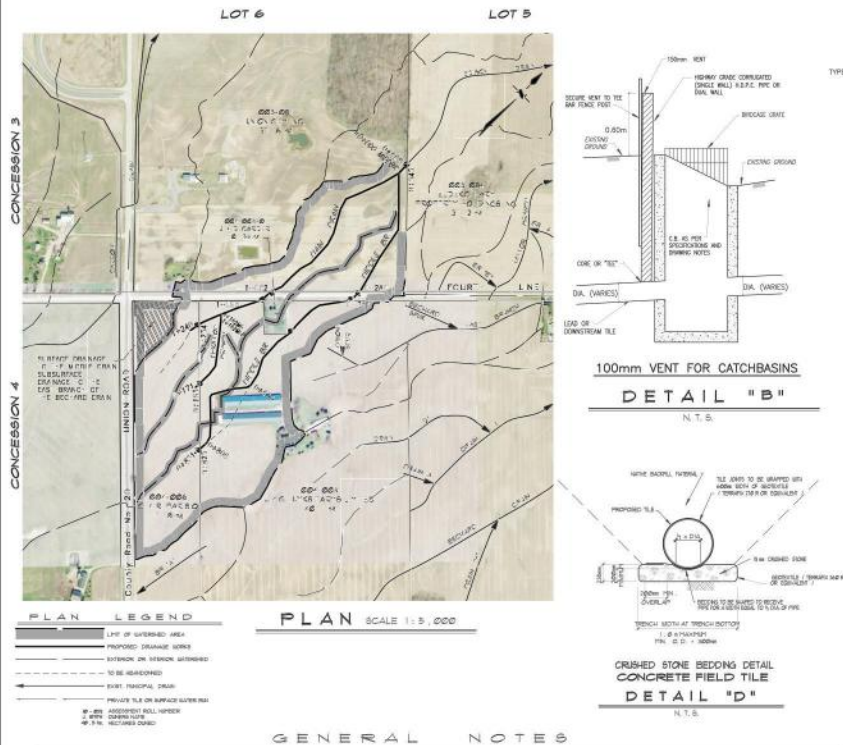
Revised:

SECTION



SPRIET ASSOCIATES LONDON LIMITED
CONSULTING ENGINEERS ARCHITECTS

STANDARD
DETAILED
DRAWING
No. 08



EDISON DRAIN 2025

Township of Southwold

Drainage Superintendent: BRENT CLUTTERBUCK
915-769-2010

No.	REVISIONS	DATE
1		

Drawn By: TP & LD
Date: SEPT. 5, 2015
Field Book: GPM/NTB
Job No.: 2241023
Drawing No.: 1 of 1

PLAN, PROFILES, & DETAIL

SPRIET ASSOCIATES
LONDON CONSULTING ENGINEERS
1000 KENNEDY RD. - LONDON, ONT. N3A 1K6
(519) 872-4100 - FAX (519) 872-4101

By-law for Municipalities Not Within a Regional Municipality, the County of Oxford or The District Municipality of Muskoka – Form 5

Drainage Act, R.S.O. 1990, c. D.17, subs. 45(1)

Drainage By-law Number 2025-67

A by-law to provide for a drainage works in the Township of Southwold
in the County of Elgin.

Whereas the council of the Township of Southwold has procured a
report under section 78 of the *Drainage Act* for the improvement
of the Fingal drain;

And whereas the report dated _____ has been authored by _____
and the attached report forms part of this by-law;

And whereas the estimated total cost of the drainage work is \$236,100.00 ;

And whereas \$39,365.00 is the amount to be contributed by the Township
of Southwold for the drainage works;

And whereas (Complete this clause only if other municipalities are being assessed a share of the cost of the project.);

_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____
_____	is being assessed in the _____	of _____

And whereas the council is of the opinion that drainage of the area is desirable;

Therefore the council of the Township of Southwold
pursuant to the *Drainage Act* enacts as follows:

1. AUTHORIZATION

The attached report is adopted and the drainage works is authorized and shall be completed as specified in the report.

2. BORROWING

The Corporation of the Township of Southwold
may borrow on the credit of the Corporation the amount of _____ being the amount necessary for
the improvement of the drainage works.

This project may be debentured.

6. CITATION

This by-law comes into force on the passing thereof and may be cited as the

" Edison Drain _____ by-law".

First reading 2025/11/24

Second reading 2025/11/24

Provisionally adopted this 24 day of November, 20 25

Name of Head of Council (Last, First Name)

Jones, Grant

Signature

Original signed

Name of Clerk (Last, First Name)

Carswell, Jeff

Signature

Original signed

Third reading _____

Enacted this _____ day of _____, 20 _____

Name of Head of Council (Last, First Name)

Signature

Name of Clerk (Last, First Name)

Signature

I, _____

clerk of the Corporation of the Township of Southwold,

certify that the above by-law was duly passed by the council of the Corporation and is a true copy thereof.

Name of Clerk (Last, First Name)

Signature

EDISON DRAIN 2025
Township of Southwold



SPRIET
ASSOCIATES
ENGINEERS & ARCHITECTS
155 York Street
London, Ontario N6A 1A8
Tel. (519) 672-4100
Fax (519) 433-9351
Email: mail@spriet.on.ca
www.spriet.on.ca

EDISON DRAIN 2025

Township of Southwold

To the Mayor and Council of
The Township of Southwold

Mayor and Council:

We are pleased to present our report on the reconstruction of parts of the Edison Municipal Drain serving parts of Lot 6, Concessions 3 and 4, in the Township of Southwold. The total watershed area contains approximately 27.8 hectares.

AUTHORIZATION

This report was prepared pursuant to Section 78 of the Drainage Act. Instructions were received from your Municipality with respect to a motion of Council. The work was initiated by a request signed by the affected landowners.

HISTORY

The Edison Municipal Drain was originally constructed pursuant to a report submitted by A.J. Graham, P. Eng., dated July 6, 1967, and was a closed drain made up of a Main Drain, McKillop Branch, Middle Branch, East Branch, and two spurs. The Main Drain consists of 1,375 meters of 350mm to 125mm field tile from the outlet into the Sanders Drain at Highway 401, upstream southerly and westerly across Fourth Line, and 120 meters into the northwest part of Lot 6, Concession 4.

The Middle Branch consisted of 777 meters of 150mm to 125mm tile from the Main Drain, 20 meters upstream of the line between Lots 5 and 6, Concession 3, southerly and westerly across Fourth Line, and into the northwest part of Lot 6, Concession 4.

The McKillop Branch consists of 165 meters of 150mm to 125 mm tile from the Main Drain, 86 meters upstream of Fourth Line, south-easterly for 171 meters into the northwest part of Lot 6.

EXISTING DRAINAGE CONDITIONS

At a site meeting held with respect to the project and through later discussions the owners reported the following:

- that the drain was undersized and not providing proper drainage
- that the owners of the west part of Lot 6, Concession 4 (Roll No. 004-006) have three outlets into their property and requested that they be replaced and upgraded to today's standards



EXISTING DRAINAGE CONDITIONS (cont'd)

- that the owner of the residential property (Roll No. 004-005-01) reported that the surface culvert on the Main Drain under the Fourth Line is plugged
- that the owner of the northeast part of Lot 6, Concession 4 (Roll No 004-005) requested that the Main Drain and Middle Branch be replaced and upgraded to today's standards and that the Middle Branch be relocated around his farm buildings
- that the owners of Lot 5, Concession 3 (Roll No. 003-084) which is downstream of the Main Drain/Middle Branch junction, is satisfied with the functioning of the drain on their property. They requested that the new drain stop at their west property line and that an overflow structure be provided at that point for excess water to relieve onto the surface
- that no request was made to improve any of the remaining portions of the drain

A field investigation and survey were completed. Upon reviewing our findings we note the following:

- that the existing drains are considerably undersized by today's standards but in working condition
- that there is sufficient gradient on the Main Drain through Lot 6 and the Middle Branch to allow connection to the Main Drain at the line between Lots 5 and 6. This would require the installation of an overflow catchbasin at this location to allow any surcharge to overflow downstream into Lot 5
- that the East Branch and spurs, while undersized, are working adequately for the owners at this time

Preliminary design, cost estimates, and assessments were prepared and an informal public meeting was held to review the findings and preliminary proposals. Further input and the following request was provided by the affected owners at that time and at later dates.

- that the McKillop Branch be replaced and upgraded to today's standards

DESIGN CRITERIA AND CONSIDERATIONS

The Drainage Coefficient method contained in "DRAINAGE GUIDE FOR ONTARIO", Publication 29 by the Ontario Ministry of Agriculture, Food, and Agribusiness (OMAFRA) is typically used to design municipal drains. The Drainage Coefficient defines a depth of water that can be removed in a 24-hour period and is expressed in millimetres per 24 hours. The coefficient used to design this drain with respect to capacity was 38mm per 24 hours.

We would like to point out that there have been indications of sandy and unstable soil conditions. It should be noted that no formal soil investigation has been made, with this information being provided by the owners and Elgin County Soils mapping.

The proposed design and report have been generally completed using the "GUIDE FOR ENGINEERS WORKING UNDER THE DRAINAGE ACT IN ONTARIO" OMAFRA Publication 852.



RECOMMENDATIONS

We are therefore recommending the following:

- that the existing Middle Branch, McKillop Branch, and the portion of the Main Drain from the Parisio property (Roll No. 004-006) downstream to the line between Lots 5 and 6, be replaced with a new 200mm to 450mm concrete tile and sewer pipe, including appurtenances, and that the existing tiles be destroyed where possible
- that an overflow catchbasin be constructed on the junction between the new and existing Main Drain at the line between Lots 5 and 6, to allow surcharge
- that the remaining existing portion of the Main Drain in the northwest part of Lot 6 (Roll No. 004-006) be officially abandoned as a municipal drain under Section 19 of the Drainage Act. The owners may maintain the intact portion as a private header tile if they so wish
- that the upper portion of the Middle Branch be relocated around the farm buildings on the north part of Lot 6, Concession 4 (Roll No. 004-005)
- that catchbasins be installed at various locations on the proposed drains to allow direct surface water entry into the tiles and thereby reduce surface flow and erosion
- that the existing surface pipes under Fourth Line, on both the Main Drain and Middle Branch, be cleaned out

Our design includes the wrapping of tile joints with geotextile to prevent the incursion of fine soil particles into the drain. If areas of poor soil are encountered at the time of construction, it may become necessary to install the tile on crushed stone bedding wrapped with geotextile or substitute plastic filter tile through such areas. The additional costs of such work would be an extra to the project. These areas are typically identified at the time of construction but may only become apparent after construction is completed. In this case, the extra costs for removal and reinstallation on stone bedding would be an extra to the project and if already billed become a supplementary billing.

In accordance with the principals of Section 14(2) of the Drainage Act, the existing surface waterway along the route of the tile drains shall be part of the drainage works for future maintenance. The width available for the waterway shall be equal to the maintenance working width as noted on the Contract Drawings.

It is recommended that basement, cellar, or crawlspace drains be directed to a sump and then discharged onto the ground surface well away from foundations and septic systems or should owners desire to connect these drains to the new outlet drain, then it is suggested that they not be directly connected to the drains. Rather it is suggested that such a connection be made by an indirect method such as by sump pump with an open-air connection such as a mini-catchbasin, crushed stone filled excavation connected to a storm P.D.C. and should include a check valve and be piped above foundation level. It is noted that there is still a risk of flooding even with indirect methods of connection and any/all responsibility shall be borne by the owner. Downspouts from eavestroughs should be directed onto the ground surface well away from foundations and septic systems and are **not** permitted to be connected to the Municipal Drain.



ENVIRONMENTAL CONSIDERATIONS AND MITIGATION MEASURES

Based on the information available, there are no significant wetlands, sensitive areas, or endangered species along the route of the drains. The proposed construction of the Edison Drain 2025 includes surface inlets which greatly help reduce the overland surface flows and any subsequent erosion.

SUMMARY OF PROPOSED WORK

The proposed work consists of approximately 1,597 lineal meters of 200mm to 450mm concrete field tile and HDPE sewer pipe, including related appurtenances.

SCHEDULES

Three schedules are attached hereto and form part of this report, being Schedule 'A' - Allowances, Schedule 'B' - Cost Estimate, and Schedule 'C' - Assessment for Construction.

Schedule 'A' - Allowances. In accordance with Sections 29 and 30 of the Drainage Act, allowances are provided for right-of-way and damages to lands and crops along the route of the drain as defined below.

Schedule 'B' - Cost Estimate. This schedule provides for a detailed cost estimate of the proposed work which is in the amount of \$236,100.00. This estimate includes engineering and administrative costs associated with this project.

Schedule 'C' - Assessment for Construction. This schedule outlines the distribution of the total estimated cost of construction over the roads and lands which are involved.

Drawing No.1, Job No. 224103 and specifications form part of this report. They show and describe in detail the location and extent of the work to be done and the lands which are affected.

ALLOWANCES

RIGHT-OF-WAY: Section 29 of the Drainage Act provides for an allowance to the owners whose land must be used for the construction, repair, or future maintenance of a drainage works.

For tile drains where the owners will be able to continue to use the land, the allowance provides for the right to enter upon such lands, and at various times for the purpose of inspecting such drain, removing obstructions, and making repairs. Also, the allowance provides for the restrictions imposed on those lands to protect the right-of-way from obstruction or derogation. The amounts granted for right-of-way on tile drains is based on a percentage of the value of the land designated for future maintenance. Therefore, the amount granted is based on \$9,000.00/ha. through cropped lands. This value is multiplied by the hectares derived from the width granted for future maintenance and the applicable lengths. No right-of-way was previously provided for any of the existing drains being replaced.

DAMAGES: Section 30 of the Drainage Act provides for the compensation to landowners along the drain for damages to lands and crops caused by the construction of the drain. The amount granted is based on \$5,500.00/ha for closed drains installed with a wheel machine. This base rate is multiplied by the hectares derived from the working widths shown on the plans and the applicable lengths.



ASSESSMENT DEFINITIONS

In accordance with the Drainage Act, lands that make use of a drainage works are liable for assessment for part of the cost of constructing and maintaining the system. These assessments are known as benefit, outlet liability and special benefit as set out under Sections 22 and 23 of the Act.

SECTION 22

Benefit as defined in the Drainage Act means the advantages to any lands, roads, buildings or other structures from the construction, improvement, repair, or maintenance of a drainage works such as will result in a higher market value, increased crop production, improved appearance, better control of surface water, or any other advantages relating to the betterment of lands, roads, buildings, or other structures.

Special Benefit is assessed to lands for which some additional work or feature has been included in the construction repair or improvement of a drainage works. The costs of such work are separated and assessed independently from the regular work.

SECTION 23

Outlet liability is assessed to lands or roads that may make use of a drainage works as an outlet either directly or indirectly through the medium of any other drainage works or of a swale, ravine, creek, or watercourse.

In addition, a Public Utility or Road Authority shall be assessed for and pay all the increased cost to a drainage works due to the construction and operation of the Public Utility or Road Authority. This may be shown as either benefit or special assessment.

ASSESSMENT

A modified "Todgham Method" is typically used to calculate the assessments shown on Schedule 'C'- Assessment for Construction. This entails breaking down the costs of the drain into sections along its route, where warranted, and then extracting Special Assessments and Special Benefit Assessments from each section.

The remainder is then separated into Benefit and Outlet Assessments. The Benefit is distributed to those properties receiving benefit as defined under "Assessment Definitions", with such properties usually being located along or close to the route of the drain. The Outlet is distributed to all properties within the watershed area of that section on an adjusted basis. The areas are adjusted for location along that section and relative run-off rates. Due to their different relative run-off rates forested lands are assessed for outlet at lower rates than cleared lands. Also, roads and residential properties are assessed for outlet at higher rates than cleared farmlands.

The actual cost of the work involving this report, with the exception of Special Assessments, is to be assessed on a pro-rata basis against the lands and roads liable for assessment for benefit and outlet as shown in detail on Schedule 'C' - Assessment for Construction. The Special Assessments shall be levied as noted in the Section "Special Assessment".



SPECIAL ASSESSMENT

In accordance with Section 26 of the Drainage Act, Special Assessments have been made against the Township of Southwold being the increased cost to the drainage work for installing 250mm and 300mm diameter sewer pipe, respectively, across their road allowance on the Main Drain and Middle Branch, due to the construction and operation of Fourth Line. The Special Assessments shall be made up of the actual cost of this work and both the final and estimated values of the Special Assessments are to be calculated as follows:

Drain	Cost of Work	Less Equivalent Drain Cost (Fixed)	Plus Administration Cost	Plus Interest, Contract Security, & Net H.S.T.	Special Assessment
Main Drain (250mm)	\$8,910.00	\$890.00	\$2,300.00	\$570.00	\$10,890.00
Middle Branch (300mm)	\$8,250.00	\$860.00	\$2,400.00	\$540.00	\$10,330.00

In accordance with Section 26 of the Drainage Act, a Special Assessment has been made against Enbridge Gas Inc. for the cost of locating and determining the elevation of their gasmain along Fourth Line on the Main Drain and Middle Branch, being the increased cost to the drainage works due to the construction and operation of their utilities. The Special Assessment shall be as shown on Schedule 'C'.

In accordance with Section 26 of the Drainage Act, a Special Assessment has been made against Eastlink for the cost of locating and determining the elevation of fibre optic cables along Fourth Line on the Main Drain and the Middle Branch, being the increased cost to the drainage works due to the construction and operation of their utilities. The Special Assessment shall be as shown on Schedule 'C'.

In accordance with Section 26 of the Drainage Act, a Special Assessment has been made against the Township of Southwold for the cost of locating and determining the elevation of their watermain along Fourth Line on the Main Drain and the Middle Branch, being the increased cost to the drainage works due to the construction and operation of their utilities and required larger upstream pipe size for the Middle Branch. The Special Assessment shall be as shown on Schedule 'C'.

If any additional work is required to the drainage works due to the existence of buried utilities such as gas/water/oil pipelines, communications cables, etc. or if any of the utilities require relocation or repair then the extra costs incurred shall be borne by the utility involved in accordance with the provisions of Section 26 of the Drainage Act.

GRANTS

In accordance with the provisions of Section 85 of the Drainage Act, a grant **may** be available for assessments against privately owned parcels of land which are used for agricultural purposes and eligible for the Farm Property Class Tax rate. Section 88 of the Drainage Act directs the Municipality to make application for this grant upon certification of completion of this drain. The Municipality will then deduct the grant from the assessments prior to collecting the final assessments.



MAINTENANCE

Upon completion of construction all owners are hereby made aware of Sections 80 and 82 of the Drainage Act which forbid the obstruction of or damage or injury to a municipal drain. This includes tree roots penetrating tiles from trees planted by owners or naturally occurring.

After completion, the Edison Drain 2025 shall be maintained by the Township of Southwold at the expense of all upstream lands and roads assessed in Schedule 'C' - Assessment for Construction and in the same relative proportions until such time as the assessment is changed under the Drainage Act.

After completion, the remaining existing portions of the Edison Drain (Main Drain) downstream of Sta. 0+645 shall be maintained by the Township of Southwold with 28% of the cost as benefit to the property (Roll No. 003-084) and the remainder prorated over the outlet assessments on the Main Drain in this report.

The above existing portion of the drain shall be repaired/maintained in accordance with the grades and dimensions set out in the plans and specifications contained in the repaired July 6, 1967, report.

Special Assessments shall **not** be pro-rated for future maintenance purposes but shall be applied as an actual cost special if part of the maintenance.

