THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

- A G E N D A -

Monday September 26, 2022

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

4. ADOPTION OF MINUTES

(a) Minutes of Regular Council Meeting of September 12, 2022
(b) Minutes of the Talbotville Station Technological Advisory Committee meeting of April 19, 2022
(c) Minutes of the War Memorial Committee Meeting of April 26, 2022
(d) Minutes of the Zero Waste Committee Meeting of June 21, 2022
(e) Minutes of the Parks Committee Meeting of September 7, 2022

5. DELEGATION

(a) **8:00 p.m. –** Mark Harris and Maegan Garber – **QCWA 2nd Quarter Operations Reports-Southwold Water Distribution System and Talbotville Wastewater Treatment Plant.**

6. DRAINAGE

(a) Filing the Report – G. H. Pennings Drain 2022

7. PLANNING

(a) **7:00 p.m. Committee of Adjustment** MV 2022-08, R. Plain 13509 Routh Road and MV 2022-09 C. Bowman and J. Smith, 13524 Routh Road **(sent under separate agenda package)**

8. REPORTS

(a) ENG 2022-38 Township Design Guidelines Manual - Part 1
(b) ENG 2022-39 Shedden and Fingal Sanitary Sewer System
(c) CAO 2022-45 Integrity Commissioner, Closed Meeting Investigator,

Ombudsman – County RFP

(d) CAO 2022-46 Christmas Gift Certificates for Staff
(e) CAO 2022-47 Electronic Monitoring Policy
(f) CAO 2022-48 FCM Asset Management Agreement
(g) CAO 2022-49 Asset Management Plan
(h) County Council Highlights – September 14, 2022

9. CORRESPONDENCE

10. BY-LAWS

(a) By-law No. 2022-80, being a by-law to appoint a Community Emergency Management Coordinator (CEMC) and to repeal By-law No. 2021-21
(b) By-law No. 2022-81, being a By-law to confirm the resolutions and motions of the Council of the Township of Southwold, which were adopted on September 26, 2022

11. OTHER BUSINESS *(For Information Only)*

(a) Kettle Creek Conservation Authority Progress Report

12. CLOSED SESSION

No business

13. ADJOURNMENT:

NEXT REGULAR MEETING OF COUNCIL
Tuesday October 11, 2022 @ 7:00 P.M.
Council Chambers, Fingal/Via Video Link

THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

MINUTES

Regular Council Meeting
Monday September 12, 2022
7:00 p.m. Council Chambers, Fingal/Via Video Link

PRESENT:	Mayor:	G. Jones
	Deputy Mayor:	R. Monteith
	Councillors:	S. Emons J. Pennings

ALSO PRESENT: Jeff Carswell, CAO/Clerk
Michele Lant, Director of Corporate Services/Treasurer (7:00 p.m.- 9:14 p.m.)
Peter Kavcic, Dir. of Infrastructure & Development Serv. (7:00 p.m.– 10:40 p.m.)
Corey Pemberton, Dir. of Building & Community Services (7:00 p.m. – 8:53 p.m.)
Paul Van Vaerenbergh, Public Works Superintendent (7:00 p.m.– 8:49 p.m.)
Jeff McArthur, Director of Emergency Services/Fire Chief (7:00 p.m. – 9:14 p.m.)
Kevin Goodhue, Water/Wastewater Compliance Superintendent (7:00 p.m.- 8:49 p.m.)
Josh Mueller, Planner (7:00 p.m.- 8:13 p.m.)
Tracey Pillion- Abbs, Planner (7:00 p.m. – 8:13 p.m.)
June McLarty, Corporate Services Clerk (7:00 p.m.- 9:14 p.m.)

ABSENT: Councillor P. North

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

DISCLOSURES:
There were no disclosures

ADOPTION OF MINUTES:

2022-233 Councillor Pennings – Councillor Emons Minutes

THAT the Minutes of the Regular Council Meeting of August 8, 2022 are hereby adopted.

CARRIED

2022-234 Deputy Mayor Monteith – Councillor Pennings Committee Mtg Meetings

THAT Council has reviewed the Minutes of the Young @ Heart Committee Meeting of June 7, 2022 and the Court of Revision Meeting of August 8, 2022.

CARRIED

PLANNING:

7:00 p.m. Committee of Adjustment MV 2022-06 and 2022-07

2022-06 Eckel C/O T. Keck, Gray & Fink Ltd, 40205 Longhurst Line
2022-07 Hiebert, 11645 Sunset Road

In attendance: T. Keck, A. Hiebert, G. Williams, B. Harrison

2022- 235 Councillor Pennings – Deputy Mayor Monteith MV 2022-06 and 2022-07

THAT the regular Council meeting adjourn to sit as a Committee of Adjustment to hear minor variance applications MV 2022-06, filed by B. and J. Eckel C/O T. Keck, Gray & Fink Ltd, 40205 Longhurst Line and 2022-07 filed by A. Hiebert, 11645 Sunset Road at **7:01 p.m.**

CARRIED

2022-236 Councillor Pennings – Deputy Mayor Monteith Adjournment of C of A

THAT the meeting of the Committee of Adjustment to hear applications MV 2022-06, filed by B. and J. Eckel C/O T. Keck, Gray & Fink Ltd, 40205 Longhurst Line and MV 2022-07 filed by A. Hiebert, 11645 Sunset Road adjourns and the regular meeting of council reconvenes at **7:42 p.m.**

CARRIED

2022-237 Councillor Pennings – Councillor Emons **Consent Application E66-22, Turville C/O Domus Developments (London) Inc. 4509 Union Road**

THAT Council of the Township of Southwold receive Report PLA 2022-31 regarding Consent Applications E66-22 – Comments to the County of Elgin;

AND THAT Council of the Township of Southwold recommends approval of the Land Division Committee of the County of Elgin for the consent applications, E66-22, subject to the Lower-Tier Municipal conditions in Appendix Two of Report PLA 2022-31;

Council of the Township of Southwold directs Administration to provide Report PLA 2022-31 as Municipal comments to the County of Elgin.

CARRIED

7:45 p.m. Zoning By-law Amendment - ZBA 2022-08, J. and K. Lethbridge C/O H. Button, Gunn & Associates, 36434 McDiarmid Line, ZBA 2022-09 B. Fulton and B. Siebenmorgen C/O. D. Roe, 36427 Talbot Line, and ZBA 2022-10, Turville C/O. Domus Development (London) Inc., 4509 Union Road.

In attendance:
A. Lethbridge, 36434 McDiarmid Line
H. Button, Gunn & Associates, 108 Centre Street St. Thomas, ON

2022-238 Deputy Mayor Monteith – Councillor Emons **Public Meetings ZBA 2022-08, ZBA 2022-09 and ZBA 2022-10**

THAT Council of the Township of Southwold now sits as a public meeting under the Planning Act to consider applications to amend the zoning on the properties owned by J. and K. Lethbridge C/O H. Button, Gunn & Associates, 36434 McDiarmid Line, ZBA 2022-09 B. Fulton and B. Siebenmorgen C/O. D. Roe, 36427 Talbot Line, and ZBA 2022-10, Turville C/O. Domus Development (London) Inc., 4509 Union Road.

CARRIED

The Mayor stated that this is a public meeting as required by Section 34 of the Planning Act to afford any person an opportunity to make representation with respect to the a

proposed zoning by-law amendment to rezone the subject lands located a 36434 McDiarmid Line from the Agricultural 1(A1) Zone to A3 Zone and the severed parcel portion of the subject lands from the Agricultural 1 (A1) Zone to A1-66, in order to recognize the lot area of the lot being created in the Township of Southwold.

The Mayor asked Council if they had any disclosure of interest concerning the proposals. None were disclosed.

The Mayor asked the Clerk what method of notice and when was the notice given to the public for the meeting. The Clerk responded that notices were mailed to neighboring property owners within 120 meters of the subject lands and emailed to commenting agencies on August 18th, 2022. A sign was posted on the subject property prior to the deadline of August 24th, 2022.

Planner Josh Mueller presented the staff report prepared by Planner Tracey Pillion-Abs.

The Mayor asked the Clerk if any comments were received from staff. The Clerk responded yes staff comments were received as detailed in the Planning Staff Report.

The Mayor asked if any written submissions were received. The Clerk responded agency comments were received as detailed in the Planning Staff Report. No public comments were received at the time of writing the Planning Staff Report.

The Mayor stated that before I open the floor to questions from the public, please be advised if any person from the public wished to receive further information on the action of Council regarding the decision on the application for zoning by-law amendment, please ensure that they email their name, address, postal code and phone number to the Planner or Clerk by September 13, 2022. Any person that has contacted the Planner to be part of the public meeting today will receive this further information automatically.

No questions were asked by the public or Council.

2022-239 Councillor Emons – Deputy Mayor Monteith ZBA 2022-08
Lethbridge, C/O H. Button
36434 McDiarmid Line

THAT Council of the Township of Southwold receive Report PLA 2022-28 regarding Zoning By-law Amendment Application ZBA 2022-08 – Recommendation Report; and,

THAT Council of the Township of Southwold approve the proposed Zoning By-law Amendment Application ZBA 2022-08, in accordance with the site-specific By-law contained within Appendix Two of Report PLA 2022-28.

CARRIED

The Mayor stated that please be advised that the decision may be appealed to the Ontario Land Tribunal by the applicants or another member of the public who have provided comments. This public meeting is now concluded.

ZBA 2022-09

The Mayor stated that this is a public meeting as required by Section 34 of the Planning Act to afford any person an opportunity to make representation with respect to a proposed zoning by-law amendment to rezone the subject lands located at 36427 Talbot Line from Agricultural 1 (A1) to Residential (R1) for the proposed three lots and to a site-specific Agricultural 1 Special Provision 68 (A1-68) for the retained land to address the new lot area as a Land Division Committee Condition of approval for applications E40-22 to E42-22.

The Mayor asked if any member of Council had a disclosure of interest concerning the proposals. None were received.

The Mayor asked the Clerk what method of notice and when was the notice given to the public for this meeting. The Clerk responded that notices were mailed to neighboring property owners within 120 meters of the subject lands and emailed to commenting agencies on August 18th, 2022. A sign was posted on the subject property prior to the deadline of August 24th, 2022.

Planner Josh Mueller presented the staff report prepared by Planner Tracey Pillion-Abbs.

The Mayor asked if any comments were received from staff. The Clerk responded yes. Staff comments were received as detailed in the Planning Staff Report.

The Mayor asked if any written submissions were received. The Clerk responded that agency comments were received as detailed in the Planning Staff Report. No public comments were received at the time of writing the Planning Staff Report.

The Mayor stated that before I open the floor to questions from the public, please be advised if any person from the public wished to receive further information on the action of Council regarding the decision on the application for zoning by-law amendment, please ensure that they email their name, address, postal code and phone number to the Planner or Clerk by September 13, 2022. Any person that has contacted the Planner to be part of the public meeting today will receive this further information automatically.

No questions were asked from Council or the public.

2022-240 Deputy Mayor Monteith – Councillor Pennings ZBA 2022-09
Fulton/Siebenmorgen
C/O D. Roe, 36427 Talbot Line

THAT Council of the Township of Southwold receive Report PLA 2022-29 regarding Zoning By-law Amendment Application ZBA 2022-09 – Recommendation Report; and,

THAT Council of the Township of Southwold approve the proposed Zoning By-law Amendment Application ZBA 2022-09, in accordance with the site-specific By-law contained within Appendix Two of Report PLA 2022-29.

CARRIED

The Mayor stated that please be advised that the decision may be appealed to the Ontario Land Tribunal by the applicants or another member of the public who have provided comments. This public meeting is now concluded.

ZBA 2022-10

In attendance:
B. Rosser, Professional Land Use Planner
J. Van de Gevel, 5111 Union Road
D. Shields, 4263 Union Road

The Mayor stated that this is a public meeting as required by Section 34 of the Planning Act to afford any person an opportunity to make representation with respect to a proposed zoning by-law amendment to rezone the subject lands located at 4509 Union Road from Site-Specific Agricultural 3 (A3-2) to Site-Specific Agricultural 1 (A1-67) to address the resulting parcel size to 2.8 ha and to permit the existing single detached dwelling use as a Land Division Committee condition of the approval for application E66-22.

The Mayor asked if any member of Council had a disclosure of interest concerning the proposals. None were received.

The Mayor asked the Clerk what method of notice and when was the notice given to the public for this meeting. The Clerk responded that notices were mailed to neighboring property owners within 120 meters of the subject lands and emailed to commenting agencies on August 18th, 2022. A sign was posted on the subject property prior to the deadline of August 24th, 2022.

The Mayor asked if any comments were received from staff. The Clerk responded yes. Staff comments were received as detailed in the Planning Staff Report.

The Mayor asked if any written submissions were received. The Clerk responded that agency comments were received as detailed in the Planning Staff Report. No public comments were received at the time of writing the Planning Staff Report.

The Mayor stated that before I open the floor to questions from the public, please be advised if any person from the public wished to receive further information on the action of Council regarding the decision on the application for zoning by-law amendment, please ensure that they email their name, address, postal code and phone number to the Planner or Clerk by September 13, 2022. Any person that has contacted the Planner to be part of the public meeting today will receive this further information automatically.

J. Van De Gevel questioned the rezoning of the retained parcel. Ms. Pillion-Abbs responded that the retained parcel will be zoned Site-Specific Agricultural 1 (A1-67) to address the resulting parcel size to 2.8 ha to permit a single detached dwelling and the severed parcel in the Settlement Reserve Zone.

Mr. Van De Gevel questioned if there would be a chance to sever off another lot with that zoning. Ms. Pillion- Abbs responded that piece in the Official Plan will be agriculture and the left-over piece is part of recent Official Plan amendment that is at the County for approval. B. Rosser commented that the part being rezoned tonight is the part outside of the North Port Stanley Settlement Area and is designated as agriculture. Any possible land severances would need to be subject to the policies under the agricultural designation of the Southwold Official Plan. Those policies would only be permissible for land severances for the purpose of a surplus farm dwelling. This parcel at 2.8 ha would not qualify as a surplus farm dwelling. The severed parcel from OPA 2022-01 was taken into settlement reserve. There will be a future rezoning at the time of the residential plan of subdivision for the severance. The rezoning of the 2.8 ha parcel will be zoned A 1-67 and it meets all the agricultural setbacks.

Mr. Van De Gevel questioned why not leave it at an A3-2 Zone to prevent any future building on the retained parcel. Ms. Rosser responded that proposed A3-2 zoning only permits a single detached dwelling as is. They would not be able to build a new single detached dwelling. The severed parcel will need to be transferred to Domus Developments (London) Inc for ownership and the lot area would need to be legal under the Zoning By-law.

Ms. Shields questioned the pond for the development that is proposed to be located near her property. Mr. Mueller responded that stormwater management pond can be addressed we receive the site plan.

Councillor Pennings commented about new subdivision being located adjacent to farm operations and the need for an education program. Ms. Rosser responded that this matter was noted during the Official Plan Amendment and rezoning public process in June. Domus Development intends to implement that education program with help from Mr. Van De Gevel and Great Lake Farms.
Councillor Emons questioned about receiving the written materials or reports for this program. Beneficial for Council to use as a model for future developments. Mr. Van De Gevel responded that they are working on some materials that will inform new residents

and welcome them to the country. Ms. Rosser commented that Domus is working with Great Lake Farms to develop these materials. It is possible that this information can come to Council.

2022-241 Councillor Emons – Councillor Pennings ZBA 2022-10 Turville C/O Domus Developments (London) Inc., 4509 Union Road

THAT Council of the Township of Southwold receive Report PLA 2022-30 regarding Zoning By-law Amendment Application ZBA 2022-10 – Recommendation Report; and,

THAT Council of the Township of Southwold approve the proposed Zoning By-law Amendment Application ZBA 2022-10, in accordance with the site-specific By-law contained within Appendix Two of Report PLA 2022-30.

CARRIED

The Mayor stated that please be advised that the decision may be appealed to the Ontario Land Tribunal by the applicants or another member of the public who have provided comments. This public meeting is now concluded.

2022-242 Deputy Mayor Monteith – Councillor Emons Adjournment of Public Mtg

THAT the public meeting to consider the applications to amend the zoning on the properties owned by J. and K. Lethbridge C/O H. Button, Gunn & Associates, 36434 McDiarmid Line, ZBA 2022-09 B. Fulton and B. Siebenmorgen C/O. D. Roe, 36427 Talbot Line, and ZBA 2022-10, Turville C/O. Domus Development (London) Inc., 4509 Union Road at **8:13 p.m.**

CARRIED

DELEGATION:
Jennifer Buchanan, Graham Scott Enns LLP
8:13 p.m. - 8:28 p.m.

2022-243 Deputy Mayor Monteith – Councillor Pennings 2021 Audited Financial Statements

THAT the Financial Statements for the Year Ended December 31, 2021 of the Corporation of the Township of Southwold, as prepared and presented by Graham Scott Enns, LLP be approved; and
THAT the Mayor, CAO/Clerk and/or Treasurer, as required, be authorized to the sign the following documents associated with the 2021 Year End:

1. Financial Statements
2. Management's Responsibility for Financial Reporting
3. Management Representation Letter
4. Audit findings letter

CARRIED

REPORTS:

Activity Report from the Director of Fire Services/Fire Chief
Jeff McArthur presented his report to Council.

Elgin County Fire Communications System Study
Jeff McArthur presented his report to Council on the study that was completed for the County's Fire Communications System. The study was completed by KVA Communications and at this time no action is required to replace the system. Fire Departments will need to plan to replace the system in the future.

Activity Report from the Director of Building and Community Services
Corey Pemberton presented his report to Council.

2022- 244 **Deputy Mayor Monteith – Councillor Pennings** **Pavilion Usage and Noise**

THAT Council endorse the staff direction for pavilion signage and usage rules.

CARRIED

Activity Report from the Director of Infrastructure and Development Services
Peter Kavcic presented his report to Council.

2022-245 **Councillor Emons – Councillor Pennings** **Elgin County Growth Forecast**

THAT Council endorse Staff's comments that will be sent to County Staff on the Elgin County's Growth Forecast report.

CARRIED

2022- 246 **Councillor Emons – Councillor Pennings** **Lake Line Speed Reduction**

THAT Council approve reducing the speed limit on Lake Line from Union Road to Scotch Line from 80 km/h to 60 km/h; and,

THAT Council approve By-law No. 2022-77, listed under By-laws.

CARRIED

2022-247 **Deputy Mayor Monteith – Councillor Emons** **By-law Enforcement Services**

THAT Council approve the agreement with Tenet Security Group Incorporated, as attached to this report as Appendix "A" and authorize the Mayor and Clerk to sign the agreement.

CARRIED

Council Restricted Acts (Lame Duck) Review – After Nominations

Jeff Carswell presented his report as information to Council. Based on the candidate certifications the Township's Council will be impacted by Section 275 of the Municipal Act, Restricted Acts after Nomination Day and the restrictions will apply.

2022-248 **Councillor Emons – Councillor Pennings** **Policy Updates**

THAT Council approve the General Expense Policy as attached as Appendix "A" to Report CAO 2022-41; and,

THAT Council approve the Conference Expense Policy as attached as Appendix "B" to Report CAO 2022-41; and,

THAT Council approve the Travel and Mileage Rate Re-imbursement Policy as attached as Appendix "C" to Report CAO 2022-41.

CARRIED

2022-249 **Deputy Mayor Monteith – Councillor Pennings** **Federal Election Districts**

THAT the Township of Southwold coordinate efforts with Elgin County, other Elgin County municipalities and the City of St. Thomas to represent interests and concerns pertaining to the proposed federal electoral boundary districts; and,

THAT the Township of Southwold develop a submission and make a presentation at the Federal Electoral Boundaries Commission for the Province of Ontario; and,

THAT the submission and presentation guiding principle be that the Township of Southwold be fully contained and represented within one federal electoral district with the entirety of Elgin County and the City of St. Thomas.

CARRIED

Activity Report from the CAO/Clerk
Jeff Carswell presented this report to Council.

County Council Highlights – August 9, 2022
Mayor Jones presented this report to Council.

CORRESPONDENCE:

- Waiver of Fee Request – Talbotville Meadows Residents - Neighbourhood Meet and Greet.
- Elgin Amateur Radio Society RE: Thank you

2022-250 Councillor Pennings – Deputy Mayor Monteith Fee Waiver Request – Talbotville Meadow Residents – Neighbourhood Meet and Greet

THAT Council of the Township of Southwold approves the $80 fee waiver request for the Talbotville Meadow Residents Neighbourhood Meet and Greet at the Talbotville Pavilion.

CARRIED

BY-LAWS:

- By-law No. 2022-51, being a by-law to provide for drainage works, Luton Drain 2022, third and final reading
- By-law No. 2022-74, being a by-law to amend By-law No. 2011-14- Lethbridge 36434 McDiarmid Line
- By-law No. 2022-75, being a by-law to amend By-law No. 2011-14- Fulton Siebenmorgen 36427 Talbot Line
- By-law No. 2022-76, being a by-law to amend By-law No. 2011-14- Turville 4509 Union Road

- By-law No. 2022-77, being a by-law to reduce speed on Lake Line
- By-law No. 2022-78, being a by-law to appoint Township Official
- By-law No. 2022-79, being a By-law to confirm the resolutions and motions of the Council of the Township of Southwold, which were adopted on September 12, 2022

2022-251 Councillor Emons – Councillor Pennings By-laws

THAT By-laws Nos. 2022-74, 2022-75, 2022-76, 2022-77, 2022-78 and, 2022-79 be read a first and second time, considered read a third time and finally passed this 12th day of September 2022;

CARRIED

2022-252 Deputy Mayor Monteith – Councillor Pennings By-law No. 2022-51

THAT By-laws No. 2022-51 be read a third time and finally passed this 12th day of September, 2022.

CARRIED

OTHER BUSINESS:

- Resolution from the Town of Aylmer RE: Warming and Cooling Centre
- Ontario Sheep Farmers RE: Livestock Guardian Dogs (LGD)
- Town of Wasaga Beach Resolution RE Strong Mayors, Building Homes Act
- Resolution from the Town of Kingsville RE: Bill 3 Strong Mayors, Building Homes Act, 2022

2022-253 Councillor Emons – Councillor Pennings Bill 3 Strong Mayors, Building Homes Act, 2022 Resolution

BE THAT IT RESOLVED The Council of the Corporation of the Township of Southwold hereby supports the attached resolutions from the Towns of Wasaga Beach and Kingsville opposing the Bill 3, Strong Mayors, Building Homes Act, 2022; and

FURTHER a copy of this resolution be sent to the Honourable Doug Ford, Premier of Ontario, the Honourable Steve Clark, Minister of Municipal Affairs and Housing, MPP Elgin- Middlesex- London Rob Flack and the Towns of Wasaga Beach and Kingsville.

CARRIED

2022-254 Councillor Emons – Councillor Pennings Livestock Guardian Dogs

THAT the Township of Southwold supports the recommendations from the Ontario Sheep Farmers for the use of Livestock Guardian Dogs.

CARRIED

Councillor reviewed the items under Other Business.

CLOSED SESSION:

2022- 255 Councillor Emons – Deputy Mayor Monteith Closed Session

THAT Council of the Township of Southwold now moves into a session of the meeting that shall be closed to the public at **9:14 p.m.** in accordance with Section 239 (2) of the Municipal Act, S.O. 2001, c. 25 for discussion of the following matters;

- Personal Matters about an identifiable individual, including municipal or local board members (section 239(2)(b))– Administration Staffing
- Litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board (section 239(2)(e)) – Talbotville Sanitary System
- Labour relations or employee negotiations (Section 239 (2)(d)) – Public Works Staffing

CARRIED

2022-256 Deputy Mayor Monteith – Councillor Emons Adjournment of Closed Session

THAT Council of the Township of Southwold adjourns the Closed Session of the Regular Council meeting at **10:38 p.m.**

CARRIED

2022-257 Councillor Pennings – Councillor Emons CAO 2022-44

THAT Council adopt the recommendation in Staff Report CAO2022-44 dated September 12, 2022 re: Records Management Contract Extension.

CARRIED

STAFF DIRECTION

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

ADJOURNMENT:

2022- 258 Deputy Mayor Monteith – Councillor Pennings Adjournment

THAT Council for the Township of Southwold adjourns this Regular meeting of Council at **10:40 p.m.**

CARRIED

_____

Mayor
Grant Jones

_____

CAO/Clerk
Jeff Carswell

Talbotville Station Technical Advisory Committee

Minutes of Meeting
Tuesday, April 19, 2022
6:30 p.m.
Fire Station, Shedden / Virtual

In Attendance: Jeff McArthur, Fire Chief / Chair
Grant Jones, Mayor
Justin Pennings, Councillor
Barry Smith, District Chief
Rene Coenen, Fire Fighter
Steve Van Maanen, Public Member
Lisa Higgs, CAO/Clerk
Caitlin Wight, Resource

---

1. **Call to Order**

Mayor Grant Jones called the meeting to order at 6:34 PM

2. **Adoption of Minutes – August 14, 2019**

The committee reviewed the minutes of the August 14, 2019, meeting

Resolution No. 1 Moved by Justin Pennings
Seconded by Barry Smith

RESOLVED that the minutes of the August 14, 2019, minutes be approved.

DISPOSITION Motion Carried

3. **Land Acquisition Update**

Lisa Higgs provided an update and timeline on land acquisition to date.

- Committee put together a plan of their ideas – 3 acres on current site in Talbotville. Discussed next steps. Confirmed with owner of the lands in June/July 2019. Contemplation of a donation of subject lands (initially with no ties). Discussions continued, then conditions were discussed (re-allocation of lands in Official Plan update, which took place in November 2021).

- July 2021 – agreement was drawn up; a Survey was prepared by AGM Group. (Survey required for legal transfer of land – needs a registered plan to define the land)
- During this process an easement was discovered. Part 1, 2, 3 of the RP to be transferred, Parts 4, 5, 6 to stay with owner. Part 3 – no development on it, because of the easement.
- Legal direction was obtained, verbal confirmation from owner, agreeable to transfer
- Request was made for written confirmation, which has not been received to date.
- Committee/ Township eager to move forward.
    - Most desirable and logical location can keep original fire hall as part of design, square footage of it is desirable. Keeping existing building and utilizing it does not present any cost savings.
    - Could sell existing land if deal does not move forward, however, would be expensive to purchase land elsewhere
    - Want to keep site as with all the development that is going on in and around Talbotville. Access to two major roads at this site (Sunset & Talbot Line)
    - Discussion on potential Public Works, Parks building on same site
    - Discussion on going back to Council and exploring further options.
        - Caution against expropriation – due to potential cost, legal fees, length of time process can take.
- L. Higgs to take a report to Council on different options and try to set up another meeting with landowners with Mayor Jones.
    - Option A – continue to work towards existing site
    - Option B – explore expropriation
    - Option C – look to another site
        - Discussion on location (not towards Shedden or St. Thomas on Talbot, or North of Talbot on Sunset)
        - Across from Talbotville Meadows – not as advantageous of a location, ability to convince landowner to sell? Price of land?
- Timeline – committee to reconvene again in two months, regardless of a status update on the land

Motion for Staff / Mayor to contact property owner to set up another meeting

Resolution No. 1 Motion: Chief McArthur
Second: S. Van Maanen

RESOLVED Staff / Mayor to contact property owner to set up another meeting. Existing site is preferred location. Report back in two months. Explore potential for expropriation

DISPOSITION Motion carried

4. New Business

- Committee discussed meeting on a more regular basis going forward. All in agreement on drafting a report
- Discussion on the following items related to the new fire hall building itself:
    - Admin rooms – want 3-4, currently there are two. There have been no formal discussions on potential satellite offices for other Township Staff. Extra shared space potential. Docking station spaces (i.e., for OPP potentially)
    - Building department – if done correctly with appropriate parking and space, can off set requirements for space
    - Public education office – storage needed for this potentially, could work out of one of the admin offices
    - Training room – looking approximately 40 x 60, 50 people. The ability to have both stations present for training. Potential to host fire training school.
    - Public use – not a good fit. Discussion on fire halls in other locations that did allow it, that it was not working out as it was originally intended. I.e., with parking. Would be limited to open houses, public fire education events, not as a public event space. Keystone complex is the emergency shelter for the Township.
    - No interest in a net zero building
    - The hall is currently compatible in the neighbourhood it is in
    - Storage requirements – as much as efficiently/ and practical as possible, bays could offer mezzanine area for gear overtop
    - Kitchen – yes, kitchenette, eat in. Could model like the existing Shedden station
    - Association Room / lounge – not a whole lot of need for this
    - Debrief room – can use training room or an office for this space
    - Male & Female washrooms – universal shower room? No need for it in the hall
    - Lockers – they would be gear lockers – do not need full section ones, 12" wide, 3' high. Personal lockers would be built into these.
    - Onsite amenities: Generator, work bench area, service area for equipment, industrial washing machine for gear, laundry tub, SCBA filling station (discussion on, is it financially beneficial)
    - Outdoor training area – fire hydrant in well thought out area, aside from filing trucks in read property
- Treatment of existing building: re-use? As office space/storage. All questions for CBO. Appropriate to invite to a meeting – high level advice on approach
- RFP discussion
    - Build spec vs. design build – get direction from Council
    - RFP to multiple design builders – budget number in place, give general idea on building (nothing super specific) – then chose who to move forward with after process closes

- Public consultation: when do we solicit feedback from community. Through public open house? Survey? Concept drawings need to be available. It has been a part of public budget consultation over the last few years
- Further discussion on:
    - Cost of building has increased by potentially 50% since committee formed
    - Price per Sq ft $350-450 – depending on construction materials and other factors. Budget target has increase.

5. Next Meeting – Tuesday, June 14, 2022, 6:30 PM

6. Motion to Adjourn

Resolution No. 3 Moved by Justin Pennings
Seconded by Rene Coenen

RESOLVED That the Talbotville Station Technical Advisory Committee adjourns this meeting at 7:59 PM

DISPOSITION Motion carried

_____ _____

Fire Chief
Jeff McArthur

Mayor
Grant Jones

Southwold War Memorial Committee

April 26, 2022
Township Office, Fingal & Virtually
1:30 PM

Attending: Sarah Emons, Len Lynch, Bill Aarts, Rev Diane Macpherson
Virtually: Rev. John Brown
Staff Resource: Michele Lant
Regrets: Mary Clutterbuck, Perry Clutterbuck, Sandy Annett

Business Arising from Minutes

Pat Temple provided Len with some information for the Silver Cross Family.

Sarah and Len met with Grayden in early 2022 regarding the possibility of both a virtual and live presentation for the 2022 Remembrance Day ceremony. Sarah will get a quote from Grayden for both the inside and outside services.

Silver Cross – Lloyd Douglas Bennett, RCAF Flight Sergeant. He died on his 1st flight in England when his plane caught fire.

Len and Diane will work on the information for the video with Grayden.

Francis Newland passed away in 2022. A tribute should be done as he was the last Southwold veteran.

Randy Graham, who helped the Boxall ladies with the luncheon also passed away in 2022.

Len was given a 1941 era RCAF flag at the end of the 2021 service from the St Thomas Legion. Len has emailed Mike Baker at the County of Elgin to see if anyone could clean it. Sarah also has a contact that she will check with.

Diane spoke to Ms. Szturm at Southwold Public School, and she was very excited to bring a choir to the service. God Save the Queen is normally played at the outside service, but instead, it was suggested to have the choir sing O Canada outside. Could give the choir the option of not having to sit inside during that part of the service and to just attend the outside part of the service. Suggest possible singing another remembrance song.

A suggestion to have someone from Southwold student council present the wreath on behalf of Southwold youth.

Plans for November 6, 2022

Flags – suggested that we use committee members again this year

- Len will ask Lynn McFarlane (Silver Cross family) about family members possible attending to do the flags

Michele will book the Harvards.

Michele will get a list of the advertisers that Mary sent to in previous years.

In June 2022, Michele will ask Caitlin to post on social media that the service will be taking place.

Bill will check with Karen Vecchio to see if there is an anniversary being celebrated this year.

Ted Barris' presentation will be on the Battle of the Atlantic.

Keystone capacity – we will need to be cognizant of the capacity for the inside service depending on possible restrictions in November. We could possibly have a feed to the outside for people that cannot get inside for the program

Displays – may need the space for people to sit and to prevent people from crowding at the displays

Discussion needs to be held on whether the bleachers will be put out for the outside service

Committee thinks it is a good idea to do a news release from the chair of the committee with Eric Bunnell that the 2022 service will be in-person with a virtual component as well.

Other Business

Next Meeting
The next meeting will be Tuesday, September 13, 2022, at 1:30 p.m. at the Township Office or virtually depending on restrictions in place at the time.

Adjournment
The meeting was adjourned at 2:03 p.m.

Southwold Zero Waste Committee

June 21, 2022
Virtually
10:00 AM

Attendance: Councillor Emons, Shannon Lynch, Niki Pennings, Caitlin Wight, Andrea Kerkvliet.
Regrets: Richard Andrews, Jess Andrews

1. Call to Order

Meeting called to order by Councillor Emons at 10:05 am

2. Approval of Agenda

Agenda was approved through Resolution No. 10. Moved by Shannon Lynch, Seconded by Niki Pennings.

RESOLVED that the agenda of the June 21, 2022 committee meeting of the Southwold Zero Waste Committee be approved. DISPOSITION: Motion Carried

3. Adoption of Minutes from May 17, 2022 Meeting

Adoption of the minutes from meeting on May 17, 2022 approved through Resolution No. 11. Moved by Shannon Lynch, Seconded by Niki Pennings.

RESOLVED that the minutes of the meeting of the Southwold Zero Waste Committee on May 17, 2022 be approved. DISPOSITION: Motion Carried.

Business arising from previous minutes

New business

- Canada Day
  - Canada Day Committee accepted offer of assistance for the event
  - Starts at 7:30, goes until fireworks end
  - Role – help with waste management. Provide an educational role. Everyone in attendance to wear aprons, walk around with recycling/garbage bags. Discussion on compost? What to do with it. Decision to put to garbage for this year. Plan for a better solution next year.
    - Caitlin to coordinate with parks dept, to get recycling bags

        - Andrea to send ideas to Caitlin on social posts for zero waste for Canada Day event.
- Young at Heart
    - Committee happy with water bottles, reusable sporks. Ice cream was served in insulated reusable mugs.
    - Committee wants to pass along message of thanks

Delegation of Duties

Adjournment

The next meeting to be Tuesday, August 23, 2022 10:00 AM Virtually. Approved through Resolution No. 12. Moved Shannon Lynch, Seconded by Niki Pennings. RESOLVED that the meeting be adjourned at 10:20 AM and that the next meeting be scheduled for August 23, 2022 at 10:00 AM virtually. DISPOSITION: Motion Carried.

TOWNSHIP OF
Southwold

- M I N U T E S -

September 7th, 2022
@ 7:00pm
Webex Meeting

Attendees:

Councillor Justin Pennings (Co-Chair)
Steve Bushell (Shedden Soccer, Youth)
Michelle Lackey (Shedden Soccer)
Jesse Walker (Shedden Soccer)
Janice Fisher (Talbotville Minor Ball)
Ross Burgar (Fingal Heritage Park)
Jeff Carswell (CAO/Clerk)
Corey Pemberton (CBO)
John Price (Parks Facility Manager)
Lori Redman (Resource)

---

1. Meeting called to order at 7:04 pm

2. Adoption of Minutes – May 5th, 2022

Resolution of Committee
Moved by: Janice Fisher
Seconded by: Steve Bushell

THAT the minutes of the May 5th, 2022 committee meeting are hereby approved

Carried

3. <u>Business Arising from previous Minutes</u>

<u>Municipal Naming Program</u>

The program is under review. Members of the Committee would like to inform the optimist club of the potential naming of the two parks in Talbotville.

<u>Parks</u>

A report is going to Council, on September 12th, 2022, regarding new signage. This will be addressed at the next committee meeting.

Bollards and fencing around Talbotville park have not been installed, will follow up with the developer and be added to the agenda for the next scheduled meeting.

Trail maintenance at Talbotville park is to be discussed with Peter Kavcic, Director of Infrastructure and Development Services. To be addressed at the next meeting.

The developer and builders have been notified of expected equipment removal from the parking area at Talbotville Park. CBO, Corey Pemberton to follow up.

Team benches were not available. Corey Pemberton, CBO for the Township of Southwold will follow up and report at the next committee meeting.

Storage will be organized, and the equipment will be stored at the older Talbotville park and new Talbotville park.

4. <u>Dave Arnett – Optimist Club</u>

Jeff Carswell, CAO, Township of Southwold, presented on behalf of the Talbotville Optimist Club. They would like to participate in park projects. Committee approved the commitment of the Optimist Club.

5. <u>Reports</u>

a) <u>Fingal Ball Committee – No Rep</u>

b) <u>Talbotville Minor Ball – Janice Fisher</u>

Members of Talbotville minor ball are retiring, including two directors, and the treasurer. Looking for a volunteer(s) to step in. Talbotville minor ball asking to have a notice posted on the Townships social media sites asking area residents to step in and help with coaching. Will coordinate with Community Services and Communications Clerk.

Talbotville minor ball had three teams playing out of the Fingal Park this summer, Atom, 4-Pitch, and T-Ball. Due to a limited number of players in the division, the Port Stanley team was the only opponent. The Talbotville park official opening ceremony was well attended.

c) <u>Talbotville Men's Soccer – No Rep</u>

d) <u>Talbotville Ladies Soccer – No Rep</u>

e) Shedden Youth Soccer – Steve Bushell/Michelle Lackey/Jesse Walker

Shedden soccer holds its annual AGM in November of this year. Shedden youth soccer reported a good year.

Low spots in the playing areas are to be addressed.

The parking lot at the open space park needs to be widened to help with parking issues. To be addressed at the next meeting.

Temporary netting along Union Road needs to be replaced with permanent fencing.

f) Shedden Adult Soccer – No Rep

g) Fingal Heritage Park – Ross Berger

The walking path and parking lot have been completed. Concrete quote for signage base, porta-potty base will be in, should be completed this fall.

Follow-up on Memorial Bench application.

A painting of a replica thrashing machine is to be installed at the park later this year.

6. 2023 Budget Items

- A path around Talbotville Meadows subdivision.
- Netting around Shedden Open Space Park.
- Widening of the parking lot at the Shedden Open Space Park.
- Trees – Greening of Parks

7. New Items

The wet area at the Shedden Open Space Park needs to be looked at – Corey Pemberton will follow up with the septic location.

Township Park's maintenance schedule has been set up based on usage.

Overseeding, rolling, and fertilizing programs are to be established to bring the parks up to sustainable maintenance levels.

Committee members to be reviewed, and additions to the committee to include with the direction of Council. A member representative from the,
Talbotville Optimist Club
Ferndale Park

TOWNSHIP OF
Southwold

8. <u>Next Meeting – November 9th, 2022 at 7:00 pm</u>

9. <u>Adjournment</u>

Moved by: Ross Burgar
Seconded by: Steve Bushell

THAT this meeting of the Parks Committee be adjourned at 8:03 pm.

carried

_____ _____
Councillor Peter North, Chair Co Chair, Councillor Justin Pennings

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Southwold Water Distribution System Operations Report Second Quarter 2022

Ontario Clean Water Agency, Southwest Region
Mark Harris, Sr. Operations Manager, Aylmer Cluster
Date: July 29, 2022

Facility Description

Facility Name:	Southwold Water Distribution System
Regional Manager:	Dale LeBritton - (519) 476-5898
Senior Operations Manager:	Mark Harris - (226) 545-0414
Business Development Manager:	Robin Trepanier - (519) 791-2922
Facility Type:	Municipal
Classification:	Class 2
Drinking Water System Category:	Large Municipal Residential
Title Holder:	Municipality

Service Information

The Southwold Distribution System services approximately 1310 service connections throughout the Township of Southwold in rural areas, Shedden and Fingal. The system supplies water to the Dutton Dunwich Distribution System, St. Thomas Distribution System and Middlesex Centre. At the Iona Interconnect, the Dutton-Dunwich Distribution System can also back feed into the Southwold system in case of emergency. The Lynhurst area (in Southwold) is supplied by the St. Thomas Area Secondary Water Supply System and the Central Elgin Distribution System, this area is operated by the City of St. Thomas.

Operational Description

A re-chlorination facility is located on Talbot Line. The Shedden Re-Chlorination Facility boosts the free chlorine residual from the supply from the St. Thomas Area Secondary Water Supply System. Water quality is monitored at this location through online chlorine analyzers as well as sampling locations located throughout the distribution system. Auto flushers are installed in problem/low usage areas in the distribution system in order to maintain adequate residuals. There are three pressure reducing valves located in the distribution system to control high pressure areas. Chambers for draining, isolating and air relief are located throughout the distribution system as well.

CLIENT CONNECTION MONTHLY CLIENT REPORT

Facility Name: Southwold Distribution System
ORG#: 5071

SECTION 1: COMPLIANCE SUMMARY

FIRST QUARTER

On February 9th, 2022 a non-compliance was reported to the MECP for the missed free chlorine residuals required under O.Reg. 170/03 Schedule 7-2(4)2. The regulation requires seven free chlorine residuals to be taken each week with at least three of the samples taken on a second day of the week, at least 48 hours after the first set. The first set of distribution residuals were collected on February 1st, 2022 at 14:00. The second set of distribution residuals were to be taken on Friday, February 5th, 2022 in accordance with the Sample Schedule. The operators of the system miscommunicated and did not follow proper procedure, missing the collection of the second set. The process analyzer at the Shedden Re-chlorination Station continuously monitors the free chlorine entering the distribution system. Monitoring data from the chlorine analyzer was reviewed for the period of the missed residuals to confirm the chlorine levels in the system were adequate. Additionally, procedures were reviewed with the operators and modified to ensure compliance with the regulations going forward. An Operator Rotation Schedule has also been finalized to outline specific roles and responsibilities of each operator in the Southwold Distribution System. A letter was prepared detailing the February Sample Schedule as well as the Operator Rotation Schedule to ensure required duties are completed.

SECOND QUARTER

There were no compliance issues to report during the second quarter.

On April 25th, 2022 the Township of Southwold utilized 7 truckloads of water to maintain pressure in the system during the EMPS valve replacement. A total of 42,000 gallons of water was brought in with 30,000 gallons coming from the City of St. Thomas Fill station (WW#260002187) and another 12,000 gallons from The City of London Bulk water station in Lambeth (WW#260004917). Two bacti samples were collected from the two trucks (stationary and runner) that were used. Residuals were then taken off each load that was received by the stationary tanker. Pressure was also monitored at this location where the water was entering the system.

SECTION 2: INSPECTIONS

FIRST QUARTER

There were no MOL or MECP inspections conducted during this quarter.

SECOND QUARTER

There were no MOL or MECP inspections conducted during this quarter.

SECTION 3: QEMS UPDATE

FIRST QUARTER

The Essential/Emergency Service and Supply Contact List was updated by the QEMS Representative on February 28th, 2022 as several changes were required prior to the annual review.

In December 2020, the Ministry proposed administrative updates to the Director's Directions to reflect current practice in municipal residential drinking water systems and improvements in technology that have occurred since the directions were first published in 2007. Based on the Ministry's proposal and feedback received from the public, the Director's Directions were updated in May 2021. On March 3rd, 2022 the Southwold Distribution System Schedule C (Subject System Description Form) was updated. Additionally, on March 3rd, 2022 OP-05 Documents and Records Control and OP-05A Documents and Records Control Locations were updated to reflect the revisions made to the Director's Direction-Minimum Requirements for Operational plans.

SECOND QUARTER

An internal audit was completed on May 24th, 2022 by Cindy Sigurdson. The audit identified no non-conformances and 11 opportunities for improvement. These opportunities for improvement will be discussed at the next Management Review.

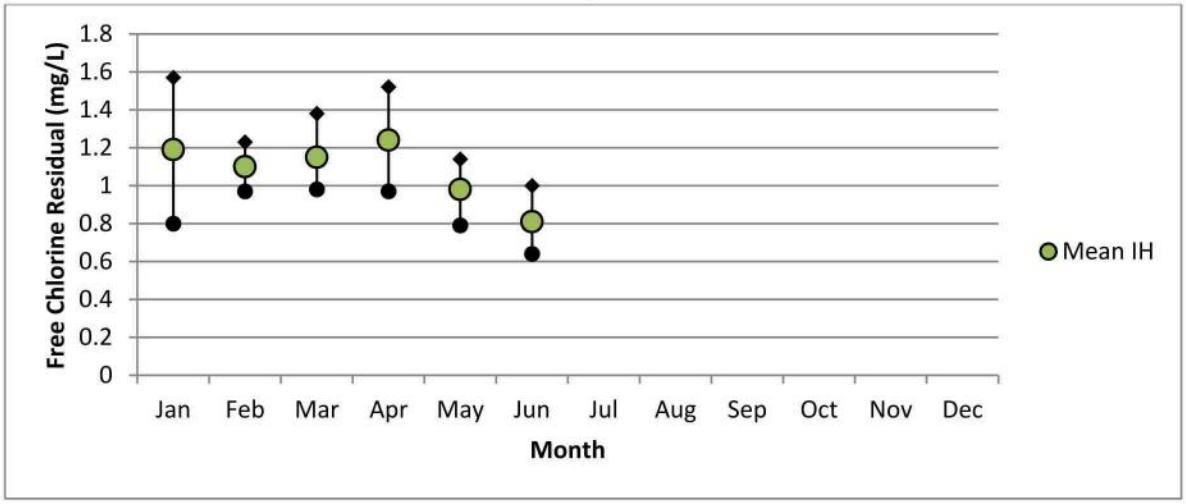
SECTION 4: PERFORMANCE ASSESSMENT REPORT

Auto Flushers are tested twice per week; the current settings are:

#	Location	Frequency	Duration
1	Iona Road	7 days	15min
2	Lake Line	5 days	15min
3	Thomas Road	7 days	15min
4	Bush Road	7 days	7min

All residuals were adequate at the current flushing durations. Changes were made to the Bush Line auto flusher after flooding concerns in a farmer's field. Chlorine residuals are taken throughout the system to monitor the auto flusher effectiveness as well as to meet regulatory requirements. O. Reg. 170/03 requires that residuals are taken 2 times per week at least 48 hours apart with a minimum of 4 residuals on the first day and 3 residuals on the second. Chart 1 below shows the residuals for 2022 obtained so far throughout the distribution system.

Chart 1. Free chlorine residuals in the distribution system.



All sampling and testing in the distribution system met requirements with the current Municipal Drinking Water License and regulations during the second quarter. Microbiological samples are taken at five locations throughout the distribution system each week (it is required to take 8 samples per month plus one sample for every 1000 people, therefore a minimum of 11 samples per month). E. coli and total coliform have a regulatory limit of 0 cfu/100mL and there is no regulatory limit for HPC. HPC concentrations are used to indicate a potential problem area; if results from a particular sample location are consistently showing elevated levels then flushing or other action is required to reduce the value. Table 1 shows the distribution system sampling results for 2022.

Table 1: Distribution system sampling results for 2022.

	# Samples	Total Coliform Range (cfu/100mL)	E. coli Range (cfu/100mL)	# Samples	HPC (cfu/100mL)
January	22	0 – 0	0 – 0	10	<10 - <10
February	20	0 – 0	0 – 0	8	<10 - <10
March	20	0 – 0	0 – 0	8	<10 - <10
April	22*	0 – 0	0 – 0	10	<10 - <20
May	25	0 – 0	0 – 0	10	<10 - <10
June	20	0 – 0	0 – 0	8	<10 - <100

*additional samples collected during EMP valve replacement

Trihalomethanes are sampled on a quarterly basis. Table 2 below shows the current running average along with the 2021-2022 results. The current running average is below the regulated limit of 100µg/L.

Table 2: Trihalomethane sample results.

	Limit (µg/L)	THM Result (µg/L)
July 2021		**40**
October 2021		**60**
January 2022		**33**
April 2022		**24**
Running Average	**100**	**39.25**

Haloacetic Acids (HAAs) are sampled on a quarterly basis. Table 3 below shows the running average along with the 2021-2022 results. The current running average is below the regulated limit of 80µg/L.

Table 3: Haloacetic acid sample results.

	Limit (µg/L)	HAA Result (µg/L)
July 2021		**19.6**
October 2021		**25.0**
January 2022		**27.3**
April 2022		**16.9**
Running Average	**80**	**22.2**

Schedule 15.1 in O. Reg. 170/03 requires sampling for lead, alkalinity and pH. This is required twice per year. The Southwold Distribution System is currently in reduced sampling which requires distribution sampling only and lead sampling only every third year. Table 5 shows the results for 2022. Lead is required in 2023.

Table 4: Schedule 15.1 sampling results.

	# Samples	pH	Alkalinity (mg/L)	Lead (µg/L)
February 2022	3	7.26 – 7.39	95 - 106	-

SECTION 5: OCCUPATIONAL HEALTH & SAFETY

FIRST QUARTER

There were no additional Health & Safety issues identified during the first quarter.

SECOND QUARTER

There were no additional Health & Safety issues identified during the second quarter.

SECTION 6: GENERAL MAINTENANCE

FIRST QUARTER

JANUARY:

07: Hydrant checks completed.
28: Adjusted bolt on pressure regulator on bottom of chlorine board.

FEBRUARY:

01: Onsite at Sunset Drive Industrial site for commissioning of private service. Flushing, swabbing and pressure testing complete.
02: Onsite at Sunset Drive Industrial site for superchlorination of 4" and 10" main of private service.
02: Aquafix onsite to look at sample stations requiring repairs.
03: Onsite at Sunset Drive Industrial site to test superchlorination of private mains. Procedure passed, now preforming dechlorination and bacti sampling. First set of bacti samples taken to SGS for analysis.
04: Second set of bacti samples taken at Sunset Drive Industrial site and dropped off at SGS for analysis.
08: Township of Southwold onsite at re-chlor building to observe leak in roof.
22: Onsite at 39036 Fingal Line with Township of Southwold for potential curbstop leak, appears the leak is a drainage issue and not related to the water.

MARCH:

03: Air Relief Chamber inspections completed.
11: Onsite at Sunset Drive Industrial site to open valve, fill and flush main, collect bacti sample and close valve. Dropped off bacti sample to SGS for analysis.
17: Onsite at Southminster and Third for replacement of sample station by Aquafix. All parts wiped with 12% hypo and flushed. Sample station pumped out.
21: Onsite at 9 Florence Court for curbstop turn on, could not get on operating nut and appears to be bent. Notified Kevin from Southwold.
22: Completed annual chamber inspections.
23: Onsite at 37303 Talbot Line for water turnoff. Could not get key on operating nut and appears to be bent. Will require repair.
24: Opened valve at property line of Sunset Drive Industrial site.

SECOND QUARTER

APRIL:

06: Onsite at 37303 for curbstop repair.
06: Onsite at lake line autoflusher to change out controller. It was observed there is a leak and will need repairs. Autoflusher is currently off.
20: Spring hydrant flushing.
20: Onsite at lake line autoflusher, once curbstop was exposed it was observed the leak was coming from the autoflusher itself, not the curbstop. Further repairs will need to be made.
24: Repairs at EMPS to be performed, operator onsite at 39262 Fingal Line and 10075 Sunset drive to monitor pressure on hydrants and residuals. Refer to log sheets for more details.
25: GFS onsite with potable water trucks at hydrant located at corner of Fingal Line and Lyle Road to pump into hydrant to maintain pressure throughout the distribution system during EMPS repair.
25: Hydrant 19 leaking from base, closed at secondary and informed SOM of issues. Opened hydrant 27 to monitor pressures and take residuals.
25: Closed hydrant 135 due to leakage from base of hydrant, opened hydrant 134 to continue monitoring pressures and residuals.
25: A section of ¼" hose on the chlorine board was repaired due to a pinhole leak.
25: EMPS repair now complete and normal operating pressure in distribution system restored. Operators offsite and hydrants closed.
26-28: Spring flushing.
29: Flowmetrix onsite for flow meter calibrations.

MAY:

02: Tested water in basement of 35518 Fingal Line for any residual, both free and total showed zero residual. Request from Southwold township.
03-06: Spring hydrant flushing.
12: Aquafix onsite to install new sample station at 6993 Iona Rd.
18: Onsite at booster station for flooded chamber alarm. It was determined that the sump was still operational, however the reset on the electrical outlet in chamber needed to be pressed in quite aways. Sump now working and chamber dry.

JUNE:

02: Onsite at 7350 Reiger Road for watermain tap and curbstop installation for new home.
03: Onsite at mill road for hydrant 213 repair. Hydrant now back in service.
03: Onsite at canco gas station on Sunset Drive for hydrant repair. Once hydrant was taken apart is was observed that more parts were needed for repairs. Hydrant still remains out of service.
06: Onsite at The Ridge at Talbotville Grove phase 2 – Block 59 watermain for meeting about commissioning.
10: Onsite at the Ridge for watermain swabbing.
13: Onsite at the Ridge for pressure testing of new watermain and super chlorination.
14: Oniste at the Ridge to sample for chlorine after 24 hour time period.
16: Onsite at the Ridge for dechlorination and flushing of watermain. Dechlorination method was switched to pucks, main was flushed for 30 mins. Main will sit with no flow for 16 hours before bacti sample to be collected.
17: Bacti sampling at the Ridge to be performed and delivered to the lab.
27: Onsite at the Ridge to oversee the connection of the new watermain to the existing watermain with SOM.

SECTION 7: ALARM SUMMARY

FIRST QUARTER

JANUARY:

09: Operator onsite at corner of Westminster Borne and Sunset, flushed hydrant and obtained clear appearance and residual of 1.27ppm. Took grab sample from residents outside tap and obtained a residual of 0.98ppm. Notified ORO.

23: Operator received call from Southwold about water leak at 5293 Grand Canyon Rd. Turned off curbstop at resident, and leak stopped. Notified homeowner leak was on their side responsibility to fix would be theirs.

27: Operator received alarm for low inlet chlorine. Operator flushed system around probe, after residual shot up it then stabilized to around 1.30ppm. Operator verified correct reading with pocket chlorimeter and notified ORO.

28: Operator received alarm for low inlet chlorine. Operator flushed analyzer and once reading stabilized, verified with pocket chlorimeter.

FEBRUARY:

07: Second set of residuals were missed on 4th, PCT notified MECP of non-compliance.

09: Written notification sent to Angela Stroyberg for non-compliance.

MARCH:

No alarms for the month.

SECOND QUARTER

APRIL:

No alarms for the month.

MAY:

18: Operator received channel 5 alarm. Arrived to booster station and observed chamber to be flooded. Spoke with SOM, issue will need to be resolved later in the day when stores open up.

