



The Corporation of the Township of Malahide

A G E N D A

June 16, 2022 – 7:30 p.m.

**Springfield & Area Community Services Building
51221 Ron McNeil Line, Springfield**

**** Note: Due to COVID-19 restrictions, this meeting will have limited seating capacity for Council and Municipal Staff only. The meeting will also be streamed live on YouTube.****

- (A) Call Meeting to Order
- (B) Disclosure of Pecuniary Interest
- (C) Approval of Previous Minutes **RES 1 (Pages 10-25)**
- (D) Presentations/Delegations/Petitions
 - Meeting to Consider – Glinski Drain relating to property at Parts Lots 23, Concession 3, in the Township of Malahide **RES 2-3 (Pages 26-27)**
 - Court of Revision – Tate Drain Branch “E” 2021 relating to property at Lots 24 to 26, Concession 2, Geographic Township of Malahide **RES 4-7**
 - Public Meeting – Zoning By-law Amendment – Applicant G&M Howe & Sons Ltd (Authorized Agent: David Roe c/o Civic Planning Solutions Inc.), relating to property at Part of Lot 5, Concession 5, Township of Malahide, and known municipally as 7077 and 7841 Rogers Road **RES 8-10 (Page 28-41)**
 - Public Meeting – Zoning By-law Amendment – Applicant Scott Hayhoe Farms Inc. (Authorized Agent: David Roe c/o Civic Planning Solutions Inc.) relating to property at Part of Lot 32, Concession 3, Township of Malahide and known municipally as 52947 and 52887 Calton Line

RES 11-13 (Pages 42-55)

(E) Reports of Departments

(i) Director of Fire & Emergency Services

- Emergency Services Activity Report – May **RES 14(Pages 56-59)**

(ii) Director of Public Works

- Asset Management Plan Update **RES 15 (Pages 60-135)**

- Contract Extension: Ontario Clean Water Agency – Malahide Wastewater Collection Sewer System **RES 16 (Pages 136-179)**

- Contract Extension: Ontario Clean Water Agency – Malahide Water System **RES 17 (Pages 180-236)**

(iii) Director of Finance/Treasurer

(iv) Clerk

-Integrity Commissioner/Closed Meeting Investigator/Ombudsman Services **RES 18 (Pages 237-239)**

(v) Building/Planning/By-law

(vi) CAO

- Springfield Water Study **RES 19 (Pages 240-309)**

(F) Reports of Committees/Outside Boards RES 20

(i)Long Point Region Conservation Authority Board of Directors – Minutes of June 1, 2022 **(Pages 310-313)**

(G) Correspondence RES 21

1. Association of Municipalities of Ontario - Watch File – dated June 2, 2022. **(Pages C3-5)**
2. District of Muskoka – Resolution seeking an amendment to Ontario Regulation 380/04 under the Emergency Management and Civil Protection Act to permit exemptions for municipalities that have responded to an actual emergency during the respective calendar year. **(Pages C6-9)**
3. County of Elgin – Council Highlights – May 2022 **(Pages C10-14)**
4. County of Elgin – Response regarding the request for Installation of Signs Prohibiting Engine Brakes in Village of Springfield and Hamlet of Lyons. **(Pages C15-20)**

5. City of Kitchener – Resolution requesting the Province of Ontario adopt energy performance tiers and timelines. **(Pages C21-22)**
6. Town of Aurora – Private Member's Bill C-233 "Keira's Law - Resolution that Aurora Town Council calls upon the House of Commons to support Member of Parliament Anju Dhillon's Private Member's Bill C-233, that will raise the level of education on domestic violence and coercive control for federally appointed Judges. **(Pages C23-25)**
7. Municipality of Chatham-Kent – Resolution requesting the Ontario Government for additional support for Retirement Homes. **(Pages C26-27)**
8. Town of Aylmer – Letter of Appreciation – letter of support in principle towards Aylmer's Water Tower Replacement. **(Page C28)**
9. The Corporation of the Town of Fort Erie – Resolution requesting the Federal & Provincial Governments enact legislation that prevents both open and closed bidding on both rental units and residential sales and prohibit sales beyond the list price. **(Pages C29-30)**
10. The Corporation of the Town of Fort Erie – Resolution requesting the Federal Government to review the proposed exemption framework for seasonal vacation properties to better reflect the reality of where these properties are located and how they are used. **(Pages C31-32)**
11. Federal Funding for Rural Communities - Request to forward issues impacting your economic development challenges as a rural community for an upcoming community forum. **(Page C33)**
12. Municipality of Thames Centre - Information Report on School Enrollment and Planning Implications within Thames Centre jurisdiction. **(Pages C34-53)**
13. Town of Blue Mountains - Voter's List Information to Candidates. **(Page C54).**

(H) Other Business

(I) By-laws

- (i) 22-40 – Amending Agreement with Ontario Clean Water Agency – Operations and Maintenance Services for Water Facilities **RES 22 (Pages 314-315)**
- (ii) 22-41 - Amending Agreement with Ontario Clean Water Agency – Malahide Wastewater Collection System **RES 23 (Pages 316-317)**
- (iii) 22-18 - Incorporating Various Parcels into Road System **RES 24 (Pages 318-321)**

(J) Closed Session **RES 25-26**

(i) Labour Relations or Employee Negotiations Matter relating to a staff recruitment matter relating to the Development Services Department

(K) Confirmatory By-law **RES 27 (Page 322)**

(L) Adjournment **RES 28**

*****VIDEOCONFERENCE MEETING***

Note for Members of the Public:IMPORTANT

Please note that the Regular Council Meeting scheduled to be held on June 16, 2022 will be via videoconference only for presenters, the press and the public.

Please note that, at this time, there is not an option for the public to call in to this meeting. However, we will be livestreaming the Council Meeting via YouTube. [Please click here to watch the Council Meeting.](#)

Written comments regarding the Council Agenda items are welcome – please forward such to the Clerk at aadams@malahide.ca.

PLEASE NOTE that the draft resolutions provided below DO NOT represent decisions already made by the Council. They are simply intended for the convenience of the Council to expedite the transaction of Council business. Members of Council will choose whether or not to move the proposed draft motions and the Council may also choose to amend or defeat them during the course of the Council meeting.

1. THAT the minutes of the regular meeting of the Council held on June 2, 2022, be adopted as printed and circulated.
2. THAT the Engineer's Report for the Glinski Drain, as prepared by Spriet Associates London Limited and dated April 26, 2022, be accepted;

AND THAT By-law No. 22-45 being a by-law to provide for the Glinski Drain drainage works be read a first and second time and provisionally adopted.
3. THAT the Court of Revision for the Glinski Drain be scheduled to be held on July 7, 2022, at 7:30 p.m.
4. THAT the Council of the Township of Malahide does hereby appoint the following members to sit on the Court of Revision for the Tate Drain Branch 'E' 2021:

Mayor Dave Mennill (Chair)
Deputy Mayor Dominique Giguère
Councillor Scott Lewis
5. THAT the Court of Revision for the Tate Drain Branch 'E' 2021 be called to order at 7: __ p.m.

AND THAT Dave Mennill be appointed Chairman.
6. THAT the Court of Revision members for the Tate Drain Branch 'E' 2021 do hereby accept the recommendations of Drainage Engineer Mike DeVos, Spriet Associates London Limited; and further, does hereby confirm the drainage assessments as outlined in the Report of the Drainage Engineer dated April 23, 2021.
7. THAT the Court of Revision relating to the Tate Drain Branch 'E' 2021 be adjourned and the Council Meeting reconvene at 7: __ p.m.
8. THAT the Public Meeting concerning the Zoning By-law Amendment Application No. D14-Z06-22 of G & M Howe & Sons Ltd, relating to the property located at Part of Lot 5, Concession 5, Township of Malahide, and known municipally as 7077 and 7841 Rogers Road; be called to order at 7: __ p.m.

9. THAT the Public Meeting concerning the Zoning By-law Amendment Application No. D14-Z06-22 of G & M Howe & Sons Ltd, relating to the property located at Part of Lot 5, Concession 5, Township of Malahide, and known municipally as 7077 and 7841 Rogers Road; be adjourned and the Council reconvene at 7:___p.m

10. THAT Report No. DS-22-27 entitled “Zoning By-law Amendment Application of G & M Howe & Sons Ltd” be received;

AND THAT the Zoning By-law Amendment Application No. D14-Z06-22 of G & M Howe & Sons Ltd (Authorized Agent: David Roe c/o Civic Planning Solutions Inc.), relating to the property located at Part of Lot 5, Concession 5, Township of Malahide, and known municipally as 7077 and 7841 Rogers Road, BE APPROVED for the reasons set out in this Report.

11. THAT the Public Meeting concerning the Zoning By-law Amendment Application No. D14-Z07-22 of Scott Hayhoe Farms Inc, relating to the property located at Part of Lot 32, Concession 3, Township of Malahide and known municipally as 52947 and 52887 Calton Line; be called to order at 7:___p.m

12. THAT the Public Meeting concerning Zoning By-law Amendment Application No. D14-Z07-22 of Scott Hayhoe Farms Inc, relating to the property located at Part of Lot 32, Concession 3, Township of Malahide and known municipally as 52947 and 52887 Calton Line; be adjourned and the Council reconvene at 7:___p.m

13. THAT Report No. DS-22-28 entitled “Zoning By-law Amendment Application of Scott Hayhoe Farms Inc.” be received;

AND THAT the Zoning By-law Amendment Application No. D14-Z07-22 of Scott Hayhoe Farms Inc, relating to the property located at Part of Lot 32, Concession 3, Township of Malahide and known municipally as 52947 and 52887 Calton Line, BE APPROVED for the reasons set out in this Report.

14. THAT Report No. F-22-09 entitled “Emergency Services Activity Report – May” be received

15. THAT Report No. PW-22-32 entitled “Asset Management Plan Update” be received;

AND THAT pursuant to Section 5 of Ontario Regulation 588/17, the Asset Management Plan, dated December 2nd, 2021, be approved; it being pointed out that the Director of Finance, as the executive lead of the municipality, has endorsed the Asset Management Plan as presented;

AND THAT consideration of this Asset Management Plan be made a part of the annual budgeting process to ensure that sufficient capital funds are available to fund the Asset Management Plan;

AND THAT this Asset Management Plan be updated, as needed, to reflect the current priorities of the Township.

16. THAT Report No. PW-22-38 entitled “Contract Extension: Ontario Clean Water Agency” be received;

AND THAT the Township enter into the agreement with the Ontario Clean Water Agency for a 5-year period for the purposes of the operation and maintenance of the Malahide Wastewater Collection Sewer System.

17. THAT Report No. PW-22-39 entitled “Contract Extension: Ontario Clean Water Agency” be received;

AND THAT the Township enter into the agreement with the Ontario Clean Water Agency for a 5-year period for the purposes of the operation and maintenance of the Malahide Water System,

AND THAT the Township, on behalf of the PBASWSS and AASWSS Joint Boards of Management, enter into the agreement with the Ontario Clean Water Agency for a 5-year period for the purposes of the operation and maintenance of the Area Secondary Water Supply System, and the Port Burwell Area Secondary Water Supply System

18. THAT Report No. CLERK-22-08 entitled “Appointment of Integrity Commissioner/Closed Meeting Investigator/Ombudsman Services” be received;

AND THAT the Township partner in a joint RFP with the County of Elgin and interested Local Municipal Partners to secure a new service provider to fulfill the transparency and accountability roles of Integrity Commissioner, Closed Meeting Investigator and Municipal Ombudsman.

19. THAT Report No. CAO-22-09, and the presentation of WT Infrastructure Solutions Inc., both entitled “Feasibility Analysis for Potable Water Distribution to the Village of Springfield” be received;

AND THAT the Final Report of WT Infrastructure Solutions Inc. entitled “Village of Springfield - Feasibility Study and Action Plan for Potable Water Distribution” and dated May 13, 2022 be received;

AND THAT Administration be directed to proceed accordingly with the “Next Steps” of the Final Report;

AND THAT Administration follow-up with a report to Council with regards to proceeding with a Class EA process for servicing the Village of Springfield.

20. THAT the following Reports of Committees/Outside Boards be noted and filed

- (i) Long Point Region Conservation Authority Board of Directors – Minutes of June 1, 2022

21. THAT the following correspondence be noted and filed:

1. Association of Municipalities of Ontario - Watch File – dated June 2, 2022. (Pages C3-5)
2. District of Muskoka – Resolution seeking an amendment to Ontario Regulation 380/04 under the Emergency Management and Civil Protection Act to permit exemptions for municipalities that have responded to an actual emergency during the respective calendar year. (Pages C6-9)
3. County of Elgin – Council Highlights – May 2022 (Pages C10-14)
4. County of Elgin – Response regarding the request for Installation of Signs Prohibiting Engine Brakes in Village of Springfield and Hamlet of Lyons. (Pages C15-20)
5. City of Kitchener – Resolution requesting the Province of Ontario adopt energy performance tiers and timelines. (Pages C21-22)
6. Town of Aurora – Private Member's Bill C-233 "Keira's Law - Resolution that Aurora Town Council calls upon the House of Commons to support Member of Parliament Anju Dhillon's Private Member's Bill C-233, that will raise the level of education on domestic violence and coercive control for federally appointed Judges. (Pages C23-25)
7. Municipality of Chatham-Kent – Resolution requesting the Ontario Government for additional support for Retirement Homes. (Pages C26-27)
8. Town of Aylmer – Letter of Appreciation – letter of support in principle towards Aylmer's Water Tower Replacement. (Page C28)
9. The Corporation of the Town of Fort Erie – Resolution requesting the Federal & Provincial Governments enact legislation that prevents both open and closed bidding on both rental units and residential sales and prohibit sales beyond the list price. (Pages C29-30)
10. The Corporation of the Town of Fort Erie – Resolution requesting the Federal Government to review the proposed exemption framework for seasonal vacation properties to better reflect the reality of where these properties are located and how they are used. (Pages C31-32)

11. Federal Funding for Rural Communities - Request to forward issues impacting your economic development challenges as a rural community for an upcoming community forum. (Page C33)
12. Municipality of Thames Centre - Information Report on School Enrollment and Planning Implications within Thames Centre jurisdiction. (Pages C34-53)
13. Town of Blue Mountains - Voter's List Information to Candidates. (Page C54).
22. THAT By-law No. 22-40, being a By-law to authorize the execution of an Amending Agreement with the Ontario Clean Water Agency for the provision of operations and maintenance services for water facilities, be given first, second and third readings, and be properly signed and sealed.
23. THAT By-law No. 22-41, being a By-law to authorize the execution of an Amending Agreement with the Ontario Clean Water Agency for the provision of operations and maintenance services for Malahide Wastewater Collection System, be given first, second and third readings, and be properly signed and sealed.
24. THAT By-law No. 22-18 being a By-law to incorporate various parcels into road system, be given first, second and third readings, and be properly signed and sealed.
25. THAT Council move into Closed Session at _____ p.m., pursuant to Section 239(2) of the Municipal Act, 2001, as amended, to discuss the following
 - (i) Labour Relations or Employee Negotiations Matter relating to a staff recruitment matter relating to the Development Services department.
26. THAT Council move out of Closed Session and reconvene at _____ p.m. in order to continue with its deliberations.
27. THAT By-law No. 22-49, being a Confirmatory By-law, be given first, second and third readings, and be properly signed and sealed.
28. THAT the Council adjourn its meeting at _____ p.m. to meet again on July 7, 2022, at 7:30 p.m.

The Corporation of the Township of Malahide

June 2, 2022 – 7:30p.m.

Virtual Meeting - <https://youtu.be/nKskAJZhCr8>

Due to COVID 19 and Public Health concerns, the Malahide Township Council met at the Springfield & Area Community Services Building, at 51221 Ron McNeil Line, Springfield, at 7:30p.m. in order to allow for physical distancing. No public attendance was permitted. The following were present:

Council: Mayor D. Mennill, Councillor M. Widner, Councillor M. Moore, Councillor R. Cerna, and Councillor C. Glinski.

Staff: Clerk A. Adams, Director of Public Works M. Sweetland, Director of Finance A. Boylan and Director of Fire and Emergency Services J. Spoor.

Council via Zoom: N/A

Staff via Zoom: Chief Administrative Officer A. Betteridge

Absent: Deputy Mayor D. Giguère and Councillor S. Lewis

CALL TO ORDER:

Mayor Mennill took the Chair and called the meeting to order at 7:30p.m.

DISCLOSURE OF PECUNIARY INTEREST and the General Nature thereof:

Councillor Widner disclosed a pecuniary interest with respect to Council Agenda item E – Request for Improvement – Maginnis Drain. The nature of the conflict being that a Junior Partner at Spriet Associates is an immediate relative of his.

MINUTES:

No. 22–214

Moved By: Max Moore

Seconded By: Rick Cerna

THAT the minutes of the regular meeting of the Council held on May 19, 2022, be adopted as printed and circulated.

Carried

PRESENTATIONS/DELEGATIONS/PETITIONS:

- Meeting to Consider – Glinski Drain relating to property at Parts Lots 23, Concession 3, in the Township of Malahide

The Mayor provided a statement in regards to the Meeting to Consider the Glinski Drain was deferred as a result of quorum and that it will be rescheduled for the next meeting.

- Public Meeting – Zoning By-law Amendment – Applicants Daniel and Michael Bogart, J Grant Burks Farm LTD. and John Burks relating to property Part of Lot 9, Concession 10 and Part 1 of RP 11R-8266, 50260 & 50264 Lyons Line

No. 22–215

Moved By: Mark Widner

Seconded By: Chester Glinski

THAT the Public Meeting concerning the Zoning By-law Amendment Application of Application of Daniel and Michael Bogart, and J. Grant Burks Farms LTD and John Benjamin Burks, relating two properties located at Part of Lot 9, Concession 10 in the former Township of South Dorchester, and being 50260 and 50264 Lyons Line; be called to order at 7:31 p.m

Carried

Mayor Mennill advised that the purpose of this Public Meeting is to consider an application to amend the zoning of the subject property 50260 and 50264 Lyons Line.

Mayor Mennill asked the Clerk to advise and confirm on the method and date of notice given for this meeting. The Clerk advised that this public meeting was advertised in the Aylmer Express for two consecutive weeks. In addition, affected property owners within 120 meters were sent a notice by prepaid first-class mail that was posted at least twenty days prior to this meeting.

Mayor Mennill requested that CAO Betteridge provide an overview of the application. CAO Betteridge provided an overview of the zoning application noting it is being processed on behalf of the property owners by the Township in order to correct the zoning as it relates to the two subject properties. The need for this “housekeeping” amendment arose when it was identified by Staff that the existing zoning for the subject properties is both misaligned. The amendment will place both properties into their respective “correct” zones so that they can both be used in their rightful manner.

Mayor Mennill asked if any Council Members wished to make any comments regarding the application. Councillor Widner inquired about the property on Crossley Hunter Line. CAO Betteridge clarified that they are demolishing an existing dwelling and creating a new dwelling. Councillor Widner further inquired if that lot could be severed as well.

CAO Betteridge noted that this could only be severed in accordance with a surplus farm house severance application and the dwelling would need to be in existence for a period of time before this could be done. However, from discussions with the owner's there is no intention of severing this property but rather to build a new house for themselves.

No. 22-216

Moved By: Rick Cerna

Seconded By: Max Moore

THAT the Public Meeting concerning the Zoning By-law Amendment Application of Application of Daniel and Michael Bogart, and J. Grant Burks Farms LTD and John Benjamin Burks, relating two properties located at Part of Lot 9, Concession 10 in the former Township of South Dorchester, and being 50260 and 50264 Lyons Line; be adjourned and the Council reconvene at 7:38 p.m

Carried

No. 22-217

Moved By: Rick Cerna

Seconded By: Chester Glinski

THAT Report No. DS-22-25 entitled "Housekeeping Zoning By-law Amendment Application of Daniel and Michael Bogart, and J. Grant Burks Farms LTD and John Benjamin Burks" be received;

AND THAT the Housekeeping Zoning By-law Amendment Application No. D14-Z05-22 of relating to the two properties located at Part of Lot 9, Concession 10 in the former Township of South Dorchester, and being 50260 and 50264 Lyons Line, BE APPROVED for the reasons set out in this Report.

Carried

No. 22-218

Moved By: Max Moore

Seconded By: Chester Glinski

THAT By-law No. 22-35 being a By-law to amend Zoning By-law No. 18-22 insofar as it relates to the properties owned by Daniel and Michael Bogart, and J. Grant Burks Farms LTD and John Benjamin Burks, located at Part of Lot 9, Concession 10 in the former Township of South Dorchester, be given first, second and third readings, and properly signed and sealed.

Carried

Public Hearing – Minor Variance Application – Applicant, Wendy D’Angelo (Authorized Agent: Zelinka Priamo Ltd. c/o Matt Campbell), relating to property at Lots 105 through 110 on Registered Plan 78, Village of Springfield, Township of Malahide, 11789 Superior Street

No. 22–219

Moved By: Mark Widner

Seconded By: Rick Cerna

THAT the Committee of Adjustment for the Township of Malahide be called to order at 7:39p.m. and that Mayor Dave Mennill be appointed Chairperson for the “Committee of Adjustment”.

Carried

Chair Mennill advised that the purpose of this Public Meeting is to consider an application for a Minor Variance as submitted by Wendy D’Angelo relating to property at Lots 105 through 110 on Registered Plan 78, Village of Springfield, Township of Malahide.

Mayor Mennill requested that Eric Steele of Monteith Brown Planning Consultants (MBPC) provide an overview of the application. Mr. Steele stated that the application is to grant relief from the established building line calculated to be 2.2 metres (approximately 7 feet) based on the average of the existing front yard depths of the two abutting properties and minimum rear yard depth requirement of 7.5 metres (approximately 24 feet) in order to construct a single-detached dwelling on the southern portion of the subject property. The effect would allow a new single-detached dwelling to be situated 1.6 metres (approximately 5 feet) from the front lot line and 7 metres from the rear lot line. The subject lot depth is shallow compared to other lots in the neighbourhood but the lots surrounding this one are more shallow than the typical lot. The placement will create a uniform street and provide separation from the road so that it can be maintained. It should also be noted that the roads department has no concern with this proposal.

Chair Mennill asked if any comments were received and the Clerk advised there were comments received from a neighbour with some concerns regarding the proposed house in respect to the type of house, location, privacy etc. and staff did address their questions and this neighbour should be in attendance if they had further comments.

Chair Mennill asked if any person in attendance wished to make any comments. Amanda Ivanyshyn whose property abuts this proposed minor variance had further inquiries in regards to privacy and fencing and how this proposal would affect them. Mr. Steele noted that regarding privacy that the subject lot creation was permitted as a building lot earlier this year and under the Zoning By-law would permit a residential house. The backyard proposal is minimally reduced from the required setbacks and this is not anticipated to have a significant impact. In respect to fencing there is existing fence on the rear of the property and if there were additional concerns the committee

could require an agreement but given the minor nature of this variance, MBPC doesn't foresee there to be significant impacts on the adjacent property.

Mayor Mennill asked if any Committee members wished to make any comments regarding the application and there were none.

No. 22-220

Moved By: Max Moore

Seconded By: Chester Glinski

THAT Report No. DS-22-26 entitled "Application for Minor Variance – Joe & Wendy D'Angelo" be received;

AND THAT the Application for Minor Variance – Joe & Wendy D'Angelo, relating to the property located in Plan 78, Lots 108 to 110 and being part 2 on 11R-1568, be approved for the reasons set out herein.

Carried

No. 22-221

Moved By: Rick Cerna

Seconded By: Mark Widner

THAT the Committee of Adjustment for the Township of Malahide be adjourned and the Council meeting reconvene at 7:47p.m.

Carried

Presentation – Derek Richmond – Expanding Services and Protecting Public Post Offices

Derek Richmond provided a presentation regarding expanding services and protecting public post offices by utilizing services that are not currently offered in communities that post offices are located in. These initiatives would support rural post offices and provide extended services to the community.

Mayor Mennill thanked Mr. Richmond for his presentation and noted that a lot of small towns do have post offices but no financial institutions and that would be an enhancement to small towns.

Mayor Mennill stated that the presentation would be received and that if Council chose to support this initiative it would be done so in the correspondence section of the meeting. Mayor Mennill asked if any members had questions in regards to the presentation.

Councillor Moore inquired about the use of these facilities for banking facilities and how they intended to be protected against vandalism and robberies in these rural communities. Mr. Richmond stated Canada Post has partnered already with TD Canada

Trust and that type of safety and security training would be implemented for Canada Post staff.

Councillor Cerna inquired about how much profit Canada Post makes in a year as this initiative is quite ambitious and offers repetitive services. Mr. Richmond said Canada Post has lost money in the first quarters of last year with problems around COVID but some of these ideas are to expand services and prevent these losses. Councillor Cerna further noted that a lot of these services are available already and if currently losing money that this may not be the right time for these initiatives. Mr. Richmond stated that Canada Post is a crown corporation and relies on its own funding to build these revenue tools up. Councillor Cerna noted that the proposal if supported is for the Township to pressure the Federal Government for funding so it still requires funding from the government. Mr. Richmond said that the Federal Government can mandate services for Canada Post to offer which will increase services and potentially increase funds. He noted that these services could provide additional revenues while bringing services back and creating community enhancement.

Councillor Widner noted that this proposal brings forth innovative ideas and wondering if a business plan has been created. Mr. Richmond noted that he is a coordinator for the campaign and this group has been pressuring the corporation and the Federal Government to bring in these services and any financial plan is done through the corporation. Canada Post has slowly started implementing this campaign but he is unaware of any financial reports regarding any of the successes or costs.

No. 22–222

Moved By: Max Moore

Seconded By: Chester Glinski

THAT the presentation from Derek Richmond, Ontario Region Coordinator for the Canadian Union of Postal Workers, regarding expanding services and protecting public post offices, be received.

Carried

Mayor Mennill thanked Mr. Richmond for his presentation and he retired from the meeting.

REPORTS:

Director of Public Works

- 2021 Road Needs Study

Councillor Cerna inquired where the Carter Road bridge is located. Director Sweetland responded that it was located on Carter Road south of Pressey Line.

Councillor Widner asked if staff was satisfied with the report and if the Township has

enough finances for these projected repairs. Director Sweetland noted these reports are static. The inspections took place in 2021 and they are only as good as when the drive by happened. Fortunately, the asset management regulations require these condition assessments be less than two years old so every two years staff can plan and be prepared. At the current time the asset management plan would be developed from the figures of this report but then every annual budget cycle staff can see if any further needs are pending for upcoming years. He noted that staff are satisfied with this report which allows for a long-term projection but can be adjusted over annual budget cycles.

No. 22-223

Moved By: Mark Widner

Seconded By: Chester Glinski

THAT Report No. PW-22-34 entitled “2021 Road Needs Study” be received;

AND THAT Council adopt the “2021 State of the Infrastructure and Asset Management Plan for Roads” report prepared by 4 Roads Management Services;

AND THAT Staff be directed to utilize the above-noted report to inform long-term asset management recommendations on the Township’s road network.

Carried

- Request for Improvement – Maginnis Drain

Councillor Widner declared a conflict of interest with respect to Council Agenda item E – Request for Improvement – Maginnis Drain. He retired from the meeting and abstained from all discussions and voting on the matter.

No. 22-224

Moved By: Chester Glinski

Seconded By: Max Moore

THAT Report No. PW-22-41 entitled “Request for Improvement – Maginnis Drain” be received;

AND THAT Mike Devos, P. Eng., of Spriet Associates, be appointed to prepare an Engineer’s Report for this petition.

Carried

Councillor Widner returned to his seat at the Council table.

- Ontario Police College Memorandum of Understanding for Kitchen Use

No. 22-225

Moved By: Rick Cerna

Seconded By: Mark Widner

THAT Report No. PW-22-37 entitled “Ontario Police College Memorandum of Understanding for Kitchen Use” be received;

AND THAT Township of Malahide Council directs the Facilities Manager to enter into a Memorandum of Understanding with the Ontario Police College for contingent use of the Malahide Community Place Kitchen Facilities.

Carried

- Springfield Veteran Banner Request

Councillor Glinski inquired if the committee is aware of the cost to place the flags on hydro posts. Director Sweetland stated that the committee is aware of the exact costs and that the information was forwarded to them for review.

No. 22-226

Moved By: Max Moore

Seconded By: Mark Widner

THAT Report No. PW-22-31 entitled “Springfield Banner Request” be received;

AND THAT the Council accept the recommendations from staff to proceed with this project based on the installation of the brackets and banners on the Hydro poles on Ron McNeil Line;

AND THAT the Municipal Staff be directed to work with the “Honour Our Veterans Committee” on the installation of the brackets and banners.

Carried

- RFP Results – Carter Road Bridge Rehabilitation Request for Proposal

Councillor Glinski sought clarification with the terminology used in the report in reference to RFP Results – Carter Road Bridge Rehabilitation Request for Proposal. Councillor Glinski noted that it almost sounds like it should be rehabilitated from this statement not just an engineer coming in to tell what needs to be done. Director Sweetland noted that prior to understanding what the scope of work is required to rehabilitate the structure an engineer is required to come up with that design component. Staff had the Ontario Structure Inspection Manual (OSIM) consultant

review it to ensure it wasn't at immediate risk of collapse and were advised it wasn't. Staff then proposed this method per the OSIM consultant's recommendation that the Township have an engineer undertake a design component of it so a construction ability can occur.

No. 22-227

Moved By: Rick Cerna

Seconded By: Max Moore

THAT Report No. PW-22-40 entitled "RFP Results – Carter Road Bridge Rehabilitation Request for Proposal" be received;

AND THAT the proposal for the Carter Road Bridge Rehabilitation be awarded to Vallee Consulting Engineers, Architects and Planners of Simcoe, Ontario in the amount of \$24,955.70 (plus HST);

AND THAT the Mayor and Clerk be authorized to enter into an agreement with Vallee Consulting Engineers, Architects and Planners for the purpose of completing the Carter Road Bridge Rehabilitation.

Carried

Councillor Widner brought forth a request in regards to the Aylmer Fair Board for required track maintenance work for the upcoming tractor pull.

Councillor Cerna inquired if we have a contingency fund if there is money left over for situations like this. Director of Finance Boylan stated the Township does have this contingency fund and is currently working through the 2021 financial results with the auditor. Staff's recommendation would be when the final 2021 report comes forth that we use those funds to pay for this request.