Repairs or improvements to any road culvert or bridge or sub-surface road crossing shall be the responsibility of the applicable Road Authority, entirely at their cost.

Respectfully submitted,

SPRIET ASSOCIATES LONDON LIMITED

M.P. DeVos, P. Eng.



MPD:kj



SCHEDULE 'A' - ALLOWANCES

EDISON DRAIN 2025

Township of Southwold

In accordance with Sections 29 and 30 of the Drainage Act, we determine the allowances payable to owners entitled thereto as follows:

CON.	LOT	ROLL NUMBER (Owner)	Section 29 Right-of-Way	Section 30 Damages	TOTALS
MAIN DRAIN					
3	S $\frac{1}{2}$ 5	003-084(Eldekci Farm Property Holdings)	\$ 40.00	\$ 50.00	\$ 90.00
3	S $\frac{1}{2}$ 6	003-087(Union Gem Inc.)	3,750.00	4,590.00	8,340.00
4	Pt.N $\frac{1}{2}$ &S $\frac{1}{2}$ 6	004-005(J & G Luyks Farms Inc.)	1,240.00	1,520.00	2,760.00
4	SW $\frac{1}{4}$ 6	004-006(G.& R. Parisio)	50.00	70.00	120.00
Total Allowances			\$ 5,080.00	\$ 6,230.00	\$ 11,310.00
TOTAL ALLOWANCES ON THE MAIN DRAIN					\$ 11,310.00
MIDDLE BRANCH					
3	S $\frac{1}{2}$ 6	003-087(Union Gem Inc.)	\$ 2,520.00	\$ 3,080.00	\$ 5,600.00
4	Pt.N $\frac{1}{2}$ &S $\frac{1}{2}$ 6	004-005(J & G Luyks Farms Inc.)	4,550.00	5,570.00	10,120.00
4	Pt. N $\frac{1}{2}$ 6	004-005-01(J. & D. Carder)	50.00	70.00	120.00
4	SW $\frac{1}{4}$ 6	004-006(G.& R. Parisio)	50.00	70.00	120.00
Total Allowances			\$ 7,170.00	\$ 8,790.00	\$ 15,960.00
TOTAL ALLOWANCES ON THE MIDDLE BRANCH					\$ 15,960.00
McKILLOP BRANCH					
4	Pt.N $\frac{1}{2}$ &S $\frac{1}{2}$ 6	004-005(J & G Luyks Farms Inc.)	\$ 1,490.00	\$ 1,820.00	\$ 3,310.00
4	SW $\frac{1}{4}$ 6	004-006(G.& R. Parisio)	50.00	70.00	120.00
Total Allowances			\$ 1,540.00	\$ 1,890.00	\$ 3,430.00
TOTAL ALLOWANCES ON THE McKILLOP BRANCH					\$ 3,430.00
TOTAL ALLOWANCES ON THE EDISON DRAIN 2025					\$ 30,700.00

SCHEDULE 'B' - COST ESTIMATE

EDISON DRAIN 2025

Township of Southwold

We have made an estimate of the cost of the proposed work which is outlined in detail as follows:

MAIN DRAIN

Mobilization of equipment	\$	900.00
Installation of the following concrete field tile including supply & installation of geotextile around tile joints		
501 meters of 250mm dia. concrete tile	\$	12,610.00
41 meters of 350mm dia. concrete tile	\$	1,110.00
20 meters of 450mm dia. concrete tile	\$	600.00
Supply of the above listed tile/pipe	\$	11,720.00
Supply & Installation of the following sewer pipe (with rubber gaskets) past tree including supply, installation and compaction of bedding and backfill materials		
13 meters of 250mm dia. sewer pipe	\$	650.00
Supply of the above listed sewer pipe	\$	440.00
Contingency amount for increased cost due to poor soil conditions:		
Installation of tile on crushed stone bedding with excavator (80 meters)	\$	3,000.00
Supply & delivery of 19mm crushed (Approx. 40 tonnes req'd)	\$	1,100.00
Contingency Allowance to install the new tile immediately adjacent to the existing tile and destroying the existing tile with a rubber tired backhoe afterwards (See General Notes on Drawings) (Approx. 566 meters)	\$	2,260.00
Strip, stockpile and releve topsoil from tile trench and adjacent working area (4m wide) specified on drawings (approx. 566m)	\$	3,400.00
20.0 meters of 250mm HDPE sewer pipe		
Supply (with rubber gaskets)	\$	660.00
Installation under Fourth Line by open cut	\$	7,500.00
Supply and install one 600mm x 600mm ditch inlet catchbasins with berm and Turfmat overflow chute and three 600mm x 600mm standard catchbasins, including grates, connection to new & exist. tiles, removal and disposal of existing catchbasins	\$	14,700.00
Clean through existing C.S.P. surface culvert under Fourth Line	\$	750.00
Clearing and grubbing	\$	300.00
Exposing and locating existing tile drains	\$	1,200.00
Exposing and locating existing utilities		
(report)	\$	470.00
(construction)	\$	450.00

SCHEDULE 'B' - COST ESTIMATE (cont'd)

**EDISON DRAIN 2025
Township of Southwold****MAIN DRAIN (cont'd)**

Tile connections as noted on plan including fittings	\$ 900.00
Contract security financing	\$ 970.00
Tile connections and contingencies	\$ 2,600.00
Allowances under Sections 29 & 30 of the Drainage Act	\$ 11,310.00

MIDDLE BRANCH

Mobilization of equipment	\$ 900.00
Installation of the following concrete field tile including supply & installation of geotextile around tile joints	
722 meters of 250mm dia. concrete tile	\$ 18,180.00
48 meters of 300mm dia. concrete tile	\$ 1,250.00
34 meters of 350mm dia. concrete tile	\$ 920.00
Supply of the above listed tile	\$ 16,140.00
Contingency amount for increased cost due to poor soil conditions:	
Installation of tile on crushed stone bedding with excavator (80 meters)	\$ 3,000.00
Supply & delivery of 19mm crushed (Approx. 40 tonnes req'd)	\$ 1,100.00
Contingency Allowance to install the new tile immediately adjacent to the existing tile and destroying the existing tile with a rubber tired backhoe afterwards (See General Notes on Drawings) (Approx. 570 meters)	\$ 2,000.00
Strip, stockpile and relevel topsoil from tile trench and adjacent working area (4m wide) specified on drawings (approx. 805m)	\$ 4,700.00
18.0 meters of 300mm sewer pipe	
Supply	\$ 750.00
Installation under Fourth Line by open cut	\$ 6,750.00
9.0 meters of 250mm sewer pipe	
Supply	\$ 300.00
Installation under laneway by open cut	\$ 2,930.00
Supply and install two 600mm x 600mm ditch inlet catchbasins with berms and Turfmat overflow chutes as specified on drawing and two 600mm x 600mm standard catchbasins, including grates, connection to new & exist. tiles, removal and disposal of existing catchbasin	\$ 14,300.00
Clean through existing C.S.P. culvert under Fourth Line	\$ 750.00

SCHEDULE 'B' - COST ESTIMATE (cont'd)

**EDISON DRAIN 2025
Township of Southwold****MIDDLE BRANCH (cont'd)**

Exposing and locating existing tile drains	(report)	\$	1,220.00
Exposing and locating existing utilities	(report)	\$	470.00
	(construction)	\$	450.00
Tile connections and fittings as noted on plan		\$	1,000.00
Contract security financing		\$	1,160.00
Tile connections and contingencies		\$	3,000.00
Allowances under Sections 29 & 30 of the Drainage Act		\$	15,960.00

McKILLOP BRANCH

Mobilization of equipment		\$	200.00
Installation of the following concrete field tile including supply & installation of geotextile around tile joints			
171 meters of 200mm dia. concrete tile		\$	4,170.00
Supply of the above listed tile		\$	3,130.00
Supply and install one 600mm x 600mm ditch inlet catchbasin with berm and Turfmat overflow chute as specified on drawing including grate & connection to tiles		\$	3,900.00
Exposing and locating existing tile drains		\$	340.00
Tile connections and fittings as noted on plan		\$	100.00
Contract security financing		\$	180.00
Tile connections and contingencies		\$	400.00
Allowances under Sections 29 & 30 of the Drainage Act		\$	3,430.00

ADMINISTRATION

Conservation Authority Review Fee		\$	300.00
Interest and Net Harmonized Sales Tax		\$	6,923.00
Survey, Plan and Final Report		\$	28,043.00
Expenses		\$	1,654.00
Supervision and Final Inspection		\$	<u>6,500.00</u>

TOTAL ESTIMATED COST **\$ 236,100.00**

TOTAL ASSESSMENT ON THE MAIN DRAIN	\$ <u>97,710.00</u>
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SCHEDULE 'C' - ASSESSMENT FOR CONSTRUCTION (Cont'd)

EDISON DRAIN 2025**Township of Southwold**

* = Non-agricultural

CON.	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	BENEFIT	OUTLET	TOTAL
MIDDLE BRANCH						
3	S½ 6	2.4	003-087(Union Gem Inc.)	\$ 17,990.00	\$ 3,446.00	\$ 21,436.00
4	Pt.N½&S½6	7.1	004-005(J & G Luyks Farms Inc.)	36,070.00	28,905.00	64,975.00
* 4	Pt. N½ 6	0.2	004-005-01(J. & D. Carder)	400.00	526.00	926.00
4	SW¼ 6	2.3	004-006(G. & R. Parisio)	1,800.00	11,007.00	12,807.00
TOTAL ASSESSMENT ON LANDS				\$ 56,260.00	\$ 43,884.00	\$ 100,144.00
Fourth Line		0.5	Township of Southwold	\$ 4,450.00	\$ 2,871.00	\$ 7,321.00
TOTAL ASSESSMENT ON ROADS				\$ 4,450.00	\$ 2,871.00	\$ 7,321.00
SPECIAL ASSESSMENT against the Township of Southwold for the increased cost of constructing a 300mm sewer pipe under Fourth Line by open cut						
						\$ 10,330.00
SPECIAL ASSESSMENT against Eastlink for the increased cost of locating and exposing their fibre optic cable on Fourth Line						
						\$ 765.00
SPECIAL ASSESSMENT against the Township of Southwold for the increased cost of locating and exposing their watermain on Fourth Line and increasing the size of the upstream tile						
						\$ 1,240.00
TOTAL ASSESSMENT ON THE MIDDLE BRANCH						\$ <u>119,800.00</u>
McKILLOP BRANCH						
4	Pt.N½&S½6	1.3	004-005(J & G Luyks Farms Inc.)	\$ 9,560.00	\$ 1,974.00	\$ 11,534.00
4	SW¼ 6	1.8	004-006(G. & R. Parisio)	1,590.00	5,466.00	7,056.00
TOTAL ASSESSMENT ON LANDS				\$ 11,150.00	\$ 7,440.00	\$ 18,590.00
TOTAL ASSESSMENT ON McKILLOP BRANCH						\$ <u>18,590.00</u>
TOTAL ASSESSMENT ON THE EDISON DRAIN 2025						\$ <u>236,100.00</u>

SCHEDULE OF NET ASSESSMENT

EDISON DRAIN 2025

Township of Southwold

Job No. 224103

September 19, 2025

* = Non-agricultural

ROLL NUMBER (OWNER)	TOTAL GRANTABLE ASSESSMENT	GRANT	ALLOWANCES	APPROX. NET
003-084(Eldekci Farm Property Holdings)	\$	\$	\$ 90.00	\$ -90.00
003-087(Union Gem Inc.)	57,703.00	19,234.00	13,940.00	24,529.00
004-005(J & G Luyks Farms Inc.)	96,177.00	32,059.00	16,190.00	47,928.00
* 004-005-01(J. & D. Carder)	1,632.00		120.00	1,512.00
004-006(G. & R. Parisio)	38,928.00	12,976.00	360.00	25,592.00
* Fourth Line	\$ 16,140.00	\$	\$	\$ 16,140.00
<u>Non-Proratable Special Assessments</u>				
* Fourth Line - Road Crossings	21,220.00			21,220.00
* Enbridge Gas Inc.	765.00			765.00
* Eastlink	1,530.00			1,530.00
* Southwold - Watermain	2,005.00			2,005.00
	\$ 236,100.00	\$ 64,269.00	\$ 30,700.00	\$ 141,131.00

SPECIFICATIONS FOR CONSTRUCTION OF MUNICIPAL DRAINAGE WORKS

G E N E R A L I N D E X

SECTION A	General Work	Pages 1 to 6
SECTION B	Open Drain	Pages 7 to 9
SECTION C	Tile Drain	Pages 10 to 15
STANDARD DETAILED DRAWINGS		SDD-01 to SDD-05



SECTION A - GENERAL WORK

I N D E X

<u>SECTION NUMBER</u>	<u>PAGE NO.</u>
A.1 COMMENCEMENT AND COMPLETION OF WORK.....	1
A.2 WORKING AREA AND ACCESS.....	1
A.3 ROAD CROSSINGS.....	1
A.4 SURPLUS EXCAVATED MATERIAL AND GRAVEL.....	3
A.5 FENCES.....	3
A.6 LIVESTOCK.....	4
A.7 STANDING CROPS.....	4
A.8 RAILWAYS, HIGHWAYS, UTILITIES.....	4
A.9 LOCATION OF UTILITIES.....	4
A.10 IRON BARS.....	4
A.11 STAKES.....	4
A.12 RIP-RAP.....	5
A.13 GABION BASKETS.....	5
A.14 RESTORATION OF LAWNS.....	5
A.15 RESTORATION OF ROADS AND LANEWAYS.....	6

SECTION A

GENERAL WORK

A.1 COMMENCEMENT AND COMPLETION OF WORK

The work must commence immediately after the Contractor is notified of the acceptance of his tender or at a later date, if set out as a condition of the tender. If weather creates poor ground or working conditions the Contractor may be required, at the discretion of the Engineer, to postpone or halt work until conditions become acceptable.

As noted on the drawn, the contractor must first arrange for a preconstruction meeting to be held on the site with the Contractor and affected owners attending to review in detail the construction scheduling, access and other pertinent details. The Contractor's costs for attending this meeting shall be included in his lump sum tender price. If the Contractor leaves the job site for a period of time after initiation of work, he shall give the Engineer and the Superintendent a minimum of twenty-four (24) hours' notice prior to returning to the project.

The work must be proceeded with in such a manner as to ensure its completion at the earliest possible date and within the time limit set out in the tender or in the contract documents.

A.2 WORKING AREA AND ACCESS

The working area available to the Contractor to construct the drain and related works including an access route to the drain shall be as specified on the drawings.

Should the specified widths become inadequate due to unusual conditions, the Contractor shall notify the Engineer immediately in order that negotiations with the affected owners can take place.

Where a Contractor exceeds the specified widths due to the nature of his operations and without authorization, he shall be held responsible for the costs of all additional damages and the amount shall be deducted from his contract price and paid to the affected owners by the Municipality.

A.3 ROAD CROSSINGS

.1 General

- .1 Scope: These specifications apply to all road crossings - Municipal, County, Regional, or Highway Roads. Where the word "Authority" is used, it shall be deemed to apply to the appropriate owning authority. These specifications in no way limit the Authority's Specifications and Regulations governing the construction of drains on their Road Allowance. The Authority will supply no labour, equipment or materials for the construction of the road crossing unless otherwise noted on the drawings.
- .2 Road Occupancy Permit: Where applicable the Contractor must submit an Application for a Road Occupancy Permit to the Authority and allow a minimum of 5 working days (exclusive of holidays) for its review and issuance.
- .3 Road Closure Request and Construction Notification: The Contractor shall submit written notification of construction and request for road closure (if applicable) to the Road Authority/Public Works Manager and the Drainage Engineer or Superintendent for review and approval a minimum of five (5) working days (exclusive of holidays) prior to proceeding with any work on road allowance. It shall be the Road Authority's responsibility to notify all the applicable emergency services, schools, etc. of the road closure or construction taking place.
- .4 Traffic Control: Where the Contractor is permitted to close the road to through traffic, the Contractor shall provide for and adequately sign the detour route to the satisfaction of the Road Authority. Otherwise, the Contractor shall keep the road open to traffic at all times. The Contractor shall provide, for the supply, erection and maintenance, suitable warning signs and/or flagmen in accordance with the Manual of Uniform Traffic Control Devices and to the satisfaction of the Road Authority to notify the motorists of work on the road ahead.



A.3 **ROAD CROSSINGS** (cont'd)

- .5 **Site Meeting/Inspection:** A site meeting shall be held with the affected parties to review in detail the crossing and/or its related works. The Authority's Inspector and/or the Drainage Engineer will inspect the work while in progress to ensure that the work is done in strict accordance with the specifications.
- .6 **Weather:** No construction shall take place during inclement weather or periods of poor visibility.
- .7 **Equipment:** No construction material and/or equipment is to be left within 3 meters of the edge of pavement overnight or during periods of inclement weather.

.2 **Jacking and Boring**

- .1 **Material:** The bore pipe shall consist of new, smooth wall steel pipe, meeting the requirements of H20 loading for road crossings and E80 loading for railway crossings. The minimum size, wall thickness and length shall be as shown on the drawings. Where welding is required, the entire circumference of any joint shall be welded using currently accepted welding practices.
- .2 **Site Preparation and Excavation:** Where necessary, fences shall be carefully taken down as specified in the General Conditions. Prior to any excavation taking place, all areas which will be disturbed shall be stripped of topsoil. The topsoil is to be stockpiled in locations away from the bore operation, off the line of future tile placement and out of existing water runs or ditches. The bore pit shall be located at the upstream end of the bore unless otherwise specified or approved. Bore pits shall be kept back at least 1 meter from the edge of pavement and where bore pits are made in any portion of the shoulder, the excavated material shall be disposed of off the road allowance and the pit backfilled with thoroughly compacted Granular "A" for its entire depth.
- .3 **Installation:** The pipe shall be installed in specified line and grade by a combination of jacking and boring. Upon completion of the operations, both ends of the bore pipe shall be left uncovered until the elevation has been confirmed by the Engineer or Superintendent. The ends of the bore pipe shall be securely blocked off and the location marked by means of a stake extending from the pipe invert to 300mm above the surrounding ground surface.
- .4 **Unstable Soil or Rock:** The Contractor shall contact the Engineer immediately should unstable soil be encountered or if boulders of sufficient size and number to warrant concern are encountered. Any bore pipe partially installed shall be left in place until alternative methods or techniques are determined by the Engineer after consultation with the Contractor, the Superintendent and the owning authority.
- .5 **Tile Connections:** Prior to commencement of backfilling, all tile encountered in excavations shall be reconnected using material of a size comparable to the existing material. Where the excavation is below the tile grade, a compacted granular base is to be placed prior to laying the tile. Payment for each connection will be made at the rate outlined in the Form of Tender and Agreement.
- .6 **Backfill:** Unless otherwise specified, the area below the proposed grade shall be backfilled with a crushed stone bedding. Bore pits and excavations outside of the shoulder area may be backfilled with native material compacted to a density of 95% Standard Proctor. All disturbed areas shall be neatly shaped, have the topsoil replaced and hand seeded. Surplus material from the boring operation shall be removed from the site at the Contractor's expense.
- .7 **Restoration:** The entire affected area shall be shaped and graded to original lines and grades, the topsoil replaced, and the area seeded down at the rate of 85 kg/per ha. unless otherwise specified or in accordance with the M.T.O. Encroachment Permit. Fences shall be restored to their original condition in accordance with the General Conditions.
- .8 **Acceptance:** All work undertaken by the Contractor shall be to the satisfaction of the Engineer.