JUNE:

11: Operator received channel 5 alarm. Arrived to booster station and observed chamber to be flooded, operator tried to reset the pump but would short out after each reset, after speaking with SOM it was determined that the pump would need to be replaced. Purchased new pump and with the help of the Aylmer on-call operator, the new pump was installed and is now working.

30: Operator received alarm for low chlorine. Arrived to booster station and observed residual to be 1.04ppm, grab sample was 1.11ppm. It appeared chlorine pump had tripped, reset control panel and pump started working again. Monitored for 10 mins, no other issues were present. Hydro One is reporting outages in the area and most likely the cause of the alarm.

SECTION 8: COMMUNITY COMPLAINTS & CONCERNS

FIRST QUARTER

JANUARY:

On January 4th, 2022 a complaint was received from a resident on Southminister Bourne regarding cloudy water and a strong smell of chlorine. This compliant was originally received by the Township on December 20th, 2021. An Operator attended the site on a number of occasions and conducted flushing and obtained chlorine residuals.

04: Onsite at corner of Westminster Borne and Sunset drive for water complaint. Opened hydrant, water had slightly milky appearance but disappeared quickly, ran for approx. 10 mins, obtained clear water and residual of 1.31ppm.

26: Closed valve at live dead end at Sunset Drive Industrial site. Ball valve had froze and broken off causing water to shoot up in the air and flooding in the area.

FEBRUARY:

On February 21st, 2022 a complaint was received from a farmer on Bush Line regarding flooding in his field caused by the auto flusher. It was determined that the drain tile which passes underground to relocate the water became clogged. The run time of the auto flusher was reduced and then turned off completely until repairs could be made to the drainage.

MARCH:

No complaints or concerns for the month.

SECOND QUARTER

No complaints or concerns for the second quarter.

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Talbotville Wastewater Treatment Plant
Operations Report
Second Quarter 2022

Ontario Clean Water Agency, Southwest Region
Mark Harris, Sr. Operations Manager, Aylmer Cluster
Date: July 29, 2022

Facility Description

Facility Name:	Talbotville Wastewater Treatment Plant
Regional Manager:	Dale LeBritton - (519) 476-5898
Senior Operations Manager:	Mark Harris - (226) 545-0414
Business Development Manager:	Robin Trepanier - (519) 791-2922
Facility Type:	Municipal
Classification:	Class 3

Service Information

Population Serviced: **125**

Capacity Information

Total Design Capacity: 500 m^3/day

	Design Values	2020 Flow Data	2021 Flow Data	2022 Flow Data
Average Daily Flow (m^3/d)	500	46.5	84.6	155.1
% of Average Daily Design Flow	-	7.0	16.9	31 0
Peak Flow (m^3/d)	1000	283.2	319.0	367.2
% of Peak Design Flow	-	28.3	31.9	36.7

	Design Flow (m^3/d)	2021 Average Daily Flow (m^3/d)	2021 % Capacity	Design Peak Flow (m^3/d)	2021 Maximum Daily Flow (m^3/d)	2021 % Peak Flow
January	500	97.4	19.5	1000	149.0	14.9
February	500	131.5	26.3	1000	367.2	36.7
March	500	140.6	28.1	1000	242.1	24.2
April	500	163.5	32.7	1000	249.0	24.9
May	500	219.0	43.8	1000	345.9	35.6
June	500	179.5	35.9	1000	249.9	25.0
Annual Average	**-**	**155.1**	**31.0**	**-**	**367.2**	**36.7**

Operational Description:

The wastewater is screened through a mechanically cleaned fine screen and discharged to the aeration tanks which operate in series. From the aeration tanks, the wastewater flows to the MBR tank(s) which operate in parallel. Supplementary treatment is provided for phosphorus removal and pH adjustment. Alum is utilized for phosphorus removal and Sodium Hydroxide is used for pH adjustment. The final effluent from the MBR tanks is discharged to the ultraviolet (UV) disinfection system. The final effluent flows from the UV disinfection system to Dodds Creek.

CLIENT CONNECTION MONTHLY CLIENT REPORT

Facility Name: Talbotville Wastewater Treatment Plant
ORG#: 1536

SECTION 1: COMPLIANCE SUMMARY

FIRST QUARTER

There were no compliance issues to report during the first quarter.

SECOND QUARTER

The Ministry of Environment, Conservation and Parks has indicated that within 3-4 months of the date that the Municipality applied for their new CLI-ECA that a draft shall be received. OCWA is requesting a copy of the drafts be provided once received to allow for a review. The standard review period is 2 weeks for the drafts and will be required to conduct a thorough review to ensure the required deadlines of the new CLI-ECAs are met.

SECTION 2: INSPECTIONS

FIRST QUARTER

There were no MOL or MECP inspections conducted during this quarter.

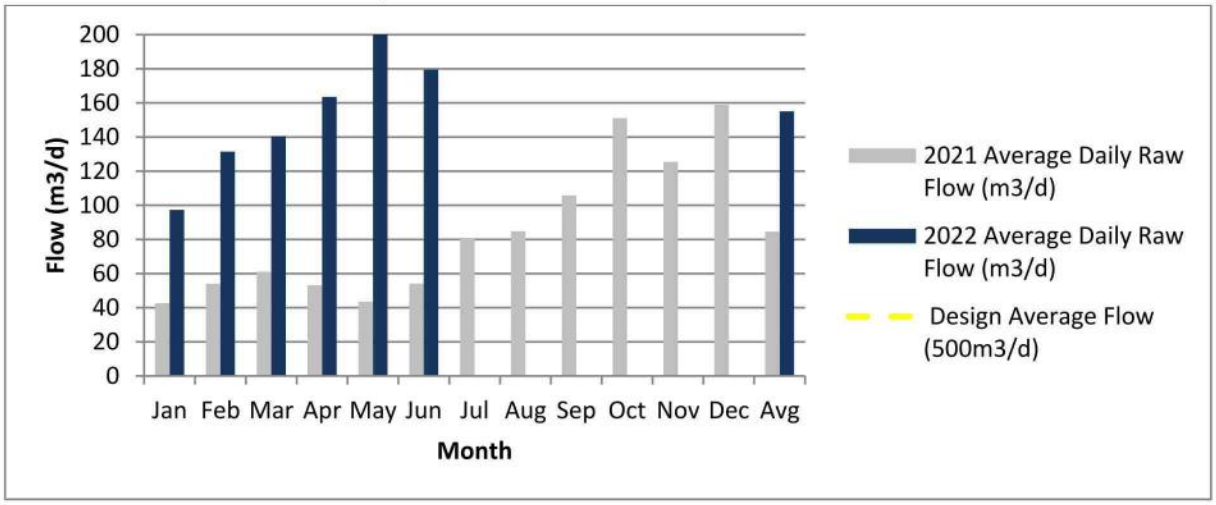
SECOND QUARTER

There were no MOL or MECP inspections conducted during this quarter.

SECTION 3: PERFORMANCE ASSESSMENT REPORT

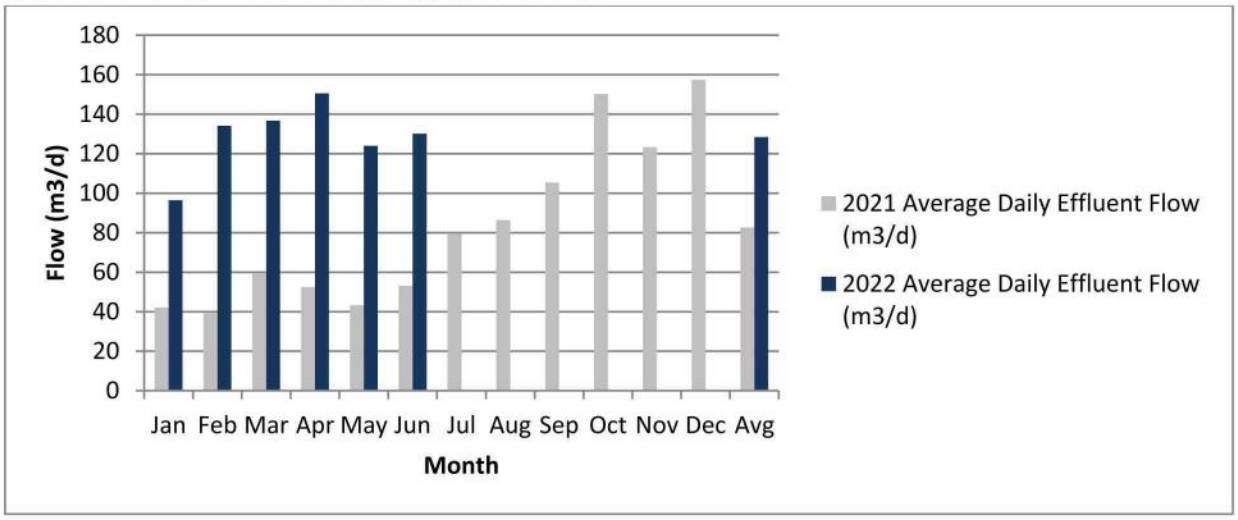
The average daily raw flow so far in 2022 is 155.1 m^3/d. This is an 83.2% increase when compared to the average daily flow in 2021. The chart below shows the monthly average flows so far for 2022, compared to the 2021 average daily flows (Chart 1).

Chart 1. Raw flows for 2022 compared to 2021



The average daily effluent flow so far in 2022 is 128.5m^3/d. This is a 55.3% increase when compared to the average daily flow in 2021. The chart below shows the monthly average flows for 2021 compared to average daily flows in 2020 (Chart 2).

Chart 2. Effluent flows for 2022 compared to 2021



Raw samples are taken on a monthly basis following the ECA requirements. The table (Table 1) below shows the raw sample results compared to the design objectives. Design objectives are highlighted red in the table below (Table 1).

Table 1. Raw water sample results for 2022	BOD5 (mg/L)	TKN (mg/L)	TP (mg/L)	TSS (mg/L)
January Results	78	23.0	1.99	116
February Results	244	43.3	4.34	329
March Results	135	25.8	2.58	240
April Results	119	27.5	2.81	150
May Results	113	28.1	2.46	100
June Results	263	65.2	3.52	156
Design Objective	250	40	7	250
# Months Above Design	**1/12**	**1/12**	**0/12**	**1/12**

The effluent is sampled on a weekly basis following the requirements of the ECA. The table (Table 2) below summarizes the monthly average results compared against the objectives and limits identified in the ECA.

Table 2. Effluent average sample results.

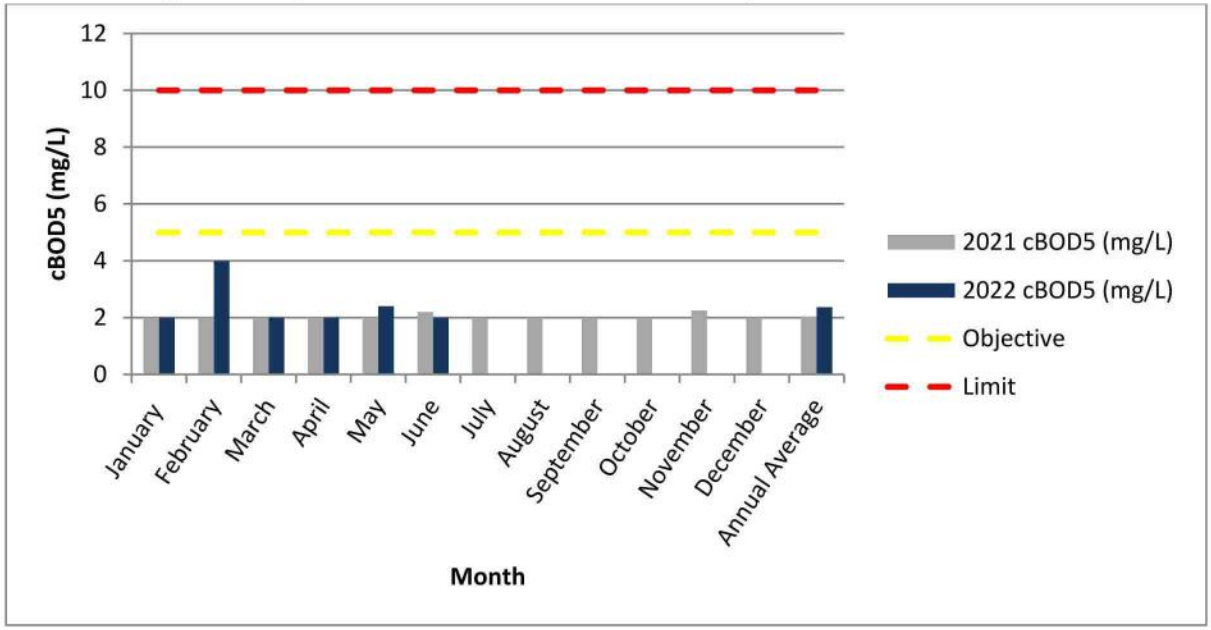
	cBOD5 (mg/L)	TSS (mg/L)	TP (mg/L)	TAN (mg/L)	E. coli (cfu/100mL)*	pH
January	2.0	4.0	0.13	0.10	1.0	7.43 – 8.12
February	4.0	2.0	0.10	0.10	1.7	7.10 – 8.38
March	2.0	2.0	0.14	0.10	1.1	7.35 – 8.16
April	2.0	2.0	0.14	0.10	1.0	7.77 – 8.13
May	2.4	2.0	0.14	0.10	1.5	6.95 – 8.19
June	2.0	2.0	0.25	0.10	1.0	6.73 – 7.47
Annual Average	**2.37**	**2.37**	**0.16**	**0.10**	**1.2**	**6.73 – 8.38**
ECA Objective	**5**	**5**	**0.2**	**1.0** 3.0**	**100**	**6.5-8.5**
ECA Limit	**10**	**10**	**0.3**	**1.5** 4.0**	**150**	**6.0-9.5**

*expressed as geometric mean

**based on May 1 to November 30 and December 1 to April 30

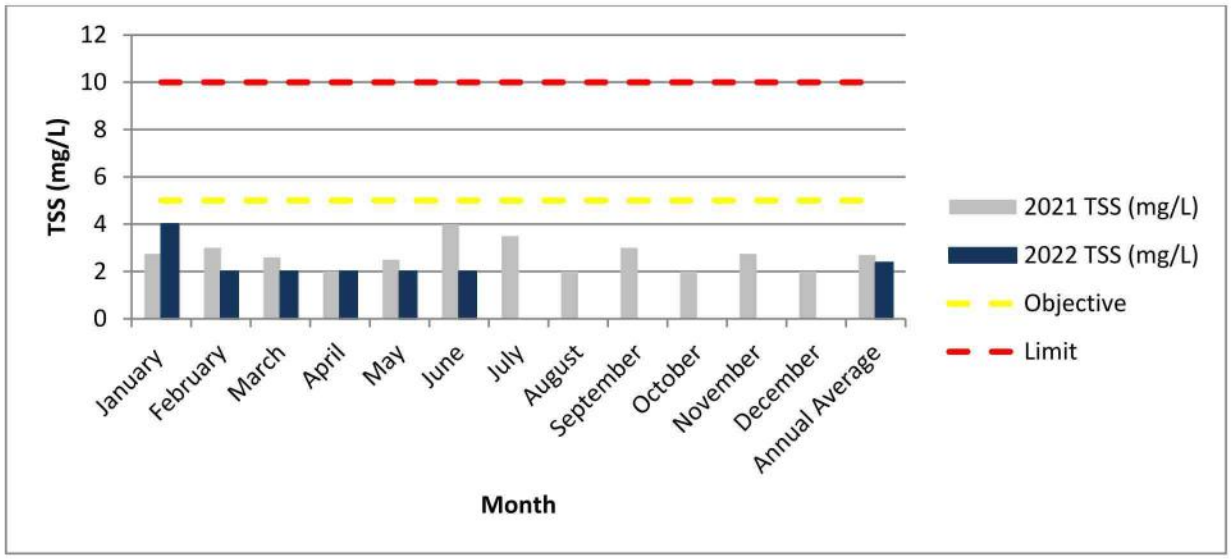
Effluent average cBOD5 so far in 2022 is 2.37mg/L. This is an increase of 16.3% when compared to the 2021 annual average. All results so far have met the effluent objectives and limits identified in the ECA. Refer to Chart 2 for the average monthly effluent cBOD5 results.

Chart 2. Average Monthly Effluent cBOD5 results for 2022 compared to 2021.



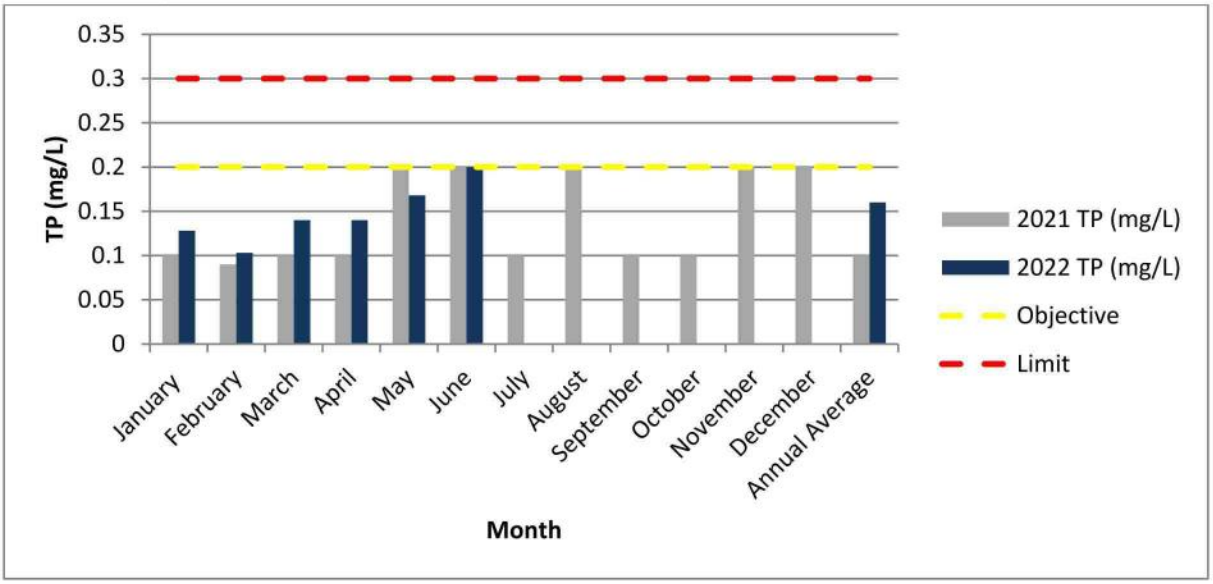
Effluent average TSS so far in 2022 is 2.37mg/L. This is a decrease of 11.9% when compared to the 2021 annual average. All results so far have met the effluent objectives and limits identified in the ECA. Refer to Chart 3 for the average monthly effluent TSS results.

Chart 3. Average monthly effluent total suspended solids for 2022 compared to 2021.



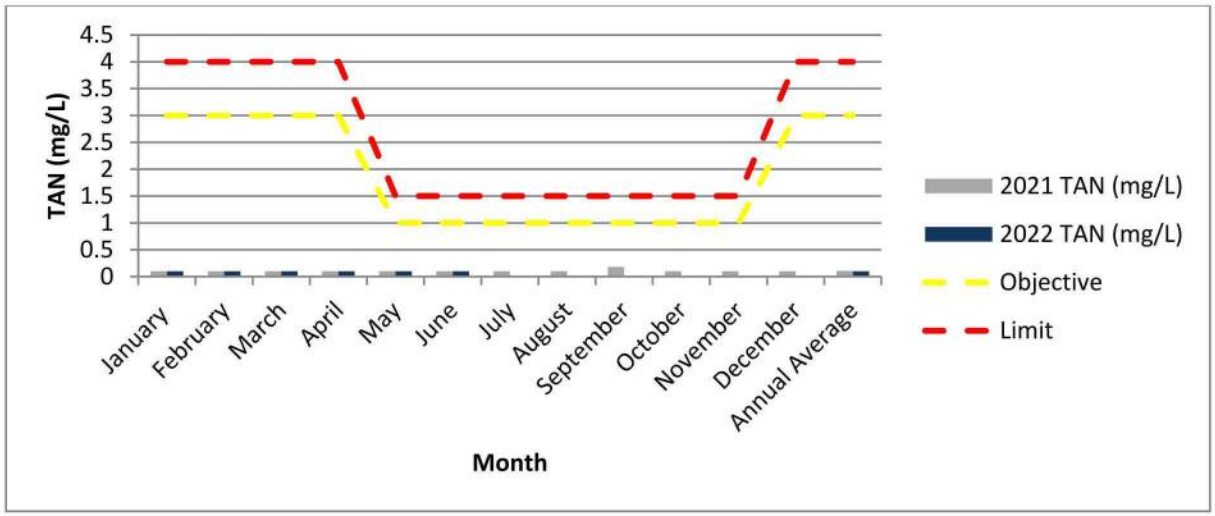
Effluent average TP so far in 2022 is 0.16mg/L. This is a 60% increase when compared to the 2021 annual average. All results in the first quarter met the effluent limits identified in the ECA.

Chart 4. Average monthly effluent total phosphorus results for 2022 compared to 2021.



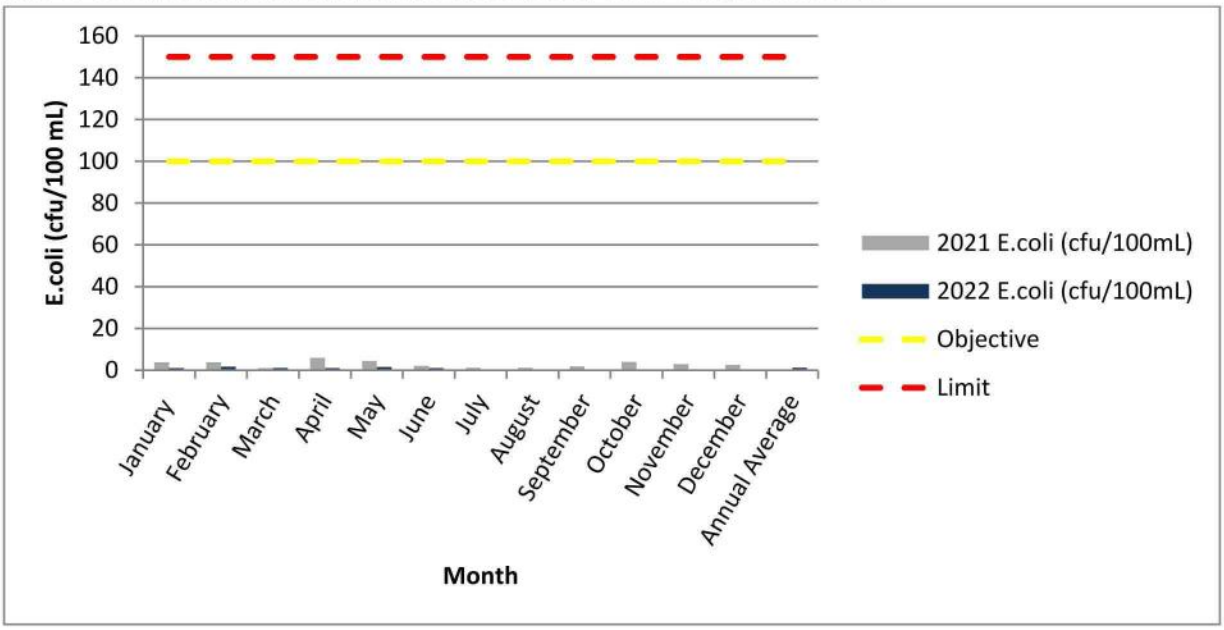
Effluent average TAN so far in 2022 is 0.10mg/L. This result is the same as the 2021 annual average. All results so far have met the effluent objectives and limits identified in the ECA Refer to Chart 5 for the average monthly TAN results.

Chart 5. Average monthly effluent total ammonia nitrogen results for 2022 compared to 2021.



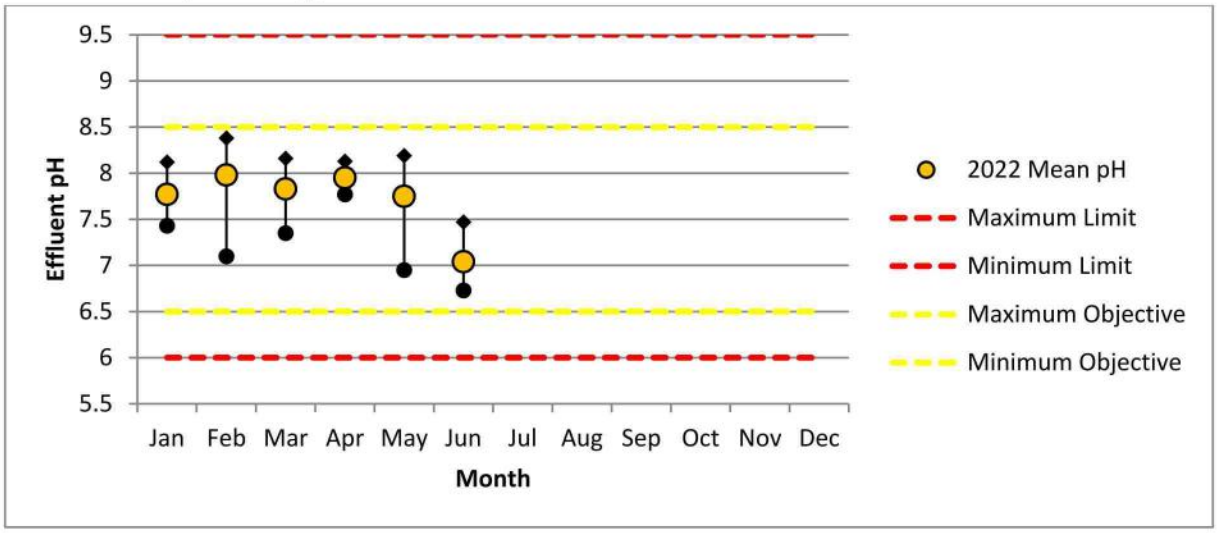
Effluent geometric mean for E. coli so far in 2022 is 1.2cfu/100mL. This is a 52.8% decrease when compared to the 2021 annual average. All results so far have met the effluent objectives and limits identified in the ECA. Refer to Chart 6 for the monthly geometric mean results for E. coli.

Chart 6. Geometric mean effluent E. coli results for 2022 compared to 2021



The effluent pH is monitored twice weekly at a minimum at the Talbotville WWTP in accordance with the ECA. The pH is required to be maintained between 6.0-9.5 at all times. Refer to Chart 7 for the monthly minimum, maximum, average pH readings in 2022. The plant has effectively maintained the pH within the compliance range.

Chart 7. Effluent pH readings for 2022.



SECTION 4: OCCUPATIONAL HEALTH & SAFETY

FIRST QUARTER

There were no Health & Safety issues identified during this quarter.

SECOND QUARTER

There were no Health & Safety issues identified during this quarter.

SECTION 5: GENERAL MAINTENANCE

FIRST QUARTER

Routine checks, readings and sampling were all conducted as required during the first quarter of 2022.

JANUARY:

06: Sanitary Sewer onsite for sludge removal.
13: Hawkins onsite to troubleshoot level transmitter in aeration tank, it was determined the transmitter has shorted out and will need to be replaced
14: Hawkins onsite to remove level transmitter from tank 302 to tank 501.
18: Farmington and Hawkins onsite to troubleshoot AV701 and AV702. It was also observed that the float in backwash tank was not working, both Farmington and Hawkins changed out float in backwash tank.
18: Hawkins determined that electrical to EQ pump 301 was working, Farmington pulled pump and cleaned off all the rags stuck in pump, causing the alarm earlier in the month.
19: Farmington onsite to clean EQ pumps 302 and 303.
20: Apex Motor Express onsite for chemical delivery.

FEBRUARY:

09: Alpine onsite for chemical delivery.
17: Hurricane onsite for sludge removal.
22: Sanitary Sewer onsite for sludge removal.
24: Hawkins onsite to install new level transmitter in aeration tank, and replace level transmitter in EQ tank.

MARCH:

02: Sanitary Sewer onsite for sludge removal.
02: MTE and Southwold onsite for facility tour.
30: Sanitary Sewer onsite for sludge removal

SECOND QUARTER

APRIL:

01: Sanitary Sewer onsite for sludge removal.
02: Alpine onsite for chemical delivery.
07: Hawkins onsite to install new DO probe.
07: Hawkins onsite to install new pH probe wall unit
28: Sanitary sewer onsite for sludge removal.

MAY:

03: Hawkins onsite to troubleshoot pH probe wall unit.
05: Farmington onsite to inspect barscreen. It appears a bearing is missing and will need to be replaced.
05: Sanitary sewer onsite for sludge removal.
05: Nevtro onsite to look at effluent discharge check valves.
06: Farmington onsite to replace to replace bearing in barscreen.
09: Hurricane onsite for EQ tank 301 and EQ tank 302 cleaning.
09: Hawkins onsite for pump 301 fault, Hawkins was able to bypass alarm in order to pump down EQ tank for cleaning.
18: Site tour with Mark Harris and Aclarus Ozone.
20: Alpine onsite for chemical delivery.
26: Sanitary Sewer onsite for sludge removal.

JUNE:

01: Changed UV bulb on UV753.
14: Sanitary Sewer onsite for sludge removal.
20: Apex onsite for chemical delivery.

SECTION 6: ALARMS

FIRST QUARTER

JANUARY:

01: Operator received alarm for low flow at FIT201. Once onsite, raw flow valves inside barscreen room and outside were flushed but did not affect flow, operator switched EQ tank pump and flow issue was resolved.

10: Operator received alarm for low building temperature. Operator arrived onsite, all heaters were working and rooms were warm.

11: Operator received alarm for low low tank 502. It was observed that level transmitter in tank 501 was at 80.0% and continually rising. Cleaned probes but did not solve the issue, discussed with ORO that plant will not run due to "high/low" level readings. Will contact Newterra in the morning to discuss issues, EQ tank at 28%, will have enough room for the plant to not operate overnight.

13: Operator onsite for high level in EQ tank. Operator manually operating plant due to level transmitter not operating properly in aeration tank.

14: Operator received alarm for AV701 fail to open/close. Operator arrived onsite, exercised AV701 and observed a couple pump cycles. Plant now running well. Discussed valve issue with ORO.

15: Operator received alarms for low low temperatures and AV701/AV702 fail. Operator arrived onsite, all heaters were working and buildings were warm. Exercised AV701 and AV702, observed a couple pump cycles and valves appear to be working.

28: Operator received alarm for low flow FIT201. Operator arrived onsite, flushed flow control valve inside barscreen room, flow returned to normal.

FEBRUARY:

17: Operator reset PLC due to internet connection. Hurricane onsite to haul sludge from high level in EQ tank. EQ tank now around 70% and steadily decreasing, plant running well. High EQ tank due to rainfall and snow melt.

23: Operator received alarm for high EQ tank. Operator arrived onsite, EQ was at 85.2%, Observed steady decrease in level of EQ tank

MARCH:

No alarms for the month.

SECOND QUARTER

APRIL:

No alarms for the month.

MAY:

03: Operator received alarm for high VAC mode on membrane 1. Acknowledged alarm and reduced effluent flow on membrane 1.

04: Operator received alarm for high VAC mode on membrane 1. Acknowledged alarm, preformed manual backwashes on membrane, reduced pull time, increased number of backwashes to be performed, increased relax time.

21: Operator received alarm for PLC fault and low pressure B-7962. Acknowledged alarm, cleared fault. Alarm likely due to thunderstorms in area.

26: Operator received low flow F-201 alarm. Acknowledged alarm and flushed flow control valve outside building and inside barscreen room.
28: Operator received low flow F-201 alarm. Acknowledged alarm, flushed flow control valve outside building and inside barscreen room.

JUNE:

01: Operator received alarm for high high level tank 302. Level was 71.1% upon arrival, plant appears to be keeping up with high flows. Alarm due to heavy rain in the area.
02: Operator received alarm for high VAC. Operator placed membrane through manual backwashes, reduced effluent pull time and increased manual backwash times.

SECTION 7: COMMUNITY COMPLAINTS & CONCERNS

FIRST QUARTER:

There were no complaints or concerns during this quarter.

SECOND QUARTER:

There were no complaints or concerns during this quarter.

G.H. PENNINGS DRAIN 2022

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

Our Job No. 221041

July 22, 2022

London, Ontario
July 22, 2022

G.H. PENNINGS DRAIN 2022

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 construction of the G.H. Pennings Municipal Drain serving parts of Lots 18 to 21, Concessions S.N.B.R.T. and N.N.B.R.T. in the Township of Southwold.

AUTHORIZATION

This report was prepared pursuant to Section 4 of the Drainage Act. Instructions were received from your Municipality with respect to a motion of Council. The work was initiated by a petition signed by owners of lands who contain 60% of the area requiring drainage.

DRAINAGE AREA

The total watershed area as described above contains approximately 83.3 hectares. The area requiring drainage is described as parts of Lots 19 and 20, Concession N.N.B.R.T.

EXISTING DRAINAGE CONDITIONS

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

- that the area is currently served by two private main tiles
- that the existing lower portion of the west tile was newer and should be incorporated as part of the new drain, if possible
- that currently these tiles outlet into private ditches on the north side of the Entegrus Transmissions Inc. (Entegrus) right-of-way
- that both tiles utilize existing surface pipes under the existing Entegrus right-of-way
- that the existing surface culvert downstream under Highway 3 on the Main (East) Drain has silted in

EXISTING DRAINAGE CONDITIONS (cont'd)

- that the existing laneway for Roll No. 004-041 crosses the Entegrus right-of-way a short distance east of the drain crossing. It was agreed that combining the Entegrus crossing with lowering the laneway by regrading should be investigated as part of this report
- that the upper portion of the west drain across Lot 19 be replaced
- that the existing private tile on the Main Drain be replaced across Lots 19 and 20 and Oneida Road
- that the private ditch between Entegrus and Talbot Line is very shallow in places and floods during larger rain events

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

- that the existing private main tiles are too small to provide proper drainage
- that the existing surface crossings under the Entegrus right-of-way are too shallow to provide a proper sub-surface outlet
- that the existing west tile to be incorporated was undersized compared to current design standards
- that it would be feasible to provide a sub-surface crossing under the intersection of the right-of-way and private laneway for Roll No. 004-041 and permanently lower the laneway elevation at the same time by not backfilling the laneway/right-of-way up to its original height
- that it is more economical to construct an open channel across the Entegrus right-of-way on the west drain than it would be to lower the crossing

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 requests were provided by the affected owners at that time and at later dates.

- Entegrus requested that we go ahead with removing the west drain crossing and leave it open to accommodate the depth of the new drain
- that we replace the entire west tile with new drain instead of incorporating the existing undersized tile
- that the Main Drain tile be relocated under the laneway/Entegrus right-of-way crossing and that the intersection be regraded

DESIGN CRITERIA AND CONSIDERATIONS

The Drainage Coefficient method contained in the "DRAINAGE GUIDE FOR ONTARIO", Publication 29 by the Ontario Ministry of Agriculture, Food, and Rural Affairs (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 hrs.

DESIGN CRITERIA AND CONSIDERATIONS (cont'd)

We would like to point out that there have been no indications of any adverse soil conditions. It should be noted that no formal soil investigation has been made, with this information being provided by the owners.

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:

MAIN DRAIN

- that the existing ditch bottom, downstream of Talbot Line, be cleaned out to provide a proper sub-surface drainage outlet
- that the existing ditch between Talbot Line and Entegrus be reconstructed to provide additional depth capacity
- that the culvert under Talbot Line be cleaned out
- that excavated material be levelled adjacent to the drain where specified
- that excavated material be hauled away and disposed of from specified areas
- that the ditch banks at bends be protected with turf mat
- that the telephone cable at Sta. 0+250 be lowered and protected with concrete
- that the working space and access route be cleared and grubbed of trees, brush and scrub where required for machines to access and complete the work on the ditch and the areas where excavated material is to be levelled
- that the stumps, logs, and brush be piled beyond this width
- that the existing culvert and adjacent ditch across the Entegrus right-of-way be incorporated as part of the Main Drain
- that the existing private tile be replaced with a new 200mm to 525mm concrete tile, including related appurtenances, and that the existing tile be destroyed where possible

WEST DRAIN

- that the existing pipe culverts in the Entegrus right-of-way on the west drain be removed and left as an open ditch

- **RECOMMENDATIONS** (cont'd)

  - that the existing private tile (West) be replaced with a new tile drain, to be known as the West Drain, consisting of 200mm to 400mm concrete tile, including related appurtenances, be constructed to provide a proper surface and sub-surface drainage outlet
  - 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

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 drain(s) 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.

ENVIRONMENTAL CONSIDERATIONS AND MITIGATION MEASURES

Based on the information available, there are no significant wetlands, sensitive areas, or endangered species within the affected watershed area or along the route of the drains. The proposed construction of the G.H. Pennings Drain 2022 includes quarry stone outlet protection and surface inlets which greatly help reduce the overland surface flows and any subsequent erosion. A temporary flow check of silt fencing is to be installed in the ditch downstream of the tile outlet for the duration of the construction.

SUMMARY OF PROPOSED WORK

The proposed work consists of approximately 243 lineal meters of open ditch cleanout and reconstruction including bank protection; approximately 2,379 lineal meters of 200mm to 525mm 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 $313,600.00. This estimate includes engineering and administrative costs associated with this project.

SCHEDULES (cont'd)

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.'s 1 and 2, Job No. 221041 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 amounts granted are based on $6,750.00/ha. through cropped lands. This value is multiplied by the hectares derived from the width granted for future maintenance and the applicable lengths.

For open ditches, the allowance provides for the loss of land due to the construction provided for in the report. The amounts granted are based on the value of the land, and the rate used was $45,000.00/ha. When any buffer strip is incorporated and/or created, the allowance granted is for any land beyond a 1.8-meter width deemed to have always been part of the drain. For existing open ditches, the right-of-way to provide for the right to enter and restrictions imposed on those lands is deemed to have already been granted.

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 amounts granted are based on $3,510.00/ha for closed drains installed with a wheel machine and $4,787.00/ha. for open ditch work with excavated material levelled adjacent to drain. These base rates are 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 or increased crop production or improved appearance or better control of surface water, or any other advantages relating to the betterment of lands, roads, buildings, or other structures.

ASSESSMENT DEFINITIONS (cont'd)

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. Special Assessments and Special Benefit Assessments are then extracted 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".

The cost to restore water supply for any well determined to be impacted by any construction covered under this report shall become part of this report and be pro-rated with the costs provided for in this report.

SPECIAL BENEFIT ASSESSMENTS

Special Benefit Assessments have been made against individual properties for their portion of the cost of various special works provided to them. These works typically include farm or access culverts, outlet pipes, rock chutes, and rip-rap protection on banks and around existing outlet pipes and shall be as shown on Schedule 'C' - Assessment for Construction. For open drains the Contractor shall contact the owner and request that all known outlet pipes be marked by the owner prior to commencement of excavation on each property. All outlets so marked or visible or as

SPECIAL BENEFIT ASSESSMENTS (cont'd)

noted on the profile, and subsequently damaged by the Contractor's operations, will be repaired by the Contractor at his cost. All other outlet pipes repaired by the Contractor under direction of the Drainage Superintendent or Engineer shall be considered an extra to the contract price. This cost shall be assessed to the property as a non-pro-rateable special benefit. These outlet pipes are not part of the drain for future maintenance purposes.

SPECIAL ASSESSMENT

In accordance with Section 26 of the Drainage Act, Special Assessments have been made against the Township of Southwold and the County of Elgin being the increased cost to the drainage work for installing a 200mm diameter sewer pipe and for the cleanout of the existing culvert across their road allowance, respectively on the Main Drain due to the construction and operation of Oneida Road and Talbot 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 Assessment are to be calculated as follows:

Road	Cost of Work	Less Equivalent Drain Cost (Fixed)	Plus Administration Cost	Plus Interest, Contract Security, & Net H.S.T.	Special Assessment
Oneida Road	$4,230.00	$430.00	$1,900.00	$290.00	$5,990.00
Talbot Line	$2,250.00	$350.00	$1,450.00	$170.00	$3,520.00

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 Talbot Line, 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 Bell Canada being the increased cost to the drainage work for locating and determining the elevation of their fibre optic and telephone cables along Talbot Line on the Main Drain due to the construction and operation of their utilities. The Special Assessment shall be made up of the actual cost of this work and both the final and estimated values of the Special Assessment are to be calculated as follows:

Location	Cost of Work	Cost of Locating and Exposing	Plus Administration Cost	Plus Interest, Contract Security, & Net H.S.T.	Special Assessment
Talbot Line	$1,200.00	$1,010.00	$1,500.00	$190.00	$3,900.00

In accordance with Section 26 of the Drainage Act, a Special Assessment has been made against Enbridge Gas for the cost of locating and determining the elevation of their gasmain along Talbot Line, 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'.

SPECIAL ASSESSMENT (cont'd)

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. For tiles through bush areas, we recommend the owner maintain the cleared space by either mowing (hay) or growing a crop over it. If no maintenance is completed over several years, we recommend the Municipality complete the mowing/clearing as part of maintenance at the discretion of the Drainage Superintendent.

After completion, the entire G.H. Pennings Drain 2022 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, with the exception of the Walser property (Roll # 004-041) which shall have its benefit assessment reduced to $14,230.00.

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. Special Benefit Assessments shall only be applied for future maintenance purposes, if the work assessed for special benefit is part of the maintenance.

Respectfully submitted,

SPRIET ASSOCIATES LONDON LIMITED

M.P. DeVos, P. Eng.

LICENSED PROFESSIONAL ENGINEER
M. P. DeVOS
PROVINCE OF ONTARIO

MPD:bv

SCHEDULE 'A' - ALLOWANCES

G. H. PENNINGS DRAIN 2022

Township of Southwold

CON.	LOT	ROLL NUMBER (Owner)	Section 29 Right-of-Way	Section 30 Damages	TOTALS
MAIN DRAIN - OPEN PORTION					
NNBTR	SPt. 19	004-040 (K. Snarey)	$ 620.00	$ 380.00	$ 1,000.00
SNBTR	SPt. 19	004-080-05 (S. Williams)	160.00		160.00
SNBTR	Pt. 19	004-080 (B. Fulton)	380.00	260.00	640.00
Right-of-Way		44-202-01 (Entegrus Transmission Inc.)	80.00		80.00
		Total Allowances	$ 1,240.00	$ 640.00	$ 1,880.00
		TOTAL ALLOWANCES ON THE MAIN DRAIN - OPEN PORTION			$ **1,880.00**
MAIN DRAIN - CLOSED PORTION					
NNBTR	SPt. 19	004-041 (E. Walser)	$ 1,780.00	$ 1,850.00	$ 3,630.00
NNBTR	SE½ 20	004-044 (G H Pennings Farms Inc.)	6,760.00	7,030.00	13,790.00
NNBTR	WPt. 21	004-047 (A. Siviero)	40.00	60.00	100.00
Right-of-Way		44-202-01 (Entegrus Transmission Inc.)	320.00		320.00
		Total Allowances	$ 8,900.00	$ 8,940.00	$ 17,840.00
		TOTAL ALLOWANCES ON THE MAIN DRAIN - CLOSED PORTION			$ **17,840.00**
WEST DRAIN					
NNBTR	SPt. 17&18	004-035 (W. Pennings)	$ 2,920.00	$ 720.00	$ 3,640.00
NNBTR	SPt. 19	004-041 (E. Walser)	4,040.00	4,200.00	8,240.00
NNBTR	SE½ 20	004-044 (G H Pennings Farms Inc.)	50.00	50.00	100.00
Right-of-Way		44-202-01 (Entegrus Transmission Inc.)	300.00		300.00
		Total Allowances	$ 7,310.00	$ 4,970.00	$ 12,280.00
		TOTAL ALLOWANCES ON THE WEST DRAIN			$ **12,280.00**
		TOTAL ALLOWANCES ON THE G. H. PENNINGS DRAIN 2022			$ **32,000.00**

SCHEDULE 'B' - COST ESTIMATE

G. H. PENNINGS DRAIN 2022

Township of Southwold

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

MAIN DRAIN - OPEN PORTION

Mobilization of equipment	$	1,000.00
62 meters of open ditch cleanout (Approx. 90 m^3)	$	660.00
139 meters of open ditch reconstruction (Approx. 270 m^3)	$	1,920.00
Sta. 0+118 to Sta. 0+250 haul away excavated material (Approx. 190 m^3)	$	3,090.00
Sta. 0+250 to Sta. 0+319 level excavated material	$	520.00
Clean though existing Surface Culvert under Talbot Line and supply and install NAG C350 Turf Reinforcement Mat around upstream end (approx. 10m^2 TRM req'd)	$	2,250.00
Seeding of ditch banks and buffer strips (approx. 760 m^2)	$	750.00
Clearing & grubbing	$	400.00
Sta. 0+244 to Sta. 0+252, Sta. 0+262 to Sta. 0+272 & Sta. 0+292 to Sta. 0+304 Regrade ditch banks, seed, supply and place N.A.G. C 350 Turf Reinforcement Mat on resloped and seeded bank (Approx. 85 m^2 Turf Reinforcement Mat required)	$	2,980.00
Exposing and locating existing utilities (report)	$	1,525.00
(construction)	$	1,525.00
Lower Bell Cable to provide 100mm clearance to ditch grade and pour 1.2m x 1.5m concrete pad protection in ditch bottom and on slopes	$	1,200.00
Contract security financing	$	160.00
Contingencies	$	750.00
Allowances under Sections 29 & 30 of the Drainage Act	$	1,880.00

MAIN DRAIN - CLOSED PORTION

Mobilization of equipment	$	1,000.00
Supply & install 6 meters of 525mm dia., H.D.P.E. plastic sewer pipe including rodent gate and quarry stone rip-rap protection around pipe and end of ditch (Approximately 8m^3 quarry stone req'd)	$	3,550.00

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

G. H. PENNINGS DRAIN 2022
Township of Southwold

MAIN DRAIN - CLOSED PORTION (cont'd)

Installation of the following concrete field tile including supply & installation of geotextile around tile joints (approx. 1550m req'd)			
149 meters of 200mm dia. concrete tile		$	3,340.00
250 meters of 250mm dia. concrete tile		$	5,890.00
300 meters of 300mm dia. concrete tile		$	7,250.00
300 meters of 350mm dia. concrete tile		$	7,660.00
230 meters of 450mm dia. concrete tile		$	6,450.00
67 meters of 525mm dia. concrete tile		$	2,180.00
Supply of the above listed tile/pipe		$	31,210.00
Contingency Allowance to install the new tile immediately adjacent to the existing tile and destroy the existing tile with a rubber tired backhoe afterwards (See General Notes on Drawings) (Approx. 762 meters)		$	3,050.00
Strip, stockpile and relevel topsoil from tile trench and adjacent working area (4m wide) specified on drawings (approx. 1220m)		$	7,320.00
13 meters of 200mm sewer pipe			
Supply		$	330.00
Installation under Oneida Road by open cut		$	3,900.00
25 meters of 525mm sewer pipe			
Supply		$	3,080.00
Installation under Laneway/Entegrus ROW		$	10,000.00
Exposing and locating existing tile drains (approx. 860m)	(report)	$	250.00
	(construction)	$	990.00
Exist. laneway and Entegrus Transmission ROW intersection to be regraded and lowered, with excavated material (500m³) to be spread in along south slope east of laneway within Entegrus property. Remaining material (120m³) to be spread over north\south private laneway including stripping, stockpiling and redistribution of granular material		$	6,000.00
Supply and install one 900mm x 1200mm and one 600mm x 600mm ditch inlet catchbasin, one 600mm x 600mm and one 900mm x 1200mm standard catchbasin, including berms with Turfmat overflow chutes, grates, leads, removal and disposal of existing catchbasins		$	14,200.00
Clearing & grubbing		$	2,500.00
Tile connections as noted on plan		$	700.00
Contract security financing		$	1,810.00
Tile connections and contingencies		$	2,500.00
Allowances under Sections 29 & 30 of the Drainage Act		$	17,840.00

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

G. H. PENNINGS DRAIN 2022
Township of Southwold

WEST DRAIN

Mobilization of equipment		$	1,000.00
Construct ditch through existing Entegrus right of way, including levelling/piling of excavated material in ROW and removal and disposal of existing surface culvert and existing concrete headwall, and supply and installation of S-75 Erosion Control Blanket and ditch cleanout at downstream limits. (Approximately 900m³ excavation required and 70m² S75 required)		$	10,200.00
Supply & install 6 meters of 450mm dia., H.D.P.E. plastic sewer pipe including rodent gate and quarry stone rip-rap protection around pipe and end of ditch (Approximately 6m³ quarry stone req'd)		$	3,110.00
Installation of the following concrete field tile including supply & installation of geotextile around tile joints (approx. 1.220m req'd)			
189 meters of 200mm dia. concrete tile		$	4,240.00
200 meters of 300mm dia. concrete tile		$	4,830.00
450 meters of 350mm dia. concrete tile		$	11,490.00
194 meters of 400mm dia. concrete tile		$	5,180.00
Supply of the above listed tile		$	23,810.00
Strip, stockpile and relevel topsoil from tile trench and adjacent working area (4m wide) specified on drawings (approx. 1039m)		$	6,230.00
Supply and install one 600mm x 600mm standard catchbasin and one 600mm x 600mm DICB including berms with Turfmat overflow chutes, grates, leads, removal and disposal of existing catchbasin.		$	6,900.00
Exposing and locating existing tile drains (approx. 440m)	(report)	$	380.00
	(construction)	$	880.00
Clearing & grubbing		$	1,200.00
Tile connections as noted on plan		$	300.00
Contract security financing		$	1,200.00
Tile connections and contingencies		$	1,500.00
Allowances under Sections 29 & 30 of the Drainage Act		$	12,280.00

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

G. H. PENNINGS DRAIN 2022
Township of Southwold

ADMINISTRATION

Conservation Authority Review Fee	$	300.00
Interest and Net Harmonized Sales Tax	$	9,507.00
Survey, Plan and Final Report	$	34,746.00
Expenses	$	2,107.00
Supervision and Final Inspection	$	8,600.00
TOTAL ESTIMATED COST	**$**	**313,600.00**

SCHEDULE 'C' - ASSESSMENT FOR CONSTRUCTION

G. H. PENNINGS DRAIN 2022

Township of Southwold

Job No. 221041 July 22, 2022

** = Non-agricultural*

CON.	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	SPECIAL BENEFIT	BENEFIT	OUTLET	TOTAL
MAIN DRAIN - OPEN PORTION							
* NNBTR	SPt. 18	0.20	004-039-01 (S & B Holdings LTD.)	$	$	$ 57.00	$ 57.00
NNBTR	SPt. 19	8.9	004-041 (E. Walser)			1,500.00	1,500.00
* NNBTR	SPt. 19	0.32	004-039 (K. Schell)			52.00	52.00
* NNBTR	SPt. 19	0.62	004-040 (K. Snarey)		1,280.00	89.00	1,369.00
* NNBTR	SPt. 19	0.25	004-040-01 (B. Gillespie)		800.00	45.00	845.00
NNBTR	SE½ 20	30.3	004-044 (G H Pennings Farms Inc.)			4,364.00	4,364.00
NNBTR	WPt. 21	5.7	004-047 (A. Siviero)			960.00	960.00
* SNBTR	SPt. 19	0.0	004-080-05 (S. Williams)		170.00		170.00
* SNBTR	Pt.20	0.1	004-082 (Yarmouth Machine Company)			3.00	3.00
* SNBTR	Pt. 19	0.2	004-080 (B. Fulton)		550.00	8.00	558.00
* Right-of-Way		0.9	44-202-01 (Entegrus Transmission Inc.)		440.00	396.00	836.00
		TOTAL ASSESSMENT ON LANDS		$	$ 3,240.00	$ 7,474.00	$ 10,714.00
Talbot Line		2.3	County of Elgin	$ 2,420.00	$ 3,350.00	$ 636.00	$ 6,406.00
Oneida Road		0.4	Township of Southwold			200.00	200.00
		TOTAL ASSESSMENT ON ROADS		$ 2,420.00	$ 3,350.00	$ 836.00	$ 6,606.00

SPECIAL ASSESSMENT against the County of Elgin for the increased cost of cleaning through the exisiting surface pipe under County Road No 3 - Talbot Line $ 3,520.00

SPECIAL ASSESSMENT against Bell Canada for the increased cost of construction and locating and exposing their fibre optic and phone cables on County Road No 3 -Talbot Line $ 3,900.00

SPECIAL ASSESSMENT against the Township of Southwold for the increased cost of exposing their watermain on County Road No 3 -Talbot Line $ 2,160.00

SPECIAL ASSESSMENT against Enbridge Gas for the increased cost of exposing their gas line and services on County Road No 3 -Talbot Line $ 2,140.00

TOTAL ASSESSMENT ON THE MAIN DRAIN - OPEN PORTION **$ 29,040.00**

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

G. H. PENNINGS DRAIN 2022

Township of Southwold

** = Non-agricultural*

CON.	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	BENEFIT	OUTLET	TOTAL
MAIN DRAIN - CLOSED PORTION						
NNBTR	SPt. 19	8.9	004-041 (E. Walser)	$ 20,200.00	$ 5,611.00	$ 25,811.00
NNBTR	SE½ 20	30.3	004-044 (G H Pennings Farms Inc.)	49,430.00	38,196.00	87,626.00
NNBTR	WPt. 21	5.7	004-047 (A. Siviero)	1,350.00	21,037.00	22,387.00
* Right-of-Way		0.2	44-202-01 (Entegrus Transmission Inc.)	2,540.00	148.00	2,688.00
			TOTAL ASSESSMENT ON LANDS	$ 73,520.00	$ 64,992.00	$ 138,512.00
Talbot Line		0.4	County of Elgin	$	$ 369.00	$ 369.00
Oneida Road		0.4	Township of Southwold	3,680.00	4,429.00	8,109.00
			TOTAL ASSESSMENT ON ROADS	$ 3,680.00	$ 4,798.00	$ 8,478.00

SPECIAL ASSESSMENT against the Township of Southwold for the increased cost of installing 200mm sewer pipe under the Oneida Road Allowance $ 5,990.00

SPECIAL BENEFIT ASSESSMENT against Entegrus Transmission Inc. for the theorectical increased cost of contructing a ditch through the former railway embankement $ 18,480.00