Mayor Mennill stated there were a couple resolutions for this proposal and inquired what an estimated cost may be for the work required. Director Sweetland stated the possible resolutions being that they could provide a specific amount for the maintenance work or one that doesn't exceed a certain amount. He noted another option would be that the Township could provide the service and invoice the Aylmer Fair Board for the work and they could then seek relief for the invoiced amount.

No. 22-228

Moved By: Mark Widner

Seconded By: Rick Cerna

THAT the request of the Aylmer Fair Board be supported and that the Township provide the required maintenance work of the track.

Carried

Clerk**- 2022 Municipal Election – Establishment of Joint Compliance Audit Committee**

Councillor Glinski inquired about the discrepancy in the honorarium from the report to the draft By-law. Clerk Adams noted that this was a clerical error as a result of back and forth conversations between the organizing committee and that in fact the \$125.00 honorarium in the By-law was the correct amount.

No. 22–229**Moved By: Rick Cerna****Seconded By: Chester Glinski**

THAT Report CLERK-22-07 entitled “2022 Municipal Election – Establishment of Joint Compliance Audit Committee” be received for information; and,

THAT Council considers giving three readings to the By-law establishing an Election Joint Compliance Audit Committee for the 2022 Municipal Election in accordance with the Municipal elections Act, 1996, as amended.

Carried

CAO**- Bill 27, Working for Workers Act, 2021 (Disconnecting from Work)**

Councillor Glinski understands the concept of disconnecting from work but wanted to confirm how this will affect after hours meetings like Council meetings as it over and above these hours. CAO Betteridge noted that Council meetings are apart of certain job descriptions and this is normal for those roles and that won't change. The intention of this policy is that there is normal responsibilities of every job description and some positions are not an 8:30pm to 4:30pm position. For instance, Public Works, Fire or CAO roles may require time sensitive or emergency components that the policy still allows for this contact to occur.

Councillor Cerna doesn't believe this legislation is required. When the work day is done it's done. He noted that a Councillor position is always available for constituents to contact them. We have a good staff and if you factor in the time at work versus time at home there is enough time to disconnect from work. Mayor Mennill noted that this policy is more for staff than it is for Council and that staff need to be disconnected. In emergencies, certain staff are always on call but if an issue on Friday can wait until Monday they should be allowed to shut down on the weekend. Councillor Cerna noted that he believed that these types of frivolous requests aren't occurring and that this government legislation isn't required. Mayor Mennill said that unfortunately there are some unreasonable people who will expect an answer at any time of day.

Councillor Widner noted that this legislation only applies to an organization that has 25 or more people on staff. If you have a smaller organization with less staff than 25 they aren't covered and that isn't fair especially as they likely require it more. Councillor Widner noted the legislation doesn't cover enough and isn't fair. He proposed a scenario of finding something at night and if an email regarding the issue is allowed with this policy. CAO Betteridge clarified that the intent is that discretion is given based on the situation. For instance, if the pot hole is significant and can create damage, it would warrant communication versus if the situation is minor than it can wait until the morning. CAO Betteridge noted that any traffic issues or safety concerns Public Works would want to know as soon as possible. Councillor Widner noted he would report it because if he knows about it and doesn't he could be liable. Councillor Cerna noted that what he is hearing is that if it's urgent you call if it's not you wait and that is what we do now. Mayor Mennill noted that this legislation just doesn't apply to us but to everyone. Councillor Cerna noted that is part of the problem with legislation like this as its blankets the entire Province.

No. 22-230**Moved By: Chester Glinski****Seconded By: Max Moore**

THAT Report No. HR-22-04 entitled "Bill 27, Working for Workers Act, 2021 (Disconnecting from Work)" be received.

AND THAT HR Policy B-3.5 Disconnecting from Work is approved.

Carried

CORRESPONDENCE:

No. 22-231

Moved By: Max Moore

Seconded By: Mark Widner

THAT the Municipality of Shuniah resolution requesting the province increase funding for the Rural and Northern Education Fund, a review of the education funding formula be undertaken and that consultation from school boards and community groups occur prior to the pupil accommodation review guide being developed be supported.

Carried

No. 22-232

Moved By: Max Moore

Seconded By: Mark Widner

THAT the potential initiatives brought forward by the Delivering Community Power Campaign for service expansion at Canada Post be supported in principle.

Carried

No. 22-233

Moved By: Max Moore

Seconded By: Mark Widner

THAT the correspondence from the Town of Aylmer in regards to a fundraising challenge for the Aylmer-Malahide Museum & Archives Capital Campaign be received;

AND THAT staff direct the Aylmer-Malahide Museum to submit a grant application through the Township's grant application process for 2023.

Carried

No. 22-234

Moved By: Max Moore

Seconded By: Mark Widner

THAT the following correspondence be noted and filed:

1. Association of Municipalities of Ontario - Watch File – dated May 19, 2022 and May 26, 2022. **(Pages C2-7)**
2. The Corporation of the City of Cambridge – Resolution request be sent to the Region of Waterloo on behalf of Cambridge Council for free public transportation on Election Days. **(Pages C8-9)**
3. Corporation of the City of Brantford – Resolution requesting the immediate release to the Survivors' Secretariat, of all documents in the possession of the Government of Canada or the Government of Ontario and the Anglican Church related to the former Mohawk Institute Residential School now located on Six Nations of the Grand River Territory, within the geographic boundaries of the City of Brantford. **(Pages C10-12)**
4. Southwestern Public Health – Notice of changes coming to COVID-19 vaccination clinics in Elgin, Oxford, and St. Thomas. **(Page C17)**

Carried

OTHER BUSINESS:

- Springfield Family Fun Day Committee – Request for Event Support

No. 22–235

Moved By: Rick Cerna

Seconded By: Chester Glinski

THAT the 2022 Springfield Family Fun Day event being held on June 18, 2022 in Springfield be supported;

AND THAT, in recognition of the community benefit, the Municipal Staff be authorized and directed to confirm 'Affiliated Municipal Groups Liability' insurance coverage for the Springfield Family Fun Day event and its Organizing Committee.

Carried

- Official Plan Amendment No. 20

Councillor Widner inquired about the Notice of Decision regarding the Official Plan Amendment (OPA) No. 20 that the County has passed and why the changes now with the Amish settlements. Mayor Mennill stated that in the past Malahide endorsed the smaller parcels and Land Division passed it with the Province never objecting. CAO Betteridge noted the County wasn't changing anything. The Township recently adopted an OPA and sent the documentation to the County for final approval. Monteith Brown

Planning Consultants recommended that the Township have a policy included to allow the allowance for undersized farm parcels for the Amish community. The County spoke with the Province in regards to the Provincial Policy Statement and the concern is allowing a certain farm parcel size for a religious identifying group and another size for others. CAO Betteridge noted that the Malahide Zoning By-law does have a minimum size of 50 acres and this isn't changing. The Provincial Policy Statement (PPS) doesn't specify minimum farm parcel size but is general to farm sizes common in the area. There are planning arguments that can be made that suggest that a smaller size could be obtained and is appropriate but what the Province doesn't want to see is that it be written into the Township Official Plan document and have the double standard.

CAO Betteridge noted that he isn't concerned from a planning perspective and provided three options that Council could chose from in respect to the notice of the decision.

Councillor Widner inquired if CAO Betteridge was finding that the Province held the power of the PPS over your head but never actually comment. CAO Betteridge said he's starting to see that a bit and that the Province used to be very active in local rural planning as they were the approval authority but have downloaded those responsibilities. The Province tries not to get involved in local planning matters but if there are glaring issues relating to the PPS they are starting to intervene to ensure conformity.

CAO Betteridge also noted that the County of Elgin is going through its own Official Plan review and it may be wise for Malahide Council to advise the County to protect the ability for the horse drawn community to create parcels of a certain size.

Councillor Widner would like a resolution sent to the County to let them know the Township isn't completely satisfied with this decision to protect the Amish Community.

CAO Betteridge requested that a five-minute recess be taken so that staff could prepare an adjusted resolution from the discussions that had occurred.

No. 22-236

Moved By: Mark Widner

Seconded By: Rick Cerna

THAT a five-minute recess be granted to allow staff the opportunity to create an alternative resolution in regards to Official Plan Amendment No. 20

Carried

Proceeding a five-minute recess, a resolution was proposed encompassing the direction that Council had provided in their discussions regarding the OPA No. 20.

No. 22-237

Moved By: Mark Widner

Seconded By: Rick Cerna

THAT the Notice of Decision dated June 1, 2022 from the County of Elgin for Malahide Official Plan Amendment No. 20 be received.

AND THAT, given that the Township of Malahide has a visible and concentrated rural community which relies on horse-powered technology for farming, the Council for the Township of Malahide hereby requests that the County of Elgin respect the farming practices of this community and continue to allow the possibility to create smaller farm properties provided the size remains appropriate and sufficiently large to maintain flexibility for future changes in the type or size of agricultural operations.

AND THAT provided the County of Elgin can continue to respect the farming practices of this community, the Council for the Township of Malahide does not object to the modification by the County to its removal of Section 5 of the Malahide Official Plan Amendment No. 20, being an amendment to Section 2.1.6 of the Malahide Official Plan.

Carried

- Southwestern Public Health (SWPH) – Request use of Malahide Community Place for Vaccination Clinic

Director of Public Works Sweetland noted that SWPH had filled its facility request for these dates but that if required again this would be a standing approval.

No. 22-238

Moved By: Rick Cerna

Seconded By: Max Moore

THAT the request of Southwestern Public Health Unit for use of Malahide Community Place for a vaccination clinic be received;

AND THAT the facility rental fee for the vaccination clinic be waived.

Carried

Councillor Cerna commented on the County's decision in Springfield relating to engine brakes signs being denied and what's a solution then to stop this. Mayor Mennill noted the County's position is that a sign can be put up but there is no provision to enforce it under the Highway Traffic Act. Mayor Mennill noted there was a sign in Summers Corners for years that is gone now and isn't aware if it did any good. Councillor Widner noted that this same topic was brought forth a couple of years ago and that there was no specific sign for this. There was a sign created by the landowner and installed in

Lyons but the County requested it be taken down but these signs could still go up if on private property.

Councillor Cerna inquired when the no parking signs were going to be installed in Summers Corners on Springfield Road by the taco food truck. Director Sweetland noted the report was sent to the County and coordination between the County, Township and community members in that area is still occurring. A report will be coming to Council for further consideration with various petitions for and against the no parking prior to a revised By-law being introduced and signage being installed.

Councillor Widner commented on the incredible turnout at the recent firework display in Port Bruce and recognized the firefighter's efforts to put on the community event.

CONFIRMATORY:

No. 22-239

Moved By: Rick Cerna

Seconded By: Max Moore

THAT By-law No. 22-38, being a Confirmatory By-law, be given first, second and third readings, and be properly signed and sealed.

Carried

ADJOURNMENT:

No. 22-240

Moved By: Chester Glinski

Seconded By: Mark Widner

THAT the Council adjourn its meeting at 8:59p.m. to meet again on June 16, 2022, at 7:30p.m.

Carried

Mayor – D. Mennill

Clerk – A. Adams



TOWNSHIP OF MALAHIDE

DRAINAGE BY-LAW NO. 22-44

Drainage Act, R. S.O. 1990, c. D17
Reg. 300/81, s.1, Form 6

Being a By-law to provide for a drainage works
on the Glinski Drain
in the Township of Malahide,
in the County of Elgin

WHEREAS the requisite number of owners have petitioned the Council of the Township of Malahide in the County of Elgin in accordance with the provisions of the Drainage Act, requesting that the following lands and roads may be drained by a drainage works.

Parts Lot 23
Concession 3
In the Township of Malahide

AND WHEREAS the Council for the Township of Malahide has procured a report made by Spriet Associates and the report is attached hereto and forms part of this by-law.

AND WHEREAS the estimated total cost of constructing the drainage works is \$35,600.00.

AND WHEREAS \$35,600.00 is the amount to be contributed by the municipality for construction of the drainage works.

AND WHEREAS \$35,600.00 is being assessed in the Township of Malahide in the County of Elgin.

AND WHEREAS the council is of the opinion that the drainage of the area is desirable.

NOW THEREFORE, THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF MALAHIDE UNDER THE DRAINAGE ACT ENACTS AS FOLLOWS:

1. The report dated April 26, 2022, and attached hereto is hereby adopted and the drainage works as therein indicated and set forth is hereby authorized, and shall be completed in accordance therewith.
2.
 - (a) The Corporation of the Township of Malahide may borrow on the credit of the Corporation the amount of \$35,600.00 being the amount necessary for construction of the drainage works.

- (b) The Corporation may issue debentures for the amount borrowed less the total amount of,
 - i. Grants received under section 85 of the Act;
 - ii. Commuted payments made in respect of lands and roads assessed within the municipality;
 - iii. Moneys paid under subsection 61(3) of the Act; and
 - iv. Moneys assessed in and payable by another municipality,
 - (c) And such debentures shall be made payable within five years from the date of the debenture and shall bear interest at a rate not higher than the rate charged by The Ontario Municipal Improvement Corporation on the date of sale of such debentures.
3. A special equal amount rate sufficient to redeem the principal and interest on the debentures shall be levied upon the lands and roads as set forth in the Schedule to be collected in the same manner and at the same time as other taxes are collected in each year for five years after the passing of this by-law.
 4. All assessments of \$500.00 or less are payable in the first year in which the assessment is imposed.
 5. This By-law comes into force on the passing thereof and may be cited as the "Glinski Drain".

READ A FIRST AND SECOND TIME THIS 16th day of June, 2022.

Mayor

Clerk

READ A THIRD TIME AND FINALLY PASSED THIS 4th day of August, 2022.

Mayor

Clerk



Report to Council

REPORT NO.: DS-22-27
DATE: June 16, 2022
ATTACHMENT: Report Photo, Application, By-law
SUBJECT: **ZONING BY-LAW AMENDMENT APPLICATION OF G & M HOWE & SONS LTD, (AUTHORIZED AGENT: DAVID ROE C/O CIVIC PLANNING SOLUTIONS INC.)**
LOCATION: Part of Lot 5, Concession 5, Township of Malahide
(7077 and 7841 Rogers Road)

Recommendation:

THAT Report No. DS-22-27 entitled “Zoning By-law Amendment Application of G & M Howe & Sons Ltd” be received;

AND THAT the Zoning By-law Amendment Application No. D14-Z06-22 of G & M Howe & Sons Ltd (Authorized Agent: David Roe c/o Civic Planning Solutions Inc.), relating to the property located at Part of Lot 5, Concession 5, Township of Malahide, and known municipally as 7077 and 7841 Rogers Road, BE APPROVED for the reasons set out in this Report.

Background:

The subject Zoning By-law Amendment Application (the “Application”) has been submitted by David Roe c/o Civic Planning Solutions Inc. on behalf of G & M Howe & Sons Ltd to implement the necessary zoning provisions required for surplus farm dwelling severances.

The Application relates to the property located at Part of Lot 5, Concession 5, Township of Malahide, and known municipally as 7077 and 7841 Rogers Road.

Notice of the Application has been circulated to agencies and registered property owners as prescribed and regulated by the Planning Act, RSO 1990, and the Malahide Official Plan, including posting notice in two recent issues of the Aylmer Express.

The analysis of the associated severance/consent application (Application: D10-E17-22) by the County Planning Department and Land Division Committee determined that the severance met all applicable policy (Provincial Policy Statement and Official Plan). The consent application was provisionally approved subject to the Applicant completing a number of conditions, one such being obtaining a zoning by-law amendment.

Comments/Analysis:

Council considered the associated severance application on April 7, 2022 (Report No. DS-22-19) and supported the severance. A report photo representative of the approved severance is attached for reference.

Development Services Staff has considered the merits of the subject application against the Provincial Policy Statement (PPS), applicable Official Plan policies and the Township's Zoning By-law and all (if any) of the correspondence received as of the date of writing and recommends that Council approve application no. D14-Z06-22.

The drafted by-law places the severed lands and the lands to which the severed lands will be conveyed in the necessary zone of the Malahide Zoning By-law: the "General Agricultural (A1-21) Zone" to recognize the undersized lot area.

Notice of the subject Zoning By-law Amendment Application has been circulated to agencies and registered property owners as prescribed and required. As of the date of writing this report, there have been no comments received in response to the Notice of Public Meeting. Any comments submitted will be summarized and provided for the information of the Council/Public at the Public Meeting.

Financial Implications to Budget:

The full cost of the consent and associated rezoning process is at the expense of the Applicant and has no implications to the Township's Operating Budget.

Relationship to Cultivating Malahide:

The importance of sustainable planning includes promoting for the protection of agricultural lands. As such, one of the goals that support the "Our Land" Strategic Pillar relates to "Respect the agricultural land base through the land use planning process".

The recommendation of this report supports the ICSP.

Submitted by:	Approved by:
Christine Strupat, HBA, CPT Development Services Technician/Assistant Planner	Adam Betteridge, MCIP, RPP Chief Administrative Officer

APPLICATION FOR ZONING BY-LAW AMENDMENT

G & M Howe & Sons Ltd.

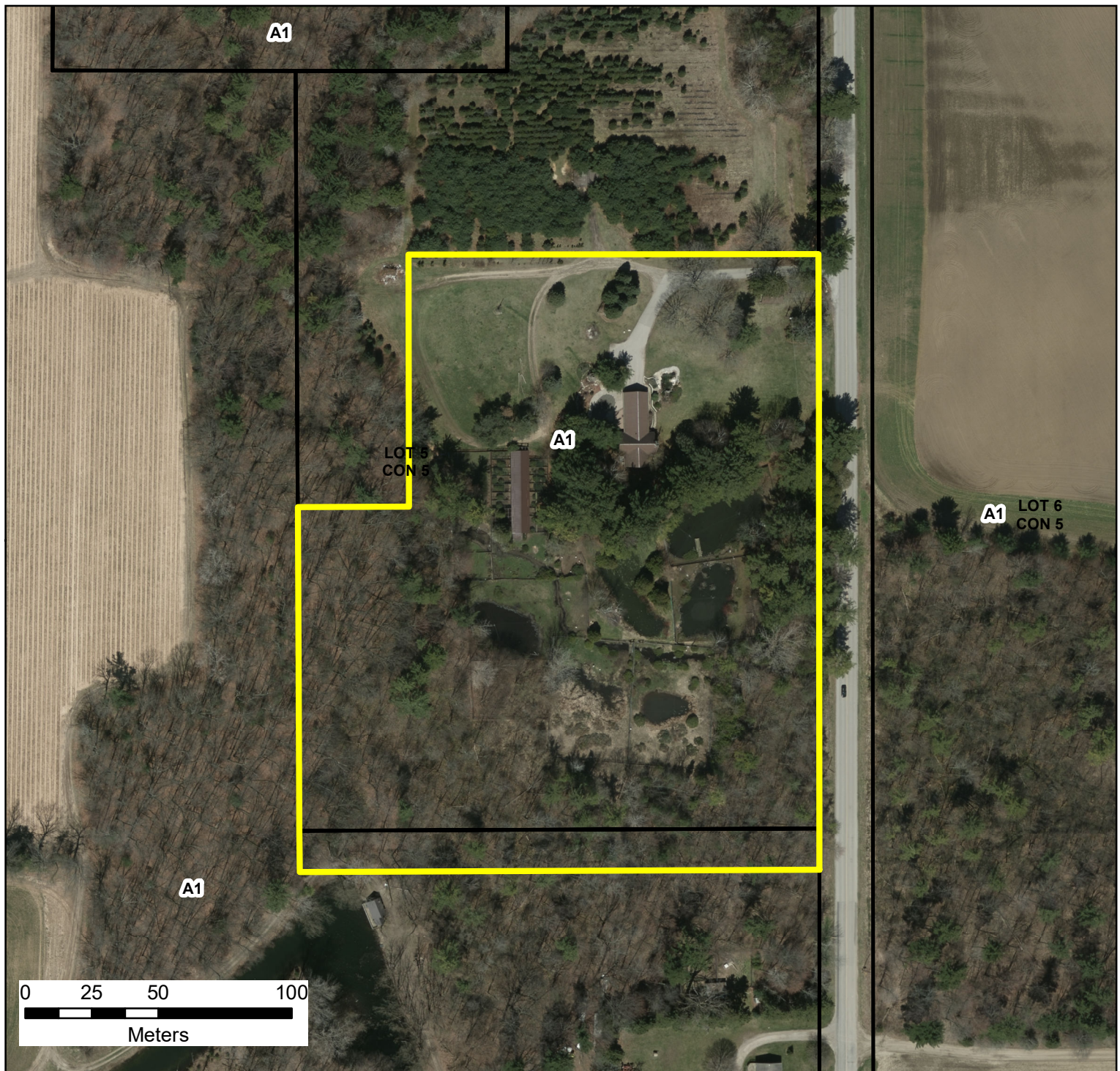
(Authorized Agent: David Roe c/o Civic Planning Solutions)

7077 & 7841 Rogers Road

Lot 5, Concession 5

Township of Malahide

**Township
of Malahide
Figure 1**



OFFICIAL PLAN DESIGNATION
Agriculture

ZONING
A1 General Agricultural



Site Specific General Agricultural (A1-21) Zone



Township of Malahide Zoning By-law Amendment Application

1. **Registered Owner's Name:** G & M Howe & Sons Ltd

Address: 7841 Rogers Road, Aylmer, ON N5H 2R4

Phone No. (Home): _____ **Business:** 519-773-3837

Fax: _____ **Email:** _____

Lot and Concession (if applicable): _____

Are there any other holders of mortgages, charges or other encumbrances of the Subject Lands? If so provide the names and addresses of such persons.

2. **Applicant / Authorized Agent:** David Roe, Civic Planning Solutions Inc.

Address: 61 Trailview Dr. Tillsonburg, ON N4G 0C6

Telephone No.: 519-983-8154 **Fax:** _____

Please specify to whom all communications should be sent:

Registered Owner () Applicant / Authorized Agent (x)

3. **Legal Description of the land for which the amendment is requested:**

Concession: 5 **Lot:** 5

Reference Plan No: _____ **Part Lot:** _____

Street and Municipal Address No.: 7077 Rogers Road

What is the size of property which is subject to this Application? Severed/ Retained /Enlarged

Area: 1.06ha/26.8ha/3.10ha m Severed/ Retained /Enlarged
Frontage: 53.6m/519.1m/178.3m Depth: 154m/407m/198.1m m

When were the subject lands acquired by the current owner?

Many years ago

4. **Existing Official Plan Designation:**

Agricultural

How does the application conform to the Official Plan?

Minor boundary adjustment to reflect existing use of lands

5. Existing Zoning By-law Classification:

A1

What are the current uses of the subject lands?

Agricultural cash crops

If known, provide the length of time these uses have continued on this property.

If there are any existing buildings or structures on the subject lands provide the following information:

Type	Front Lot Line Setback	Side Lot Line Setbacks	Rear Lot Line Setback	Height	Dimensions
Cabin on Severed	13.81m	16.75m/32.06m	extensive	4.5m	33.5m ²
House on enlarged	62.15m	2m/extensive	18.34m	5.5m	249.5m ²
Barn 1 on Severed and enlarged	15.31m	encroaching	38.84m	6m	187.2m
Barn 2 on retained	extensive	22.5m/extensive	extensive	6m	57.3m ²

If known, provide the dates in which each of these buildings were constructed.

older buildings

6. What is the Nature and Extent of the Rezoning?

Special Provision to recognize altered undersized lots in A1 Zone

7. Why is the rezoning being requested?

Required as a condition of Severance E17-22 Approved April 27, 2022

8. Does the proposed Zoning By-law amendment implement a growth boundary adjustment of a settlement area? no

If so, attach separately justification or information for the request based on the current Official Plan policies or associated Official Plan amendment.

9. Does the proposed amendment remove land from an area of employment? no

If so, attach separately justification or information for the request based on the current Official Plan policies or associated Official Plan amendment.

10. Description of proposed development for which this amendment is requested (i.e. permitted uses, buildings or structures to be erected. (Be Specific)

No new buildings proposed

For any proposed buildings or structures on the subject lands provide the following information:

Type	Front Lot Line Setback	Side Lot Line Setbacks	Rear Lot Line Setback	Height	Dimensions

11. Services existing or proposed for the subject lands: Please indicate with a ✓

Water Supply	Existing	Proposed
--------------	----------	----------

Municipal Piped Water Supply	()	()
Private Drilled Well	(x)	()
Private Dug Well	()	()
Communal Well	()	()
Lake or other Surface Water Body	()	()
Other	()	()

Sewage Disposal	Existing	Proposed
Municipal Sanitary Sewers	()	()
Individual Septic System	(x)	()
Communal System	()	()
Privy	()	()
Other	()	()

Note: If the proposed development is on a private or communal system and generate more than 4500 litres of effluent per day, the applicant must include a servicing options report and a hydrogeological report.

Are these reports
attached? _____

If not, where can they be
found? _____

Storm Drainage

Provisions: _____ existing drainage to ditches

Proposed Outlet: _____

12. How will the property be accessed?

Provincial Highway () County Road () Municipal Road – maintained all year (x)

Municipal Road – seasonally maintained () Right-of-way () Water ()

If access is by water, do the parking and docking facilities exist, and what is the nearest public road?

13. Has the subject land ever been the subject of an application under the Planning Act for:

Plan of Subdivision () Consent (x)

Zoning By-law Amendment () Ministers Zoning Order ()

If yes to any of the above, indicate the file number and status of the application.

Severance E 17-22 approved April 27, 2022

14. How is the proposed amendment consistent with the Provincial Policy Statement 2005?

Minor boundary adjustment severance

15. Are the subject lands within area designated under any Provincial Plan(s)? If the answer is yes, does the proposed amendment conform to the Provincial Plan(s)?

17. The Owner is required to attach the following information with the application and it will form part of the application. Applications will not be accepted without the following.

- (a) A sketch based on an Ontario Land Surveyor description of the subject lands showing
- the boundaries and dimension of the subject lands;
 - the location, size and type of all existing and proposed buildings and structures, indicating their setbacks from all lot lines, the location of driveways, parking or loading spaces, landscaping areas, planting strips, and other uses;

Township of Malahide Zoning By-law Amendment Application

- the approximate location of all natural and artificial features (buildings, railways, roads, watercourses, drainage ditches, banks of rivers or streams, wetlands, wooded areas, wells and septic tanks) that are on the subject lands, adjacent to the subject lands, or in the opinion of the applicant may affect the application;
 - the current uses of the land that is adjacent to the subject land;
 - the location, width, and name of any roads within or abutting the subject land, indicating where it is an unopened road allowance, a public traveled road, a private road, or a right-of-way;
 - the location of the parking and docking facilities to be used (if access will be by water only);
 - the location and nature of any easement affecting the subject land.
- (b) Written comments from the Elgin St. Thomas Health Unit, Long Point Region Conservation Authority and Ministry of Transportation (if applicable).
- (c) If a private sewage system is necessary, pre-consultation with the Chief Building Official is required about the approval process
- 18. If this application is signed by an agent or solicitor on behalf of an applicant(s), the owner's written authorization must accompany the application. If the applicant is a corporation acting without an agent or solicitor the application must be signed by an officer of the corporation and the seal if any must be affixed.**

19. Additional Information as required by Council

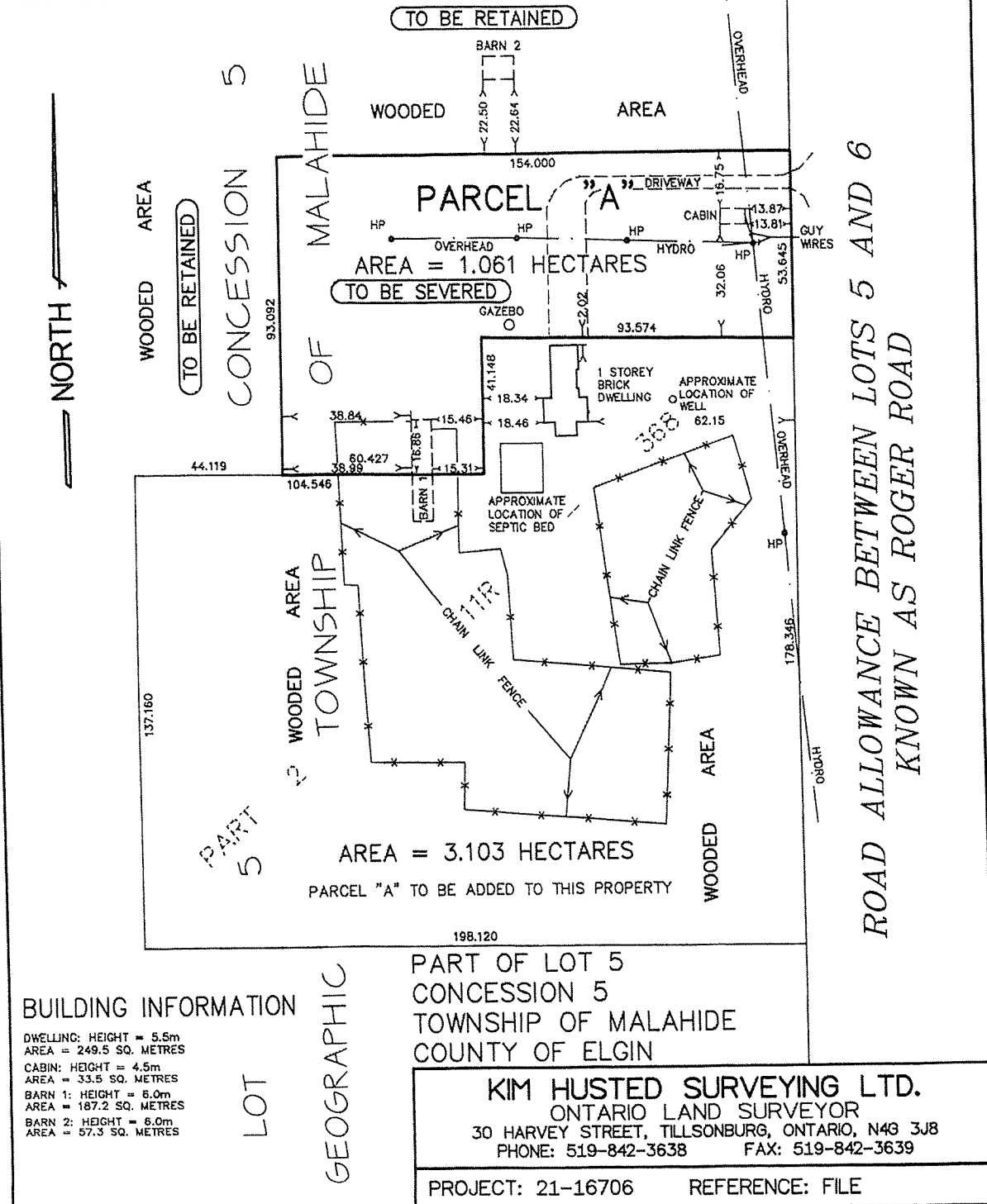
20. If this application is to accommodate the consent of a surplus farm dwelling, please provide the following information:

Date surplus farm dwelling was erected: _____

Please provide the assessment roll number, location, and zoning of the farm parcel with which the subject lands is being consolidated.