A.3 **ROAD CROSSINGS** (cont'd)

.3 **Open Cut**

- .1 **Material**: The culvert or sub-drain crossing pipe material shall be specified on the drawings.
- .2 **Site Preparation and Excavation**: Where necessary, fences shall be carefully taken down as specified in the general conditions. Prior to any excavation taking place, the areas which will be disturbed shall be stripped of topsoil. The topsoil is to be stockpiled in locations away from the construction area.
- .3 **Installation**: The pipe shall be installed using bedding and cover material in accordance with Standard Detailed Drawing No. 2 or detail provided on drawings.
- .4 **Unstable Soil or Rock**: The Contractor shall contact the Engineer immediately should unstable soil be encountered or if boulders of sufficient size and number to warrant concern are encountered.
- .5 **Tile Connections**: Prior to commencement of backfilling, all tiles encountered in excavations shall be reconnected using material of a size comparable to the existing material. Where the excavation is below the tile grade, a compacted granular base is to be placed prior to laying the tile. Payment for connections not shown on the drawings shall be an extra to the contract.
- .6 **Backfill**: Backfill from the top of the cover material up to the underside of road base shall meet the requirements for M.T.O. Granular "B". The backfill shall be placed in lifts not exceeding 300mm in thickness and each lift shall be thoroughly compacted to produce a density of 98% Standard Proctor. Granular "B" road base for County Roads and Highways shall be placed to a 450mm thickness and Granular "A" shall be placed to a thickness of 200mm, both meeting M.T.O. requirements. Granular road base materials shall be thoroughly compacted to produce a density of 100% Standard Proctor.

Where the road surface is paved, the Contractor shall be responsible for placing an HL-4 Hot Mix Asphalt patch of the same thickness as the existing pavement. The asphalt patch shall be flush with the existing roadway on each side and not overlap. If specified, the asphalt patch shall not be placed immediately over the road base and the Granular "A" shall be brought up flush with the existing asphalt and a liberal amount of calcium chloride shall be spread on the gravel surface. The asphalt patch must be completed within the time period set out on the drawing.

The excavated material from the trench beyond a point 2.5 meters from the travelled portion or beyond the outside edge of the gravel shoulder, may be used as backfill in the trench in the case of covered drains. This material should be compacted in layers not exceeding 600mm.

A.4 **SURPLUS EXCAVATED MATERIAL AND GRAVEL**

Excess excavated material from open cut installation through roads, railways, laneways and lawn/grass areas, shall be removed and disposed of off-site by the Contractor as part of their lump sum installation price. If as a result of any work, gravel or crushed stone is required and not all the gravel or crushed stone is used in the construction of the works, the Contractor shall haul away such surplus gravel or stone unless otherwise approved.

A.5 **FENCES**

No earth shall be placed against fences and all fences removed by the Contractor are to be replaced by him in as good condition as found. In general, the Contractor will not be allowed to cut existing fences but shall disconnect existing fences at the nearest anchor post or other such fixed joint and shall carefully roll it back out of the way. Where the distance to the closest anchor post or fixed joint exceeds 50 meters, the Contractor will be allowed to cut and splice in accordance with accepted methods and to the satisfaction of the owner and the Engineer or Superintendent. Where existing fences are deteriorated to the extent that existing materials are not salvageable for replacement, the Contractor shall notify the Engineer or the Superintendent prior to dismantling. Fences damaged beyond salvaging by the Contractor's negligence shall be replaced with new materials, similar to those existing, at the Contractor's expense. The replacement of the fences shall be done to the satisfaction of the owner and the Engineer or Superintendent. The site examination should indicate to the Contractor such work, if any, and an allowance should be made in the tendered price.

The Contractor shall not leave any fence open when he is not at work in the immediate vicinity.



A.6 LIVESTOCK

The Contractor shall provide each property owner with 48 hours' notice prior to removing any fences along fields which could possibly contain livestock. Thereafter, the property owner shall be responsible to keep all livestock clear of the construction areas until further notified. Where necessary, the Contractor will be directed to erect temporary fences. The Contractor shall be held responsible for loss or injury to livestock or damage caused by livestock, where the injury or damage is caused by his failure to notify the property owner or through negligence or carelessness on the part of the Contractor.

The Contractor constructing a tile drain shall not be held responsible for damages or injury to livestock occasioned by leaving trenches open for inspection by the Engineer if he notifies the owner at least 48 hours prior to commencement of the work on that portion. The Contractor will be held liable for such damages or injury if the backfilling of such trenches is delayed more than 1 day after acceptance by the Engineer.

A.7 STANDING CROPS

The Contractor shall not be held responsible for damages to standing crops within the working area available and the access route provided if he notifies the owner thereof at least 48 hours prior to commencement of the work on that portion.

A.8 RAILWAYS, HIGHWAYS, UTILITIES

A minimum of forty-eight (48) hours' notice to Railways, Highways and Utilities, exclusive of Saturdays, Sundays and Holidays, shall be required by the Contractor prior to any work being performed and in the case of a pipe being installed by open cutting or boring under a Highway or Railway, a minimum of 72 hours' notice is required.

A.9 UTILITIES

The attention of the Contractor is drawn to the presence of utilities along the course of the drain. The Contractor will be responsible for determining the location of all utilities and will be held liable for any damage to all utilities caused by his operations. The Contractor shall co-operate with all authorities to ensure that all utilities are protected from damage during the performance of the work. The cost of any necessary relocation work shall be borne by the utility. No allowance or claims of any nature will be allowed on account for delays or inconveniences due to utilities relocation, or for inconveniences and delays caused by working around or with existing utilities not relocated.

A.10 IRON BARS

The Contractor shall be held liable for the cost of an Ontario Land Surveyor to replace any iron bars destroyed during the course of construction.

A.11 STAKES

At the time of the survey, stakes are set along the course of the drain at intervals of 50 meters. The Contractor shall ensure that the stakes are not disturbed unless approval is obtained from the Engineer. Any stakes removed by the Contractor without the authority of the Engineer, shall be replaced at the expense of the Contractor. At the request of the Contractor, any stakes which are removed or disturbed by others or by livestock, shall be replaced at the expense of the drain.



A.12 **RIP-RAP**

Rip-rap shall be specified on the drawings and shall conform to the following:

- .1 **Quarry Stone**: shall range in size from 150mm to 300mm evenly distributed and shall be placed to a 300mm thickness on a filter blanket at a 1.5 to 1 slope unless otherwise noted. Filter blanket to be Mirafi 160N or approved equal.
- .2 **Broken Concrete**: may be used in areas outside of regular flows if first broken in maximum 450mm sized pieces and mixed to blend with quarry stone as above. No exposed reinforcing steel shall be permitted.
- .3 **Shot Rock**: shall range in size from 150mm to 600mm placed to a depth of 450mm thickness on a filter blanket at a 1.5:1 slope unless otherwise noted. Filter blanket to be Mirafi 160N or approved equal.

A.13 **GABION BASKETS**

Supply and install gabion basket rip-rap protection as shown on the drawings.

Gabion baskets shall be as manufactured by Maccaferri Gabions of Canada Ltd. or approved equal and shall be assembled and installed in strict accordance with the manufacturer's recommendations.

The gabion fill material shall consist solely of fractured field stone or gabion stone graded in size from 100mm to 200mm (4" to 8") and shall be free of undersized fragments and unsuitable material.

A.14 **RESTORATION OF LAWNS**

- .1 **General**: Areas noted on the drawings to be restored with seeding or sodding shall conform to this specification, and the Contractor shall allow for all costs in his lump sum bid for the following works.
- .2 **Topsoil**: Prior to excavation, the working area shall be stripped of existing topsoil. The topsoil stockpile shall be located so as to prevent contamination with material excavated from the trench. Upon completion of backfilling operations, topsoil shall be spread over the working area to a depth equal to that which previously existed but not less than the following:
 - Seeding and sodding - minimum depth of 100mm
 - Gardens - minimum depth of 300mm

In all cases where a shortfall of topsoil occurs, whether due to lack of sufficient original depth or rejection of stockpiled material due to Contractor's operations, imported topsoil from acceptable sources shall be imported at the Contractor's expense to provide the specified depths. Topsoil shall be uniformly spread, graded, and cultivated prior to seeding or sodding. All clods or lumps shall be pulverized, and any roots or foreign matter shall be raked up and removed as directed.

.3 **Sodding**

- .1 **Materials**: Nursery sod to be supplied by the Contractor shall meet the current requirements of the Ontario Sod Growers Association for No. 1 Bluegrass Fescue Sod.
- .2 **Fertilizer**: Prior to sod placement, approved fertilizer shall be spread at the rate of 5kg/100m² of surface area and shall be incorporated into such surfaces by raking, discing or harrowing. All surfaces on which sod is to be placed shall be loose at the time of placing sod to a depth of 25mm.
- .3 **Placing Sod**: Sod shall be laid lengthwise across the face of slopes with ends close together. Sod shall be counter sunk along the joints between the existing grade and the new sodding to allow for the free flow of water across the joint. Joints in adjacent rows shall be staggered and all joints shall be pounded and rolled to a uniform surface.

On slopes steeper than 3 to 1, and in unstable areas, the Engineer may direct the Contractor to stake sod and/or provide an approved mesh to prevent slippages. In all cases where such additional work is required, it will be deemed an extra to the contract and shall be paid for in accordance with the General Conditions. No sod shall be laid when frozen nor upon frozen ground nor under any other condition not favourable to the growth of the sod. Upon completion of sod laying the Contractor shall thoroughly soak the area with water to a depth of 50mm. Thereafter it will be the responsibility of the property owner to maintain the area in a manner so as to promote growth.

A.14 RESTORATION OF LAWNS (cont'd)

- .4 **Seeding:** Seed to be supplied by the Contractor shall be "high quality grass seed" harvested during the previous year, and shall be supplied to the project in the supplier's original bags on which a tag setting out the following information is affixed:

- Year or Harvest - recommended rate of application
- Type of Mixture - fertilizer requirements

Placement of seed shall be by means of an approved mechanical spreader. All areas on which seed is to be placed shall be loose at the time of placing seed, to a depth of 25mm. Seed and fertilizer shall be spread in accordance with the supplier's recommendations unless otherwise directed by the Engineer. Thereafter it will be the responsibility of the property owner to maintain the area in a manner so as to promote growth.

- .5 **Settlement:** The Contractor shall be responsible during the one-year guarantee period for the necessary repair of restored areas due to trench settlement. Areas where settlement does not exceed 50mm may be repaired by top dressing with fine topsoil. In areas where settlement exceeds 50mm, the Contractor will be required to backfill the area with topsoil and restore with seeding and/or sodding as originally specified.

A.15 RESTORATION OF ROADS AND LANEWAYS

- .1 **Gravel:** Restoration shall be in accordance with the applicable standard detailed drawing or as shown on the drawings.
- .2 **Asphalt and Tar and Chip:** Prior to restoration all joints shall be neatly sawcut. Restoration shall be as a in gravel above with the addition of the following:
- .1 Roads shall have the finished grade of Granular 'A', allow two courses of hot-mix asphalt (M.T.O. 310), 80mm HL6 and 40mm HL3 or to such greater thickness as may be required to match the existing.
 - .2 Laneways shall have the finished grade of Granular 'A' allow one 50mm minimum course of hot-mix asphalt (HL3) or greater as may be required to match existing.

SECTION B - OPEN DRAIN

I N D E X

<u>SECTION NUMBER</u>		<u>PAGE NO.</u>
B.1	PROFILE.....	7
B.2	ALIGNMENT.....	7
B.3	CLEARING AND GRUBBING.....	7
B.4	EXCAVATION.....	7
B.5	EXCAVATED MATERIAL.....	7
B.6	EXCAVATION THROUGH BRIDGES AND CULVERTS.....	8
B.7	PIPE CULVERT.....	8
B.8	MOVING DRAINS OFF ROADS.....	8
B.9	TRIBUTARY OUTLETS.....	8
B.10	SEDIMENT BASINS AND TRAPS.....	9
B.11	SEEDING.....	9

SECTION B
OPEN DRAIN

B.1 PROFILE

The profile drawing shows the depth of cuts from the ground beside the stake to the final invert of the ditch in meters and decimals of a meter and also the approximate depth of cuts from the existing bottom of the ditch to the elevation of the ditch bottom. These cuts are established for the convenience of the Contractor; however, benchmarks will govern the final elevation of the drain. Benchmarks have been established along the course of the drain and their locations and elevations are noted on the profile drawing. A uniform grade shall be maintained between stakes in accordance with the profile drawing.

B.2 ALIGNMENT

The drain shall be constructed in a straight line and shall follow the course of the present drain or water run unless otherwise noted on the drawings. Where it is necessary to straighten any bends or irregularities in alignment not noted on the drawings, the Contractor shall contact the Engineer or Superintendent before commencing the work.

B.3 CLEARING AND GRUBBING

Prior to commencement of work, all trees, scrub, fallen timber and debris shall be removed from the side slopes of the ditch and for such a distance on the working side so as to eliminate any interference with the construction of the drain or the spreading of the spoil. The side slopes shall be neatly cut and cleared flush with slope whether or not they are affected directly by the excavation. With the exception of large stumps causing damage to the drain, the side slope shall not be grubbed. All other cleared areas shall be grubbed and the stumps put into piles for disposal by the owner.

All trees or limbs 150mm (6") or larger, that it is necessary to remove, shall be considered as logs and shall be cut and trimmed, and left in the working width separate from the brush, for use or disposal by the owner. Trees or limbs less than 150mm in diameter shall be cut in lengths not greater than 5 meters and placed in separate piles with stumps spaced not less than 75 meters apart in the working width, for the use or disposal of the owner. In all cases, these piles shall be placed clear of excavated materials, and not be piled against standing trees. No windrowing will be permitted. The clearing and grubbing and construction of the drain are to be carried out in two separate operations and not simultaneously at the same location.

B.4 EXCAVATION

The bottom width and the side slopes of the ditch shall be those shown on the profile drawing.

Unless otherwise specified on the drawings, only the existing ditch bottom is to be cleaned out and the side slopes are not to be disturbed. Where existing side slopes become unstable because of construction, the Contractor shall immediately contact the Engineer or Superintendent. Alternative methods of construction and/or methods of protection will then be determined, prior to continuing the work.

Where an existing drain is being relocated or where a new drain is being constructed, the Contractor shall, unless otherwise specified, strip the topsoil for the full width of the drain, including the location of the spoil pile. Upon completion of levelling, the topsoil shall be spread to an even depth across the full width of the spoil.

B.5 EXCAVATED MATERIAL

Excavated material shall be deposited on either or both sides of the drain as indicated on the drawings or as directed by the Engineer or Superintendent. A buffer strip of not less than 3 meters in width through farmed lands and 2 meters in width through bush areas shall be left along the top edges of the drain. The buffer strip shall be seeded and/or incorporated as specified on the drawings. The material shall be deposited beyond the specified buffer strip.



B.5 EXCAVATED MATERIAL (cont'd)

No excavated material shall be placed in tributary drains, depressions, or low areas which direct water into the ditch so that water will be trapped behind the spoil bank. The excavated material shall be placed and levelled to a minimum width to depth ratio of 50 to 1 unless instructed otherwise. The edge of the spoil bank away from the ditch shall be feathered down to the existing ground; the edge of the spoil bank nearest the ditch shall have a maximum slope of 2 to 1. The material shall be levelled such that it may be cultivated with ordinary farm equipment without causing undue hardship on machinery and personnel. No excavated material shall cover any logs, scrub, debris, etc. of any kind.

Where it is necessary to straighten any unnecessary bends or irregularities in the alignment of the ditch, the excavated material from the new cut shall be used for backfilling the original ditch. Regardless of the distance between the new ditch and the old ditch no extra compensation will be allowed for this work and must be included in the Contractor's lump sum price for the open work.

Any stones 150mm or larger left exposed on top of the levelled excavated material shall be removed and disposed of as an extra to the contract unless otherwise noted on plans.

B.6 EXCAVATION THROUGH BRIDGES AND CULVERTS

The Contractor shall excavate the drain to the full specified depth and width under all bridges. Where the bridge or culvert pipe is located within a road allowance, the excavated material shall be levelled within the road allowance. Care shall be taken not to adversely affect existing drainage patterns. Temporary bridges may be carefully removed and left on the bank of the drain but shall be replaced by the Contractor when the excavation is completed unless otherwise specified. Permanent bridges must be left intact. All necessary care and precautions shall be taken to protect the structure. The Contractor shall notify the Engineer or Superintendent if excavation may cause the structure to undermine or collapse.

B.7 PIPE CULVERTS

Where specified on the drawings, the existing culvert shall be carefully removed, salvaged and either left at the site for the owner or reinstalled at a new grade or location. The value of any damage caused to the culvert due to the Contractor's negligence in salvage operation will be determined and deducted from the contract price.

All pipe culverts shall be installed in accordance with the standard detail drawings as noted on the drawings. If couplers are required, 5 corrugation couplers shall be used for up to and including 1200mm dia. pipe and 10 corrugation couplers for greater than 1200mm dia.

B.8 MOVING DRAINS OFF ROADS

Where an open drain is being removed from a road allowance, it must be reconstructed wholly on the adjacent lands with a minimum distance of 2.0 meters between the property line and the top of the bank, unless otherwise noted on the drawings. The excavated material shall be used to fill the existing open ditch and any excess excavated material shall be placed and levelled on the adjacent lands beyond the buffer strip, unless otherwise noted. Any work done on the road allowance, with respect to excavation, disposal of materials, installation of culverts, cleaning under bridges, etc., shall be to the satisfaction of the Road Authority and the Engineer.

B.9 TRIBUTARY OUTLETS

The Contractor shall guard against damaging the outlets of tributary drains. Prior to commencement of excavation on each property the Contractor shall contact the owner and request that all known outlet pipes be marked by the owner. All outlets so marked or visible or as noted on the profile, and subsequently damaged by the Contractor's operations will be repaired by the Contractor at his cost. All outlet pipes repaired by the Contractor under direction of the Drainage Superintendent or Engineer which were not part of the Contract shall be considered an extra to the contract price.



B.10 **SEDIMENT BASINS AND TRAPS**

The Contractor shall excavate sediment basins prior to commencement of upstream work as shown on the plan and profile. The dimension of the basin will be in a parabolic shape with a depth of 450mm below the proposed ditch bottom and the basin will extend along the drain for a minimum length of 15 meters.

A sediment trap 300mm deep and 5 meters long with silt fence placed across ditch bottom on the downstream end of the trap shall be constructed prior to and maintained during construction, to prevent silt from flushing downstream. The silt fence shall be removed and disposed of after construction.

B.11 **SEEDING**

- .1 **Delivery:** The materials shall be delivered to the site in the original unopened containers which shall bear the vendor's guarantee of analysis and seed will have a tag showing the year of harvest.
- .2 **Hydro Seeding:** Areas specified on drawings shall be hydro seeded and mulched upon completion of construction in accordance with O.P.S.S. 572 and with the following application rates:

Primary Seed (85 kg/ha.):	50% Creeping Red Fescue 40% Perennial Ryegrass 5% White Clover
Nurse Crop	Italian (Annual) Ryegrass at 25% of Total Weight
Fertilizer (300 kg/ha.)	8-32-16
Hydraulic Mulch (2000 kg/ha.)	Type "B"
Water (52,700 litres/ha.)	

Seeding shall not be completed after September 30.