TOTAL ASSESSMENT ON MAIN DRAIN - CLOSED PORTION **$ 171,460.00**

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

G. H. PENNINGS DRAIN 2022

Township of Southwold

** = Non-agricultural*

CON.	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	BENEFIT	OUTLET	TOTAL
WEST DRAIN						
NNBTR	SPt. 17&18	8.3	004-035 (W. Pennings)	$ 21,930.00	$ 4,527.00	$ 26,457.00
NNBTR	SPt. 19	16.0	004-041 (E. Walser)	28,700.00	30,331.00	59,031.00
NNBTR	SE½ 20	8.8	004-044 (G H Pennings Farms Inc.)	650.00	12,512.00	13,162.00
* Right-of-Way			44-202-01 (Entegrus Transmission Inc.)	900.00		900.00
			TOTAL ASSESSMENT ON LANDS	$ 52,180.00	$ 47,370.00	$ 99,550.00

SPECIAL BENEFIT ASSESSMENT against Entengrus Transmission Inc. for the increased cost of contructing a ditch through the former railway embankement $ 13,550.00

TOTAL ASSESSMENT ON WEST DRAIN **$ 113,100.00**

TOTAL ASSESSMENT ON THE G. H. PENNINGS DRAIN 2022 **$ 313,600.00**

SCHEDULE OF NET ASSESSMENT

G. H. PENNINGS DRAIN 2022

Township of Southwold

Job No. 221041 July 22, 2022

* = *Non-agricultural*

ROLL NUMBER (OWNER)	TOTAL ASSESSMENT	GRANT	ALLOWANCES	APPROX. NET
004-035 (W. Pennings)	$ 26,457.00	$ 8,819.00	$ 3,640.00	$ 13,998.00
* 004-039-01 (S & B Holdings LTD.)	57.00			57.00
004-041 (E. Walser)	86,342.00	28,781.00	11,870.00	45,691.00
* 004-039 (K. Schell)	52.00			52.00
* 004-040 (K. Snarey)	1,369.00		1,000.00	369.00
* 004-040-01 (B. Gillespie)	845.00			845.00
004-044 (G H Pennings Farms Inc.)	105,152.00	35,051.00	13,890.00	56,211.00
004-047 (A. Siviero)	23,347.00	7,782.00	100.00	15,465.00
* 004-080-05 (S. Williams)	170.00		160.00	10.00
* 004-082 (Yarmouth Machine Company)	3.00			3.00
* 004-080 (B. Fulton)	558.00		640.00	-82.00
* 44-202-01 (Entegrus Transmission Inc.)	4,424.00		700.00	3,724.00
Special Benefit Assessment	32,030.00			32,030.00
<u>Special Assessments</u>				
Southwold Watermain	$ 2,160.00	$	$	$ 2,160.00
Bell Canada	3,900.00			3,900.00
Enbridge Gas	2,140.00			2,140.00
* Talbot Line	$ 6,775.00	$	$	$ 6,775.00
Special Assessment	3,520.00			3,520.00
* Oneida Road	8,309.00			8,309.00
Special Assessment	5,990.00			5,990.00
	$ 313,600.00	**$ 80,433.00**	**$ 32,000.00**	**$ 201,167.00**

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

SECTION NUMBER		PAGE NO.
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 to1, 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

SECTION NUMBER		PAGE NO.
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

SECTION NUMBER		PAGE NO.
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)

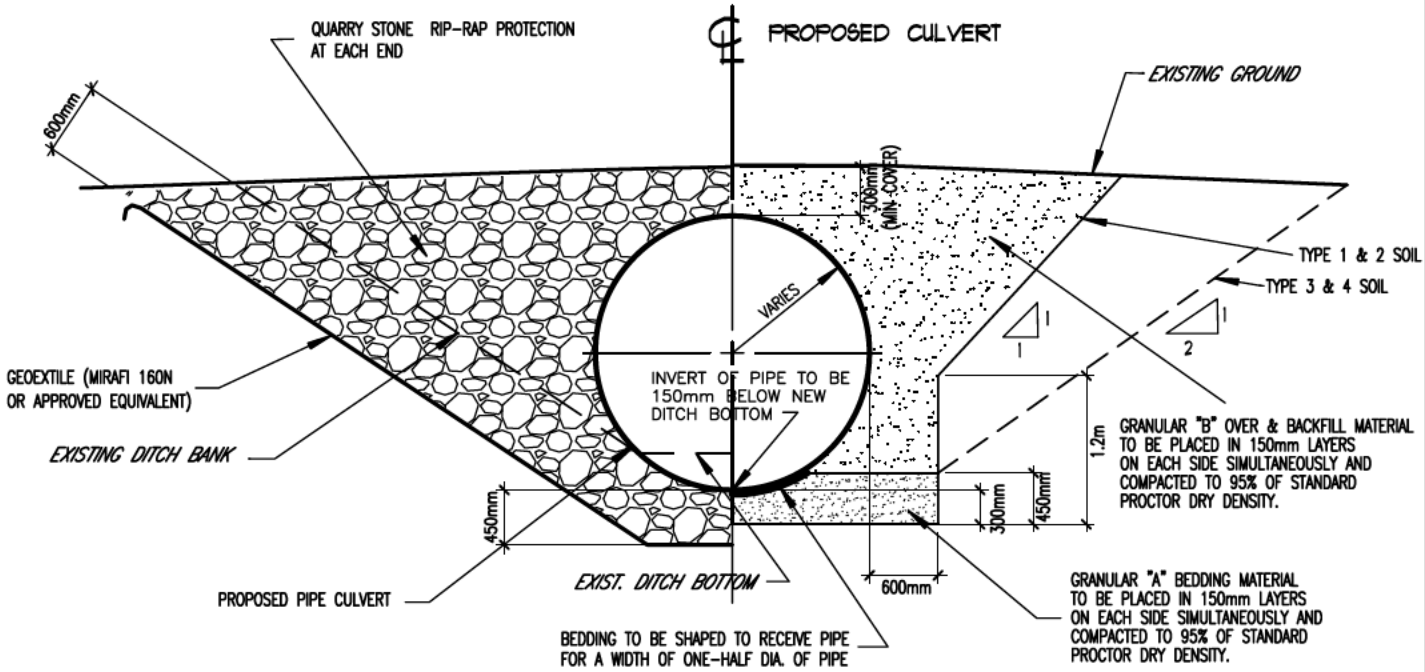
C.19 BACKFILLING EXISTING DITCHES

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

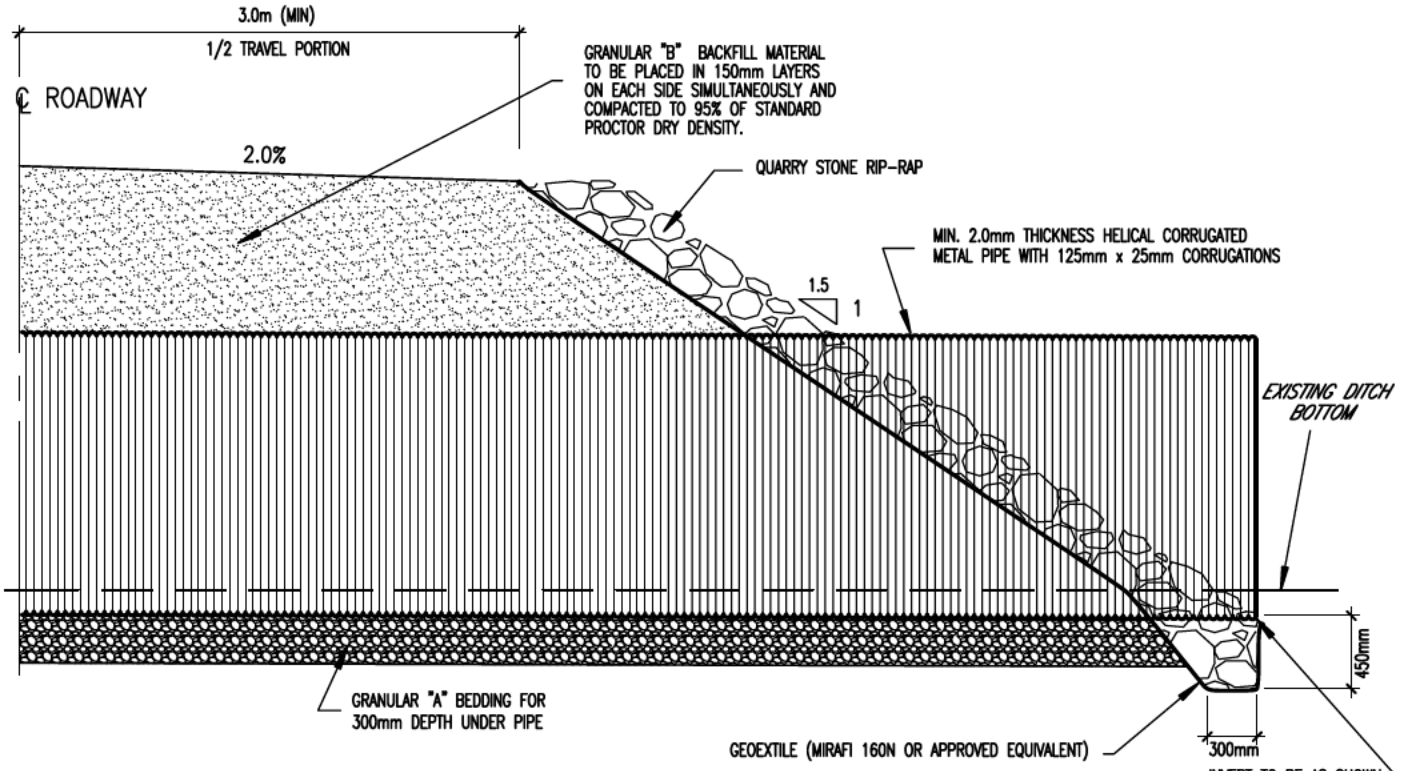
Drainage guide for Ontario, Ministry of Agriculture, Food and Rural Affairs Publication Number 29 and its amendments, dealing with the construction of Subsurface Drainage systems, shall be the guide to all methods and materials to be used in the construction of tile drains except where superseded by 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.



HALF ELEVATION

HALF SECTION

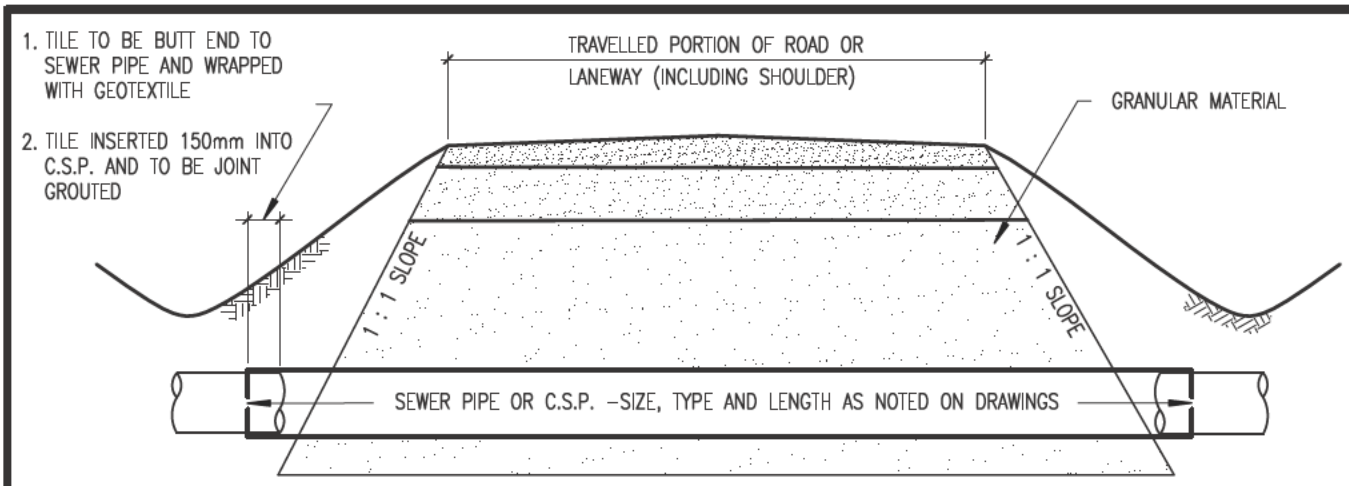


HALF SECTION THROUGH PIPE

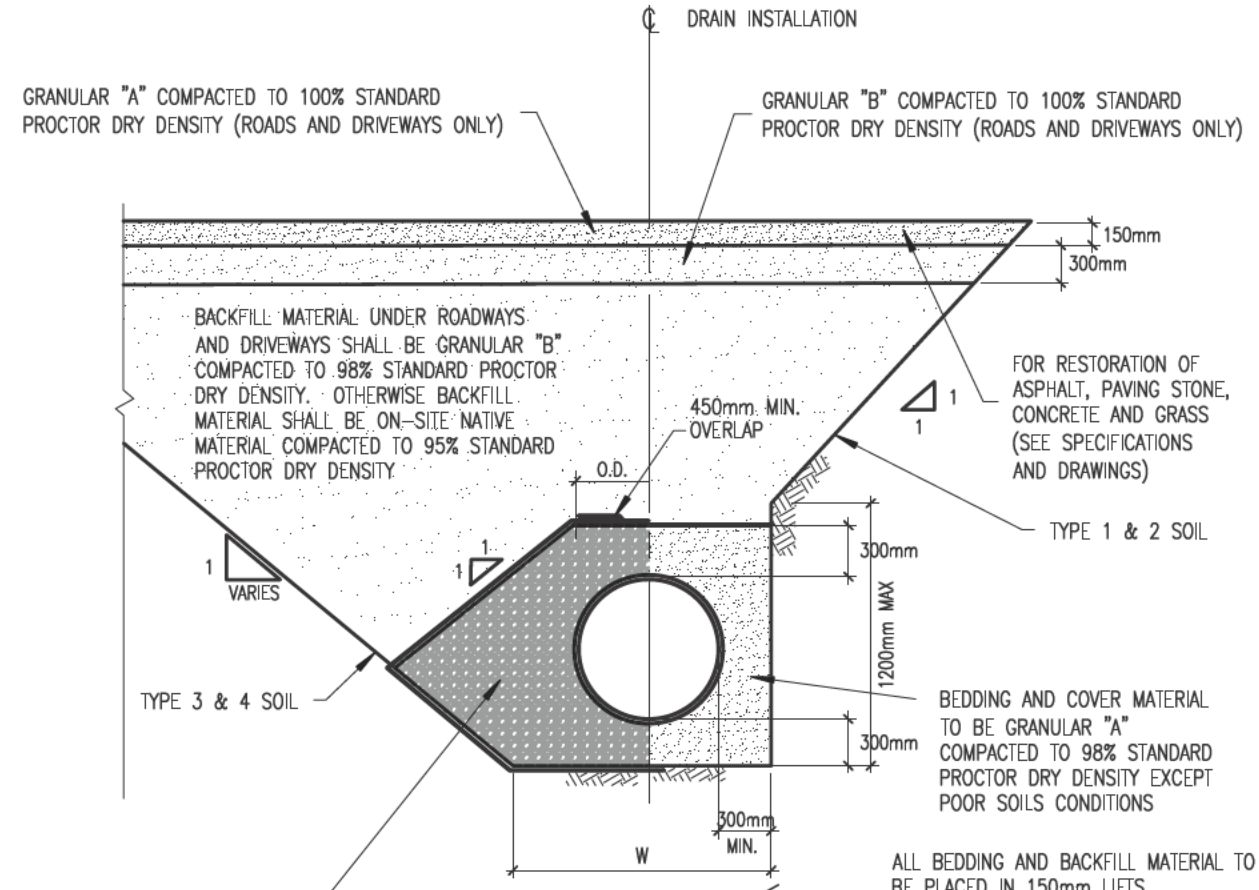
NOTES

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		STANDARD DETAILED DRAWING No. 01
SPRIET ASSOCIATES LONDON LIMITED CONSULTING ENGINEERS ARCHITECTS		

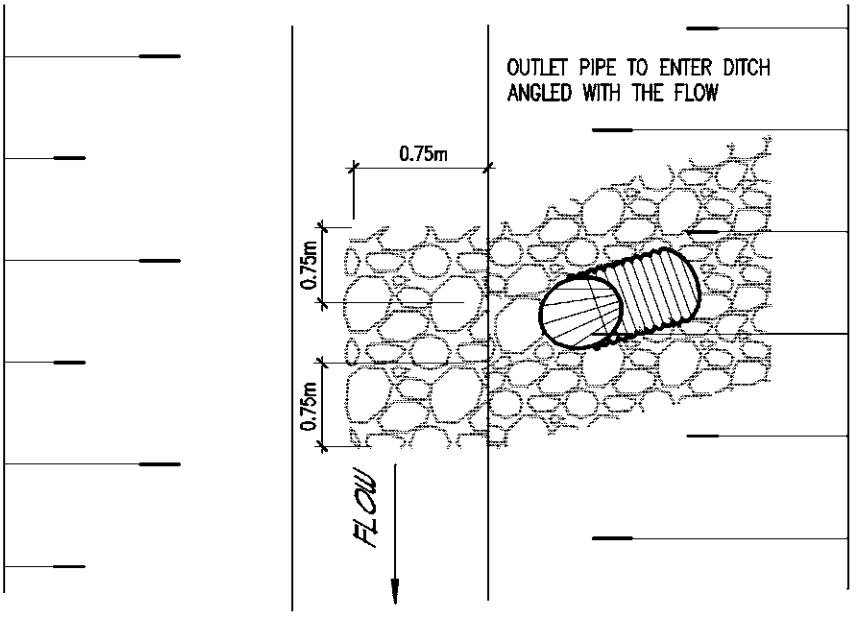


SECTION THROUGH PIPE



CROSS SECTION

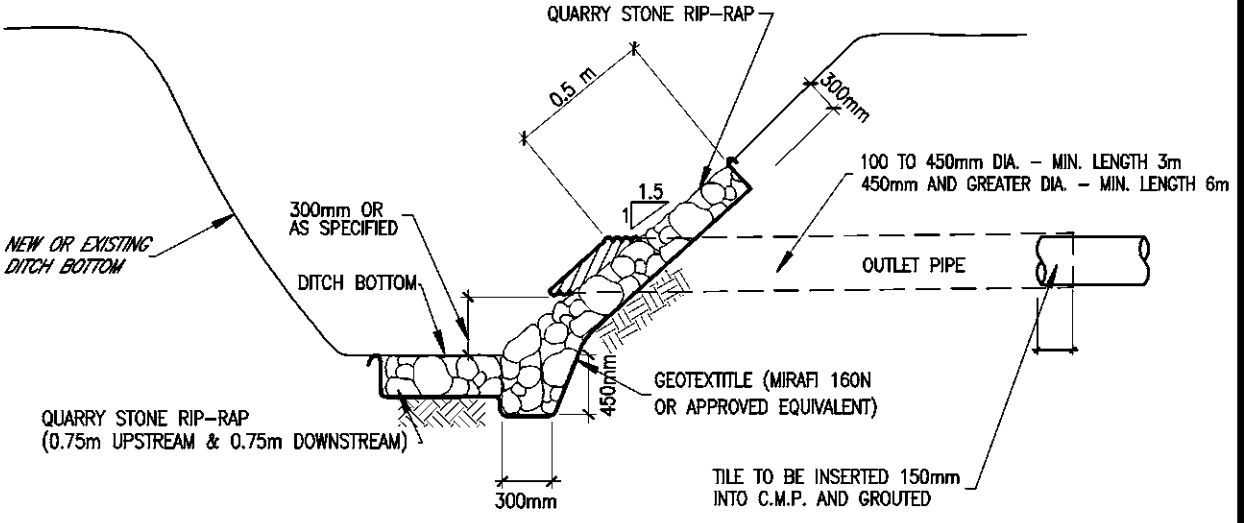
TYPICAL INSTALLATION DETAIL FOR SEWER PIPE UNDER DRIVEWAYS AND TRAVELLED PORTIONS OF ROADS		
Scale: N.T.S.	Approved by:	Date: January 1983
Drawn by: jk	M.P.D.	Revised: JULY 2018
ELEVATION & SECTION		STANDARD DETAILED DRAWING No. 02
SPRIET ASSOCIATES LONDON LIMITED CONSULTING ENGINEERS ARCHITECTS		



PLAN

NOTES

1. WHERE THE DISTURBED AREA EXCEEDS THE MIN. WIDTHS, RIP-RAP TO EXTEND TO A MIN. OF 600mm BEYOND THE DISTURBED AREA

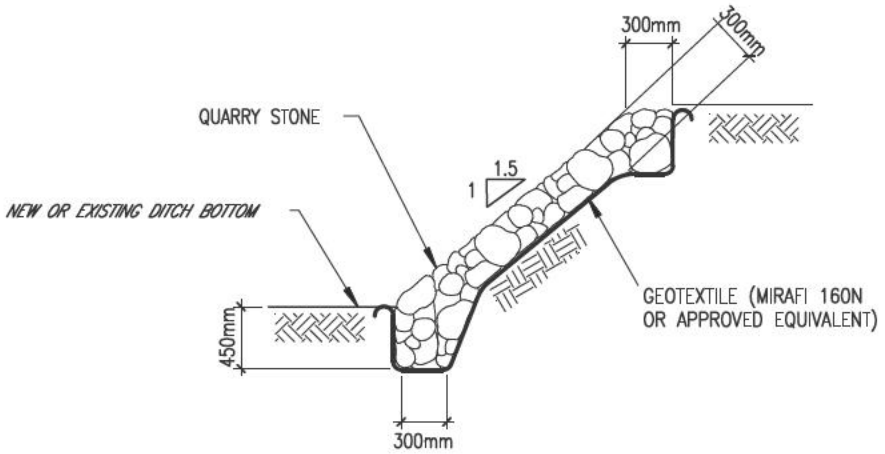


TYPICAL OUTLET RIP-RAP

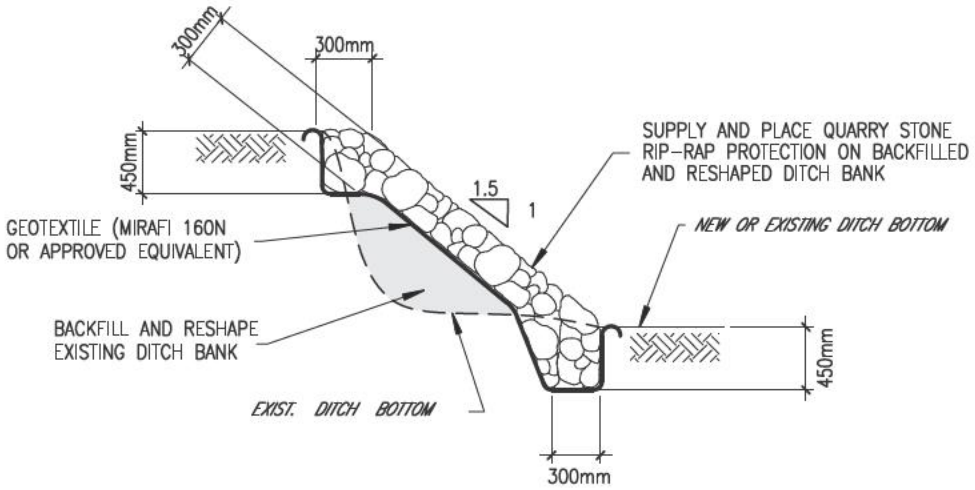
NOTES

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		STANDARD DETAILED DRAWING No. 03
SPRIET ASSOCIATES LONDON LIMITED CONSULTING ENGINEERS ARCHITECTS		

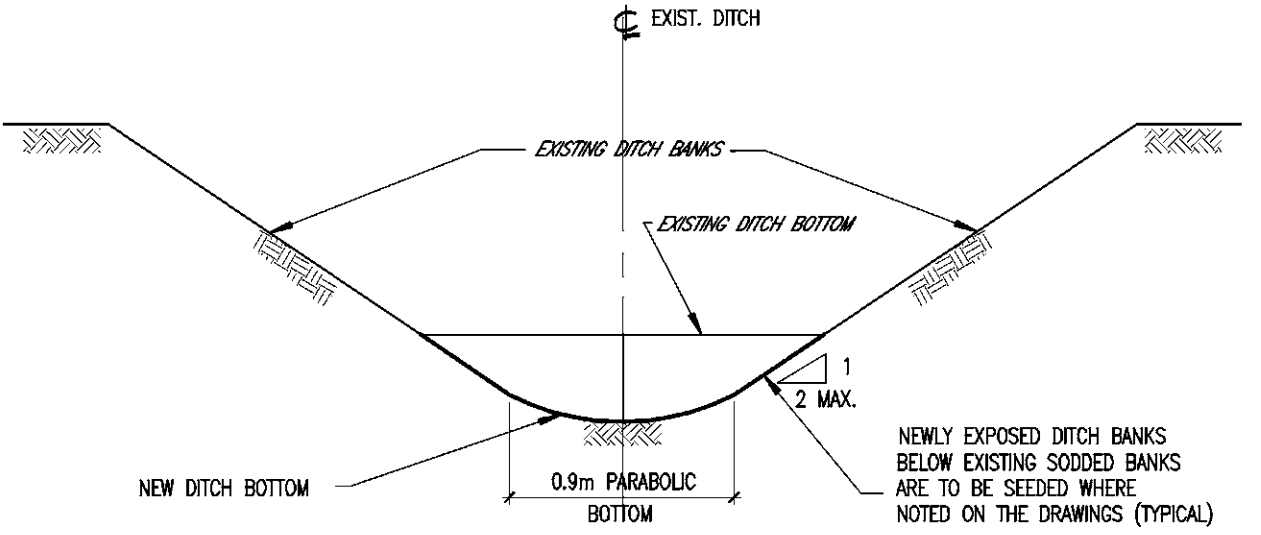


TYPICAL DITCH BANK RIP-RAP

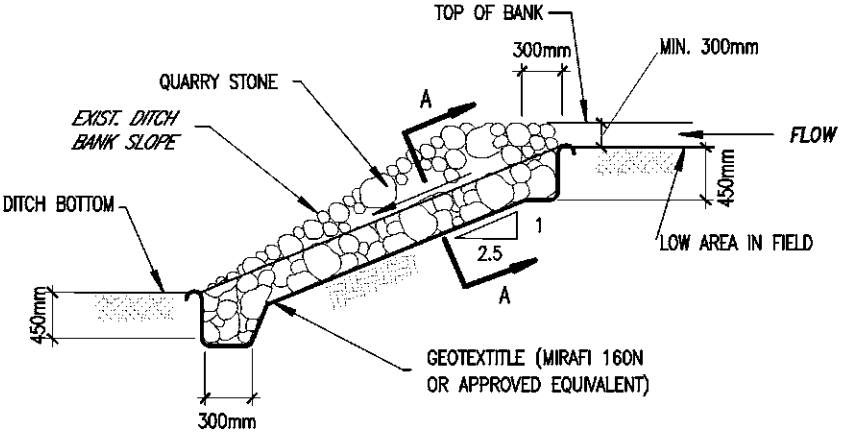


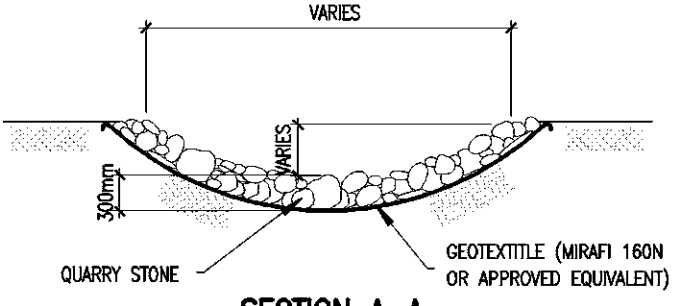
TYPICAL DITCH BANK RIP-RAP WITH BACKFILLING OF WASHOUT

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		STANDARD DETAILED DRAWING No. 04
SPRIET ASSOCIATES LONDON LIMITED CONSULTING ENGINEERS ARCHITECTS		



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		STANDARD DETAILED DRAWING No. 05
SPRIET ASSOCIATES LONDON LIMITED CONSULTING ENGINEERS ARCHITECTS		

GENERAL NOTES

1/ OUR SPECIFICATIONS DATED JANUARY 2010 APPLY TO THIS PROJECT.

2/ THE WORKING WIDTH AVAILABLE TO THE CONTRACTOR TO CONSTRUCT THE NEW DRAINS SHALL CONSIST OF THOSE LANDS IMMEDIATELY ADJACENT TO THE DRAIN AND CONNECTIONS AND SHALL NOT EXCEED THE FOLLOWING AVERAGE WIDTHS.

OPEN PORTIONS	- 18 meters (INCLUDING 3m BUFFER)
OPEN PORTIONS-BUSH AREAS	- 15 meters TOTAL (REMOVE ONLY TREES ALONG BANK AND THOSE ABSOLUTELY NECESSARY TO COMPLETE CONSTRUCTION
CLOSED PORTIONS	- 20 meters
CLOSED PORTIONS (THROUGH BUSH)	- 30 meters (CENTERED ON THE DRAIN)

THE WORKING WIDTH FOR PURPOSES OF FUTURE MAINTENANCE SHALL BE THE SAME AS ABOVE EXCEPT FOR CLOSED PORTIONS (NOT THROUGH BUSH) SHALL BE 10m.

3/ ALL OWNERS ALONG THE COURSE OF THE DRAIN SHALL MAKE AN ACCESS ROUTE FROM THE NEAREST ROAD TO THE DRAIN LOCATION AVAILABLE TO THE CONTRACTOR THE AVERAGE WIDTH OF THIS ROUTE SHALL NOT EXCEED 8 METERS. THE ACCESS ROUTE SHALL ALSO APPLY FOR FUTURE MAINTENANCE PURPOSES.

4/ a) ALL UTILITIES TO BE LOCATED AND EXPOSED PRIOR TO CONSTRUCTION SO THAT THE NEW TILE GRADES CAN BE CONFIRMED. IF THERE IS A CONFLICT IN ELEVATION BETWEEN THE PROPOSED DRAIN AND THE UTILITY, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY.
b) CONTRACTOR TO NOTIFY ALL UTILITIES 72 HOURS PRIOR TO HIS SCHEDULED TIME FOR STARTING THE ABOVE WORK.
c) THE COST FOR THIS WORK SHALL BE INCLUDED IN THE ITEM ON THE EXTENT OF WORK AND NO EXTRA PAYMENT SHALL BE MADE TO THE CONTRACTOR, EXCEPT IF ROAD RESTORATION IS REQUIRED.

5/ ALL TREES, SCRUB, BRUSH, ETC. TO BE CLEARED AND GRUBBED IN ACCORDANCE WITH "SECTION B.3 AND C.4" SPECIFICATIONS.

6/ RIP-RAP TO BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH "SECTION A. 8" IN THE SPECIFICATIONS.

7/ TURF REINFORCEMENT MAT SHALL BE " NORTH AMERICAN GREEN C 350 " EROSION CONTROL BLANKET SHALL BE " NORTH AMERICAN GREEN S75 " OR APPROVED EQUAL. MAT / BLANKET SHALL BE INSTALLED ON SEEDED BANK IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS WITH THE FOLLOWING EXCEPTIONS.
a) STAPLES TO BE 300mm LONG AND SHALL BE INSTALLED TO MANUFACTURER'S " D " PATTERN.
b) MAT TO BE KEYED 300mm BELOW DITCH BOTTOM, 300mm INTO BANK SLOPE AT UPSTREAM LIMIT AND SHALL BE STAPLED 300mm BELOW TOE OF BANK.

8/ CONTRACTOR TO ARRANGE A PRE-CONSTRUCTION MEETING WITH THE ENGINEER, DRAINAGE SUPERINTENDENT, AND THE AFFECTED OWNERS. ALL PARTIES SHALL RECEIVE 48 HOURS NOTICE TO THE MEETING.

9/ WORK TO BE COMPLETED FROM AND EXCAVATED MATERIAL TO BE DEPOSITED AND LEVELLED ON THE FOLLOWING SIDES OF THE DITCH IN ACCORDANCE WITH "SECTION B.5" IN THE SPECIFICATIONS.

STA. 0 + 118 TO STA. 0 + 250	- EAST AND SOUTH AND EXCAVATED MATERIAL TO BE HAULED AWAY
STA. 0 + 250 TO STA. 0 + 315	- EAST AND SOUTH AND EXCAVATED MATERIAL TO BE LEVELED

10/ A 2 METER WIDE BUFFER STRIP OF NEW & EXISTING VEGETATION BETWEEN THE TOP OF THE BANK AND THE CULTIVATED LANDS ON BOTH SIDES OF THE DITCH SHALL BE MAINTAINED AS PART OF THE OPEN PORTION OF THE DRAIN.

11/ NEWLY EXPOSED DITCH BANKS ARE TO BE HAND SEEDED UPON COMPLETION OF CONSTRUCTION IN ACCORDANCE WITH "SECTION B. 7" IN THE SPECIFICATIONS.

12/ SILT FENCE TO BE PLACED ACROSS DITCH BOTTOM AT STA. 0 + 118 DURING CONSTRUCTION TO PREVENT SILT FROM FLUSHING DOWNSTREAM, AND ARE TO BE MAINTAINED AS NECESSARY DURING CONSTRUCTION. SILT FENCE AND SILT TO BE REMOVED AND DISPOSED OF AFTER CONSTRUCTION.

13/ ALL CONCRETE AND PLASTIC TILE AND PIPE TO CONFORM TO SECTION C.1" IN THE SPECIFICATIONS.
a) SEWER PIPE TO BE CONCRETE, H.D.P.E. PLASTIC 320 MPA (BELL & SPIGOT WITH RUBBER GASKETS, CONFORMING TO CSA B182-06), PVC ULTRA RIB OR PVC SDR 35
b) CONCRETE TILE SHALL BE HEAVY DUTY, UNLESS SPECIFIED AS 2000 D OR 2400 D ON PROFILE.

14/ ALL CATCHBASINS SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH "SECTION C. 16" IN THE SPECIFICATIONS, EXCEPT AS FOLLOWS:
a) ALL CATCHBASIN LEADS TO BE CONNECTED TO NEW TILE DRAIN WITH PRE-FABRICATED " WYE "
b) ALL NON ROAD DITCH INLET CATCHBASINS TO HAVE BERMS (CONSTRUCTED WITH SUBSOIL) WITH OVERFLOW CHUTE PROTECTED WITH N.A.G. C350 TURF REINFORCEMENT MAT (SEE DETAIL "A")

15/ NEW TILE DRAINS TO BE LOCATED AS FOLLOWS:

MAIN DRAIN - CLOSED PORTION

a) STA. 0 + 000 to STA. 0 + 098 - 0 + 010	- EXACT LOCATION TO BE DETERMINED AT TIME OF CONSTRUCTION
c) STA. 0 + 098 = 0 + 010 to 0 + 500	- NEW TILE DRAIN TO BE PLACED IN SAME LOCATION AS EXISTING TILE DRAIN WHERE POSSIBLE. EXIST. TILE TO BE DESTROYED AND EXPOSED TILE SHALL BE DISPOSED OF OFF - SITE.
c) STA. 0 + 500 to 1 + 30	- EXACT LOCATION TO BE DETERMINED AT TIME OF CONSTRUCTION

WEST DRAIN

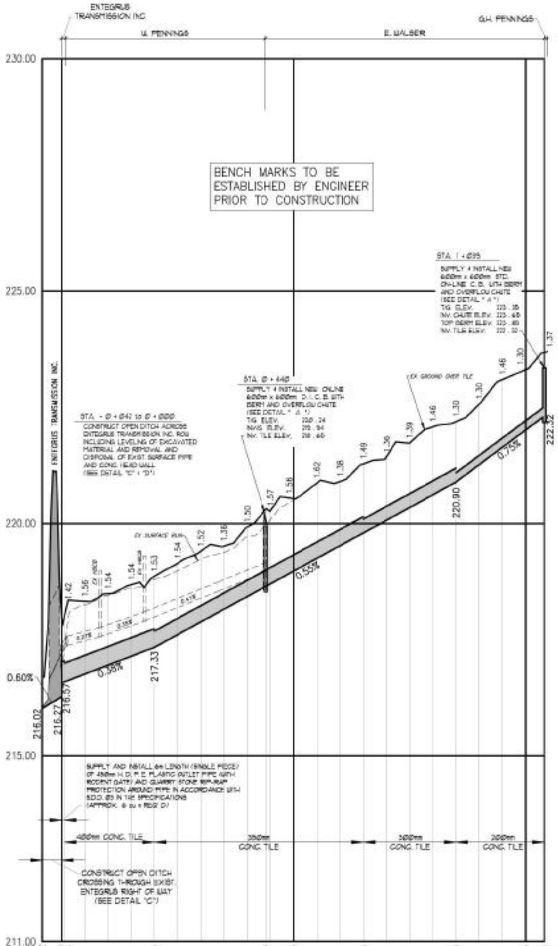
a) STA. 0 + 000 to STA. 0 + 440	- ON SOUTH-EAST SIDE OF EXIST. TILE
b) STA. 0 + 440 to STA. 1 + 035	- NEW TILE DRAIN TO BE PLACED IN SAME LOCATION AS EXIST. TILE DRAIN WHERE POSSIBLE. EXIST. TILE TO BE DESTROYED AND EXPOSED TILE SHALL BE DISPOSED OF OFF SITE

EXISTING TILE DRAINS TO BE EXPOSED IN AS MANY LOCATIONS AS ARE NECESSARY TO CONFIRM THEIR EXACT LOCATION AND ELEVATION PRIOR TO CONSTRUCTION. EXACT LOCATION OF NEW TILE DRAINS THEN TO BE CONFIRMED BY DRAINAGE SUPERINTENDENT OR ENGINEER.

16/ a) INSTALLATION OF TILE AND TRENCH WIDTHS SHALL BE IN ACCORDANCE WITH "SECTION C - TILE DRAIN" IN THE SPECIFICATIONS.
b) SEWER PIPE UNDER TRAVEL PORTION OF ROADS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILED DRAWING No. 02 IN THE SPECIFICATIONS.
c) ALL OTHER SEWER PIPE TO BE INSTALLED IN ACCORDANCE WITH DETAIL " B "
d) ALL CONCRETE TILE AND TILE-PIPE JOINTS TO BE WRAPPED WITH GEOTEXTILE IN ACCORDANCE WITH "SECTION C.8" IN THE SPECIFICATIONS.
e) NO CONSTRUCTION EQUIPMENT OR FARM MACHINERY SHALL CROSS OVER THE MOUNDED BACKFILLED TILE TRENCHES UNTIL SUFFICIENT SETTLEMENT HAS OCCURRED.
f) STRIP AND STOCKPILE TOPSOIL FROM CONSTRUCTION AREA (4 metre width) EXCEPT LANEWAYS & ROADS. EXCESS SPOIL TO BE LEVELLED AND TOPSOIL RELEVELLED OVER SPOIL, MOUNDED TRENCH AND REMAINING CONSTRUCTION AREA.

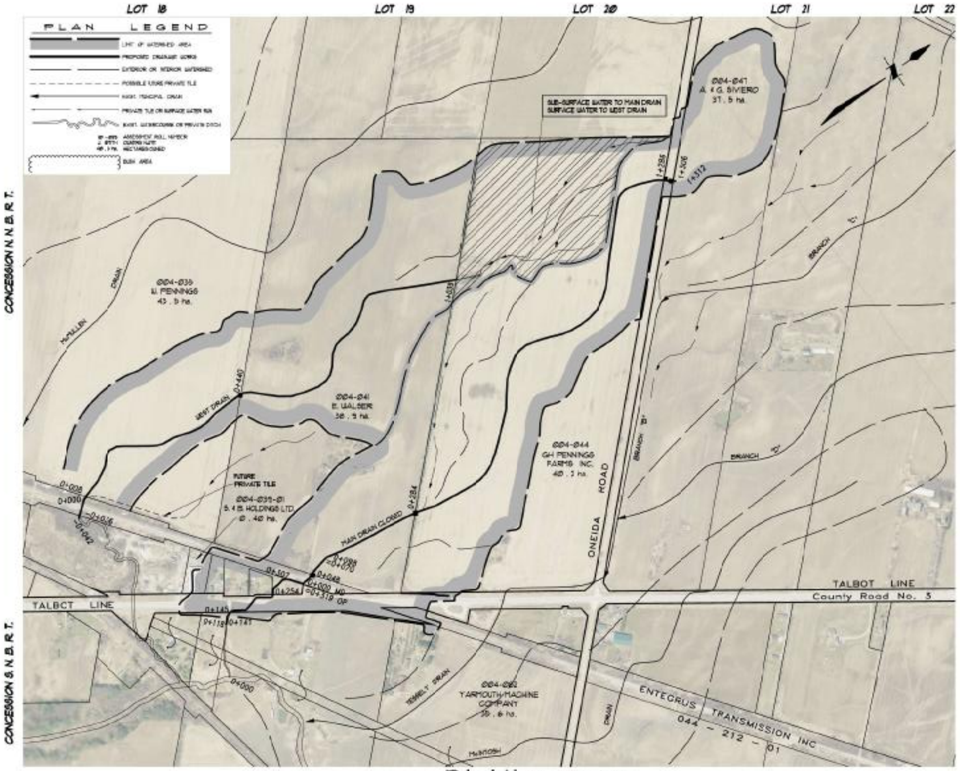
17/ a) IF IT BECOMES IMPRACTICAL TO INSTALL THE NEW TILE IN THE EXISTING TILE LOCATION DUE TO EXISTING TILE ALIGNMENT AND/OR TOO MUCH WATER FLOWING THROUGH THE TILE, THEN THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND/OR THE DRAINAGE SUPERINTENDENT.
b) IF SO ORDERED BY THE ENGINEER AND/OR DRAINAGE SUPERINTENDENT THEN THE CONTRACTOR SHALL INSTALL THE NEW TILE IMMEDIATELY ADJACENT TO THE EXISTING TILE. AFTER CONSTRUCTION IS COMPLETED THE EXISTING TILE SHALL BE DESTROYED WITH A RUBBER TIRE BACKHOE. TILE CONNECTIONS INTO THE EXISTING TILE SHALL BE CONNECTED TO THE NEW TILE.

18/ a) THE CONTRACTOR SHALL ENSURE THAT ALL TRIBUTARY DRAINS ARE CONNECTED DURING TIME OF CONSTRUCTION. ANY MISSED TILE CONNECTIONS THAT ARE FOUND DURING THE WARRANTY PERIOD OF THE CONTRACT SHALL BE COMPLETED BY THE CONTRACTOR AND SHALL BE PAID THE AMOUNT SET OUT ON PAGE 2 OF THE " FORM OF TENDER". NO ADDITIONAL PAYMENT FOR MOBILIZATION WILL BE ALLOWED. THE CONTRACTOR IS NOT RESPONSIBLE FOR COMPLETING MISSED TILE CONNECTIONS THAT ARE FOUND AFTER THE WARRANTY PERIOD FOR THE CONTRACT HAS EXPIRED.
b) ALL TILE CONNECTIONS TO BE MADE WITH CORING MACHINE AND PLASTIC ADAPTOR OR PREFABRICATED FITTINGS.
c) THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A LIST SHOWING STATIONS OF ALL TILE CONNECTIONS UPON COMPLETION OF CONSTRUCTION.

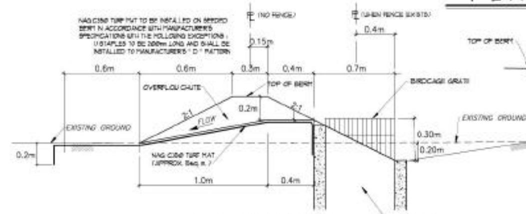


WEST DRAIN PROFILE

SCALE : HOR. 1 : 5,000
VERT. 1 : 50

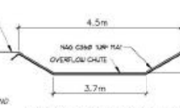


PLAN SCALE 1 : 5,000

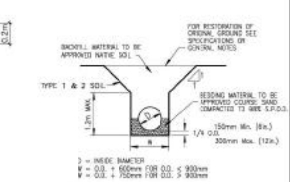


SECTION THROUGH BERM
N.T.S.

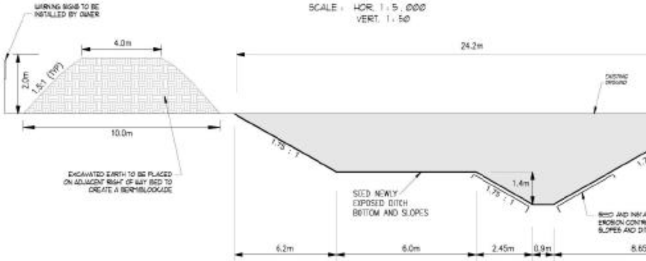
DETAIL "A"
N.T.S.



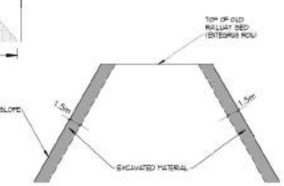
SECTION THROUGH OVERFLOW
N.T.S.



DETAIL "B" N.T.S.



ENTEGRUS TRANSMISSION INC.
STA. - 0 + 000 WEST BRANCH
DETAIL "C"
N.T.S.



SECTION TO SHOW DISPOSAL OF EXCESS MATERIAL ON ENTEGRUS R.O.W.
DETAIL "D"
N.T.S.

G.H. PENNINGS DRAIN 2022

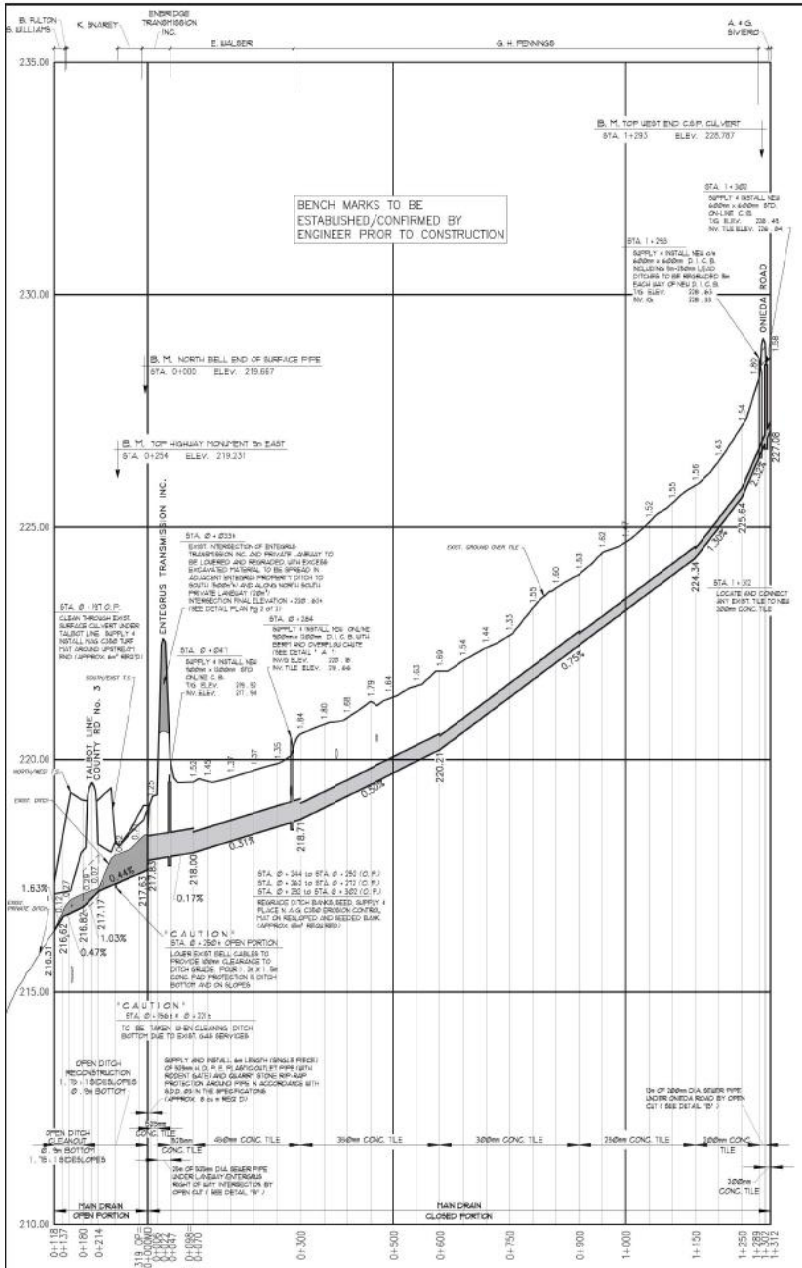
Township of Southwold

Drainage Superintendent: BRENT CLUTTERBUCK 519-769-2010	No.	REVISIONS	DATE

Drawn By: RK & AV	Field Book: GPS & RTS	JOB No. 221041	Drawing No. 1 of 2
Date: JULY 22, 2022			
PLAN, PROFILE & DETAILS			

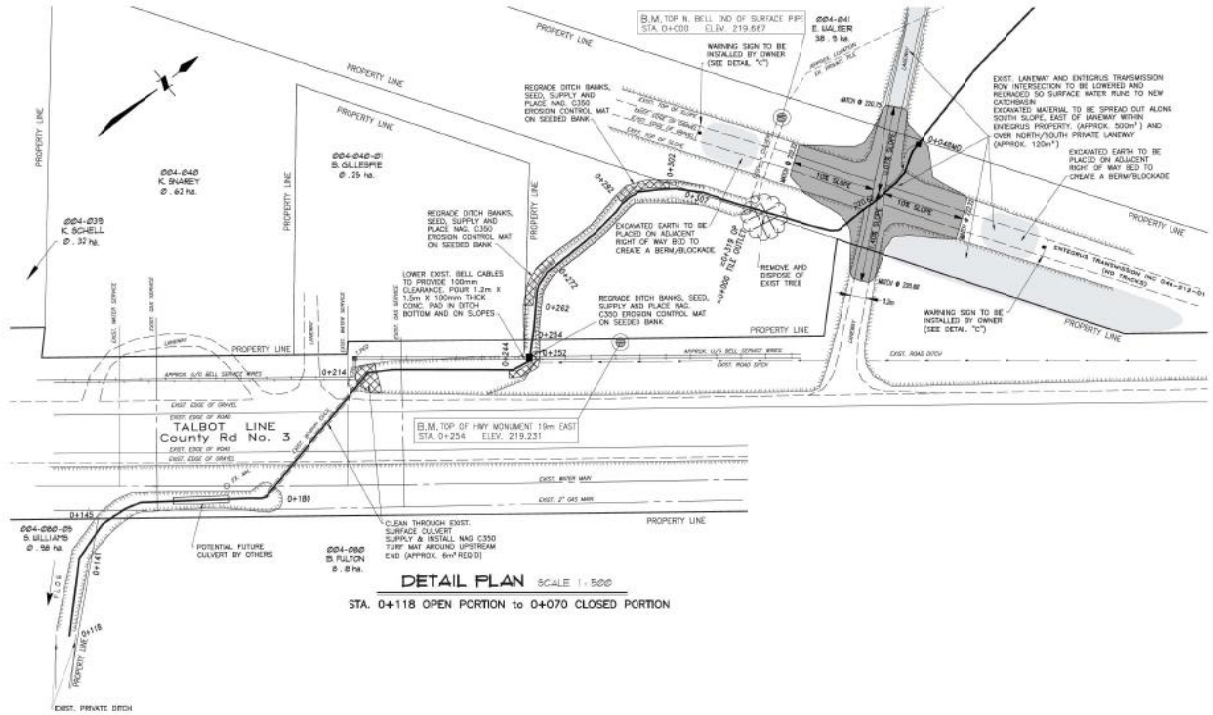
M. P. DAVIS — LICENSED PROFESSIONAL ENGINEER — PROVINCE OF ONTARIO

SPRIET ASSOCIATES
LONDON LIMITED
CONSULTING ENGINEERS
155 YORK STREET — LONDON (519) 672-4100



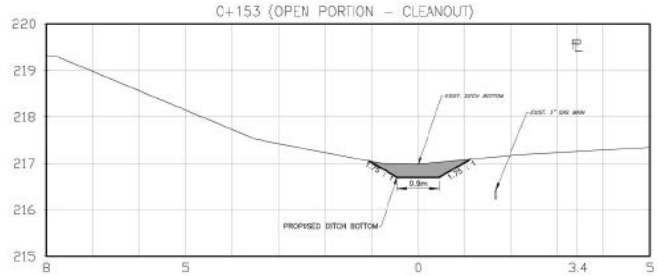
MAIN DRAIN PROFILE

SCALE: HOR. 1 : 5,000
VERT. 1 : 50

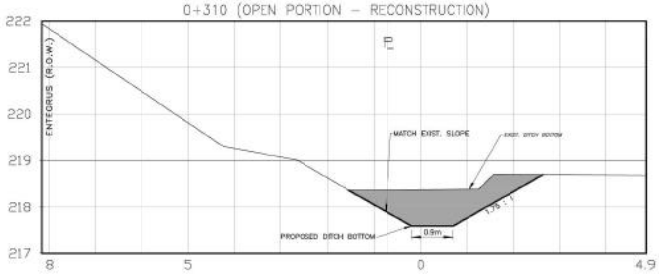


DETAIL PLAN SCALE 1 : 500

STA. 0+118 OPEN PORTION to 0+070 CLOSED PORTION



SECTIONS SCALE 1 : 50



G.H. PENNINGS DRAIN 2022

Township of Southwold

Drainage Superintendent:
BRENT CLUTTERBUCK
519-765-2010

No.	REVISIONS	DATE

Drawn By: RSL & AJV	Field Book	JOB No.	Drawing No.
Date: July 22, 2022	GPB & RTB	221040	2 of 2

PROFILE, DETAIL PLAN & SECTIONS

LICENSED PROFESSIONAL ENGINEER M. P. DUFOS PROVINCE OF ONTARIO

SPRIET ASSOCIATES
LONDON LIMITED
CONSULTING ENGINEERS
100 KING STREET – LONDON (519) 672-4100 – FAX 1A5

TOWNSHIP OF SOUTHWOLD

Report to Council

MEETING DATE: September 26, 2022

PREPARED BY: Peter Kavcic, Director of Infrastructure and Development Services

REPORT NO: ENG 2022-38

SUBJECT MATTER: Township Design Guidelines Manual– Part 1

Recommendation(s):

THAT Council approve the Township Design Guidelines Manual – Part 1.

Purpose:

The purpose of the report is for Council to approve the Township Design Guidelines Manual Part 1 of 2.