SKETCH

ILLUSTRATING PROPOSED SEVERANCE
FOR: GLENN HOWE



**THE CORPORATION OF THE
TOWNSHIP OF MALAHIDE
BY-LAW NO. 22-42**

Being a By-law to amend By-law No. 18-22

**G & M Howe & Sons Ltd. /
7077 and 7841 Rogers Road**

WHEREAS the Council of The Corporation of the Township of Malahide deems it necessary to pass a By-law to amend By-law No. 18-22, as amended;

AND WHEREAS authority is granted under Section 34 of the Planning Act, as amended, to pass a By-law;

AND WHEREAS this By-law conforms with the Official Plan of the Township of Malahide, as amended;

NOW THEREFORE the Council of The Corporation of the Township of Malahide **HEREBY ENACTS AS FOLLOWS:**

1. **THAT** the area shown in bold on the attached map, Schedule “A”, and described as Part of Lot 5, Concession 5, Part 2 of RP-11R368, in the Township of Malahide, shall remain in the “General Agricultural (A1) Zone” of By-law No. 18-22 and shall be subject to the added provisions of Section 5.4.21 of By-law No. 18-22 as set forth in this By-law. The zoning of this land shall be shown as “A1-21” on Key Map 61 of Schedule “A” to By-law No. 18-22, as amended.
2. **THAT** By-law No. 18-22, as amended, is hereby further amended by amending Section 5.4 GENERAL AGRICULTURAL (A1) ZONE – ‘SITE-SPECIFIC’ ZONES, by adding the following new subsection.

“5.4.21 a) Defined Area

A1-21 as shown on Schedule ‘A’, Map No. 61.

b) Minimum Lot Area 4.16ha

3. **THAT** this By-law shall come into force:

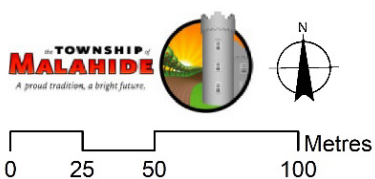
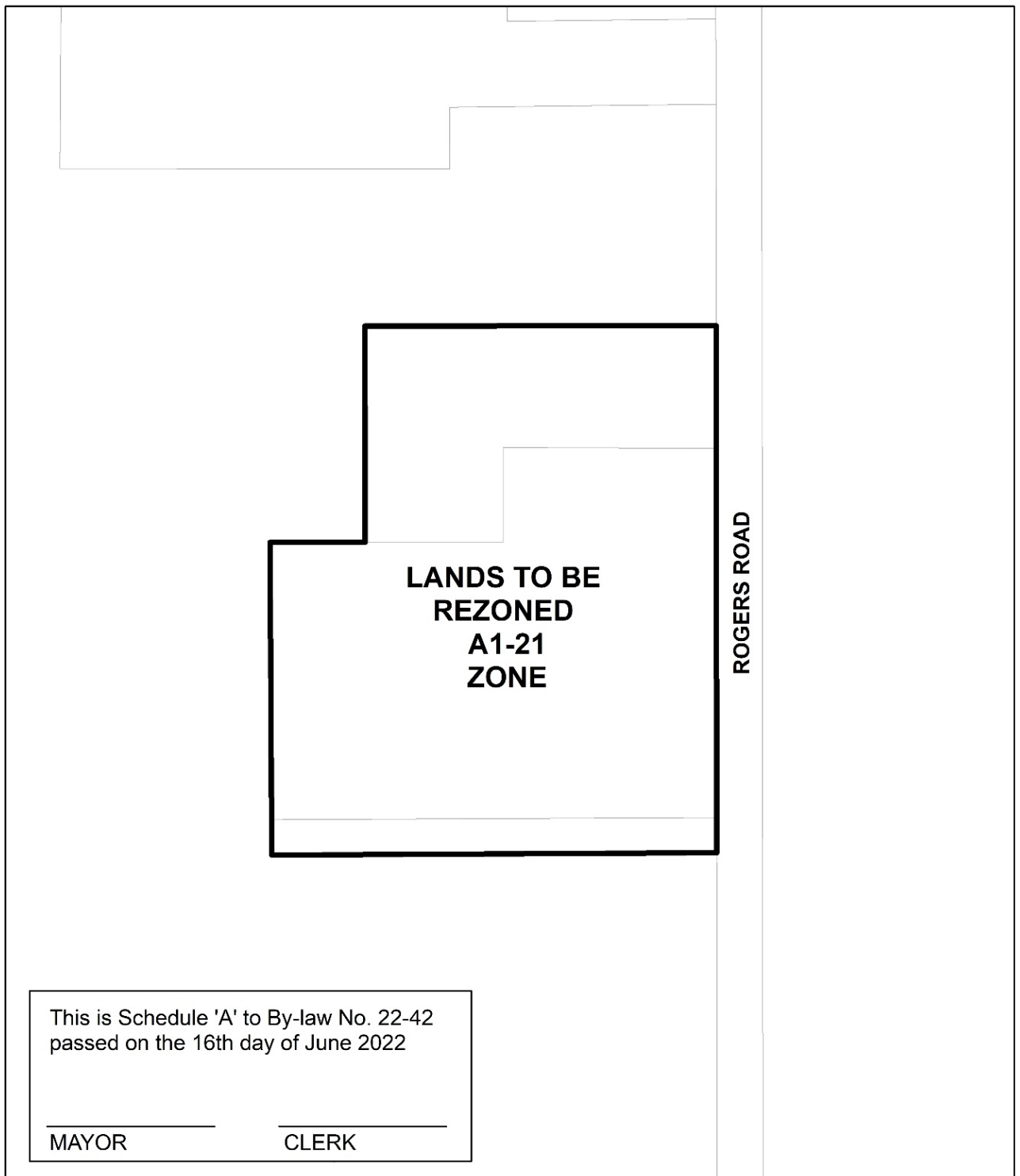
- a) Where no notice of objection has been filed with the Township's Clerk within the time prescribed by the Planning Act and regulations pursuant thereto, upon the expiration of the prescribed time; or,
- b) Where notice of objection has been filed with the Township's Clerk within the time prescribed by the Planning Act and regulations pursuant thereto, upon the approval of the Ontario Land Tribunal.

READ a **FIRST** and **SECOND** time this 16th day of June, 2022.

READ a **THIRD** time and **FINALLY PASSED** this 16th day of June, 2022.

Mayor – D. Mennill

Clerk – A. Adams

SCHEDULE A

Township of Malahide
Comprehensive Zoning By-law No.18-22.

SCHEDULE 'A'
Map 61



Report to Council

REPORT NO.: DS-22-28
DATE: June 16, 2022
ATTACHMENT: Report Photo, Severance Sketch, Application, By-law
SUBJECT: **ZONING BY-LAW AMENDMENT APPLICATION OF SCOTT HAYHOE FARMS INC. (AUTHORIZED AGENT: DAVID ROE C/O CIVIC PLANNING SOLUTIONS INC)**
LOCATION: Part of Lot 32, Concession 3, Township of Malahide (52947 and 52887 Calton Line)

Recommendation:

THAT Report No. DS-22-28 entitled “Zoning By-law Amendment Application of Scott Hayhoe Farms Inc.” be received;

AND THAT the Zoning By-law Amendment Application No. D14-Z07-22 of Scott Hayhoe Farms Inc, relating to the property located at Part of Lot 32, Concession 3, Township of Malahide and known municipally as 52947 and 52887 Calton Line, BE APPROVED for the reasons set out in this Report.

Background:

The subject Zoning By-law Amendment Application (the “Application”) has been submitted by David Roe c/o Civic Planning Solutions Inc. on behalf of Scott Hayhoe Farms Inc. to implement the necessary zoning provisions required for surplus farm dwelling severances.

The Application relates to the property located at Part of Lot 32, Concession 3, Township of Malahide, and known municipally as 52947 and 52887 Calton Line.

Notice of the Application has been circulated to agencies and registered property owners as prescribed and regulated by the Planning Act, RSO 1990, and the Malahide Official Plan, including posting notice in two recent issues of the Aylmer Express.

The analysis of the associated severance/consent applications (Application E14-22 and E15-22) by the County Planning Department and Land Division Committee determined that the severances met all applicable policy (Provincial Policy Statement and Official Plan). The consent applications were provisionally approved subject to the Applicant completing a number of conditions, one such being obtaining a zoning by-law amendment.

Comments/Analysis:

The Council considered the associated severance applications on April 7, 2022 (Report Nos. DS-22-17 and DS-22-18) and supported the severances. A report photo representative of the approved severance is attached for reference.

Development Services Staff has considered the merits of the subject application against the Provincial Policy Statement (PPS), applicable Official Plan policies and the Township's Zoning By-law and all (if any) of the correspondence received as of the date of writing and recommends that Council approve application no. D14-Z07-22.

The drafted by-law places the two (2) severed surplus farm dwelling parcels and the retained farm parcel into the necessary zones of the Malahide Zoning By-law: the "Small Lot Agricultural (A4) Zone" for the surplus farmhouse dwelling parcels; and, "Large Lot Agricultural (A2) Zone" for the retained farmland parcel.

As of the date of writing this report, there have been no comments received in response to the Notice of Public Meeting. Any comments submitted will be summarized and provided for the information of the Council/Public at the Public Meeting.

Financial Implications to Budget:

The full cost of the consent and associated rezoning process is at the expense of the Applicant and has no implications to the Township's Operating Budget.

Relationship to Cultivating Malahide:

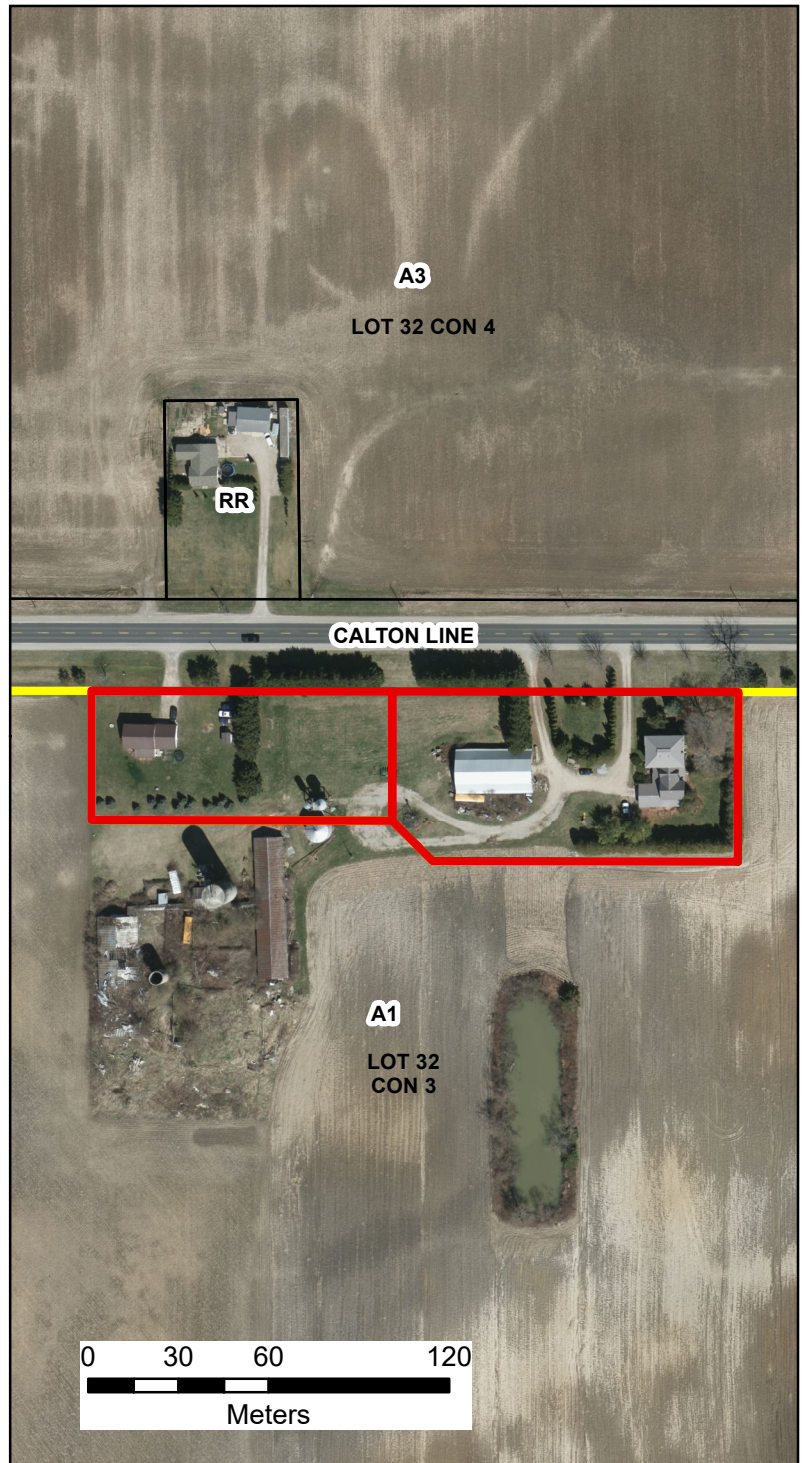
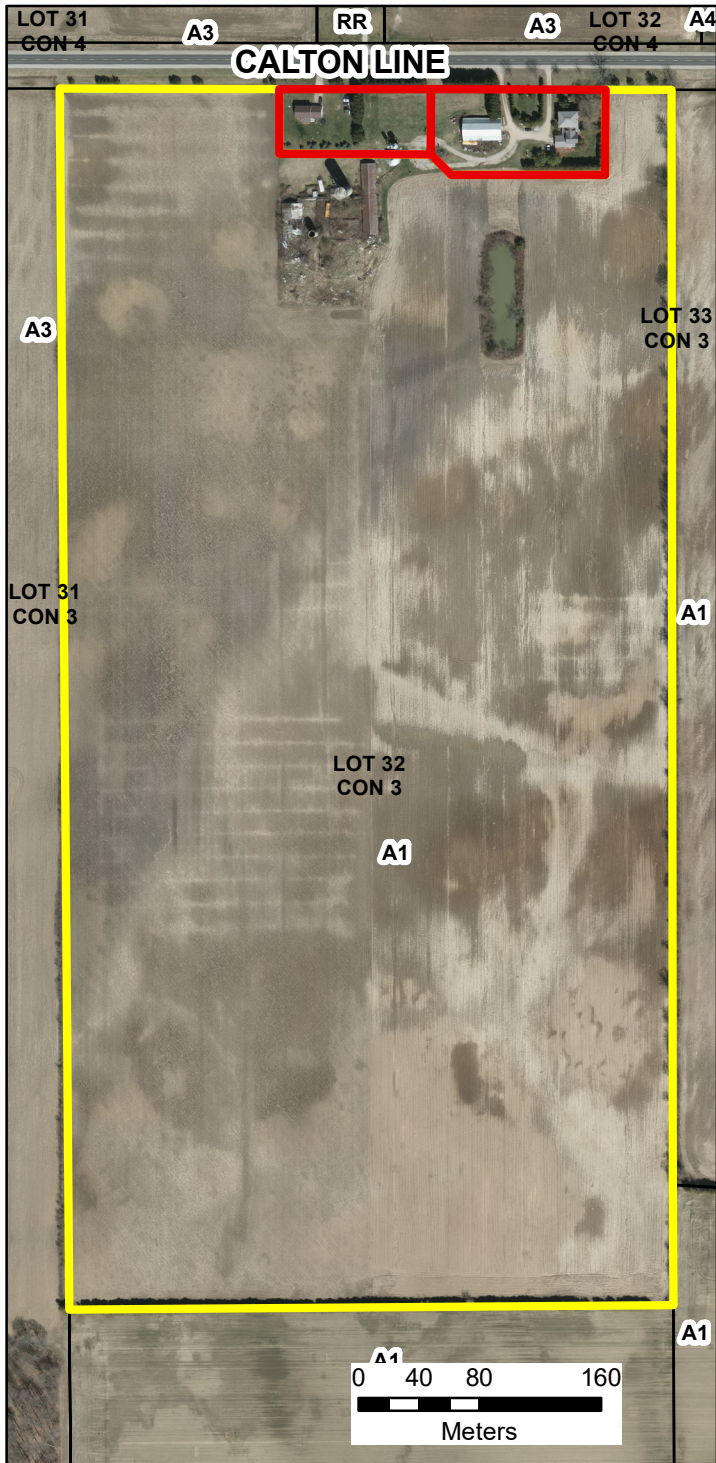
The importance of sustainable planning includes promoting for the protection of agricultural lands. As such, one of the goals that support the "Our Land" Strategic Pillar relates to "Respect the agricultural land base through the land use planning process".

New non-farm lot creation is permitted in very limited circumstances, including surplus farm dwelling severances. As such, the recommendation of this report supports the ICSP.

Submitted by:	Approved by:
Christine Strupat, HBA, CPT Development Services Technician/Assistant Planner	Adam Betteridge, MCIP, RPP Chief Administrative Officer

APPLICATION FOR AZONING BY-LAW AMENDMENT
Scott Hayhoe Farms Inc
(Authorized Agent: David Roe c/o Civic Planning Solutions)
52887 and 52947 Calton Line
Lot 32, Concession 3
Township of Malahide

**Township
of Malahide
Figure 1**

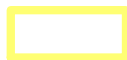


OFFICIAL PLAN DESIGNATION
Agriculture

ZONING
A1 General Agricultural



Lands to be rezoned from A1 General Agricultural
to A4 Small Lot Agricultural Zone



Lands to be rezoned from A1 General Agricultural
to A2 Special Agricultural Zone



1. Registered Owner's Name:

Scott Hayhoe Farms Inc.

Address: 5045 Wales Crescent, Aylmer, ON N5H 2R2

Phone No.
(Home):

Business: 519-902-3409

Fax:

Email: scottehayhoe@gmail.com

Lot and Concession (if applicable):

Are there any other holders of mortgages, charges or other encumbrances of the Subject Lands? If so provide the names and addresses of such persons.

2. Applicant / Authorized Agent:

David Roe , Civic Planning Solutions Inc.

Address: 61 Trailview Dr. Tillsonburg, ON N4G 0C6

Telephone No.: 519-983-8154

Fax:

Please specify to whom all communications should be sent:

Registered Owner () Applicant / Authorized Agent (x)

3. Legal Description of the land for which the amendment is requested:

Concession: 3

Lot: 32

Reference Plan No:

Part Lot:

Street and Municipal Address No.: 52947 and 52887 Calton Line

What is the size of property which is subject to this Application? Lot 1/ Lot 2 / Retained

Area: 1.58ac/1.06ac/77.34ac

115m/100m/195m

m Frontage: m Depth: 56.38m/42.9m/807m m

When were the subject lands acquired by the current owner?

2021

4. Existing Official Plan Designation:

Agricultural

How does the application conform to the Official Plan?

Severance of dwellings made surplus through farm consolidation

5. Existing Zoning By-law Classification:

A1

What are the current uses of the subject lands?

Agricultural cash crops

If known, provide the length of time these uses have continued on this property.

If there are any existing buildings or structures on the subject lands provide the following information:

	Type	Front Lot Line Setback	Side Lot Line Setbacks	Rear Lot Line Setback	Height	Dimension s
Parcel B	House Lot 1	15.11m	16.7m/89.6m	15.77m	8.5m	179m ²
	Barn	19.5m	24.4m/67.9m	15.3m	7m	346.3m ²
Parcel A	House Lot 2	10.7m	9.9m/65m	18.3m	6m	141.7m ²

If known, provide the dates in which each of these buildings were constructed.

older buildings

6. What is the Nature and Extent of the Rezoning?

Rezone severed lots to AR and restrict new dwelling on retained lands

7. Why is the rezoning being requested?

Complete condition of severance approvals E 14-22 and E 15-22

8. Does the proposed Zoning By-law amendment implement a growth boundary adjustment of a settlement area? no

If so, attach separately justification or information for the request based on the current Official Plan policies or associated Official Plan amendment.

9. Does the proposed amendment remove land from an area of employment? no

If so, attach separately justification or information for the request based on the current Official Plan policies or associated Official Plan amendment.

10. Description of proposed development for which this amendment is requested (i.e. permitted uses, buildings or structures to be erected. (Be Specific)

No new buildings proposed

For any proposed buildings or structures on the subject lands provide the following information:

Type	Front Lot Line Setback	Side Lot Line Setbacks	Rear Lot Line Setback	Height	Dimensions
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

11. Services existing or proposed for the subject lands: Please Indicate with a ✓

Water Supply

Existing

Proposed

Municipal Piped Water Supply	()	()
Private Drilled Well	(x)	()
Private Dug Well	()	()
Communal Well	()	()
Lake or other Surface Water Body	()	()
Other	()	()

Sewage Disposal	Existing	Proposed
Municipal Sanitary Sewers	()	()
Individual Septic System	(x)	()
Communal System	()	()
Privy	()	()
Other	()	()

Note: If the proposed development is on a private or communal system and generate more than 4500 litres of effluent per day, the applicant must include a servicing options report and a hydrogeological report.

Are these reports
attached? _____

If not, where can they be
found? _____

Storm Drainage

Provisions: _____ existing drainage to ditches

Proposed Outlet: _____

12. How will the property be accessed?

Provincial Highway () County Road (x) Municipal Road – maintained all year ()

Municipal Road – seasonally maintained () Right-of-way () Water ()

If access is by water, do the parking and docking facilities exist, and what is the nearest public road?

13. Has the subject land ever been the subject of an application under the Planning Act for:

Plan of Subdivision () Consent (x)

Zoning By-law Amendment () Ministers Zoning Order ()

If yes to any of the above, indicate the file number and status of the application.

Severance files E 14-22 and E 15-22 approved April 27, 2022

14. How is the proposed amendment consistent with the Provincial Policy Statement 2005?

Severance of dwellings made surplus through farm consolidation

15. Are the subject lands within area designated under any Provincial Plan(s)? If the answer is yes, does the proposed amendment conform to the Provincial Plan(s)?

17. The Owner is required to attach the following information with the application and it will form part of the application. Applications will not be accepted without the following.

(a) A sketch based on an Ontario Land Surveyor description of the subject lands showing

- the boundaries and dimension of the subject lands;
 - the location, size and type of all existing and proposed buildings and structures, indicating their setbacks from all lot lines, the location of driveways, parking or loading spaces, landscaping areas, planting strips, and other uses;
-

- the approximate location of all natural and artificial features (buildings, railways, roads, watercourses, drainage ditches, banks of rivers or streams, wetlands, wooded areas, wells and septic tanks) that are on the subject lands, adjacent to the subject lands, or in the opinion of the applicant may affect the application;
 - the current uses of the land that is adjacent to the subject land;
 - the location, width, and name of any roads within or abutting the subject land, indicating where it is an unopened road allowance, a public traveled road, a private road, or a right-of-way;
 - the location of the parking and docking facilities to be used (if access will be by water only);
 - the location and nature of any easement affecting the subject land.
- (b) Written comments from the Elgin St. Thomas Health Unit, Long Point Region Conservation Authority and Ministry of Transportation (if applicable).
- (c) If a private sewage system is necessary, pre-consultation with the Chief Building Official is required about the approval process
- 18. If this application is signed by an agent or solicitor on behalf of an applicant(s), the owner's written authorization must accompany the application. If the applicant is a corporation acting without an agent or solicitor the application must be signed by an officer of the corporation and the seal if any must be affixed.**

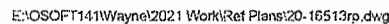
19. Additional Information as required by Council

20. If this application is to accommodate the consent of a surplus farm dwelling, please provide the following information:

Date surplus farm dwelling was erected:

older houses

Please provide the assessment roll number, location, and zoning of the farm parcel with which the subject lands is being consolidated.





Legend

- Local
- Arterial
- Highways
- Elgin Parcels
- Boundary
- Elgin Road Network
- Elgin Road Network
- Elgin Road Network
- World Imagery
- Low Resolution 15m Imagery
- High Resolution 60cm Imagery
- High Resolution 30cm Imagery
- Citations

Notes

0.5 0 0.23 0.5 Kilometers

WGS_1984_Web_Mercator_Auxiliary_Sphere
© Latitude Geographics Group Ltd.

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

**THE CORPORATION OF THE
TOWNSHIP OF MALAHIDE
BY-LAW NO. 22-43**

Being a By-law to amend By-law No. 18-22

**Scott Hayhoe Farms Inc/
52947 and 52887 Calton Line**

WHEREAS the Council of The Corporation of the Township of Malahide deems it necessary to pass a By-law to amend By-law No. 18-22, as amended;

AND WHEREAS authority is granted under Section 34 of the Planning Act, as amended, to pass a By-law;

AND WHEREAS this By-law conforms with the Official Plan of the Township of Malahide, as amended;

NOW THEREFORE the Council of The Corporation of the Township of Malahide **HEREBY ENACTS AS FOLLOWS:**

1. **THAT** the area shown in hatching on the attached map, Schedule "A", and described as Part of Lot 32, Concession 3, in the Township of Malahide, shall be removed from the "General Agricultural (A1) Zone" of By-law No. 18-22 and placed within the "Small Lot Agricultural (A4) Zone" of By-law No. 18-22 as set forth in this By-law. The zoning of this land shall be shown as "A4" on Key Map 86 of Schedule "A" to By-law No. 18-22, as amended.
2. **THAT** the area shown in bold on the attached map, Schedule "A", and described as Part of Lot 32, Concession 3 in the Township of Malahide, shall be removed from the "General Agricultural (A1) Zone" of By-law No. 18-22 and placed within the "Special Agricultural (A2) Zone" of By-law No. 18-22 as set forth in this By-law. The zoning of this land shall be shown as "A2" on Key Map 86 of Schedule "A" to By-law No. 18-22, as amended.
3. **THAT** this By-law shall come into force:
 - a) Where no notice of objection has been filed with the Township's Clerk within the time prescribed by the Planning Act and regulations pursuant thereto, upon the expiration of the prescribed time; or,
 - b) Where notice of objection has been filed with the Township's Clerk within the time prescribed by the Planning Act and regulations pursuant thereto, upon the approval of the Ontario Land Tribunal.

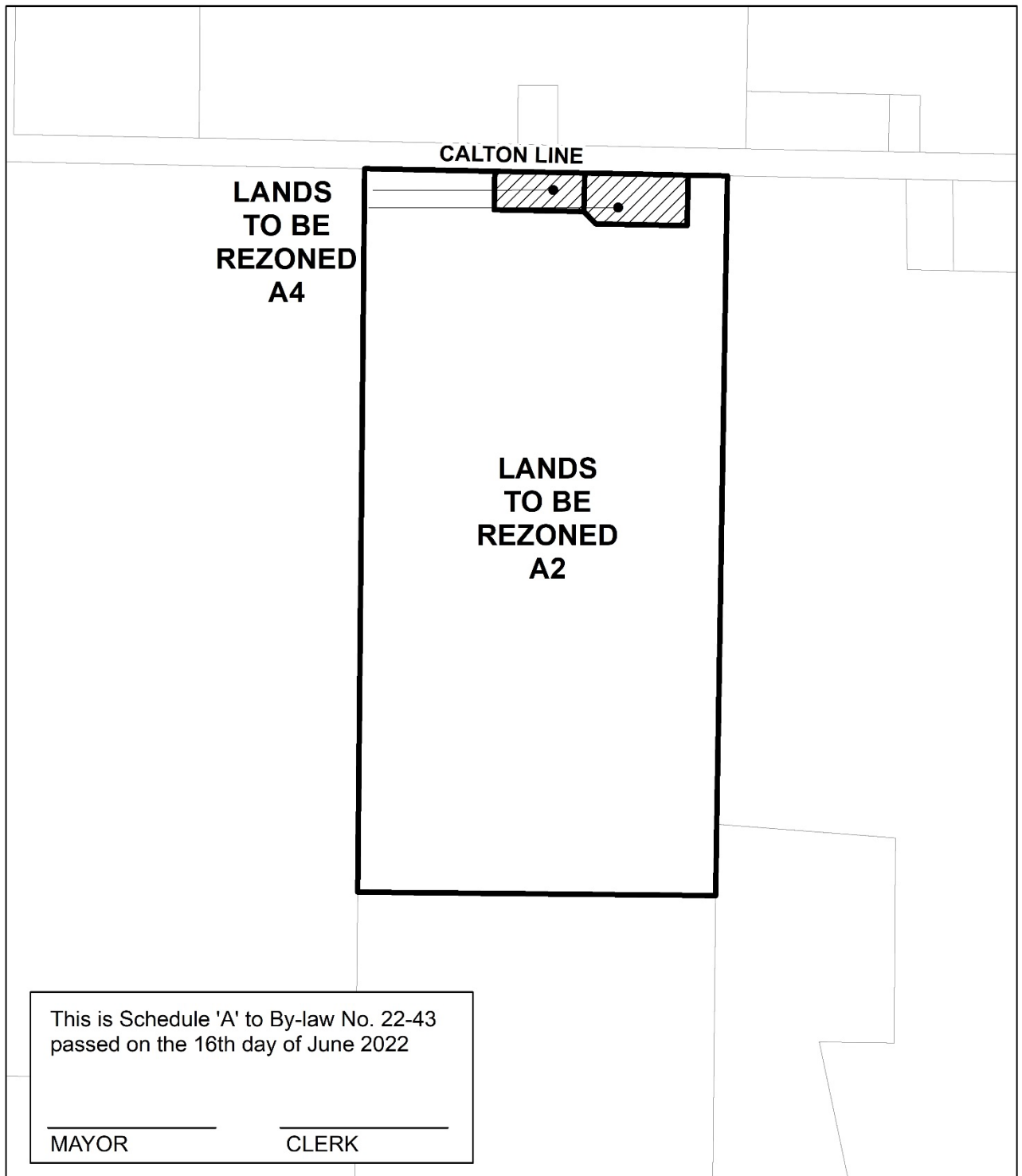
READ a **FIRST** and **SECOND** time this 16th day of June, 2022.