- .3 **Hand Seeding:** Hand seeding shall be completed daily with the seed mixture and fertilizer and application rate shown under "Hydro Seeding" above. Placement of the seed shall be by means of an approved mechanical spreader. Seeding shall not be completed after September 30.



SECTION C - TILE DRAIN

I N D E X

<u>SECTION NUMBER</u>	<u>PAGE NO.</u>
C.1 PIPE MATERIALS.....	10
C.2 TESTING.....	10
C.3 LINE.....	10
C.4 CLEARING AND GRUBBING.....	11
C.5 PROFILE.....	11
C.6 GRADE.....	11
C.7 EXCAVATION.....	11
C.8 INSTALLATION.....	12
C.9 ROAD AND LANEWAY SUB-SURFACE CROSSINGS.....	12
C.10 BACKFILLING.....	13
C.11 UNSTABLE SOIL.....	13
C.12 ROCKS.....	13
C.13 BROKEN, DAMAGED, OR EXCESS TILE.....	13
C.14 TRIBUTARY DRAINS.....	13
C.15 OUTLET PIPES.....	14
C.16 CATCHBASINS AND JUNCTION BOXES.....	14
C.17 BLIND INLETS.....	15
C.18 GRASSED WATERWAY.....	15
C.19 BACKFILLING EXISTING DITCHES.....	15
C.20 RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEM.....	15

SECTION C

TILE DRAIN

C.1 PIPE MATERIALS

- .1 **Concrete Tile:** All tile installed under these specifications shall be sound and of first quality and shall meet all A.S.T.M. Specifications current at the time of tendering. Concrete tile shall conform to Designation C412 "Extra Quality" except that the minimum compression strengths shall be increased by 25%. Heavy Duty tile shall conform to Designation C412 "Heavy Duty Extra Quality".
- .2 **Corrugated Steel Pipe:** Unless otherwise specified, all metal pipe shall be corrugated, riveted steel pipe or helical corrugated steel pipe with a minimum wall thickness of 1.6mm (16 gauge) and shall be fully galvanized.
- .3 **Plastic Tubing:** The plans will specify the type of tubing or pipe, such as non-perforated or perforated (with or without filter material).
 - i) Corrugated Plastic Drainage Tubing shall conform to the current O.F.D.A. Standards
 - ii) Heavy Duty Corrugated Plastic Pipe shall be "Boss 1000" manufactured by the Big 'O' Drain Tile Co. Ltd. or approved equal
- .4 **Concrete Sewer Pipe:** The Designations for concrete sewer pipe shall be C14 for concrete sewer pipe 450mm (18") diameter or less; and C76 for concrete sewer pipe greater than 450mm (18") diameter. Where closed joints are specified, joints shall conform to the A.S.T.M. Specification C443.

Where concrete sewer pipe "seconds" are permitted the pipe should exhibit no damages or cracks on the barrel section and shall be capable of satisfying the crushing strength requirements for No.1, Pipe Specifications (C14 or C76). The pipe may contain cracks or chips in the bell or spigot which could be serious enough to prevent the use of rubber gaskets, but which are not so severe that the joint could not be mortared conventionally.
- .5 **Plastic Sewer Pipe:** The plans will specify the type of sewer pipe, such as non-perforated or perforated (with or without filter material). All plastic sewer pipe and fittings shall be "Boss Poly-Tite", ULTRA-RIB", "Challenger 3000" or approved equal with a minimum stiffness of 320 kpa at 5% deflection.
- .6 **Plastic Fittings:** All plastic fittings shall be "Boss 2000" or "Challenger 2000" with split coupler joints or approved equal.

C.2 TESTING

The manufacturer shall provide specimens for testing if required. The random selection and testing procedures would follow the appropriate A.S.T.M. requirements for the material being supplied. The only variation is the number of tiles tested: 200mm to 525mm dia. - 5 tile tested, 600mm to 900mm dia. - 3 tile tested. The drain will be responsible for all testing costs for successful test results. Where specimens fail to meet the minimum test requirements, the manufacturer will be responsible for the costs of the unsuccessful tests. Alternately, the Engineer may accept materials on the basis of visual inspections and the receipt in writing from the Manufacturer of the results of daily production testing carried out by the Manufacturer for the types and sizes of the material being supplied.

C.3 LINE

Prior to stringing the tile, the Contractor shall contact the Superintendent or the Engineer in order to establish the course of the drain.

Where an existing drain is to be removed and replaced in the same trench by the new drain or where the new drain is to be installed parallel to an existing drain, the Contractor shall excavate test holes to locate the existing drain (including repairing drainage tile) at intervals along the course of the drain as directed by the Engineer and/or the Superintendent. The costs for this work shall be included in the tender price.

Where an existing drain is to be removed and replaced in the same trench by the new drain, all existing tiles shall be destroyed, and all broken tile shall be disposed of offsite.



C.3 **LINE** (cont'd)

The drain shall run in as straight a line as possible throughout its length, except that at intersections of other water courses or at sharp corners, it shall run on a curve of at least a 15-meter radius. The new tile drain shall be constructed at an offset from and generally parallel with any ditch or defined watercourse in order that fresh backfill in the trench will not be eroded by the flow of surface water. The Contractor shall exercise care not to disturb any existing tile drain or drains which parallel the course of the new drain, particularly where the new and the existing tile act together to provide the necessary capacity.

C.4 **CLEARING AND GRUBBING**

Prior to commencement of drain construction, all trees, scrub, fallen timber and debris shall be cleared and grubbed from the working area. Unless otherwise specified, the minimum width to be cleared and grubbed shall be 20 meters in all hardwood areas and 30 meters in all softwood areas (willow, poplar, etc.), the width being centred on the line of the drain.

All trees or limbs 150mm (6") or larger, that it is necessary to remove, shall be considered as logs and shall be cut and trimmed, and left in the working width separate from the brush, for use or disposal by the owner. Trees or limbs less than 150mm in diameter shall be cut in lengths not greater than 5 meters and placed in separate piles with stumps spaced not less than 75 meters apart in the working width, for the use or disposal of the owner. In all cases, these piles shall be placed clear of excavated materials, and not be piled against standing trees. No windrowing will be permitted. The clearing and grubbing and construction of the drain are to be carried out in two separate operations and not simultaneously at the same location.

C.5 **PROFILE**

The profile drawing shows the depth of cuts from the ground beside the stake to the final invert of the drain in meters and decimals of a meter. These cuts are established for the convenience of the Contractor; however, benchmarks will govern the final elevation of the drain. Benchmarks have been established along the course of the drain and their locations and elevations are noted on the profile drawing.

C.6 **GRADE**

The Contractor shall provide and maintain in good working condition, an approved system of establishing a grade sight line to ensure the completed works conform to the profile drawing. In order to confirm the condition of his system and to eliminate the possibility of minor errors on the drawings, he shall ensure his grade sight line has been confirmed to be correct between a minimum of two control points (bench marks) and shall spot check the actual cuts and compare with the plan cuts prior to commencement of tile installation. He shall continue this procedure from control point to control point as construction of the drain progresses. When installing a drain towards a fixed point such as a bore pipe, the Contractor shall uncover the pipe and confirm the elevation, using the sight line, a sufficient distance away from the pipe in order to allow for any necessary minor grade adjustments to be made in order to conform to the as built elevation of the bore pipe. All tile improperly installed due to the Contractor not following these procedures shall be removed and replaced entirely at the Contractor's cost.

When following the procedures and a significant variation is found, the Contractor shall immediately cease operations and advise the Engineer.

C.7 **EXCAVATION**

- .1 **Trench:** Unless otherwise specified, all trenching shall be done with a recognized farm tiling machine approved by the Engineer or Superintendent. The machine shall shape the bottom of the trench to conform to the outside diameter of the pipe for a minimum width of one-half of the outside diameter. The minimum trench width shall be equal to the outside diameter of the tile to be installed plus 100mm (4") on each side unless otherwise approved. The maximum trench width shall be equal to the outside diameter of the tile to be installed plus 250mm (10") on each side unless otherwise approved.



C.7 **EXCAVATION** (cont'd)

- .2 **Scalping**: Where the depths of cuts in isolated areas along the course of the drain as shown on the profile exceed the capacity of the Contractor's tiling machine, he shall lower the surface grade in order that the tiling machine may trench to the correct depth. Topsoil is to be stripped over a sufficient width that no subsoil will be deposited on top of topsoil. Subsoil will then be removed to the required depth and piled separately. Upon completion of backfilling, the topsoil will then be replaced to an even depth over the disturbed area. The cost for this work shall be included in his tender price.
- .3 **Excavator**: Where the Contractor's tiling machine consistently does not have the capacity to dig to the depths required or to excavate the minimum trench width required, he shall indicate in the appropriate place provided on the tender form his proposed methods of excavation.
- Where the use of an excavator is either specified on the drawings or approved as evidenced by the acceptance of his tender on which he has indicated the proposed use of a backhoe he shall conform to the following requirements:
- a) the topsoil shall be stripped and replaced in accordance with Section .2 "Scalping".
 - b) all tile shall be installed on a bed of 19mm crushed stone with a minimum depth of 150mm which has been shaped to conform to the lower segment of the tile.
 - c) the Contractor shall allow for the cost of the preceding requirements (including the supply of the crushed stone) in his lump sum tender price unless it is otherwise provided for in the contract documents.
- .4 **Backfilling Ditch**: Where the contract includes for a closed drain to replace an open drain and the ditch is to be backfilled, the Contractor shall install the tile and backfill the trench prior to backfilling the ditch unless otherwise noted. The distance the trench shall be located away from the ditch shall be as noted on the drawings, (beyond area required for stockpiling topsoil and backfilling). After tile installation is complete topsoil (if present) shall be stripped and stockpiled within the above limits prior to backfilling of ditch. Only tracked equipment shall be permitted to cross backfilled tile trench and must be at 90 degrees to line of tile.

C.8 **INSTALLATION**

The tile is to be laid with close fitting joints and in regular grade and alignment in accordance with the plan and profile drawings. The tiles are to be bevelled, if necessary, to ensure close joints (in particular around curves). Where, in heavy clay soils, the width of a joint exceeds 10mm the joint shall be wrapped with filter cloth as below. Where the width of a joint exceeds 12mm the tile shall first be removed and the joint bevelled to reduce the gap. The maximum deflection of one tile joint shall be 15 degrees. Where a drain connects to standard or ditch inlet catchbasins or junction box structures, the Contractor shall include in his tender price for the supply and installation of compacted Granular 'A' bedding under areas backfilled from the underside of the pipe to undisturbed soil. The connections will then be grouted.

Where a tile drain passes through a bore pit, the Tile Contractor shall include in his tender price for the supply and placement of compacted Granular "A" bedding from the underside of the pipe down to undisturbed soil within the limits of the bore pit.

As above and where soil conditions warrant, the Engineer may require (or as specified on the drawings) that each tile joint be wrapped with synthetic filter cloth. The width of the filter cloth shall be 300mm wide for tile sizes of 150mm to 300mm and 400mm wide for sizes of 350mm to 750mm. The filter cloth shall cover the full perimeter of the tile and overlap a minimum of 100mm or as specified on the drawings. The type of cloth shall be Mirafi 140NL for loam soils and 150N for sandy soil. Any such work not shown on the drawings shall be considered as an addition to the contract price unless specified on the drawings.

C.9 **ROAD AND LANEWAY SUB-SURFACE CROSSINGS**

All road and laneway crossings may be made with an open cut in accordance with standard detailed drawings in the specifications or on the drawings. The exact location of the crossing shall be verified and approved by the Road Authority and the Engineer and/or Superintendent.

C.10 BACKFILLING

As the laying of the tile progresses, blinding up to the springline including compaction by tamping (by hand) is to be made on both sides of the tile. No tile shall be backfilled until inspected by the Engineer or Drainage Superintendent unless otherwise approved by the Engineer.

The remainder of the trench shall be backfilled with special care being taken in backfilling up to a height approximately 150mm above the top of the tile to ensure that no tile breakage occurs. During the backfilling operation no equipment shall be operated in a way that would transfer loads onto the tile trench. Surplus material is to be mounded over the tile trench so that when settlement takes place the natural surface of the ground will be restored. Upon completion, a minimum cover of 600mm is required over all tile. Where stones larger than 150mm are present in the backfill material, they shall be separated from the material and disposed of by the Contractor.

Where a drain crosses a lawn area, the backfilling shall be carried out as above except that, unless otherwise specified, the backfill material shall be mechanically compacted to eliminate settlement.

C.11 UNSTABLE SOIL

The Contractor shall immediately contact the Engineer or Superintendent if quicksand is encountered, such that installation with a tiling machine is not possible. The Engineer shall, after consultation with the Superintendent and Contractor, determine the action necessary and a price for additions or deletions shall be agreed upon prior to further drain installation. Where directed by the Engineer, test holes are to be dug to determine the extent of the affected area. Cost of test holes shall be considered an addition to the contract price.

C.12 ROCKS

The Contractor shall immediately contact the Engineer or Superintendent if boulders of sufficient size and number are encountered such that the Contractor cannot continue trenching with a tiling machine. The Engineer or Superintendent may direct the Contractor to use some other method of excavating to install the drain. The basis of payment for this work shall be determined by the Engineer and Drainage Superintendent.

If only scattered large stones or boulders are removed on any project, the Contractor shall haul same to a nearby bush or fence line, or such other convenient location as approved by the Landowners(s).

C.13 BROKEN, DAMAGED TILE OR EXCESS TILE

The Contractor shall remove and dispose of off-site all broken (existing or new), damaged or excess tile or tiles. If the tile is supplied by the Municipality, the Contractor shall stockpile all excess tile in readily accessible locations for pickup by the Municipality upon the completion of the job.

C.14 TRIBUTARY DRAINS

Any tributary tile encountered in the course of the drain shall be carefully taken up by the Contractor and placed clear of the excavated earth. If the tributary tile drains encountered are clean or reasonably clean, they shall be connected into the new drain. Where existing drains are full of sediment, or contain pollutants, the decision to connect those drains to the new drain shall be left to the Engineer or Superintendent. Each tributary tile connection made by the Contractor shall be located and marked with a stake and no backfilling shall take place until the connection has been approved by the Engineer or Superintendent.

For tributary drains 150mm dia. or smaller connected to new tiles 250mm dia. or larger, and for 200mm dia. connected to 350mm dia. or larger, the Contractor shall neatly cut a hole in the middle of a tile length. The connections shall be made using a prefabricated adaptor. All other connections shall be made with prefabricated wyes or tees conforming to Boss 2000 split coupler or approved equal.

Where an open drain is being replaced by a new tile drain, existing tile outlets entering the ditch from the side opposite the new drain shall be extended to the new drain. All existing metal outlet pipes shall be carefully removed, salvaged, and left for the owner. Where the grade of the connection passes through the newly placed backfill in the ditch, the backfill material below the connection shall be thoroughly compacted and metal pipe of a size compatible with the tile outlet shall be installed so that a minimum length of 2 meters at each end is extending into undisturbed soil.



C.14 **TRIBUTARY DRAINS** (cont'd)

Where locations of tiles are shown on the drawings the Contractor shall include in his tender price, all costs for connecting those tiles to the new drain regardless of length.

Where tiles not shown on the drawings are encountered in the course of the drain, and are to be connected to the new drain, the Contractor shall be paid for each connection at the rate outlined in the Form of Tender and Agreement.

C.15 **OUTLET PIPES**

Corrugated steel pipe shall be used to protect the tile at its outlet. It shall have a hinged metal grate with a maximum spacing between bars of 40mm. The corrugated steel pipe shall be bevelled at the end to generally conform to the slope of the ditch bank and shall be of sufficient size that the tile can be inserted into it to provide a solid connection. The connection will then be grouted immediately.

The installation of the outlet pipe and the required rip-rap protection shall conform to the standard detailed drawing as noted on the drawing.

C.16 **CATCHBASINS AND JUNCTION BOXES**

- .1 **Catchbasins:** Unless otherwise noted or approved, catchbasins shall be in accordance with O.P.S.D. 705.010, 705.030. All catchbasins shall include two - 150mm riser sections for future adjustments. All ditch inlet catchbasins shall include one 150mm riser section for future adjustments. The catchbasin top shall be a "Bird Cage" type substantial steel grate, removable for cleaning and shall be inset into a recess provided around the top of the structure. The grate shall be fastened to the catchbasin with bolts into the concrete. Spacing of bars on grates for use on 600mmx600mm structures shall be 65mm centre to centre. Spacing of bars on grates for use on structures larger than 600mmx600mm shall be 90mm with a steel angle frame.

The exact location and elevation of catchbasins shall be approved by the Road Authority or the Engineer/Superintendent. Catchbasins offset from the drain shall have "Boss 2000" 200mm diameter leads or approved equal unless otherwise noted and the leads shall have a minimum of 600mm of cover. The leads shall be securely grouted at the structures and the drain.

- .2 **Junction Boxes:** Junction boxes shall be the precast type unless otherwise approved. Dimensions for precast junction boxes shall conform to those for catchbasins. The inside dimensions of the box shall be a minimum of 100mm larger than the outside diameter of the largest pipe being connected. The minimum cover over the junction box shall be 600mm. Benching to spring line shall be supplied with all junction boxes.
- .3 **Connections:** Catchbasins and junction boxes shall not be ordered until elevations of existing pipes being connected have been verified in the field as indicated on the drawings. All connections shall be securely grouted at both the inside and outside walls of the structure.
- .4 **Installation:** Where the native material is clay, all catchbasins shall be backfilled with an approved granular material placed and compacted to a minimum width of 300mm on all sides with the following exception. Where the native material is sandy or granular in nature it may be used as backfill. Filter cloth shall be placed between the riser sections of all catchbasins.

Where the Contractor has over excavated or where ground conditions warrant, the structure shall be installed on a compacted granular base.

The Contractor shall include in his tender price for the construction of a berm behind all ditch inlet structures. The berm shall be constructed of compacted clay keyed 300mm into undisturbed soil. Topsoil shall be distributed to a 65mm thickness and seeded unless otherwise specified. The Contractor shall also include for regrading, shaping and seeding of road ditches for a maximum of 15 meters each way from all catchbasins.



C.17 BLIND INLETS

Where specified, blind inlets shall be installed along the course of the drain in accordance with details on the drawings.

C.18 GRASSED WATERWAY

Topsoil to be stripped from construction area and stockpiled prior to construction of waterway. Waterway to be graded into a parabolic shape to the width shown on the drawings. Topsoil to be relevelled over the waterway and other areas disturbed by construction.