Background:

On May 24, 2022 Staff brought forward the draft Township Design Guidelines Manual – Part 1, which required a 20 working day period for consultation. Following the review period Staff received minor comments from Spriet Associates and SBM Engineering. The main comments and responses are seen below:

Comments	Responses
Adjust average day domestic demand for water to align with sanitary design	Design parameter updated similar to 250L/cap/day sanitary design demand
Remove the need for sanitary clean out and lower the minimum sanitary clean out diameter to 100mm	Sanitary cleanouts are required for maintenance and 150mm is required for sanitary PDC diameter. This aligns with municipal partners
Adjust collector road from 8.5m to 9.2m	Adjusted collector to 9.0m
Adjust local road to 8.0m	Not required, unnecessary widening of asphalt resulting in speeding
Adjust radii for curbs	Not required, unnecessary large radii results in speeding

As the comments and suggestions were minor, Staff would like Council to approve the Township Design Standards as attached in Schedule 'A'.

Financial Implications:

N/A

Strategic Plan Goals:

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

☒ Promoting residential, agricultural, commercial, and industrial development by ensuring policies and services are in place to support growth in The Township of Southwold.

☐ Promoting a healthy, naturally beautiful, and community-oriented municipality by encouraging and supporting involvement of volunteer organizations wishing to provide cultural and recreational activities in the Township of Southwold.

☒ Providing improved transportation and a strong commitment to asset management with a goal of maintaining the Township's infrastructure in the promotion of public safety

☐ Exercising good financial stewardship in the management of Township expenditures and revenues.

☒ Promoting public engagement, transparent government, and strong communications with all members of the community across various mediums for the strengthening of civic participation.

Respectfully Submitted by:
Peter Kavcic, P.Eng.
Director of Infrastructure and Development Services
"Submitted electronically"

Approved by:
Jeff Carswell, CAO/Clerk
"Approved electronically"

Schedule 'A' – Township Design Guidelines Manual

TOWNSHIP OF SOUTHWOLD

Report to Council

MEETING DATE: September 26, 2022

PREPARED BY: Peter Kavcic, Director of Infrastructure and Development Services

REPORT NO: ENG 2022-39

SUBJECT MATTER: Shedden and Fingal Sanitary Sewer System

Recommendation(s):

THAT Council endorse Staff's preferred Option for the sanitary sewer system in Shedden and Fingal which includes aligning the sanitary sewer system with the recommended design alternative in the Environmental Assessment.

Purpose:

The purpose of this report is to provide Council with an update on the sanitary sewer system for Shedden and Fingal.

Background:

As part of the Environmental Assessment (EA) for the Shedden and Fingal sanitary servicing project, the preferred sanitary system was to be on Union Road from Talbot Line to Fingal Line, with a preferred wastewater treatment plant (WWTP) location. The preferred routing as per the EA can be seen in the below image.

Figure 1 – Sanitary Sewer EA Routing
(red – sewer, red square – WWTP, green – forcemain)

After finalizing the EA, the Council approved recommendation was to design the sanitary sewer system for new development and not existing residents. The Township as part of this recommendation was responsible for constructing the sewer system along Union Road between Talbot Line and Fingal Line. The cost for this sanitary sewer system would be funded through sewer connection charges. Properties that don't immediately front along this section of Union Road, would require the developer or property owner to install a sanitary sewer at their cost in order to connect.

Shedden Sanitary Sewer System

When reviewing development potential properties, Staff were investigating ways to minimize costs for developers. One way to minimize sanitary servicing costs are to have property owners work together to service their development through their property rather than along an existing road network. An anticipated trunk sewer for properties along the north/east limit of settlement area is shown in purple, which will service these properties. The trunk sewer design allows the main sanitary sewer along Union Road to be shallower, as well it provides a more economical option for developers. The orange arrows are how these properties connect to the sewer system. The two properties west of the tracks that are further removed from Talbot Line will require more work to service any development.

Figure 2 – Shedden Sanitary Sewer System

Fingal Sanitary Sewer System

When reviewing the Fingal sanitary sewer system, Council asked Staff to review additional rerouting of the municipal sanitary sewer through private property that has development potential. Staff and the consultants have reviewed both options up to Union Road and have provided our preference below.

Option 1: Routing as shown in the EA

Option 1 for servicing Fingal includes the following:

- 1600m of forcemain to Union Road (green)
- 400m of sanitary sewer (red)
- Pump station at 8068 Union Road (red circle)
- Estimated cost of $3.7M

Figure 3 – Option 1 Fingal Sanitary Routing as Shown in EA

This option will allow the sanitary sewer system in Fingal to be constructed the quickest as the sewer system is within the County Road allowance and doesn't require additional EA approvals or coordination for easement agreements. The development at 8068 Union Road is furthest ahead in the process, with a draft plan submission anticipated for late 2022. Their timeline for construction is anticipated between 2023-2024. Other development potential properties in Fingal are at the early stages of the planning process and are likely 1.5-2 years minimum away from draft plan of subdivision application.

Option 2: Rerouting through private property

Option 2 for servicing includes the following:

- 750m of sanitary sewer (red)
- Trunk sewer system through private lands. Sewer to align with road network for future subdivision
- 1900m of forcemain to Union Road with 1450m on private property (green)
- Estimated cost of $5.0M, additional engineering cost of $100K.

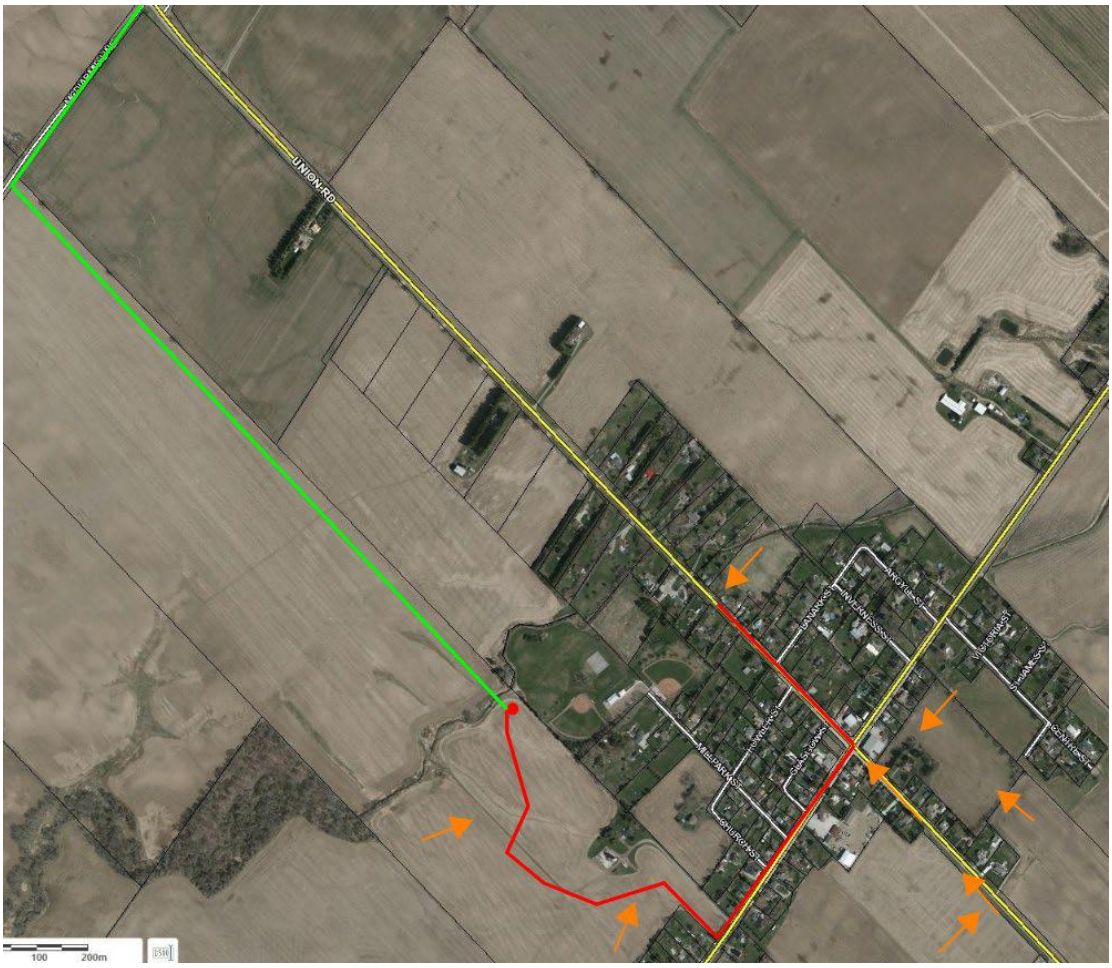


Figure 4 – Option 2 Fingal Sanitary Routing through Private Property

For Option 2 there are several scheduling and legal constraints which include:

- EA addendum to adjust the sanitary route in Fingal
- Partnering with private property owner to design trunk sewer system through a future plan of subdivision
- Acquiring easement rights for forcemain on private property

These constraints make it more challenging to design a sanitary sewer system where there is an immediate need for servicing in Fingal at 8068 Union Road. When considering Option 2, Staff included the sewer along Union Road because the EA committed to providing this connection.

The increase in price for Option 2 is a result of the sanitary sewer being longer to allow the properties on Union Road ability to connect, as this was provided in the EA preferred routing. The forcemain length for Option 2 is also longer, even though the price per meter to install is less when compared to Option 1.

Staff's recommendation for the sanitary sewer system in Shedden and Fingal is to align with the EA and continue designing the sewer system on Union Road between Talbot Line and Fingal Line.

Financial Implications:

If moving forward with Option 2, there are additional costs for engineering as well as legal fees to negotiate and acquire easement rights. The legal fees for the easement rights are not included in Option 2 cost estimate.

Strategic Plan Goals:

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

☒ Promoting residential, agricultural, commercial, and industrial development by ensuring policies and services are in place to support growth in The Township of Southwold.

☐ Promoting a healthy, naturally beautiful, and community-oriented municipality by encouraging and supporting involvement of volunteer organizations wishing to provide cultural and recreational activities in the Township of Southwold.

☐ Providing improved transportation and a strong commitment to asset management with a goal of maintaining the Township's infrastructure in the promotion of public safety

☒ Exercising good financial stewardship in the management of Township expenditures and revenues.

☒ Promoting public engagement, transparent government, and strong communications with all members of the community across various mediums for the strengthening of civic participation.

Respectfully Submitted by:
Peter Kavcic, P.Eng.
Director of Infrastructure and Development Services
"Submitted electronically"

Approved by:
Jeff Carswell, CAO/Clerk
"Approved electronically"

TOWNSHIP OF SOUTHWOLD

Report to Council

MEETING DATE: September 26, 2022

PREPARED BY: Jeff Carswell, CAO/Clerk

REPORT NO: CAO 2022-45

SUBJECT MATTER: Integrity Commissioner, Closed Meeting Investigator, Ombudsman – County RFP

Recommendations:

1. THAT the Council of the Township of Southwold agrees to enter into an agreement with Aird & Berlis LLP for Integrity Commissioner, Closed Meeting Investigator and Ombudsman Services as set out in the response to Elgin County RFP2022-P36.

2. AND THAT the appropriate authorizing by-law be brought forward for Council's consideration.

Purpose:

The purpose of this report is to seek direction from Council on engaging Aird & Berlis LLP as Integrity Commissioner, Closed Meeting Investigator and Ombudsman (IC/CMI/Ombuds) for the Township of Southwold.

Background:

As reported previously, Mark McDonald advised the County of Elgin and participating municipalities that he would no longer provide IC/CMI/Ombuds services after September 30, 2022. The County took the lead on developing and issuing an RFP. The RFP closed and was evaluated by County and Local staff. The County accepted the proposal from Aird & Berlis LLP on September 14, 2022 for IC/CMI/Ombuds services. Local municipalities have the option to "piggy-back" on this proposal.

Comments:

The recommendation report from the County is attached (Attachment #1)

While no retainer is charged per annum, the hourly rate is $489.75 and is quite a bit higher than that of the previous IC/CMI/Ombuds ($150.00/hr). The County identified this likelihood during the RFP process. The $489.75/hr rate is based on the average rate on projected percentage allocation of work among staff members based on past experiences and projections for the type of service being rendered. Hourly rates are fixed for a two-year period. Mileage and Disbursements are extra and generally applicable if on-site services are required.

The quantity of IC/CMI/Ombuds services required is contingent on the number of complaints/requests received in a given year. This figure can vary and, as such, it is difficult to predict a precise cost on this basis. The Township has been fortunate that there have been very few complaints/requests. A budget estimate of $5,000 will be included in the Legal Expenses budget for this.

The Township is required by legislation to appoint an Integrity Commissioner. Appointment of the Closed Meeting Investigator and Ombudsman can also be appointed by Council, or if an appointment is not made, these responsibilities fall to the Ontario Ombudsman. Depending on the type and number of complaints that could come in, there may be some cost savings if relying on the Ontario Ombudsman for Closed Meeting Investigation and Ombudsman Services. Due to the limited number of complaints and the efficiencies and reduced confusion with combining all accountability services with one service provider, staff would recommend continuing with engaging a single IC/CMI/Ombuds provider.

Financial Implications:

There could be an increase in costs depending on the number and complexity of complaints.

Strategic Plan Goals:

The above recommendation helps the Township meet the Strategic Plan Goal of:
☐ Promoting residential, agricultural, commercial, and industrial development by ensuring policies and services are in place to support growth in The Township of Southwold.

☐ Promoting a healthy, naturally beautiful, and community-oriented municipality by encouraging and supporting involvement of volunteer organizations wishing to provide cultural and recreational activities in the Township of Southwold.
☒ Providing improved transportation and a strong commitment to asset management with a goal of maintaining the Township's infrastructure in the promotion of public safety
☒ Exercising good financial stewardship in the management of Township expenditures and revenues.
☐ Promoting public engagement, transparent government, and strong communications with all members of the community across various mediums for the strengthening of civic participation.

Respectfully Submitted by:
Jeff Carswell, CAO/Clerk
"Submitted electronically"

REPORT TO COUNTY COUNCIL

FROM: Julie Gonyou, Chief Administrative Officer

Mike Hoogstra, Manager of Procurement & Risk

DATE: September 9, 2022

SUBJECT: Integrity Commissioner, Closed Meeting Investigator and Municipal Ombudsman – Contract Award

RECOMMENDATIONS:

THAT the contract for Integrity Commissioner, Closed Meeting Investigator and Municipal Ombudsman be awarded to Aird & Berlis LLP for a two-year term; and,

THAT staff be authorized to extend the contract for an additional two-year term, subject to section 7.6 of the Procurement Policy; and,

THAT the Warden and Chief Administrative Officer be authorized to sign a contract for Integrity Commissioner, Closed Meeting Investigator and Municipal Ombudsman services on terms and conditions acceptable to the County Solicitor and Chief Administrative Officer.

INTRODUCTION:

This report provides details on the Request for Proposal (RFP) for Integrity Commissioner, Closed Meeting Investigator and Municipal Ombudsman Services and seeks Council's approval to award the contract.

The RFP was issued as a cooperative purchasing project that included the City of St. Thomas and all constituent municipalities, save and except the Town of Aylmer. Each municipality has the option to cross-appoint the same firm under a separate agreement.

DISCUSSION:

On June 14, 2022, Council directed that staff draft an RFP for Integrity Commissioner, Closed Meeting Investigator and Ombudsman services, to be issued jointly on behalf of Elgin County and any interested local municipal partners. The RFP document (2022-P36) is appended to this report as Attachment 1.

Information that was advertised and posted on the County's Bid Portal page https://elgincounty.bidsandtenders.ca including RFP dates, proposals submitted and a complete plan takers list is appended to this report as Attachment 2.

The Evaluation Committee (refer to Attachment 3), evaluated each proposal based on the following criteria:

i) Understanding of the project;
ii) Methodology and Approach to Project Tasks, Deliverables including training program;
iii) Project Team experience and qualifications;
iv) Project Firm experience within municipal government including practices, procedures, methods and mandates found within municipal government;
v) Fees / Pricing / Total Overall Cost;
vi) Reference Verification.

Three (3) proposals were received in response to the RFP, with all three (3) meeting the minimum mandatory requirements. The Evaluation Committee met on September 6, 2022 to review the three (3) proposals. Scoring for the two (2) highest proponents was close enough that the Evaluation Committee exercised the discretionary option pursuant to section 3.8 of the RFP to engage the two highest scoring proponents in a presentation. Both presentations to the Evaluation Committee occurred on September 8, 2022. The two (2) highest scoring firms provided a high-level overview of their proposal/services and responded to questions from the committee.

The firm selected by the Evaluation Committee pursuant to the RFP evaluation criteria is Aird & Berlis LLP. The proposal from Aird & Berlis LLP was the highest scoring qualified proposal and thus represented the best complete quality submission.

All Proponents that submitted a proposal to the County will be advised of the contract award and will be offered a debriefing of their individual proposal submission.

FINANCIAL IMPLICATIONS:

The hourly rate for Integrity Commissioner, Closed Meeting Investigator and Municipal Ombudsman services varies depending on the individual staff member that is performing the work on behalf of the service provider. The average rate proposed for the new contact term is $489.75 per hour, with the average being formulated based on projected percentage allocation of work among staff members based on past experience and projections for the type of service being rendered. The hourly rates are fixed for a two-year term. Disbursements and travel costs are extra should on-site services be required. The quantity of Integrity Commissioner, Closed Meeting

Investigator and Municipal Ombudsman hours utilized is contingent on the number of complaints and/or requests for advice received so it is not possible for staff to predict the precise cost on an annual basis. With that qualification limiting the ability to forecast annual costs, staff are including a budget estimate of $3,000.

ALIGNMENT WITH STRATEGIC PRIORITIES:

Serving Elgin	Growing Elgin	Investing in Elgin
☒ **Ensuring alignment of current programs and services with community need.** ☐ **Exploring different ways of addressing community need.** ☐ **Engaging with our community and other stakeholders.**	☐ **Planning for and facilitating commercial, industrial, residential, and agricultural growth.** ☐ **Fostering a healthy environment.** ☒ **Enhancing quality of place.**	☒ **Ensuring we have the necessary tools, resources, and infrastructure to deliver programs and services now and in the future.** ☒ **Delivering mandated programs and services efficiently and effectively.**

Additional Comments:

LOCAL MUNICIPAL PARTNER IMPACT/COMMUNICATIONS:

This report will be shared with all local municipalities, save and except the Town of Aylmer, and the City of St. Thomas. Each municipality has the option to cross-appoint the same firm under a separate agreement.

In the past, Elgin County covered the retainer costs associated with the Integrity Commissioner/Closed Meeting Investigator and Ombudsman services for all constituent municipalities with the exception of the Town of Aylmer ($20,375). The recommended firm's pricing does not include a retainer fee and it is recommended that each constituent municipality fund all costs associated with these services.

CONCLUSION:

As detailed above, the Evaluation Committee completed an evaluation and selection process in accordance with Request for Proposal No. 2022-P36 and subsequently the proposal submission from Aird & Berlis LLP was deemed the successful qualified proponent and is recommended for award.

All of which is Respectfully Submitted

Julie Gonyou
Chief Administrative Officer

Mike Hoogstra
Manager of Procurement & Risk

TOWNSHIP OF SOUTHWOLD

Report to Council

MEETING DATE: September 26, 2022

PREPARED BY: Jeff Carswell, CAO/Clerk

REPORT NO: CAO 2022-46

SUBJECT MATTER: Christmas Gift Certificates for Staff

Recommendation:

THAT Council adopt Policy HR-61 Christmas Gift Certificate Policy as attached to this report.

Purpose:

The purpose of this report is to provide information to Council on the Christmas Gift Certificate Program and put forth a policy (Attachment "A") that captures the past practice.

Background:

Over the past six years, the Township of Southwold has not hosted a formal Christmas Party but did give all employees a gift certificate from a Southwold Business. The gift certificates have been handed out at an informal gathering with coffee and donuts hosted by Council.

In 2020, in response to the pandemic and considering many businesses being unable to open, in lieu of gift cards, staff received cheques. 2021 saw the return to gift cards and smaller gatherings.

Comments:

To provide some structure and rules around this program, staff have developed the attached policy. The policy reflects past practice with several proposed changes that attempt to address gaps since moving to the gift certificate program.

Based on discussion with staff, the program is greatly appreciated. Limiting gift certificates to local businesses ensures the funds stay within the community. Quite often more than the gift certificate value is purchased from the local business.

In reviewing the history of the program and the changing nature of employment, staff are recommending some minor changes in the proposed policy. These include:

- Clarification of Part-time Employee to include Firefighters. Apparently, firefighters were originally invited to the Township Christmas Party and are part-time employees, but for some reason were not included in the gift certificate program. In discussion with the Fire Chief, there does not appear to be another similar benefit provided in-lieu.
- While there is the ability to treat different employee groups differently, this would be an area where having some consistency would be beneficial to maintain employee moral and demonstrate the Township's commitment to treating all employees fairly.
- Changing Part-time Gift Certificate value from $35 to $50 to permit more businesses to participate as some businesses are limited to denominations of $25, $50, $75, etc.

Financial Implications:

The proposed changes will have some additional costs (approx. $2,000), due mainly to the inclusion of Firefighters in the Part-time employee group.

Strategic Plan Goals:

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

☐ Promoting residential, agricultural, commercial, and industrial development by ensuring policies and services are in place to support growth in The Township of Southwold.

☐ Promoting a healthy, naturally beautiful, and community-oriented municipality by encouraging and supporting involvement of volunteer organizations wishing to provide cultural and recreational activities in the Township of Southwold.

☐ Providing improved transportation and a strong commitment to asset management with a goal of maintaining the Township's infrastructure in the promotion of public safety

☒ Exercising good financial stewardship in the management of Township expenditures and revenues.

☐ Promoting public engagement, transparent government, and strong communications with all members of the community across various mediums for the strengthening of civic participation.

Respectfully Submitted by:
Jeff Carswell, CAO/Clerk
"Submitted electronically"

Township of Southwold
Human Resources
Policy and Procedure Manual

Title: Christmas Gift Certificate Policy	
Number: HR-61	**Type:** Policy
Effective Date: 2022-09-26	**Last Review Date:**
Approval: Council, Resolution	**Review Frequency:** Annually, October
Applies to: All Staff	

Purpose:

To provide a policy framework for the Christmas Gift Certificate program.

Definitions:

Full-time Employee – all employees of the Township that work full-time hours (35 – 40 hrs/week) whether continuously employed or on fixed-term contract.

Part-time Employee – all employees of the Township that work part-time hours whether continuously employed or on a fixed-term contract. Part-time includes Firefighters.

Application:

This Policy applies to Full-time and Part-time Employees in the employ of the Township when the gift certificates are distributed.

The CAO/Clerk may also authorize the issuance of a gift certificate to other people such as recent retirees, employees that recently completed a contract and/or situations where recognition with a Christmas Gift Certificate would be appropriate.

Policy:

1. Gift certificates from Township businesses will be provided in early December each year as follows:
    a. Full-time Employees - $75
    b. Part-time Employees - $50

2. Staff will be provided with the opportunity to select the gift certificate from a list of several businesses in the Township.

3. The CAO/Clerk will administer this policy and complete the following:
    a. Provide an update to Council on this policy each year in September/October, along with any recommended changes.
    b. Review and update the vendor list each year confirming vendors are still interested and able to participate in the gift certificate program.
    c. Consider the inclusion of new vendors.
    d. Providing staff with the list of vendors and request for their preferred gift certificate vendor.
    e. Securing gift certificates.
    f. Coordinating the distribution of the Gift Certificates in conjunction with Council and service recognition event (if applicable)

4. For clarification the following employee classes are not eligible for the program:
    a. Councillors
    b. Contractors
    c. Summer Students

Revision History:

Version	Effective Date	Revision Notes
1	2022-09-26	New policy that reflects past practice.

Related Policies:

Service Recognition Policy

TOWNSHIP OF SOUTHWOLD

Report to Council

MEETING DATE: September 26, 2022

PREPARED BY: Jeff Carswell, CAO/Clerk

REPORT NO: CAO 2022-47

SUBJECT MATTER: Electronic Monitoring Policy

Recommendation:

THAT Council adopt Policy HR-31 Electronic Monitoring Policy, as attached to this report.

Purpose:

To put forward an Electronic Monitoring Policy as required by Part XI.1, Section 41.1.1 of the Employment Standards Act (ESA).
https://www.ontario.ca/laws/statute/00e41#BK72

Background:

Bill 88, the Working for Workers Act 2022, which became law in April requires that employers in Ontario with (25) or more employees on Jan. 1, 2022 prepare an electronic monitoring policy by October 11, 2022. This policy must then be circulated to employees within (30) days of its approval.

Policy requirements, as prescribed in the Province of Ontario reference document on "Written policy on electronic monitoring of employees" include:

1. A statement as to whether the employer engages in electronic monitoring of employees;
2. Where the employer does electronically monitor employees, the policy must also contain a description of how the employer may electronically monitor employees, a description of the circumstances in which the employer may electronically monitor employees and the purposes for which information obtained through the electronic monitoring may be used by the employer;
3. The date the policy was prepared and the date any changes were made to the policy.

Comments:

Township staff have completed an environmental scan of internal business processes and reviewed policies prepared by comparable municipalities. It is expected that the Electronic Monitoring Policy will be a living document and may be amended in the future.

The proposed Electronic Monitoring Policy is attached as Attachment #2. The policy is based on other municipal policies. Many of the items listed relate to Network Security and these have been reviewed by the contracted IT Service provider.

It is anticipated that implementation of the Electronic Monitoring Policy will have no substantiative impact on day-to-day operations in Township departments.

The Township of Southwold will continue to respect and maintain the privacy of employees through an approach that prioritizes accountability and transparency of operations.

Financial Implications:

There are not any financial implications at this time.

Strategic Plan Goals:

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

☐ Promoting residential, agricultural, commercial, and industrial development by ensuring policies and services are in place to support growth in The Township of Southwold.

☐ Promoting a healthy, naturally beautiful, and community-oriented municipality by encouraging and supporting involvement of volunteer organizations wishing to provide cultural and recreational activities in the Township of Southwold.

☐ Providing improved transportation and a strong commitment to asset management with a goal of maintaining the Township's infrastructure in the promotion of public safety

☒ Exercising good financial stewardship in the management of Township expenditures and revenues.

☒ Promoting public engagement, transparent government, and strong communications with all members of the community across various mediums for the strengthening of civic participation.

Respectfully Submitted by:
Jeff Carswell, CAO/Clerk
"Submitted electronically"

Township of Southwold
Human Resources
Policy and Procedure Manual

Title: Electronic Monitoring Policy	
Number: HR-21	**Type:** Policy
Effective Date: 2022-09-26	**Last Review Date:**
Approval: Council, Resolution	**Review Frequency:** Annually
Applies to: All Employees	

Purpose:

This policy satisfies the requirements of the Employment Standards Act, Part XI.1 - Written Policy on Electronic Monitoring.
https://www.ontario.ca/laws/statute/00e41#BK72

Definitions:

Electronic Monitoring refers to use of electronic means to observe, record, track or collect data on employees (including but not limited to employee performance, location and resource use) where such information may be accessed and/or reviewed by the employer or someone acting on the employer's behalf.

Application:

This Policy applies to all employees, as defined by the Ontario Employment Standards Act, 2002 ("ESA"), whether they are working remotely, in the workplace or are mobile. For clarity, "employee" under this Policy means only those employees of the Township which are considered employees under the ESA.

Policy:

1. The Township of Southwold ("Township") is committed to transparency with regard to electronic monitoring.

2. The Electronic Monitoring Policy is intended to outline the Municipality's electronic monitoring practices and should be read in conjunction with other Municipal policies, procedures, guidelines or standards.

3. The table below outlines instances of electronic monitoring utilized by the Township:

TOOL	CIRCUMSTANCES	HOW	PURPOSE
Endpoint Threat Detection and Response	Continuous	Endpoint Threat Detection and Response monitors the use of workstations (programs run, files read and written, etc.) and compares it against a baseline to detect abnormalities and potential unauthorized use.	Network Security
Email Tracking	Continuous	Software records copies of all messages sent or received by addresses within the Township's domain.	Network Security
Network/Performance Monitoring Tools/Firewalls/VPN	Continuous	Tools that record network traffic occurring between workstations, servers, the internet, etc. Investigations may occur to troubleshoot incidents which may expose User Identifiable Information.	Network Security
Event Log Collection Tools	Continuous	Collection of event logs generated by electronic devices to a centralized or non-centralized system.	Network Security

TOOL	CIRCUMSTANCES	HOW	PURPOSE
Electronic Key Fob/ Card System	Each Scan/ Entry	An electronic sensor creates a record each time an authorized user scans their fob or card and enters certain Municipal facilities.	Facility Security
Video Surveillance (Facility)	Continuous	Cameras record video footage of specific areas within Township facilities.	Facility Security
Vehicle Telematics/ GPS	Certain fleet vehicles during on shift use	On-board sensors detect and report on vehicle location.	Fleet/ Operations Management and Security
Who's Responding	Firefighter response	Phone Text/GPS	Fire Department Response
Mobile Device Location Tracking & Investigations	Continuous & with reasonable grounds	Enablement of Location Services on mobile devices. Investigations may occur to locate missing assets and/or document unsanctioned employee activities.	Asset Security

4. Nothing in this policy affects or limits the Township's ability to use information obtained through electronic monitoring. The Township reserves the right to monitor Information Technology assets and services belonging to the Township to ensure secure, effective, and appropriate use. Employees should have no expectation of privacy as it relates to their use of Township Information Technology or the location of Township assets.

POSTING, NOTICE AND RETENTION:

5. The Township shall provide a copy of this Policy to each employee of the Township within thirty (30) calendar days of implementation.

6. Should any amendment(s) be made to the Policy after its implementation, the Township shall provide each employee of the Township a copy of the amended Policy within thirty (30) calendar days of the amendment(s) being made.

7. The Township shall provide a copy of this Policy to all new employees upon onboarding and within thirty (30) calendar days of the employee commencing

employment with the Township.

8. The Township shall retain a copy of this and any revised version of this Policy in accordance with the relevant Records Management and Retention Policy provisions.

9. This report shall be reviewed annually and amended as necessary.

Revision History:

Version	Effective Date	Revision Notes
1	2022-09-26	New policy required by ESA by 2022-10-11

Related Policies:

Disconnecting from Work Policy
Acceptable Computer and Internet Usage Policy

TOWNSHIP OF SOUTHWOLD

Report to Council

MEETING DATE: September 26, 2022

PREPARED BY: Jeff Carswell, CAO/Clerk

REPORT NO: CAO 2022-48

SUBJECT MATTER: FCM Asset Management Agreement

Recommendation:

THAT Council authorize the Mayor and Clerk to sign the attached FCM Asset Management Grant Agreement.

Purpose:

To seek approval of the FCM Asset Management Grant Agreement.

Background:

In the fall of the 2020, the Township applied to FCM for an Asset Management Grant. Approval was granted in the fall of 2021, for a project starting in September 2021 running until September 2022. The agreement for this project and grant has been received and must be signed to fulfill the requirements of the program.

Comments:

The FCM Asset Management Grant Agreement reflects the terms of the application and FCM Asset Management program. Even though the Township's project took place over 2022, the agreement needs to be completed in order to secure funding and finalize the grant for this project.

It is recommended the Mayor and Clerk be authorized to sign the agreement.

Financial Implications:

There are not any financial implications at this time.

Strategic Plan Goals:

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

☐ Promoting residential, agricultural, commercial, and industrial development by ensuring policies and services are in place to support growth in The Township of Southwold.

☐ Promoting a healthy, naturally beautiful, and community-oriented municipality by encouraging and supporting involvement of volunteer organizations wishing to provide cultural and recreational activities in the Township of Southwold.

☐ Providing improved transportation and a strong commitment to asset management with a goal of maintaining the Township's infrastructure in the promotion of public safety

☒ Exercising good financial stewardship in the management of Township expenditures and revenues.

☐ Promoting public engagement, transparent government, and strong communications with all members of the community across various mediums for the strengthening of civic participation.

Respectfully Submitted by:
Jeff Carswell, CAO/Clerk
"Submitted electronically"

GRANT AGREEMENT

THIS AGREEMENT is effective as of the date of last signature on the signature page.

BETWEEN:

CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

(herein called "**Recipient**")

-and-

FEDERATION OF CANADIAN MUNICIPALITIES

(herein called "**FCM**")

WHEREAS:

(a) the Government of Canada and FCM have established the Municipal Asset Management Program (herein called **MAMP**);

(b) the Government of Canada has funded the Municipal Asset Management Program, which is being administered by FCM;

(c) FCM has agreed to provide the Recipient with a grant for use by the Recipient solely for the project described in this Agreement; and

(d) this Agreement contains the terms for the administration and remittance of the grant by FCM to the Recipient and the use of the grant by the Recipient.

NOW THEREFORE, the Parties hereby agree as follows:

ARTICLE 1
DEFINITIONS AND SCHEDULES

1.01 Definitions. Whenever used in this Agreement and unless the context otherwise requires, the following terms have the following meanings:

"**Agreement**" means this agreement, including all schedules, and all amendments or restatements as permitted;

"**Business Day**" means any day other than a Saturday, Sunday or statutory holidays in the Province of Ontario;

"**Claim**" has the meaning ascribed thereto in Section 13.01 of this Agreement;

"**Confidential Information**" has the meaning ascribed thereto in Section 11.01 of this Agreement.

"**Eligible Activities**" means any reasonable activities necessary to complete the Project as described in Part 2 of Schedule A attached hereto.

"**Eligible Expenditure Date**" has the meaning ascribed thereto in Part 4 of Schedule C attached hereto;

"**Eligible Expenditures**" means those permitted expenditures described in Part 4 of Schedule C attached hereto, for which the Recipient may use the Grant;

"**Grant**" means the grant set forth in Article 2;

"**Grant Amount**" means the amount to be disbursed by FCM on account of the Grant up to the maximum amount set forth in Part 1 of Schedule B attached hereto;

"**Indemnified Parties**" has the meaning ascribed thereto in Section 13.01 of this Agreement;

"**Parties**" means FCM and the Recipient, and "**Party**" refers to any one of them;

"**Project**" means the project described in Part 2 of Schedule A attached hereto;

"**Project End Date**" has the meaning ascribed thereto in Part 2 of Schedule A attached hereto; and

"**Project Start Date**" has the meaning ascribed thereto in Part 2 of Schedule A attached hereto;

"**Receiving Party**" has the meaning ascribed thereto in Section 11.01 of this Agreement.

1.02 Schedules. The following annexed Schedules, which may be amended by FCM from time to time, form part of this Agreement and the Parties shall comply with all terms and conditions set-out therein:

Schedule A: Part 1: Conditions of Contribution
Part 2: Description of Project, Statement of Work and Project Expenditures
Part 3: Reporting Requirements and Project Deliverables

Schedule B: Part 1: Grant Amount
Part 2: Particulars of the Sources of Funding
Part 3: Contribution Schedule/Period of Funding

Schedule C: Part 1: Request for Contribution, Letter of Attestation and Expense Claim
Part 2: Report Templates
Part 3: Accepted Practices
Part 4: Eligible Expenditures

Schedule D: Contact Information

ARTICLE 2
THE GRANT

2.01 Grant Purpose. FCM is providing the Grant to the Recipient for the sole purpose of assisting the Recipient in the performance of the Project, as described in Part 2 of Schedule A attached hereto.

2.02 Grant Amount. Subject to and in accordance with the terms and conditions of this Agreement and in reliance upon the representations, warranties and covenants of the Recipient hereinafter set forth, FCM agrees to contribute towards the Eligible Expenditures, the Grant Amount, as more particularly described in Part 1 of Schedule B attached hereto.

2.03 Disbursement of Grant.

(a) FCM shall disburse the Grant in accordance with Part 3 of Schedule B attached hereto.

(b) No portion of the Grant shall be disbursed by FCM without it first receiving from the Recipient a completed Request for Contribution in accordance with Part 1 of Schedule C attached hereto.

(c) Provided that the Conditions of Contribution set-out in Part 1 of Schedule A attached hereto are satisfied, the Recipient may request the Grant by delivering to FCM the appropriate

Request for Contribution in accordance with Part 1 of Schedule C attached hereto at least 30 days before the requested date of disbursement; the requested date of disbursement may be delayed if the Request for Contribution delivered by the Recipient to FCM is not, in FCM's sole discretion, satisfactory and revisions or supplemental documentation are required.

2.04 Term. This Agreement shall continue in force until FCM has received and notified the Recipient of its satisfaction with all reports required to be completed by the Recipient in accordance with the terms and conditions of this Agreement, or until the Agreement has been terminated in accordance with Section 12.01, whichever shall first occur.

ARTICLE 3
CONDITIONS OF CONTRIBUTION

3.01 Conditions of Contribution. Subject to Section 2.03, the obligation of FCM to disburse the Grant to the Recipient is conditional upon the Recipient satisfying the conditions set-out in Part 1 of Schedule A attached hereto, to the satisfaction of FCM.

ARTICLE 4
REPRESENTATIONS AND WARRANTIES

4.01 Representations and Warranties. The Recipient represents and warrants that:

(a) it is duly established under the laws of the Province of Ontario and has the legal power and authority to enter into, and perform its obligations under this Agreement and the Project;

(b) this Agreement has been duly authorized and executed by it and constitutes a valid and binding obligation of it, enforceable against it in accordance with its terms;

(c) neither the making of this Agreement nor the compliance with its terms and the terms of the Project will conflict with or result in the breach of any of the terms, conditions or provisions of, or constitute a default under any indenture, debenture, agreement or other instrument or arrangement to which the Recipient is a party or by which it is bound, or violate any of the terms or provisions of the Recipient's constating documents or any license, approval, consent, judgment, decree or order or any statute, rule or regulation applicable to the Recipient;

(d) no litigation, arbitration or administrative proceedings are current or pending or have been threatened, and so far as the Recipient is aware no claim has been made, which is likely to have an adverse effect on its preparation and/or delivery of the Project or its compliance with its obligations under this Agreement; and

(e) it has the right to grant the license set out in Section 6.02 of this Agreement.

ARTICLE 5
COVENANTS

5.01 Affirmative Covenants. Unless FCM shall otherwise agree in writing, the Recipient covenants and agrees that it shall:

(a) use the Grant only for Eligible Activities relating to the Project;

(b) carry out the Project and conduct the activities thereof in compliance with all applicable laws and regulations and, without restricting the generality of the foregoing, in compliance

with all labour, environmental, health and safety and human rights legislation applicable to the Project;

(c) carry out the Project with due diligence and efficiency and in accordance with sound engineering, scientific, financial and business practices;

(d) ensure that Project contracts are awarded in a way that is fair, transparent, competitive and consistent with value for money principles (the optimal combination of quality, service, time and cost considerations, over the useful life of the good, service or asset acquired for the purposes of Eligible Activities);

(e) provide FCM with prompt notice of any:

(i) material change to the Project;

(ii) proposed change in the nature or scope of its legal status; or

(iii) act, event, litigation or administrative proceeding that does or may materially and adversely affect the Project or may materially and adversely affect the ability of the Recipient to perform its obligations under this Agreement or the Project

(f) comply with FCM's reporting requirements by using the latest version of the report templates, provided for indicative purposes in Schedule C, Part 2, which are amended from time to time by FCM and made available to the Recipient after signature of the Agreement; and

(g) repay any amounts owed to FCM, as determined by FCM, within 30 days of receiving such notice by FCM.

5.02 Negative Covenants. Unless FCM shall otherwise agree in writing, the Recipient shall not:

(a) use the Grant for expenditures that are not Eligible Expenditures;

(b) for 5 years after the end date of this Agreement, sell, assign, transfer, lease, exchange or otherwise dispose of, or contract to sell, assign, transfer, lease, exchange or otherwise dispose of, any of the real or personal property, whether movable or immovable, acquired, purchased, constructed, rehabilitated or improved, in whole or in part, with the Grant (the "**Assets**"); if at any time within 5 years after the end date of this Agreement, the Recipient sells, assigns, transfers, leases, exchanges or otherwise disposes of any Asset other than to the Government of Canada, a local government, or with the Government of Canada's consent, the Recipient may be required to pay back to FCM, at FCM's sole discretion, all or a portion of the Grant that was disbursed by FCM to the Recipient.

ARTICLE 6
INTELLECTUAL PROPERTY

6.01 Intellectual Property. Copyright in all reports, documents and deliverables prepared in connection with this Agreement and listed in the Schedules of this Agreement by or on behalf of the Recipient (the "Recipient Documentation") will be the exclusive property of, and all ownership rights shall vest in either the Recipient or, subject to the Recipient's ability to grant the license set out in Section 6.02, a person or entity engaged to develop the Recipient Documentation on behalf of the Recipient.

6.02 License. The Recipient hereby grants to FCM an irrevocable, perpetual, worldwide, royalty-free, license, to use, publish, make improvements to, sub-license, translate and copy the Recipient Documentation. This license shall survive the expiration or termination of this Agreement.

ARTICLE 7
APPROPRIATIONS

7.01 Appropriations. Notwithstanding FCM's obligation to make any payment under this Agreement, this obligation does not arise if, at the time when a payment under this Agreement becomes due, the Parliament of Canada has not passed an appropriation that is sufficient and constitutes lawful authority for the Government of Canada making the necessary payment to FCM for the project or program in relation to which the Grant is being provided. FCM may reduce, delay or terminate any payment under this Agreement in response to the reduction or delay of appropriations or departmental funding levels in respect of transfer payments, the project or program in relation to which the Grant is being provided, or otherwise, as evidenced by any appropriation act or the federal Crown's main or supplementary estimates expenditures. FCM will not be liable for any direct, indirect, consequential, exemplary or punitive damages, regardless of the form of action, whether in contract, tort or otherwise, arising from any such reduction, delay or termination of funding.

ARTICLE 8
MEMBERS OF THE HOUSE OF COMMONS AND SENATE

8.01 No member of the House of Commons or the Senate of Canada will be admitted to any share or part of this Agreement, or to any benefit arising from it, that is not otherwise available to the general public. The Recipient will promptly inform FCM should it become aware of the existence of any such situation.

ARTICLE 9
NO BRIBES

9.01 The Recipient guarantees that no bribe, gift or other inducement has been paid, given, promised or offered to any person in order to obtain this Agreement. Similarly, no person has been employed to solicit or secure the Agreement upon any agreement for a commission, percentage, brokerage or contingent fee. The Recipient also guarantees that it has no financial interest in the business of any third party that would affect its objectivity in carrying out the Project.

ARTICLE 10
AUDIT AND ACCESS

10.01 Audit and Access.

(a) FCM reserves the right to undertake, at any time, at its expense, any audit of the records and accounts of the Recipient in relation to the Project. The Recipient agrees to ensure that prompt and timely corrective action is taken in response to any audit findings and recommendations conducted in accordance with this Agreement. The Recipient will submit to FCM in a timely manner, a report on follow-up actions taken to address recommendations and results of the audit.

(b) The Recipient shall maintain proper and accurate financial accounts and records, including but not limited to its contracts, invoices, statements, receipts, employee timesheets, and vouchers, in respect of the Project. The Recipient covenants and agrees that it shall keep all such books and records of the Project until March 31, 2031.

(c) Upon FCM's request with reasonable prior notice thereto, the Recipient shall provide FCM and its designated representatives with reasonable and timely access to sites, facilities, and any documentation relating to the Project for the purposes of audit, inspection, monitoring, evaluation, and ensuring compliance with this Agreement, and permit FCM to

communicate directly with, including the receipt of information from, its external auditors regarding its accounts and operations relating to the Project.

(d) The Government of Canada, the Auditor General of Canada, and their designated representatives, to the extent permitted by law, will at all times be permitted to inspect the terms and conditions of this Agreement and any records and accounts respecting the Project and will have reasonable and timely access to sites, facilities and any documentation relevant for the purpose of audit.

(e) The covenants, rights and obligations contained in this Article 10 shall survive the termination or expiry of this Agreement.

ARTICLE 11
CONFIDENTIALITY

11.01 Confidentiality.

(a) All processes, documents, data, plans, material, policies or information pertaining to either Party's operations which is obtained by the other Party ("**Receiving Party**") or furnished to the Receiving Party in connection with this Agreement and expressly identified as confidential thereby, including, without limitation, the terms of this Agreement, ("**Confidential Information**") shall be maintained by the Receiving Party in strict confidence and shall not be disclosed to any person or entity for any reason or used by the Receiving Party except as necessary for it to perform its obligations hereunder.

(b) The limitations contained in this section shall not apply to (a) Confidential Information which is in the public domain at the time of disclosure; (b) Confidential Information that becomes part of the public domain after disclosure through no fault of the Receiving Party; (c) Confidential Information that the Receiving Party can prove was known by the Receiving Party at the time of disclosure; (d) Confidential Information that the Receiving Party can prove was supplied to the Receiving Party by a third party or was independently developed by the Receiving Party; or (e) Confidential Information required to be disclosed pursuant to judicial process.

ARTICLE 12
TERMINATION

12.01 Termination of the Agreement.

(a) FCM may terminate this Agreement:

(i) if the Recipient breaches any term or condition of this Agreement, and fails to remedy such breach upon the expiry of 15 Business Days' written notice from FCM of such breach or, with respect to a breach that cannot be remedied within the 15 Business Day period, such longer period of time as FCM may reasonably provide the Recipient to remedy the breach, provided the Recipient has commenced to remedy the breach within the 15 Business Day period and is actively and diligently taking appropriate measures to remedy the breach;

(ii) if the Recipient becomes insolvent and/or proceedings have been commenced under any legislation or otherwise for its dissolution, liquidation or winding-up, or bankruptcy, insolvency or creditors' arrangement proceedings have been commenced by or against the Recipient;

(iii) if, in FCM's sole discretion, the Project cannot be completed as initially presented; and

(iv) if the Parliament of Canada fails to pass an appropriation that is sufficient and constitutes lawful authority for the Government of Canada making the necessary payment to FCM for the project or program in relation to which the Grant is being provided.

(b) Either Party may, on not less than 30 days' prior written notice to the other Party, terminate this Agreement.

12.02 Effect of Termination. If this Agreement is terminated pursuant to Section 12.01, the Recipient may be:

(a) reimbursed for all or a portion of the expenses they have incurred in relation to the Project up to the effective date of termination; or

(b) required to pay back to FCM all or a portion of the Grant Amount that was disbursed by FCM to the Recipient prior to the effective date of termination, within 30 days of receiving such notice by FCM;

as applicable, all subject to FCM's sole discretion and satisfaction, taking into consideration out-of-pocket expenses incurred and results reported by the Recipient in connection with the Project.

ARTICLE 13
INDEMNITY

13.01 Indemnity. The Recipient hereby agrees to indemnify and hold harmless FCM and its officers, directors, employees and agents (collectively, the "**Indemnified Parties**") from and against any and all liability, loss, costs, damages and expenses (including legal, expert and consultant fees), causes of action, actions, claims, demands, lawsuits or other proceedings (collectively, a "**Claim**"), by whomever made, sustained, incurred, brought or prosecuted, in any way arising out of or in connection with the Project or otherwise in connection with this Agreement, but only to the extent that such Claim arises out of or is in connection with the Recipient's breach of this Agreement or is caused by the negligence or wilful misconduct of the Recipient in the performance of its obligations hereunder or otherwise in connection with the Project.

13.02 Intellectual Property Indemnity. Recipient shall defend or settle at its expense any claim or suit against FCM arising out of or in connection with an assertion that the Recipient Intellectual Property infringes any intellectual property right and Recipient shall indemnify and hold harmless FCM from damages, costs, and attorneys' fees, if any, finally awarded in such suit or the amount of the settlement thereof; provided that (i) Recipient is promptly notified in writing of such claim or suit, and (ii) Recipient shall have the sole control of the defense and/or settlement thereof.

ARTICLE 14
MISCELLANEOUS PROVISIONS

14.01 Notice. Any notice, document or other communication required to be given under this Agreement shall be in writing and shall be sufficiently given if sent by personal delivery/courier, registered mail or email to the other Party at its address indicated in Schedule D attached hereto, or to such other address, email address or person that the Party designates in writing to the other Party. The notice shall be deemed to have been delivered on the day of personal delivery, on the day received by email (as evidenced by a transmission confirmation), or on the fifth day following mailing.

14.02 Relationship of the Parties. The relationship between the Recipient and FCM is, and shall at all times be and remain, essentially that of a recipient and a grantor, and this Agreement does not and shall not be deemed to create a joint venture, partnership, and fiduciary or agency relationship between the Parties for any purpose. Neither the Recipient, nor any of its personnel are engaged as an employee, servant or agent of FCM.

14.03 Public Announcements. The Recipient shall cooperate with FCM, who will lead the preparation and issuance of the public funding announcement for the Project and/or the coordination of a public announcement event attended by FCM and the Government of Canada. The Recipient will be informed of the process immediately after the signature of this Agreement. If any public statement or release is so required, the Recipient shall promptly inform FCM of upcoming promotional events related to the Project and allow FCM and the Government of Canada to participate in such media activities or events.

14.04 Project Branding. The Recipient shall recognize and state in an appropriate manner, as approved by FCM, the financial assistance offered by FCM concerning the Project and the contribution of the Government of Canada to FCM, as specified in Part 3 of Schedule C attached hereto. If requested by FCM, the Recipient shall have affixed, in content, form, location and manner acceptable to FCM, signage acknowledging the contribution of FCM and the Government of Canada to the Project. The Recipient shall adhere to the policies regarding the use of graphic design elements and signage as specified in Part 3 of Schedule C attached hereto.

14.05 Entire Agreement. This Agreement constitutes the entire understanding between the Parties with respect to the subject matter hereof and supersedes all prior understandings, negotiations and discussions, whether written or oral. There are no conditions, covenants, agreements, understandings, representations, warranties or other provisions, express or implied, collateral, statutory or otherwise, relating to the subject matter hereof except as herein provided.

14.06 Survival. Except as otherwise provided herein, those sections of this Agreement which, by the nature of the rights or obligations set-out therein might reasonably be expected to survive any termination or expiry of this Agreement, shall survive any termination or expiry of this Agreement.

14.07 Amendments. No amendment of the Agreement will have any force or effect unless reduced to writing and signed by both Parties.

14.08 Assignment. The Recipient cannot assign this Agreement without the prior written consent of FCM.

14.09 Enurement. This Agreement shall enure to the benefit of, and shall be binding upon, the Parties and their respective, heirs, executors, administrators, successors and permitted assigns.

14.10 Governing Law. This Agreement shall be governed by and construed in accordance with the law of the Province of Ontario and the federal laws of Canada applicable therein.

14.11 Severability. Each of the binding provisions contained in this Agreement is distinct and severable. Any declaration by a court of competent jurisdiction of the invalidity or unenforceability of any binding provision or part of a binding provision will not affect the validity or enforceability of any other provision of this Agreement.

14.12 Waiver. No waiver of any provision of this Agreement shall be effective unless made in writing and signed by the waiving Party. The failure of any Party to require the performance of any term or obligation of this Agreement, or the waiver by any Party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

14.13 Counterparts. This Agreement may be executed and delivered (including by facsimile transmission or in protocol document format (“PDF”)) in one or more counterparts, each of which when executed

shall be deemed to be an original but all of which taken together shall constitute one and the same agreement.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties hereto have executed and delivered this Agreement as of the date written below.

CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

Per: _____
Name: Lisa Higgs
Title: Chief Administrative Officer/Clerk

Date: _____

Per: _____
Name: Grant Jones
Title: Mayor

Date: _____

I/We have authority to bind the Recipient herein.

FEDERATION OF CANADIAN MUNICIPALITIES

Per: _____
Name: Kate Fleming
Title: Director, Low Carbon Cities Canada and MAMP

Date: _____

I have authority to bind FCM herein.

Schedule A

Part 1 Conditions of Contribution

The obligation of FCM to disburse the Grant Amount is conditional upon the Recipient satisfying the following conditions, to the satisfaction of FCM:

- Completed Request for Contribution in the form of Part 1 of Schedule C;
- Receipt and acceptance of Final Report, which is due within 30 days of Project end date, in accordance with the reporting template Part 2 of Schedule C;
- Receipt and acceptance of Evidence of Deliverables, as noted in the Final Report;
- Receipt and acceptance of Expense claim;
- Letter of Attestation for Expense Claim, including confirmation that all expenses claimed are Eligible Expenditures, in the format of Part 4 of Schedule C.

The Recipient acknowledges and agrees that, notwithstanding the foregoing conditions, FCM's obligation to disburse the Grant Amount is subject to Article 7 of the Agreement.

Schedule A

Part 2 Description of Project, Statement of Work and Project Expenditures

The Recipient will undertake a Project in accordance with the phases, activities and/or milestones outlined in the below Statement of Work.

Project Number: MAMP 17430 – Township of Southwold, Ontario
Project Title: Populate data in the Asset Management Software System
Project Sector: Asset Management (MAMP)
Project Type: MAMP Projects

Project Start Date	Project End Date
1 September 2021	1 September 2022

Project Description
Through this project, the Township of Southwold will complete data collection and data entry into the Asset Management System. Training for a contract position and all Township staff involved in the Asset Management Project will be included in the project to ensure the project is meeting the regulated requirements, along with asset management best practices. Asset data, including condition information for Roads, Water, Wastewater, Buildings, Fleet and Equipment will be entered into the asset management system. This will give staff access to a comprehensive, accurate and up to date inventory for assets for the next steps in the asset management process.

1. Develop a job description for contract staff involved with data collection.	A set of documents including: • Copy of job descriptions and summaries of work completed.
2. Implement asset management training for employees involved in collecting and recording asset data.	A set of documents including: • Copies of training material and training attendance records.
3. Undertake inventory of all existing assets (Roads, Water, Wastewater, Buildings, Fleet, Equipment), including condition information.	A set of documents demonstrating the complete inventory of listed assets, including: • Copies of reports and data extracts from a Comprehensive Asset Inventory from the Asset Management System.

	1 September 2021	1 September 2022			
Develop a job description for contract staff involved with data collection and input			$1,500.00	$0.00	
Identify other staff that will be involved in asset management and document roles and responsibilities			$0.00	$0.00	
	1 September 2021	1 September 2022			
Training from PSD CityWide (Asset Management Software Vendor) for staff involved in asset management on data collection, entry and maintenance of data			$10,000.00	$0.00	
	1 September 2021	1 September 2022			
Wages and overhead for 0.5 FTE Contract Staff for data collection and entry into the Asset Management System			$37,000.00	$0.00	

Total Eligible Expenditures	**$48,500.00**

Schedule A

Part 3 Reporting Requirements and Project Deliverables

The following report is to be provided to FCM at the completion of the Project. The format of the report is as provided in Part 2 of Schedule C.