READ a **THIRD** time and **FINALLY PASSED** this 16th day of June, 2022.

Mayor – D. Mennill

Clerk – A. Adams

SCHEDULE A





Report to Council

REPORT NO.: F-22-09
DATE: June 16, 2022
ATTACHMENT: None
SUBJECT: EMERGENCY SERVICES ACTIVITY REPORT - MAY

Recommendation:

THAT Report No. F-22-09 entitled “Emergency Services Activity Report – May” be received.

Comments:

This report provides information reported for the month of May, 2022 unless otherwise stated.

Department Responses

The Malahide Fire Services responded to thirty-one (31) incidents. A comparison of these incidents to the same month of previous years is shown in the bar graph at right:

Medical incidents accounted for approximately forty-five (45%) of all incidents in the subject month. Incident by type is shown on the chart at right.

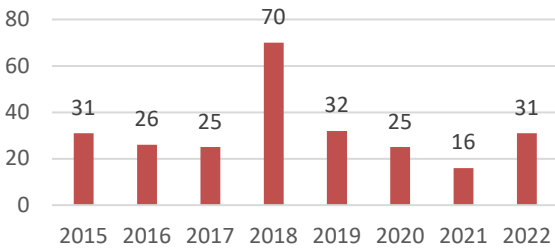
The average age of persons requiring medical response was 61 with a 50/50 male/female ratio.

The split of incidents (North/South) was:

South Station: 20

North Station: 11

Responses Month to Month Comparison



Fire	3
Burn Complaint	5
Alarm Malfunction	0
CO Alarm	2
Public Hazard - Wires Down	2
Technical Rescue MVC	4
Technical Rescue Other	1
Medical	14
Assisting Other Fire Department	0
Total	31

Fire Events Loss/Save, Fire Prevention, and Fire Safety Inspections

There were three fires (2 structure and 1 grass) with a combined estimated total dollar loss of \$120,000 and dollar save of \$2,900,000.

This month's fire safety message was "Clean and inspect your BBQ".

Fire Prevention Staff had two (2) activities for fire prevention instruction or public education. The Fire Prevention team were active at the Springfield Library, reading to young residents of Malahide and demonstrating fire escape planning. As well the team were very visible at the fireworks display hosted by the Malahide Firefighters Association at Port Bruce on the May long weekend. It is estimated that there were approximately 2000 people in attendance and educational materials were provided to more than 200 children.

For this month the Staff conducted three (3) inspections. One (1) inspection orders for non-compliance was issued.

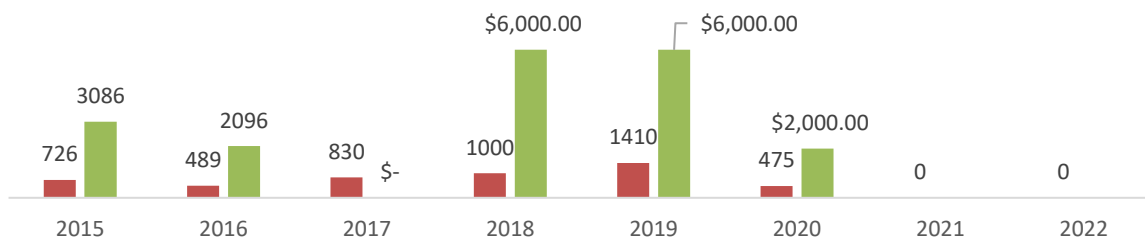
Ontario Police College ("OPC")

To date the Staff have not trained any Police Cadets. The current agreement with the OPC is that it will reimburse Malahide Fire Service \$2,000.00 per session, as well as cover the cost of any equipment that is damaged during any presentation.

The next training session at OPC has not been scheduled.

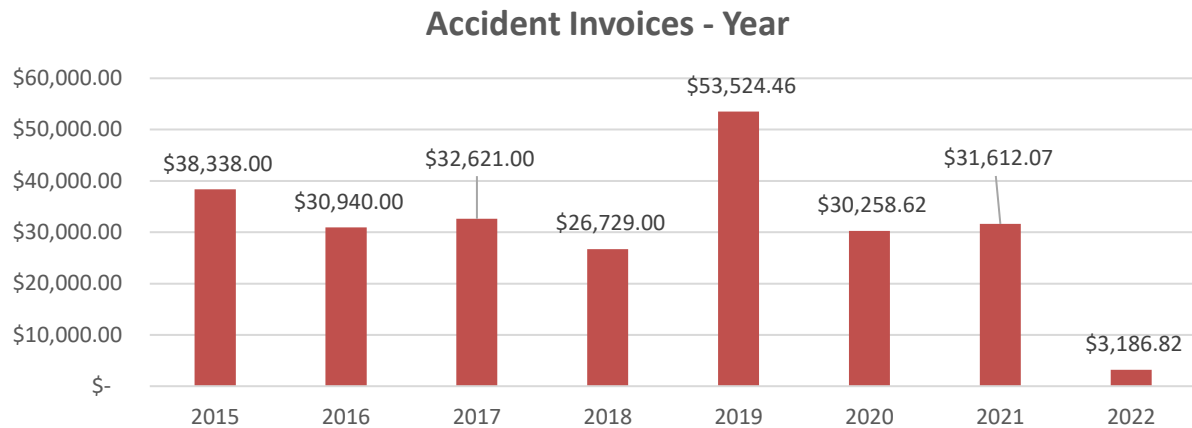
In the below bar graph, the total number of cadets trained per year is shown in red, and the amount invoiced to the OPC is shown in green:

OPC Cadet Training - Year to Date Comparison



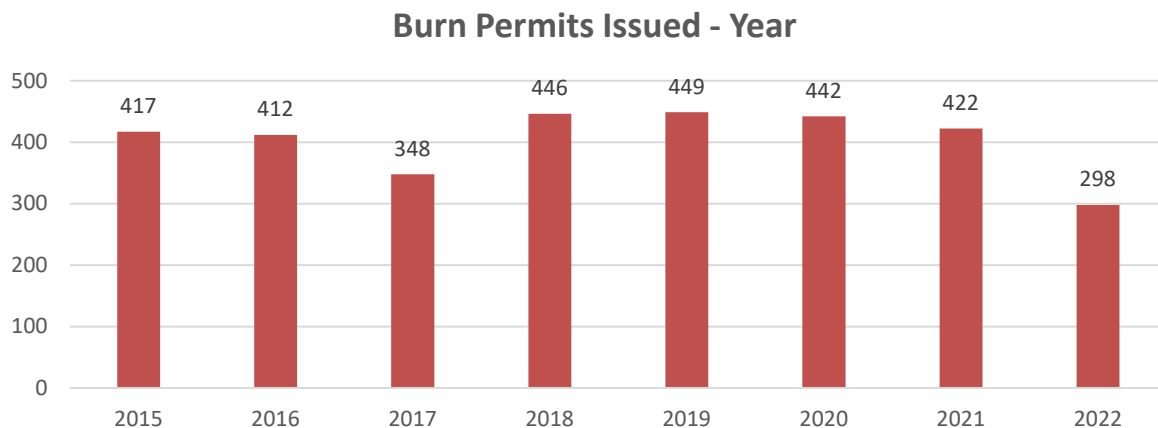
Motor Vehicle Collision Revenues

Malahide Fire Services responded to four (4) motor vehicle collisions (“MVC”) in May, 2022. Year-to-date invoicing for services provided (e.g. to MTO and to non-residents of Malahide), and total for prior years, is provided below:



Burn Permits

Year-to-date permits issued, and total for prior years, is provided below:



General

Automatic Aid Agreement(s)

The Automatic Aid Agreement with Central Elgin was not activated in the subject month.

Mutual Aid

Malahide Fire Services was not requested for Mutual Aid assistance nor was Mutual Aid requested in April.

Emergency Management Program

Emergency Response

Port Bruce Flooding Review of the EM processes continues to be discussed.

Public Education/Awareness, Training, and Emergency Management Program Committee

Public education/awareness included above as a part of Fire Prevention activities.

Training: TBD.

Next Emergency Management Program Committee meeting: TBD.

2022 Program Compliance Activities

EMPC Meeting – TBD

ERP Review – TBD

Annual Exercise – TBD

Malahide Flood Plan Review – TBD

Annual CCG Training – TBD

Relationship to Cultivating Malahide:

The Cultivating Malahide Integrated Community Sustainability Plan (ICSP) is based upon four pillars of sustainability: Our Land, Our Economy, Our Community, and Our Government.

One of the goals that support the “Our Community” Strategic Pillar relates to “Keep Our Community Safe”. By undertaking a long-range strategy, in consultation with the appropriate emergency services authorities, to identify resources required to optimize the provision of emergency services.

Submitted by:	Approved by:
Jeff Spoor Director of Fire & Emergency Services	Adam Betteridge Chief Administrative Officer



Report to Council

REPORT NO.: PW-22-32
DATE: June 16, 2022
ATTACHMENT: Draft Asset Management Plan
SUBJECT: **ASSET MANAGEMENT PLAN UPDATE**

Recommendation:

THAT Report No. PW-22-32 entitled “Asset Management Plan Update” be received;

AND THAT pursuant to Section 5 of Ontario Regulation 588/17, the Asset Management Plan, dated December 2nd, 2021, be approved; it being pointed out that the Director of Finance, as the executive lead of the municipality, has endorsed the Asset Management Plan as presented;

AND THAT consideration of this Asset Management Plan be made a part of the annual budgeting process to ensure that sufficient capital funds are available to fund the Asset Management Plan;

AND THAT this Asset Management Plan be updated, as needed, to reflect the current priorities of the Township.

Background:

O. Reg. 588/17: Asset Management Planning for Municipal Infrastructure was approved in December 2017. This regulation requires municipalities to move their asset management plans forward, detailing specific requirements and timelines. As the Council is aware, the Township received a grant to update the Township's asset management plan in accordance with the new regulation. Watson & Associates was engaged in 2018 and completed an update at that time. The next upcoming reporting milestone under O. Reg. 588/17 is due on July 1st, 2022, and requires an asset management plan covering degradation and a funding strategy relating to a municipality's core infrastructure assets.

Comments/Analysis:

In December 2021, the Township Staff undertook an update of the Watson plan, and with this update, it is the intent to move the Township's asset management practices towards compliance with Ontario Regulation 588/17. The Regulation stipulated that an Asset Management Plan be updated for core infrastructure assets, including: roads; bridges and culverts; water distribution systems, wastewater collection networks, and stormwater treatment. The Township does not currently own stormwater treatment infrastructure; surface water is managed under the Drainage Act, R.S.O. 1990. A review has not been conducted on non-core assets at this time; the forecasts from the Watson plan will be used for the purposes of this update. Non-core assets must be reviewed and updated by July 1st, 2024 under the O. Reg. 588/17 timelines.

The following tasks were performed during this update to ensure compliance with O. Reg. 588/17:

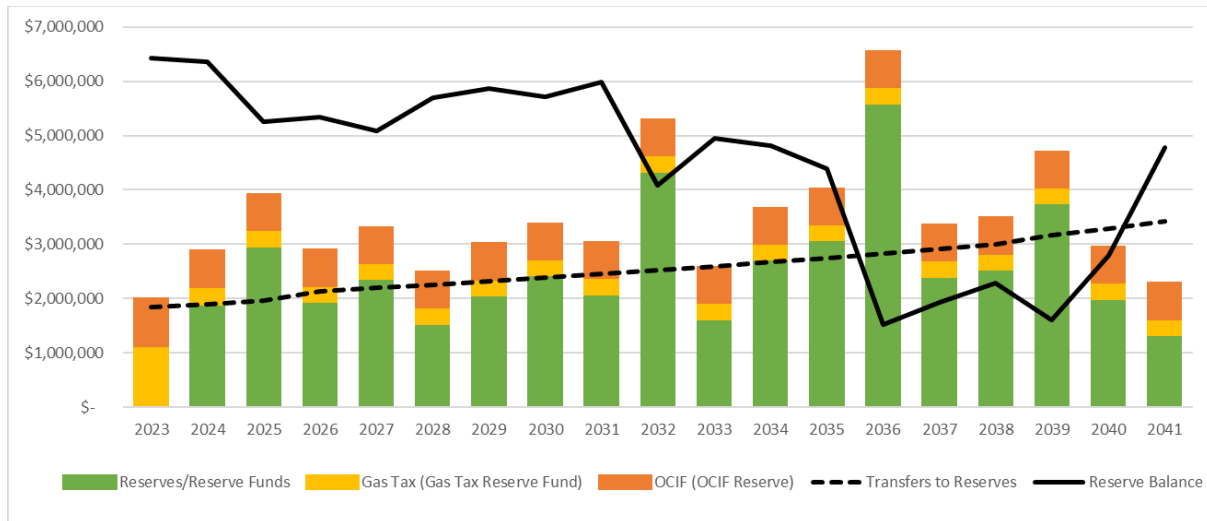
- An inventory of assets, updating the current conditions and current replacement costs;
- A review and update of current defined levels of service;
- An evaluation of the lifecycle activities undertaken on an asset to maintain current levels of service;
- A forecast of annual costs associated with maintaining current levels of service, performing lifecycle activities and replacements; and,
- A review of assumptions regarding future changes in population and economic activities.

As these tasks were performed, the Watson & Associates plan was updated, in largely the same format, with the following key changes to be highlighted:

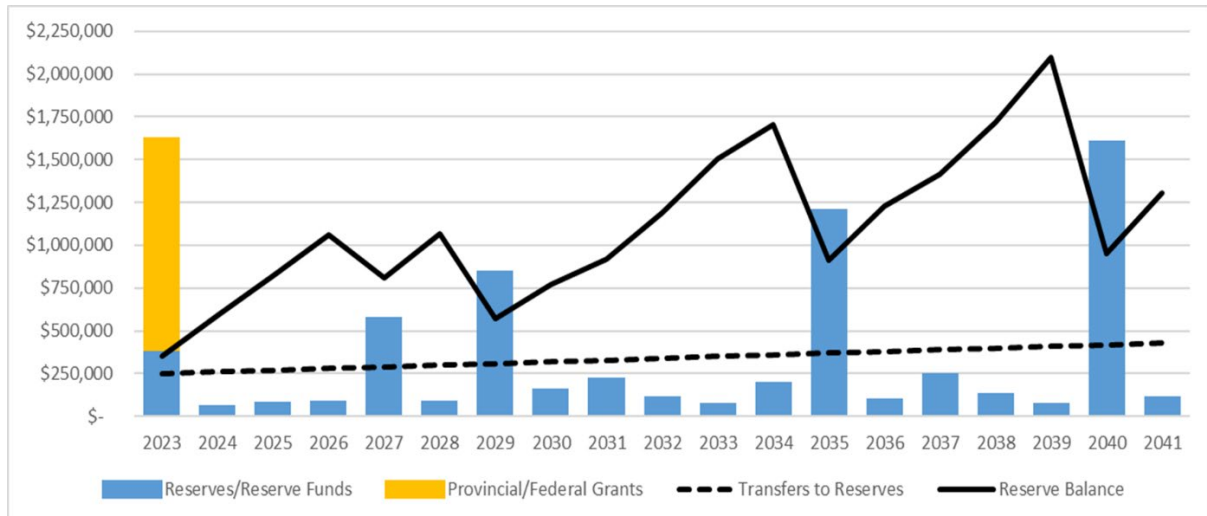
- Bridge and Culvert data was updated from the 2016 OSIM report to the 2020 OSIM report, as prepared by MEDA Engineering & Technical Services.
- Road data was updated from the 2018 Roads Needs Study update to the 2021 Roads Needs Study report, as prepared by 4 Roads Management Services.
- Water and Wastewater sections were added to this plan, and data was updated from the 2013 Rate Studies, as prepared by Watson & Associates, to current data, as informed by Staff.
- Current Levels of Service were reformatted to aid comprehension of technical and community level objectives, expectations, and performance measures.
- Total replacement costs and lifecycle activity costs were updated from 2019 values to 2021 values, to ensure more accurate forecasting.

The only significant change to the forecasted funding strategies presented by Watson & Associates was the elimination of recommended debt financing in the amount of \$3.1 million. A forecast of annual costs over the 20-year reporting period, depicted below, identifies sources of funding for capital expenditures and the annual contribution to capital reserves.

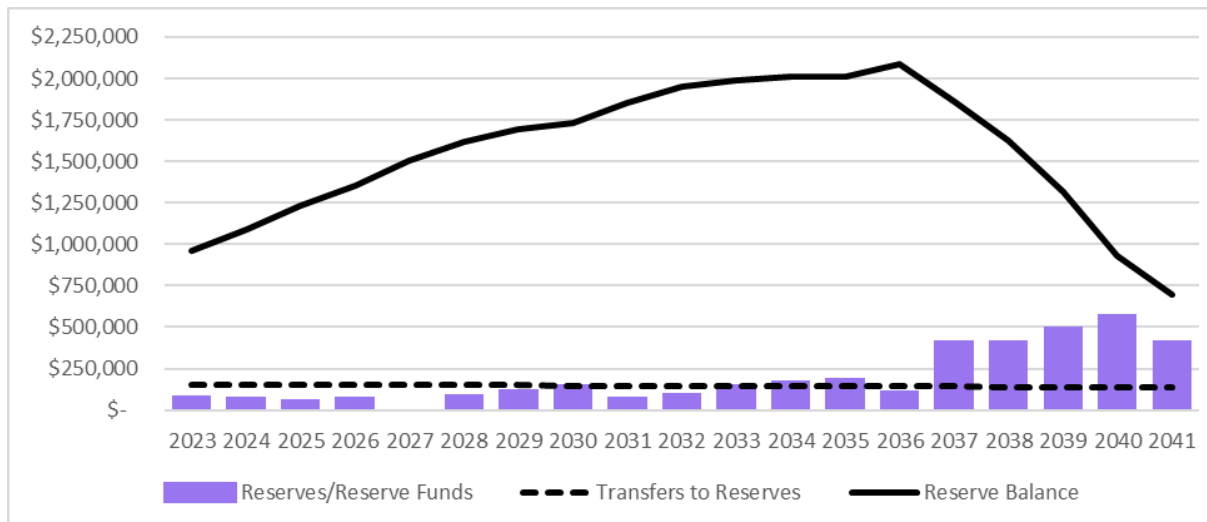
Capital Budget Funding Strategy – Tax Levy



Capital Budget Funding Strategy – Water Distribution System



Capital Budget Funding Strategy – Wastewater Collection System



The plan is intended to be a tool for Township Staff and Council to use during various decision-making processes, including informing the annual budgeting process and future capital grant application processes. The plan will serve as a road map for sustainable infrastructure planning going forward. As such, the plan will continue to be updated in compliance with the timelines established under O. Reg. 588/17, and reviewed on an continual basis to ensure that the most up-to-date information is available for decision-making.

Financial Implications to Budget:

The recommendations of this report will not have an impact on the current budget, however this Asset Management Plan would become a significant part of the annual budgeting process to ensure that sufficient capital funds are available to fund the Asset Management Plan.

Relationship to Cultivating Malahide:

The Cultivating Malahide Integrated Community Sustainability Plan (ICSP) is based upon four pillars of sustainability: Our Land, Our Economy, Our Community, and Our Government.

One of the goals that support the “Our Local Government” Strategic Pillar relates to “Embody Financial Efficiency throughout Decision-Making”. Providing Council with appropriate information about the Township’s assets meets the requirements of this goal.

Submitted by:	Approved by:	Approved for Council:
Talya Jones, Asset Management Analyst	Matt Sweetland, P.Eng., Director of Public Works	Adam Betteridge, Chief Administrative Officer
	Adam Boylan, Director of Finance / Treasurer	



Asset Management Plan

Township of Malahide

A proud tradition, a bright future.

May 6, 2022

Township of Malahide
87 John Street South, Aylmer On
www.malahide.ca

Table of Contents

Definitions, Abbreviations, and Acronyms.....	4
1. INTRODUCTION	5
1.1. Overview	5
1.2. Legislative Context.....	6
1.3. Plan Development	6
1.4. State of Local Infrastructure and Levels of Service	7
1.5. Lifecycle Management	7
1.6. Funding Strategy	8
1.7. Growth	8
1.8. Maintenance and Integration	8
2. ROAD NETWORK	10
2.1. State of Local Infrastructure and Levels of Service	10
2.1.1. Asset Class Summary	10
2.1.2. Condition	11
2.1.3. Current Levels of Service	12
2.2. Lifecycle Activities	14
2.2.1. Lifecycle Activities	14
2.2.2. Degradation Profiles	14
2.2.3. Design Criteria	15
2.2.4. Expected Lifecycle and Associated Risk	16
2.3. Funding Strategy	18
2.3.1. Annual Cost Forecast	18
2.3.2. Funding Strategy	18
2.3.3. Network Service Level Forecast	19
3. BRIDGES AND STRUCTURAL CULVERTS	20
3.1 State of Local Infrastructure and Levels of Service	20
3.1.1. Asset Class Summary	20
3.1.2. Condition	21
3.1.3. Current Levels of Service	21
3.2. Lifecycle Management	23
3.2.1. Lifecycle Activities	23
3.2.2. Degradation Profiles	23
3.2.3. Decision Criteria	24
3.2.4. Expected Lifecycle and Associated Risk	24
3.3. Funding Strategy	26
3.3.1. Annual Cost Forecast	26
3.3.2. Funding Strategy	27
3.3.3. Network Service Level Forecast	27
4. WATER DISTRIBUTION SYSTEM	28
4.1. State of Local Infrastructure and Service Levels	28
4.1.1. Asset Class Summary	28

4.1.2.	Condition	29
4.1.3.	Current Levels of Service	29
4.2.	Lifecycle Management	31
4.2.1.	Lifecycle Activities	31
4.2.2.	Degradation Profile	31
4.2.3.	Decision Criteria	32
4.2.4.	Expected Lifecycle and Associated Risk	32
4.3.	Funding Strategy	35
4.3.1.	Annual Cost Forecast	35
4.3.2.	Funding Strategy	36
4.3.3.	Network Service Level Forecast	36
5.	WASTEWATER COLLECTION SYSTEM	37
5.1.	State of Local Infrastructure and Service Levels	37
5.1.1.	Asset Class Summary	37
5.1.2.	Condition	38
5.1.3.	Current Levels of Service	38
5.2.	Lifecycle Management	40
5.2.1.	Lifecycle Activities	40
5.2.2.	Degradation Profile	40
5.2.3.	Decision Criteria	41
5.2.4.	Expected Lifecycle and Associated Risk	41
5.3.	Funding Strategy	44
5.3.1.	Annual Cost Forecast	44
5.3.2.	Funding Strategy	44
5.3.3.	Network Service Level Forecast	45
6.	OVERALL FUNDING STRATEGY	46
6.1.	Funding Sources	46
6.2.	Funding Shortfall	46
6.3.	Tax Levy Impact	46
6.4.	User Fee Impact – Water and Wastewater	47
7.	RECOMMENDATIONS	48
7.1.	Current Considerations	48
7.2.	Future Improvements	48
	Appendix A Financing Strategy Tables – Tax Levy	1
	Appendix B Financing Strategy Tables – Water Distribution System	1
	Appendix C Financing Strategy Tables – Wastewater Collection System	1

Definitions, Abbreviations, and Acronyms

CL	Centreline
BCI	Bridge Condition Index
EUL	Estimated Useful Life
GTF	Federal Gas Tax Fund
G/S	Gravel
HCB	High-Class Bituminous
HVAC	Heating, Ventilation, and Air Conditioning
IJPA	Infrastructure for Jobs and Prosperity Act
KPI	Key Performance Indicator
LCB	Low-Class Bituminous
LOS	Levels of Service
MMS	Minimum Maintenance Standards
OCIF	Ontario Community Infrastructure Fund
OSIM	Ontario Structure Inspection Manual
SCADA	Supervisory Control and Data Acquisition System
ULR	Useful Life Remaining

1. INTRODUCTION

1.1. Overview

The main objective of an asset management plan is to use a municipality's best available information to develop a comprehensive long-term plan for capital assets. In addition, the plan should provide a sufficiently documented framework that will enable continuous improvement and updates of the plan, to ensure its relevancy over the long-term. Watson & Associates Economists Ltd. (Watson) was retained by the Township of Malahide (Township) in 2018 to update the Township's 2013 Asset Management Plan (dated November 29, 2013). In 2021, Township Staff undertook an update of the Watson plan (dated February 20, 2019), and with this update, it is the intent to move the Township's asset management practices towards compliance with Ontario Regulation 588/17.

Due July 1, 2022, O. Reg. 588/17 requires municipal asset management plans to be updated for core assets only (roads, bridges and culverts, and water and wastewater assets). The update should include updated asset inventories, current levels of service, lifecycle activities, and funding strategies. The next update, due July 1, 2024, will require the same update for all capitalized assets. This plan will be a tool for Township staff and Council to use during various decision-making processes, including the annual budgeting and future capital grant applications. This plan will serve as a road map for sustainable infrastructure planning going forward.

The following assets are included in this asset management plan:

Funding Source - Tax Levy

- Roads;
- Bridges and structural culverts;
- Streetlights and sidewalks;
- Guiderails;
- Fleet;
- Facilities (buildings, parks, and cemeteries); and
- Equipment.

Funding Source - User Fees

- Water distribution system; and
- Wastewater collection system.

The Township's goals and objectives with respect to asset management are identified in the Township's Strategic Asset Management Policy. A major theme within that policy is for the Township's physical assets to be managed in a manner that will support the sustainable provision of municipal services to Township residents. Through the implementation of the asset management plan, the Township's practice should evolve to provide services at levels proposed within this document. Moreover, infrastructure and other capital assets should be maintained at condition levels that provide a safe and functional environment for its residents. Therefore, the asset management plan, and the progress with respect to its implementation, will be evaluated based on the Township's ability to meet these goals and objectives.

1.2. Legislative Context

Asset management planning in Ontario has evolved significantly over the past decade. Before 2009, capital assets were recorded by municipalities as expenditures in the year of acquisition or construction. The long-term issue with this approach was the lack of a capital asset inventory, both in the municipality's accounting system and financial statements. As a result of revisions to section 3150 of the Public Sector Accounting Board handbook, effective for the 2009 fiscal year, municipalities were required to capitalize tangible capital assets, thus creating an inventory of assets.

In 2012, the province launched the Municipal Infrastructure Strategy. As part of that initiative, municipalities and local service boards seeking provincial funding were required to demonstrate how any proposed project fits within a detailed asset management plan. In addition, asset management plans encompassing all municipal assets needed to be prepared by the end of 2016 to meet Federal Gas Tax agreement requirements. To assist in defining the components of an asset management plan, the Province produced a document entitled *Building Together: Guide for Municipal Asset Management Plans*. This guide documented the components, information, and analysis that were required to be included in municipal asset management plans under this initiative. The province's Infrastructure for Jobs and Prosperity Act, 2015 (IIPA) was proclaimed on May 1, 2016. This legislation detailed principles for evidence-based and sustainable long-term infrastructure planning. IIPA also gave the province the authority to guide municipal asset management planning by way of regulation.

In late 2017, the province introduced O. Reg. 588/17 under IIPA. The intent of O. Reg. 588/17 is to establish a standard format for municipal asset management plans. Specifically, the regulations require that asset management plans be developed that define the current and proposed levels of service, identify the lifecycle activities that would be undertaken to achieve these levels of service, and provide a financial strategy to support the levels of service and lifecycle activities. This plan has been developed to address the requirements of O. Reg. 588/17 utilizing the best information available to the Township at this time.

1.3. Plan Development

The asset management plan was developed using a program that leverages the Township's asset management principles as identified within its strategic asset management policy, capital asset database information, and staff input in identifying current and proposed levels of service, as informed by the Council, as well as proposed asset management strategies.

The development of the Township's asset management plan is based on the steps summarized below:

1. Compile available information pertaining to the Township's capital assets (to be included in the plan) including attributes such as size/material type, useful life, age, accounting valuation and current valuation. Update current valuation, where required, using benchmark costing data or applicable inflationary indices.
2. Define and assess the state of local infrastructure through current asset conditions, based on a combination of Township staff input, existing asset reports, and an asset age-based condition analysis.
3. Define and document current levels of service, as well as proposed levels of service, based on discussions with Township Council and staff, and consideration of various background reports.

4. Develop an asset management strategy that provides the activities required to sustain the levels of service discussed above. The strategy summarizes these activities in the forecast of annual capital and operating expenditures required to achieve these level of service outcomes.
5. Develop a funding strategy to support the lifecycle management strategy. The funding strategy informs how the capital and operating expenses arising from the asset management strategy will be funded over the forecast period, and may be accommodated in the annual budget process.
6. Document the comprehensive Asset Management Plan in a formal report to inform future decision-making and to communicate planning to municipal stakeholders.
7. Make the Asset Management Plan and all relevant background information and reports available to the public. The Asset Management Plan, Strategic Asset Management Policy, and relevant reports to Council will be available on the Township's website, in addition to all background information made available upon request.

1.4. State of Local Infrastructure and Levels of Service

This is an analysis of the Township's assets, the current service levels provided by those assets, and the service levels the Township intends to deliver into the future.

O. Reg. 588/17 requires that for each asset category included in the asset management plan, the following information must be identified:

- Summary of the assets;
- Replacement cost of the assets;
- Average age of the assets (it is noted that the Regulation specifically requires average age to be determined by assessing the age of asset components);
- Information available on condition of assets; and
- Approach to condition assessments (based on recognized and generally accepted good engineering practices where appropriate)

Asset management plans must identify the current levels of service being provided for each asset category. For core municipal infrastructure assets (Bridges and Culverts, Roads, Wastewater, and Water), both the qualitative descriptions pertaining to community levels of service, and metrics pertaining to technical levels of service, are prescribed by O. Reg. 588/17. For all other infrastructure assets, each municipality is required to establish its own measures for levels of service.