Waterway to be prepared for seeding by harrowing and then seeded by drilling followed by rolling. Seeding rate to be 85 Kg/Ha with the following mixture:

- 30% Canon Canada Bluegrass
- 25% Koket Chewings Fescue
- 30% Rebel Tall Fescue
- 15% Diplomat Perennial Rye
- Plus #125 Birdsfoot Trefoil (25% of Total Weight)

C.19 BACKFILLING EXISTING DITCHES

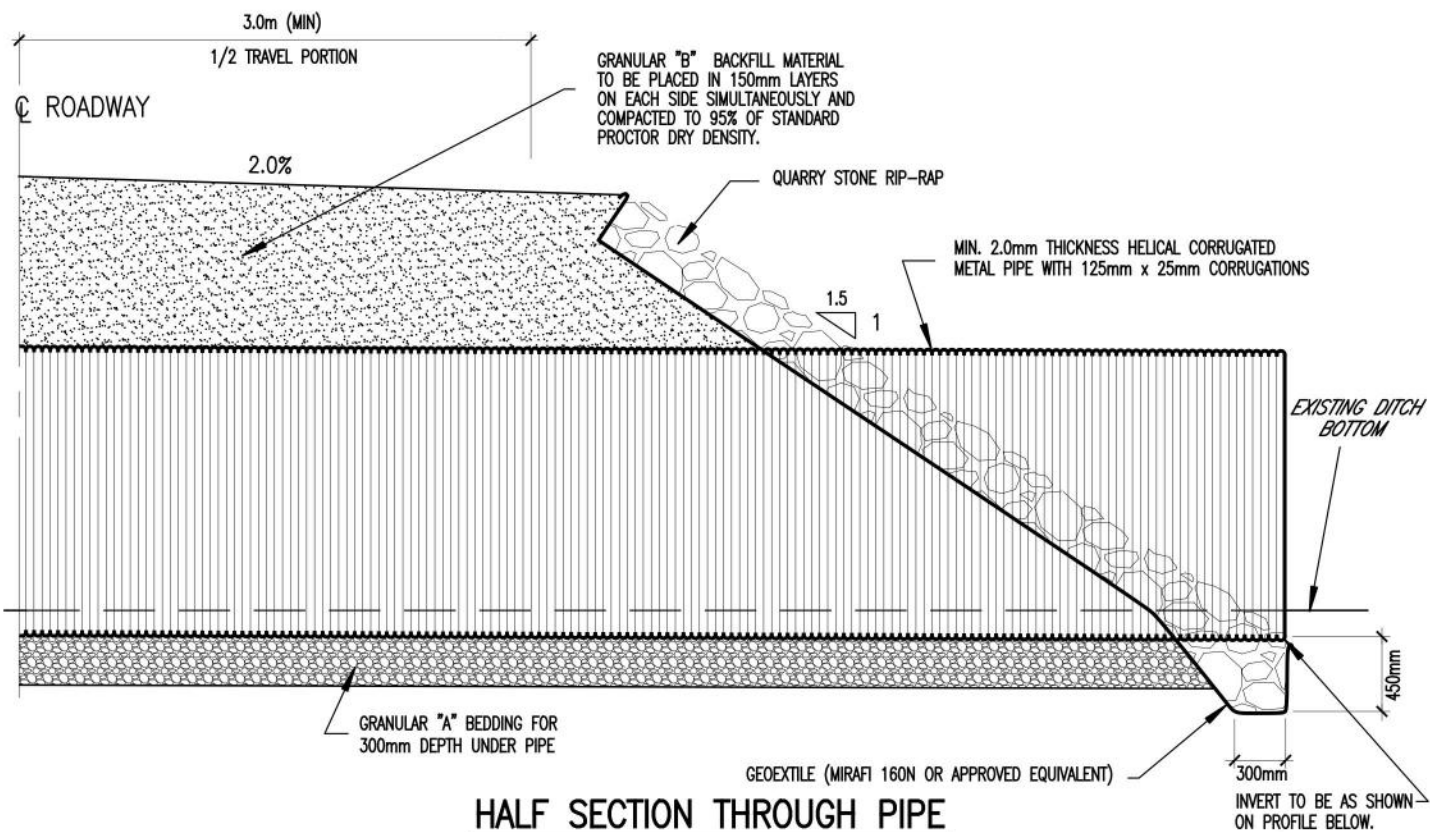
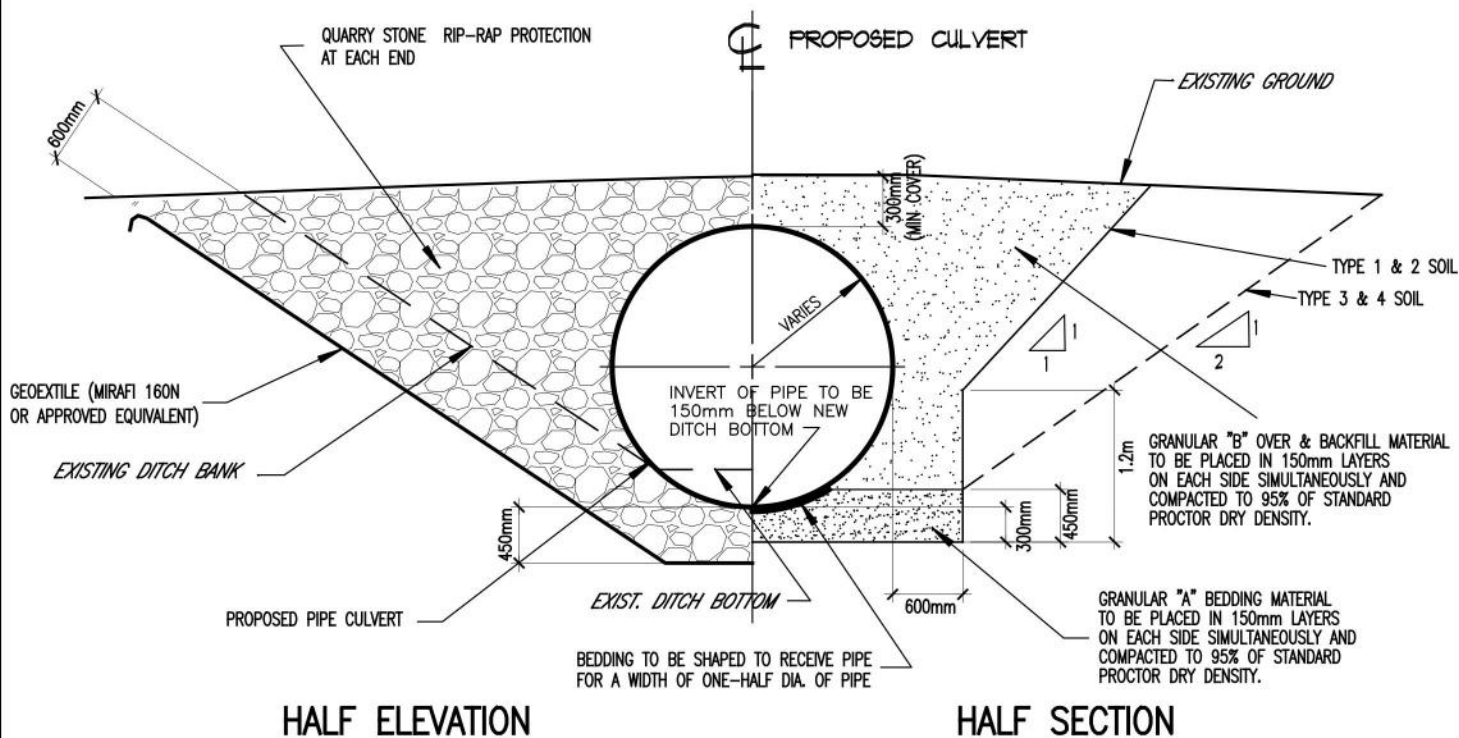
The Contractor shall backfill the ditch sufficiently for traversing by farm machinery. If sufficient material is not available from the old spoil banks to fill in the existing ditch, the topsoil shall be stripped and the subsoil shall be bulldozed into the ditch and the topsoil shall then be spread over the backfilled ditch unless otherwise specified on the contract drawings. The Contractor shall ensure sufficient compaction of the backfill and if required, repair excess settlement up to the end of the warranty period. The final grade of the backfilled ditch shall provide an outlet for surface water.

C.20 RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEM

Drainage guide for Ontario, Ministry of Agriculture, Food and Rural Affairs Publication Number 29 and its amendments, dealing with the construction of Subsurface Drainage systems, shall be the guide to all methods and materials to be used in the construction of tile drains except where superseded by other specifications of this contract.

The requirements of licensing of operators, etc. which apply to the installation of closed drains under the Tile Drainage Act shall also be applicable to this contract in full unless approval otherwise is given in advance by the Engineer.





NOTES

- 1) WHERE THE CULVERT IS TO BE INSTALLED IN POOR SOIL CONDITIONS, THE BEDDING MATERIAL SHALL BE 19mm CRUSHED STONE COMPLETELY WRAPPED IN GEOTEXTILE SUCH AS MIRAFI 160N OR APPROVED EQUIVALENT.

TYPICAL FARM CULVERT INSTALLATION DETAIL

Scale: N.T.S.

Approved by:

Date: January 1983

Drawn by: jk

M.P.D.

Revised: November 2000

ELEVATION & SECTION

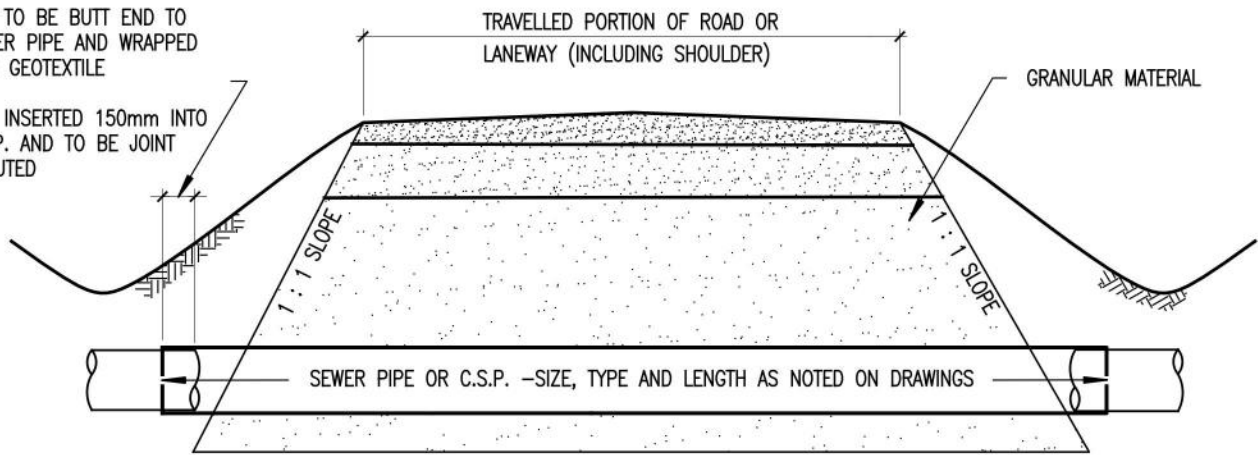


SPRIET ASSOCIATES LONDON LIMITED
CONSULTING ENGINEERS ARCHITECTS

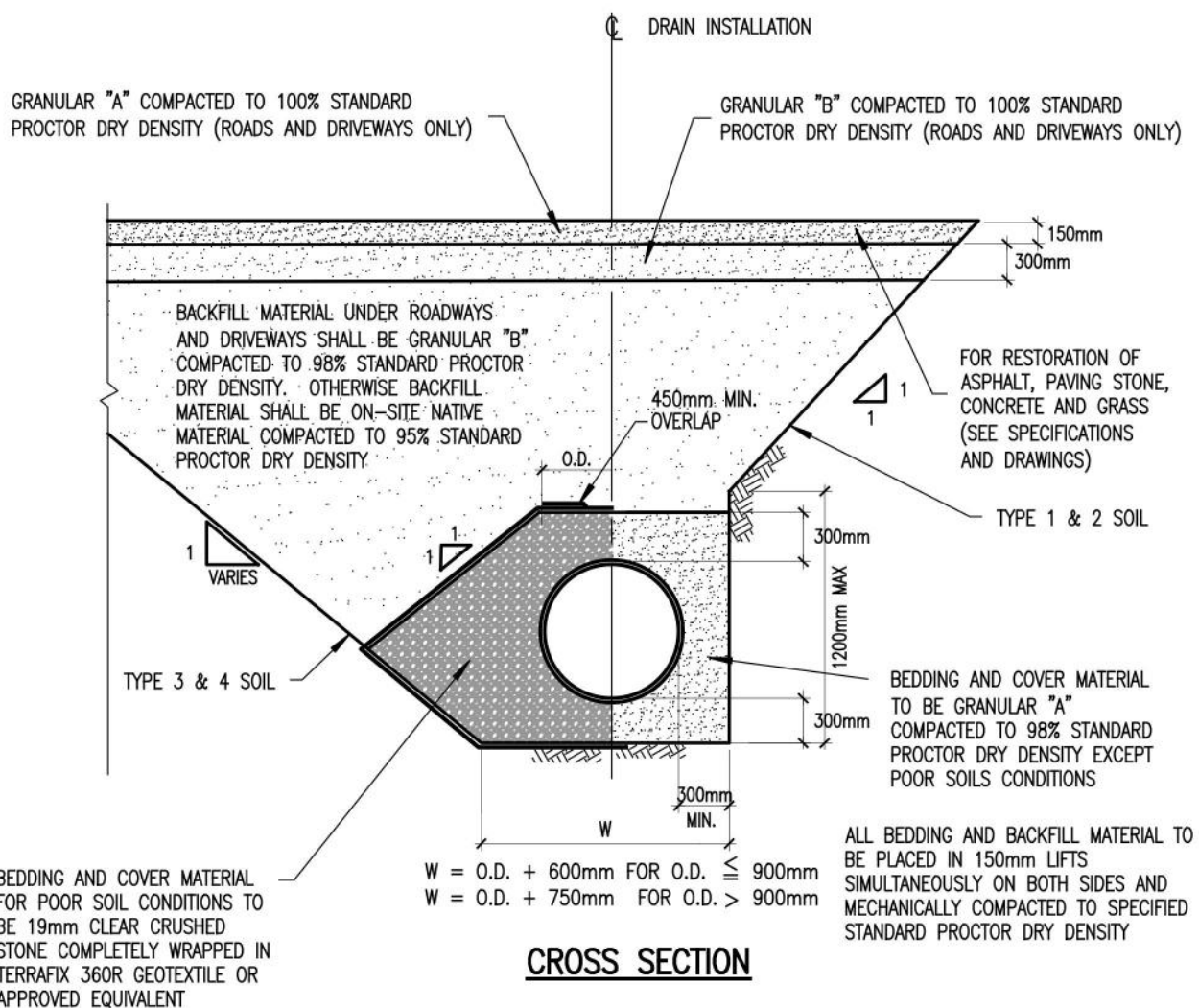
STANDARD
DETAILED
DRAWING
No. 01

1. TILE TO BE BUTT END TO
SEWER PIPE AND WRAPPED
WITH GEOTEXTILE

2. TILE INSERTED 150mm INTO
C.S.P. AND TO BE JOINT
GROUTED



SECTION THROUGH PIPE



CROSS SECTION

TYPICAL INSTALLATION DETAIL FOR SEWER PIPE UNDER DRIVEWAYS AND TRAVELLED PORTIONS OF ROADS

Scale: N.T.S.

Approved by:

Date: January 1983

Drawn by: jk

M.P.D.

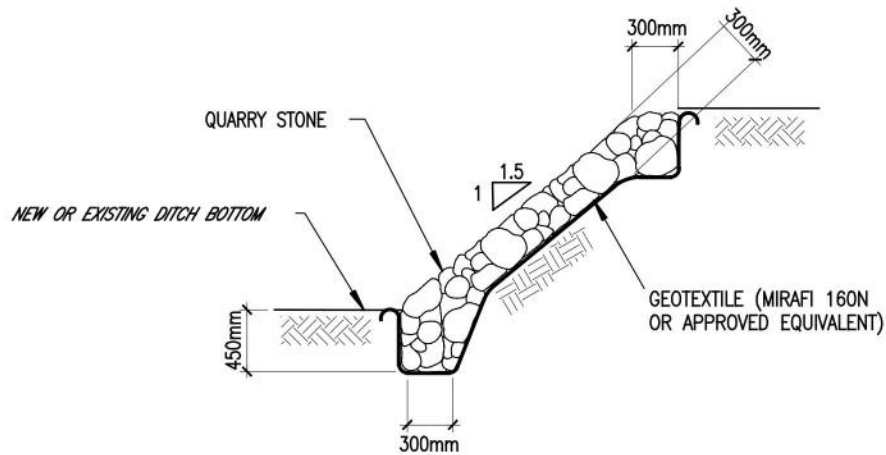
Revised: JULY 2018

ELEVATION & SECTION

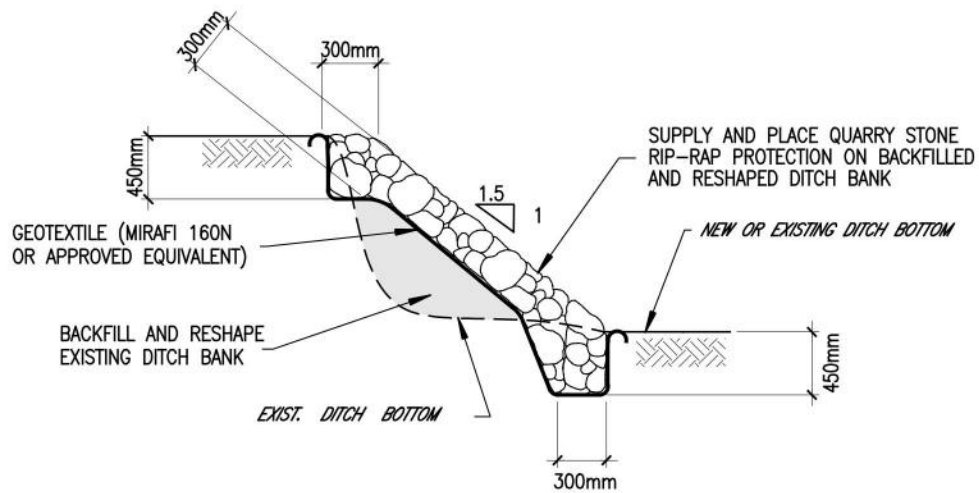


SPRIET ASSOCIATES LONDON LIMITED
CONSULTING ENGINEERS ARCHITECTS

STANDARD
DETAILED
DRAWING
No. 02



TYPICAL DITCH BANK RIP-RAP



**TYPICAL DITCH BANK RIP-RAP
WITH BACKFILLING OF WASHOUT**

TYPICAL DITCH BANK RIP-RAP DETAILS

Scale: N.T.S.

Approved by:

Date: July 2000

Drawn by: jk

M.P.D.