Name of Report	Due Date:	Content
Final Report	3 October 2022	The content and format of this report is provided in Schedule C, Part 2.

Schedule B

Part 1 Grant amount

Subject to the terms and conditions of this Agreement, FCM agrees to contribute towards the Eligible Expenditures an amount (the "**Grant Amount**") that is equal to the lesser of:

the sum of thirty-eight thousand and eight hundred dollars ($38,800.00); or

eighty percent (80.0%) of Eligible Expenditures;

Notwithstanding the foregoing, if the aggregate amount of funding received or to be received from all sources of funding, other than the Recipient, as described in Part 2 of Schedule B (all as determined and calculated by FCM) is greater than the total expenditures incurred by the Recipient in respect of the Project then FCM may reduce the Grant Amount to such amount as it deems appropriate, in its sole and absolute discretion.

Schedule B

Part 2 Particulars of the Sources of Funding

The funding sources for this initiative are outlined in the table below. Each funding source indicates the amount of funding and when the funding was confirmed or is expected to be confirmed.

Funding source	Description	Confirmed (Y/N)	Date committed Day month year	Amount ($)	% of total budget
FCM Grant	Grant	Y	22 July 2021	$38,800.00	80.0%
Township of Southwold	Budget, reserves	Y	13 July 2020	$9,700.00	20.0%
			Total funding:	**$48,500.00**	**100.0%**

Budget total expenditures	**$48,500.00**
Budget total Eligible Expenditures	**$48,500.00**

Schedule B

Part 3 Payment Schedule/ Period of Funding

FCM will disburse the Grant Amount as determined in this table upon completion of activities, as evidenced by submission and acceptance by FCM of the Final Report and a Request for Contribution.

The Final Report and Request for Contribution must be submitted at least 30 days prior to the requested date of disbursement.

The Recipient must notify FCM in writing of any anticipated delays in this disbursement schedule. FCM reserves the right to adjust dates of disbursement or amounts subject to Article 7 of the Agreement.

Deliverable	**Date of Report Submission**	**Forecast Date of Disbursement**	**Maximum Amount of Disbursement**
Final Report	3 October 2022	2 November 2022	**$38,800.00**

Period of Funding:

The Period of Funding is defined as the period between the Project Start Date and 30 days after the Project End Date as set out in Part 2 of Schedule A.

Schedule C

Part 1 Request for Contribution, Letter of Attestation and Expense Claim

[LETTERHEAD OF THE RECIPIENT]

[Address]
[Date]

Federation of Canadian Municipalities
24 Clarence Street
Ottawa, Ontario
K1N 5P3

Attention: Luba Shmygol
Project Officer - MAMP

Ladies and Gentlemen:

Re: MAMP – no. 17430 Agreement between the Federation of Canadian Municipalities (as Trustee) and the Township of Southwold ("Recipient") (the "Agreement")

I, **[Instruction: insert the name of a person named in the Agreement]**, the **[Instruction: insert the title]**, of the Recipient certify and confirm that the Recipient is requesting the Contribution and that the Recipient has satisfied each condition of contribution listed below. I understand that all information below must be submitted and accepted in order for FCM to be able to proceed to funds transfer.

I am attaching to this request for contribution all documents specified in Part 1 of Schedule A:

- Project Final Report, with all content specified in the template (Part 2 of Schedule C);
- The deliverables (as indicate in the final report);
- Letter of Attestation;
- Expense Claim.

In addition, I have also attached the following documents:

- An updated statement of funding sources and amounts (Part 2 of Schedule B);
- The request to receive payment by direct deposit.

Signature: _____ Date: _____

Schedule C

Letter of Attestation for Expense Claim

[LETTERHEAD OF THE RECIPIENT]

[Address]
[Date]

TO: The Federation of Canadian Municipalities

This letter of attestation (the "**Letter**") is issued pursuant to the Agreement #17430 (project number) dated _____ (the "**Agreement**") between the Federation of Canadian Municipalities ("**FCM**") and Township of Southwold (the "**Recipient**"), and in support of the expense claim submitted by the Recipient to FCM for reimbursement of expenses incurred and paid by the Recipient in relation to the Project (the "**Expense Claim**").

All defined terms used in this Letter and not otherwise defined shall have the corresponding meaning in the Agreement.

I am an authorized officer of the Recipient and I hereby certify, in satisfaction of the terms and conditions of the Agreement, that:

i. All expenses claimed in the Expense Claim have been incurred and paid by the Recipient;

ii. All expenses claimed in the Expense Claim relate to the Project;

iii. All expenses claimed in the Expense Claim relate to Eligible Activities in compliance with the eligible activity requirements described in Part 4 of Schedule C to the Agreement; and

iv. All expenses claimed in the Expense Claim are Eligible Expenditures in compliance with the eligible expenditure requirements described in Part 4 of Schedule C to the Agreement.

v. All expenses claimed have been incurred during the Period of Funding.

_____
Name and title of authorized officer of Recipient

_____ _____
Signature Date

Expense Claim

[LETTERHEAD OF THE RECIPIENT]

[Address]
[Date]

Project Number	MAMP 17430
Project Title	Populate data in the Asset Management Software System

The following expenditures have been incurred from the period between Day Month Year and Day Month Year for the completion of the activities identified.

Activity Completed	**Total Budgeted Expenditures ($) (as per Part 2 of Schedule A per activity)**	**Total Actual Eligible Expenditures Net of Tax Rebates per activity ($)**	**Total Actual Ineligible Expenditures Net of Tax Rebates per activity ($)**	**Total Actual Expenditures Net of Tax Rebates per activity ($)**
Activity 1: Develop a job description for contract staff involved with data collection.	**$1,500.00**			
Activity 2: Implement asset management training for employees involved in collecting and recording asset data.	**$10,000.00**			
Activity 3: Undertake inventory of all existing assets (Roads, Water, Wastewater, Buildings, Fleet, Equipment), including condition information.	**$37,000.00**			
Total Expenditure ($)	**$48,500.00**	**$**	**$**	**$**

Expenditures Incurred by Expenditure Category (as per Part 4 of Schedule C)	**Total Actual Eligible Expenditures Net of Tax Rebates ($)**	**Total Actual Ineligible Expenditures Net of Tax Rebates ($)**	**Total Actual Expenditures Net of Tax Rebates ($)**
Administrative and Overhead Expenditures			
Capital Expenditures			
Equipment Rental			
In-Kind	**N/A**		
Training			

Professional and/or Technical Services			
Staff remuneration			
Supplies and Materials			
Travel and accommodation			
Total Expenditures Incurred ($)	**$**	**$**	**$**

FEDERATION OF CANADIAN MUNICIPALITIES | FÉDÉRATION CANADIENNE DES MUNICIPALITÉS

REQUEST TO RECEIVE PAYMENT BY DIRECT DEPOSIT (EFT)

Applicant Information (please print to sign)

◉ NEW APPLICATION ○ UPDATE EXISTING INFORMATION

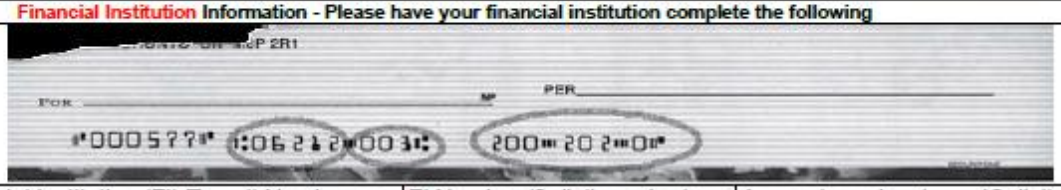
GRANTS / LOANS RECIPIEN

Recipient/Vendor Name			
Address			
City		Province Select...	Postal Code
Email address for remittance advice			
Name			
Title		Phone	
Signature		Date (DD/MM/YYYY)	

☐ I (We) agree to authorize FCM to deposit payments directly to the below-noted account.

Please attach a void cheque or have your bank/financial institution complete the following:

Financial Institution Information - Please have your financial institution complete the following



Financial Institution (FI) Transit Number	FI Number (3 digit number)	Account number (max 12 digit number)
FI Name		
FI Address		
Name of FI Officer		
Title of FI Officer		
Signature of FI Officer		
Phone # of FI Officer		

Please scan and email the completed form to your contact at FCM

Schedule C

Part 2 Completion Report Template

FINAL REPORT
FCM's Municipal Asset Management Program (MAMP)

This template is provided for information purposes only. The final version, to be submitted as part of the final reporting requirement, may be subject to change.

Project number	(Pre-filled by MAMP)(Pre-filled by MAMP)
Project title	(Pre-filled by MAMP)
Name of lead applicant (organization)	(Pre-filled by MAMP)
Name of Authorized Officer (signatory)	
Date	

Note: If completing this form electronically, the boxes will expand to accommodate text.

1. Reporting on activities

Activity	Completed? Y/Partial/No	Deliverable	Title of submitted deliverable document
1. (Pre-filled by MAMP)	Choose an item	(Pre-filled by MAMP)	
2. (Pre-filled by MAMP)	Choose an item	(Pre-filled by MAMP)	
3. (Pre-filled by MAMP)	Choose an item	(Pre-filled by MAMP)	

For any activities marked No or Partial above, please explain the deviation from the scope of work.

2. Reporting on outcomes

Conduct a final self-assessment using the Asset Management Readiness Scale. We recommend that you bring a cross-functional group of staff together to do this assessment. Referring to the Asset Management Readiness Scale, look at the outcome statements for each level. Identify which outcomes you have achieved. If you have completed all the outcomes for a particular level, you have completed that level. Based on your self-assessment, complete the table below.

1. Policy and governance	(Pre-filled by MAMP)	Choose a level	Policy and objectives Strategy and frameworks	
			Measurement and monitoring	
2. People and leadership	(Pre-filled by MAMP)	Choose a level	Cross-functional groups Accountability	
			Resourcing and commitment	
3. Data and information	(Pre-filled by MAMP)	Choose a level	Asset data	
			Performance data Financial data	
4. Planning and decision-making	(Pre-filled by MAMP)	Choose a level	Documentation and standardization	
			Asset investment plans Budgets	
5. Contribution to asset management practice	(Pre-filled by MAMP)	Choose a level	Training and development	
			Knowledge sharing — internal	
			Knowledge sharing — external	

Were there additional factors or programs — other than FCM project funding — that contributed to your project outcomes? If so, please provide a short description of any other important contributing factors.

3. Identifying other outcomes

In addition to the outcomes described in the table above, please describe any other changes that occurred because of your project. Examples might include a change in interest in asset management, cost savings, a change in departmental budget priorities, and so on.

For each additional change that you have observed, please answer the following questions:

- What change did you observe over the course of the project?
- What/who contributed to this change?
- How do you know this change has happened?
- Why is this change important?

Other changes
1.
2.
3.

4. Lessons learned

What worked well?
What would you recommend to other municipalities undertaking the same work?
Please provide 1–3 lessons.

Lesson (one short statement)	**Description** (provide any additional detail here)
1.	
2.	
3.	

What would you do differently?
If you were to do this project again, what would you change? Please provide 1–3 lessons.

Lesson (one short statement)	**Description** (provide any additional detail here)
1.	
2.	
3.	

Note: These lessons will be compiled and shared, without attribution, with other municipalities and practitioners to advance asset management knowledge.

5. Resources

Please list and describe any external human resources (i.e. organizations or personnel) that you worked with during the project.

Name of organization or person	How did you identify this organization or person?	Brief description of their contribution
1.		
2.		
3.		

Please list and evaluate other key information sources, tools, templates, training materials, etc., that you used to assist your work during this project. *Note: This list may be used to inform other municipalities and organizations of available information and resources.*

Title of tool/resource	How did you identify this tool/resource?	How useful was the tool/resource?	Description/comments
1.		Choose an item	
2.		Choose an item	
3.		Choose an item	
4.		Choose an item	
5.		Choose an item	

6. Reporting on budget

Please complete the final budget reporting template, found in Schedule C of your contract, including all eligible expenses, and submit it together with this final report. Please confirm whether either or both of the following statements are true:

☐ The actual expenditure for any activity in this project deviated by more than 15% from the budget presented in the application.

☐ Some of the expenditures included in the final budget report were used for activities marked as Partial or Not Completed in Question 1.

If you ticked either of the above statements, please explain why your actual expenditures varied from the original activity budget. FCM staff may contact you for further details.

7. Next steps

What are your next steps to improve your community's asset management practices?

Next step	Do you need outside help to take this next step? If so, what help do you need?
1.	
2.	
3.	

8. Interest in knowledge sharing

Peer learning is a priority for FCM's Municipal Asset Management Program (MAMP). Please indicate if you are interested in sharing your lessons through MAMP with peer municipalities and organizations.

☐ Yes, we are interested in sharing our results and experiences at peer learning events.

9. Individuals involved in reporting

Please list the titles of the individuals that contributed to, or were consulted in, the completion of this report.

10. Comments (for FCM internal use) *(optional)*

FCM will continue to adapt and improve the MAMP program throughout its life cycle. We welcome all feedback about the program, or your experience, that might help us make it more useful in the future.

11. Testimonials (for public use) *(optional)*

FCM and Infrastructure Canada would appreciate a testimonial as to the value that MAMP funding has provided.

How has the Municipal Asset Management Program supported your municipality or organization in making better-informed infrastructure decisions? Why is this important for your community?

☐ Yes, I give my permission to use the above statements publicly, with attribution to the municipality or organization.

Signature

☐ By typing my name below and submitting this report, I am providing my signature and I certify that the above final report is complete and accurate in its entirety.

_____

Signed by the Authorized Officer

Schedule C

Part 3 Accepted Practices

The Recipient shall incorporate the following language into the Final Plan or Final Study or Final Capital Project, as applicable, and the Final Completion Report, unless it has received written notice to the contrary from FCM:

> "© 202X, **Township of Southwold**. All Rights Reserved.
> The preparation of this project was carried out with assistance from the Government of Canada and the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them."

Schedule C

Part 4 Eligible Activities and Expenditures

Eligible expenses must be incurred after Eligible Expenditure Date of 1 September 2021.

Expenditure Category	Eligible expenditures	Ineligible expenditures
1) Pre-application	N/A	• Any expenditure incurred prior to FCM's eligible expenditure date. • Expenditure of developing this proposal or application.
2) Administrative and Overhead Expenditures	Administrative expenditures that are directly linked to and have been incurred for the project, such as: • Communication expenditures (e.g. long-distance calls or faxes). • Outsourced printing or photocopying. • Acquisition of documents used exclusively for the project. • Document translation. • Transportation, shipping and courier expenditures for delivery of materials essential for the project. • Design and production of communication products to promote project outcomes and benefits to the public.	General overhead expenditures incurred in the regular course of business, such as: • Office space, real estate fees and supplies. • Financing charges and interest payments. • Promotional items. • Permits or certifications. • Advertising, website development, project education materials or expenditures to disseminate project communications products. • Hospitality expenses (food and drink, alcohol, entertainment, etc.).

3) Capital Expenditures	Purchase of software related to asset management *Note: FCM's contribution to this expense may not exceed 50% of FCM's total contribution to the project.*	• Any other capital expenditures or amortization expenses. • Development of a software program
4) Equipment Rental	• Rental of tools and equipment. • Related operating expenditures such as fuel and maintenance expenditures.	Rental of tools or equipment related to regular business activities.
5) In-Kind	N/A	Any goods and services received through donation.
6) Training	• Expenditures associated with accessing reference materials such as standards, templates and toolkits. • Expenditures associated with attending training sessions, (provided externally) or bringing training in-house. • Food and drink, to the extent that these costs comply with the Treasury Board of Canada guidelines, and to the extent that they are necessary to conduct the training/workshop sessions.	Any other hospitality expenses such as: • Food and drink • Alcohol • Door prizes • Entertainment • Music • Decorations • Flowers, centerpieces • Etc.
7) Professional and/or Technical Services	Fees for professional or technical consultants and contractors, incurred in support of eligible activities.	• Expenditures associated with regular business activities not related to the project. • Legal fees.

8) Staff Remuneration	Daily rates actually paid by the Eligible Recipient to its Employees in Canada for time actually worked on the implementation of the Project.
	
	The daily rate per employee shall include the following costs:
	
	a) direct salaries: actual and justifiable sums paid by the Eligible Recipient to Employees in accordance with the Eligible Recipient's pay scales as regular salary <u>excluding</u> overtime pay and bonuses.
		• In-kind contribution of services.
		• Participant salaries.
		• Expenditures related to regular business activities.
		• Overtime Pay
		• Bonuses / performance pay.
		• Fringe benefits such as;
		  ○ sick days
		  ○ pension plan
		  ○ any other fringe benefits not listed as eligible
		• Costs related to ongoing or other business activities and not specifically required for the project.
		• Professional membership fees or dues.

	b) fringe benefit: in accordance with the Eligible Recipient's policies, as follows: i. time-off benefits (prorated to the annual percentage (%) of time actually worked on the implementation of the Project): allowable number of days to be paid by the Eligible Recipient for the following payable absences: statutory holidays, annual vacation, and paid benefits: actual sums paid by the Eligible Recipient for paid benefits (prorated to the annual percentage (%) of time actually worked on the implementation of the Project): the Eligible Recipient's contribution to employment insurance and workers' compensation plans (where applicable), health and medical insurance, group life insurance, or other mandatory government benefits; *Note: Labour costs must be documented in a manner that meets audit standards for verification of eligibility of cost and level of effort.*	
9) Supplies and materials	Supplies and materials required to undertake the project.	Expenditures related to regular business activities
10) Taxes	The portion of Provincial/Harmonized Sales Tax and Goods and Services Tax for which your organization is not eligible for rebate.	The portion of Provincial /Harmonized Sales Tax and Goods and Services Tax for which your organization is eligible for rebate, and any other expenditures eligible for rebates.

11) Travel and Accommodation	For individuals on travel status (individuals travelling more than 16 km from their assigned workplace - using the most direct, safe and practical road.); • Travel and associated expenses for implementing partners, guest speakers and consultants to the extent that the travel and accommodation rates comply with the Treasury Board of Canada guidelines, and to the extent that such travel is necessary to conduct the initiative. www.canada.ca/en/treasury-board-secretariat/services/travel-relocation/travel-government-business.html • *Where justified, participant travel costs may be claimed with prior written consent from FCM. Under no circumstances will participant honorariums be covered.*	

Note: Invoices, receipts and timesheets (where applicable), must be sufficiently detailed to enable verification of expenditure eligibility and level of effort.

Schedule D

Contact Information

Notices and Requests.

Any notice, demand, request or other communication to be given or made under this Agreement to FCM or to the Recipient, other than a notice of default, shall be in writing and may be made or given by personal delivery, by ordinary mail, by facsimile or by electronic mail. A notice of default shall be in writing and delivered by registered mail. Notices shall be addressed as follows:

FCM

Federation of Canadian Municipalities
24 Clarence Street
Ottawa, Ontario
K1N 5P3

Attention: Anjali Parikh, Project Officer
Email: aparikh@fcm.ca

Recipient

Township of Southwold
35663 Fingal Line
Fingal, Ontario
N0L 1K0

Attention: Jeff Carswell, Treasurer
Email: treasurer@southwold.ca

TOWNSHIP OF SOUTHWOLD

Report to Council

MEETING DATE: September 26, 2022

PREPARED BY: Jeff Carswell, CAO/Clerk

REPORT NO: CAO 2022-49

SUBJECT MATTER: Asset Management Plan

Recommendation:

THAT Council adopt the 2022 Township of Southwold Asset Management Plan as prepared by PSDCitywide dated September 26, 2022.

Purpose:

To seek approval of the Asset Management Plan.

Background:

All municipalities are required to comply with O.Reg 588/17 regarding Asset Management Plans. In late 2021 the Township engaged PSDCitywide to assist with preparing an Asset Management Plan.

Comments:

The draft Asset Management Plan is attached. (Attachment "A"). The Plan was developed by PSDCitywide, in conjunction with Township staff over 2022.

Based on staff input and review, the plan reflects the Township's mix of assets and generally aligns with budgets and direction staff have been taking with respect to Asset Management. This plan will help to guide future budgets for the Township's significant assets.

Overall, there are not any surprises or major concerns noted. The plan reflects past staff observations during budget deliberations that funding levels are getting close to funding future replacements, but there is very little left for new assets and expansion or increasing asset service levels.

It should also be noted that the newness of the water and sanitary systems is leading to relatively high percentage of assets in very good condition. These asset classes have estimated useful of 75 years. Overtime condition assessment will be added to these

assets to provide a better projection of replacement time rather than relying only on age.

Financial Implications:

There are not any financial implications at this time. This plan will help to guide development of future budgets.

Strategic Plan Goals:

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

☒ Promoting residential, agricultural, commercial, and industrial development by ensuring policies and services are in place to support growth in The Township of Southwold.

☐ Promoting a healthy, naturally beautiful, and community-oriented municipality by encouraging and supporting involvement of volunteer organizations wishing to provide cultural and recreational activities in the Township of Southwold.

☒ Providing improved transportation and a strong commitment to asset management with a goal of maintaining the Township's infrastructure in the promotion of public safety

☒ Exercising good financial stewardship in the management of Township expenditures and revenues.

☐ Promoting public engagement, transparent government, and strong communications with all members of the community across various mediums for the strengthening of civic participation.

Respectfully Submitted by:
Jeff Carswell, CAO/Clerk
"Submitted electronically"

Asset Management Plan

Township of Southwold

2022

This Asset Management Program was prepared by:

psdcitywide

Empowering your organization through advanced asset management, budgeting & GIS solutions

DRAFT

Key Statistics

Replacement cost of asset portfolio
$112.4 million

Replacement cost of infrastructure per household
$63,884(2021)

Percentage of assets in fair or better condition
70%

Percentage of assets with assessed condition data
34%

Annual capital infrastructure deficit
$167 thousand

Recommended timeframe for eliminating annual infrastructure deficit
5 Years

Target reinvestment rate
2.67%

Actual reinvestment rate
2.52%

Table of Contents

1 Introduction 3
2 Scope and Methodology 12
3 Portfolio Overview 15
4 Road Network 19
5 Bridges & Culverts 28
6 Stormwater Network ..... **Error! Bookmark not defined.**
7 Buildings 34
8 Waste Management ..... **Error! Bookmark not defined.**
9 Vehicles 47
10 Machinery & Equipment 53
11 Water Network 60
12 Sanitary Network 67
13 Impacts of Growth 74
14 Financial Strategy 76
15 Appendices 85

DRAFT

Executive Summary

Municipal infrastructure provides the foundation for the economic, social, and environmental health and growth of a community through the delivery of critical services. The goal of asset management is to deliver an adequate level of service in the most cost-effective manner. This involves the development and implementation of asset management strategies and long-term financial planning.

Scope

Identifying the current practices and strategies that are in place to manage public infrastructure and making recommendations where they can be further refined. Through the implementation of sound asset management strategies, the Township can ensure that public infrastructure is managed to support the sustainable delivery of municipal services.

The following asset categories are addressed in further sections:

Asset Categories

- Road Network
- Bridges & Culverts
- Vehicles
- Buildings
- Land Improvements
- Machinery & Equipment
- Sanitary Network
- Water Network

The Township has achieved compliance with O. Reg. 588/17 to the extent of the requirements that must be completed by July 1, 2022. There are additional requirements concerning general infrastructure, proposed levels of service and growth that must be met by July 1, 2024 and 2025.

DRAFT

Findings

The overall replacement cost of the asset categories owned by Southwold totals $112.4 million. 70% of all assets analysed are in fair or better condition and assessed condition data was available for 34% of assets. For the remaining 66% of assets, assessed condition data was unavailable, and asset age was used to approximate condition – a data gap that persists in most municipalities.

The development of a long-term, sustainable financial plan requires an analysis of whole lifecycle costs. By using a combination of proactive lifecycle strategies (roads) and replacement only strategies (all other assets) to determine the lowest cost option to maintain the current level of service.

To meet capital replacement and rehabilitation needs for existing infrastructure, prevent infrastructure backlogs, and achieve long-term sustainability, the Township's average annual capital requirement totals $3.0 million. Based on a historical analysis of sustainable capital funding sources, the Township is committing approximately $2.83 million towards capital projects or reserves per year. As a result, there is currently an annual funding gap of $167 thousand.

It is important to note that this represents a snapshot in time and is based on the best available processes, data, and information at the Township. Strategic asset management planning is an ongoing and dynamic process that requires continuous improvement and dedicated resources.

Recommendations

A financial strategy was developed to address the annual capital funding gap. The annual tax funded assets are currently fully funded in Southwold. The water rate change required to eliminate the Township's infrastructure deficit based on a 5-year plan is 0.4% annually. The sanitary rate is currently in a deficit, however, as the network is new the connections are still being installed. Once residents are utilizing the system at the levels forecasted in the rates, the system will be fully funded. It is recommended to monitor the progress.

Recommendations to guide continuous refinement of the Township's asset management program. These include:

- Review data to update and maintain a complete and accurate dataset
- Develop a condition assessment strategy with a regular schedule
- Review and update lifecycle management strategies
- Development and regularly review short- and long-term plans to meet capital requirements
- Measure current levels of service and identify sustainable proposed levels of service

DRAFT

1 Introduction

1.1 Key Insights

- The goal of asset management is to minimize the lifecycle costs of delivering infrastructure services, manage the associated risks, while maximizing the value ratepayers receive from the asset portfolio

- The Township's asset management policy provides clear direction to staff on their roles and responsibilities regarding asset management

- An asset management plan is a living document that should be updated regularly to inform long-term planning

1.2 Southwold Community Profile

Census Characteristic	Southwold	Ontario
Population 2021	4,851	14,223,942
Population Change 2016-2021	9.7	5.8
Total Private Dwellings	1,760	5,929,250
Population Density	16.1/km^2	15.9/km^2
Land Area	301.38 km^2	892,411.76 km^2

The township of Southwold is situated in Southwestern Ontario, within Elgin County and borders the north shore of Lake Erie and the Thames River. It is part of the London census metropolitan area. The township was named in 1793 after Suffolk, England, and became incorporated as a municipality in 1852. It is home to Southwold Earthworks National Historic Site, a rare, fortified village of Neutral Iroquois who inhabited the area from 1500 – 1650 AD.

The township sits on rich soil beds that primarily produce corn and soybean agricultural products. Agriculture areas are protected, and the township discourages non-agricultural uses to help preserve the intended land use and prevent conflict between farm and non-farm uses. Southwold also services The City of Toronto's waste management needs from the Green Lane Environmental Landfill, which was purchased in 2010.

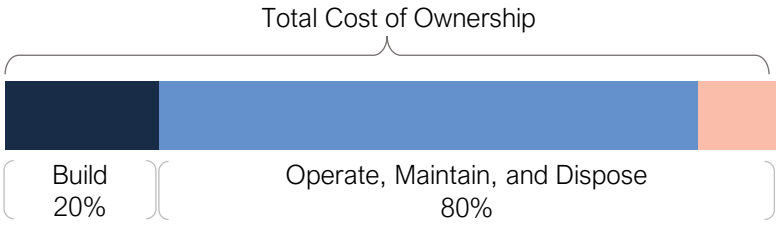
Southwold's transportation network consists of linkages that service the movement of people and goods more broadly to Southwestern Ontario using HWY 401, HWY 3 and Highway 4.

DRAFT

1.3 An Overview of Asset Management

Municipalities are responsible for managing and maintaining a broad portfolio of infrastructure assets to deliver services to the community. The goal of asset management is to minimize the lifecycle costs of delivering infrastructure services, manage the associated risks, while maximizing the value ratepayers receive from the asset portfolio.

The acquisition of capital assets accounts for only 10-20% of their total cost of ownership. The remaining 80-90% derives from operations and maintenance. The Township focused its analysis on the capital costs to maintain, rehabilitate and replace existing municipal infrastructure assets.



These costs can span decades, requiring planning and foresight to ensure financial responsibility is spread equitably across generations. An asset management plan is critical to this planning, and an essential element of broader asset management program. The industry-standard approach and sequence to developing a practical asset management program begins with a Strategic Plan, followed by an Asset Management Policy and an Asset Management Strategy, concluding with an Asset Management Plan.

This industry standard, defined by the Institute of Asset Management (IAM), emphasizes the alignment between the corporate strategic plan and various asset management documents. The strategic plan has a direct, and cascading impact on asset management planning and reporting.

1.3.1 Asset Management Policy

An asset management policy represents a statement of the principles guiding the Township's approach to asset management activities. It aligns with the organizational strategic plan and provides clear direction to municipal staff on their roles and responsibilities. The Township Council resolution number 2019-262 approved the Strategic Asset Management Policy on June 24th, 2019, in accordance with Ontario Regulation 588/17. The objectives of the policy include the following:

- Prioritizing the need for existing and future assets to effectively deliver services
- Supporting sustainability and economic development
- Maintaining prudent financial planning and decision making

DRAFT

1.3.2 Asset Management Strategy

An asset management strategy outlines the translation of organizational objectives into asset management objectives and provides a strategic overview of the activities required to meet these objectives. It provides greater detail than the policy on how the Township plans to achieve asset management objectives through planned activities and decision-making criteria.

The Township's Strategic Asset Management Policy contains many of the key components of an asset management strategy and may be expanded on in future revisions or as part of a separate strategic document.

1.4 Key Concepts in Asset Management

Effective asset management integrates several key components, including lifecycle management, risk management, and levels of service. These concepts are applied throughout this asset management plan and are described below in greater detail.

1.4.1 Lifecycle Management Strategies

The condition or performance of most assets will deteriorate over time. This process is affected by a range of factors including an asset's characteristics, location, utilization, maintenance history and environment. Asset deterioration has a negative effect on the ability of an asset to fulfill its intended function, and may be characterized by increased cost, risk and even service disruption.

To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. There are several field intervention activities that are available to extend the life of an asset. These activities can be generally placed into one of three categories: maintenance, rehabilitation, and replacement. The following table provides a description of each type of activity and the general difference in cost.

Lifecycle Activity	Description	Example (Roads)	Cost
Maintenance	Activities that prevent defects or deteriorations from occurring	Crack Seal	$
Rehabilitation/ Renewal	Activities that rectify defects or deficiencies that are already present and may be affecting asset performance	Mill & Re-surface	$$
Replacement/ Reconstruction	Asset end-of-life activities that often involve the complete replacement of assets	Full Reconstruction	$$$

DRAFT

Depending on initial lifecycle management strategies, asset performance can be sustained through a combination of maintenance and rehabilitation, but at some point, replacement is required. Understanding what effect these activities will have on the lifecycle of an asset, and their cost, will enable staff to make better recommendations.

The Township's approach to lifecycle management is described within each asset category. Developing and implementing a proactive lifecycle strategy will help staff to determine which activities to perform on an asset and when they should be performed to maximize useful life at the lowest total cost of ownership.

1.4.2 Risk Management Strategies

Municipalities generally take a 'worst-first' approach to infrastructure spending. Rather than prioritizing assets based on their importance to service delivery, assets in the worst condition are fixed first, regardless of their criticality. However, not all assets are created equal. Some are more important than others, and their failure or disrepair poses more risk to the community than that of others. For example, a road with a high volume of traffic that provides access to critical services poses a higher risk than a low volume rural road. These high-value assets should receive funding before others.

By identifying the various impacts of asset failure and the likelihood that it will fail, risk management strategies can identify critical assets, and determine where maintenance efforts, and spending, should be focused.

A high-level evaluation of asset risk and criticality was performed. Each asset has been assigned a probability of failure score and consequence of failure score based on available asset data. These risk scores can be used to prioritize maintenance, rehabilitation, and replacement strategies for critical assets.

1.4.3 Levels of Service

A level of service (LOS) is a measure of what the Township is providing to the community and the nature and quality of that service. Within each asset category, technical metrics and qualitative descriptions that measure both technical and community levels of service have been established and measured as data is available.

These measures include a combination of those that have been outlined in O. Reg. 588/17 in addition to performance measures identified by the Township as worth measuring and evaluating. The Township measures the level of service provided at two levels: Community Levels of Service, and Technical Levels of Service.

DRAFT

Community Levels of Service

Community levels of service are a simple, plain language description or measure of the service that the community receives. For core asset categories the province, through O. Reg. 588/17, has provided qualitative descriptions that are required. For non-core asset categories, the Township must determine the qualitative descriptions that will be used by July 1, 2024. These descriptions can be found in the Levels of Service subsection within each asset category.

Technical Levels of Service

Technical levels of service are a measure of key technical attributes of the service being provided to the community. These include mostly quantitative measures and tend to reflect the impact of the Township's asset management strategies on the physical condition of assets or the quality/capacity of the services they provide.

For core asset categories the province, through O. Reg. 588/17, has provided technical metrics that are required. For non-core asset categories, the Township must determine the technical metrics that will be used by July 1, 2024. The metrics can be found in the Levels of Service subsection within each asset category.

Current and Proposed Levels of Service

The Township is focusing on measuring the current level of service provided to the community. Once current levels of service have been measured, the Township plans to establish proposed levels of service over a 10-year period, in accordance with O. Reg. 588/17.

Proposed levels of service should be realistic and achievable within the timeframe outlined by the Township. They should also be determined with consideration of a variety of community expectations, fiscal capacity, regulatory requirements, corporate goals, and long-term sustainability. Once proposed levels of service have been established, and prior to July 2025, the Township must identify a lifecycle management and financial strategy which allows these targets to be achieved.

DRAFT

1.5 Climate Change

Climate change can cause severe impacts on human and natural systems around the world. The effects of climate change include increasing temperatures, higher levels of precipitation, droughts, and extreme weather events. In 2019, Canada's Changing Climate Report (CCCR 2019) was released by Environment and Climate Change Canada (ECCC).

The report revealed that between 1948 and 2016, the average temperature increase across Canada was 1.7°C; moreover, during this period, Northern Canada experienced a 2.3°C increase. The temperature increase in Canada has doubled that of the global average. If emissions are not significantly reduced, the temperature could increase by 6.3°C in Canada by the year 2100 compared to 2005 levels. Observed precipitation changes in Canada include an increase of approximately 20% between 1948 and 2012.

By the late 21st century, the projected increase could reach an additional 24%. During the summer months, some regions in Southern Canada are expected to experience periods of drought at a higher rate. Extreme weather events and climate conditions are more common across Canada. Recorded events include droughts, flooding, cold extremes, warm extremes, wildfires, and record minimum arctic sea ice extent.

The changing climate poses a significant risk to the Canadian economy, society, environment, and infrastructure. The impacts on infrastructure are often a result of climate-related extremes such as droughts, floods, higher frequency of freeze-thaw cycles, extended periods of high temperatures, high winds, and wildfires. Physical infrastructure is vulnerable to damage and increased wear when exposed to these extreme events and climate variabilities. Canadian Municipalities are faced with the responsibility to protect their local economy, citizens, environment, and physical assets.

1.5.1 Southwold Climate Profile

The Township of Southwold is in southwestern Ontario in the County of Elgin, on the north shore of Lake Erie. The Township is expected to experience notable effects of climate change which include higher average annual temperatures, an increase in total annual precipitation, and an increase in the frequency and severity of extreme events. According to Climatedata.ca – a collaboration supported by Environment and Climate Change Canada (ECCC) – the Township of Southwold may experience the following trends:

DRAFT

Higher Average Annual Temperature:

- Between the years 1981 and 2010 the annual average temperature was 8.57ºC
- Under a high emissions scenario, the annual average temperatures are projected to increase to 10.7ºC by the year 2050 and increase an additional 3.1ºC by the end of the century.

Increase in Total Annual Precipitation:

- Under a high emissions scenario, Southwold is projected to experience an 8% increase in precipitation by the year 2050 and a 15% increase by the end of the century.

Increase in Frequency of Extreme Weather Events:

- It is expected that the frequency and severity of extreme weather events will change.

1.5.2 Lake Erie

The Great Lakes are one of the largest sources of fresh water on earth, containing 21 percent of the world's surface freshwater. There are 35 million people living in the Great Lakes watershed and nearly one-third are within the Lake Erie watershed. The physical impacts of climate change are most noticeable from: flooding, extreme weather events such as windstorms and tornados, and/or rising water levels eroding shorelines and natural spaces. Erosion and flooding pose a threat to the surrounding built infrastructure such as park assets, bridges, and roads. Communities located in the Great Lakes region may experience more severe windstorms or tornados as a result of climate change, causing damage to both the natural and built environment.

Public health and safety depend on the stability and predictability of the ecosystem in the Great Lakes watershed. The quality of water is threatened by anthropogenic climate change as a result of blue-green algae blooms, soil erosion, and agricultural, stormwater, and wastewater runoff. These phenomena put undue stress on regional water filtering and treatment systems. The safety of the public is threatened by the physical impacts of flooding such as flooding and erosion. In some cases, homeowners located near the lakeshore are already at risk of losing their homes.

1.5.3 Integration Climate change and Asset Management

Asset management practices aim to deliver sustainable service delivery - the delivery of services to residents today without compromising the services and well-being of future residents. Climate change threatens sustainable service delivery by

DRAFT

reducing the useful life of an asset and increasing the risk of asset failure. Desired levels of service can be more difficult to achieve because of climate change impacts such as flooding, high heat, drought, and more frequent and intense storms.

To achieve the sustainable delivery of services, climate change considerations should be incorporated into asset management practices. The integration of asset management and climate change adaptation observes industry best practices and enables the development of a holistic approach to risk management.

1.6 Ontario Regulation 588/17

As part of the *Infrastructure for Jobs and Prosperity Act, 2015*, the Ontario government introduced Regulation 588/17 - Asset Management Planning for Municipal Infrastructure (O. Reg 588/17). Along with creating better performing organizations, more liveable and sustainable communities, the regulation is a key, mandated driver of asset management planning and reporting. It places substantial emphasis on current and proposed levels of service and the lifecycle costs incurred in delivering them. The diagram below outlines key reporting requirements under O. Reg 588/17 and the associated timelines.

2019

Strategic Asset Management Policy

2022

Asset Management Plan for Core Assets with the following components:

1. Current levels of service
2. Inventory analysis
3. Lifecycle activities to sustain LOS
4. Cost of lifecycle activities
5. Population and employment forecasts
6. Discussion of growth impacts

2024

Asset Management Plan for Core and Non-Core Assets (same components as 2022) and Asset Management Policy Update

2025

Asset Management Plan for All Assets with the following additional components:

1. Proposed levels of service for next 10 years
2. Updated inventory analysis
3. Lifecycle management strategy
4. Financial strategy and addressing shortfalls
5. Discussion of how growth assumptions impacted lifecycle and financial

DRAFT

1.6.1 O. Reg. 588/17 Compliance Review

The following table identifies the requirements outlined in Ontario Regulation 588/17 for municipalities to meet by July 1, 2024. Next to each requirement a page or section reference is included in addition to any necessary commentary.

Requirement	O. Reg. Section	AMP Section Reference	Status
Summary of assets in each category	S.5(2), 3(i)	4 - 12	Complete
Replacement cost of assets in each category	S.5(2), 3(ii)	4 - 12	Complete
Average age of assets in each category	S.5(2), 3(iii)	4 - 12	Complete
Condition of assets in each category	S.5(2), 3(iv)	4 - 12	Complete
Description of municipality's approach to assessing the condition of assets in each category	S.5(2), 3(v)	4 - 12	Complete
Current levels of service in each category	S.5(2), 1(i-ii)	4 - 12	Complete
Current performance measures in each category	S.5(2), 2	4 - 12	Complete
Lifecycle activities needed to maintain current levels of service for 10 years	S.5(2), 4	4 - 12	Complete
Costs of providing lifecycle activities for 10 years	S.5(2), 4	Appendix B	Complete
Growth assumptions	S.5(2), 5(i-ii) S.5(2), 6(i-vi)	13	Complete

DRAFT

2 Scope and Methodology

2.1 Key Insights

- Southwold has 8 different asset categories and is divided between tax-funded and rate-funded categories
- The source and recency of replacement costs impacts the accuracy and reliability of asset portfolio valuation
- Accurate and reliable condition data helps to prevent premature and costly rehabilitation or replacement and ensures that lifecycle activities occur at the right time to maximize asset value and useful life

2.2 Asset Categories

To ensure compliance with Ontario Regulation 588/17 the July 2022 deadline under the regulation requires analysis of only core assets (roads, bridges and culverts, water, wastewater, and stormwater). Where the July 2024 requires analysis of all other assets.

The state of the infrastructure for the Township's asset portfolio, establishes current levels of service and the associated technical and customer oriented key performance indicators (KPIs), outlines lifecycle strategies for optimal asset management and performance, and provides financial strategies to reach sustainability for the asset categories listed below.

Asset Category	Source of Funding
Road Network	Tax Levy
Bridges & Culverts	
Buildings	
Vehicles	
Machinery & Equipment	
Land Improvements	
Water Network	User Rates
Sanitary Network	

DRAFT

2.3 Deriving Replacement Costs

There are a range of methods to determine the replacement cost of an asset, and some are more accurate and reliable than others. The two methodologies are:

- **User-Defined Cost and Cost/Unit**: Based on costs provided by municipal staff which could include average costs from recent contracts; data from engineering reports and assessments; staff estimates based on knowledge and experience
- **Cost Inflation/CPI Tables**: Historical cost of the asset is inflated based on Consumer Price Index or Non-Residential Building Construction Price Index

User-defined costs based on reliable sources are a reasonably accurate and reliable way to determine asset replacement costs. Cost inflation is typically used in the absence of reliable replacement cost data. It is a reliable method for recently purchased and/or constructed assets where the total cost is reflective of the actual costs that the Township incurred. As assets age, and new products and technologies become available, cost inflation becomes a less reliable method.

2.4 Estimated Useful Life and Service Life Remaining

The estimated useful life (EUL) of an asset is the period over which the Township expects the asset to be available for use and remain in service before requiring replacement or disposal. The EUL for each asset was assigned according to the knowledge and expertise of municipal staff and supplemented by existing industry standards when necessary.

By using an asset's in-service date and its EUL, the Township can determine the service life remaining (SLR) for each asset. Using condition data and the asset's SLR, the Township can more accurately forecast when it will require replacement. The SLR is calculated as follows:

$$Service\ Life\ Remaining\ (SLR) = In\ Service\ Date + Estimated\ Useful\ Life(EUL) - Current\ Year$$

2.5 Reinvestment Rate

As assets age and deteriorate they require additional investment to maintain a state of good repair. The reinvestment of capital funds, through asset renewal or replacement, is necessary to sustain an adequate level of service. The reinvestment rate is a measurement of available or required funding relative to the total replacement cost. By comparing the actual vs. target reinvestment rate the Township can determine the extent of any existing funding gap.

DRAFT

The reinvestment rate is calculated as follows:

$$Target\ Reinvestment\ Rate = \frac{Annual\ Capital\ Requirement}{Total\ Replacement\ Cost}$$

$$Actual\ Reinvestment\ Rate = \frac{Annual\ Capital\ Funding}{Total\ Replacement\ Cost}$$

2.6 Deriving Asset Condition

An incomplete or limited understanding of asset condition can mislead long-term planning and decision-making. Accurate and reliable condition data helps to prevent premature and costly rehabilitation or replacement and ensures that lifecycle activities occur at the right time to maximize asset value and useful life.

A condition assessment rating system provides a standardized descriptive framework that allows comparative benchmarking across the Township's asset portfolio. The table below outlines the condition rating system used to determine asset condition. This rating system is aligned with the Canadian Core Public Infrastructure Survey which is used to develop the Canadian Infrastructure Report Card.

Condition	Description	Criteria	Service Life Remaining (%)
Very Good	Fit for the future	Well maintained, good condition, new or recently rehabilitated	80-100
Good	Adequate for now	Acceptable, generally approaching mid-stage of expected service life	60-80
Fair	Requires attention	Signs of deterioration, some elements exhibit significant deficiencies	40-60
Poor	Increasing potential of affecting service	Approaching end of service life, condition below standard, large portion of system exhibits significant deterioration	20-40
Very Poor	Unfit for sustained service	Near or beyond expected service life, widespread signs of advanced deterioration, some assets may be unusable	0-20

The analysis is based on assessed condition data only as available. In the absence of assessed condition data, asset age is used as a proxy to determine asset condition. Appendix E includes additional information on the role of asset condition data and provides basic guidelines for the development of a condition assessment program.

DRAFT

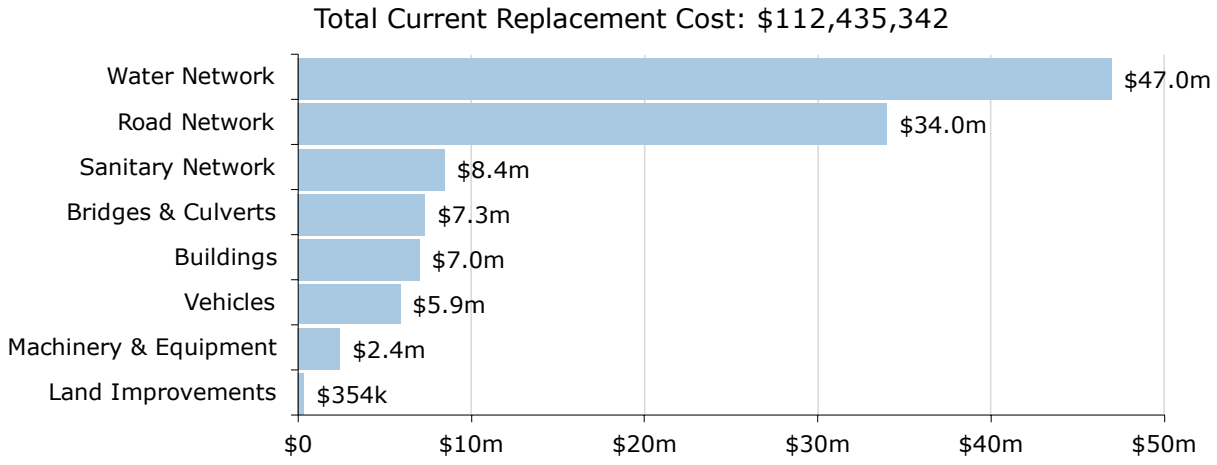
3 Portfolio Overview

3.1 Key Insights

- The total replacement cost of the Township's asset portfolio is $112.4 million
- The Township's target re-investment rate is 2.67%, and the actual re-investment rate is 2.52%,
- 85% of all assets are in fair or better condition
- 31% of assets are projected to require rehabilitation / replacement in the next 10 years
- Average annual capital requirements total $3.0 million per year across all asset categories

3.2 Total Replacement Cost of Asset Portfolio

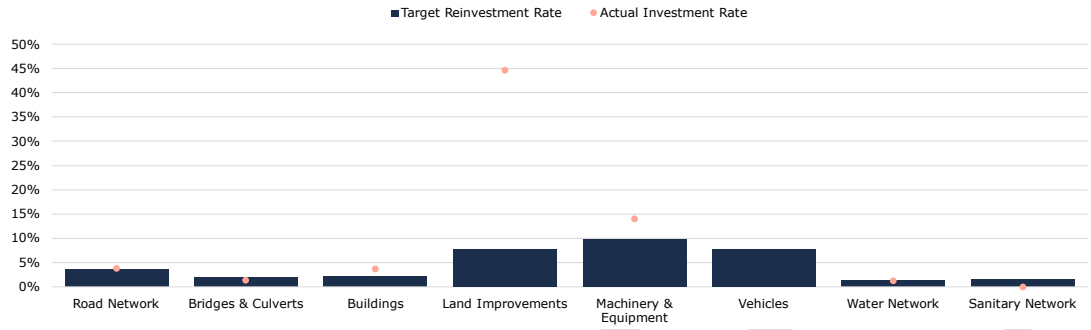
The asset categories have a total replacement cost of $112.4 million based on inventory data from 2022. This total was determined based on a combination of user-defined costs and historical cost inflation. This estimate reflects replacement of historical assets with similar, not necessarily identical, assets available for procurement today.



DRAFT

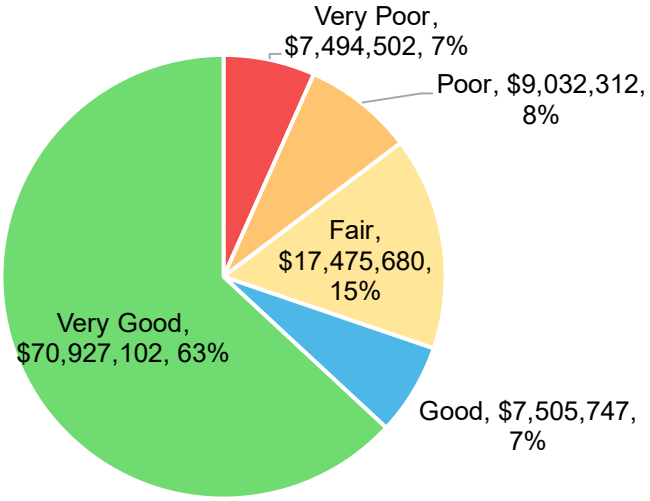
3.3 Target vs. Actual Reinvestment Rate

The graph below depicts funding gaps or surpluses by comparing target vs actual reinvestment rate. To meet the long-term replacement needs, the Township should be allocating approximately $3.0 million annually, for a target reinvestment rate of 2.67%. Actual annual spending on infrastructure totals approximately $2.83 million, for an actual reinvestment rate of 2.52%.



3.4 Condition of Asset Portfolio

The current condition of the assets is central to all asset management planning. Collectively, 85% of assets in Southwold are in fair or better condition. This estimate relies on both age-based and field condition data.



Assessed condition data is available for 34% of assets; for the remaining portfolio, age is used as an approximation of condition. Assessed condition data is invaluable in asset management planning as it reflects the true condition of the asset and its ability to perform its functions.

The table below identifies the source of condition data.

Asset Category	% of Assets with Assessed Condition	Source of Condition Data
Road Network	90%	2019 CD Watters Study
Bridges & Culverts	87%	2020 Spriet Associates
Buildings	8%	2016 Valco Real Estate Appraisals
All other Categories	0%	No Assessments

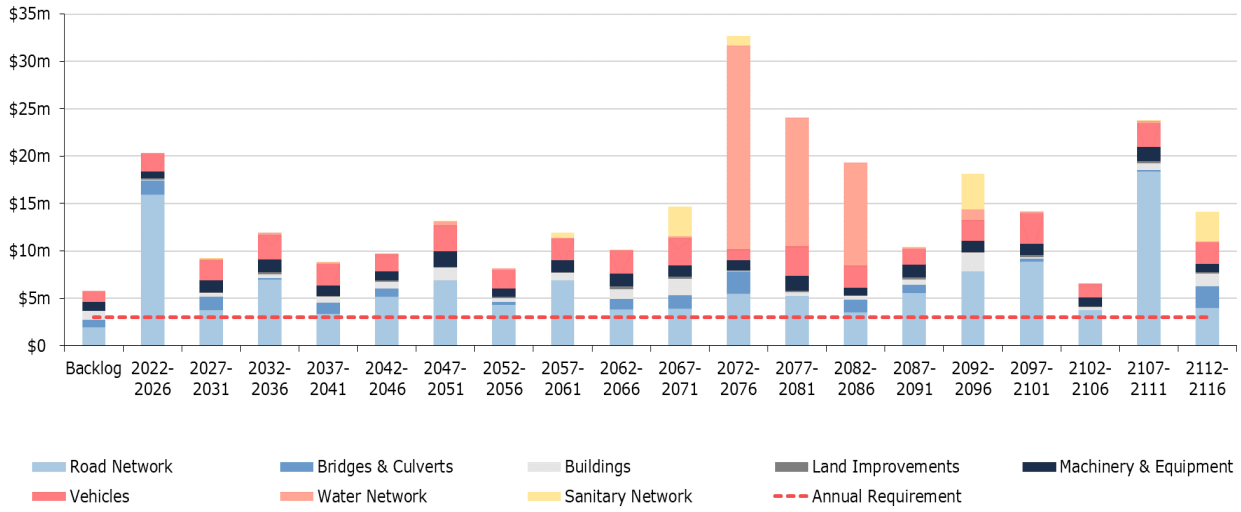
3.5 Service Life Remaining

Based on asset age, available assessed condition data and estimated useful life, 31% of the Township's assets will require rehabilitation / replacement within the next 10 years. Capital requirements over the next 10 years are identified in Appendix B.

3.6 Forecasted Capital Requirements

The development of a long-term capital forecast should include both asset rehabilitation and replacement requirements. With the development of asset-specific lifecycle strategies that include the timing and cost of future capital events, the Township can produce an accurate long-term capital forecast.

The following graph identifies capital requirements over the next 90 years. This projection is used as it ensures that every asset has gone through one full iteration of replacement. The forecasted requirements are aggregated into 5-year bins and the trend line represents the average annual capital requirements.



3.7 Risk & Criticality

The Township has noted key trends, challenges, and risks to service delivery that they are currently facing:

Climate Change & Extreme Weather

Asset deterioration is accelerated due to extreme weather, which in some cases can cause unexpected failures. Freeze-thaw cycles, ice jams, and surface flooding from extreme rainfall have been experienced by the Township in recent years. These events make long-term planning difficult and can result in a lower level of service.

Asset Data & Information

There is a lack of confidence in the available inventory data and condition data. Staff have been prioritizing data refinement efforts to increase the accuracy and reliability of asset data and information. Staff find it a continuous challenge to dedicate resources and time towards data collection and condition assessments to ensure that condition and asset attribute data is regularly reviewed and updated.

DRAFT

4 Road Network

4.1 Key Insights

The road network is a critical component of the provision of safe and efficient transportation services and represents the highest value asset category in the Township's tax funded asset portfolio. It includes all municipally owned and maintained roadways in addition to supporting roadside infrastructure including sidewalks, guardrails, and streetlights.

The Township's roads and sidewalks are maintained by the roads department who are also responsible for winter snow clearing, ice control and snow removal operations of Township roads.

The state of the infrastructure for the road network is summarized in the following table.