1.5. Lifecycle Management

Lifecycle management strategies are required to maintain the current and proposed levels of service. A lifecycle management strategy identifies the recommended lifecycle activities required to achieve desired levels of service. Lifecycle activities are the specified actions that can be performed on assets in order to increase service level and extend service life. These actions can be carried out on a planned schedule in a prescriptive manner, or through a reactionary approach where the treatments are only carried out when specified conditions are met. O. Reg. 588/17 requires that all potential lifecycle activity options be presented, with the aim of analyzing these options in search of identifying the set of lifecycle activities that can be undertaken at the lowest cost to maintain current levels of service or to provide proposed levels of service.

Asset management plans must include a 10-year capital plan that forecasts the lifecycle activities resulting from the lifecycle management strategy. What follows are the lifecycle management strategies for all asset classes contained within this asset management plan, with each section focusing on an individual asset category. Although a considerable amount of effort has been spent on developing lifecycle management strategies informed by observed asset conditions, there are still some assets for which the lifecycle management strategy is age-based. The expenditure forecasts resulting from the lifecycle management strategies for each asset category are also included and have been developed for a 20-year forecast period.

1.6. Funding Strategy

A funding strategy should sustainably fund the lifecycle management strategies of an asset. The funding strategy contained herein focuses on examining how the Township can fund the lifecycle activities required to maintain its assets at the current and/or proposed levels of service. The strategies presented are a suggested approach which should be examined and re-evaluated during the annual budgeting processes to ensure the sustainability of the Township's financial position as it relates to its assets.

O. Reg. 588/17 requires a 10-year capital plan that forecasts the costs of implementing the lifecycle management strategy and the lifecycle activities required therein. The funding strategy in this asset management plan has been developed for a 20-year forecast period, where adequate data allowed, to enable the Township to evaluate the sustainability of its assets over a longer-term horizon. The funding strategy forecast (including both expenditure and revenue sources) was prepared consistent with the Township's departmental budget structure so that it can be used in conjunction with the annual budget process. Various financing options, including reserve funds, debt, and grants were considered. The recommended financing strategy identifies rehabilitation and replacement activities required over the forecast period.

1.7. Growth

For municipalities with a population of less than 25,000, as reported by Statistics Canada in the most recent official census, assumptions need to be made regarding future changes in population and how those changes will affect asset lifecycle activities required to maintain current levels of service. The 2021 population estimate of the Township of Malahide, as reported by Statistics Canada, was 10,201. This represents an increase of 0.7% from the previous year's estimate. Assuming that growth remains at this level for the next ten years, the current lifecycle activities outlined in this report will remain sufficient to maintain the current levels of service.

1.8. Maintenance and Integration

It should be noted, that while this report covers a forecast period of 20 years, the full lifecycle of the Township's assets were considered in the calculations. In this context, the asset management plan should be updated as the strategic priorities and capital needs of the Township change. This can be accomplished in conjunction with specific legislative requirements (i.e. 5-year review of asset management plan under Infrastructure for Jobs and Prosperity Act), as well as the Township's annual budget process.

Further integration into other Township financial/planning documents would assist in ensuring the ongoing accuracy of the asset management plan, as well as the integrated financial/planning documents. The asset management plan has been developed to allow linkages to a number of strategic documents,

as identified in the Township's Strategic Asset Management Policy. Township staff have the tools available to perform updates to the asset management plan as necessary.

In the future, the asset management plan will continue to be updated by Township staff to more closely integrate with other studies and reports pertaining to Township assets. For example, the strategies identified in this asset management plan should be updated to include the biennial OSIM and Road Needs Study reports.

When updating the asset management plan, it should be noted that the state of local infrastructure, proposed levels of service, lifecycle management strategy, and funding strategy are integrated and impact each other. For example, the funding strategy outlines how the asset management strategy will be funded. The lifecycle management strategy illustrates the costs required to maintain expected levels of service at a sustainable level. The proposed levels of service component summarizes and links each service area to specific assets contained in the state of local infrastructure section and thus determines how these assets will be used to provide expected service levels.

2. ROAD NETWORK

2.1. State of Local Infrastructure and Levels of Service

2.1.1. Asset Class Summary

The Township currently owns and manages 273 centreline kilometres of road assets with a 2021 replacement value totaling approximately \$130.6 million. The replacement value has been estimated based on replacement costs from the Township's 2021 State of the Infrastructure and Asset Management Plan for Roads report as prepared by 4 Roads Management Services (dated February 02, 2022). The road network consists of roads with various surface types, including high-class bituminous (HCB), low-class bituminous (LCB), and gravel (G/S). These assets reside in urban, semi-urban, and rural roadside environments. Table 2-1 and Table 2-2 provide a breakdown of the road network by surface type and roadside environment.

The entirety of the road network, on average, was 22 years old in 2021. There are relatively few HCB (4%) roads in the network, which are on average younger than the other surface types. The majority of the road network consist of LCB roads (76%), with the remainder of the network consisting of gravel roads (20%). In the context of roadside environment, the majority of the network is comprised of rural roads (94%).

Figure 2-1 maps the road network by surface material in order to visualize the Township's current circumstances.

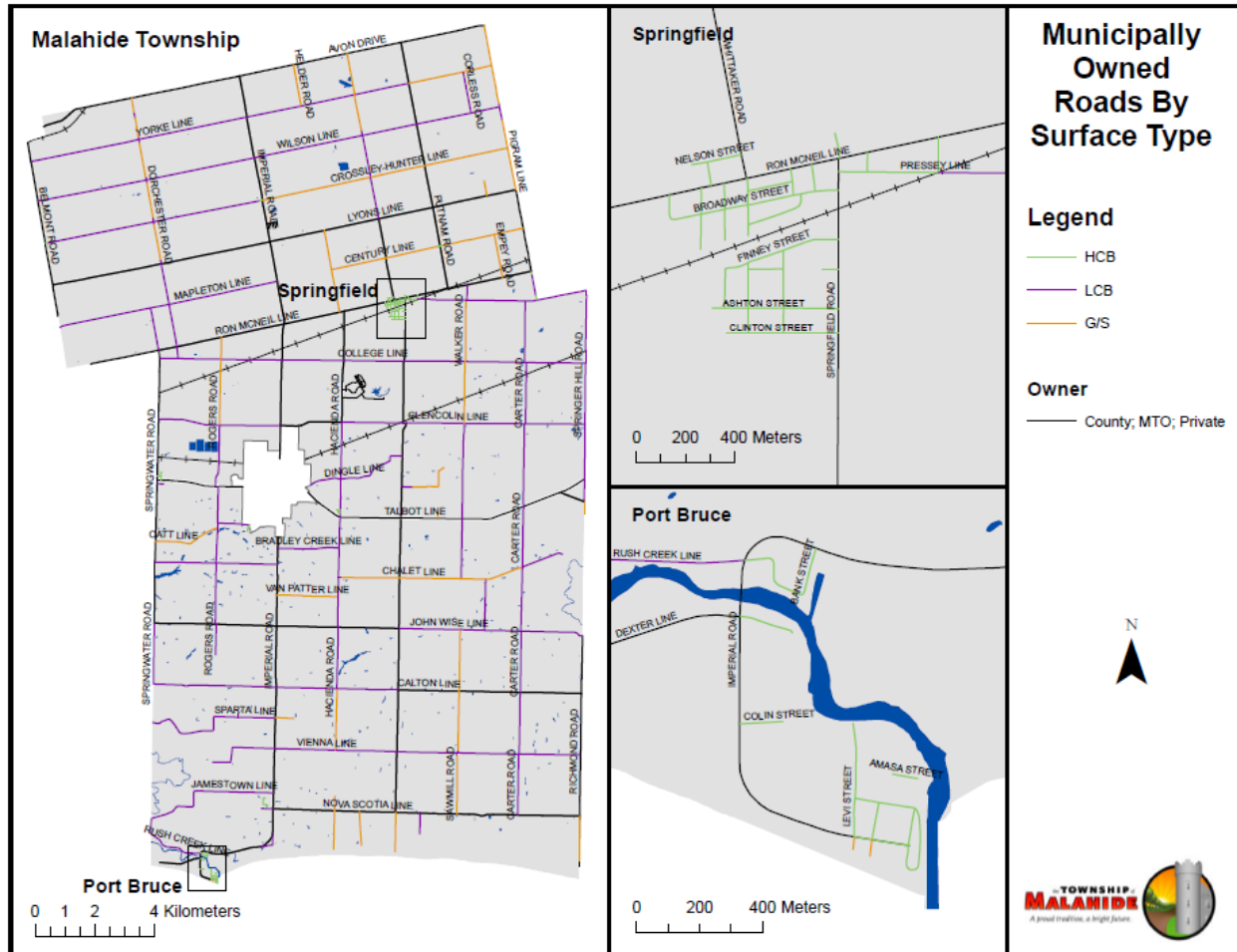
Table 2-1
Road Network – surface Type

Surface Type	Centreline Kilometers	Percentage (%) of Total Centerline Kilometers	Average Age	Replacement Cost (2021 \$)
HCB	11	4%	17	\$6,869,034
LCB	206	76%	22	\$102,152,730
G/S	56	20%	30	\$21,662,945
TOTAL	273	100%	22	\$130,684,709

Table 2-2
Road Network – Roadside Environment

Roadside Environment	Centreline Kilometers	Percentage (%) of Total Centerline Kilometers	Average Age	Replacement Cost (2021 \$)
Urban	2	1%	7	\$2,188,046
Semi-Urban	14	5%	21	\$6,506,027
Rural	257	94%	23	\$121,990,636
TOTAL	273	100%	22	\$130,684,709

Figure 2-1
Map – Roads by Surface Type



2.1.2. Condition

While asset age may provide some limited context to the functional state of an asset, an assessed physical condition is a better measure of where an asset is in its lifecycle. Physical condition therefore provides a more accurate estimate of an asset's remaining service life. The Township's 2021 State of the Infrastructure and Asset Management Plan for Roads report provides a physical condition rating for each road segment in the network. This physical condition rating is provided on a scale of 0-100, with 100 being a perfect condition and 0 indicating an asset at the end of its service life.

To better communicate the condition of the road network, these numeric condition ratings have been segmented into qualitative condition states. Table 2-3 summarizes the various physical condition ratings and the condition state they represent for road assets.

Table 2-3
Road Condition States Defined with Respect to Physical Condition

Physical Condition	Condition State
100-91	Brand New
90-81	Very Good
80-71	Good
70-51	Fair
50-34	Poor
33-1	Very Poor
0	End of Life

Table 2-4 examines the average condition of the road network by surface type, which is weighted based on centreline kilometres. Adjustments to the physical condition are performed annually based on the lifecycle degradation profiles developed in the Township's 2021 State of the Infrastructure and Asset Management Plan for Roads report, or set to known values when capital improvements are completed (i.e. rehabilitation or replacement activities being performed). The physical condition ratings utilized in this plan are from mid-2021 and represent the most up-to-date information available to the Township at this time.

As illustrated in Table 2-4, high-class and low-class bituminous roads are in a "Good" condition state on average, while gravel roads are in a "Fair" condition state. Assessed across the entire road network, all road segments are at an average physical condition rating of 71, or currently in a "Good" condition state.

Table 2-4
Road Condition Analysis

Surface Type	Centreline Kilometers	Physical Condition (Weighted Average)	Average Condition State
HCB	11	74	Good
LCB	206	74	Good
G/S	56	56	Fair
TOTAL	273	71	Good

2.1.3. Current Levels of Service

The level of service currently provided by the Township's road network is, in part, a result of the state of local infrastructure identified above. A levels of service analysis defines the current levels of service and enables the Township to periodically evaluate these service level objectives. The Township's strategic service objective is to provide a safe and reliable road network to connect the Municipality's residents and businesses. Road assets have prescribed levels of service reporting requirements under O. Reg. 588/17. These requirements include levels of service reporting from two different levels, i.e. community levels of service and technical levels of service. Community levels of service objectives describe service levels in terms that residents understand and reflect their scope and quality expectations of the road network. Technical levels of service describe the scope and quality of Township roads through performance measures that can be quantified, evaluated, and detail how effectively a municipality provides services. Table 2-5 presents the current levels of service measures as mandated by O. Reg. 588/17.

Table 2-5
Roads Current Levels of Service – O.Reg. 588/17

SCOPE	SERVICE OBJECTIVES	COMMUNITY EXPECTATIONS	TECHNICAL PERFORMANCE MEASURES	CURRENT LEVEL OF SERVICE
SAFETY	To ensure that the Municipality's road network is safe by keeping pavement and gravel surfaces in fair condition or better.	Roads throughout the community are in fair condition or better.	Average Network Pavement Condition Index (PCI) Value for paved roads:*	"Good"
			Average Network Surface Condition for unpaved roads:*	"Fair"
RELIABILITY	To ensure that Municipality's road network is reliable by minimizing the number of road closures, both planned and unplanned.	Minimal number of annual unplanned road closures, both planned and unplanned, throughout the community.	Total number of road closures:	17
			Percentage of closures planned:	60%
			Percentage of closures unplanned:	40%
INTER-CONNECTIVITY	To ensure that Municipality's road network provides good connectivity between and throughout all areas of the community.	Minimal number of properties without municipal road access throughout the community.	Total number of lane-kilometres as a proportion of square kilometres of land area of the community:*	1.33 KM
			Total number of lane-kilometres by road class as a proportion of square kilometres of land area of the community:*	
			Arterial (MMS 1 to 2):	0.00 KM/KM²
			Collector (MMS 3 to 4):	1.02 KM/KM²
			Local (MMS 5 to 6):	0.37 KM/KM²

* mandated by O. Reg. 588/17

2.2. Lifecycle Activities

2.2.1. Lifecycle Activities

This section will detail the lifecycle activities as documented in the Township's 2021 State of the Infrastructure and Asset Management Plan for Roads report and through discussions amongst Township staff.

The lifecycle activities that the Township currently employs in the management of its roads include:

- Reconstruction – REC (LCB/HCB roads);
- Reconstruction – RSS (reconstruction including storm sewers, HCB roads);
- Resurfacing – R1 (50mm depth, HCB roads);
- Resurfacing – R2 (100mm depth, HCB roads);
- Single Surface Treatment – SST (LCB roads) and
- Single Surface Treatment – SST+ (includes padding & geometric correction, LCB roads).

Table 2-6 details the costs associated with undertaking these lifecycle activities, by surface type. The costs are presented on a cost per center lane kilometre basis as identified in the Township's 2021 State of the Infrastructure and Asset Management Plan for Roads report.

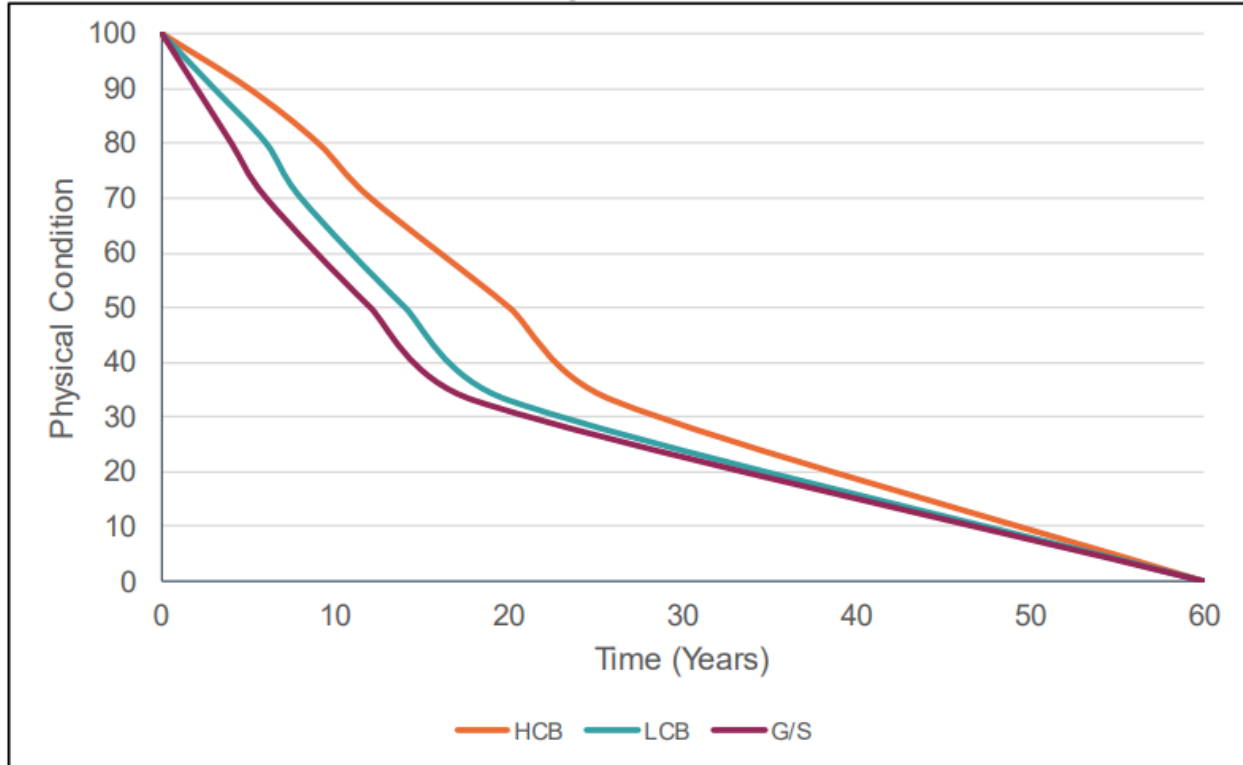
Table 2-6
Average Road Treatment Costs by Surface Type (per cl-km)

Treatment	Surface Type	Cost/cl-km
Resurfacing - R1	HCB	\$127,638
Resurfacing - R2	HCB	\$249,497
Single Surface Treatment - SST	LCB	\$31,301
Single Surface Treatment - SST+	LCB	\$126,733
Reconstruction - REC	HCB/LCB	\$345,038
Reconstruction - RSS	HCB	\$1,382,149

2.2.2. Degradation Profiles

Assets deteriorate over time, eventually reaching a point where they have no remaining service life left. However, the path each asset takes in reaching its end of life differs, even for assets of the same type. A condition rating identifies where along the path any particular asset lays, or in other words, how long an asset has left before it reaches its end of life. Therefore, condition and service life are linked, and can be plotted graphically to visually represent the degradation curve of an asset. Figure 2-2 presents the degradation profile of roads (by surface type) that have been developed based on the Township's 2021 State of the Infrastructure and Asset Management Plan for Roads report. Through the process of conducting regular road condition inspections, the Township will be able to further refine these degradation profiles.

Figure 2-2
Road Degradation Profiles



2.2.3. Design Criteria

Table 2-7 presents the decision criteria—developed by referencing the 2021 State of the Infrastructure and Asset Management Plan for Roads report and through discussions amongst Township staff—for triggering a specific road treatment. When all the decision criteria for a given road asset are met, the corresponding treatment is eligible to be applied. When a treatment is applied, the physical condition of the asset is improved by the amount specified in the “Gain to Condition” column, but not to exceed the amount listed in the “Maximum Condition Threshold” column.

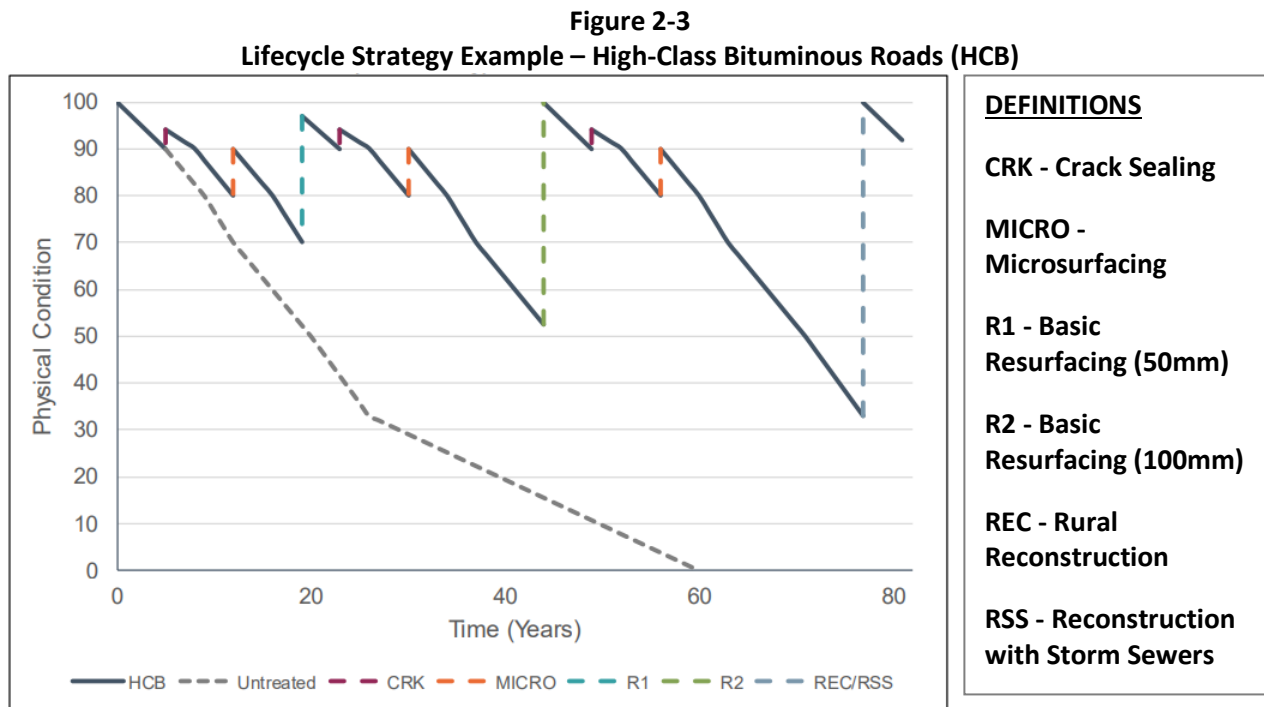
Table 2-7
Roads Treatment Decision Criteria

Treatment	Surface Type	Roadside Environment	Condition Range	# of Times Treatment Prev. Applied	Gain to Condition	Maximum Condition Threshold
R1	HCB	Any	71-55	0	+97	97
R2		Any	54-35	0	+100	100
SST	LCB	Any	77-53	0	+97	97
SST+		Any	52-37	0	+100	100
REC	HCB/LCB	Semi-Urban/Rural	34-0	N/A	+100	100
RSS	HCB	Urban	34-0	N/A	+100	100

2.2.4. Expected Lifecycle and Associated Risk

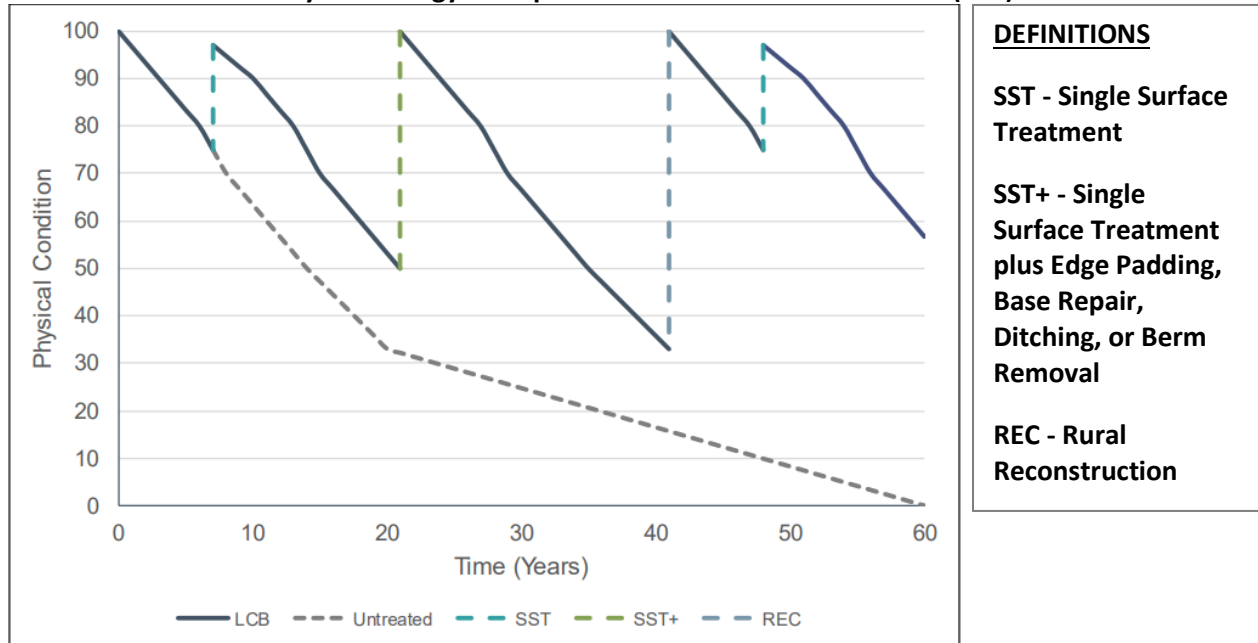
Combining the treatments, degradation profiles, and decision criteria presented herein results in a complete lifecycle management strategy. Figure 2-3, Figure 3-4, and Figure 2-5 present an illustrative example of the expected lifecycle of HCB, LCB, and gravel roads, respectively. The dashed, vertical lines represent points of intervention in the representative road's expected life. The lifecycle path of the asset is represented by the solid lines, following the degradation profiles presented above. Finally, the grey, dotted line demonstrates the expected lifecycle of a road segment were it to not receive any treatments over the course of its service life.

For an HCB road, based on the decision criteria outlined in Table 2-7, one R1 and one R2 resurfacing treatments would be performed on a road segment before a full reconstruction takes place. Further, between the resurfacing cycles, crack sealing and microsurfacing treatments would be carried out as an efficient means of improving the service levels provided. R1, R2, SST, and SST+ treatments previously applied are reset to 0 upon any Reconstruction treatment.



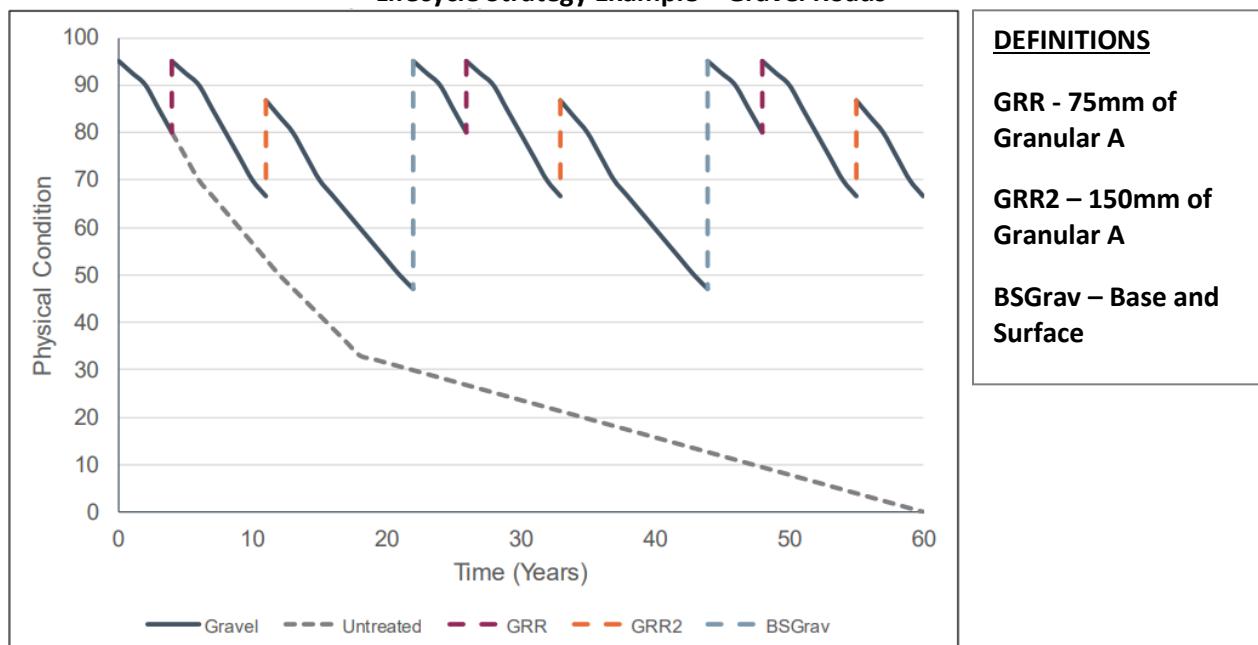
Based on the decision criteria outlined in Table 2-7 for LCB roads, one SST and one SST+ single surface treatment would be performed on a road segment before a full reconstruction took place.

Figure 2-4
Lifecycle Strategy Example – Low-Class Bituminous Roads (LCB)



Finally, based on the decision criteria outlined in Table 2-7 for gravel roads, one GRR and one GRR2 gravel resurfacing treatment would be performed on a road segment before a BSGrav treatment took place. Treatment of gravel roads will not be considered a capital program and will instead be included in operational programs.