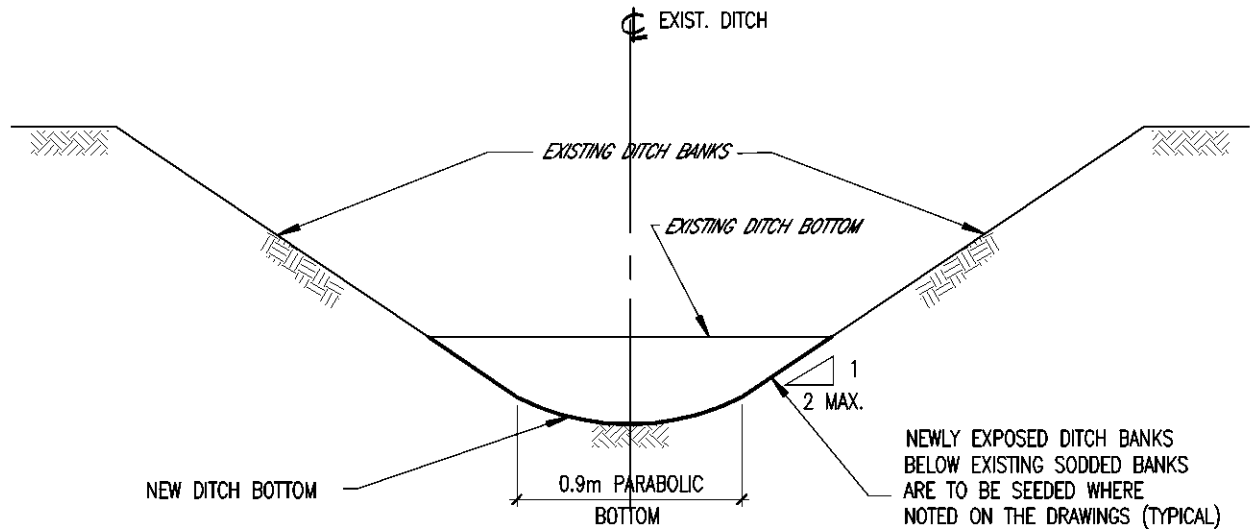
Revised: November 2000

SECTIONS

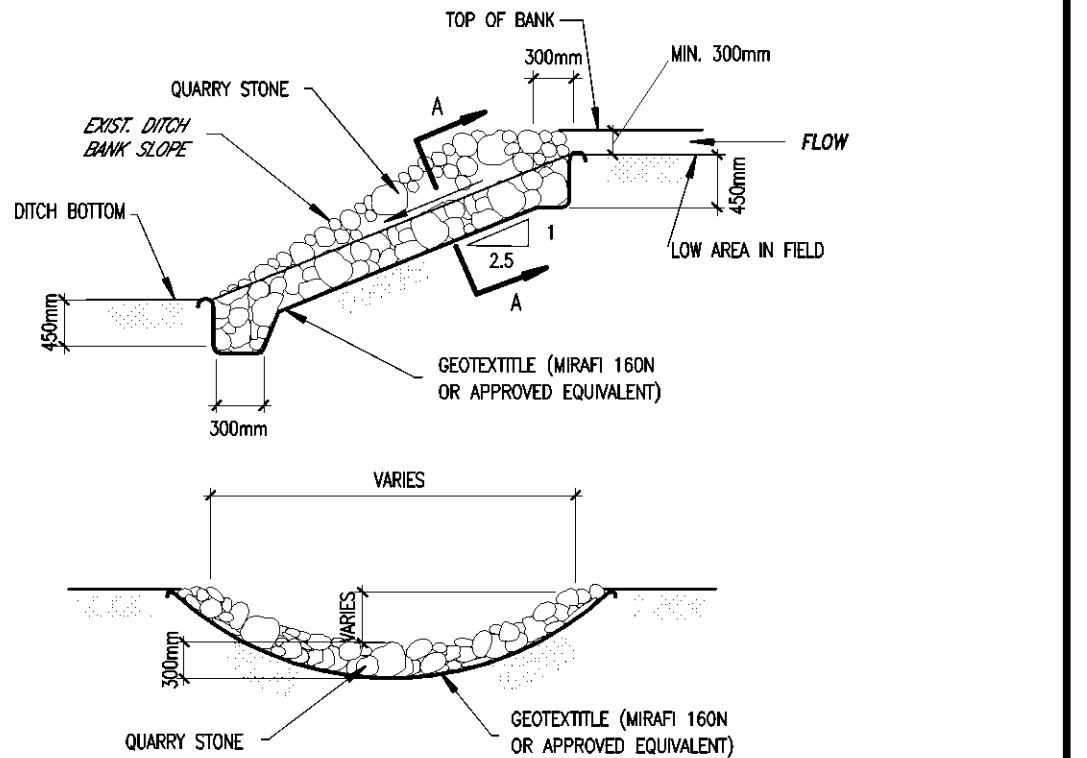


SPRIET ASSOCIATES LONDON LIMITED
CONSULTING ENGINEERS ARCHITECTS

STANDARD
DETAILED
DRAWING
No. **04**



TYPICAL DITCH BOTTOM CLEANOUT



SECTION A-A

TYPICAL ROCK CHUTE

TYPICAL DITCH BOTTOM CLEANOUT TYPICAL ROCK CHUTE CONSTRUCTION

Scale: N.T.S.

Approved by:

Date: November 2000

Drawn by: jk

M.P.D.

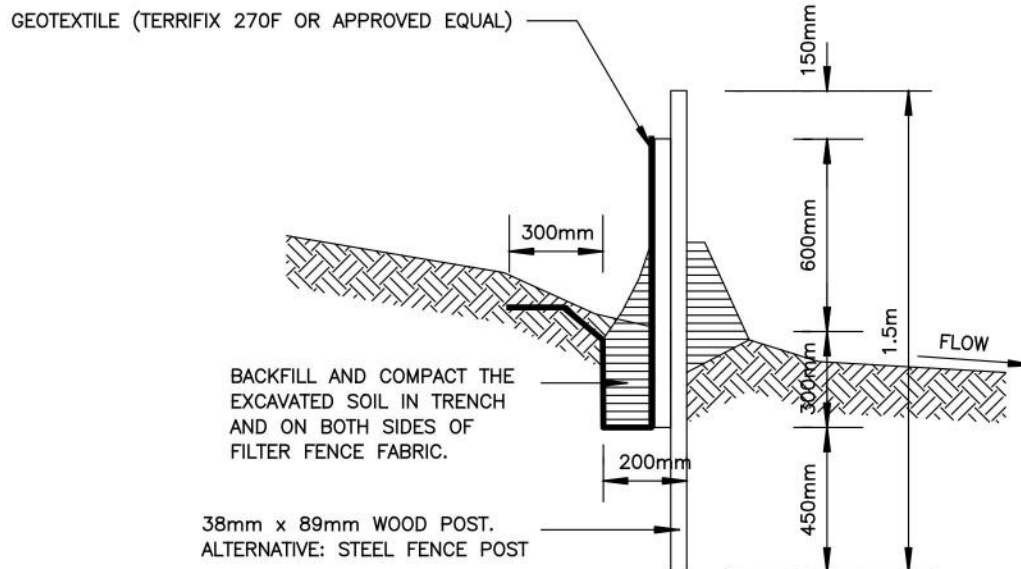
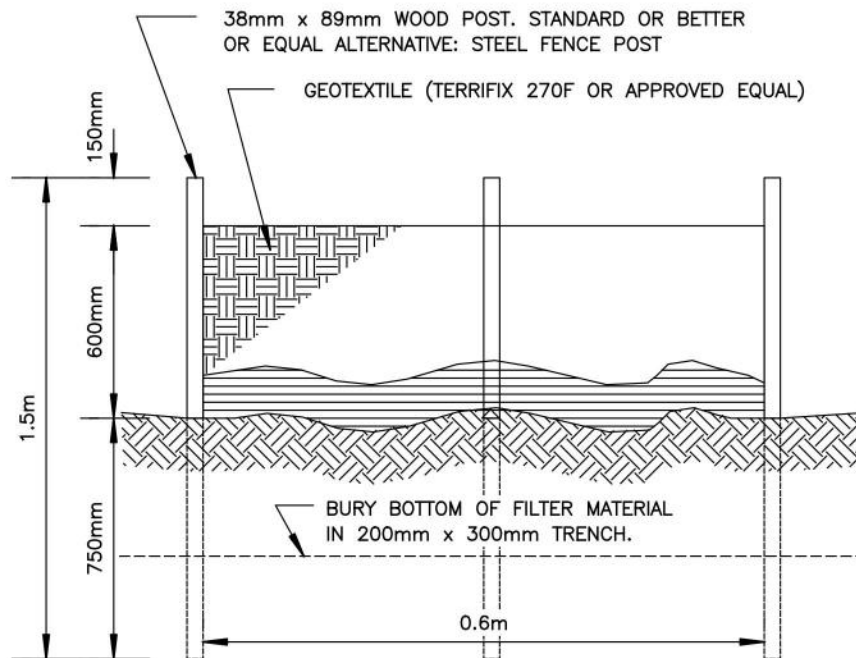
Revised:

SECTIONS



SPRIET ASSOCIATES LONDON LIMITED
CONSULTING ENGINEERS ARCHITECTS

STANDARD
DETAILED
DRAWING
No. **05**



SILT FENCE DETAIL

Scale: N.T.S.

Approved by:

Date: February 2025

Drawn by: TF

M.P.D.

Revised:

SECTION



SPRIET ASSOCIATES LONDON LIMITED
CONSULTING ENGINEERS ARCHITECTS

STANDARD
DETAILED
DRAWING
No. 08



THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

BY- LAW NO. 2026-08

A by-law to authorize the submission of an application to Ontario Infrastructure and Lands Corporation ("OILC") for financing of certain capital work(s) of The Corporation of the Township of Southwold (the "Municipality"); and to authorize long-term borrowing for such capital work(s) through the issue of debentures to OILC

WHEREAS the *Municipal Act, 2001* (Ontario), as amended, (the "**Act**") provides that a municipal power shall be exercised by by-law unless the municipality is specifically authorized to do otherwise;

AND WHEREAS subsection 401 (1) of the Act provides that a municipality may incur a debt for municipal purposes, whether by borrowing money or in any other way, and may issue debentures and prescribed financial instruments and enter prescribed financial agreements for or in relation to the debt;

AND WHEREAS subsection 408 (1) of the Act also provides that a municipality shall authorize long-term borrowing by the issue of debentures or through another municipality under section 403 or 404 of the Act;

AND WHEREAS subsection 408 (3) of the Act provides that the term of a debt of a municipality or any debenture or other financial instrument for long-term borrowing issued for it shall not extend beyond the lifetime of the capital work for which the debt was incurred and shall not exceed 40 years;

AND WHEREAS clause 408 (4)(a) of the Act provides that a debenture by-law shall provide for raising in each year as part of the general upper-tier levy or the general municipality levy the amounts of principal and interest payable in each year under the by-law to the extent that the amounts have not been provided for by other taxes or by fees or charges imposed on persons or property by a by-law of any municipality and clauses 408 (4) (b) and (c) provide that a debenture by-law shall include provisions that contemplate the payment of principal and interest in each year. Subsection 408 (5) of the Act further provides that the total amount of principal and interest that must be raised in a year under clause 408 (4)(a) of the Act does not include any outstanding

amount of principal specified as payable on the maturity date of a debenture if one or more refinancing debentures are issued by the municipality on or before the maturity date in respect of the outstanding principal;

AND WHEREAS OILC has invited Ontario municipalities wishing to obtain debt financing in order to meet capital expenditures incurred or to be incurred in connection with eligible capital works, to make an application to OILC for such financing by completing and submitting an application in the form provided by OILC (the "**Application**");

AND WHEREAS the Council of the Municipality has passed the by-law(s) enumerated in column (1) of Schedule "A" attached hereto and forming part of this By-law ("**Schedule "A"**") authorizing the capital work(s) described in column (2) of Schedule "A" (the "**Capital Work(s)**") in the respective amount of the estimated expenditure set out in column (3) of Schedule "A" (the "**Estimated Expenditure**") and authorizing long-term borrowing pursuant to the issuance of debentures for the Capital Work(s) in a principal amount which does not exceed the respective maximum debenture amount set out in column (4) of Schedule "A" (the "**Maximum Debenture Amount**");

AND WHEREAS before the Council of the Municipality approved the Capital Work(s) in accordance with section 4 of Ontario Regulation 403/02 (the "**Regulation**"), the Council of the Municipality had its Treasurer calculate an updated limit in respect of its then most recent annual debt and financial obligation limit received from the Ministry of Municipal Affairs and Housing (as so updated, the "**Updated Limit**"), and the Treasurer calculated the estimated annual amount payable in respect of the Capital Work(s) based on long-term financing for such Capital Work(s) in an amount that did not exceed the respective Maximum Debenture Amount for the Capital Work(s), and determined that the estimated annual amount payable in respect of each respective Maximum Debenture Amount, did not cause the Municipality to exceed the Updated Limit, and accordingly the approval of the Ontario Land Tribunal, pursuant to the Regulation, was not required before any such Capital Work(s) was authorized by the Council of the Municipality;

AND WHEREAS the Municipality has completed and submitted, or is in the process of completing and submitting, the Application to request financing for the Capital Work(s) by way of long-term borrowing through the issue of debentures to OILC;

AND WHEREAS OILC has accepted and has approved, or will notify the Municipality only if it accepts and approves, the Application, as the case may be;

AND WHEREAS at least five (5) business days prior to the passing of the debenture by-law in connection with the issue of Debentures as defined below, OILC will provide

the Municipality with a rate offer letter agreement in OILC's standard form (the "**Rate Offer Letter Agreement**").

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD ENACTS AS FOLLOWS:

1. The Council of the Municipality hereby confirms, ratifies and approves the execution by the Treasurer of the Application and the submission by such authorized official of the Application, duly executed by such authorized official, to OILC for the long-term financing of the Capital Work(s) in an amount that does not exceed \$4,836,480 (the aggregate of the Maximum Debenture Amount(s) set out in column (4) of Schedule "A"), substantially in the form of Schedule "B" attached hereto and forming part of this By-law, with such changes thereon as such authorized official may hereafter approve, such execution and delivery to be conclusive evidence of such approval.
2. The Head of Council and the Treasurer are hereby authorized to negotiate and enter into, execute and deliver for and on behalf of the Municipality the Rate Offer Letter Agreement on such terms and conditions as such authorized officials may approve, such execution and delivery to be conclusive evidence of such approval.
3. Subject to the terms and conditions of the Rate Offer Letter Agreement and such other terms and conditions as OILC may otherwise require, the Head of Council and the Treasurer are hereby authorized to long-term borrow for the Capital Work(s) and to issue debentures, including refinancing debentures, if applicable, to OILC on the terms and conditions provided in the Rate Offer Letter Agreement and on such other terms and conditions as such authorized officials may approve (the "**Debentures**"); provided that the principal amount of the Debentures issued in respect of the Capital Work(s) does not exceed the respective Maximum Debenture Amount for each such Capital Work.
4. In accordance with the provisions of section 25 of the *Ontario Infrastructure and Lands Corporation Act, 2011*, as amended from time to time hereafter, the Municipality is hereby authorized to agree in writing with OILC that the Minister of Finance is entitled, without notice to the Municipality, to deduct from money appropriated by the Legislative Assembly of Ontario for payment to the Municipality, amounts not exceeding the amounts that the Municipality fails to pay to OILC on account of any unpaid indebtedness of the Municipality to OILC in respect of the Debentures and to pay such amounts to OILC from the Consolidated Revenue Fund.

5. The Municipality shall provide for raising in each year as part of the general levy, the amounts of principal and interest payable in each year in respect of any Debenture outstanding, to the extent that the amounts have not been provided for by any other available source including other taxes or fees or charges imposed on persons or property by a by-law of any municipality, subject to the ability of the Municipality to issue one or more refinancing debentures on or before the maturity date in respect of the outstanding principal, if applicable.
6. The Head of Council and the Treasurer are hereby authorized to enter into, execute and deliver the Rate Offer Letter Agreement and to issue the Debentures, one or both of the Clerk and the Treasurer are hereby authorized to generally do all things and to execute all other documents and papers in the name of the Municipality in order to perform the obligations of the Municipality under the Rate Offer Letter Agreement and to issue the Debentures, and the Clerk or the Treasurer is authorized to affix the Municipality's municipal seal to any such documents and papers.
7. The money realized in respect of the Debentures, including any premium, and any earnings derived from the investment of that money, after providing for the expenses related to the issue of the Debentures, if any, shall be apportioned and applied to the respective Capital Work and to no other purpose except as permitted by the Act.
8. This By-law takes effect on the day of passing.

**READ A FIRST AND SECOND TIME, CONSIDERED READ A THIRD TIME, AND
FINALLY PASSED THIS 26th DAY OF JANUARY, 2026.**

Mayor
Grant Jones

CAO/Clerk
Jeff Carswell

Schedule "A"
to By-Law Number 2026-08

	(1)	(2)	(3)	(4)
<u>Item #</u>	<u>Authorizing By-Law Number</u>	<u>Description of Capital Work</u>	<u>Estimated Expenditure</u>	<u>Maximum Debenture Amount</u> (cannot exceed the Estimated Expenditure)
			\$	\$
1	2024-26	Public Works Building	4,836,480	4,836,480
2				
3				
4				
5				

Schedule "B"
to By-Law Number 2026-08

[Insert the OILC Application into Schedule "B"]

**True Copy Certification
of By-Law Number 2026-08**

I, Jeff Carswell, CAO/Clerk of the Municipality do certify that the foregoing by-law is a true copy of By-law No. 2026-08 passed by the Council of the Municipality on January 26th, 2026.

DATED as of _____.

Jeff Carswell
CAO/Clerk



THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

BY- LAW NO. 2026-09

Being a by-law to confirm the resolutions and motions of the Council of the Township of Southwold, which were adopted on January 26, 2026.

WHEREAS Section 5(3) of the Municipal Act, 2001, Chapter 25, provides that a municipal power, including a municipality's capacity, rights, powers and privileges under section 8, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise;

AND WHEREAS it has been expedient that from time to time, the Council of the Corporation of the Township of Southwold should enact by resolution or motion of Council;

AND WHEREAS it is deemed advisable that all such actions that have been adopted by a resolution or motion of Council only should be authorized by By-law;

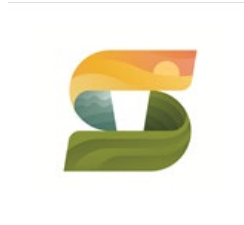
NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD ENACTS AS FOLLOWS:

1. That the actions of the Council of the Township of Southwold at the Regular Meeting of Council held on January 26, 2026; in respect to each report, motion, resolution or other action passed and taken by the Council at its meetings, is hereby adopted, ratified and confirmed, as if each resolution or other action was adopted, ratified and confirmed by its separate by-law.
2. That the Mayor and the proper officers of the Corporation are hereby authorized and directed to do all things necessary to give effect to the said action, or obtain approvals, where required, and, except where otherwise provided, the Mayor and the Clerk are hereby directed to execute all documents necessary in that behalf and to affix the Corporate Seal of the Township of Southwold to all such documents.

**READ A FIRST AND SECOND TIME, CONSIDERED READ A THIRD TIME, AND
FINALLY PASSED THIS 26th DAY OF JANUARY, 2026.**

Mayor
Grant Jones

CAO/Clerk
Jeff Carswell



THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

-ADDENDUM TO AGENDA-

Monday January 26, 2026

REGULAR MEETING OF COUNCIL

7:00 p.m., Council Chambers, Fingal/Via Video Link

2. ADDENDUM TO AGENDA

Item Added:

10. BY-LAWS

(d) 2026-10, being a by-law to enter into an agreement the Minister of Transportation for the Pothole Prevention and Repair Program



THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

BY- LAW NO. 2026-10

Being a by-law to authorize the Execution of an Agreement between His Majesty the King in Right of Ontario as represented by the Hon. Minister of Transportation and the Corporation of the Township of Southwold

WHEREAS Section 5 of the Municipal Act, 2001, S.O. 2001 c.25 as amended, provided that the powers of a municipality shall be exercised by its Council;

AND WHEREAS the Corporation of the Township of Southwold deems it desirable to enter into an agreement with His Majesty the King in Right of Ontario, as represented by the Hon. Minister of Transportation;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD ENACTS AS FOLLOWS:

- 1. THAT** the Mayor and Director of Corporate Services/Treasurer be authorized to sign and affix the seal of the Corporation of the Township of Southwold agreement with His Majesty the King in Right of Ontario, as represented by the Hon. Minister of Transportation.
- 2. THAT** a copy of the said agreement is attached hereto as Schedule "A" and forms part of this by-law.
- 3. THAT** this by-law shall come into force and effect upon finally passing thereof.