Replacement Cost	Condition	Financial Capacity	
$34,009,427	Fair (56%)	Annual Requirement:	$1,207,818
		Funding Available:	$1,282,824
		Annual Deficit:	($181,181)

The following level of service statements are a key driving force behind the Township's asset management planning:

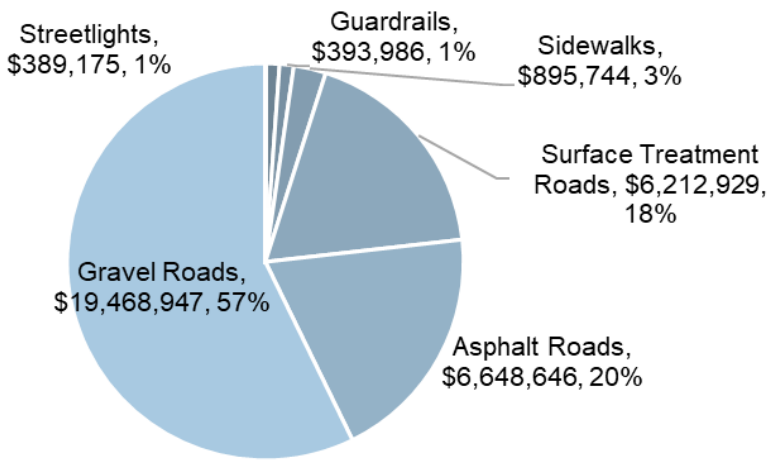
Service Attribute	Level of Service Statement
Reliability & Responsiveness	The roads are almost always available for use, in good condition and meet regulatory requirements

DRAFT

4.2 Asset Inventory & Costs

The table below includes the quantity and total replacement cost of each asset segment in the Township's road inventory.

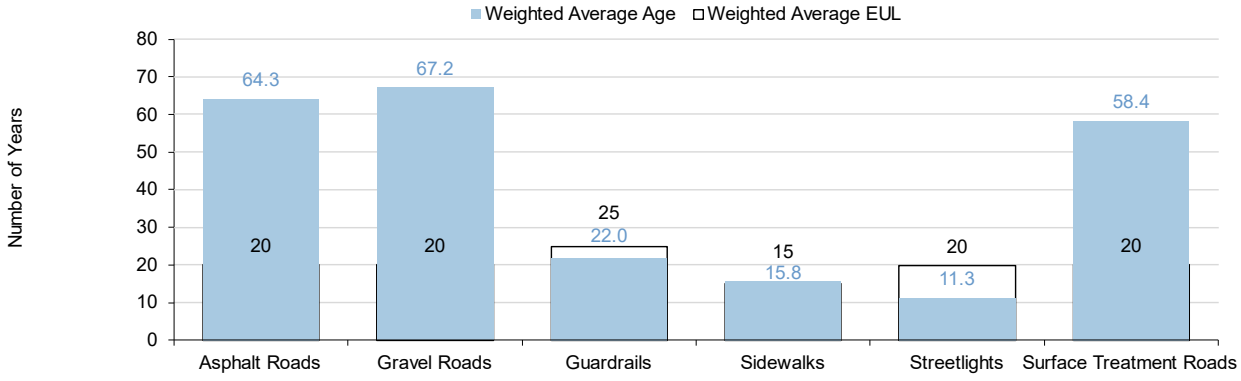
Asset Segment	Quantity	Replacement Cost
Asphalt Roads	21,986m	$6,648,646
Gravel Roads	142,516m	$19,468,947
Guardrails	5,804m	$393,986
Sidewalks	7,779m	$895,744
Streetlights	227	$389,175
Surface Treatment Roads	3,260m	$6,212,929
Total		**$34,009,427**



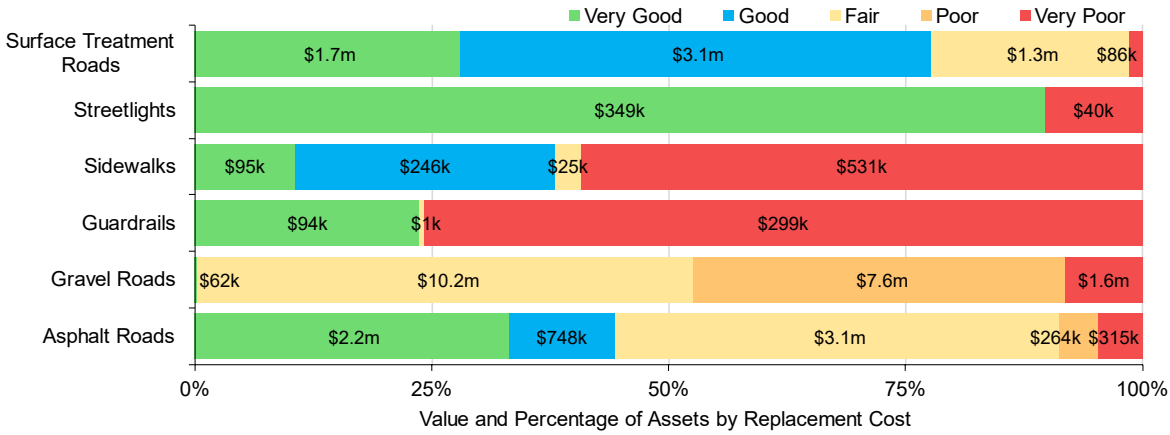
Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

4.3 Asset Condition & Age

The graph below identifies the average age, and the estimated useful life for each asset segment. It is all weighted by replacement cost.



The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



To ensure that the Township's roads continue to provide an acceptable level of service, the Township should monitor the average condition of all assets. If the average condition declines, staff should re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation, and replacement activities is required to increase the overall condition of the roads.

Each asset's estimated useful life should also be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

4.3.1 Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets. The following describes the Township's current approach:

- The roads are assessed by staff annually to set priorities based on the current state
- Roads needs studies are completed every 5 years by external consultants

The rating criteria is used to determine the current condition of road segments and forecast future capital requirements is:

Condition	Rating
Very Good	80-100
Good	60-80
Fair	40-60
Poor	20-40
Very Poor	0-20

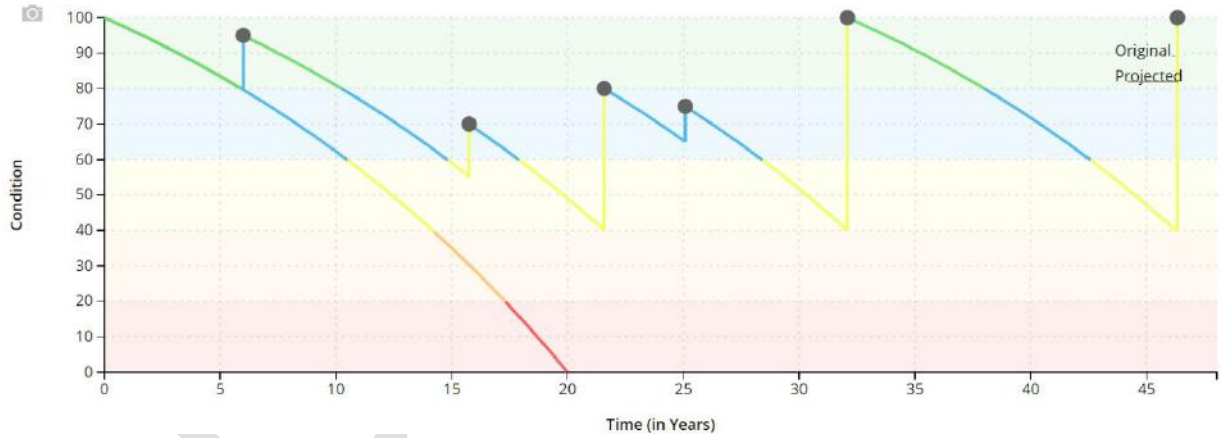
DRAFT

4.4 Lifecycle Management Strategy

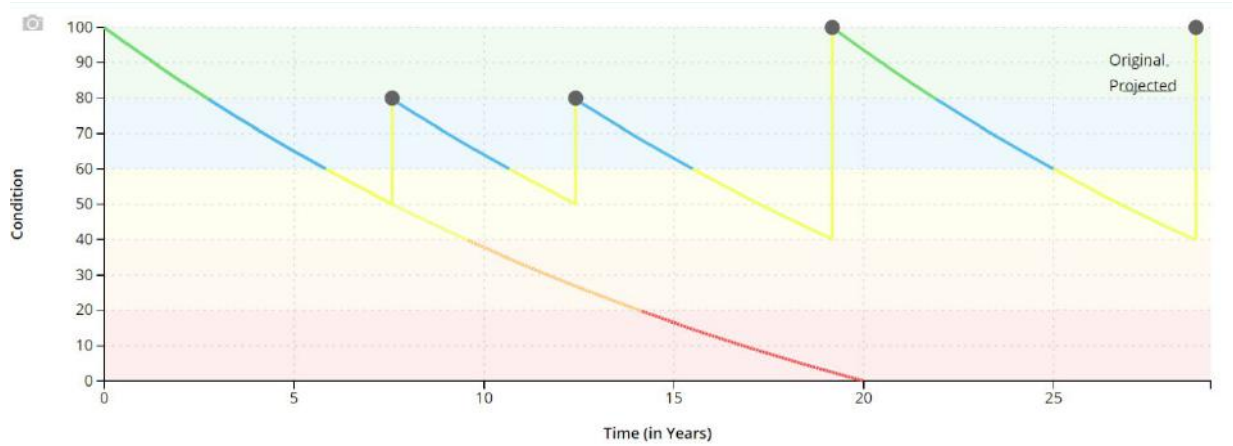
The condition or performance of most assets will deteriorate over time. This process is affected by a range of factors including an asset's characteristics, location, utilization, maintenance history and environment.

The following lifecycle strategies have been developed as a proactive approach to managing the lifecycle of Township owned roads. Instead of allowing the roads to deteriorate until replacement is required, strategic rehabilitation is expected to extend the service life of roads at a lower total cost.

Asphalt Roads		
Event Name	**Event Class**	**Event Trigger**
Crack Sealing	Maintenance	6 years & 65 condition
Microsurfacing	Preventative Maintenance	55 condition
Surface Mill & Pave	Rehabilitation	40 condition
Full depth Mill & Pave	Rehabilitation	40 condition
Full Reconstruction	Replacement	40 condition



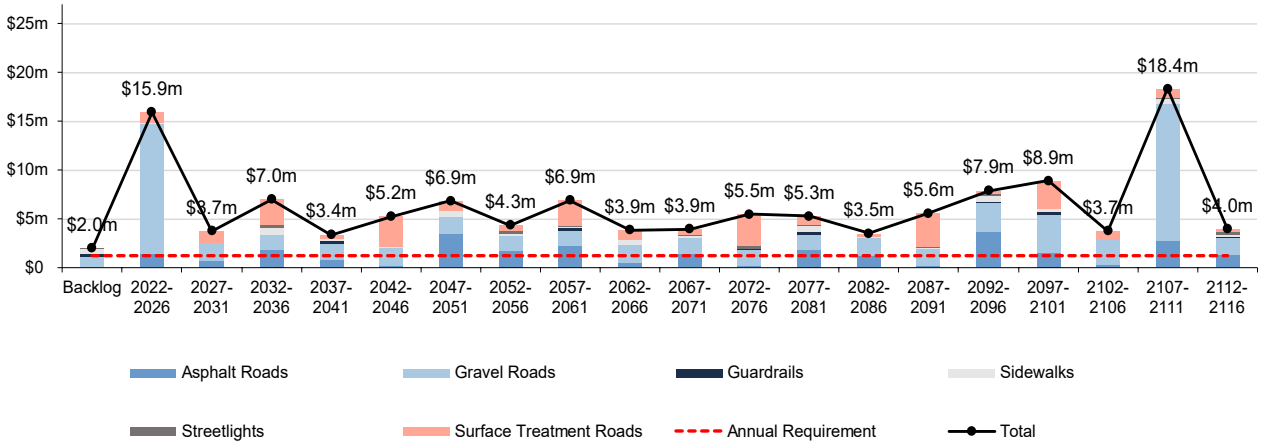
Surface Treatment Roads		
Event Name	**Event Class**	**Event Trigger**
Single Surface Treatment (SST)	Rehabilitation	50 – 55 condition
Double Surface Treatment (DST)	Rehabilitation	40 – 45 condtion
Full Reconstruction	Replacement	40 condition



The Township has developed a gravel road program that adds 50-60mm of compacted gravel and shouldering every 4 years which is captured as a capital expense. When the condition of the road reaches 40 condition the Township will fully replace the road section.

4.4.1 Forecasted Capital Requirements

Based on the lifecycle strategies identified previously for roads, and assuming the end-of-life replacement of all other assets in this category, the following graph forecasts capital requirements for the road network. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs. The following projection is used as it ensures that every asset has gone through one full iteration of replacement. The forecasted requirements are aggregated into 5-year bins and the trend line represents the average annual capital requirement. For the road network the annual capital requirement is $1.2 million



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

4.5 Risk & Criticality

The following risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2022 inventory data. See Appendix D for the criteria used to determine the risk rating of each asset.

Consequence	1	2	3	4	5
5	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
4	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
3	13 Assets $3,078,572	13 Assets $4,796,861	54 Assets $4,923,889	2 Assets $264,148	8 Assets $472,261
2	4 Assets $115,888	30 Assets $5,884,343	37 Assets $6,697,350	31 Assets $5,313,660	16 Assets $1,747,076
1	51 Assets $317,209	4 Assets $42,927	2 Assets $25,849	0 Assets $0	40 Assets $329,395

Probability

This is a high-level model developed by Township staff and it should be reviewed and adjusted to reflect an evolving understanding of both the probability and consequences of asset failure.

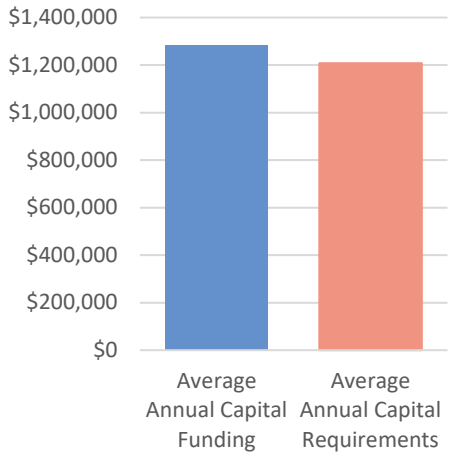
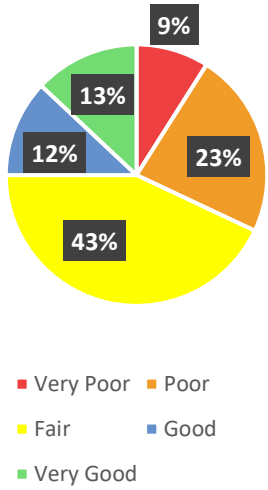
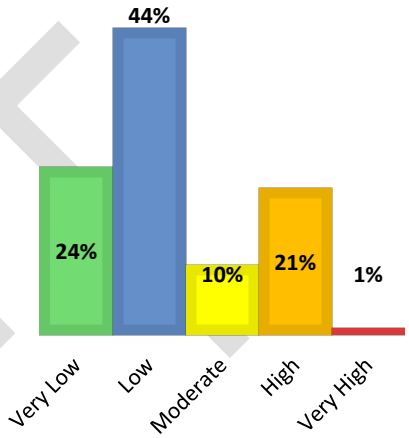
The asset-specific attributes that municipal staff utilize to define and prioritize the criticality of the road network are documented below:

Probability of Failure (POF)	Consequence of Failure (COF)
Condition (Structural)	Replacement Cost (Economic)
Service Life Remaining (Functional)	Surface Type (Operational)

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

4.6 Levels of Service

The following tables identify the Township's current level of service for the roads.

Cost	Performance (Average Condition)	Risk
		

These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected.

4.6.1 Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the road network.

Service Attribute	Qualitative Description	Current LOS
Scope	Description, which may include maps, of the road network in the municipality and its level of connectivity	See Appendix C
Quality	Description or images that illustrate the different levels of road class pavement condition	The surface condition with a rating as follows: 0 – 20 Very Poor 20 – 40 Poor 40 – 60 Fair 60 – 80 Good 80 – 100 Very Good

DRAFT

Service Attribute	Qualitative Description	Current LOS
Reliability	Roads are almost always available for use	Documented road closures and durations
Responsiveness	Roads meet regulatory requirements	YES

4.6.2 Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by the road network.

Service Attribute	Technical Metric	Current LOS
Scope	Lane-km of arterial roads (MMS classes 1 and 2) per land area (km/km^2)	0
	Lane-km of collector roads (MMS classes 3 and 4) per land area (km/km^2)	0.56
	Lane-km of local roads (MMS classes 5 and 6) per land area (km/km^2)	0.93
Quality	Average pavement condition index for paved roads in the municipality	Asphalt = 73 Tar & Chip = 60
	Average surface condition for unpaved roads in the municipality (e.g. excellent, good, fair, poor)	Fair
Reliability	# of unplanned road closures	0
Responsiveness	Percentage of identified compliance issues with Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways that are resolved within the specified timeframe.	100%

DRAFT

4.7 Recommendations

Asset Inventory

- Review road culverts and sidewalk inventory to determine whether all municipal assets within these asset segments have been accounted for.
- The sidewalk inventory includes several pooled assets that should be broken into discrete segments to allow for detailed planning and analysis.

Risk Management Strategies

- Implement risk-based decision-making as part of asset management planning and budgeting processes. This should include the regular review of high-risk assets to determine appropriate risk mitigation strategies.
- Review risk models on a regular basis and adjust according to an evolving understanding of the probability and consequences of asset failure.

Levels of Service

- Continue to measure current levels of service in accordance with the metrics identified in O. Reg. 588/17 and those metrics that the Township believes to provide meaningful and reliable inputs into asset management planning.
- Work towards identifying proposed levels of service as per O. Reg. 588/17 and identify the strategies that are required to close any gaps between current and proposed levels of service.

DRAFT

5 Bridges & Culverts

5.1 Key Insights

Bridges and culverts represent a critical portion of the transportation services provided to the community. The roads department is responsible for the maintenance of all bridges and culverts located across municipal roads. The state of the infrastructure for bridges and culverts is summarized in the following table.

Replacement Cost	Condition	Financial Capacity	
$7,329,427	Good (71%)	Annual Requirement:	$146,589
		Funding Available:	$100,000
		Annual Deficit:	$46,589

The following level of service statements are a key driving force behind the Township's asset management planning:

Service Attribute	Level of Service Statement
Performance	The bridges and culverts are in good condition with minimal unplanned service interruptions and closures.

5.2 Asset Inventory & Costs

The table below includes the quantity, total replacement cost and annual capital requirements of each asset segment in the Township's bridges and culverts inventory.

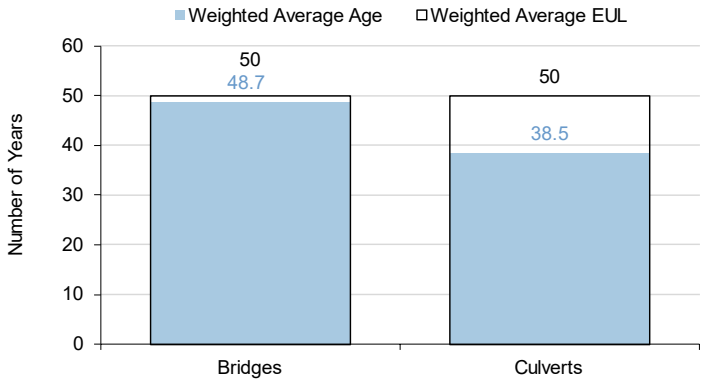
Asset Segment	Quantity	Replacement Cost	Annual Capital Requirement
Bridges	57m	$3,716,194	$74,324
Culverts	324m	$3,613,233	$72,265
Total		**$7,329,427**	**$146,589**

Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

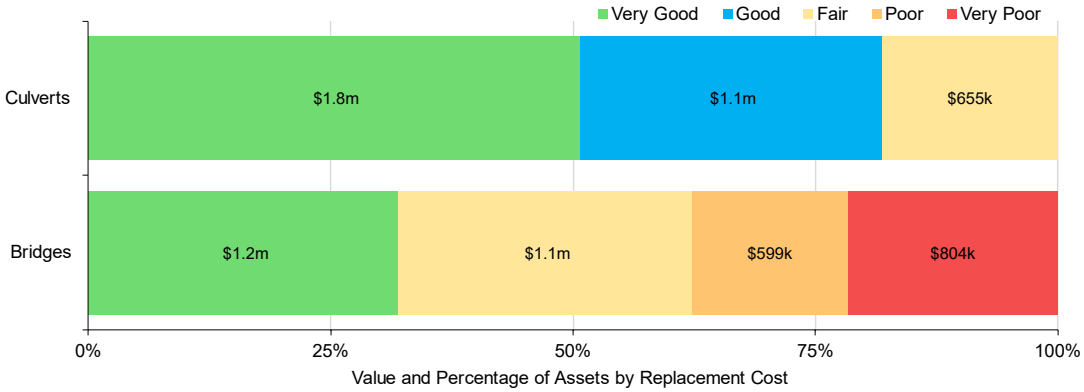
5.3 Asset Condition & Age

The graph below identifies the average age and the estimated useful life for each asset segment. The values are weighted value based on replacement cost.

DRAFT



The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



To ensure that the Township's Bridges & Culverts continue to provide an acceptable level of service, the staff should monitor the average condition of all assets. If the average condition declines, the Township should re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation, and replacement activities is required to increase the overall condition of the bridges and culverts.

Each asset's Estimated Useful Life should also be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

5.3.1 Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets. The following describes the Township's current approach:

- Condition assessments of all bridges and culverts with a span greater than or equal to 3 meters are completed every 2 years in accordance with the Ontario Structure Inspection Manual (OSIM)
- Culverts with a diameter / span of 1 meter to less than 3 meters are inspected every 5 years by internal staff

5.4 Lifecycle Management Strategy

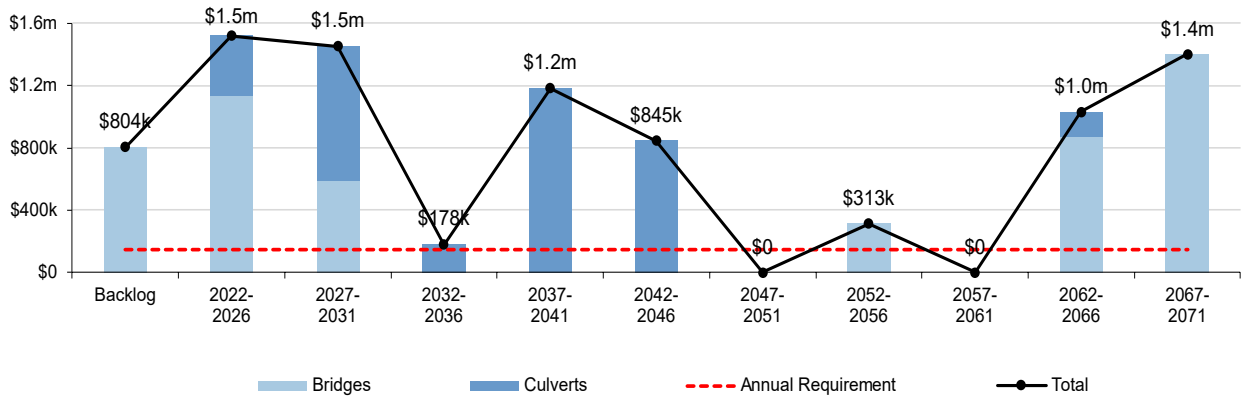
The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration.

The following table outlines the Township's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance, Rehabilitation and Replacement	All lifecycle activities are driven by the results of mandated structural inspections competed according to the Ontario Structure Inspection Manual (OSIM)
Inspection	The most recent inspection report was completed in 2020 by Spriet Associates

5.4.1 Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs. The following graph identifies capital requirements over the next 50 years. This projection is used as it ensures that every asset has gone through one full iteration of replacement. The forecasted requirements are aggregated into 5-year bins and the trend line represents the average annual capital requirements. For Bridges and culverts the average annual capital requirement is $146,589.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

5.5 Risk & Criticality

The risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2022 inventory data. See Appendix D for the criteria used to determine the risk rating of each asset.

Consequence	1	2	3	4	5
5	8 Assets $3,210,999	4 Assets $1,101,543	2 Assets $1,122,662	2 Assets $991,343	0 Assets $0
4	0 Assets $0	1 Asset $114,649	2 Assets $213,970	0 Assets $0	0 Assets $0
3	2 Assets $138,060	0 Assets $0	0 Assets $0	1 Asset $412,090	0 Assets $0
2	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
1	1 Asset $15,158	1 Asset $8,953	0 Assets $0	0 Assets $0	0 Assets $0

Probability

This is a high-level model developed by Township staff should review and adjust the risk model to reflect an evolving understanding of both the probability and consequences of asset failure.

The asset-specific attributes that municipal staff utilize to define and prioritize the criticality of bridges and culverts are documented below:

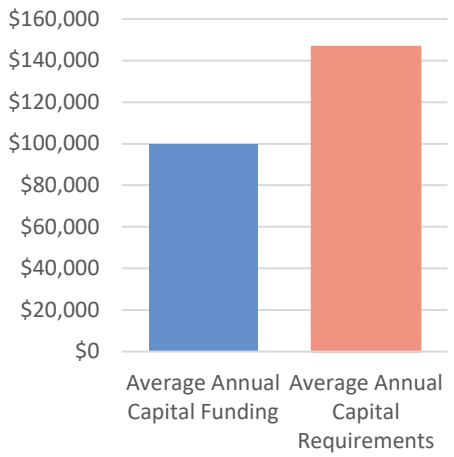
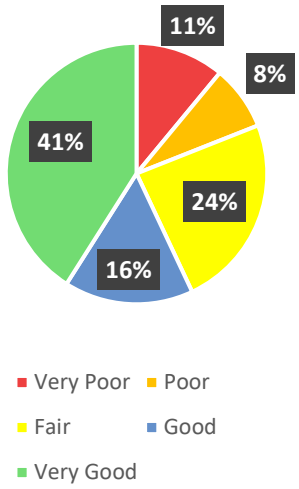
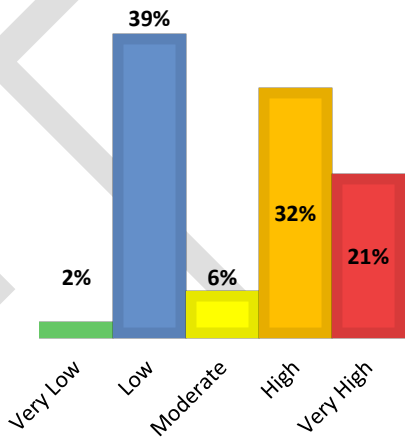
Probability of Failure (POF)	Consequence of Failure (COF)
Condition	Replacement Cost (60% Economic)
Service Life Remaining	Span / Diameter (20%Operational)
	AADT (20% Social 50%)
	Detour Distance (20% Social 50%)

The identification of critical assets allows the Township to determine risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

DRAFT

5.6 Levels of Service

The following tables identify the Township's current level of service for bridges and culverts.

Cost	Performance (Average Condition)	Risk
		

The metrics included below are the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected.

5.6.1 Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by bridges and culverts.

Service Attribute	Qualitative Description	Current LOS
Scope	Description of the traffic that is supported by municipal bridges (e.g. heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists)	Bridges and structural culverts are a key component of the municipal transportation network.
Quality	Description or images of the condition of bridges and culverts and how this would affect use of the bridges and culverts	See Appendix C

DRAFT

5.6.2 Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by bridges and culverts.

Service Attribute	Technical Metric	Current LOS
Scope	% of bridges in the Town with loading or dimensional restrictions	0
Quality	Average bridge condition index value for bridges	67
	Average bridge condition index value for structural culverts	75
Performance	# of unplanned bridge closures	0
	% of bridges inspected within the last two years	100

5.7 Recommendations

Risk Management Strategies

- Implement risk-based decision-making as part of asset management planning and budgeting processes. This should include the regular review of high-risk assets to determine appropriate risk mitigation strategies.
- Review risk models on a regular basis and adjust according to an evolving understanding of the probability and consequences of asset failure.

Lifecycle Management Strategies

- The Township should work towards identifying projected capital rehabilitation and renewal costs for bridges and culverts and integrating these costs into long-term planning.

Levels of Service

- Continue to measure current levels of service in accordance with the metrics identified in O. Reg. 588/17 and those metrics that the Township believe to provide meaningful and reliable inputs into asset management planning.
- Work towards identifying proposed levels of service as per O. Reg. 588/17 and identify the strategies that are required to close any gaps between current and proposed levels of service.

DRAFT

6 Buildings

6.1 Key Insights

The Township of Southwold owns and maintains several facilities and recreation centres that provide key services to the community. These include:

- administrative offices
- fire stations
- public works garages and storage sheds
- medical centre
- a strip mall
- a community complex

The state of the infrastructure for the buildings and facilities is summarized in the following table.

Replacement Cost	Condition	Financial Capacity	
$7,013,262	Good (77%)	Annual Requirement:	$147,138
		Funding Available:	$260,000
		Annual Deficit:	($112,862)

The following core values and level of service statements are a key driving force behind the Township's asset management planning:

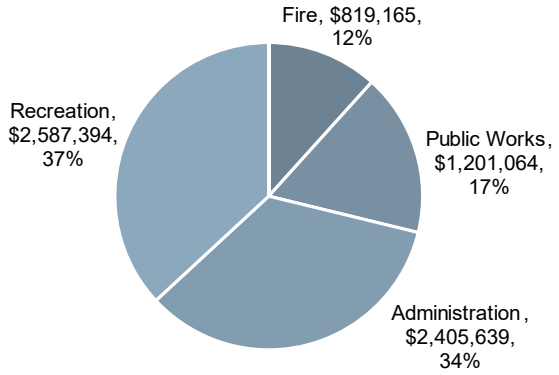
Service Attribute	Level of Service Statement
Performance	To provide safe, clean buildings with an accessible user experience in good condition.

DRAFT

6.2 Asset Inventory & Costs

The table below includes the quantity, total replacement cost and annual capital requirements of each asset segment in the Township's buildings inventory.

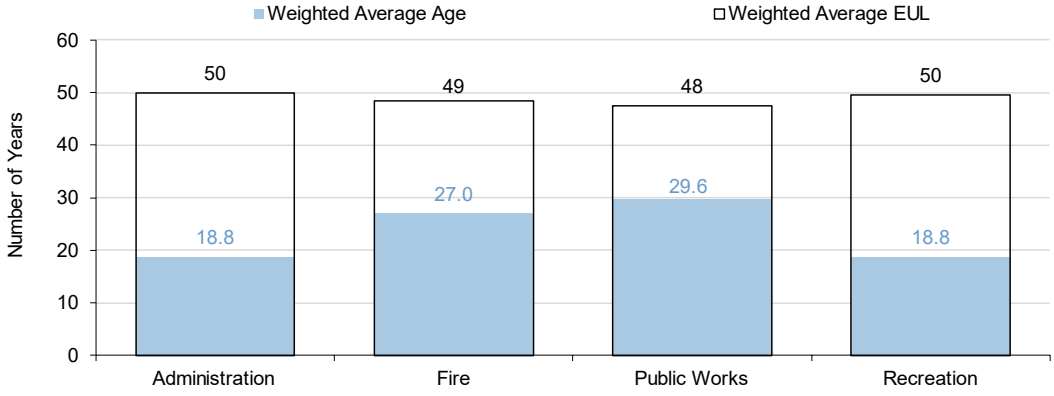
Asset Segment	Quantity	Replacement Cost	Annual Capital Requirement
Admin	5	$2,405,639	$48,113
Fire	5	$819,165	$19,410
Public Works	6	$1,201,064	$26,501
Recreation	15	$2,587,394	$53,114
Total		**$7,013,262**	**$147,138**



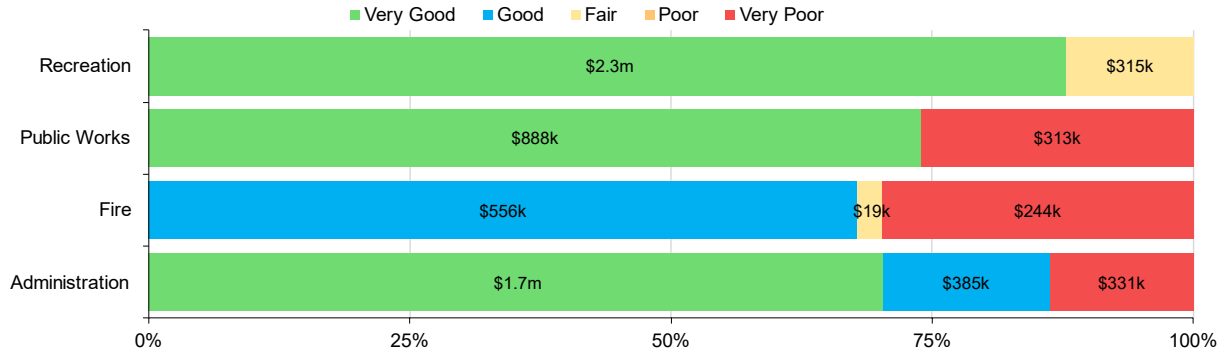
Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

6.3 Asset Condition & Age

The graph below identifies the average age, and the estimated useful life for each asset segment. The values are weighted based on replacement cost.



The graph below visually illustrates the average condition for each asset segment on a very good to very poor.



To ensure that the Township's buildings continue to provide an acceptable level of service, the Township should monitor the average condition of all assets. If the average condition declines, staff should re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation and replacement activities is required to increase the overall condition of the buildings.

Each asset's estimated useful life should also be reviewed to determine whether adjustments need to be made to better align with the observed service life.

6.3.1 Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets. The following describes the Township's current approach:

- Monthly inspections are performed by staff using a condition label of good, fair and poor

6.4 Lifecycle Management Strategy

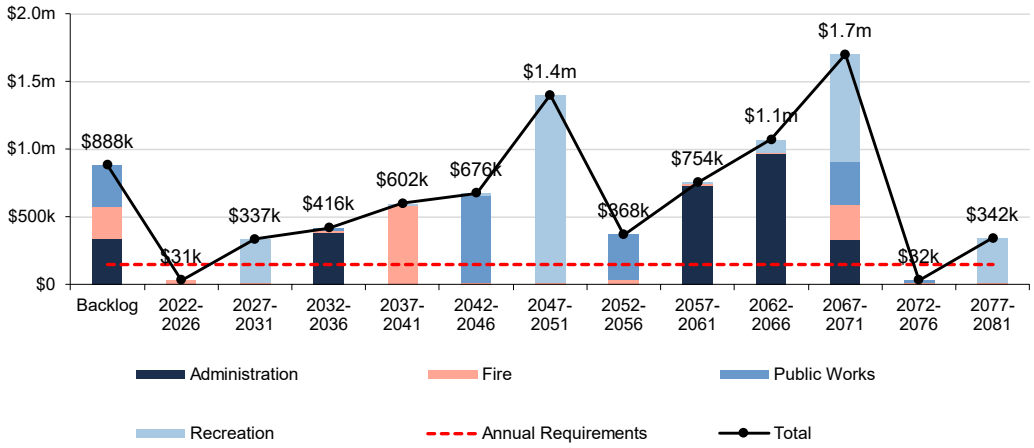
To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. Increasing the asset inventory over time to provide better details for alignment with lifecycle needs of typical building systems. The following table outlines the Township's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance / Rehabilitation	Municipal buildings are subject to regular inspections to identify needs
	Maintenance of buildings is dealt with on a case-by-case basis
Replacement	Assessments will be completed strategically as buildings approach their end-of-life to determine whether replacement or rehabilitation is appropriate

DRAFT

6.4.1 Forecasted Capital Requirements

The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs. The following graph identifies capital requirements over the next 60 years. This projection is used as it ensures that every asset has gone through one full iteration of replacement. The forecasted requirements are aggregated into 5-year bins and the trend line represents the average capital requirements at $147,138.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

6.5 Risk & Criticality

The risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2022 inventory data. See Appendix D for the criteria used to determine the risk rating of each asset.

Consequence	Probability 1	2	3	4	5
5	9 Assets $5,000,537	1 Asset $384,780	0 Assets $0	0 Assets $0	3 Assets $781,796
4	1 Asset $110,023	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
3	2 Assets $144,393	0 Assets $0	4 Assets $247,476	0 Assets $0	1 Asset $94,351
2	2 Assets $82,542	0 Assets $0	2 Assets $57,803	0 Assets $0	0 Assets $0
1	5 Assets $68,925	2 Assets $19,321	1 Asset $9,509	0 Assets $0	1 Asset $11,806

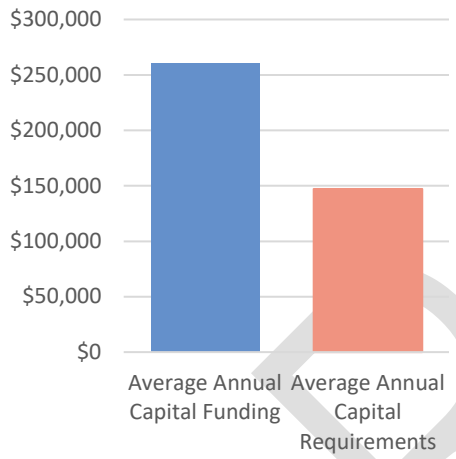
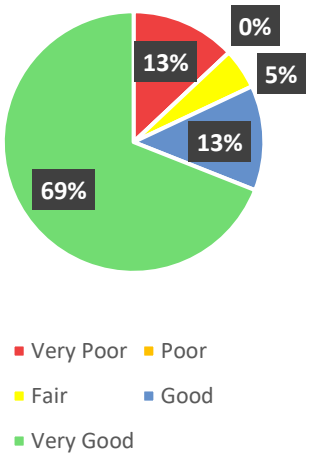
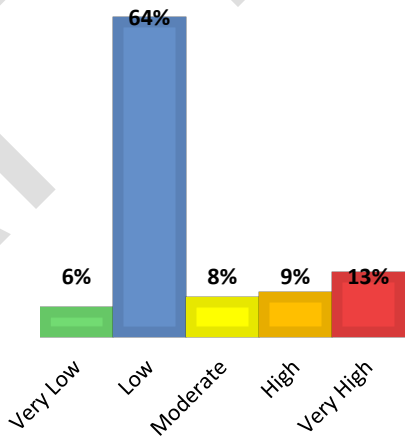
DRAFT

This is a high-level model developed by Township staff and should be reviewed and adjusted to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

6.6 Levels of Service

The table below outlines high-level service indicators for Buildings.

Cost	Performance (Average Condition)	Risk
		

Buildings are considered a non-core asset category as such, the Township has until July 1, 2024, to determine the community levels of service and technical metrics that measure the current level of service provided, the regulation does not specify what they need to be. To meet the July 1, 2024 requirements the Township has outlined the community and technical levels of service that will be measured in the following sections.

6.6.1 Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by buildings in the Township.

Service Attribute	Qualitative Description	Current LOS (2021)
Scope	Description, which may include maps, of the types of facilities that the municipality operates and maintains	See Appendix C

6.6.2 Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by buildings in the municipality.

Service Attribute	Technical Metric	Current LOS (2021)
Scope	Square metres of indoor recreation facilities per 1,000 households	0.05
Quality	Average facility condition index value for facilities in the municipality	Good
Performance	% of buildings and facilities inspected per year	95

6.7 Recommendations

Asset Inventory

- The Township's asset inventory contains a high-level breakdown of building components. Staff should work towards a more detailed component-based inventory of all buildings to allow for component-based lifecycle planning and inventory consistency.

Replacement Costs

- Gather accurate replacement costs and update on a regular basis to ensure the accuracy of capital projections.

Risk Management Strategies

- Implement risk-based decision-making as part of asset management planning and budgeting processes. This should include the regular review of high-risk assets to determine appropriate risk mitigation strategies.

Levels of Service

- Work towards identifying proposed levels of service as per O. Reg. 588/17 and identify the strategies that are required to close any gaps between current and proposed levels of service.

DRAFT

7 Land Improvements

7.1 Key Insights

The Township of Southwold owns a small number of assets that are considered Land Improvements. This category includes:

- Parking lots
- Sports fields
- Fencing
- Multi-activity pad

The state of the infrastructure for the land improvements is summarized in the following table.

Replacement Cost	Condition	Financial Capacity	
$353,727	Fair (48%)	Annual Requirement:	$27,467
		Funding Available:	$158,142
		Annual Deficit:	($130,675)

The following level of service statements are a key driving force behind the Township's asset management planning:

Service Attribute	Level of Service Statement
Scope	The land improvements meet safety and accessibility standards
Quality	The land improvements are in good condition

7.2 Asset Inventory & Costs

The table below includes the quantity, total replacement cost and annual capital requirements of each asset segment in the Township's land improvement inventory.

Asset Segment	Quantity	Replacement Cost	Annual Capital Requirement
Fire	3	$76,267	$7,912
Public Works	1	$8,601	$860
Recreation	8	$268,859	$18,696
		$353,727	**$27,467**

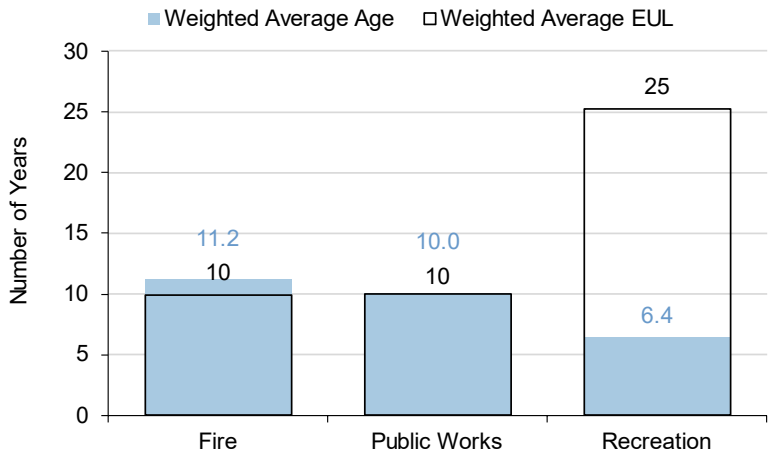
Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

DRAFT

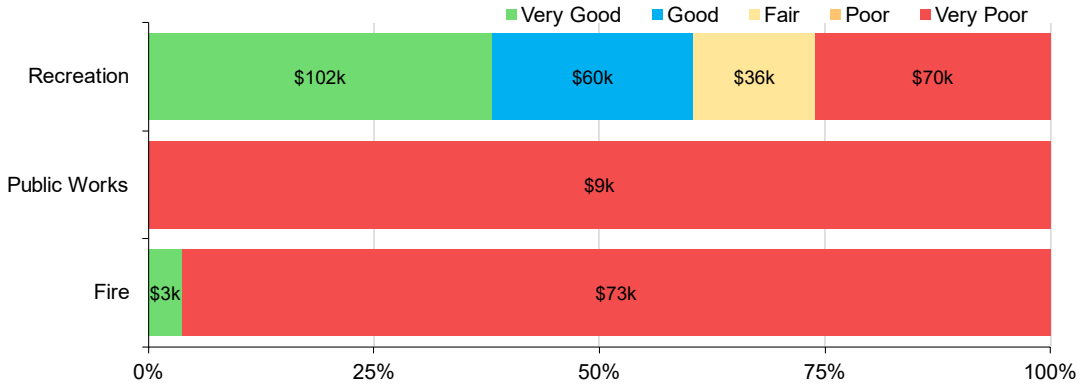
DRAFT

7.3 Asset Condition & Age

The graph below identifies the average age, and the estimated useful life for each asset segment. The values are weighted based on replacement cost.



The graph below visually illustrates the average condition for each asset segment on a very good to very poor.



To ensure that the Township's land improvements continue to provide an acceptable level of service, the Township should monitor the average condition of all assets. If the average condition declines, staff should re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation and replacement activities is required to increase the overall condition.

Each asset's estimated useful life should also be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

7.3.1 Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets. The following describes the Township's current approach:

- Regular maintenance and checks performed by internal staff

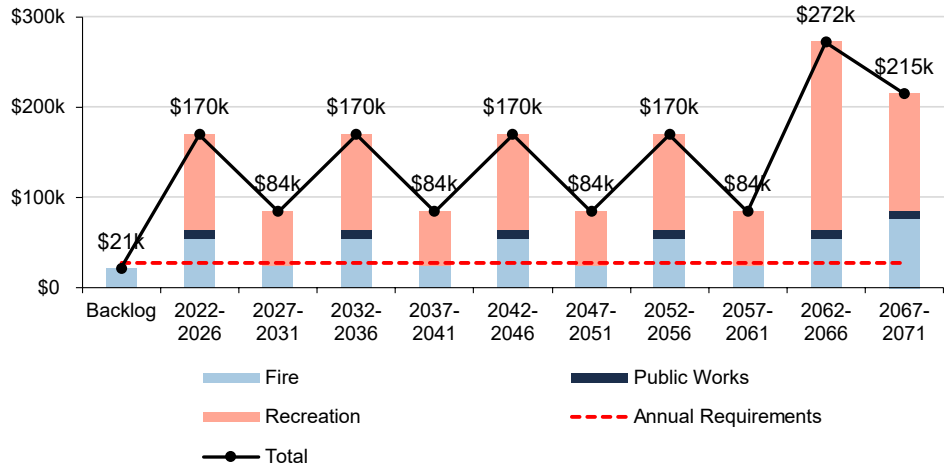
7.4 Lifecycle Management Strategy

To ensure that Township assets are performing as expected and meeting the needs of residents, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The following table outlines the Township's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance, Rehabilitation & Replacement	Assessments are completed regularly to determine maintenance work required

7.4.1 Forecasted Capital Requirements

The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs. The following graph identifies capital requirements over the next 5 years. This projection is used as it ensures that every asset has gone through one full iteration of replacement. The forecasted requirements are aggregated into 5-year bins and the trend line represents the average annual capital requirements which are $229,480.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

7.5 Risk & Criticality

The risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2022 inventory data. See Appendix D for the criteria used to determine the risk rating of each asset.

Consequence	1	2	3	4	5
5	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
4	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
3	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0	1 Asset $51,965
2	2 Assets $78,531	0 Assets $0	0 Assets $0	0 Assets $0	1 Asset $45,953
1	3 Assets $26,697	1 Asset $60,057	2 Assets $36,393	0 Assets $0	3 Assets $54,131

Probability

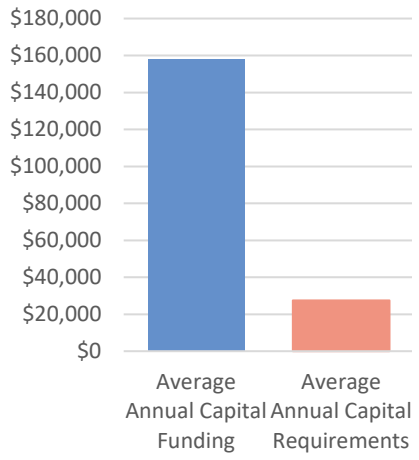
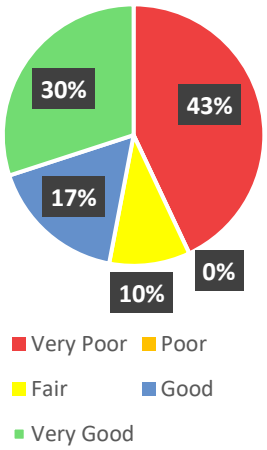
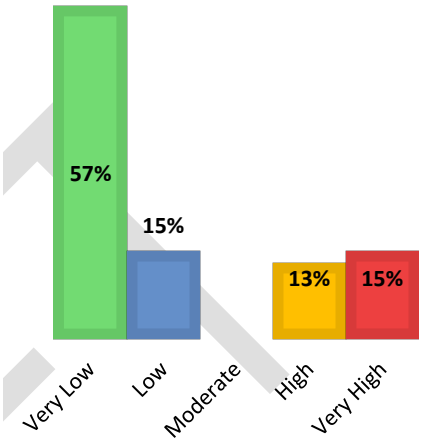
This is a high-level model developed by Township staff and should be reviewed and adjusted to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

DRAFT

7.6 Levels of Service

The table below outlines high-level service indicators for Land Improvements.

Cost	Performance (Average Condition)	Risk
		

Land Improvements are considered a non-core asset category. As such, the Township has until July 1, 2024, to determine the qualitative descriptions and technical metrics that measure the current level of service provided. To meet the July 1, 2024, requirements the Township has outlined the community and technical levels of service that will be measured in the following sections.

7.6.1 Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by land improvement assets in the Township.

Service Attribute	Qualitative Description	
Scope	Description, which may include maps, of the outdoor recreational facilities that the municipality operates and maintains	See Appendix C

7.6.2 Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by machinery and equipment in the municipality.

DRAFT

Service Attribute	Technical Metric	Current LOS (2021)
Scope	Square metres of outdoor recreation facility space per 1,000 households	300
Quality	Average condition of outdoor recreational facilities in the municipality (e.g. very good, good, fair, poor, very poor)	Good
Performance	Parkland in Municipality as percentage of total area of Municipality	0.1%

7.7 Recommendations

Replacement Costs

- All replacement costs used were based on the inflation of historical costs. These costs should be evaluated to determine their accuracy and reliability. Replacement costs should be updated according to the best available information on the cost to replace the asset in today's value.

Risk Management Strategies

- Implement risk-based decision-making as part of asset management planning and budgeting processes. This should include the regular review of high-risk assets to determine appropriate risk mitigation strategies.

Levels of Service

- Begin measuring current levels of service in accordance with the metrics that the Township has established. Additional metrics can be established as they are determined to provide meaningful and reliable inputs into asset management planning.
- Work towards identifying proposed levels of service as per O. Reg. 588/17 and identify the strategies that are required to close any gaps between current and proposed levels of service.

DRAFT

8 Vehicles

8.1 Key Insights

Vehicles allow staff to efficiently deliver municipal services and personnel. Municipal vehicles are used to support several service areas, including:

- tandem axle trucks for winter control activities
- fire rescue vehicles to provide emergency services
- pick-up trucks to support the maintenance of all departments

The state of the infrastructure for the vehicles is summarized in the following table.

Replacement Cost	Condition	Financial Capacity	
$5,893,394	Fair (46%)	Annual Requirement:	$450,050
		Funding Available:	$340,000
		Annual Deficit:	$110,050

The following level of service statements are a key driving force behind the Township's asset management planning:

Service Attribute	Level of Service Statement
Quality	The vehicles are in fair condition with minimal unplanned service interruptions

8.2 Asset Inventory & Costs

The table below includes the quantity, total replacement cost and annual capital requirements of each asset segment in the Township's vehicle inventory.

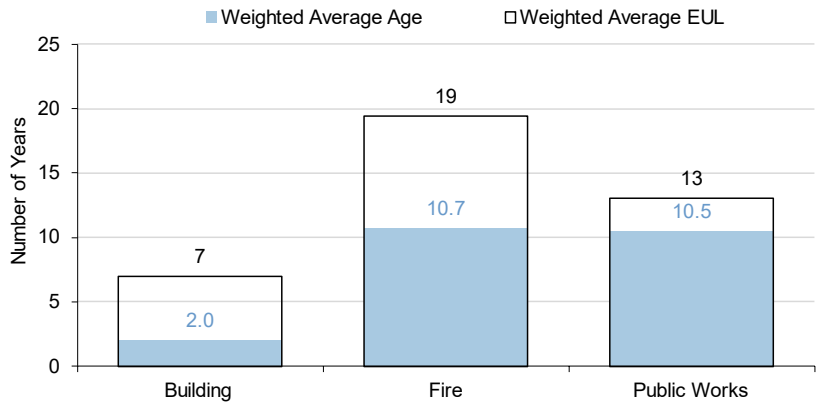
Asset Segment	Quantity	Replacement Cost	Annual Capital Requirement
Buildings	1	$40,278	$5,754
Fire	7	$1,916,906	$102,347
Public Works	35	$3,936,210	$341,949
Total		**$5,893,394**	**$450,050**

Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

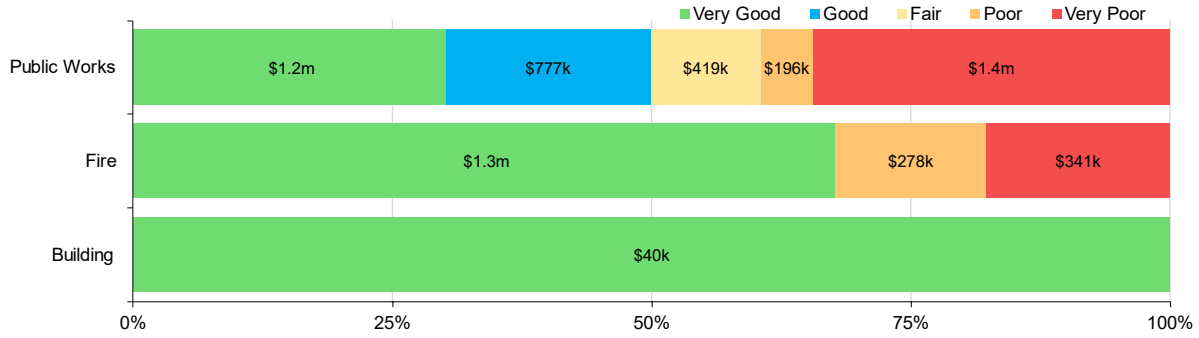
DRAFT

8.3 Asset Condition & Age

The graph below identifies the average age and the estimated useful life for each asset segment. The values are weighted based on replacement cost.



The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



To ensure that the Township's vehicles continue to provide an acceptable level of service, the Township should monitor the average condition of all assets. If the average condition declines, staff should re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation and replacement activities is required to increase the overall condition.

Each asset's estimated useful life should also be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

8.3.1 Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets. The Township's current approach is staff complete daily pre-use visual inspections of vehicles to ensure they are in state of adequate repair prior to operation. CVOR vehicles are all inspected annual as per MTO requirements.

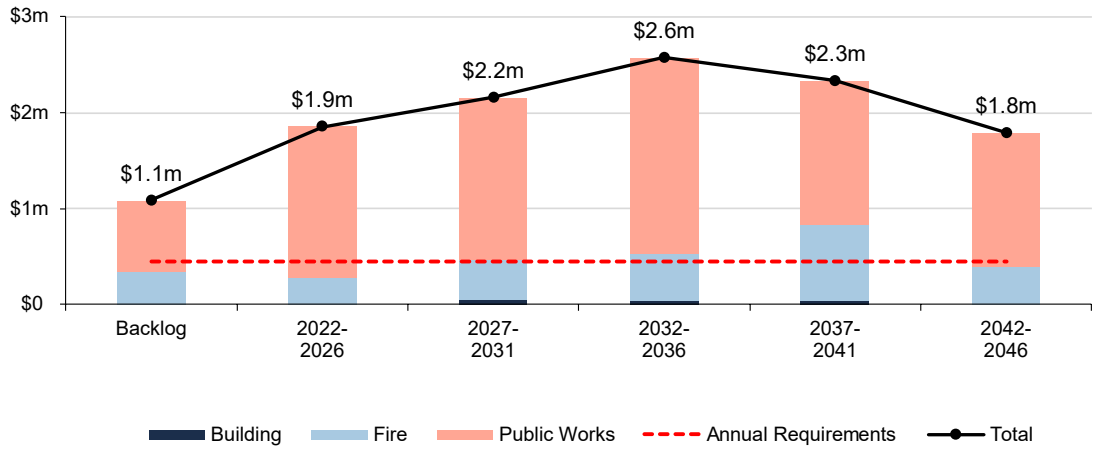
8.4 Lifecycle Management Strategy

The condition or performance of assets will deteriorate over time, to ensure vehicles are performing as expected, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The following table outlines the Township's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance / Rehabilitation	Visual inspections completed and documented daily
	Every 4-7000km includes an inspection and oil changed
Replacement	Vehicle replacements are based on age, usage and annual repair costs are all considered when determining appropriate treatment options

8.4.1 Forecasted Capital Requirements

The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs. The following graph identifies capital requirements over the next 20 years. This projection is used as it ensures that every asset has gone through one full iteration of replacement. The forecasted requirements are aggregated into 5-year bins and the trend line represents the average annual capital requirements at $450,050.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

8.5 Risk & Criticality

The risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2022 inventory data. See Appendix D for the criteria used to determine the risk rating of each asset.