Figure 2-5
Lifecycle Strategy Example – Gravel Roads



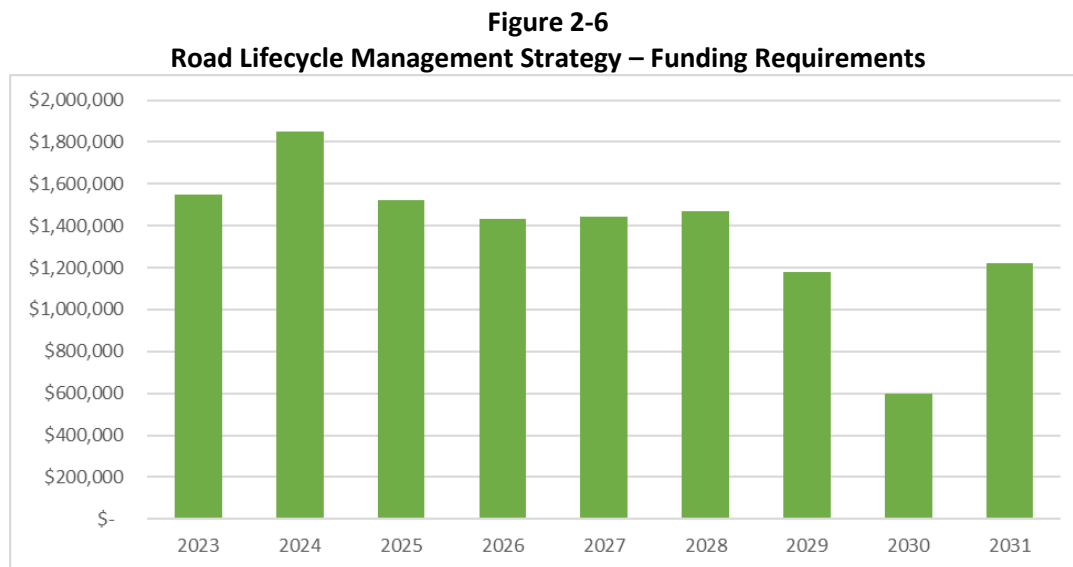
The lifecycle strategies presented above would allow for the proposed levels of service introduced in Section 2.1.3 to be met for almost all roads. Currently, the way the reconstruction treatments have been defined, MMS class 3 roads would fall below the minimum condition score of 50 for a portion of their lifecycle. The only MMS class 3 roads are LCB roads, which make up 6.1% of the network, based on centreline kilometres.

2.3. Funding Strategy

2.3.1. Annual Cost Forecast

Figure 2-6 presents the 20-year expenditure forecast that results from following the lifecycle management strategy detailed above. This forecast illustrates the annual expenditures without any consideration to budgetary constraints. Over the 10-year forecast period, the average annual expenditures would be approximately \$1.3 million, following the work plan as outlined in the Township's 2021 State of the Infrastructure and Asset Management Plan for Roads report. In recent years, increases and decreases in fuel, asphalt, and salt have been disproportionate to the Consumer Price Index. As such, consideration should be given to annual adjustments in road funding, which are more reflective of the actual experience. Therefore, the intent will be for funding to be adjusted annually to accommodate inflation and the forecast will only be for a 10-year period in order to be presented as accurately as possible.

Table A-1 in Appendix A: Funding Strategy Tables – Tax Levy, presents the capital expenditure forecast for each tax levy-based asset class over the 2023- 2041 forecast period. This expenditure forecast is based on the current lifecycle activities identified this plan.

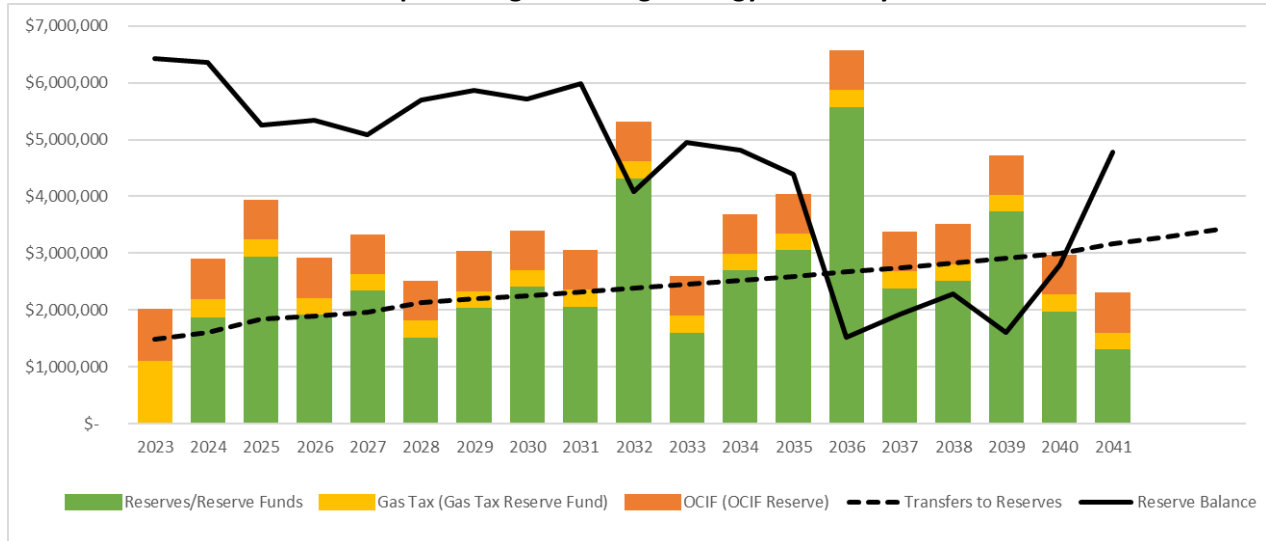


2.3.2. Funding Strategy

Figure 2-7 presents the 20-year funding strategy for all forecasted, tax levy-based, capital expenditures, including the expenditure forecast detailed above. The lifecycle rehabilitation and renewal activities planned for road assets are projected to cost, on average, approximately \$1.3 million per year over the forecast period. The funding strategy for these costs is to finance from reserves. There will be a 3% annual increase to the transfer to reserves from operating for the reserve balance to sufficiently fund the forecasted expenditures.

Table A-3 in Appendix A: Funding Strategy Tables – Tax Levy, presents the funding strategy for road assets over the 2023-2041 forecast period. This funding forecast is based on the current lifecycle activities identified this plan.

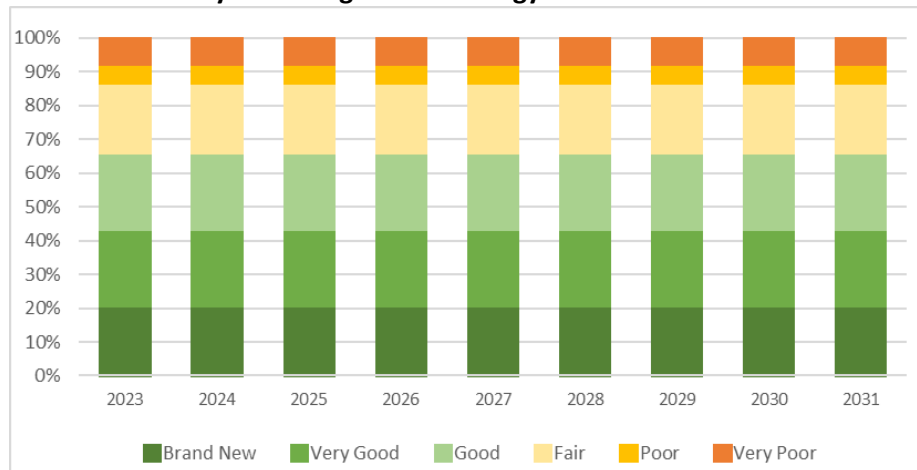
Figure 2-7
Capital Budget Funding Strategy – Tax Levy



2.3.3. Network Service Level Forecast

Figure 2-8 demonstrates the roads network service levels over the forecast period as a result of implementing this lifecycle management funding strategy. This funding strategy will enable the Township to move towards a sustainable position of maintaining the current levels of service for roads assets.

Figure 2-8
Road Lifecycle Management Strategy – Network Service Levels



3. BRIDGES AND STRUCTURAL CULVERTS

3.1 State of Local Infrastructure and Levels of Service

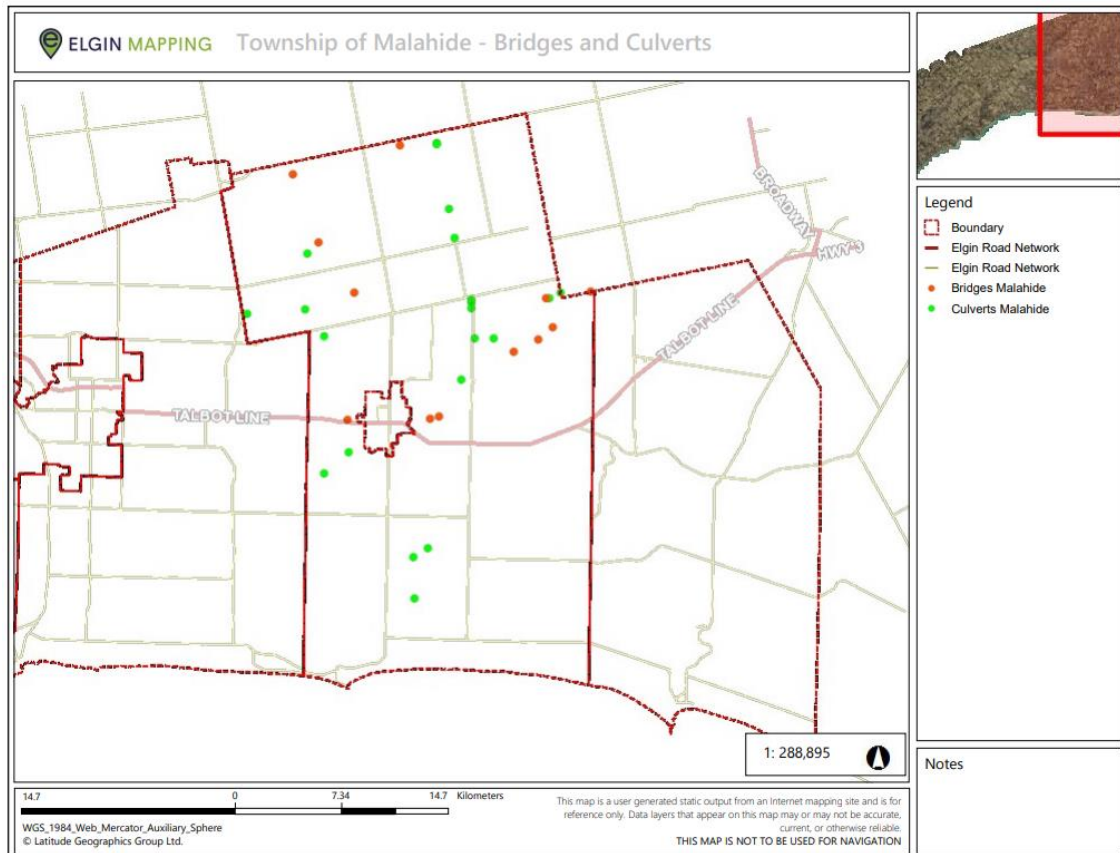
3.1.1. Asset Class Summary

The Township currently owns and manages 12 bridges and 21 structural culverts, with a 2020 total replacement value totaling approximately \$43.8 million. The replacement value has been estimated based on replacement costs from the Township's 2020 Bridge and Culvert Inspection (OSIM) report as prepared by MEDA Engineering & Technical Services (dated October 05, 2020). Table 3-1 provides a summary of count, age, and replacement value for the current bridge and culvert network. The average age of the Township's 21 culverts averages 36 years, while the average age of the 12 bridges is 23 years. Figure 3-1 maps the bridge and culvert network to visualize the Township's current asset distribution.

Table 3-1
Bridge and Culvert Infrastructure Summary

Type	Quantity	Average Age	Replacement Cost (2020 \$)
Bridges	12	23	\$22,227,402
Culverts	21	36	\$21,654,067
TOTAL	33	31	\$43,881,469

Figure 3-1
Map – Bridges and Culverts



3.1.2. Condition

The Township's 2020 Ontario Structure Inspection Manual (OSIM) report assessed the condition of the bridge and culvert network, applying a bridge condition index (BCI) for assets. A BCI score is provided on a numeric scale of 0-100, and is a measure of the overall condition of the structure based on an evaluation of individual components. To better communicate the condition of the bridge and culvert network, the numeric condition ratings have been segmented into qualitative condition states as summarized in Table 3-2.

Table 3-2
Bridge and Culvert condition States Defined with Respect to BCI

BCI	Condition State
100-91	Brand New
90-81	Very Good
80-71	Good
70-61	Fair
60-36	Poor
35-1	Very Poor
0	End of Life

Table 3-3 examines the average condition rating of the bridge and culvert network. The condition of the structures comes from the Township's 2020 OSIM report. On average, bridges and culverts are in a "Good" condition state. Assessed for the entire bridge and culvert network, all structures provide an average BCI of 74, representing a "Good" condition state. The lowest observed condition in the bridge network is "Fair", and for culverts is "Poor".

Table 3-3
Bridge and Culvert Condition Analysis

Type	Quantity	Average BCI	Lowest Observed BCI	Average Condition State
Bridge	12	78	68	Good
Culvert	21	71	51	Good
TOTAL	31	74	51	Good

3.1.3. Current Levels of Service

The level of service currently provided by the Township's bridge and culvert network is, in part, a result of the state of local infrastructure identified above. A level of service analysis defines the current levels of service and enables the Township to periodically evaluate these service level objectives. The Township's strategic service objective is to provide safe and reliable bridge and culvert assets to connect residents and businesses. Bridges and culverts are utilized by all levels of vehicles, i.e. passenger vehicles, emergency vehicles, pedestrians, cyclists, slow-moving vehicles, heavy transport vehicles, etc., and allow the passage of drainage throughout the Township.

Bridge and culvert assets have prescribed levels of service reporting requirements under O. Reg. 588/17. These requirements include levels of service reporting from two different levels, i.e. community levels of service and technical levels of service. Community levels of service objectives describe service levels in terms that residents understand and reflect their scope and quality expectations of the bridge and culvert network. Technical levels of service describe the scope and quality of Township bridges and culverts

through performance measures that can be quantified, evaluated, and detail how effectively a municipality provides services. The Township has also set performance measures for levels of service beyond the requirements under regulation. Performance measures have been categorized within three main service objectives, i.e. safety, reliability, and interconnectivity. Table 3-4 presents the current levels of service as mandated by O. Reg. 588/17 and as set by the Township.

Table 3-4
2020 Bridge and Culvert Current Levels of Service

SCOPE	SERVICE OBJECTIVES	COMMUNITY EXPECTATIONS	TECHNICAL PERFORMANCE MEASURES	CURRENT LEVEL OF SERVICE
SAFETY	To ensure bridge and culvert assets are safe by keeping them in good condition or better and by ensuring that all structures meet the requirements of Ontario Regulation 104/97: Standards for Bridges.	Bridges and culverts throughout the community are in good condition or better.	Average Bridge Condition Index (BCI) value for bridge structures:*	"Good"
			Average Bridge Condition Index (BCI) value for structural culverts:*	"Good"
RELIABILITY	To ensure bridge and culvert assets are reliable by minimizing the number of structures with dimensional, weight, seasonal, or traffic restrictions, as well as the number of structure closures, both planned and unplanned.	Minimal number of bridge and culvert assets with dimensional, weight, and/or traffic restrictions throughout the community.	Bridge and culvert assets with dimensional restrictions:*	0%
			Bridge and culvert assets with weight restrictions:*	0%
		Minimal number of annual unplanned bridge closures, both planned and unplanned, throughout the community.	Bridge and culvert assets with traffic-use restrictions:*	0%
			Bridge and culvert assets with seasonal restrictions:	100%
			Bridge and culvert closures:	0 Planned 0 Unplanned
INTER-CONNECTIVITY	To ensure bridge and culvert assets provide good connectivity between and throughout all areas of the community.	Minimal number of properties without municipal bridge or culvert access over watercourses, rail lines, or other features throughout the community.	Municipal right-of-way crossings serviced by a bridge or culvert asset:	100%

* mandated by O. Reg. 588/17

3.2. Lifecycle Management

3.2.1. Lifecycle Activities

This section will detail the lifecycle activities (capital treatments) as set forth in the 2020 OSIM report. The treatments that the Township currently employs in the management of its bridges and culverts include:

- Bridge:
 - Rehabilitation;
 - Standard;
 - Including jacking of the deck;
 - Reconstruction;
- Culvert:
 - Reconstruction.

Table 3-5 details the costs for the lifecycle activities listed above. These costs are presented as a percentage of estimated replacement cost for the entire bridge, which are derived from averages present in the 2020 OSIM report. The “Rehabilitation – Includes Jacking the Deck” treatment is a flag from the 2020 OSIM report, where this treatment is only performed if the recommended rehabilitation treatment for a bridge required jacking of the deck. As this is a costly endeavour, the percent of replacement cost attributed to this treatment is greater than standard rehabilitations. After completing a rehabilitation treatment that includes jacking of the deck, or a reconstruction, this flag is removed, and all subsequent rehabilitations will be standard rehabilitations, until such a time as it is deemed that a jacking of the deck treatment would be necessary again.

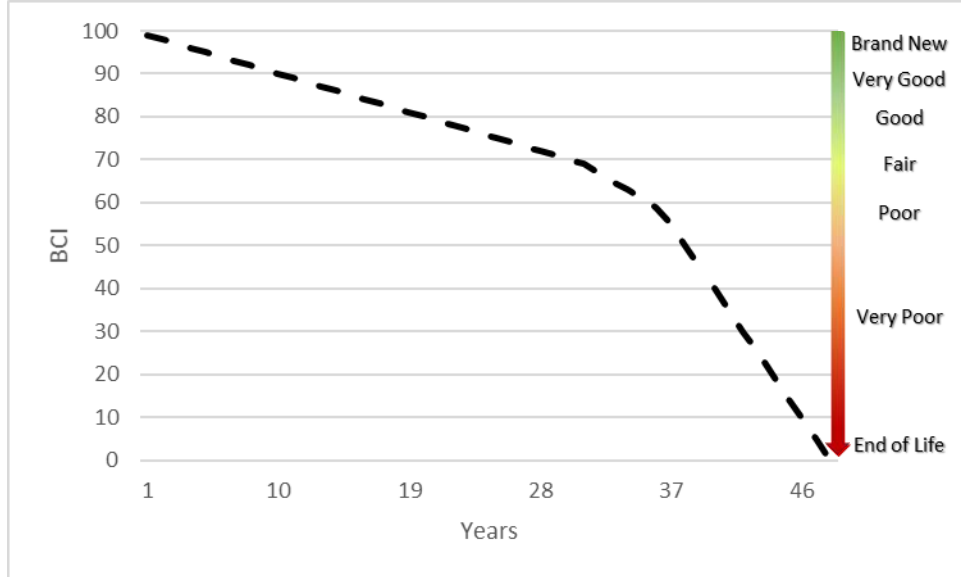
Table 3-5
Bridge and Culvert Treatment Costs as Percent of Total Replacement

Treatment	Applies To	% of Replacement Cost
Rehabilitation – Standard	Bridge	22%
Rehabilitation – Includes Jacking the Deck	Bridge	43%
Reconstruction	Bridge & Culvert	100%

3.2.2. Degradation Profiles

Assets deteriorate over time, eventually reaching a point where they have no remaining service life left. However, the path each asset takes in reaching its end of life differs, even for assets of the same type. A condition rating identifies where along the path any particular asset lays, or in other words, how long an asset has left before it reaches its end of life. Therefore, condition and service life are linked, and can be plotted graphically to visually represent the degradation curve of an asset. Figure 3-2 presents the degradation profile of bridges and culverts that has been developed based on information contained in the Township’s 2020 OSIM report. Through the process of conducting the required bi-annual bridge and culvert inspections, the Township will be able to further refine the degradation profile associated with these assets.

Figure 3-2
Bridge & Culvert Degradation Profile



3.2.3. Decision Criteria

Table 3-6 presents the decision criteria, developed by referencing the 2020 OSIM report, for triggering specific bridge and culvert treatments. When the decision criteria for a given asset are met, the corresponding treatment is eligible to be applied. When a treatment is applied, the BCI of the asset is improved by the amount specified in the “Gain to Condition” column, but not to exceed the amount listed in the “Maximum Condition Threshold” column.

Table 3-6
Bridge and Culvert Treatment Decision Criteria

Asset Type	Treatment	BCI Range	Flag – Requires Jacking of Deck	Gain to Condition	Maximum Condition Threshold
Bridge	Rehabilitation – Incl. Jacking of Deck	45-36	True	+99	99
	Rehabilitation – Standard	45-36	False	+99	99
	Reconstruction	35-0	N/A	+100	100
Culvert	Reconstruction	35-0	N/A	+100	100

3.2.4. Expected Lifecycle and Associated Risk

Combining the treatments, degradation profiles, and decision criteria presented herein results in a complete lifecycle management strategy. Figure 3-3 and 3-4 present illustrative examples of the expected lifecycle for bridges and culverts, respectively. The dotted, vertical lines represent points of intervention in the representative asset’s expected life. The lifecycle path of the asset is represented by the solid lines, following the degradation profile presented above. Finally, the red, dashed line demonstrates the expected lifecycle of an asset were it to not receive any treatments over the course of its service life.

The lifecycle strategy as defined for bridges is a preservation strategy, which means that an asset will only receive rehabilitation treatments and not be reconstructed, assuming the window of opportunity to conduct the rehabilitation treatments has not passed. In other words, as long as budgetary constraints never prevent a bridge rehabilitation from occurring as it becomes due, a bridge will never degrade to a point that it needs to be reconstructed. For example, a representative bridge will degrade from some BCI greater than 45, and upon reaching a BCI of 45, the bridge will be triggered for a rehabilitation, which in turn increases its BCI to 99. This process will loop ad infinitum until such a time as budgetary pressures prevent the rehabilitation from occurring. If the fiscal limits prevent the bridge from being treated for some time period that the bridge's BCI falls to 35 or below, only then will a reconstruction be triggered.

The lifecycle strategy for culverts is to reconstruct (replace) when the designated BCI is reached. While this strategy is simple—and may not appear to be significantly different from an age-based replacement strategy—because it is informed by the assessed condition this strategy results in more accurate forecasting. As the asset's condition is regularly re-assessed biennially, the timing of the eventual reconstruction could vary significantly from an age-based approach. For example, if the environment that the culvert resides in causes it to degrade quicker or slower than the expected average, and the assessed condition rating reflects this, then the eventual replacement will be triggered at a different time than an age-based approach.

In addition to the biennially scheduled OSIM inspections, an enhanced review will be conducted on structures as they approach the forecasted rehabilitation/reconstruction period. The enhanced review will consider the condition of individual structure components as well as environmental factors, traffic, and other risks. Reviewing these associated risks will ensure that the recommended rehabilitation or reconstruction period optimizes budget requirements and reflects all elements of the structure and the level of service it provides.

Figure 3-3
Lifecycle Strategy – Bridges

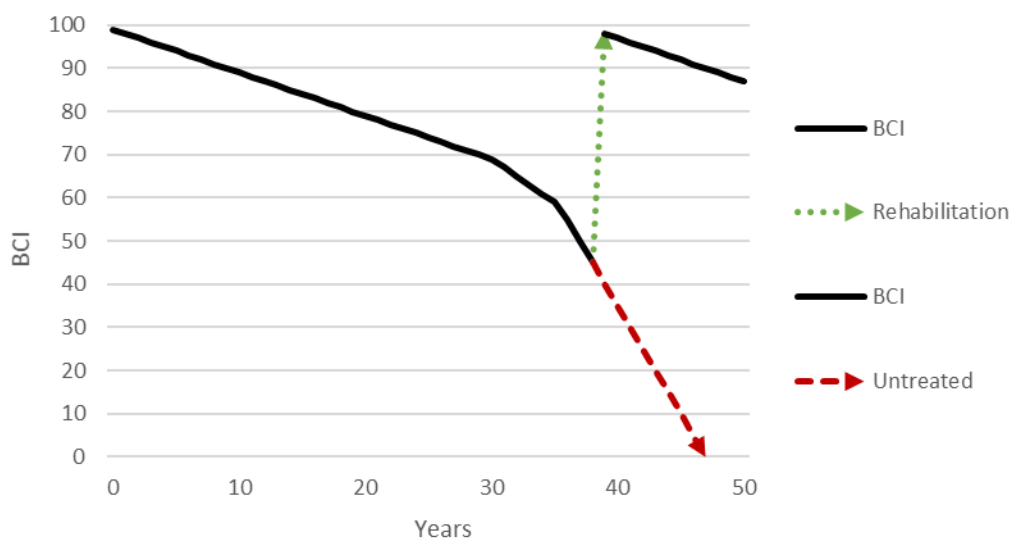
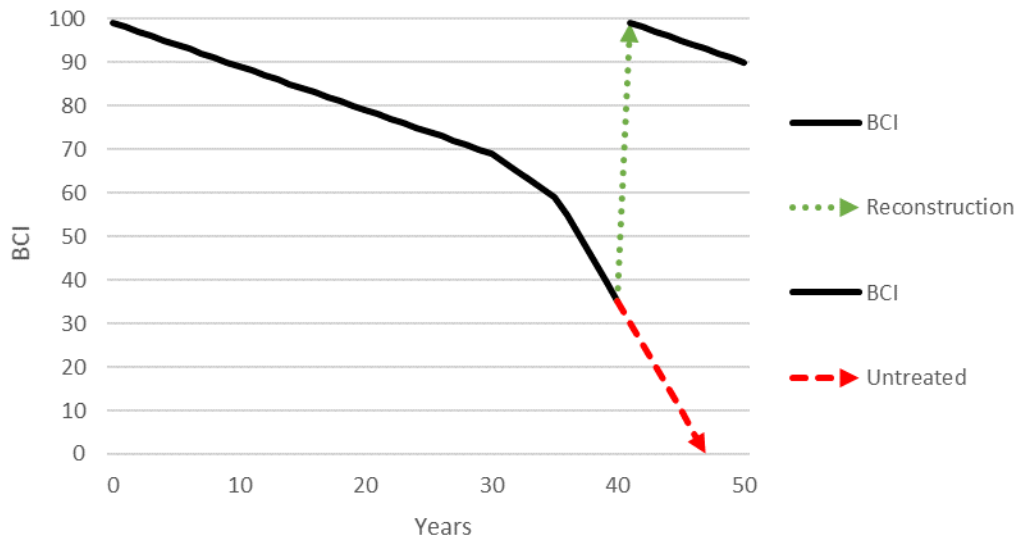


Figure 3-4
Lifecycle Strategy – Structural Culverts



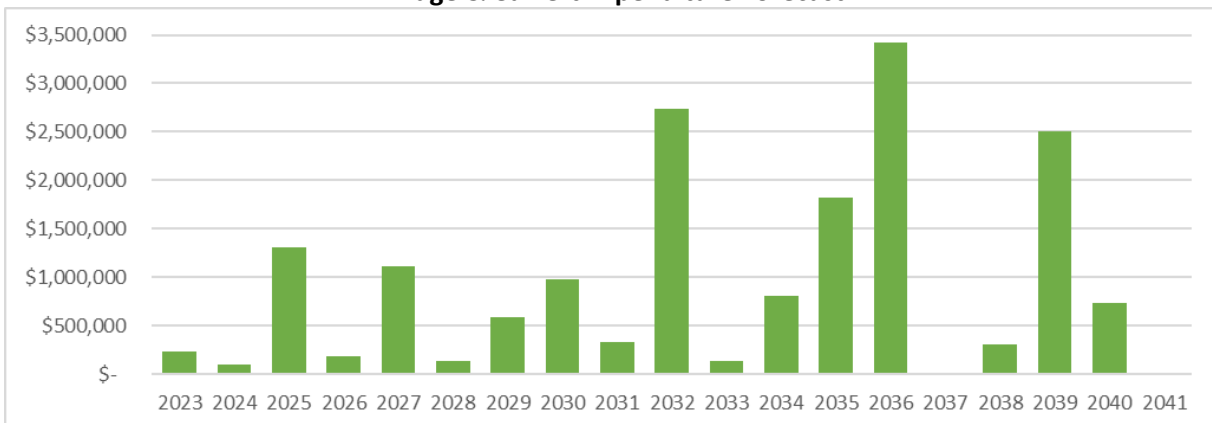
3.3. Funding Strategy

3.3.1. Annual Cost Forecast

Figure 3-5 presents the 20-year expenditure forecast that results from following the lifecycle management strategy detailed above. This forecast illustrates the annual expenditures without any consideration to budgetary constraints. Over the 20-year forecast period, the average annual expenditure would be approximately \$840,613. The expenditure forecast includes a capital inflation factor of 3.5% annually, which aligns closely with the historical 20-year annual average rate of inflation as witnessed in Statistics Canada's Building Construction Price Index. The forecast also includes a 20% estimated cost for engineering, environmental assessments, and geotechnical studies, etc., for major projects.

Table A-2 in Appendix A: Funding Strategy Tables – Bridges & Culverts, presents the capital expenditure forecast for the bridge and culvert asset network over the 2023-2041 forecast period. This expenditure forecast is based on the current lifecycle activities identified this plan.

Figure 3-5
Bridge & Culvert Expenditure Forecast

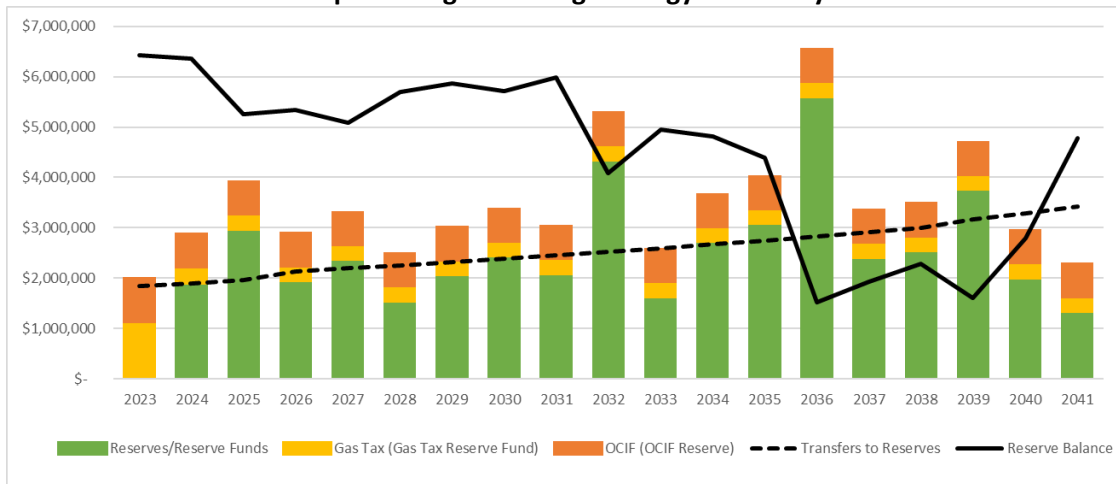


3.3.2. Funding Strategy

Figure 3-6 presents the 20-year funding strategy for all forecasted, tax levy-based, capital expenditures, including the expenditure forecast detailed above. The lifecycle rehabilitation and renewal activities planned for the bridge and culvert assets are projected to cost, on average, approximately \$840,613 per year over the forecast period. The funding strategy for these costs is to finance from reserves. There will be a 3% annual increase to the transfer to reserves from operating for the reserve balance to sufficiently fund the forecasted expenditures.