**READ A FIRST AND SECOND TIME, CONSIDERED READ A THIRD TIME, AND
FINALLY PASSED THIS 26th DAY OF JANUARY, 2026.**

Mayor
Grant Jones

CAO/Clerk
Jeff Carswell

**ONTARIO TRANSFER PAYMENT AGREEMENT
POTHOLE PREVENTION AND REPAIR PROGRAM**

THE AGREEMENT is effective as of the 30th day of January 2026.

BETWEEN:

**His Majesty the King in right of Ontario
as represented by Hon. Minister of Transportation

(the “Province”)**

- and -

**THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

(the “Recipient”)**

WHEREAS the Recipient has requested funding from the Province for the Project (as defined in section A.1.2) and the Province has agreed to provide such funding to the Recipient subject to certain terms and conditions;

AND WHEREAS the Agreement sets out the terms and conditions upon which the Province has agreed to provide funds, up to the Maximum Funds (as defined in section A1.2) to the Recipient for the purpose of carrying out the Project, and upon which the Recipient has agreed to carry out the Project.

NOW THEREFORE in consideration of the mutual covenants and agreements contained in the Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are expressly acknowledged, the Province and the Recipient agree as follows:

1.0 ENTIRE AGREEMENT

1.1 Schedules to the Agreement. The following schedules form part of the Agreement:

Schedule “A” - General Terms and Conditions
Schedule “B” - Project Specific Information

Schedule "C" - Project Description and Timelines
Schedule "D" - Eligible Expenditures and Ineligible Expenditures
Schedule "E" - Payment Plan
Schedule "F" - Reporting and Compliance Audit
Sub-Schedule F1 - Project Reports

1.2 Entire Agreement. The Agreement constitutes the entire agreement between the Parties with respect to its subject matter and contained in the Agreement and supersedes all prior oral or written representations and agreements.

2.0 CONFLICT OR INCONSISTENCY

2.1 Conflict or Inconsistency. In the event of a conflict or inconsistency between the Additional Provisions, identified in Schedule "B" and the provisions in Schedule "A", the following rules will apply:

- (a) the Parties will interpret any Additional Provisions in so far as possible, in a way that preserves the intention of the Parties as expressed in Schedule "A"; and
- (b) where it is not possible to interpret the Additional Provisions in a way that is consistent with the provisions in Schedule "A", the Additional Provisions will prevail over the provisions in Schedule "A" to the extent of the inconsistency.

3.0 COUNTERPARTS

3.1 One and the Same Agreement. The Agreement may be executed in any number of counterparts, with the same effect as if the Parties had signed the same document, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

4.0 AMENDING THE AGREEMENT

4.1 Amending the Agreement. The Agreement may only be amended by a written agreement duly executed by the Parties.

5.0 ACKNOWLEDGEMENT

5.1 Acknowledgement. The Recipient acknowledges that:

- (a) by receiving Funds it may become subject to legislation applicable to organizations that receive funding from the Government of Ontario, including the *Broader Public Sector Accountability Act, 2010* (Ontario),

the *Public Sector Salary Disclosure Act, 1996* (Ontario), and the *Auditor General Act* (Ontario);

- (b) His Majesty the King in right of Ontario has issued expenses, perquisites, and procurement directives and guidelines pursuant to the *Broader Public Sector Accountability Act, 2010* (Ontario);
- (c) the Funds are:
 - (i) to assist the Recipient to carry out the Project and not to provide goods or services to the Province;
 - (ii) funding for the purposes of the *Public Sector Salary Disclosure Act, 1996* (Ontario);
- (d) the Province is not responsible for carrying out the Project;
- (e) the Province is bound by the *Freedom of Information and Protection of Privacy Act* (Ontario) and that any information provided to the Province in connection with the Project or otherwise in connection with the Agreement may be subject to disclosure in accordance with that Act; and
- (f) the Province is bound by the *Financial Administration Act* (Ontario) (“FAA”) and, pursuant to subsection 11.3(2) of the FAA, payment by the Province of Funds under the Agreement will be subject to:
 - (i) an appropriation, as that term is defined in subsection 1(1) of the FAA, to which that payment can be charged being available in the Funding Year in which the payment becomes due; or
 - (ii) the payment having been charged to an appropriation for a previous fiscal year.

- SIGNATURE PAGE FOLLOWS -

IN WITNESS WHEREOF the Parties have executed the Agreement on the dates set out below.

HIS MAJESTY THE KING IN RIGHT OF ONTARIO
as represented by the Minister of Transportation

Date

Name: Prabmeet Sarkaria

Title: Minister

**CORPORATION OF THE TOWNSHIP OF
SOUTHWOLD**

January 26, 2026

Date

Name: Michele Lant

Title: Director of Corporate Services/

Treasurer

I have authority to bind the Recipient

January 26, 2026

Date

Name: Grant Jones

Title: Mayor

I have authority to bind the Recipient

**SCHEDULE “A”
GENERAL TERMS AND CONDITIONS**

A1.0 INTERPRETATION AND DEFINITIONS

A1.1 Interpretation. For the purposes of interpretation:

- (a) words in the singular include the plural and vice-versa;
- (b) words in one gender include all genders;
- (c) the headings do not form part of the Agreement; they are for reference only and will not affect the interpretation of the Agreement;
- (d) any reference to dollars or currency will be in Canadian dollars and currency; and
- (e) “include”, “includes” and “including” denote that the subsequent list is not exhaustive.
- (f) all accounting terms not otherwise defined in the Agreement have their ordinary meanings.

A1.2 Definitions. In the Agreement, the following terms will have the following meanings:

“Additional Provisions” means the terms and conditions set out in Schedule “B”.

“Agreement” means this agreement entered into between the Province and the Recipient, all of the schedules listed in section 1.1, and any amending agreement entered into pursuant to section 4.1.

“Business Day” means any working day, Monday to Friday inclusive, excluding statutory and other holidays, namely: New Year’s Day; Family Day; Good Friday; Easter Monday; Victoria Day; Canada Day; Civic Holiday; Labour Day; Thanksgiving Day; Remembrance Day; Christmas Day; Boxing Day and any other day on which the Province has elected to be closed for business.

“Effective Date” means the date set out at the top of the Agreement.

“Eligible Expenditures” means the costs of the Project that are eligible for funding by the Province under the Agreement and that are further described in Scheduled D.

“Event of Default” has the meaning ascribed to it in section A12.1.

“Expiry Date” means the expiry date set out in Schedule “B”.

“Final Report” means the report described in Schedule “F”.

“Funding Year” means in the case, the period commencing on the Effective Date and ending on the following March 31.

“Funds” means the money the Province provides to the Recipient pursuant to the Agreement.

“Indemnified Parties” means His Majesty the King in right of Ontario, and includes His ministers, agents, appointees, and employees.

“Loss” means any cause of action, liability, loss, cost, damage, or expense (including legal, expert and consultant fees) that anyone incurs or sustains as a result of or in connection with the Project or any other part of the Agreement.

“Materials” means material, machinery, equipment and fixtures forming part of the Project.

“Maximum Funds” means the maximum set out in Schedule “B”.

“Notice” means any communication given or required to be given pursuant to the Agreement.

“Notice Period” means the period of time within which the Recipient is required to remedy an Event of Default pursuant to section A12.3(b), and includes any such period or periods of time by which the Province extends that time pursuant to section A12.4.

“Parties” means the Province and the Recipient.

“Party” means either the Province or the Recipient.

“Proceeding” means any action, claim, demand, lawsuit, or other proceeding that anyone makes, brings or prosecutes as a result of or in connection with the Project or with any other part of the Agreement.

“Project” means the undertaking described in Schedule “C”.

“Records Review” means any assessment the Province conducts pursuant to section A7.4.

“Reports” means the reports described in Schedule “F” and Sub-schedule “F1”.

“Requirements of Law” means all applicable requirements, laws, statutes,

codes, acts, ordinances, approvals, orders, decrees, injunctions, by laws, rules, regulations, official plans, permits, licenses, authorizations, directions and agreements with all authorities.

“Substantial Performance” means when the Work or a substantial part thereof has passed inspection and testing and is ready for use or is being used for intended purposes.

A1.3 References This Agreement refers to the following standards, specifications or publications:

Ontario Provincial Standard Specifications, Construction

OPSS PROV 127

OPSS MUNI 301

OPSS MUNI 303

OPSS MUNI 304

OPSS MUNI 310

OPSS MUNI 336

OPSS MUNI 337

OPSS MUNI 341

OPSS MUNI 369

A2.0 REPRESENTATIONS, WARRANTIES, AND COVENANTS

A2.1 General. The Recipient represents, warrants, and covenants that:

- (a) it is, and will continue to be, a validly existing legal entity with full power to fulfill its obligations under the Agreement;
- (b) it has, and will continue to have, the experience and expertise necessary to carry out the Project;
- (c) it is in compliance with, and will continue to comply with, all federal and provincial laws and regulations, all municipal by-laws, and any other orders, rules, and by-laws related to any aspect of the Project, the Funds, or both; and
- (d) that, unless otherwise provided for in the Agreement, any information the Recipient provided to the Province in support of its request for funds (including information relating to any eligibility requirements) was true and complete at the time the Recipient provided it and will continue to be true and complete.

A2.2 Execution of Agreement. The Recipient represents and warrants that it has:

- (a) the full power and capacity to enter into the Agreement; and
- (b) taken all necessary actions to authorize the execution of the Agreement.

A2.3 Governance. The Recipient represents, warrants, and covenants that it has, will maintain in writing, and will follow:

- (a) a code of conduct and ethical responsibilities for all persons at all levels of the Recipient's organization;
- (b) procedures to enable the Recipient's ongoing effective functioning;
- (c) decision-making mechanisms for the Recipient;
- (d) procedures to enable the Recipient to manage Funds prudently and effectively;
- (e) procedures to enable the Recipient to complete the Project successfully;
- (f) procedures to enable the Recipient to identify risks to the completion of the Project and strategies to address the identified risks, all in a timely manner;
- (g) procedures to enable the preparation and submission of all Reports required pursuant to Article A7.0; and
- (h) procedures to enable the Recipient to address such other matters as the Recipient considers necessary to enable the Recipient to carry out its obligations under the Agreement.

A2.4 Supporting Proof. Upon the request of the Province, the Recipient will provide the Province with proof of the matters referred to in Article A2.0.

A3.0 TERM OF THE AGREEMENT

A3.1 Term. The term of the Agreement will commence on the Effective Date and will expire on the Expiry Date unless terminated earlier pursuant to Article A11.0 or Article A12.0.

A4.0 FUNDS AND CARRYING OUT THE PROJECT

A4.1 Funds Provided. The Province will:

- (a) provide the Recipient with \$38,000 in Funds for the purpose of carrying out the Project;
- (b) provide the Funds to the Recipient in accordance with the payment plan attached to the Agreement as Schedule "E" ; and

- (c) deposit the Funds into an account the Recipient designates provided that the account:
 - (i) resides at a Canadian financial institution; and
 - (ii) is in the name of the Recipient.

A4.2 Limitation on Payment of Funds. Despite section A4.1:

- (a) the Province is not obligated to provide any Funds to the Recipient until the Recipient provides the certificates of insurance or other proof required pursuant to section A10.2 ;
- (b) the Province may adjust the amount of Funds it provides to the Recipient for any Funding Year based upon the Province's assessment of the information the Recipient provides to the Province pursuant to section A7.2.

A4.3 Use of Funds and Carry Out the Project. The Recipient will do all of the following:

- (a) carry out the Project in accordance with the Agreement;
- (b) use the Funds only for the purpose of carrying out the Project;
- (c) spend the Funds only in accordance with the maximum funds set out in Schedule B.”;
- (d) not use the Funds to cover any cost that has been or will be funded or reimbursed by any other funding program or source. .

A4.4 Interest-Bearing Account. If the Province provides Funds before the Recipient's immediate need for the Funds, the Recipient will place the Funds in an interest-bearing account in the name of the Recipient at a Canadian financial institution.

A4.5 Interest. If the Recipient earns any interest on the Funds, the Province may do either or both of the following:

- (a) deduct an amount equal to the interest from any further instalments of Funds;
- (b) demand from the Recipient the payment of an amount equal to the interest.

A4.6 Rebates, Credits, and Refunds. The Province will calculate Funds based on the actual costs to the Recipient to carry out the Project, less any costs (including taxes) for which the Recipient has received, will receive, or is eligible to receive, a rebate, credit, or refund.

A5.0 RECIPIENT'S ACQUISITION OF GOODS OR SERVICES, AND DISPOSAL OF ASSETS

A5.1 Acquisition. If the Recipient acquires goods, services, or both with the Funds, it will do so through a process that promotes the best value for money.

A5.2 Disposal. The Recipient will not, without the Province's prior consent, sell, lease, or otherwise dispose of any asset purchased or created with the Funds or for which the Funds were provided.

A6.0 CONFLICT OF INTEREST

A6.1 Conflict of Interest Includes. For the purposes of Article A6.0, a conflict of interest includes any circumstances where:

- (a) the Recipient; or
- (b) any person who has the capacity to influence the Recipient's decisions,

has outside commitments, relationships, or financial interests that could, or could be seen by a reasonable person to, interfere with the Recipient's objective, unbiased, and impartial judgment relating to the Project, the use of the Funds, or both.

A6.2 No Conflict of Interest. The Recipient will carry out the Project and use the Funds without an actual, potential, or perceived conflict of interest unless:

- (a) the Recipient:
 - (i) provides Notice to the Province disclosing the details of the actual, potential, or perceived conflict of interest; and
 - (ii) requests the consent of the Province to carry out the Project with an actual, potential, or perceived conflict of interest;
- (b) the Province provides its consent to the Recipient carrying out the Project with an actual, potential, or perceived conflict of interest; and
- (c) the Recipient complies with any terms and conditions the Province may prescribe in its consent.

A7.0 REPORTS, ACCOUNTING, AND REVIEW

A7.1 Province Includes. For the purposes of sections A7.4, A7.5 and A7.6, “Province” includes any auditor or representative the Province may identify.

A7.2 Preparation and Submission. The Recipient will:

- (a) submit to the Province at the address set out in Schedule “B”:
 - (i) all Reports in accordance with the timelines and content requirements set out in Schedule “F”;
 - (ii) any other reports in accordance with any timelines and content requirements the Province may specify from time to time;
- (b) ensure that all Reports and other reports are:
 - (i) completed to the satisfaction of the Province; and
 - (ii) signed by an authorized signing officer of the Recipient.

A7.3 Record Maintenance. The Recipient will keep and maintain for a period of seven years from their creation:

- (a) all financial records (including invoices and evidence of payment) relating to the Funds or otherwise to the Project in a manner consistent with either international financial reporting standards or generally accepted accounting principles or any comparable accounting standards that apply to the Recipient; and
- (b) all non-financial records and documents relating to the Funds or otherwise to the Project.

A7.4 Records Review. The Province may, at its own expense, upon twenty-four hours’ Notice to the Recipient and during normal business hours enter upon the Recipient’s premises to conduct an audit or investigation of the Recipient regarding the Recipient’s compliance with the Agreement, including assessing any of the following:

- (a) the truth of any of the Recipient’s representations and warranties;
- (b) the progress of the Project;
- (c) the Recipient’s allocation and expenditure of the Funds.

A7.5 Inspection and Removal. For the purposes of any Records Review, the Province may take one or both of the following actions:

- (a) inspect and copy any records and documents referred to in section A7.3;
- (b) remove any copies the Province makes pursuant to section A7.5(a).

A7.6 Cooperation. To assist the Province in respect of its rights provided for in section A7.5, the Recipient will cooperate with the Province by:

- (a) ensuring that the Province has access to the records and documents wherever they are located;
- (b) assisting the Province to copy records and documents;
- (c) providing to the Province, in the form the Province specifies, any information the Province identifies; and
- (d) carrying out any other activities the Province requests.

A7.7 No Control of Records. No provision of the Agreement will be construed to give the Province any control whatsoever over any of the Recipient's records.

A7.8 Auditor General. The Province's rights under Article A7.0 are in addition to any rights provided to the Auditor General pursuant to section 9.1 of the *Auditor General Act* (Ontario).

A8.0 COMMUNICATIONS REQUIREMENTS

A8.1 Acknowledge Support. Unless the Province directs the Recipient to do otherwise, the Recipient will in each of its Project-related publications, whether written, oral, or visual:

- (a) acknowledge the support of the Province for the Project;
- (b) ensure that any acknowledgement is in a form and manner as the Province directs; and
- (c) indicate that the views expressed in the publication are the views of the Recipient and do not necessarily reflect those of the Province.

A9.0 INDEMNITY

A9.1 Indemnify. The Recipient will indemnify and hold harmless the Indemnified Parties from and against any Loss and any Proceeding, unless solely caused by the gross negligence or wilful misconduct of the Indemnified Parties.

A10.0 INSURANCE

A10.1 Insurance. The Recipient represents, warrants, and covenants that it has, and will maintain, at its own cost and expense, with insurers having a secure A.M. Best rating of B+ or greater, or the equivalent, all the necessary and appropriate insurance that a prudent person carrying out a project similar to the Project would maintain, including commercial general liability insurance on an occurrence basis for third party bodily injury, personal injury, and property damage, to an inclusive limit of not less than the amount set out in Schedule "B" per occurrence, which commercial general liability insurance policy will include the following:

- (a) the Indemnified Parties as additional insureds with respect to liability arising in the course of performance of the Recipient's obligations under, or otherwise in connection with, the Agreement;
- (b) a cross-liability clause;
- (c) contractual liability coverage; and
- (d) at least 30 days' written notice of cancellation.

A10.2 Proof of Insurance. The Recipient will:

- (a) provide to the Province, either:
 - (i) certificates of insurance that confirm the insurance coverage required by section A10.1; or
 - (ii) other proof that confirms the insurance coverage required by section A10.1; and
- (b) in the event of a Proceeding, and upon the Province's request, the Recipient will provide to the Province a copy of any of the Recipient's insurance policies that relate to the Project or otherwise to the Agreement, or both.

A10.3 Subcontractor insurance. The Recipient will ensure that any subcontractors retained to perform any part or parts of the Project will obtain and maintain all the necessary and appropriate insurance that a prudent person in the business of the subcontractor would obtain and maintain.

A11.0 TERMINATION ON NOTICE

A11.1 Termination on Notice. The Province may terminate the Agreement at any time without liability, penalty, or costs upon giving 30 days' Notice to the

Recipient.

A11.2 Consequences of Termination on Notice by the Province. If the Province terminates the Agreement pursuant to section A11.1, the Province may take one or more of the following actions:

- (a) cancel further instalments of Funds;
- (b) demand from the Recipient the payment of any Funds remaining in the possession or under the control of the Recipient; and
- (c) determine the reasonable costs for the Recipient to wind down the Project, and do either or both of the following:
 - (i) permit the Recipient to offset such costs against the amount the Recipient owes pursuant to section A11.2(b); and
 - (ii) subject to section A4.1(a), provide Funds to the Recipient to cover such costs.

A12.0 EVENT OF DEFAULT, CORRECTIVE ACTION, AND TERMINATION FOR DEFAULT

A12.1 Events of Default. Each of the following events will constitute an Event of Default:

- (a) in the opinion of the Province, the Recipient breaches any representation, warranty, covenant, or other term of the Agreement, including failing to do any of the following in accordance with the terms and conditions of the Agreement:
 - (i) carry out the Project;
 - (ii) use or spend Funds; or
 - (iii) provide, in accordance with section A7.2, Reports or such other reports as the Province may have requested pursuant to section A7.2(a)(ii);
- (b) the Recipient's operations, its financial condition, its organizational structure or its control changes such that it no longer meets one or more of the eligibility requirements of the program under which the Province provides the Funds;
- (c) the Recipient makes an assignment, proposal, compromise, or arrangement for the benefit of creditors, or a creditor makes an application for an order adjudging the Recipient bankrupt, or applies for the appointment of a receiver;

- (d) the Recipient ceases to operate.