Consequence	1	2	3	4	5
5	6 Assets $2,000,661	2 Assets $667,452	2 Assets $549,912	1 Asset $278,170	4 Assets $1,197,526
4	0 Assets $0	0 Assets $0	1 Asset $113,658	1 Asset $149,942	0 Assets $0
3	3 Assets $206,645	0 Assets $0	0 Assets $0	0 Assets $0	1 Asset $83,922
2	5 Assets $193,649	3 Assets $109,854	0 Assets $0	4 Assets $151,266	1 Asset $36,555
1	6 Assets $123,430	0 Assets $0	1 Asset $5,752	0 Assets $0	1 Asset $25,000

Probability

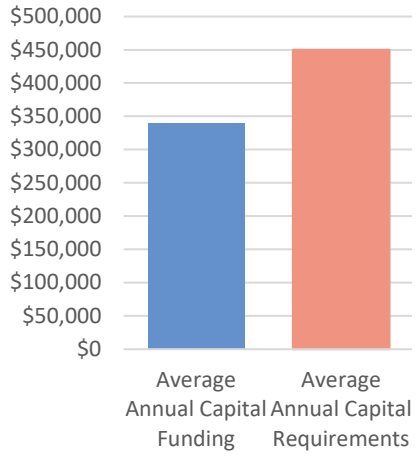
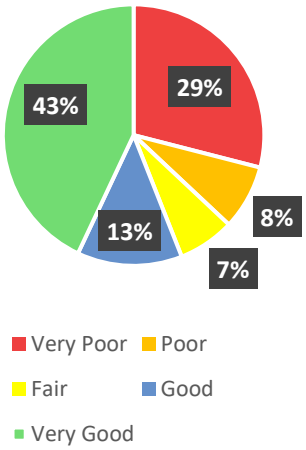
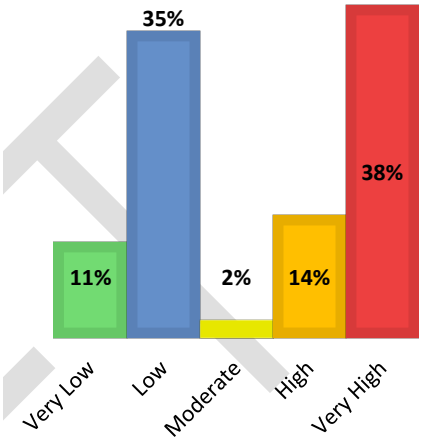
This is a high-level model developed by the Township staff and should be reviewed and adjusted to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

DRAFT

8.6 Levels of Service

The table below outlines high-level service indicators for Vehicles.

Cost	Performance (Average Condition)	Risk
		

Vehicles are considered a non-core asset category. As such, the Township has until July 1, 2024, to determine the qualitative descriptions and technical metrics that measure the current level of service provided. To meet the July 1, 2024, requirements the Township has outlined the community and technical levels of service that will be measured in the following sections.

8.6.1 Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by vehicles in the Township.

Service Attribute	Qualitative Description	
Scope	Description or images of the types of vehicles (e.g. light, medium and heavy-duty) that the municipality operates and the services that they help to provide to the community	See Appendix C

DRAFT

8.6.2 Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by machinery and equipment in the municipality.

Service Attribute	Technical Metric	Current LOS (2021)
Scope	# of light duty vehicles per 1,000 households	0.011
	# of heavy duty vehicles per 1,000 households	0.016
Quality	Average condition of vehicles (e.g. very good, good, fair, poor, very poor)	Good
Performance	% of regulated MTO maintenance inspections complete	100

8.7 Recommendations

Replacement Costs

- Gather accurate replacement costs and update on a regular basis to ensure the accuracy of capital projections.

Condition Assessment Strategies

- Review assets that have surpassed their estimated useful life to determine if immediate replacement is required or whether these assets are expected to remain in-service. Adjust the service life and/or condition ratings for these assets accordingly.

Risk Management Strategies

- Implement risk-based decision-making as part of asset management planning and budgeting processes. This should include the regular review of high-risk assets to determine appropriate risk mitigation strategies.

Levels of Service

- Work towards identifying proposed levels of service as per O. Reg. 588/17 and identify the strategies that are required to close any gaps between current and proposed levels of service.

DRAFT

9 Machinery & Equipment

9.1 Key Insights

To maintain the quality stewardship of Southwold's infrastructure and support the delivery of services, Township staff own and employ various types of machinery and equipment. This includes:

- Computer hardware, software, and phone systems to support all Township services
- Landscaping equipment to maintain public parks
- Fire equipment to support the delivery of emergency services
- Public Works equipment to support transportation services
- Equipment and furniture to enable the provision of recreational services

The state of the infrastructure for the machinery and equipment is summarized in the following table.

Replacement Cost	Condition	Financial Capacity	
$2,430,527	Fair (57%)	Annual Requirement:	$236,841
		Funding Available:	$75,000
		Annual Deficit:	$77,550

The following level of service statements are a key driving force behind the Township's asset management planning:

Service Attribute	Level of Service Statement
Scope	The machinery and equipment service provides suitable material for staff to perform their duties effectively
Quality	The machinery and equipment are in good condition with minimal unplanned service interruptions.

DRAFT

9.2 Asset Inventory & Costs

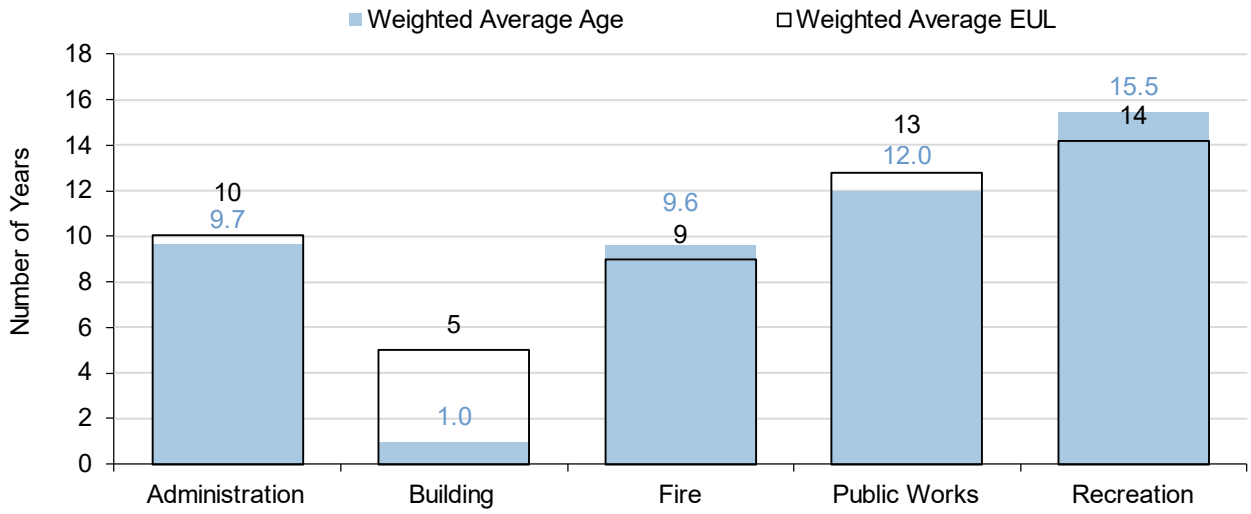
The table below includes the quantity, total replacement cost and annual capital requirements of each asset segment in the Township's machinery and equipment inventory.

Asset Segment	Quantity	Replacement Cost	Annual Capital Requirement
Administration	29	$170,058	$23,542
Building	1	$4,260	$852
Fire	319	$787,111	$97,394
Public Works	55	$342,460	$29,540
Recreation	5,927	$1,126,638	$85,514
Total		**$2,430,527**	**$236,841**

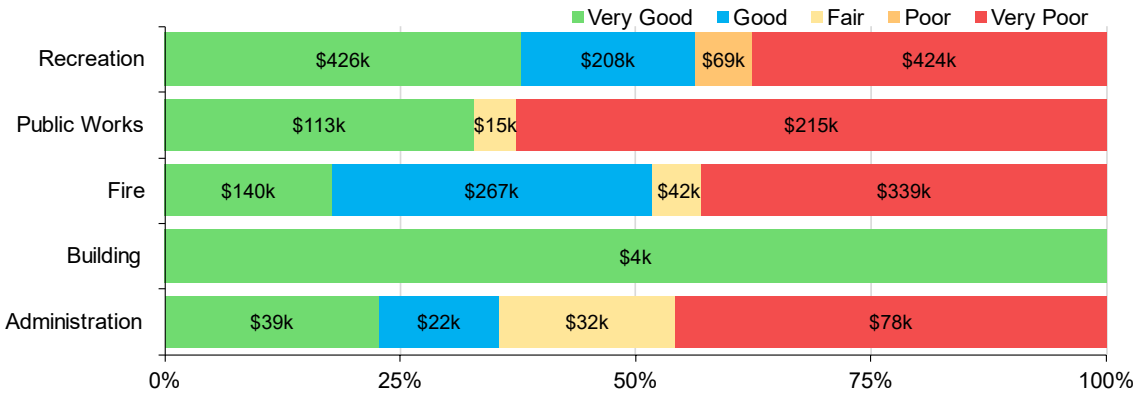
Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

9.3 Asset Condition & Age

The graph below identifies the average age and the estimated useful life for each asset segment. The values are weighted based on replacement cost.



The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



To ensure that the Township's machinery and equipment continues to provide an acceptable level of service, the Township should continue to monitor the average condition. If the average condition declines, staff should re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation and replacement activities is required to increase the overall condition.

Each asset's estimated useful life should also be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

9.3.1 Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets. The following describes the Township's current approach:

- Staff complete regular visual inspections of machinery and equipment to ensure they are in state of adequate repair
- The broad range of types of equipment included in this category, there are some types with very established assessments (i.e. Fire Equipment) but also many don't have any assessment procedures

Th rating criteria used to determine the current condition and forecast future capital requirements is consistent throughout all asset categories with a scale of 0 - 100.

9.4 Lifecycle Management Strategy

The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration.

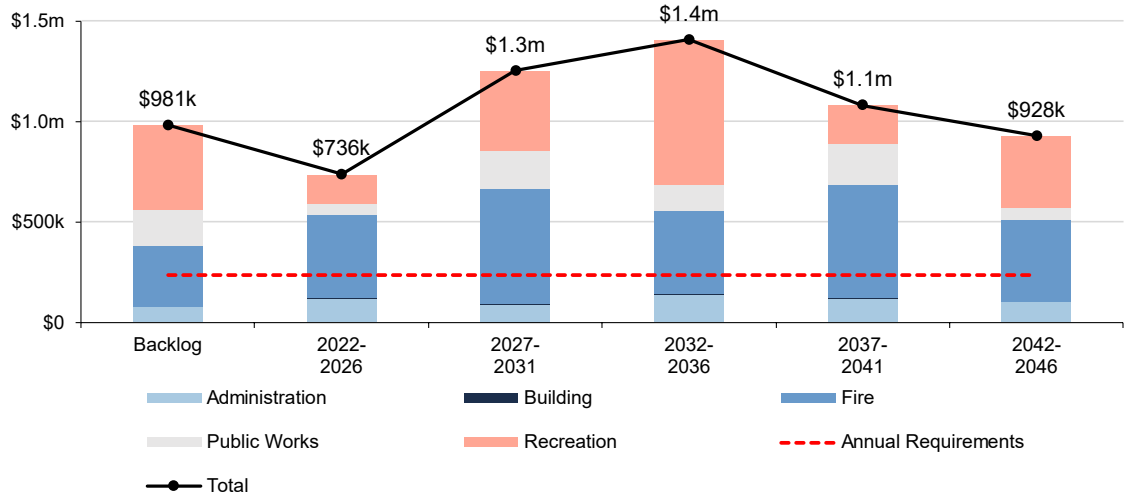
DRAFT

The following table outlines the Township's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance/ Rehabilitation	Maintenance program varies by department
	Fire Protection Services equipment is subject to a much more rigorous inspection and maintenance program compared to most other departments
	Machinery and equipment is maintained according to manufacturer recommended actions and supplemented by the expertise of municipal staff
Replacement	The replacement of machinery and equipment depends on deficiencies identified

9.4.1 Forecasted Capital Requirements

The following graph identifies capital requirements over the next 30 years. This projection is used as it ensures that every asset has gone through one full iteration of replacement. The forecasted requirements are aggregated into 5-year bins and the trend line represents the average annual capital requirements at $128,550.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

9.5 Risk & Criticality

The risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2022 inventory data. See Appendix D for the criteria used to determine the risk rating of each asset.

Consequence	1	2	3	4	5
5	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
4	2 Assets $218,426	2 Assets $205,005	0 Assets $0	0 Assets $0	2 Assets $239,937
3	2 Assets $141,610	2 Assets $157,047	0 Assets $0	1 Asset $63,497	1 Asset $51,469
2	1 Asset $39,499	0 Assets $0	0 Assets $0	0 Assets $0	6 Assets $182,317
1	36 Assets $322,187	16 Assets $134,376	10 Assets $88,944	1 Asset $5,330	96 Assets $580,883

Probability

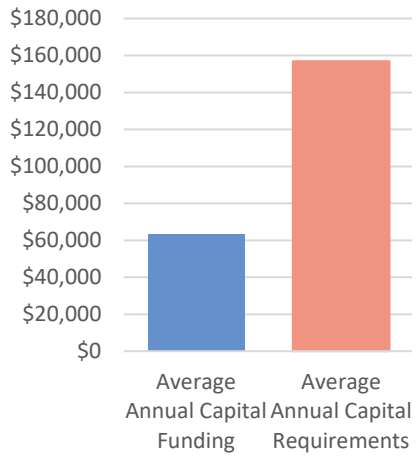
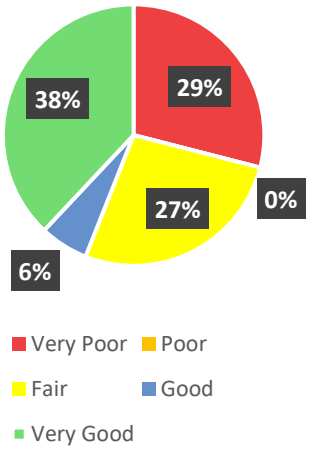
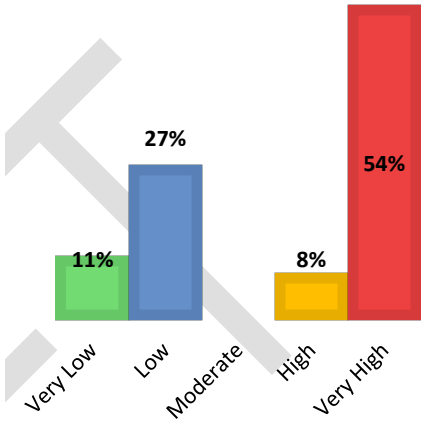
This is a high-level model developed by Township staff and should be reviewed and adjusted to reflect an evolving understanding of both the probability and consequences of asset failure.

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

DRAFT

9.6 Levels of Service

The table below outlines high-level service indicators for Machinery & Equipment.

Cost	Performance (Average Condition)	Risk
		

Equipment is considered a non-core asset category. As such, the Township has until July 1, 2024, to determine the qualitative descriptions and technical metrics that measure the current level of service provided. To meet the July 1, 2024 requirements the Township has outlined the community and technical levels of service that will be measured in the following sections.

9.6.1 Community Levels of Service

The following table outlines the qualitative description that determine the community levels of service provided by machinery and equipment in the Township.

Service Attribute	Qualitative Description	
Scope	Description or images of the types of equipment that the municipality operates and the services that they help to provide to the community	See Appendix C

9.6.2 Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by machinery and equipment in the municipality.

Service Attribute	Technical Metric	Current LOS (2021)
Quality	Average condition of equipment (e.g. very good, good, fair, poor, very poor)	Fair
Performance	# of FTEs supporting IT service requests	0.25

DRAFT

9.7 Recommendations

Replacement Costs

- All replacement costs are based on the inflation of historical cost. These costs should be evaluated to determine their accuracy and reliability. Replacement costs should be updated according to the best available information on the cost to replace the asset in today's value.

Condition Assessment Strategies

- Review assets that have surpassed their estimated useful life to determine if immediate replacement is required or whether these assets are expected to remain in-service. Adjust the service life and/or condition ratings for these assets accordingly.

Risk Management Strategies

- Implement risk-based decision-making as part of asset management planning and budgeting processes. This should include the regular review of high-risk assets to determine appropriate risk mitigation strategies.

Levels of Service

- Work towards identifying proposed levels of service as per O. Reg. 588/17 and identify the strategies that are required to close any gaps between current and proposed levels of service.

DRAFT

10 Water Network

10.1 Key Insights

The water services provided by the Township are overseen by the Ontario Clean Water Agency (OCWA). The public works department works with OCWA to ensure the responsible management for the following:

- Water Treatment Plant
- Distribution System

The state of the infrastructure for the water network is summarized in the following table:

Replacement Cost	Condition	Financial Capacity	
$46,962,608	Very Good (96%)	Annual Requirement:	$645,773
		Funding Available:	$614,715
		Annual Deficit:	$31,058

The following level of service statements are a key driving force behind the Township's asset management planning:

Service Attribute	Level of Service Statement
Scope	Municipal water is accessible to the community in sufficient capacity (does not exceed maximum use.
Quality	The water network is in good condition with minimal unplanned service interruptions due to main breaks and boil water advisories.

10.2 Asset Inventory & Costs

The table below includes the quantity, replacement cost method, and annual capital requirements of each asset segment in the Township's water network inventory.

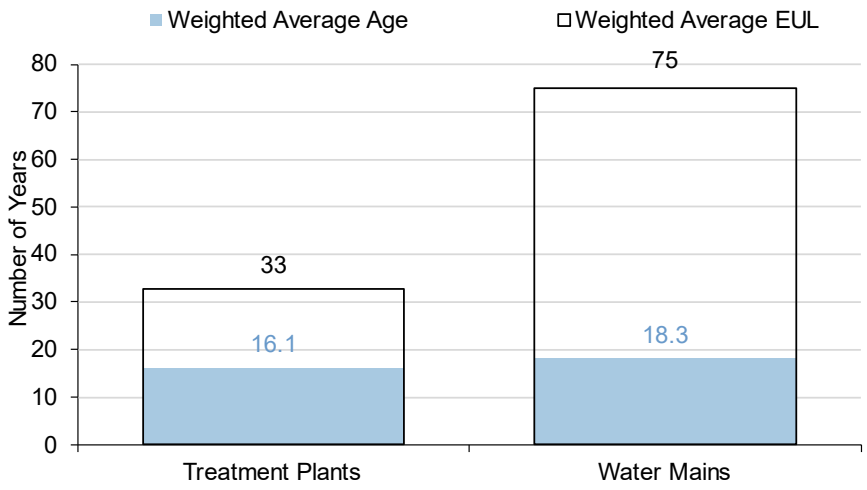
Asset Segment	Quantity	Replacement Cost	Annual Requirement
Treatment Plants	1	$487,134	$26,100
Water Mains	246.8km	$46,475,474	$619,673
Total		**$46,962,608**	**$645,773**

Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

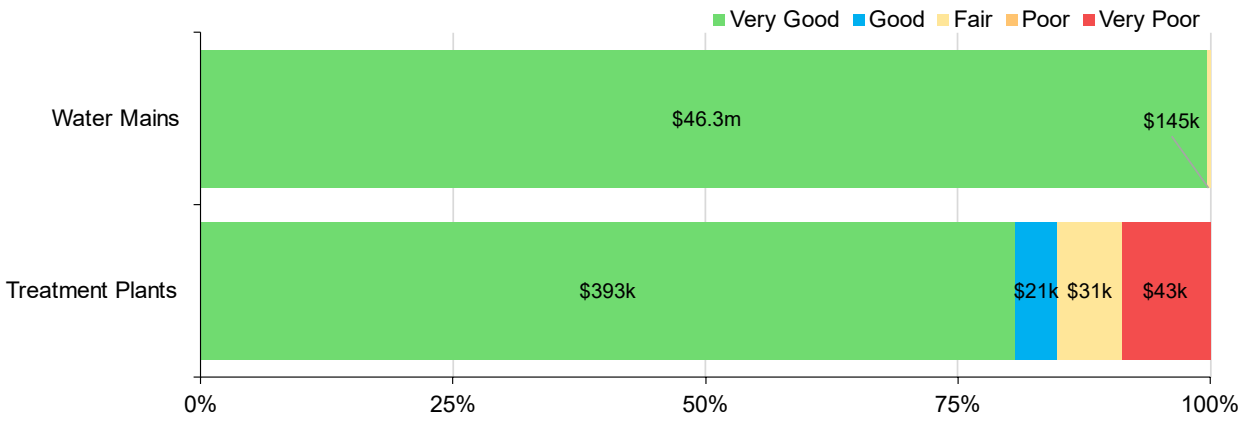
DRAFT

10.3 Asset Condition & Age

The graph below identifies the average age, and the estimated useful life for each asset segment. The values are weighted based on replacement cost.



The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



To ensure that the Township's water network continues to provide an acceptable level of service, the Township should monitor the average condition of all assets. If the average condition declines, staff should re-evaluate the lifecycle management strategy to determine what combination of activities is required to increase the overall condition of the water network.

Each asset's Estimated Useful Life should also be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

10.3.1 Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets. The following describes the Township's current approach:

- For watermains staff rely on the age, material, and break history to estimate the condition of water mains
- A leak detection program is also under review

The following rating criteria is used to determine the current condition of water network assets and forecast future capital requirements:

Condition	Rating
Very Good	80-100
Good	60-80
Fair	40-60
Poor	20-40
Very Poor	0-20

10.4 Lifecycle Management Strategy

The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The following table outlines the Township's current lifecycle management strategy.

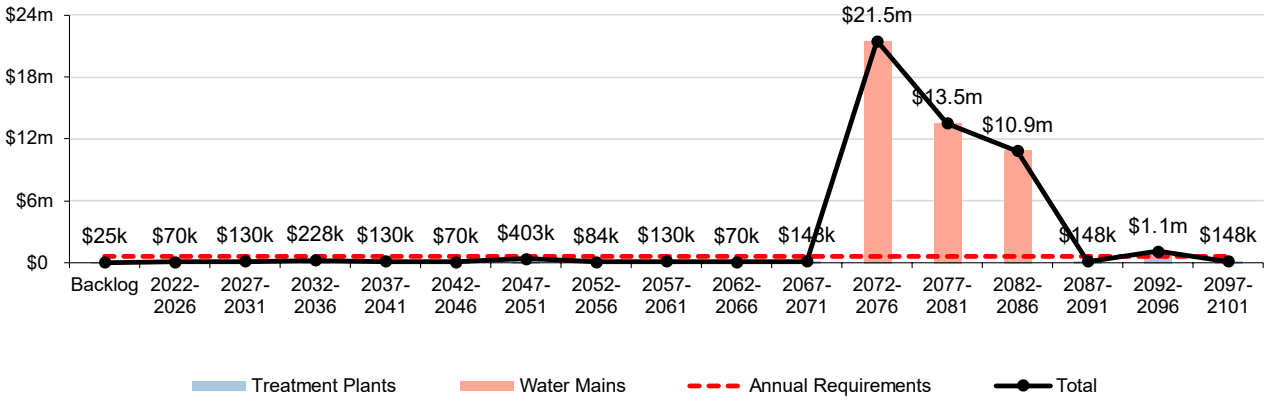
Activity Type	Description of Current Strategy
Maintenance	Main flushing is completed on the network
Replacement	Replacement activities are identified based on an analysis of the main break rate as well as any issues identified during regular maintenance activities

10.4.1 Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs. The following graph identifies capital requirements over the next 90 years. This projection is used as it ensures that every asset has gone through one full iteration of replacement. The

DRAFT

forecasted requirements are aggregated into 5-year bins and the trend line represents the average annual capital requirements at $645,773.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

10.5 Risk & Criticality

The following risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2022 inventory data. See Appendix D for the criteria used to determine the risk rating of each asset.

Consequence	1	2	3	4	5
5	20 Assets $15,714,982	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
4	49 Assets $27,885,193	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
3	11 Assets $1,067,775	0 Assets $0	1 Asset $132,625	0 Assets $0	0 Assets $0
2	25 Assets $1,422,007	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
1	37 Assets $633,641	1 Asset $20,750	4 Assets $42,891	0 Assets $0	5 Assets $42,744
Probability	1	2	3	4	5

This is a high-level model developed by Township staff and should be reviewed and adjusted to reflect an evolving understanding of both the probability and consequences of asset failure.

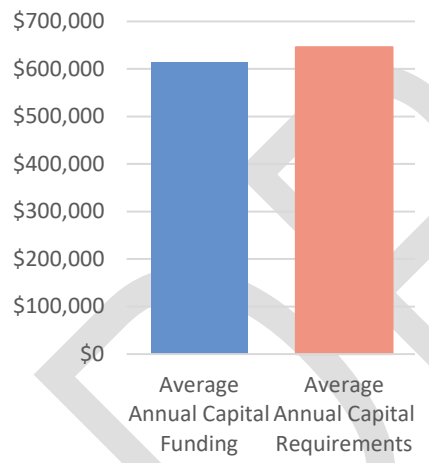
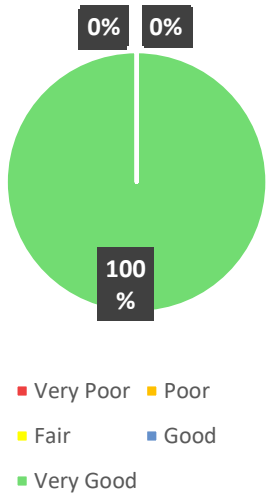
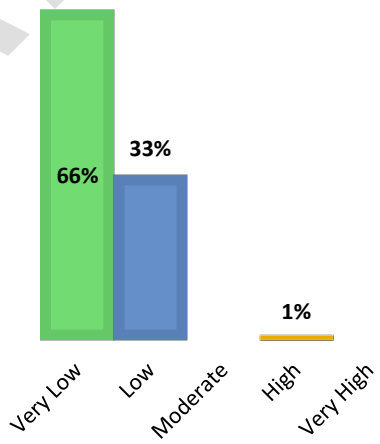
The asset-specific attributes that municipal staff utilize to define and prioritize the criticality of the water network are documented below:

Condition (80% Structural 75%)	Replacement Cost (Economic 75%)
Historical Watermain Breaks (80% Structural 25%)	Diameter (Social 25%)
Service Life Remaining (20% Functional)	

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

10.6 Levels of Service

The following tables identify the Township's current level of service for water network.

Cost	Performance (Average Condition)	Risk
		

These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17 as well as any additional performance measures that the Township has selected.

10.6.1 Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by water network.

Service Attribute	Qualitative Description	Current LOS
Scope	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system	See Appendix C
	Description, which may include maps, of the user groups or areas of the municipality that have fire flow	See Appendix C
Reliability	Description of boil water advisories and service interruptions	There is a log that details all events

10.6.2 Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by the water network.

Service Attribute	Technical Metric	Current LOS
Scope	% of properties connected to the municipal water system	87%
	% of properties where fire flow is available	87%
Reliability	# 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 system	0
	# of connection-days per year where water is not available due to water main breaks compared to the total number of properties connected to the municipal water system	0
Performance	Water loss %	20%
	Number of water main breaks / km of water main	0.00405

DRAFT

10.7 Recommendations

Asset Inventory

- The water main assets are the only distribution asset, consider including other components i.e. hydrants , valves, etc.

Replacement Costs

- Gather accurate replacement costs and update on a regular basis to ensure the accuracy of capital projections.

Risk Management Strategies

- Implement risk-based decision-making as part of asset management planning and budgeting processes. This should include the regular review of high-risk assets to determine appropriate risk mitigation strategies.

Levels of Service

- Continue to measure current levels of service. Additional metrics can be established as they are determined to provide meaningful and reliable inputs into asset management planning.
- Work towards identifying proposed levels of service as per O. Reg. 588/17 and identify the strategies that are required to close any gaps between current and proposed levels of se

DRAFT

11 Sanitary Network

11.1 Key Insights

The Sanitary Network provided by the Township are overseen by the public works department with OCWA (Ontario Clean Water Agency). The department is responsible for the following:

- Wastewater treatment plants
- Sanitary collection system

The state of the infrastructure for the sanitary network is summarized in the following table.

Replacement Cost	Condition	Financial Capacity	
$8,442,970	Very Good (99%)	Annual Requirement:	$135,802
		Funding Available:	$0
		Annual Deficit:	$135,802

The following level of service statements are a key driving force behind the Township's asset management planning.

Service Attribute	Level of Service Statement
Scope	The sanitary network is accessible to the community in sufficient capacity.
Quality	The sewer network is in good condition with minimal unplanned service interruptions due to backups and effluent violations.

11.2 Asset Inventory & Costs

The table below includes the quantity, replacement cost and annual capital requirement for each asset segment in the Township's sanitary network inventory.

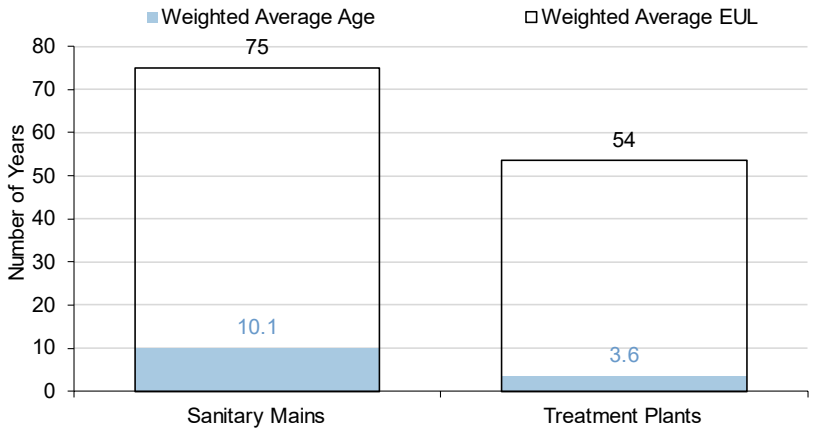
Asset Segment	Quantity	Replacement Cost	Annual Capital Requirement
Sanitary Mains	2,358m	$4,688,297	$62,511
Treatment Plants	2	$3,754,673	$73,291
Total		**$8,442,970**	**$135,802**

Each asset's replacement cost should be reviewed periodically to determine whether adjustments are needed to more accurate represent realistic capital requirements.

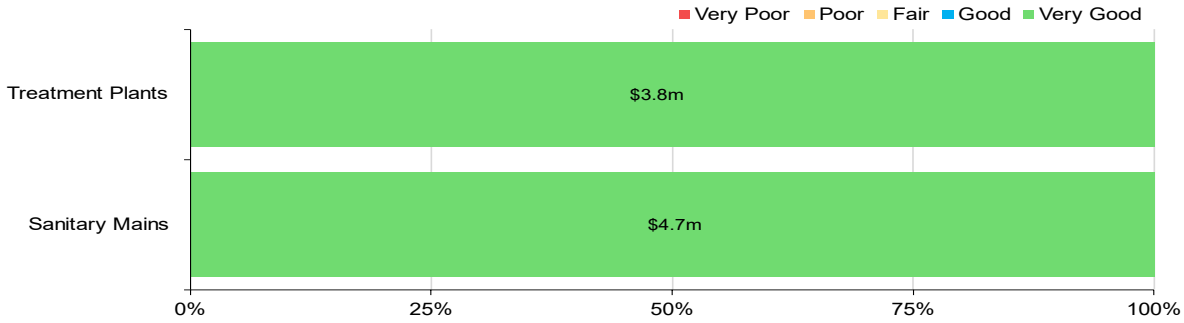
DRAFT

11.3 Asset Condition & Age

The graph below identifies the average age, and the estimated useful life for each asset segment. The values are weighted based on replacement cost.



The graph below visually illustrates the average condition for each asset segment on a very good to very poor scale.



To ensure that the Township's sanitary network continues to provide an acceptable level of service, the Township should monitor the average condition of all assets. If the average condition declines, staff should re-evaluate their lifecycle management strategy to determine what combination activities is required to increase the overall condition of the sanitary network.

Each asset's Estimated Useful Life should also be reviewed periodically to determine whether adjustments need to be made to better align with the observed length of service life for each asset type.

11.3.1 Current Approach to Condition Assessment

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets. The Township's current approach is to have OCWA manages all condition assessments and make recommendations. The rating criteria used to determine the current condition of sewer network assets and forecast future capital requirements is the same as other categories 0-100.

11.4 Lifecycle Management Strategy

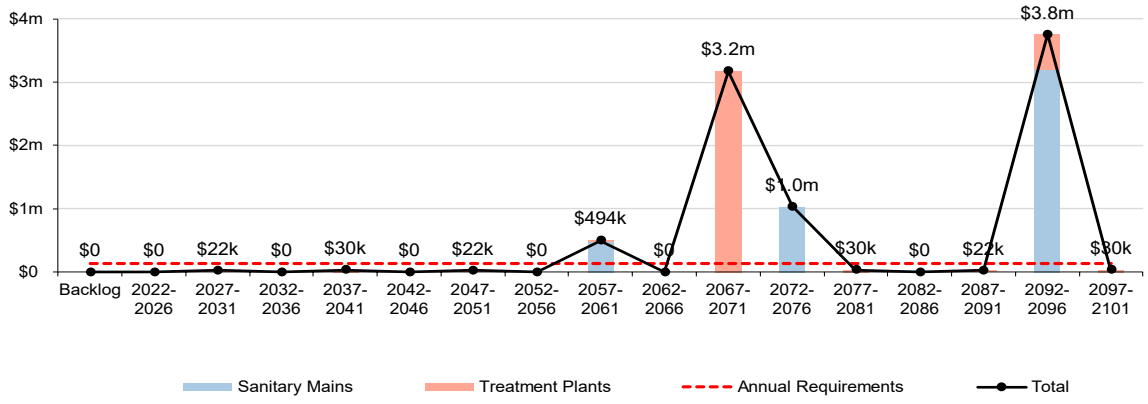
The condition or performance of most assets will deteriorate over time. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. The following table outlines the Township's current lifecycle management strategy.

Activity Type	Description of Current Strategy
Maintenance	Main flushing and PACP CCTV Inspection 20 years
Replacement	In the absence of mid-lifecycle rehabilitative events, assets are simply maintained with the goal of full replacement once it reaches its end-of-life.

11.4.1 Forecasted Capital Requirements

The following graph forecasts long-term capital requirements. The annual capital requirement represents the average amount per year that the Township should allocate towards funding rehabilitation and replacement needs.

The following graph identifies capital requirements over the next 90 years. This projection is used as it ensures that every asset has gone through one full iteration of replacement. The forecasted requirements are aggregated into 5-year bins and the trend line represents the average annual capital requirements at $135,802.



The projected cost of lifecycle activities that will need to be undertaken over the next 10 years to maintain the current level of service can be found in Appendix B.

11.5 Risk & Criticality

The following risk matrix provides a visual representation of the relationship between the probability of failure and the consequence of failure for the assets within this asset category based on 2022 inventory data. See Appendix D for the criteria used to determine the risk rating of each asset.

Consequence	1	2	3	4	5
5	4 Assets $6,913,366	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
4	3 Assets $972,894	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
3	3 Assets $315,573	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
2	4 Assets $202,214	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0
1	4 Assets $38,923	0 Assets $0	0 Assets $0	0 Assets $0	0 Assets $0

Probability

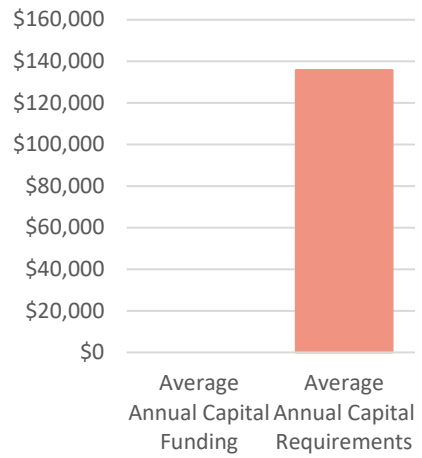
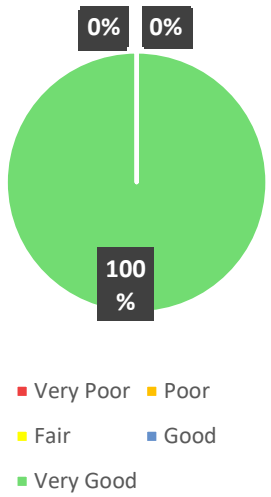
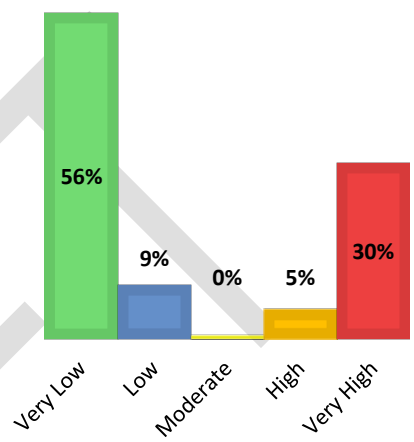
This is a high-level model developed by Township staff and should be reviewed and adjusted to reflect an evolving understanding of both the probability and consequences of asset failure. The asset-specific attributes that municipal staff utilize to define and prioritize the criticality of the sanitary network are documented below:

Probability of Failure (POF)	Consequence of Failure (COF)
Condition (Structural 60%)	Replacement Cost (Economic 75%)
Remaining Service Life (Functional 40%)	Diameter (Operational 25%)

The identification of critical assets allows the Township to determine appropriate risk mitigation strategies and treatment options. Risk mitigation may include asset-specific lifecycle strategies, condition assessment strategies, or simply the need to collect better asset data.

11.6 Levels of Service

The following tables identify the Township's current level of service for the sanitary network.

Cost	Performance (Average Condition)	Risk
		

These metrics include the technical and community level of service metrics that are required as part of O. Reg. 588/17.

11.6.1 Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by sanitary network.

DRAFT

Service Attribute	Qualitative Description	Current LOS
Scope	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system	See Appendix C
Reliability	Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes	The Township does not own any combined sewers
	Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches	The Township does not own any combined sewers
	Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes	Stormwater can enter into sanitary sewers due to cracks in sanitary mains or through indirect connections (e.g. weeping tiles). In the case of heavy rainfall events, sanitary sewers may experience a volume of water and sewage that exceeds its designed capacity.
	Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to stormwater infiltration	The Township follows a series of design standards that integrate servicing requirements and land use considerations when constructing, they also are sealed when constructed.
	Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system	Effluent refers to water pollution that is discharged from a wastewater treatment plant, and may include suspended solids, total phosphorous and biological oxygen demand. The Environmental Compliance Approval (ECA) identifies the effluent criteria for municipal wastewater treatment plants.

DRAFT

11.6.2 Technical Levels of Service

The following table outlines the quantitative metrics that determine the technical level of service provided by the sanitary network.

Service Attribute	Technical Metric	Current LOS
Scope	% of properties connected to the municipal wastewater system	15%
Reliability	# 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	0
	# of connection-days per year having wastewater backups compared to the total number of properties connected to the municipal wastewater system	0
	# of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system	0
Performance	Average daily wastewater flows	84.6
	Volume of reportable spills per year (ML)	0

11.7 Recommendations

Risk Management Strategies

- Implement risk-based decision-making as part of asset management planning and budgeting processes. This should include the regular review of high-risk assets to determine appropriate risk mitigation strategies.
- Review risk models on a regular basis and adjust according to an evolving understanding of the probability and consequences of asset failure.

Levels of Service

- Work towards identifying proposed levels of service as per O. Reg. 588/17 and identify the strategies that are required to close any gaps between current and proposed levels of service.

DRAFT

12 Impacts of Growth

12.1 Key Insights

- Understanding the key drivers of growth and demand will allow the Township to plan for new infrastructure more effectively, and the upgrade or disposal of existing infrastructure
- Moderate population and employment growth is expected
- The costs of growth should be considered in long-term funding strategies that are designed to maintain the current level of service

12.2 Description of Growth Assumptions

The demand for infrastructure and services will change over time based on a combination of internal and external factors. Understanding the key drivers of growth and demand will allow the Township to plan for new infrastructure, as well as the upgrade or dispose of existing infrastructure. Increases or decreases in demand can affect what assets are needed and what level of service meets the needs of the community.

12.2.1 Southwold Official Plan (November 2021)

The Township recently adopted a new Official Plan to ensure conformance with the provincial and upper tier documents, and address matters of local planning interest. The Official Plan is a planning document for the purpose of guiding the future development of the Township of Southwold from 2021 to 2041. The Official Plan has been approved at County of Elgin as of February 22, 2022.

The Settlement Area policies apply to the Township's villages and hamlets. The Settlement Policy Area designation is intended to be the areas of the Town where growth will be focused in order to optimize the use of public services and infrastructure, and to minimize outward sprawl of development into areas of natural resources and natural heritage. Most of the Township's future growth will be in Talbotville, Shedden, Fingal and North Port Stanley where access or planned access to public infrastructure including water and sanitary exist.

The majority of non-residential growth will be directed to the Town's employment areas in Talbotville and Shedden in accordance with the policies of the Municipality's Municipal Comprehensive ReviewThe former Ford St. Thomas Assembly Plant site is anticipated for future redevelopment for employment. In addition, council continues to provide protection of The City of Toronto's waste disposal facility from incompatible land uses in the region.

DRAFT

12.2.2 Projected Growth

The County of Elgin provides direction based on county-wide and provincial interest. It is responsible for the allocation of growth to the local municipalities, which is based on a combination of local factors including: local planning policy; historic and recent growth trends; market demand; and the capacity to accommodate growth from land supply and servicing perspectives.

The following table outlines the population and employment forecasts allocated to Southwold, according to the 2016 Census.

	2016	2021	2031	2041
Total Housing Unit Forecast	1,630	1,730	2,280	2,780
Historical & Forecast Total Population	4,570	4,800	5,940	6,640

12.3 Impact of Growth on Lifecycle Activities

By July 1, 2025, the Township's asset management plan must include a discussion of how the assumptions regarding future changes in population and economic activity informed the preparation of the lifecycle management and financial strategy.

Planning for forecasted population growth may require the expansion of existing infrastructure and services. As growth-related assets are constructed or acquired, they should be integrated into the Township's asset management program.

While the addition of residential units will add to the existing assessment base and offset some of the costs associated with growth, the Township will need to review the lifecycle costs of growth-related infrastructure.

DRAFT

13 Financial Strategy

13.1 Key Insights

- The Township is committing approximately $2,830,618 towards capital projects per year from sustainable revenue sources
- Given the annual capital requirement of $2,997,477, there is currently a funding gap of $166,860 annually
- For tax-funded assets, we recommend reallocating asset categories that are in surplus to categories in deficit
- For the water network, we recommend increasing rate revenues by 0.4% annually for the next 5 years to achieve a sustainable level of funding
- For the sanitary network, we recommend continuing to monitor the customer connections and system use to ensure revenues are reaching the forecasted values during the 10 year implementation period

13.2 Financial Strategy Overview

For an asset management plan to be effective and meaningful, it must be integrated with financial planning and long-term budgeting. The development of a comprehensive financial plan will allow the Township of Southwold to identify the financial resources required for sustainable asset management based on existing asset inventories, desired levels of service, and projected growth requirements.

This report develops such a financial plan by presenting several scenarios for consideration and culminating with final recommendations. As outlined below, the scenarios presented model different combinations of the following components:

1. The financial requirements for:
    a. Existing assets
    b. Existing service levels
    c. Requirements of contemplated changes in service levels (none identified for this plan)
    d. Requirements of anticipated growth (none identified for this plan)
2. Use of traditional sources of municipal funds:
    a. Tax levies
    b. User fees
    c. Reserves
    d. Debt

DRAFT

3. Use of non-traditional sources of municipal funds:
    a. Reallocated budgets
    b. Partnerships
    c. Procurement methods
4. Use of Senior Government Funds:
    a. Canada Community Building Fund (CCBF)
    b. Annual grants

Note: Periodic grants are normally not included due to Provincial requirements for firm commitments. However, if moving a specific project forward is wholly dependent on receiving a one-time grant, the replacement cost included in the financial strategy is the net of such grant being received.

If the financial plan component results in a funding shortfall, the Province requires the inclusion of a specific plan as to how the impact of the shortfall will be managed. In determining the legitimacy of a funding shortfall, the Province may evaluate a Township's approach to the following:

1. To reduce financial requirements, consideration has been given to revising service levels downward.
2. All asset management and financial strategies have been considered. For example:
    a. If a zero-debt policy is in place, is it warranted? If not, the use of debt should be considered.
    b. Do user fees reflect the cost of the applicable service? If not, increased user fees should be considered.

13.3 Annual Requirements & Capital Funding

13.3.1 Annual Requirements

The annual requirements represent the amount the Township should allocate annually to each asset category to meet replacement needs as they arise, prevent infrastructure backlogs, and achieve long-term sustainability. In total, the Township allocation is approximately $3 million annually.

For most asset categories the annual requirement has been calculated based on a "replacement only" scenario, in which capital costs are only incurred at the construction and replacement of each asset. However, for the road network, lifecycle management strategies have been developed to identify capital costs that are realized through strategic rehabilitation and renewal.

DRAFT

- **Replacement Only Scenario**: Based on the assumption that assets deteriorate and – without regularly scheduled maintenance and rehabilitation – are replaced at the end of their service life.
- **Lifecycle Strategy Scenario**: Based on the assumption that lifecycle activities are performed at strategic intervals to extend the service life of assets until replacement is required.

The development of these strategies allows for a comparison of potential cost avoidance if the strategies were to be implemented. The following table compares two scenarios for the road network:

Asset Category	Annual Requirements (Replacement Only)	Annual Requirements (Lifecycle Strategy)
Road Network	$1,713,787	$1,207,818

The implementation of a proactive lifecycle strategy for roads leads to a potential annual cost avoidance of approximately $505,970 for the road network. This represents an overall reduction of the annual requirements by 30%. As the lifecycle strategy scenario represents the lowest cost option available to the Township, we have used this annual requirement in the development of the financial strategy.

13.3.2 Annual Funding Available

Based on a historical analysis of sustainable capital funding sources, the Township is committing approximately $2,830,618 towards capital projects per year from sustainable revenue sources. Given the annual capital requirement of $2,997,477, there is currently a funding gap of $166,860 annually.

13.4 Funding Objective

A scenario has been developed that would enable Southwold to achieve full funding within 1 to 20 years for the following assets:

1. **Tax Funded Assets:** Road Network, Bridges & Culverts, Stormwater Network, Buildings, Waste Management, Machinery & Equipment, & Vehicles
2. **Rate Funded Assets:** Water Network, & Sanitary Network

For each scenario developed we have included strategies, where applicable, regarding the use of cost containment and funding opportunities.

DRAFT

13.5 Financial Profile: Tax Funded Assets

13.5.1 Current Funding Position

The following tables show, by asset category, the Township's average annual asset investment requirements, current funding positions, and funding increases required to achieve full funding on assets funded by taxes.

Asset Category	Avg. Annual Requirement	Annual Funding Available					Annual Deficit/ Surplus
		Taxes	CCBF	OCIF	Green Lane	Total	
Road Network	1,200,000	870k	140k	273k		1283k	-82,824
Bridges & Culverts	147,000	100k				100k	47,000
Buildings	147,000	260k				260k	-113,000
Land Improvements	27,000				158k	158k	-131,142
Machinery & Equipment	237,000	115k			225k	340k	-103,000
Vehicles	450,000	75k				75k	375,000
	2.208m	**1.03m**	**334k**	**101k**		**2.216m**	**-7,966**

Tax funded infrastructure categories are currently funded at 100% of their long-term requirements.

13.5.2 Full Funding Requirements

In 2022, Township of Southwold will have an annual tax revenue of 4,454,788 and for capital replacement like for like tax funded infrastructure categories are currently funded at 100% of their long-term requirements.

13.5.3 Financial Strategy Recommendations

Considering all the above information, we recommend prioritizing future projects to fit within the funding envelop and replacing the current data with condition-based data. Although our recommendations include no further use of debt, the results of the condition-based analysis may require otherwise.

DRAFT

13.6 Financial Profile: Rate Funded Assets

13.6.1 Current Funding Position

The following tables show, by asset category, the Township's average annual asset investment requirements, current funding positions, and funding increases required to achieve full funding on assets funded by taxes.

Asset Category	Avg. Annual Requirement	Annual Funding Available				Annual Deficit
		Rates	CCBF	OCIF	Total	
Water Network	645,773	614,715	0	0	614,715	31,058
Sanitary Network	135,802	0	0	0	0	135,802
	781,575	**614,715**	**0**	**0**	**614,715**	**166,860**

The average annual investment requirement for the above categories is $781,575. Currently with the funds allocated to the Water Network the asset category is 95% funded and with the fund allocated to the sanitary network the asset category is 0% funded.

13.6.2 Full Funding Requirements

In 2022, Township of Southwold has annual water network revenues of $1.7 million. Without consideration of any other sources of revenue or cost containment strategies, full funding would require a 1.8% rate change over time.

In the following table, we have expanded the above scenario to present multiple options. Due to the small increase required we commend a 5-year phase in.

Water Network				
	5 Years	**10 Years**	**15 Years**	**20 Years**
Infrastructure Deficit	31,058	31,058	31,058	31,058
Rate Revenue Increase Required	1.8%	1.8%	1.8%	1.8%
Annually	**0.4%**	**0.2%**	**0.1%**	**0.1%**

In 2022, the Township has annual sanitary network revenues of $94,000. The system is very new and currently with the number of customer connections an operating funding shortfall is currently compounding. However, when the current rates were designed the number of customer connections and system use is forecasted to reach full funding by 2031. Current connection numbers are 92 in 2022, 222 in 2023 and expected to reach 902 by 2031.

DRAFT

13.6.3 Financial Strategy Recommendations

Considering the above information, we recommend the 5-year option for the water network & monitoring the connections are aligning with the forecasted numbers in the sanitary network over the next 10 years.

This involves full capital funding being achieved over 10 years by:

a) increasing rate revenues by 0.4% for the water network each year for the next 5 years.
b) the rate revenues increasing for the sanitary network through additional connections each year for the next 10 years.
c) these rate revenue increases are solely for the purpose of phasing in full funding to the respective rate funded asset categories.
d) increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in.

Notes:

1. As in the past, periodic senior government infrastructure funding will most likely be available during the phase-in period. This periodic funding should not be incorporated into an AMP unless there are firm commitments in place.
2. Any increase in rates required for operations would be in addition to the above recommendations.

Although this strategy achieves full capital funding for rate-funded assets over 10 years, the recommendation does require prioritizing capital projects to fit the annual funding available.

Prioritizing future projects will require the current data to be replaced by condition-based data. The recommendations include no further use of debt, the results of the condition-based analysis may require otherwise.

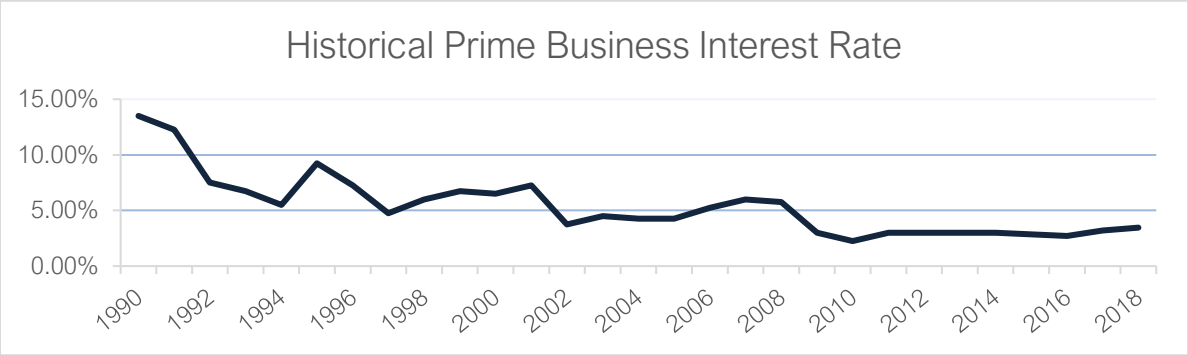
DRAFT

13.7 Use of Debt

For reference purposes, the following table outlines the premium paid on a project if financed by debt. For example, a $1M project financed at 3.0%[1] over 15 years would result in a 26% premium or $260,000 of increased costs due to interest payments. For simplicity, the table does not consider the time value of money or the effect of inflation on delayed projects.

Interest Rate	Number of Years Financed					
	5	10	15	20	25	30
7.0%	22%	42%	65%	89%	115%	142%
6.5%	20%	39%	60%	82%	105%	130%
6.0%	19%	36%	54%	74%	96%	118%
5.5%	17%	33%	49%	67%	86%	106%
5.0%	15%	30%	45%	60%	77%	95%
4.5%	14%	26%	40%	54%	69%	84%
4.0%	12%	23%	35%	47%	60%	73%
3.5%	11%	20%	30%	41%	52%	63%
3.0%	9%	17%	26%	34%	44%	53%
2.5%	8%	14%	21%	28%	36%	43%
2.0%	6%	11%	17%	22%	28%	34%
1.5%	5%	8%	12%	16%	21%	25%
1.0%	3%	6%	8%	11%	14%	16%
0.5%	2%	3%	4%	5%	7%	8%
0.0%	0%	0%	0%	0%	0%	0%

It should be noted that current interest rates are near all-time lows. Sustainable funding models that include debt need to incorporate the risk of rising interest rates. The following graph shows where historical lending rates have been:



[1] Current municipal Infrastructure Ontario rates for 15-year money is 3.2%.