Table A-3 in Appendix A: Funding Strategy Tables – Tax Levy, presents the funding strategy for bridge and culvert assets over the 2023-2041 forecast period. This funding forecast is based on the current lifecycle activities identified this plan.

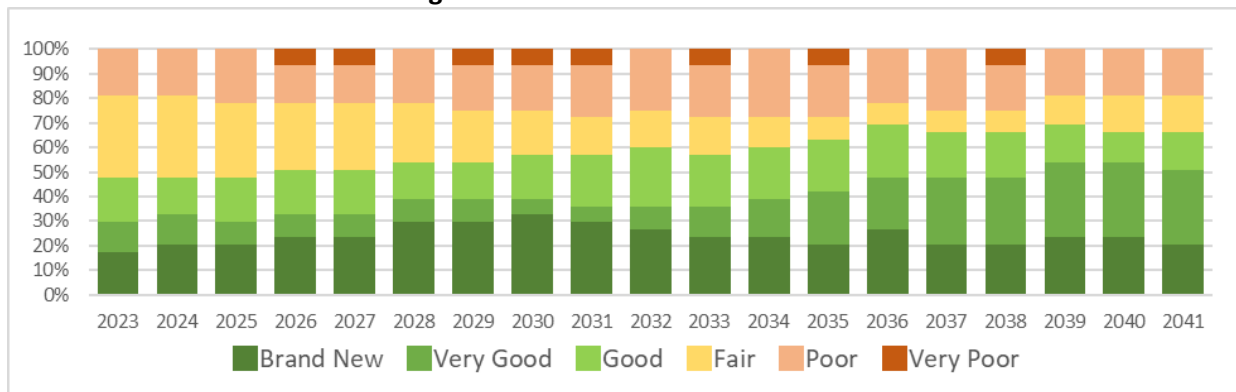
Figure 3-6
Capital Budget Funding Strategy – Tax Levy



3.3.3. Network Service Level Forecast

Figure 3-7 demonstrates the bridge and culvert network service levels over the forecast period as a result of implementing this lifecycle management funding strategy. This funding strategy will enable the Township to move towards a sustainable position of maintaining the current levels of service for bridge and culvert assets.

Figure 3-7
Bridge & Culvert Network Service Levels



4. WATER DISTRIBUTION SYSTEM

4.1. State of Local Infrastructure and Service Levels

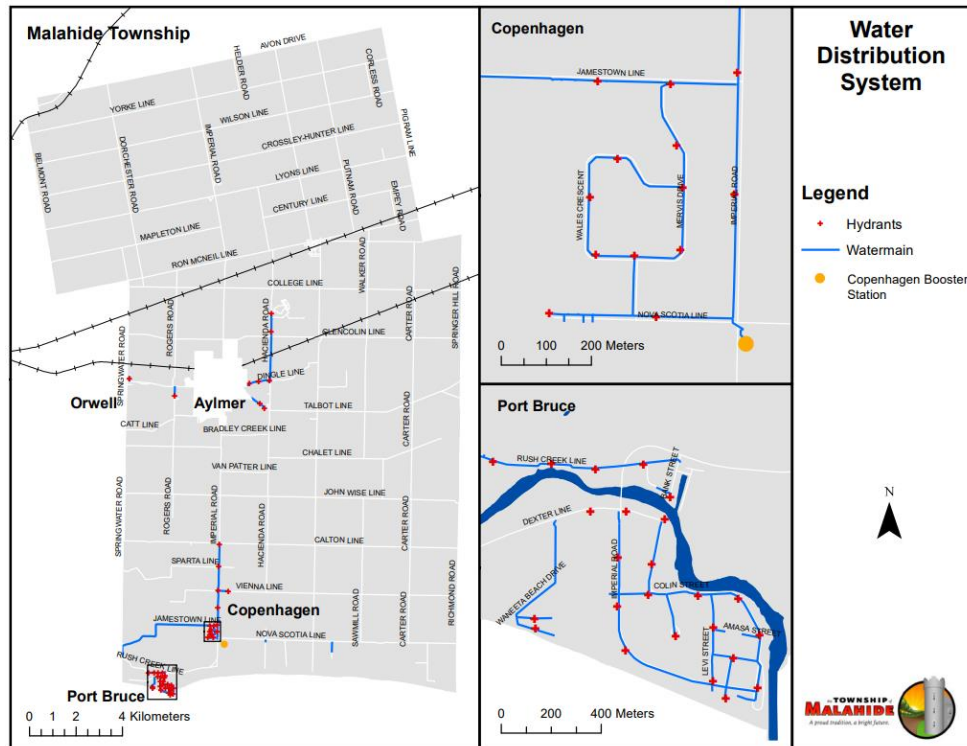
4.1.1. Asset Class Summary

The Township currently owns and manages 22.4 kilometres of water mains, 47 hydrants, 639 water meters, 1 booster station, 12 sample stations, and a Supervisory Control and Data Acquisition System (SCADA), with a 2021 total replacement value totaling approximately \$17.8 million. The water provided from this system flows through one of three other systems: Port Burwell Area or Aylmer Area Secondary Water Supply Systems, or the Towns of Aylmer Water System, and is treated from the Elgin Primary Water System. Table 4-1 provides a summary of count, age, and replacement value for the current water distribution system assets. The average age of the Township's water distribution system is approximately 15 years. Figure 4-1 maps the water distribution system to visualize the Township's current asset network.

Table 4-1
Water Distribution System Infrastructure Summary

Type	Quantity	Average Age	Replacement Cost (2021 \$)
Water Mains	22.4 km	25	\$16,635,022
Hydrants	47 units	14	\$376,000
Water Meters	639 units	12	\$357,500
Booster Station	1	10	\$274,637
Sample Stations	12	12	\$89,616
SCADA	1	6	\$34,231
TOTAL			\$17,767,006

Figure 4-1
Map – Malahide Water Distribution System



4.1.2. Condition

The Township Staff assessed the condition of the water distribution system, applying a condition state for the percentage of useful life remaining for assets. The percentage of useful life remaining is based on a predetermined useful life for water mains, hydrants, water meters, sample stations, for the booster station. To better communicate the condition of the water distribution system, the numeric condition ratings have been segmented into qualitative condition states as summarized in Table 4-2.

Table 4-2
Water Distribution System Condition States Defined with Respect to Useful Life

Useful Life Remaining (%)	Condition State
100-84	Brand New
83-67	Very Good
66-51	Good
50-34	Fair
33-18	Poor
17-1	Very Poor
0	End of Life

Table 4-3 examines the average condition rating of water distribution system. The condition of the assets comes from the percentage of useful life remaining. Assessed for the entire water distribution system, all assets provide an average percentage of useful life remaining of, representing a “Good” condition state. The lowest observed condition in the water distribution system is 0 “End of Life” in the category of water meters, as some are beyond the end of their useful life.

Table 4-3
Water Distribution System Condition Analysis

Type	Quantity	Average % of Useful Life Remaining (ULR)	Lowest Observed ULR	Average Condition State
Water Mains	22.4 km	75	44	Very Good
Hydrants	47	65	35	Good
Meters	639	52	0	Good
Booster Station	1	53	66	Good
Sample Stations	12	71	24	Very Good
SCADA	1	48	8	Fair
TOTAL				Good

4.1.3. Current Levels of Service

The levels of service currently provided by the Township’s water distribution system are a result of the state of local infrastructure identified above. A level of service analysis defines the current levels of service and enables the Township to periodically evaluate these service level objectives. The Township’s strategic service objective is to provide safe and reliable water distribution system throughout the municipality.

Water distribution system assets have prescribed levels of service reporting requirements under O. Reg. 588/17. These requirements include levels of service reporting from two different levels, i.e. community levels of service and technical levels of service. Community levels of service objectives describe service levels in terms that customers understand and reflect their scope and quality expectations of the water

distribution system. Technical levels of service describe the scope and quality of Township water distribution mains, hydrants, and meters, through performance measures that can be quantified, evaluated, and detail how effectively a municipality provides services. The Township has also set performance measures for levels of service beyond the requirements under regulation. Performance measures have been categorized within three main service objectives, i.e. safety, reliability, and inclusivity. Table 4-4 presents the current levels of service as mandated by O. Reg. 588/17 and as set by the Township.

Table 4-4
2021 Water Distribution System Current Levels of Service

SCOPE	SERVICE OBJECTIVES	COMMUNITY EXPECTATIONS	TECHNICAL PERFORMANCE MEASURES	CURRENT LEVEL OF SERVICE
SAFETY	To ensure that Municipality's water system is safe by keeping water supply and distribution assets in good condition or better, and in compliance with the Safe Drinking Water Act, 2002.	Water assets throughout the community are in good condition or better.	Average watermain condition:*	"Very Good"
			Average asset condition overall:*	"Good"
RELIABILITY	To ensure that the Municipality's water supply and distribution assets are reliable by minimizing watermain breaks and/or boil water advisories, and by ensuring minimum fire flow requirements.	Available fire flow coverage throughout the community, with minimal number of boil water advisories or service interruptions.	Percentage of total properties with available/adequate fire flow coverage:*	18%
			Number of connection-days per year due to boil water advisories compared to the number of properties connected:*	0 Days per Year
			Number of connection-days per year due to watermain breaks compared to the number of properties connected:*	0 Days per Year
INCLUSIVITY	To ensure that the Municipality's water supply and distribution service is inclusive by providing service to all properties throughout the community.	Minimal number of properties without municipal water service throughout the community.	Percentage of total number of properties connected to the community's water supply and distribution system:*	26%

* mandated by O. Reg. 588/17

4.2. Lifecycle Management

4.2.1. Lifecycle Activities

This section will detail the lifecycle activities (capital treatments) as prescribed by Township staff. The treatments that the Township currently employs in the management of its water distribution system include:

- Water Mains, and Hydrants:
 - Rehabilitation;
 - Replacement.
- Water Meters, and Sample Stations:
 - Replacement.
- Booster Station, and SCADA
 - Component Rehabilitation
 - Component Replacement

Table 4-5 details the costs for the lifecycle activities listed above. These costs are presented as a percentage of estimated replacement cost or as flat rates per treatment. Rehabilitation of a water main includes replacement of metallic fittings and service lines. Rehabilitation of a hydrant involves the replacement of internal components. Hydrants are inspected every two years by the Ontario Clean Water Agency (OCWA) who may make recommendations for such rehabilitations. The replacement of a water main, hydrant, or meter is the costliest treatment and therefore is only recommended after all other treatments have been exhausted.

Table 4-5
Water Distribution System Treatment Costs

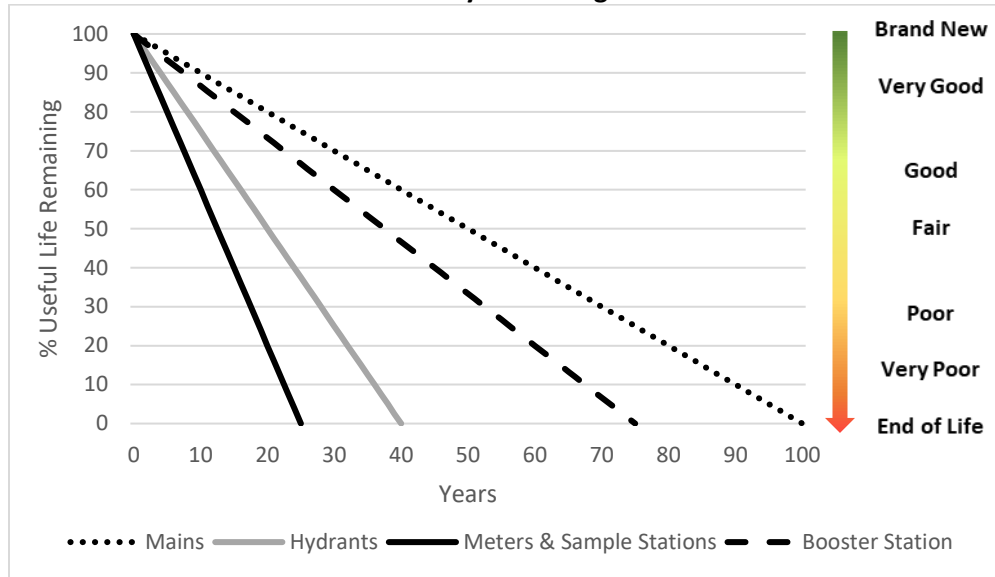
Treatment	Applies To	Cost (2021\$)
Rehabilitation – Fittings Replacement	Water Mains	\$15,000 per Service
Rehabilitation – Internal Rebuild	Hydrants	37% of Replacement Cost
Rehabilitation – Components	Booster Station & SCADA	6% of Replacement Cost
Replacement	All	100% of Replacement Cost

4.2.2. Degradation Profile

Assets deteriorate over time, eventually reaching a point where they have no remaining service life left. However, the path each asset takes in reaching its end of life differs, even for assets of the same type. A condition rating identifies where along the path any particular asset lays, or in other words, how long an asset has left before it reaches its end of life. Therefore, condition and service life are linked, and can be plotted graphically to visually represent the degradation curve of an asset.

Figure 4-2 presents the degradation profile of the water distribution system that has been developed based on a straight-line approach per manufacturer recommendations. Through the process of conducting condition assessments, the Township will be able to collect data to further refine the degradation profile.

Figure 4-2
Water Distribution System - Degradation Profile



4.2.3. Decision Criteria

Table 4-6 presents the decision criteria—developed through discussions amongst Township staff—for triggering specific water distribution asset treatments. When the decision criteria for a given asset are met, the corresponding treatment is eligible to be applied. When a treatment is applied, the percentage of useful life remaining of the asset is improved by the amount specified in the “Gain to Condition” column, but not to exceed the amount listed in the “Maximum Condition Threshold” column.

Table 4-6
Water Distribution System Treatment Decision Criteria

Asset Type	Treatment	%ULR Range	Gain to Condition	Maximum Condition Threshold
Water Mains	Rehabilitation	60-50	+30	80
	Replacement	20-0	+100	100
Hydrants	Rehabilitation	20-10	+90	98
	Replacement	10-0	+100	100
Meters & Sample Stations	Replacement	0	+100	100
Booster Station	Structure Rehabilitation	60-50	+15	+78
	Component Replacement	20-0	+100	100
	Replacement	20-0	+100	100
SCADA	Component Replacement	20-0	+100	100

4.2.4. Expected Lifecycle and Associated Risk

Combining the treatments, degradation profiles, and decision criteria presented herein results in a complete lifecycle management strategy. Figure 4-3, 4-4, and 4-5 present illustrative examples of the expected lifecycles for water mains, hydrants, and meters and sample stations, respectively. Figure 4-6 presents the expected lifecycle for the component-based booster Station. The dotted, vertical lines

represent points of intervention in the representative asset's expected life. The lifecycle path of the asset is represented by the solid lines, following the degradation profile presented above. Finally, the red, dashed line demonstrates the expected lifecycle of an asset were it to not receive any treatments over the course of its service life.

The lifecycle strategy as defined for water mains and hydrants is a combination of a preservation and replacement strategy, which means that an asset will receive rehabilitation treatments before its eventual replacement. If budgetary constraints prevent a water main or hydrant rehabilitation from occurring as it becomes due, the asset will continue to degrade to a point that it needs to be replaced. For example, a PVC water main will degrade from some percentage of useful life remaining (ULR) greater than 60%, and upon reaching a ULR of 60%, the water main will be triggered for a rehabilitation, which in turn increases its ULR to 80%. Then the water main will continue to degrade from a ULR of 80% to a ULR of 20% at which time it will be triggered for replacement. If the rehabilitation does not occur, the water main will continue to degrade from the ULR of 60% to the ULR of 20% triggering a replacement approximately 20 years sooner. Water mains and hydrants are triggered for replacement at 20% useful life remaining to minimize the risk of failure which could cause a significant threat to public safety.

The lifecycle strategy for meters and sample stations is to replace them when they have failed. While this strategy is simple—and may not appear to be significantly different from an age-based replacement strategy—because it is informed by the failure of an asset this strategy results in less accurate forecasting. As the individual asset's condition is degraded over time, the timing of the eventual replacement could vary significantly from one asset to another due to unique internal and environmental factors. For example, if the environment in which a meter resides causes it to degrade faster or slower than the expected average, then the eventual replacement at the time of failure will be different than an average age-based approach. Water meter efficacy is monitored on a regular basis with a superficial review being done monthly and a more in-depth review being undertaken on a quarterly basis.

The lifecycle strategies for the booster station and SCADA will be to address individual components of the asset in a combination of preservation and replacement strategy. If budgetary constraints prevent a component rehabilitation from occurring as it becomes due, the asset will continue to degrade to a point that it needs to be replaced. Individual components will have specific rehabilitation treatment and replacement schedules. Ensuring these schedules are adhered to will result in the overall asset continuing to provide current levels of service and will minimize the risk of failure.

In addition to the age-based approach to condition assessments, enhanced reviews will be conducted on assets as they approach the forecasted treatment/replacement periods. The enhanced reviews will consider the condition of individual asset components as well as environmental factors, and other risks. Reviewing these associated risks will ensure that the recommended treatment or replacement period reflects all elements of the asset and the level of service it provides.

Figure 4-3
Lifecycle Strategy – Water Mains

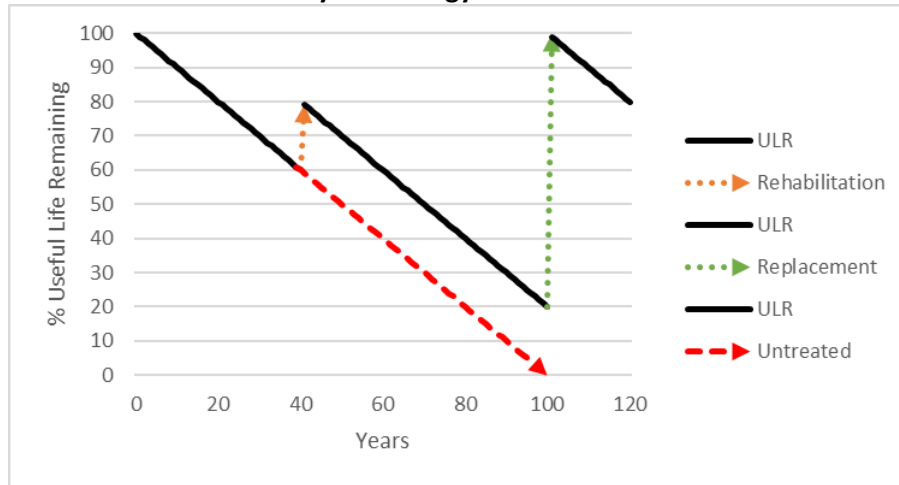


Figure 4-4
Lifecycle Strategy – Hydrants

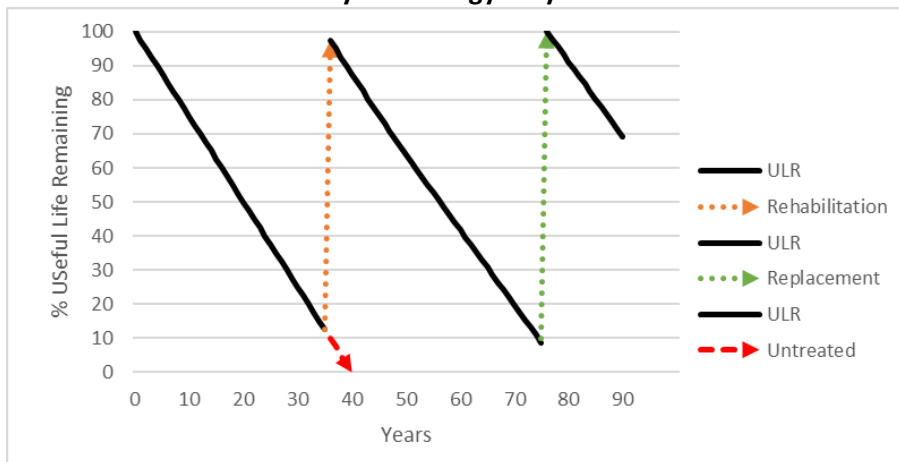


Figure 4-5
Lifecycle Strategy – Meters and Sample Stations

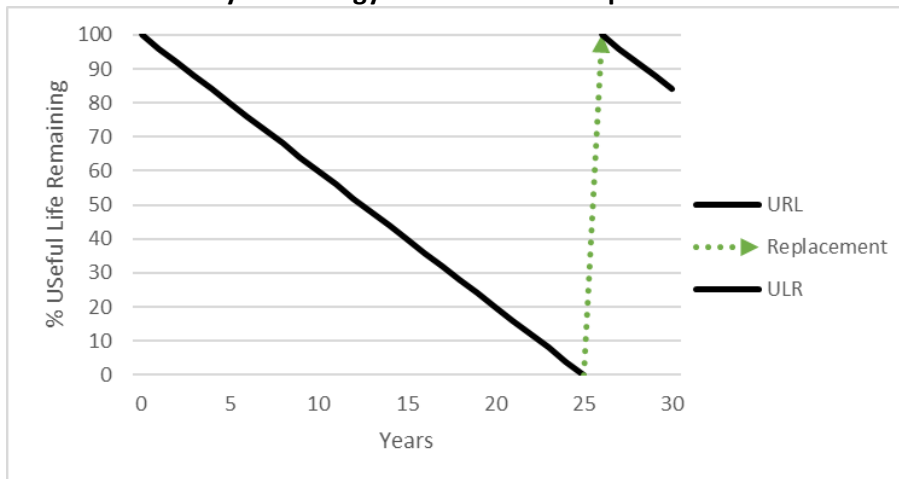
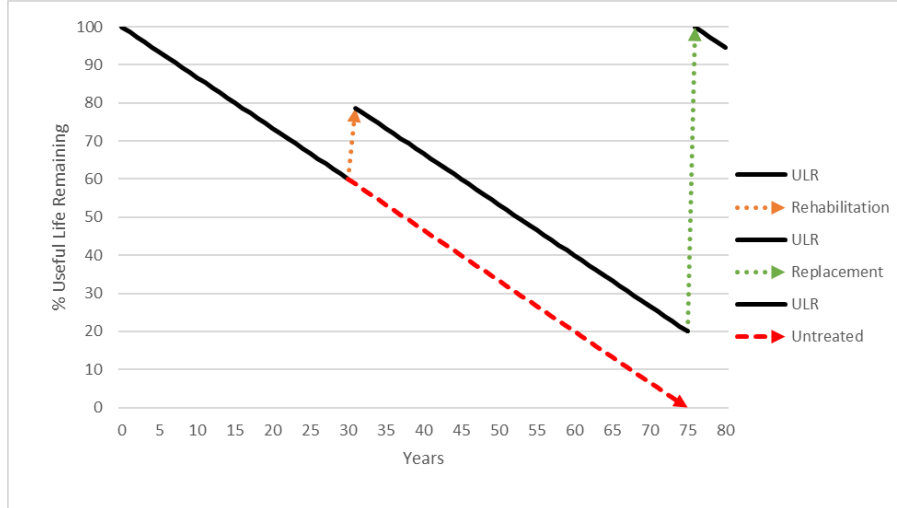


Figure 4-6
Lifecycle Strategy – Booster Station Structure



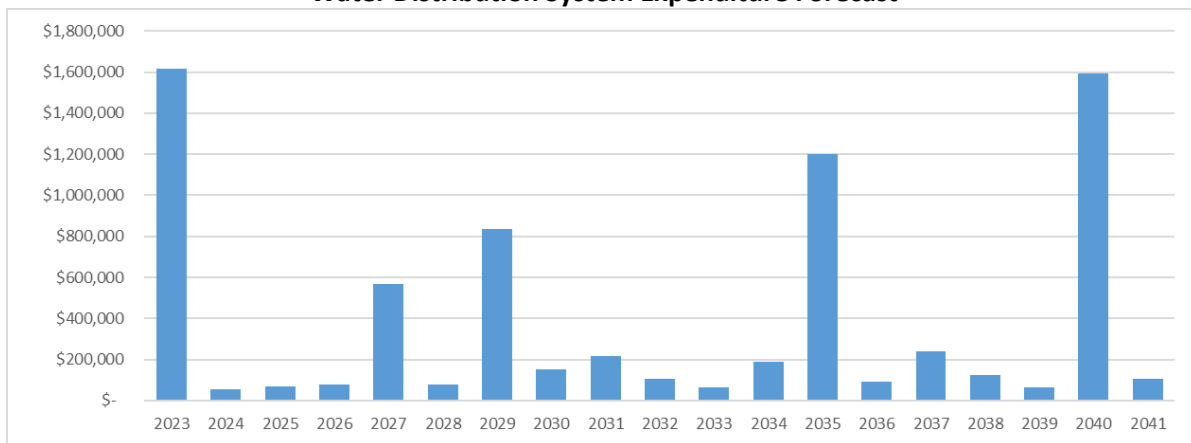
4.3. Funding Strategy

4.3.1. Annual Cost Forecast

Figure 4-7 presents the 20-year expenditure forecast that results from following the lifecycle management strategy detailed above. This forecast illustrates the annual expenditures without any consideration to budgetary constraints. Over the 20-year forecast period, the average annual expenditure would be approximately \$360,123. The expenditure forecast includes a capital inflation factor of 3.5% annually, which aligns closely with the historical 20-year annual average rate of inflation as witnessed in Statistics Canada's Building Construction Price Index. The forecast also includes a 20% estimated cost for engineering, environmental assessments, and geotechnical studies, etc., for major projects.

Table B-1 in Appendix B: Funding Strategy Tables – Water Distribution System, presents the capital expenditure forecast for water distribution system assets over the 2023-2041 forecast period. This expenditure forecast is based on the current lifecycle activities identified this plan.

Figure 4-7
Water Distribution System Expenditure Forecast

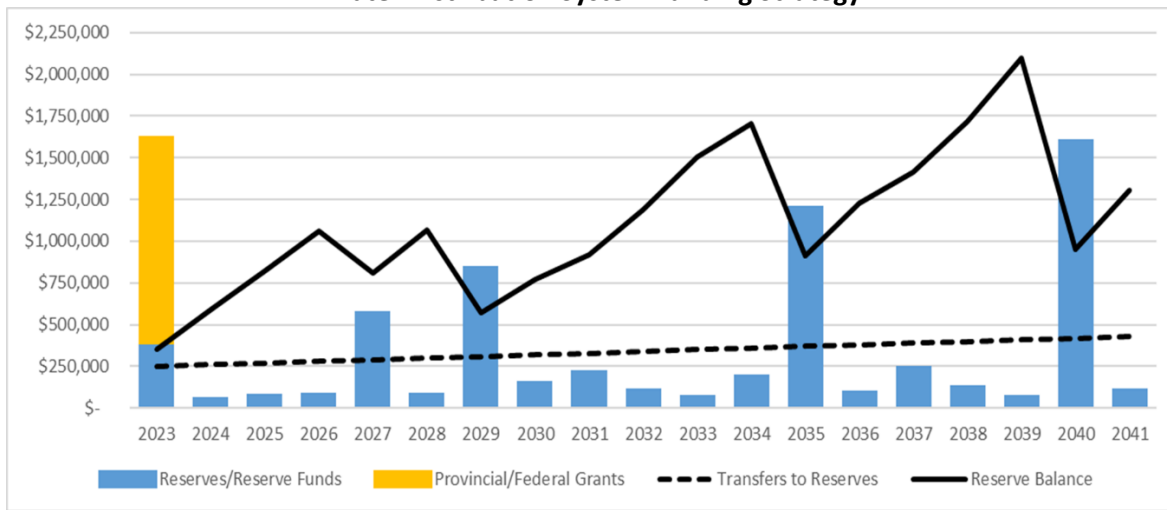


4.3.2. Funding Strategy

Figure 4-8 presents the 20-year funding strategy for the expenditure forecast detailed above. The lifecycle rehabilitation and renewal activities planned for the wastewater collection system are projected to cost, on average, approximately \$360,123 per year over the forecast period. The funding strategy for these costs is to finance from reserves. There will be a \$10,000 annual increase to the transfer to reserves from operating for the reserve balance to sufficiently fund the forecasted expenditures.

Table B-2 in Appendix B: Funding Strategy Tables – Water Distribution System, presents the funding strategy for water distribution system assets over the 2023-2041 forecast period. This funding forecast is based on the current lifecycle activities identified this plan.

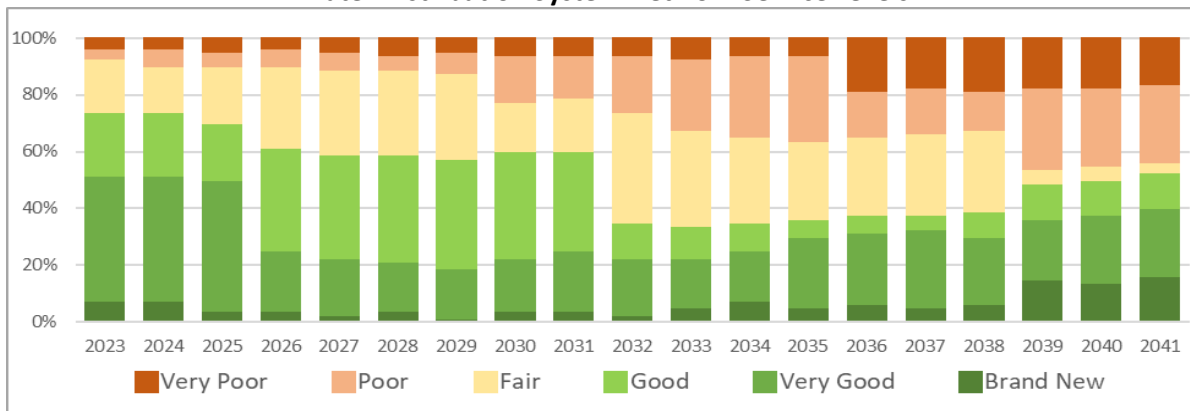
Figure 4-8
Water Distribution System Funding Strategy



4.3.3. Network Service Level Forecast

Figure 4-9 demonstrates the water distribution system network service levels over the forecast period as a result of implementing this lifecycle management funding strategy. This funding strategy will enable the Township to move towards a sustainable position of maintaining the current levels of service for water distribution assets.