A12.2 Consequences of Events of Default and Corrective Action. If an Event of Default occurs, the Province may, at any time, take one or more of the following actions:

- (a) initiate any action the Province considers necessary in order to facilitate the successful continuation or completion of the Project;
- (b) provide the Recipient with an opportunity to remedy the Event of Default;
- (c) suspend the payment of Funds for such period as the Province determines appropriate;
- (d) reduce the amount of the Funds;
- (e) cancel further instalments of Funds;
- (f) demand from the Recipient the payment of any Funds remaining in the possession or under the control of the Recipient;
- (g) demand from the Recipient the payment of an amount equal to any Funds the Recipient used, but did not use in accordance with the Agreement;
- (h) demand from the Recipient the payment of an amount equal to any Funds the Province provided to the Recipient;
- (i) demand from the Recipient the payment of an amount equal to the costs the Province incurred or incurs to enforce its rights under the Agreement, including the costs of any Records Review and the costs it incurs to collect any amounts the Recipient owes to the Province; and
- (j) upon giving Notice to the Recipient, terminate the Agreement at any time, including immediately, without liability, penalty or costs to the Province.

A12.3 Opportunity to Remedy. If, pursuant to section A12.2(b), the Province provides the Recipient with an opportunity to remedy the Event of Default, the Province will give Notice to the Recipient of:

- (a) the particulars of the Event of Default; and
- (b) the Notice Period.

A12.4 Recipient not Remediating. If the Province provides the Recipient with an

opportunity to remedy the Event of Default pursuant to section A12.2(b), and:

- (a) the Recipient does not remedy the Event of Default within the Notice Period;
- (b) it becomes apparent to the Province that the Recipient cannot completely remedy the Event of Default within the Notice Period; or
- (c) the Recipient is not proceeding to remedy the Event of Default in a way that is satisfactory to the Province,

the Province may extend the Notice Period or initiate any one or more of the actions provided for in sections A12.2(a), (c), (d), (e), (f), (g), (h), (i) and (j).

A12.5 When Termination Effective. Termination under Article A12.0 will take effect as provided for in the Notice.

A13.0 FUNDS AT THE END OF A FUNDING YEAR

A13.1 Funds at the End of a Funding Year. Without limiting any rights of the Province under Article A12.0, if, by the end of a Funding Year, the Recipient has not spent all of the Funds allocated for that Funding Year as provided for in the maximum funds set out in Schedule B.”, the Province may take one or both of the following actions:

- (a) demand from the Recipient payment of the unspent Funds;
- (b) adjust the amount of any further instalments of Funds accordingly.

A14.0 FUNDS UPON EXPIRY

A14.1 Funds Upon Expiry. Upon expiry of the Agreement, the Recipient will pay to the Province any Funds remaining in its possession, under its control, or both.

A15.0 DEBT DUE AND PAYMENT

A15.1 Payment of Overpayment. If at any time the Province provides Funds in excess of the amount to which the Recipient is entitled under the Agreement, the Province may:

- (a) deduct an amount equal to the excess Funds from any further instalments of Funds; or
- (b) demand that the Recipient pay to the Province an amount equal to the excess Funds.

A15.2 Debt Due. If, pursuant to the Agreement:

- (a) the Province demands from the Recipient the payment of any Funds, an amount equal to any Funds or any other amounts owing under the Agreement; or
- (b) the Recipient owes to the Province any Funds, an amount equal to any Funds or any other amounts owing under the Agreement, whether or not the Province has demanded their payment,

such amounts will be deemed to be debts due and owing to the Province by the Recipient, and the Recipient will pay the amounts to the Province immediately, unless the Province directs otherwise.

A15.3 Interest Rate. The Province may charge the Recipient interest on any money owing to the Province by the Recipient under the Agreement at the then current interest rate charged by the Province of Ontario on accounts receivable.

A15.4 Payment of Money to Province. The Recipient will pay any money owing to the Province by cheque payable to the “Ontario Minister of Finance” and delivered to the Province at the address set out in Schedule “B”.

A15.5 Fails to Pay. Without limiting the application of section 43 of the *Financial Administration Act* (Ontario), if the Recipient fails to pay any amount owing under the Agreement, His Majesty the King in right of Ontario may deduct any unpaid amount from any money payable to the Recipient by His Majesty the King in right of Ontario.

A16.0 NOTICE

A16.1 Notice in Writing and Addressed. Notice will be:

- (a) in writing;
- (b) delivered by email, postage-prepaid mail, personal delivery, or courier; and
- (c) addressed to the Province or the Recipient as set out in Schedule “B”, or as either Party later designates to the other by Notice.

A16.2 Notice Given. Notice will be deemed to have been given:

- (a) in the case of postage-prepaid mail, five Business Days after the Notice is mailed; or
- (b) in the case of email, personal delivery or courier on the date on which the Notice is delivered.

A16.3 Postal Disruption. Despite section A16.2(a), in the event of a postal disruption:

- (a) Notice by postage-prepaid mail will not be deemed to be given; and
- (b) the Party giving Notice will give Notice by email, personal delivery, or courier.

A17.0 CONSENT BY PROVINCE AND COMPLIANCE BY RECIPIENT

A17.1 Consent. When the Province provides its consent pursuant to the Agreement:

- (a) it will do so by Notice;
- (b) it may attach any terms and conditions to the consent; and
- (c) the Recipient may rely on the consent only if the Recipient complies with any terms and conditions the Province may have attached to the consent.

A18.0 SEVERABILITY OF PROVISIONS

A18.1 Invalidity or Unenforceability of Any Provision. The invalidity or unenforceability of any provision of the Agreement will not affect the validity or enforceability of any other provision of the Agreement.

A19.0 WAIVER

A19.1 Condonation not a waiver. Failure or delay by the either Party to exercise any of its rights, powers or remedies under the Agreement will not constitute a waiver of those rights, powers or remedies and the obligations of the Parties with respect to such rights, powers or remedies will continue in full force and effect.

A19.2 Waiver. Either Party may waive any of its rights, powers or remedies under the Agreement by providing Notice to the other Party. A waiver will apply only to the specific rights, powers or remedies identified in the Notice and the Party providing the waiver may attach terms and conditions to the waiver.

A20.0 INDEPENDENT PARTIES

A20.1 Parties Independent. The Recipient is not an agent, joint venturer, partner, or employee of the Province, and the Recipient will not represent itself in any way that might be taken by a reasonable person to suggest that it is or take any actions that could establish or imply such a relationship.

A21.0 ASSIGNMENT OF AGREEMENT OR FUNDS

A21.1 No Assignment. The Recipient will not, without the prior written consent of the Province, assign any of its rights or obligations under the Agreement.

A21.2 Agreement Binding. All rights and obligations contained in the Agreement will extend to and be binding on:

- (a) the Recipient's heirs, executors, administrators, successors, and permitted assigns; and
- (b) the successors to His Majesty the King in right of Ontario.

A22.0 GOVERNING LAW

A22.1 Governing Law. The Agreement and the rights, obligations, and relations of the Parties will be governed by and construed in accordance with the laws of the Province of Ontario and the applicable federal laws of Canada. Any actions or proceedings arising in connection with the Agreement will be conducted in the courts of Ontario, which will have exclusive jurisdiction over such proceedings.

A23.0 FURTHER ASSURANCES

A23.1 Agreement into Effect. The Recipient will:

- (a) provide such further assurances as the Province may request from time to time with respect to any matter to which the Agreement pertains; and
- (b) do or cause to be done all acts or things necessary to implement and carry into effect the terms and conditions of the Agreement to their full extent.

A24.0 JOINT AND SEVERAL LIABILITY

A24.1 Joint and Several Liability. Where the Recipient comprises more than one entity, each entity will be jointly and severally liable to the Province for the fulfillment of the obligations of the Recipient under the Agreement.

A25.0 RIGHTS AND REMEDIES CUMULATIVE

A25.1 Rights and Remedies Cumulative. The rights and remedies of the Province under the Agreement are cumulative and are in addition to, and not in substitution for, any of its rights and remedies provided by law or in equity.

A26.0 FAILURE TO COMPLY WITH OTHER AGREEMENTS

A26.1 Other Agreements. If the Recipient:

- (a) has failed to comply with any term, condition, or obligation under any other agreement with His Majesty the King in right of Ontario or one of His agencies (a "Failure");
- (b) has been provided with notice of such Failure in accordance with the requirements of such other agreement;
- (c) has, if applicable, failed to rectify such Failure in accordance with the requirements of such other agreement; and
- (d) such Failure is continuing,

the Province may suspend the payment of Funds for such period as the Province determines appropriate.

A27.0 SURVIVAL

A27.1 Survival. The following Articles and sections, and all applicable cross-referenced Articles, sections and schedules, will continue in full force and effect for a period of seven years from the date of expiry or termination of the Agreement: Article 1.0, Article 2.0, Article A1.0 and any other applicable definitions, section A2.1(a), sections A4.4, A4.5, A4.6, section A5.2, section A7.1, section A7.2 (to the extent that the Recipient has not provided the Reports or other reports as the Province may have requested and to the satisfaction of the Province), sections A7.3, A7.4, A7.5, A7.6, A7.7, A7.8, Article A8.0, Article A9.0, section A11.2, section A12.1, sections A12.2(d), (e), (f), (g), (h), (i) and (j), Article A13.0, Article A14.0, Article A15.0, Article A16.0, Article A18.0, section A21.2, Article A22.0, Article A24.0, Article A25.0 and Article A27.0.

A28.0 ELECTRONIC SIGNATURE

A28.1 Electronic Signature. The Province and the Recipient agree that the Agreement may be validly executed electronically, and that their respective electronic signature is the legal equivalent of a manual signature. An electronic signature of an authorized signing representative may be evidenced by (i) a manual signature, (ii) a digital signature including the name of the authorized signing representative in the respective signature line of the Agreement, (iii) an image of a manual signature, (iv) an Adobe signature, or (v) any other digital signature with the prior written consent of both Parties, placed in the respective signature line of the Agreement and the Agreement delivered by electronic means to the other Party,

including by email.

END OF GENERAL TERMS AND CONDITIONS

**SCHEDULE “B”
PROJECT SPECIFIC INFORMATION**

Maximum Funds	\$38,000
Program Title	Pothole Prevention and Repair Program
Expiry Date	June 30, 2026
Insurance	\$ 5,000,000
Contact information for the purposes of Notice to the Province	<p>Position: James Flanders, Team Lead, Special Highway Operations Initiatives Highway Operations Management Branch, Operations Division</p> <p>Address: 2nd Floor 301 St. Paul Street St. Catharines, Ontario L2R 7R4</p> <p>Email: PPRP@ontario.ca</p>
Contact information for the purposes of Notice to the Recipient	<p>Position: Aaron VanOorspronk Director of Infrastructure and Development Services</p> <p>Address: 35663 Fingal Line, Fingal, ON N0L 1K0</p> <p>Fax:</p> <p>Email: development@southwold.ca</p>
Contact information for the senior financial person in the Recipient organization (e.g., CFO, CAO) – to respond as required to requests from the Province related to the Agreement	<p>Position: Michele Lant, Director of Corporate Services/Treasurer</p> <p>Address: 35663 Fingal Line, Fingal, ON N0L 1K0</p> <p>Fax:</p> <p>Email: treasurer@southwold.ca</p>

Additional Provisions:

None

**SCHEDULE “C”
PROJECT DESCRIPTION AND TIMELINES**

C1.0 PROJECT DESCRIPTION

C1.1 Project Details. The Project will use the pothole prevention and repair measures set out in section C1.2, C1.3 and C1.4 on road(s) under the jurisdiction of the Recipient. The Project will deploy one or a combination of the methods set out in this Schedule “C”.

C1.2 Pothole Prevention Strategies

- (a) Rout and Seal, means routing, cleaning and sealing cracks using hot poured rubberized asphalt sealant compound as per OPSS MUNI 341.
- (b) Microsurfacing means applying a thin lift of polymer modified asphalt emulsion mix to distressed pavement.as per OPSS MUNI 336.
- (c) Slurry Seal means applying a homogeneous mixture of emulsified asphalt, fine aggregates, water, mineral filler, and, if required, additive in a cold fluid state on a prepared bituminous surface as per OPSS.MUNI 337.
- (d) Single Surface Treatment means a single application of bituminous binder followed by a single application of Class 1, Class 2, Class 3, Class 4, Class 5, or Class 6 aggregate as per OPSS.MUNI 304
- (e) Double Chip Seal means two successive single chip seals with different aggregate gradations as per OPSS.MUNI 303.and
- (f) Granular In-Fill and Grading, Drainage and Stabilization of Unpaved Roadways means surfaces that are typically existing granular but may include sub grade soil surfaces as per OPSS.MUNI 301.

C1.3 Pothole Repair Strategies

- (a) Hot Mix Asphalt (HMA) Patching of Flexible Pavement means resurfacing localized areas of distressed pavement using Hot Mix Asphalt as per OPSS MUNI 310.
- (b) Scarification and Grading of Unpaved Roadways means uniform loosening of the roadway surface to remove damaged areas such as raveling and potholes as per OPSS.MUNI 301.
- (c) Concrete – Pavement and Joint Seal Repairs means sawcutting, cleaning and sealing or resealing cracks in concrete pavement and concrete base as per OPSS MUNI 369.

C1.4 Other

- (a) Project design works related to pothole preservation and repair works that will be completed between April 1, 2025 and March 31, 2026.

C2.0 PROJECT TIMELINES

C2.1 Project Timelines. The Recipient will begin the Project by April 1, 2025, and will achieve Substantial Performance of the Project by March 31, 2026.

SCHEDULE “D”

ELIGIBLE AND INELIGIBLE EXPENDITURES

D1.0 ELIGIBLE EXPENDITURES

D1.1 Eligible Expenditures. Subject to Article D2.0, Eligible Expenditures include the direct costs incurred and paid by the Recipient between April 1, 2025, and March 31, 2026 and that, in the opinion and at the sole discretion of the Province, are considered to have been properly and reasonably incurred and are necessary for the successful implementation of the Project, and include:

- (a) Purchase and delivery of materials required for the Project;
- (b) Project design related to preservation and repair works that will be completed between the period of April 1, 2025, and March 31, 2026;
- (c) Labour for contracted construction and repairs if used for Eligible Expenditures;
- (d) Recipient-owned equipment to be reimbursed at OPSS 127 Rates if used for Eligible Expenditures;
- (e) Updating Road Condition Reports if prepared by an external consultant;
- (f) Any other costs, as determined by the Province from time to time and at its sole discretion.

D1.2 Required Documentation. Eligible Expenditures must be documented through paid invoices or original receipts, or both, satisfactory to the Province.

D2.0 INELIGIBLE EXPENDITURES

D2.1 Ineligible Expenditures. Without limitation, the following costs, unless they have received the prior written approval of the Province, will be considered Ineligible Expenditures:

- (a) Costs not associated with the Project;
- (b) Costs incurred before April 1, 2025, or after March 31, 2026;
- (c) Costs associated with feasibility studies and design work that will not be completed between April 1, 2025 and March 31, 2026;
- (d) Any costs related to a project that has already received funding for eligible expenses from another funding source;
- (e) Administrative costs;
- (f) Audit and financial reporting costs;
- (g) Any other costs, as determined by the Province from time to time and at its sole discretion.

**SCHEDULE “E”
PAYMENT PLAN**

Project Milestones	Required Reports/ Documents	Date	Payment
# 1 TPA Dually Executed		January 30, 2026 to February 27, 2026	100% of Maximum Funds
# 2 Compliance Reporting	<ul style="list-style-type: none"> As per F1.1 	January 30, 2026	
# 3 Final Reporting	<ul style="list-style-type: none"> As per F2.1 	April 17, 2026	

SCHEDULE “F” REPORTING AND COMPLIANCE AUDIT

F1.0 DEFINITION

F1.1 Definition. In this Schedule “F”:

“Generally Accepted Auditing Standards” means Canadian Generally Accepted Auditing Standards as adopted by the Chartered Professional Accountants of Canada or the Public Sector Accounting Board applicable as of the date on which such a record is kept or required to be kept in accordance with such standards.

F2.0 REPORTS, DOCUMENTS AND SUBMISSION DATES

F2.1 Description and Submission Dates The Recipient will submit to the Province, at the email address pprp@ontario.ca, the Reports and other documents described as requested that are further described in Sub-schedule “F1” and section A.10.2 by their respective submission dates.

F3.0 COMPLIANCE AUDIT

F3.1 Compliance Audit. The Province may, at its sole discretion and within timelines set out by the Province, request that the Recipient carry out a Project compliance audit in accordance with Generally Accepted Auditing Standards and delivers the corresponding compliance audit report(s) within the timelines set out by the Province.

F3.2 Compliance Audit Requirements. If the Province requests a Project compliance audit pursuant to section F3.1, the Recipient will retain at the Recipient’s expense and within the timelines set out by the Province, an accredited external independent auditor(s) to carry out the audit and will deliver any compliance audit reports(s) from such audit to the province within seven Business Days of the Recipient’s receipt of the report.

F3.3 Compliance Audit Objectives. The key objectives of the compliance audit(s) are to:

- (a) determine whether Funds were expended for the purposes intended and with due regard to the economy, efficiency and effectiveness;
- (b) determine compliance with the Agreement;

- (c) ensure that the Project, Reports and other reports, and financial information are complete, timely, accurate, in accordance with the terms and conditions of the Agreement;
- (d) ensure that information and monitoring processes and systems are sufficient for the identification, capture, validation and monitoring of the service performance measures;
- (e) assess the overall management and administration of the Project;
- (f) provide recommendations for improvement or redress; and
- (g) ensure that prompt and timely corrective action is taken on audit findings.

SUB SCHEDULE “F1” PROJECT REPORTS

F1.0. COMPLIANCE REPORT

F1.1. The Recipient shall submit the following to the Province by January 30th, 2026:

- (a) a copy of the Recipient’s 2022 Asset Management Plan or current;
- (b) a copy of the Recipient’s most recent Pavement/Road Condition Reports;
- (c) a confirmation of submission of the Recipient’s 2024 Financial Information Return to Ministry of Municipal Affairs and Housing;
- (d) the number of pothole complaints received by the Recipient in the 2024 and 2025 calendar years, as available;
- (e) additional information requested by the Province.

F1.2.0 FINAL REPORT

F1.2.1 Description and Submission Date. The Recipient shall submit to the Province a description of the activities completed and certify the completion of the Project as per the Agreement. The reporting period for the Projects and information that pertains to them is April 1, 2025 to March 31, 2026. The deadline to submit required reporting is April 17, 2026.

The final report will include the following:

- (a) Quantitative data on road maintenance supported by the Program, that the Recipient carried out, including the number of kilometres maintained;
- (b) Project details of activities and/or materials related to the use of the Funds.
Examples of accepted documentation include: invoices and payment certificates, post construction report, purchase and delivery of assets or supplies;
- (c) Other activities that achieved the Project’s objectives.

F1.2.2 Reporting Failure. The Province requires submission of the program reports to inform future development of the Program, ensure effective administration and monitor performance of the Program. Any failure by the Recipient to provide Reports to the Province as set out in this Agreement may result in an Event of Default by the Recipient under Section A12.1.