A change in 15-year rates from 3% to 6% would change the premium from 26% to 54%. Such a change would have a significant impact on a financial plan.

The following tables outline how Southwold has historically used debt for investing in the asset categories as listed.

Asset Category	Current Debt Outstanding	Use of Debt in the Last Five Years				
		2017	2018	2019	2020	2021
Buildings	60,000	-	100,000	-	-	-
Sanitary Network	1,655,354	-	-	-	-	-
Total	**1,715,354**	-	-	-	-	-

Asset Category	Principal & Interest Payments in the Next Ten Years						
	2021	2022	2023	2024	2025	2026	2031
Buildings	10,000	10,000	10,000	10,000	10,000	10,000	-
Sanitary Network	130,530	130,530	130,530	130,530	130,530	130,530	130,530
Total	140,530	140,530	140,530	140,530	140,530	140,530	130,530

The revenue options outlined in this plan allows Southwold to fully fund its long-term infrastructure requirements without further use of debt.

13.8 Use of Reserves

13.8.1 Available Reserves

Reserves play a critical role in long-term financial planning. The benefits of having reserves available for infrastructure planning include:

- the ability to stabilize tax rates when dealing with variable and sometimes uncontrollable factors
- financing one-time or short-term investments
- accumulating the funding for significant future infrastructure investments
- managing the use of debt
- normalizing infrastructure funding requirements

DRAFT

The table below outlines the details of the reserves currently available to Township's asset categories.

Asset Category	Balance on December 31, 2021
GG - Building Renewal	$53,110
Fire - Apparatus	$760,572
Fire - Building Renewal	$371,925
Fire - Major Equipment	$64,177
Roads - Building Renewal	$412,098
Roads - Road Construction	$1,120,679
Roads - Bridges & Culvert	$576,764
Roads - Sidewalks	$90,000
Roads - Street Lights	$130,685
Health - Building Renewal	$114,902
Parks - Equipment	$4,362
Keystone - Building Renew	$99,409
Library - Building Renewal	$103,750
Total Tax Funded:	**$3,902,433**

There is considerable debate in the municipal sector as to the appropriate level of reserves that a Township should have on hand. There is no clear guideline that has gained wide acceptance. Factors that municipalities should consider when determining their capital reserve requirements include:

- breadth of services provided
- age and condition of infrastructure
- use and level of debt
- economic conditions and outlook
- internal reserve and debt policies.

These reserves are available for use by applicable asset categories during the phase-in period to full funding. This coupled with Southwold' judicious use of debt in the past, allows the scenarios to assume that, if required, available reserves and debt capacity can be used for high priority and emergency infrastructure investments in the short- to medium-term.

13.9 Recommendation

In 2024, Ontario Regulation 588/17 will require Southwold to integrate proposed levels of service for all asset categories in its asset management plan update. We recommend that future planning should reflect adjustments to service levels and their impacts on reserve balances.

DRAFT

14 Appendices

14.1 Key Insights

- Appendix A includes a one-page report card with an overview of key data from each asset category
- Appendix B identifies projected 10-year capital requirements for each asset category
- Appendix C includes several maps that have been used to visualize the current level of service
- Appendix D identifies the criteria used to calculate risk for each asset category
- Appendix E provides additional guidance on the development of a condition assessment program

DRAFT

Appendix A: Infrastructure Report Card

Asset Category	Replacement Cost	Asset Condition	Financial Capacity	
Road Network	$34,009,427	Fair (56%)	Annual Requirement:	$1,207,818
			Funding Available:	$1,282,824
			Annual Deficit:	($181,181)
Bridges & Culverts	$7,329,427	Good (71%)	Annual Requirement:	$146,589
			Funding Available:	$100,000
			Annual Deficit:	$46,589
Buildings	$7,013,262	Good (77%)	Annual Requirement:	$147,138
			Funding Available:	$260,000
			Annual Deficit:	($112,862)
Land Improvements	$353,727	Fair (48%)	Annual Requirement:	$27,467
			Funding Available:	$158,142
			Annual Deficit:	($130,675)
Vehicles	$5,893,394	Fair (46%)	Annual Requirement:	$450,050
			Funding Available:	$340,000
			Annual Deficit:	$110,050
Machinery & Equipment	$2,430,527	Fair (57%)	Annual Requirement:	$236,841
			Funding Available:	$75,000
			Annual Deficit:	$77,550
Water Network	$46,962,608	Very Good (96%)	Annual Requirement:	$645,773
			Funding Available:	$614,715
			Annual Deficit:	$31,058
Sanitary Network	$8,442,970	Very Good (99%)	Annual Requirement:	$134,350
			Funding Available:	$0
			Annual Deficit:	$134,350
Overall	$112,435,342	Good (78%)	Annual Requirement:	$2,996,026
			Funding Available:	$2,830,681
			Annual Deficit:	$165,345

DRAFT

Appendix B: 10-Year Capital Requirements

The following tables identify the capital cost requirements for each of the next 10 years to meet projected capital requirements and maintain the current level of service.

Category	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Road Network	$926,940	$1,274,308	$1,314,120	$3,767,658	$1,724,600	$69,920	$937,600	$98,400	$1,187,233	$1,378,440
Bridges & Culverts	$-	$210,649	$4,090,639	$90,181	$-	$434,649	$-	$-	$-	$22,482
Water Network	$-	$153,895	$562,531	$18,383	$16,510	$-	$15,589	$184,911	$1,044,154	$4,393
Buildings	$130,368	$75,798	$22,725	$38,319	$41,947	$8,957	$128,032	$19,190	$28,370	$33,562
Sanitary Network	$-	$-	$-	$-	$-	$-	$-	$-	$-	$9,698
Stormwater Network	$-	$-	$-	$-	$-	$-	$-	$-	$-	$-
Machinery & Equipment	$17,422	$352,318	$42,740	$-	$33,563	$48,881	$122,697	$88,771	$27,874	$81,325
Vehicles	$-	$38,445	$121,063	$410,183	$-	$174,514	$161,406	$-	$218,742	$-
Waste Management	$-	$217,132	$217,132	$217,132	$217,132	$217,132	$217,132	$217,132	$217,132	$217,132
Total	**$1,074,730**	**$2,322,545**	**$6,370,950**	**$4,541,856**	**$2,033,752**	**$954,053**	**$1,582,456**	**$608,404**	**$2,723,505**	**$1,747,032**

Road Network

Segment	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Asphalt	$436k	$868k	$318k	$836k	$1.6m	$56k	$554k	$0	$35k	$60k
Curb & Gutter	$0	$0	$0	$0	$0	$0	$0	$0	$245k	$0
Gravel	$389k	$349k	$483k	$329k	$0	$0	$0	$92k	$524k	$970k
Sidewalks	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Streetlights	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Tar & Chip	$102k	$58k	$513k	$2.6m	$170k	$14k	$384k	$6k	$384k	$348k
Total:	**$927k**	**$1.3m**	**$1.3m**	**$3.8m**	**$1.7m**	**$70k**	**$938k**	**$98k**	**$1.2m**	**$1.4m**

DRAFT

Bridges & Culverts

Segment	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Culverts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Bridges	$0	$211k	$4.1m	$90k	$0	$435k	$0	$0	$0	$22k
Total:	**$0**	**$211k**	**$4.1m**	**$90k**	**$0**	**$435k**	**$0**	**$0**	**$0**	**$22k**

Stormwater Network

Segment	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Catchbasins	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Storm Mains	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Storm Manholes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total:	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Buildings

Segment	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Admin	$0	$7k	$7k	$0	$0	$2k	$0	$0	$8k	$0
Fire	$0	$24k	$0	$0	$0	$0	$28k	$0	$0	$20k
Health	$0	$23k	$0	$38k	$5k	$0	$0	$0	$0	$6k
Public Works	$0	$3k	$0	$0	$0	$0	$31k	$0	$0	$0
Recreation	$130k	$19k	$15k	$0	$36k	$7k	$69k	$19k	$20k	$7k
Total:	**$130k**	**$76k**	**$23k**	**$38k**	**$42k**	**$9k**	**$128k**	**$19k**	**$28k**	**$34k**

Waste Management

Segment	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Landfill	$0	$217k	$217k	$217k	$217k	$217k	$217k	$217k	$217k	$217k
Total:	**$0**	**$217k**	**$217k**	**$217k**	**$217k**	**$217k**	**$217k**	**$217k**	**$217k**	**$217k**

DRAFT

Machinery & Equipment										
Segment	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
Fire	$0	$0	$0	$0	$0	$0	$18k	$89k	$0	$0
IT	$0	$0	$0	$0	$9k	$49k	$0	$0	$0	$9k
Public Works	$0	$343k	$0	$0	$0	$0	$0	$0	$0	$72k
Recreation	$17k	$9k	$43k	$0	$25k	$0	$104k	$0	$28k	$0
Total:	**$17k**	**$352k**	**$43k**	**$0**	**$34k**	**$49k**	**$123k**	**$89k**	**$28k**	**$81k**

Vehicles										
Segment	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
Buildings	$0	$0	$0	$0	$0	$35k	$0	$0	$0	$0
Fire	$0	$0	$121k	$130k	$0	$0	$123k	$0	$92k	$0
Public Works	$0	$38k	$0	$280k	$0	$140k	$38k	$0	$126k	$0
Total:	**$0**	**$38k**	**$121k**	**$410k**	**$0**	**$175k**	**$161k**	**$0**	**$219k**	**$0**

Water Network										
Segment	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
Fire Water Supply Line	$0	$0	$0	$0	$0	$0	$0	$0	$1.0m	$0
Small Water Systems	$0	$0	$0	$9k	$0	$0	$0	$0	$0	$0
Treatment Plant	$0	$154k	$391k	$10k	$17k	$0	$16k	$145k	$19k	$4k
Water Mains	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water Storage Tank	$0	$0	$171k	$0	$0	$0	$0	$39k	$0	$0
Total:	**$0**	**$154k**	**$563k**	**$18k**	**$17k**	**$0**	**$16k**	**$185k**	**$1.0m**	**$4k**

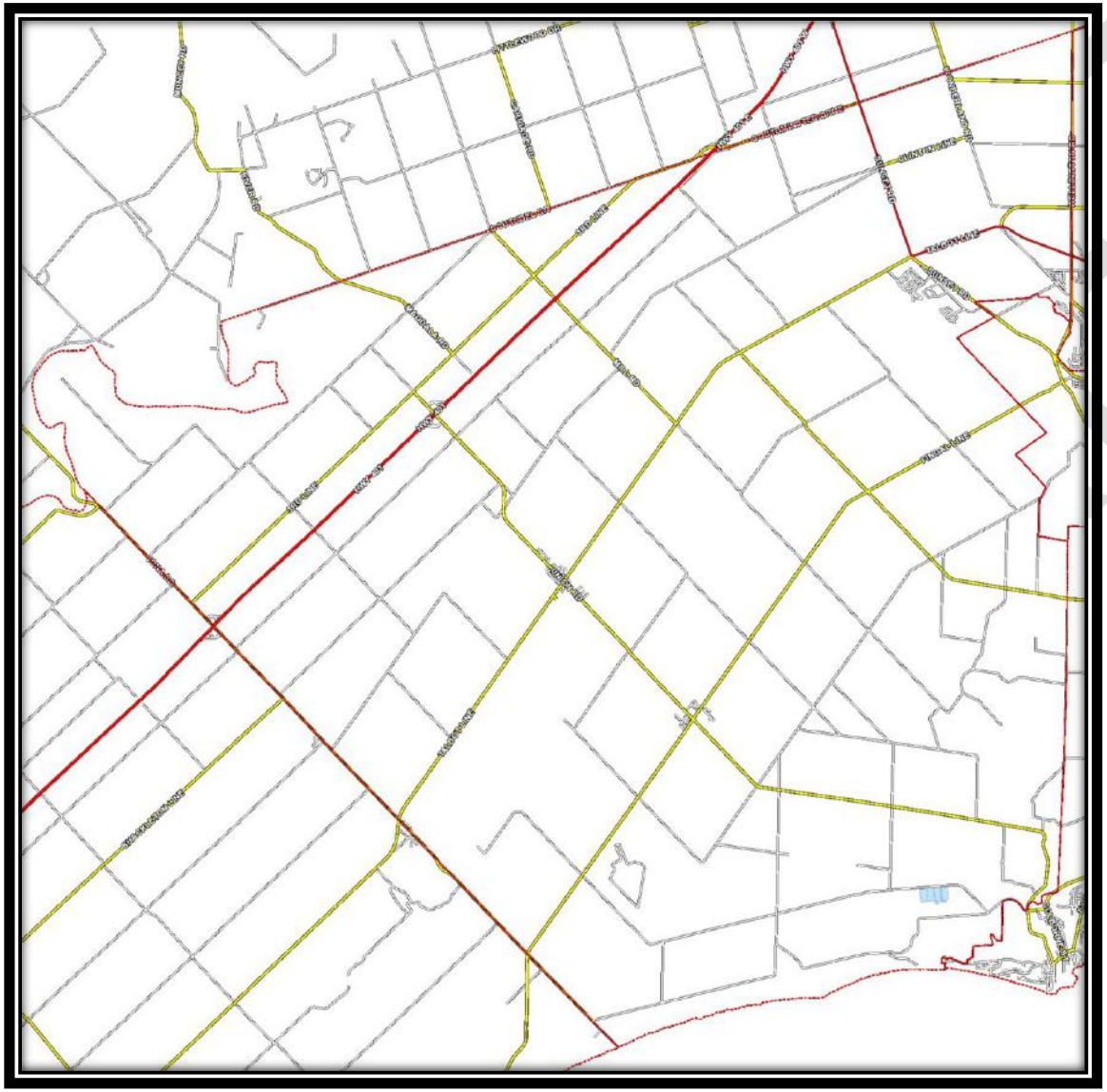
DRAFT

Sanitary Network										
Segment	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
Forcemain	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Lagoons	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sanitary Mains	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sanitary Manholes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Wastewater Pumping Station	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10k
Total:	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$10k**

DRAFT

Appendix C: Level of Service Maps

Road Network Map

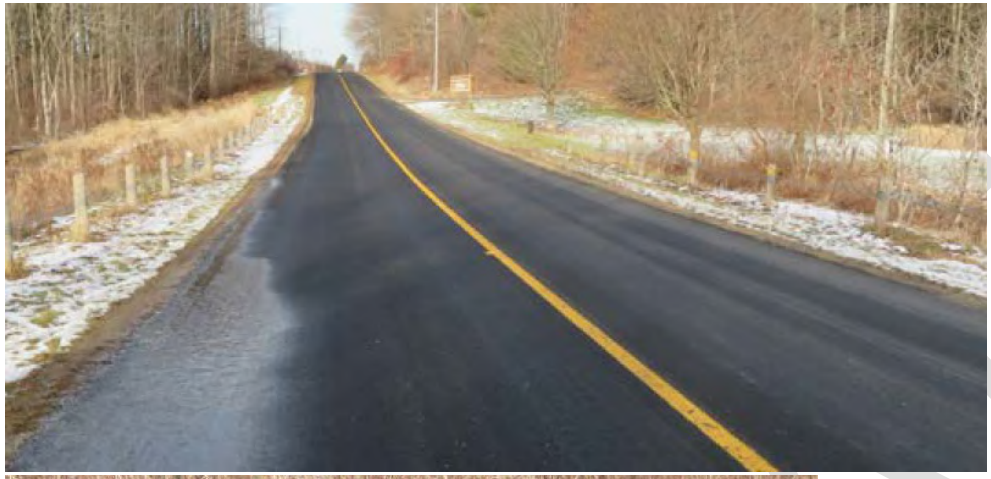


Images of Bridge in Good Condition

DRAFT

Images of Bridge in Poor Condition

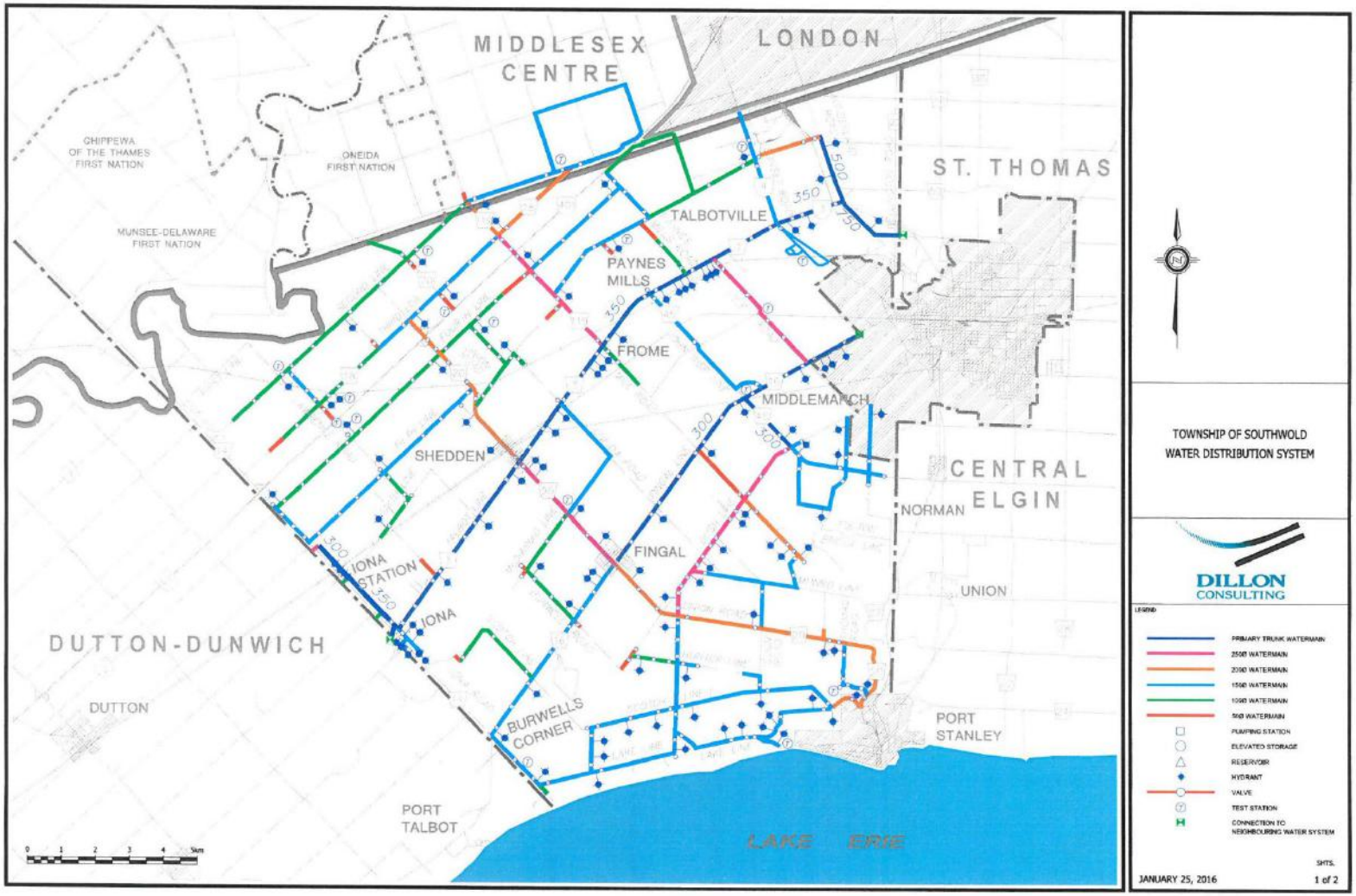
Images of Culvert in Good Condition

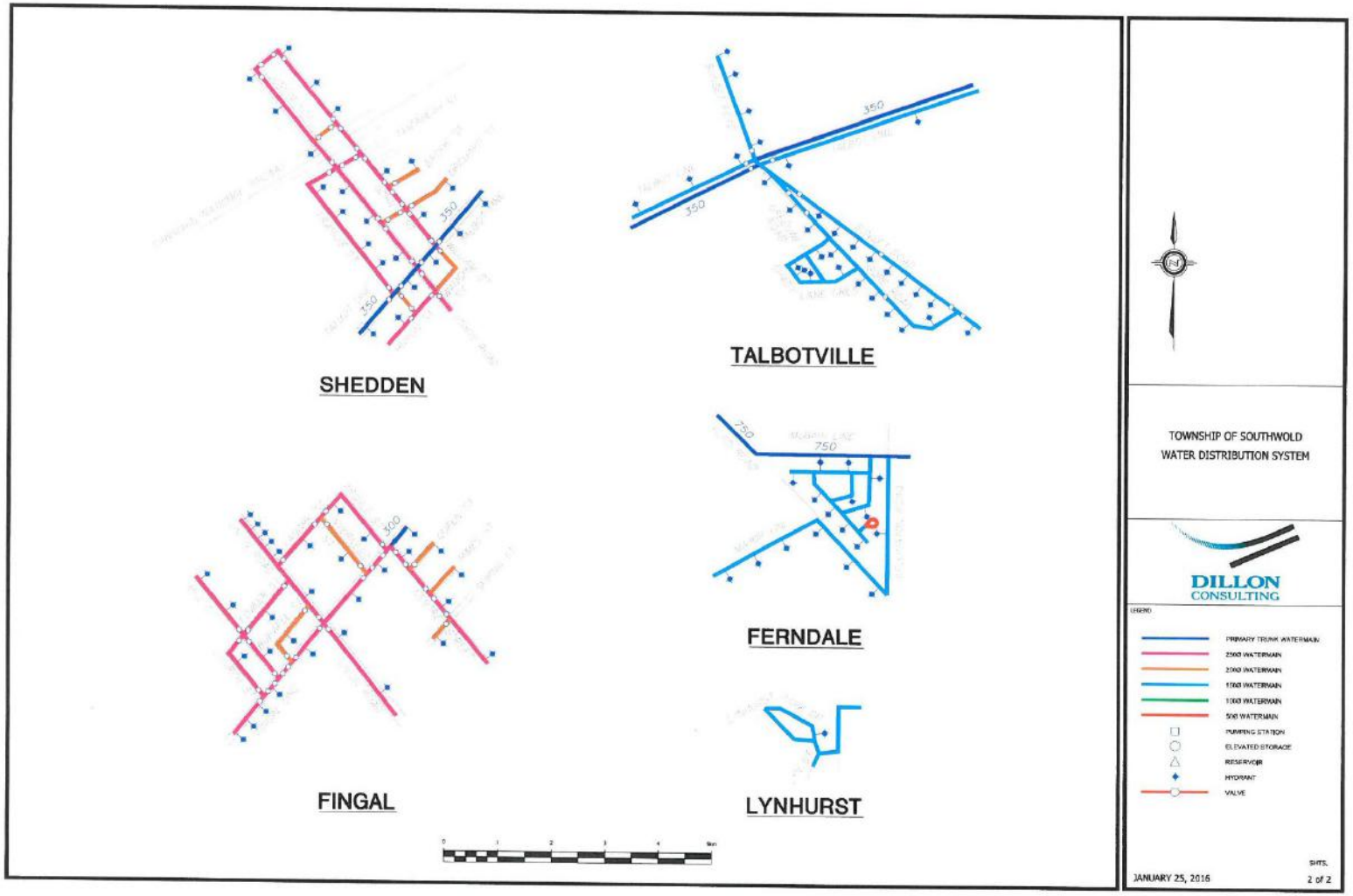


DRAFT

Images of Culvert in Fair Condition

Water System Network Maps




SHEDDEN
TALBOTVILLE
FERNDALE
FINGAL
LYNHURST
TOWNSHIP OF SOUTHWOLD
WATER DISTRIBUTION SYSTEM
DILLON
CONSULTING
LEGEND
PRIMARY TRUNK WATERMAIN
PUMPING STATION
ELEVATED STORAGE
RESERVOIR
HYDRANT
VALVE
JANUARY 25, 2016
SHTS.
2 of 2

Sanitary System Network Maps

Ferndale / Lynhurst

Talbotville

DRAFT

Appendix D: Risk Rating Criteria

Asset Category	Asset Segment	Risk Criteria	Criteria	Weighting (%)	Sub-Criteria	Weighting (%)	Value/Range	Score
General / Corporate		COF	Economic	100%	Replacement Cost	100%	0 - 5,000 5,000 - 20,000 20,000 - 50,000 50,000 - 100,000 >100,000	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
		POF	Structural	60%	Age Based Condition	100%	80 - 100 60 - 79 40 - 59 20 - 39 0 - 19	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain
			Functional	40%	Service Life Remaining	100%	> 40 20 - 30 10 - 20 1 - 10 < 1	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain

DRAFT

Asset Category	Asset Segment	Risk Criteria	Criteria	Weighting (%)	Sub-Criteria	Weighting (%)	Value/Range	Score
Bridges & Culverts	Bridges	COF	Economic	100%	Replacement Cost	100%	0 - 5,000 5,000 - 20,000 20,000 - 50,000 50,000 - 100,000 >100,000	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
		POF	Structural	60%	Assessed Condition	100%	80 - 100 60 - 79 40 - 59 20 - 39 0 - 19	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain
			Functional	40%	Service Life Remaining	100%	> 40 20 - 30 10 - 20 1 - 10 < 1	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain
	Culverts	COF	Economic	50%	Replacement Cost	100%	0 - 5,000 5,000 - 20,000 20,000 - 50,000 50,000 - 100,000 >100,000	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
			Operational	50%	Surface Type	50%	Gravel Tar & Chip Asphalt	2 - Minor 3 - Moderate 4 - Major
					Diameter	50%	<3m >3M and equal to	2 - Minor 4 - Major
		POF	Structural	60%	Condition	100%	80 - 100 60 - 79 40 - 59 20 - 39 0 - 19	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain
			Functional	40%	Service Life Remaining	100%	> 40 20 - 30 10 - 20 1 - 10 < 1	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain

DRAFT

Asset Category	Asset Segment	Risk Criteria	Criteria	Weighting (%)	Sub-Criteria	Weighting (%)	Value/Range	Score
Road Network	Roads	COF	Economic	50%	Replacement Cost	100%	0 - 5,000 5,000 - 20,000 20,000 - 50,000 50,000 - 100,000 >100,000	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
			Operational	50%	Surface Type	100%	Gravel Surface Treatment Asphalt	2 - Minor 3 - Moderate 4 - Major
		POF	Structural	60%	Assessed Condition	100%	80 - 100 60 - 79 40 - 59 20 - 39 0 - 19	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain
			Functional	40%	Service Life Remaining	100%	> 40 20 - 30 10 - 20 1 - 10 < 1	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain

DRAFT

Asset Category	Asset Segment	Risk Criteria	Criteria	Weighting (%)	Sub-Criteria	Weighting (%)	Value/Range	Score
Stormwater Network	Catchbasin / Manholes	COF	Economic	70%	Replacement Cost	100%	0 - 5,000 5,000 - 20,000 20,000 - 50,000 50,000 - 100,000 >100,000	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
			Operational	30%	Surface Type	100%	Gravel Tar & Chip Asphalt	2 – Minor 3 – Moderate 4 – Major
		POF	Structural	60%	Assessed Condition	100%	80 - 100 60 - 79 40 - 59 20 - 39 0 - 19	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain
			Functional	40%	Service Life Remaining	100%	> 40 20 - 30 10 - 20 1 - 10 < 1	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain

DRAFT

Asset Category	Asset Segment	Risk Criteria	Criteria	Weighting (%)	Sub-Criteria	Weighting (%)	Value/Range	Score
Stormwater Network Continued	Storm Mains	COF	Economic	50%	Replacement Cost	100%	0 - 5,000 5,000 - 20,000 20,000 - 50,000 50,000 - 100,000 >100,000	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
			Operational	50%	Surface Type	50%	Gravel Tar & Chip Asphalt	2 – Minor 3 – Moderate 4 – Major
					Diameter	50%	200 250 375 & 400 >450 & < 700 >700	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
		POF	Structural	60%	Assessed Condition	100%	80 - 100 60 - 79 40 - 59 20 - 39 0 - 19	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain
			Functional	40%	Service Life Remaining	100%	> 40 20 - 30 10 - 20 1 - 10 < 1	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain

DRAFT

Asset Category	Asset Segment	Risk Criteria	Criteria	Weighting (%)	Sub-Criteria	Weighting (%)	Value/Range	Score
Sanitary Network	Sanitary Mains	COF	Economic	50%	Replacement Cost	100%	0 - 5,000 5,000 - 20,000 20,000 - 50,000 50,000 - 100,000 >100,000	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
			Operational	50%	Surface Type	50%	Gravel Tar & Chip Asphalt	2 – Minor 3 – Moderate 4 – Major
					Diameter	50%	200 250 375 & 400 >450 & < 700 >700	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
		POF	Structural	60%	Assessed Condition	100%	80 - 100 60 - 79 40 - 59 20 - 39 0 - 19	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain
			Functional	40%	Service Life Remaining	100%	> 40 20 - 30 10 - 20 1 - 10 < 1	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain

DRAFT

Asset Category	Asset Segment	Risk Criteria	Criteria	Weighting (%)	Sub-Criteria	Weighting (%)	Value/Range	Score
Sanitary Network Continued	Rest of the System	COF	Economic	70%	Replacement Cost	100%	0 - 5,000 5,000 - 20,000 20,000 - 50,000 50,000 - 100,000 >100,000	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
			Operational	30%	System Segments	100%	Manholes Lagoon, Mains & Forcemains Pumping Stations	2 - Minor 4 - Major 5 - Severe
		POF	Structural	60%	Assessed Condition	100%	80 - 100 60 - 79 40 - 59 20 - 39 0 - 19	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain
			Functional	40%	Service Life Remaining	100%	> 40 20 - 30 10 - 20 1 - 10 < 1	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain

DRAFT

Asset Category	Asset Segment	Risk Criteria	Criteria	Weighting (%)	Sub-Criteria	Weighting (%)	Value/Range	Score
Water Network	Water Mains / Water Services	COF	Economic	70%	Replacement Cost	100%	0 - 5,000 5,000 - 20,000 20,000 - 50,000 50,000 - 100,000 >100,000	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
			Operational	30%	Diameter	50%	> 100 100 - 150 150 - 300 300 - 400 > 400	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
		POF	Structural	60%	Assessed Condition	100%	80 - 100 60 - 79 40 - 59 20 - 39 0 - 19	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain
			Functional	40%	Service Life Remaining	100%	> 40 20 - 30 10 - 20 1 - 10 < 1	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain

DRAFT

Asset Category	Asset Segment	Risk Criteria	Criteria	Weighting (%)	Sub-Criteria	Weighting (%)	Value/Range	Score
Water Network Continued	Rest of the System	COF	Economic	70%	Replacement Cost	100%	0 - 5,000 5,000 - 20,000 20,000 - 50,000 50,000 - 100,000 >100,000	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
			Operational	30%	System Segments	100%	Services Small Water Systems Webbwood Fire Sup. Storage & Mains Treatment Plant	1 - Insignificant 2 - Minor 3 - Moderate 4 - Major 5 - Severe
		POF	Structural	60%	Assessed Condition	100%	80 - 100 60 - 79 40 - 59 20 - 39 0 - 19	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain
			Functional	40%	Service Life Remaining	100%	> 40 20 - 30 10 - 20 1 - 10 < 1	1 - Rare 2 - Unlikely 3 - Possible 4 - Likely 5 - Almost Certain

DRAFT

Appendix E: Condition Assessment Guidelines

The foundation of good asset management practice is accurate and reliable data on the current condition of infrastructure. Assessing the condition of an asset at a single point in time allows staff to have a better understanding of the probability of asset failure due to deteriorating condition.

Condition data is vital to the development of data-driven asset management strategies. Without accurate and reliable asset data, there may be little confidence in asset management decision-making which can lead to premature asset failure, service disruption and suboptimal investment strategies. To prevent these outcomes, the Township's condition assessment strategy should outline several key considerations, including:

- The role of asset condition data in decision-making
- Guidelines for the collection of asset condition data
- A schedule for how regularly asset condition data should be collected

Role of Asset Condition Data

The goal of collecting asset condition data is to ensure that data is available to inform maintenance and renewal programs required to meet the desired level of service. Accurate and reliable condition data allows municipal staff to determine the remaining service life of assets, and identify the most cost-effective approach to deterioration, whether it involves extending the life of the asset through remedial efforts or determining that replacement is required to avoid asset failure.

In addition to the optimization of lifecycle management strategies, asset condition data also impacts the Township's risk management and financial strategies. Assessed condition is a key variable in the determination of an asset's probability of failure. With a strong understanding of the probability of failure across the entire asset portfolio, the Township can develop strategies to mitigate both the probability and consequences of asset failure and service disruption. Furthermore, with condition-based determinations of future capital expenditures, the Township can develop long-term financial strategies with higher accuracy and reliability.

Guidelines for Condition Assessment

Whether completed by external consultants or internal staff, condition assessments should be completed in a structured and repeatable fashion, according to consistent and objective assessment criteria. Without proper guidelines for the completion of condition assessments there can be little confidence in the validity of condition data and asset management strategies based on this data.

Condition assessments must include a quantitative or qualitative assessment of the current condition of the asset, collected according to specified condition rating

DRAFT

criteria, in a format that can be used for asset management decision-making. As a result, it is important that staff adequately define the condition rating criteria that should be used and the assets that require a discrete condition rating. When engaging with external consultants to complete condition assessments, it is critical that these details are communicated as part of the contractual terms of the project. There are many options available to the Township to complete condition assessments. In some cases, external consultants may need to be engaged to complete detailed technical assessments of infrastructure. In other cases, internal staff may have sufficient expertise or training to complete condition assessments.

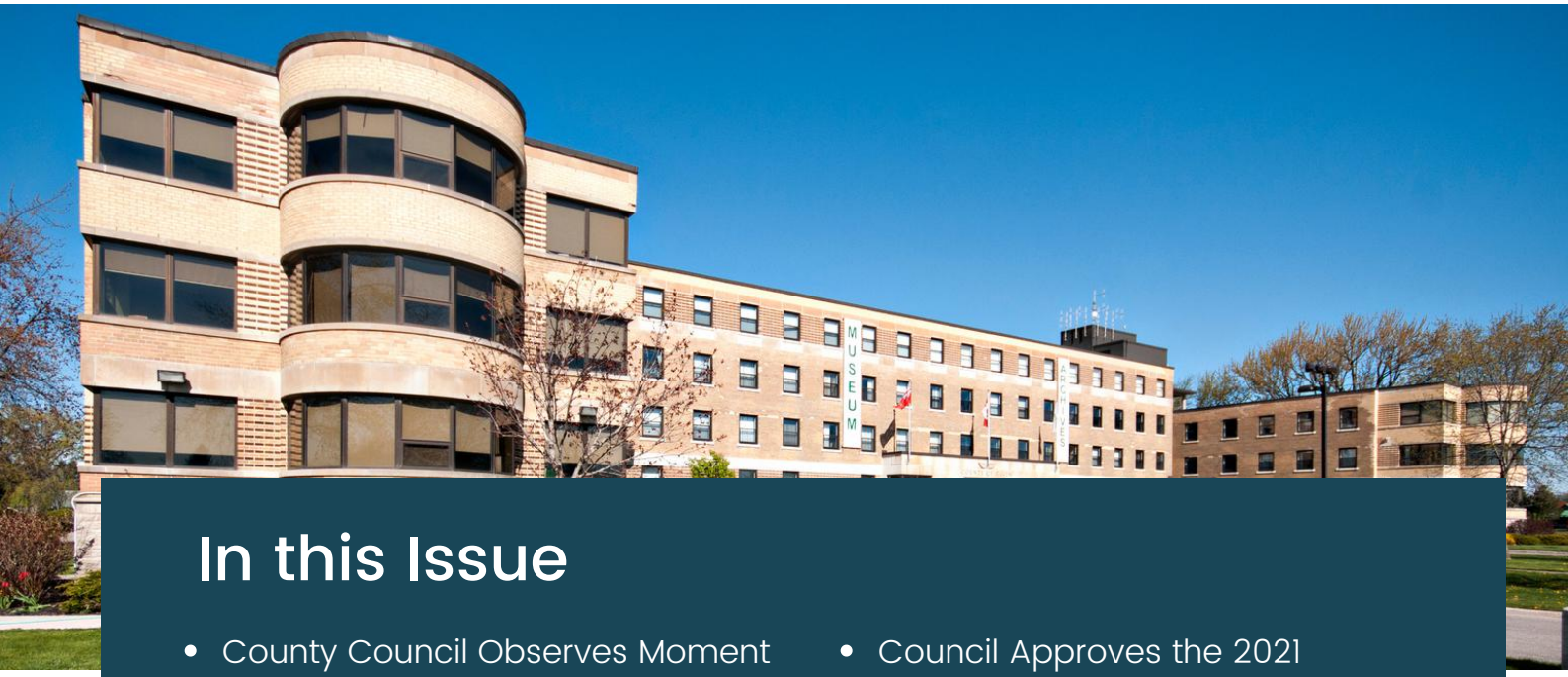
Developing a Condition Assessment Schedule

Condition assessments and general data collection can be both time-consuming and resource-intensive. It is not necessarily an effective strategy to collect assessed condition data across the entire asset inventory. Instead, the Township should prioritize the collection of assessed condition data based on the anticipated value of this data in decision-making. The International Infrastructure Management Manual (IIMM) identifies four key criteria to consider when making this determination:

1. **Relevance**: every data item must have a direct influence on the output that is required
2. **Appropriateness**: the volume of data and the frequency of updating should align with the stage in the assets life and the service being provided
3. **Reliability**: the data should be sufficiently accurate, have sufficient spatial coverage and be appropriately complete and current
4. **Affordability**: the data should be affordable to collect and maintain

DRAFT

Elgin County Council Highlights



In this Issue

- County Council Observes Moment of Silence in Honour of Queen Elizabeth II
- Council Celebrates BPSO Designation for Elgin County Homes
- Warden French Raises Flag in Honour of Childhood Cancer Awareness Month
- Council Reignites Elgin-St. Thomas Age Friendly Network
- Council Approves Revisions to Collection Development Policy for County Libraries
- Council Endorses Amendment to Township of Southwold Official Plan
- Council Approves the 2021 Financial Statements
- Council Grants Exemption to Draft Plan Approval for Plan of Condominium in Town of Aylmer
- Council Approves Extension of Reduced Speed Zone in Hamlet of Eden
- Proposed Redistribution of Federal Electoral Districts
- Council Awards Contract for Integrity Commissioner, Closed Meeting Investigator and Municipal Ombudsman
- Pilot Project for East Road

County Council Observes Moment of Silence in Honour of Queen Elizabeth II

At the beginning of their meeting, County Council observed a moment of silence to mourn and reflect on the life and legacy of Queen Elizabeth II, Britain's longest serving monarch. Residents are invited to sign a book of condolences in-person at the Elgin County Heritage Centre until after the Queen's funeral on Monday, September 19, 2022.

Council Celebrates Best Practice Spotlight Organization Designation for Elgin County Homes

Sue Sweeney, Registered Nurses' Association of Ontario Best Practice Spotlight Organization Coach presented Warden French and staff from each of the three (3) Elgin County Long-Term Care Homes with certificates to celebrate their Best Practice Spotlight Organization (BPSO) designation. The County of Elgin began the process in May of 2019, and staff worked through the pandemic and other challenges to receive BPSO designation status across all three (3) homes. The County of Elgin Homes implemented best practice guidelines in the following areas: Preventing Falls and Reducing Injury from Falls, Promoting Safety: Alternative to the Use of Restraints, and Assessment and Management of Pressure Injuries. More information can be found in the presentation included in the September 14, 2022 County Council Agenda Package.

Warden French Raises Flag in Honour of Childhood Cancer Awareness Month

On Wednesday, September 14, 2022, Warden Mary French proclaimed September as Childhood Cancer Awareness Month in the County of Elgin. Along with representatives from Childcan, Warden French raised the Childhood Cancer Awareness Flag to mark the occasion. By raising this flag, the County hopes to provide awareness about an organization that helps families and children faced with childhood cancer deal with the emotional and financial tolls associated with this disease.

"Elgin County is proud to raise the Child Cancer Awareness flag to demonstrate that we stand with the brave children battling cancer and the families that have not been so fortunate," said Warden Mary French. "It truly was a privilege to hear the stories shared today and draw attention to such an important topic within our community."

Council Reignites Elgin-St. Thomas Age Friendly Network

Elgin County Council supported re-engaging the Elgin-St. Thomas Age Friendly Network. The Network is a multi-stakeholder group that takes a leadership role in planning to respond to the growing needs of older adults in our communities. Re-engaging the Network will establish ongoing and productive partnerships between a network of individuals, groups, and organizations committed to planning and incorporating age-friendly principles within a community; encourage existing organizations to incorporate age-friendly activities into their core missions; produce evaluation and document findings on the benefits of age-friendly communities; and secure long-term sources of both non-financial and financial support. By working together with community members and service providers, the Network can ensure that everyone's future in St. Thomas and Elgin is friendly, safe, inclusive and supportive. To read more about the Elgin-St. Thomas Age Friendly Network, please view the staff report in the September 14, 2022 County Council Agenda Package.

Council Approves Revisions to Collection Development Policy for County Libraries

County Council approved revisions to the Elgin County Library Collection Development Policy. The policy is a critical tool in maintaining a healthy and diverse collection in all formats that respects diversity and upholds principles of intellectual freedom. The policy guides important matters such as purchasing decisions, requests from the public for new acquisitions, and decisions about when to discard materials. The revised policy can be found in the September 14, 2022 County Council Agenda Package.

Council Endorses Amendment to Township of Southwold Official Plan

County Council approved Official Plan Amendment No. 1 to the Township of Southwold Official Plan. The amendment redesignates approximately 10 ha (25 acres) of land at 4485 Thomas Road from "Residential" to "Agricultural Area", as well as 10 ha (25 acres) of the land at 4509 Union Road from "Agricultural Area" to "Residential". The amendment will impact the Township of Southwold and ensure that the Township has an adequate supply of 'shovel ready' residential land. More information can be found in the September 14, 2022 County Council Agenda Package.

Council Approves the 2021 Financial Statements

County Council approved the 2021 Financial Statements. The statements show a small surplus of $3M, some of which has been set aside to support future years. The Corporation of the County of Elgin Consolidated Financial Statements can be viewed in the September 14, 2022 County Council Agenda Package, as well as on the County website.

Council Grants Exemption to Draft Plan Approval for Plan of Condominium in Town of Aylmer

County Council granted an exemption to draft plan approval for Plan of Condominium on Part of Park Lot 6, Plan 145; Parts 1, 2 and Parts 7-10, 11R-8159, in the Town of Aylmer, County of Elgin (85 Forest Street, Aylmer), File No. 34CD-AY2201. The subject lands are located in the Town of Aylmer, which is designated Tier 1 Settlement Area on Schedule 'A' of the County of Elgin Official Plan. Tier 1 settlement areas are the primary focus areas for growth in the County OP, in part due to the level of services and infrastructure available. Policy E1.2 of the County OP states that County Council shall approval only those plans of condominium which comply with the provisions of the plan and applicable local official plan. The proposal conforms to the purpose and intent of the County OP and Town of Aylmer OP and has undergone a previous planning review as part of the site plan approval process in the Town of Aylmer.

Full details can be found in the September 14, 2022 County Council Agenda Package.

Council Approves Extension of Reduced Speed Zone in Hamlet of Eden

In response to a resident request, County Council approved an extension to the reduced speed zone along Plank Road (CR #19) in the Hamlet of Eden. Elgin County Engineering staff supported the extension of the reduced speed limit as additional residences are being constructed in that area. The existing 50km/h speed zone will be extended by 231 metres to the north and by 450 metres to the south to the Hamlet's limits along Plank Road.

Proposed Redistribution of Federal Electoral Districts

On August 19, 2022, the Federal Electoral Boundaries Commission for the Province of Ontario released its proposed new electoral map for consideration at public hearing this fall. County Council is committed to coordinating efforts with Local Municipal Partners and the City of St. Thomas to represent interests and concerns pertaining to the proposed federal electoral boundary districts. Council approved by resolution to develop a submission and make a presentation at the Federal Electoral Boundaries Commission for the Province of Ontario that emphasizes the necessity for the County of Elgin to remain contained and represented within one federal electoral district with the entirety of Elgin County and the City of St. Thomas. More information regarding the proposed redistribution of the federal electoral districts can be found in the September 14, 2022 County Council Agenda Package.

Council Awards Contract for Integrity Commissioner, Closed Meeting Investigator and Municipal Ombudsman

County Council awarded the contract for Integrity Commissioner, Closed Meeting Investigator and Municipal Ombudsman to Aird & Berlis LLP for a two-year term. The request for proposal was issued as a cooperative purchasing project that included the City of St. Thomas and all constituent municipalities, except the Town of Aylmer. More information can be found in the September 14, 2022 County Council Agenda Package.

Pilot Project for East Road

The General Manager of Engineering, Planning & Enterprise/Deputy CAO presented a report that provided three (3) different traffic calming options for East Road in Port Stanley. County Council directed staff to proceed with Option #1 – Reduced Lane Widths with Flexible Bollards with an estimated cost of $15,000 with all costs associated with installation, maintenance and removal to be funded by the Municipality of Central Elgin. The pilot project will be in place for one-year and staff will report to Council immediately after the project's completion. Full details of the project can be found in the Council Agenda Package.

For the complete September 14, 2022 County Council Agenda Package please visit the Elgin County website.

THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

BY- LAW NO. 2022-80

Being a by-law to appoint a Community Emergency Management Coordinator for the Township of Southwold pursuant to the standards under the Emergency Management & Civil Protection Act R.S.O., 1990, c. E 9, as amended and to repeal By-law No. 2021-21

WHEREAS subsection 3 (1) of the Emergency Management and Civil Protection Act, R.S.O.1990,c.E.9,asamended,requiresthedevelopmentandimplementationofan Emergency Management Program by Council;

AND WHEREAS the Municipality has passed By-law No. 2019-83 to Adopt an Emergency Management Program;

AND WHEREAS the Corporation of the Township of Southwold has passed By-law No. 2021-21 an Agreement with the County of Elgin for CEMC services.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD ENACTS AS FOLLOWS:

1. **THAT** Stephanie Cyros be appointed as Community Emergency Management Co-ordinator (CEMC), effective September 26, 2022; and

2. **THAT** any by-law(s) contravening this by-law shall be repealed.

READ A FIRST AND SECOND TIME, CONSIDERED READ A THIRD TIME, AND FINALLY PASSED THIS 26th DAY OF SEPTEMBER, 2022.

_____
Mayor
Grant Jones

_____
CAO/Clerk
Jeff Carswell

Kettle Creek
Conservation Authority

PROGRESS REPORT

OCTOBER 1, 2022

TRANSITION PLAN

- The Transition Plan was approved by KCCA's Board of Directors at the November 24, 2021 Full Authority meeting.
- The Transition plan was circulated to member municipalities on November 26, 2021.
- The Transition plan was circulated to the Minister on December 2, 2021.
- The Transition plan was posted to KCCA's website: https://www.kettlecreekconservation.on.ca/governance/

INVENTORY OF PROGRAMS AND SERVICES

- The draft Inventory of Programs and Services was approved for circulation to member municipalities for comment by KCCA's Board of Directors at the January 19, 2022 Full Authority meeting.
- The Inventory of Programs and Services was approved by KCCA's Board of Directors at the February 9, 2022 Full Authority meeting.
- The Inventory was circulated to member municipalities on February 16, 2022.
- The Inventory was circulated to the Minister on February 16, 2022.
- The Inventory was posted to KCCA's website: https://www.kettlecreekconservation.on.ca/governance/
- Based on feedback from MECP, minor edits were made to the Inventory of Programs and Services for the July 1, 2022 Progress Report.

CONSULTATION WITH MEMBER MUNICIPALITIES

- Staff provided a presentation to municipal staff from St. Thomas, Thames Centre, Malahide, Southwold and Central Elgin on January 11, 2022 to review the *Conservation Authorities Act* amendments and initial categorization of KCCA's programs and services.
- Feedback received to date on KCCA's Inventory of Programs and Services:
    - Middlesex Centre (January 26, 2022)
      No concerns. Observed a shift in funding allocation from provincial to municipal levy in category 1 programming relative to flood forecasting. Clarification was provided that this shift was a result of the provincial transfer payment being cut from $119,652 to $61,770 in 2019.
    - Central Elgin (January 31, 2022)
      No concerns with the categorization of KCCA programs and services.
    - Southwold (January 31, 2022)
      No concerns with the categorization of KCCA programs and services. Seeking consistency where possible amongst its CAs for MOU terms and fee structure. Interested in discussions on additional services KCCA could provide.
    - Malahide (February 3, 2022)
      No concerns with the categorization of KCCA programs and services. Suggested expanded detail to note where specific monitoring stations are located. Requested information was provided to the municipality.

- St. Thomas (February 3, 2022)
  No concerns with the categorization of KCCA programs and services. Staff indicated support for the two Category 3 programs requiring an agreement (tree planting and watershed monitoring).
- Thames Centre (February 3, 2022)
  No concerns with the categorization of KCCA programs and services.
- City of London (April 29, 2022)
  Clarification sought on costs for new mandatory programs/services, whether the costs provided reflect total gross costs or London's apportioned share, and if costs include depreciation.

- Staff distributed the July 1, 2022 Progress Report and the updated Inventory of Programs and Services to all member municipalities on June 23, 2022. No concerns or questions were submitted by member municipalities.

AGREEMENTS

- Staff are reviewing existing Category 2 agreements to determine if changes need to be made to meet the requirements of Ontario Regulation 687/21.
- The upcoming municipal election is stalling progress in the development of cost apportioning agreements/MOUs. Agreements/MOUs will be developed with new Councils and KCCA Board of Directors.

OTHER ACTIVITIES

- Attended Conservation Ontario sessions related to changes to the *Conservation Authorities Act* and Phase 1 and 2 regulations.
- Attended MECP sessions on the *Conservation Authorities Act* and the Inventory of Programs and Services.
- Meeting held with MECP staff on May 12, 2022 to solicit feedback on KCCA's Inventory of Programs and Services.
- Fee Policy and Fee Schedules approved at the May 18, 2022 KCCA Full Authority meeting as per requirements of the *Conservation Authorities Act*.
- KCCA's website updated to include Governance Section as per Phase 2 Regulations.
- Attended a Conservation Ontario session related to Conservation Areas Strategy and Lands Inventory on June 15, 2022.
- Land Acquisition and Disposition Policy approved at the August 18, 2022 KCCA Full Authority meeting as per requirements of *Conservation Authorities Act.*
- Development of orientation materials for member municipality Councils and KCCA's Board of Directors following the municipal election.

THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

BY- LAW NO. 2022-81

Being a by-law to confirm the resolutions and motions of the Council of the Township of Southwold, which were adopted on September 26, 2022.

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 hereby enacts as follows:

1. That the actions of the Council of the Township of Southwold at the Regular Meeting of Council held on September 12, 2022; 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 SEPTEMBER, 2022.

Mayor
Grant Jones

CAO/Clerk
Jeff Carswell

THE CORPORATION OF THE TOWNSHIP OF SOUTHWOLD

ADDENDUM TO AGENDA

Monday September 26, 2022

REGULAR MEETING OF COUNCIL

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

---

2. ADDENDUM TO AGENDA

Item Added:

9. CORRESPONDENCE:

(a) Optimist Club of Fingal-Shedden & District RE: Santa Claus Parade

Optimist Club of Fingal-Shedden & District
Annual Santa Claus Parade
PO Box 136
Shedden, On, N0L 2E0

Sept 25, 2022

Township of Southwold
35663 Fingal Line
Fingal, ON N0L 1K0

To Whom It May Concern:

I am writing on behalf of the **Optimist Club of Fingal-Shedden & District** to request permission of the Southwold Council to hold our annual Santa Claus Parade in the Village of Fingal on **Sunday, December 4th, 2022, beginning at 2:00 p.m.**

Our planned route begins with all floats and marching entries forming at the Southwold Township office parking lot and on the side of the road along Fingal Line at the west end of the village. The parade proceeds east on Fingal Line through the main village intersection at Union Road and turns north at Lanark Street to Fowler Street, west on Fowler Street and again crosses Union Road onto Church Street, and ends back at the Southwold Township office parking lot.

We will request assistance from the OPP Detachment to handle overall traffic and crowd control. Since the Optimist Club has their own traffic barricades, we will not need any from the township. With the help of our club members, we will be stopping traffic along Fingal Line at the east end of the village at Centre Street, at the west end of the village at Church Street, at the intersection of Union Road and Fingal Line, and at the intersection of Union Road and Lanark Street.

The total length of time that the roadways will be blocked to traffic will be from 2:00p.m. to approximately 3:00p.m.

Your permission to allow us to go ahead with the parade would be greatly appreciated.

Covid concerns
While most covid precautions are no longer required by law, we will continue to observe certain procedures to ensure public safety.

Spectators
All members of the public are now aware of covid protocols in their daily lives. Spectators will be reminded before and during the parade to maintain proper distances, and wear masks when contacting non-family members. The MC during the parade will be reminding spectators also.

Participants
Distribution of candy or other items by participants to spectators will be strictly forbidden. This has been allowed in the past, but is not acceptable under current covid rules.

The Fire Department collects food donations and places them on a separate flatbed truck during the parade. We will ask them to wear masks or shields at all times and use gloves. They will be responsible to distribute the food collected when it is safe to do so.

Organizers
All Optimist members and helpers will be required to show proof of double vaccination status before being allowed to assist at the parade, and contact information will be gathered. Masks will be worn at all times during marshalling and the parade itself.

Santa Claus
Santa Claus will again be part of our parade. He will remain on his own float, and will follow the same rules as any other participant. He will not need to wear a mask when on his float or when he is alone getting ready.
In the past, we have had Santa stay after the parade and have kids come and see him at the church. This year, we can have Santa sit at the church as usual, but kids will be required to stay with their parents at a 6 foot distance from Santa. The line of kids waiting to see Santa will be maintained with 6 foot intervals between family groups, and the Optimist members will maintain the lines and spacing. All members of the public are now familiar with this requirement at every store they visit, so we do not expect any difficulties maintaining this spacing.

Thank you for your consideration of this outdoor event. We believe that we can once again bring Santa to the kids in our area in a safe and fun way for everyone.

I can be contacted at the above email address or at 519-764-2436 to confirm your approval.

Yours sincerely,

Steve Garvin –
Chair – Santa Claus Parade Committee
Optimist Club of Fingal-Shedden & District