Figure 4-9
Water Distribution System Network Service Levels



5. WASTEWATER COLLECTION SYSTEM

5.1. State of Local Infrastructure and Service Levels

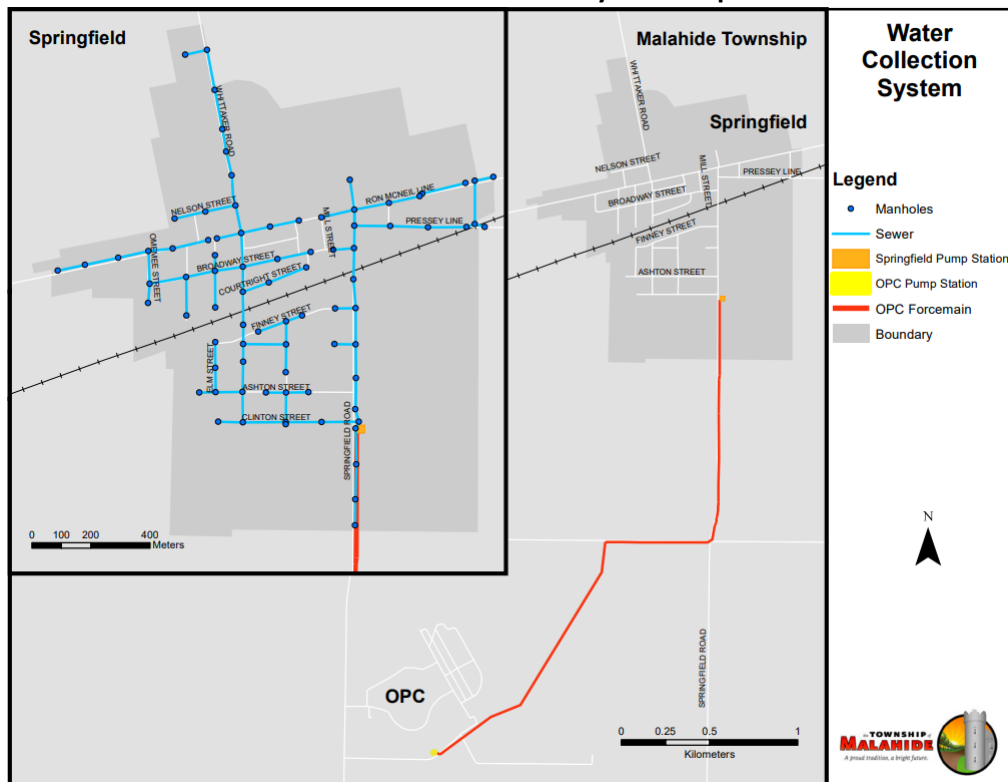
5.1.1. Asset Class Summary

The Township currently owns and manages 7.5 kilometres of wastewater collection mains, 3.6 Kilometres of wastewater force mains, 2 Pump Stations, and 80 manholes, with a 2021 total replacement value totaling approximately \$10.9 million. The collected wastewater is pumped to a wastewater treatment facility owned by the Town of Aylmer. Table 5-1 provides a summary of count, age, and replacement value for the current wastewater collection system assets. The oldest average age of the Township's wastewater collection system belongs to the collection mains, averaging 22 years, while the youngest average age belongs to the pump stations, averaging 11 years. Figure 5-1 maps the wastewater collection system to visualize the Township's current asset network.

Table 5-1
Wastewater Collection System Infrastructure Summary

Type	Quantity	Average Age	Replacement Cost (2021 \$)
Collection Mains	7.5 km	22	\$4,507,920
Manholes	80 units	21	\$960,000
Pump Stations	2 stations	11	\$3,295,000
Force Main	3.6 km	20	\$2,173,200
TOTAL			\$10,936,120

Figure 5-1
Wastewater Collection System Map



5.1.2. Condition

The Township Staff assessed the condition of the wastewater collection system, applying a condition state for the percentage of useful life remaining for assets. The percentage of useful life remaining is based on a predetermined useful life for collection mains, force mains, manholes, and the pump station components. To better communicate the condition of the wastewater collection system, the numeric condition ratings have been segmented into qualitative condition states as summarized in Table 5-2.

Table 5-2
Wastewater Collection System Condition States Defined with Respect to Useful Life

Useful Life Remaining (%)	Condition State
100-84	Brand New
83-67	Very Good
66-51	Good
50-34	Fair
33-18	Poor
17-1	Very Poor
0	End of Life

Table 5-3 examines the average condition rating of wastewater collection system. The condition of the assets comes from the percentage of useful life remaining. On average, the collection system is in a “Very Good” condition state. The lowest observed condition in the wastewater collection system is “Good” in the asset category of manholes.

Table 5-3
Wastewater Collection System Condition Analysis

Type	Quantity	Average % of Useful Life Remaining (ULR)	Lowest Observed URL	Average Condition State
Collection Mains	7.2 km	78	78	Very Good
Force Mains	3.6 km	80	80	Very Good
Pump Stations	2	90	80	Brand New
Manholes	80	58	58	Good
TOTAL				Very Good

5.1.3. Current Levels of Service

The levels of service currently provided by the Township’s wastewater collection system is, in part, a result of the state of local infrastructure identified above. A level of service analysis defines the current levels of service and enables the Township to periodically evaluate these service level objectives. The Township’s strategic service objective is to provide safe and reliable wastewater collection system to collect, and transport wastewater throughout the municipality.

Wastewater collection system assets have prescribed levels of service reporting requirements under O. Reg. 588/17. These requirements include levels of service reporting from two different levels, i.e. community levels of service and technical levels of service. Community levels of service objectives describe service levels in terms that customers understand and reflect their scope and quality expectations of the wastewater collection system. Technical levels of service describe the scope and quality of Township collection mains, force mains, pump stations, and manholes, through performance measures that can be quantified, evaluated, and detail how effectively a municipality provides services.

The Township has also set performance measures for levels of service beyond the requirements under regulation. Performance measures have been categorized within three main service objectives, i.e. safety, reliability, and inclusivity. Table 5-4 presents the current levels of service as mandated by O. Reg. 588/17 and as set by the Township.

Table 5-4
2021 Wastewater Collection System Current Levels of Service

SCOPE	SERVICE OBJECTIVES	COMMUNITY EXPECTATIONS	TECHNICAL PERFORMANCE MEASURES	CURRENT LEVEL OF SERVICE
SAFETY	To ensure that Municipality's wastewater collection and conveyance assets are safe by keeping them in fair condition or better.	Wastewater assets throughout the community are in fair condition or better.	Average network pipe condition:	"Very Good"
			Average pump station condition:	"Brand New"
RELIABILITY	To ensure that Municipality's wastewater collection and conveyance assets are reliable by minimizing the number of associated overflows, and/or basement back-ups.	Minimal number of sanitary overflows, and/or basement back-ups.	Total number of incidents and volume of combined sewer flows exceeding system capacity (overflows) compared to number of properties connected:*	0 Overflows
			Total number of connection-days per year due to basement back-ups compared to number of properties connected:*	0 Basement Back-ups
INCLUSIVITY	To ensure that Municipality's wastewater collection, conveyance and treatment service is inclusive by providing service to all properties throughout the community.	Minimal number of properties without municipal wastewater collection services throughout the community.	Percentage of total number of properties connected to the community's wastewater system:*	9% of Total Properties

* mandated by O. Reg. 588/17

5.2. Lifecycle Management

5.2.1. Lifecycle Activities

This section will detail the lifecycle activities (capital treatments) as prescribed by Township staff. The treatments that the Township currently employs in the management of its wastewater collection system include:

- Collection Mains, Force Mains, and Manholes:
 - Replacement.
- Force Mains:
 - Replacement.
- Pump Stations:
 - Component Rehabilitation;
 - Component Replacement.

Table 5-5 details the costs for the lifecycle activities listed above. These costs are presented as a percentage of estimated replacement cost or as flat rates per treatment. Rehabilitation of the force main includes the replacement of the four air release valves. Rehabilitation of the components of a pump station include rebuilding and replacing pumps, pipes, electrical, valves, vents meters, generators, and structural components.

Table 5-5
Water Distribution System Treatment Costs

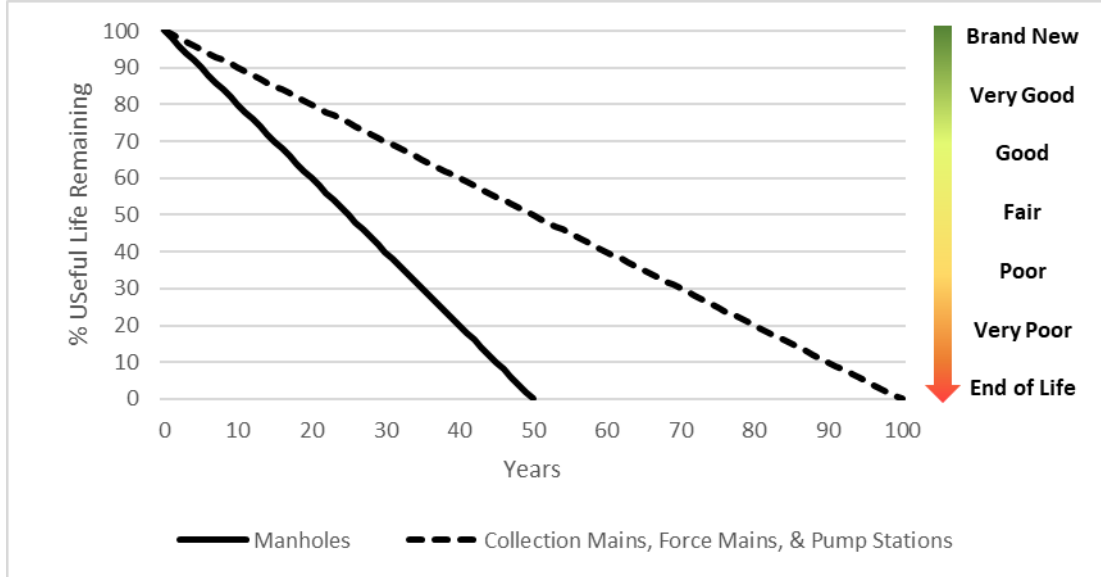
Treatment	Applies To	Cost (2021 \$)
Rehabilitation – Electrical	Pump Stations	\$100,000
Rehabilitation – Wet Well	Pump Stations	\$50,000
Rehabilitation – Pumps	Pump Stations	\$15,000 per pump
Replacement	All	100% of Replacement Cost

5.2.2. Degradation Profile

Assets deteriorate over time, eventually reaching a point where they have no remaining service life left. However, the path each asset takes in reaching its end of life differs, even for assets of the same type. A condition rating identifies where along the path any particular asset lays, or in other words, how long an asset has left before it reaches its end of life. Therefore, condition and service life are linked, and can be plotted graphically to visually represent the degradation curve of an asset.

Figure 5-2 presents the degradation profile of collection and force mains, pump stations, and manholes, that have been developed based on a straight-line approach per manufacturer recommendations. Through the process of conducting condition assessments, the Township will be able to collect data to further refine the degradation profile.

Figure 5-2
Collection and Force Main Degradation Profile



5.2.3. Decision Criteria

Table 5-6 presents the decision criteria—developed through discussions amongst Township staff—for triggering specific wastewater collection asset treatments. When the decision criteria for a given asset are met, the corresponding treatment is eligible to be applied. When a treatment is applied, the percentage of useful life remaining of the asset is improved by the amount specified in the “Gain to Condition” column, but not to exceed the amount listed in the “Maximum Condition Threshold” column.

Table 5-6
Wastewater Collection System Treatment Decision Criteria

Asset Type	Treatment	%ULR Range	Gain to Condition	Maximum Condition Threshold
Collection Mains	Replacement	20-0	+100	100
Force Mains	Replacement	20-0	+100	100
Manholes	Replacement	0	+100	100
Pump Stations	Structure Rehabilitation	60-50	+15	+78
	Component Replacement	20-0	+100	100
	Replacement	20-0	+100	100

5.2.4. Expected Lifecycle and Associated Risk

Combining the treatments, degradation profiles, and decision criteria presented herein results in a complete lifecycle management strategy. Figure 5-3 and 5-4 present illustrative examples of the expected lifecycles for wastewater collection mains and manholes, respectively. Figure 5-5 and 5-6 present the expected lifecycles for the component-based force main and pump stations. The dotted, vertical lines represent points of intervention in the representative asset’s expected life. The lifecycle path of the asset is represented by the solid lines, following the degradation profile presented above. Finally, the red, dashed line demonstrates the expected lifecycle of an asset were it to not receive any treatments over the course of its service life.

The lifecycle strategy for wastewater collection mains and manholes is to replace them when they have failed. While this strategy is simple—and may not appear to be significantly different from an age-based replacement strategy—because it is informed by a condition assessment of an asset this strategy results in less accurate forecasting. As the individual asset’s condition is degraded over time, the timing of the eventual replacement could vary significantly from one asset to another due to unique internal and environmental factors. For example, if the environment in which a collection main resides causes it to degrade faster or slower than the expected average, then the eventual replacement may be different than an average age-based approach. Collection main conditions are monitored on a regular basis with a flushing and camera review being done on a four-year basis.

The lifecycle strategies for the force mains, pump stations, and SCADA will be to address individual components of the asset in a combination of preservation and replacement strategy. If budgetary constraints prevent a component rehabilitation from occurring as it becomes due, the asset will continue to degrade to a point that it needs to be replaced. Individual components will have specific rehabilitation treatment and replacement schedules. Ensuring these schedules are adhered to will result in the overall asset continuing to provide current levels of service and will minimize the risk of failure.

In addition to the age-based approach to condition assessments, enhanced reviews will be conducted on assets as they approach the forecasted treatment/replacement periods. The enhanced reviews will consider the condition of individual asset components as well as environmental factors, and other risks. Reviewing these associated risks will ensure that the recommended treatment or replacement period reflects all elements of the asset and the level of service it provides.

Figure 5-3
Lifecycle Strategy – Wastewater Collection Mains

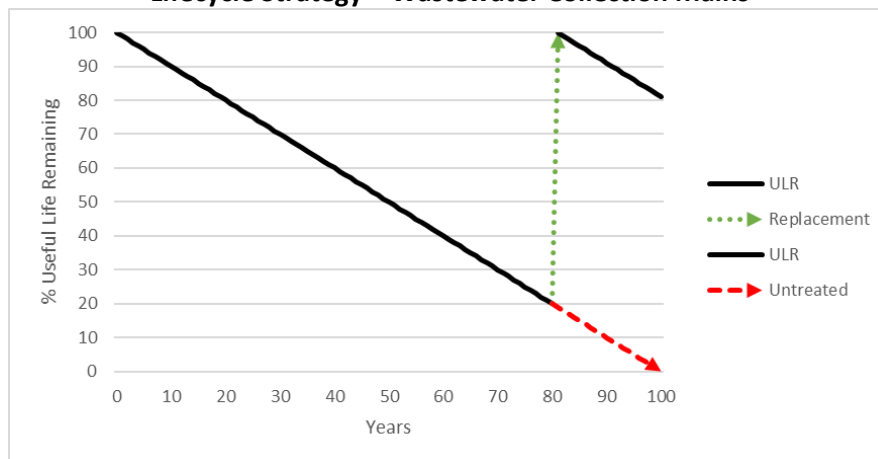


Figure 5-4
Lifecycle Strategy – Manholes

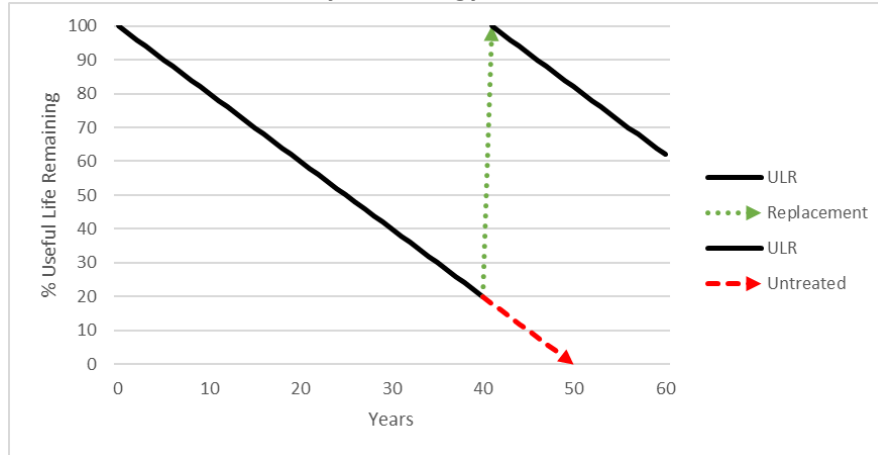


Figure 5-5
Lifecycle Strategy – Force Mains

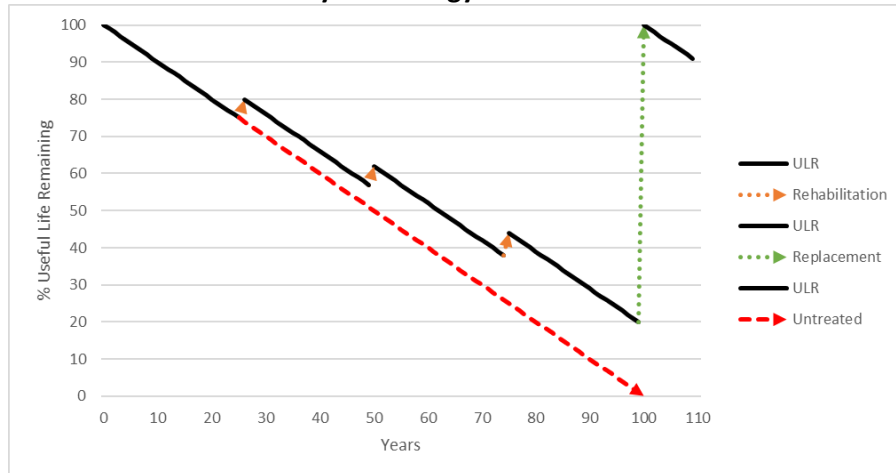
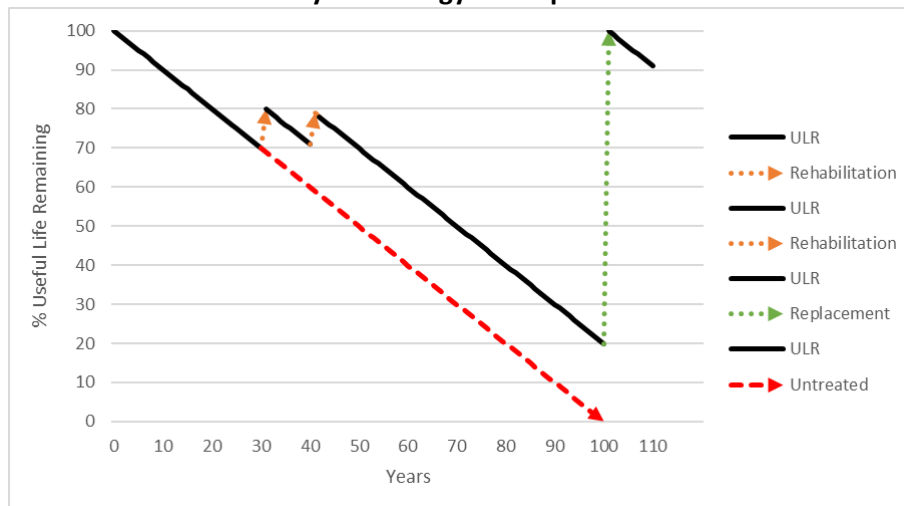


Figure 5-6
Lifecycle Strategy – Pump Stations



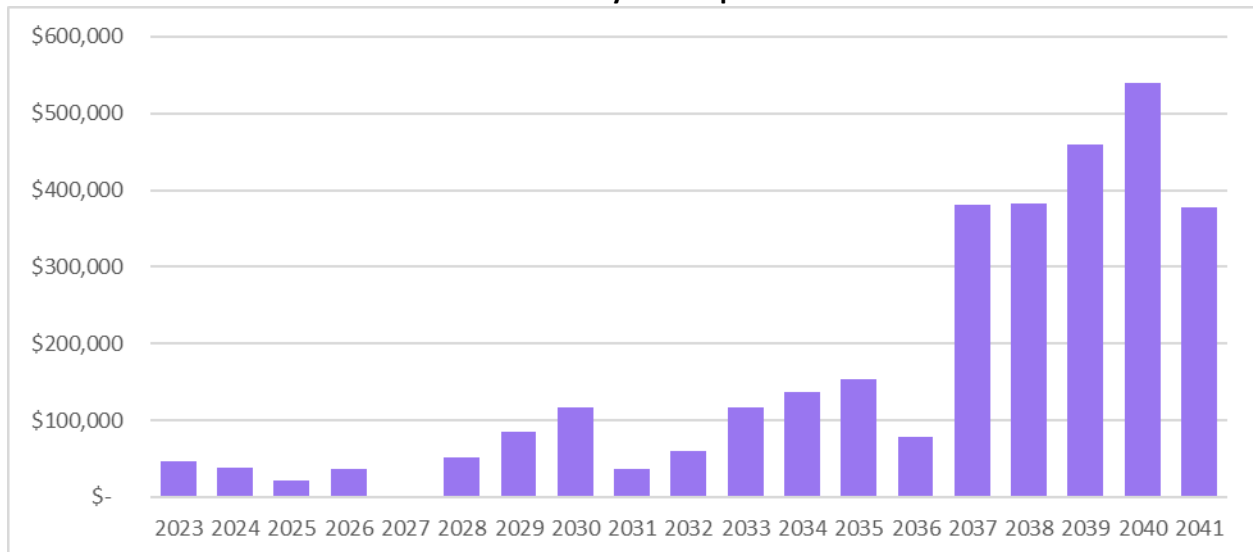
5.3. Funding Strategy

5.3.1. Annual Cost Forecast

Figure 5-7 presents the 20-year expenditure forecast that results from following the lifecycle management strategy detailed above. This forecast illustrates the annual expenditures without any consideration to budgetary constraints. Over the 20-year forecast period, the average annual expenditure would be approximately \$153,000. The expenditure forecast includes a capital inflation factor of 3.5% annually, which aligns closely with the historical 20-year annual average rate of inflation as witnessed in Statistics Canada's Building Construction Price Index.

Table C-1 in Appendix C: Funding Strategy Tables – Wastewater Collection System, presents the capital expenditure forecast for wastewater collection system assets over the 2023- 2041 forecast period. This expenditure forecast is based on the current lifecycle activities identified this plan.

Figure 5-7
Wastewater Collection System Expenditure Forecast

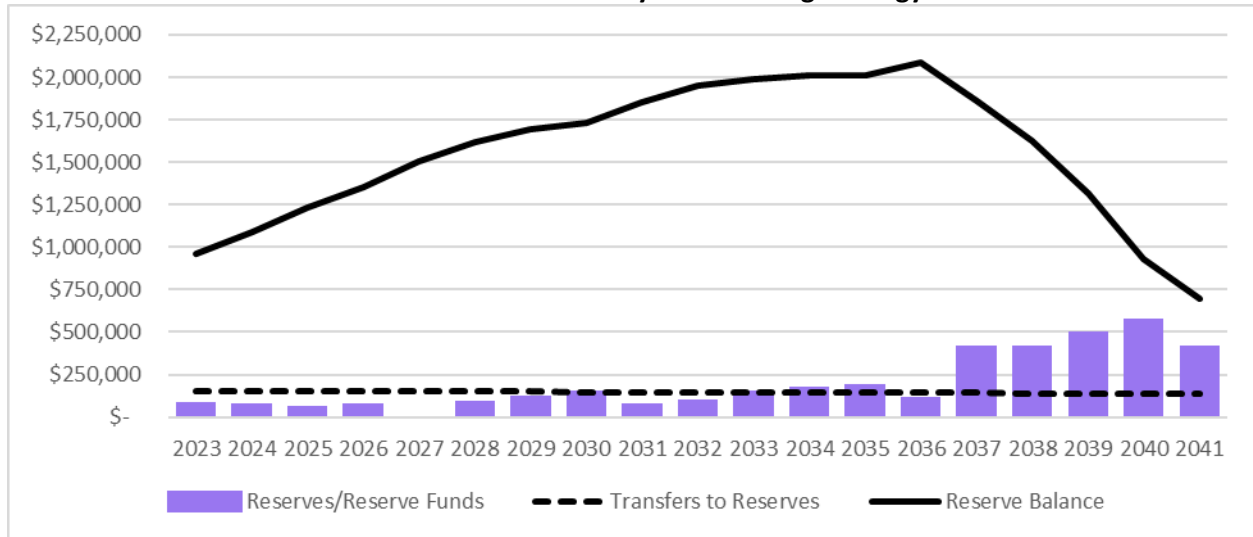


5.3.2. Funding Strategy

Figure 5-8 presents the 20-year funding strategy for the expenditure forecast detailed above. The lifecycle rehabilitation and renewal activities planned for the wastewater collection system are projected to cost, on average, approximately \$153,000 per year over the forecast period. The funding strategy for these costs is to finance from reserves. There will be an annual decrease of \$1000 to the transfer to reserves from operating as the reserve balance will sufficiently fund the forecasted expenditures.

Table C-2 in Appendix C: Funding Strategy Tables – Wastewater Collection System, presents the funding strategy for wastewater collection system assets over the 2023-2041 forecast period. This funding forecast is based on the current lifecycle activities identified this plan.

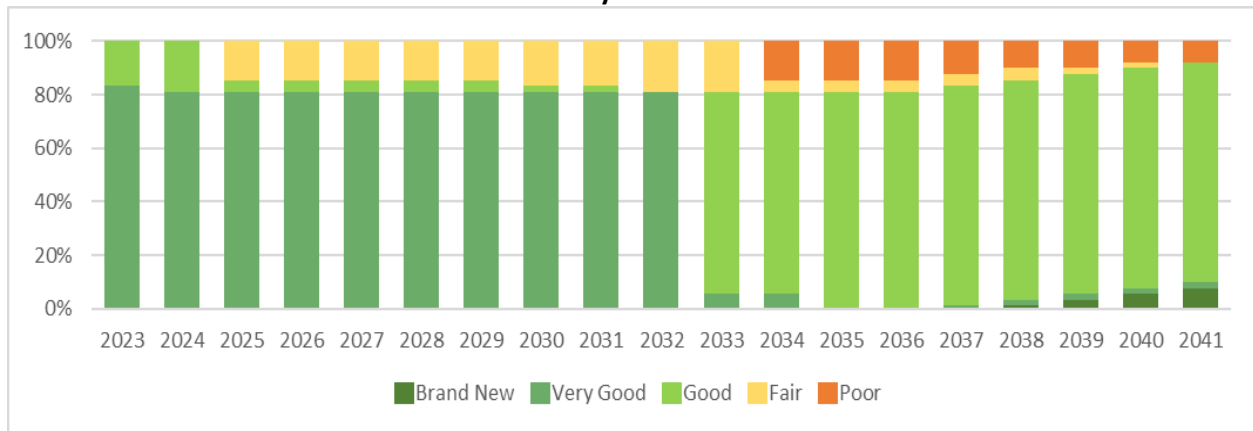
Figure 5-8
Wastewater Collection System Funding Strategy



5.3.3. Network Service Level Forecast

Figure 5-9 demonstrates the wastewater collection system network service levels over the forecast period as a result of implementing this lifecycle management funding strategy. This funding strategy will enable the Township to move towards a sustainable position of maintaining the current levels of service for wastewater assets.

Figure 5-9
Wastewater Collection System Network Service Levels



6. OVERALL FUNDING STRATEGY

6.1. Funding Sources

Table A-3 summarizes the recommended strategy to fund the asset lifecycle costs identified for tax levy-based assets, and Table B-2 and C-2 summarize the recommended strategies to fund the asset lifecycle costs for water and wastewater-based assets, respectively. These funding forecasts were based on the funding sources identified in the Township's 2021 budget.

The lifecycle costs required to sustain established levels of service are being recovered through several methods:

- Ontario Community Infrastructure Fund (OCIF) formula-based funding is identified for years in which the funding amount is known (2019-2020). The 2020 level of OCIF funding is then maintained for the remaining years of the forecast, recognizing the OCIF as a stable and long-term funding source for capital projects.
- Gas tax funding has been shown as a stable and long-term funding source for eligible capital projects. Annual funding estimates are based on Township's 2019 budget for 2019-2021. The funding in subsequent years has been maintained at the 2021 level.
- Provincial/Federal grant funding has been included in the forecast for water works. This grant funding is included as a necessary source of funding to ensure the Township can complete these projects.
- Debt financing is not required, the financing strategy does not include debt financing over the forecast period.
- The Township will be dependent upon maintaining healthy capital reserves/reserve funds in order to provide the remainder of the required lifecycle funding over the forecast period. This will require the Township to proactively adjust amounts being transferred to these capital reserves during the annual budget process.

6.2. Funding Shortfall

This funding strategy has been developed to be fully funded, and therefore no funding shortfall has been identified. However, this means that if identified grants are not received at expected amounts then shortfalls may present themselves if service level expectations are maintained. In such an event, the difference could be made up through increases to the revenue streams over-and-above those presented hereafter.

6.3. Tax Levy Impact

While the annual funding requirement may fluctuate, it is important for the Township to implement a consistent, yet increasing, annual investment in capital so that the excess annual funds can accrue in capital reserve funds. Table A-3 presents a summary of the impacts on the tax levy as a result of this funding strategy. These impacts layer on assessment increases resulting from new assessment growth, assumed to be approximately 2% annually.

In order to fund the recommended asset lifecycle activities over the forecast period using the Township's own available funding sources (i.e. using taxation, Gas Tax funding, OCIF funding, and grants), an increase in the Township's taxation levy would be required approximately 3% annually for 2022-2041.

The taxation impacts identified above include inflationary adjustments to the Township's operating costs and revenues as identified in its 2021 budget (e.g. general operating inflation of 3.5% annually). However, if other funding sources become available (as mentioned above) or if maintenance practices allow for the deferral of capital works, then the impact on the Township's taxation levy would potentially decrease. Further detail on the Funding Strategy is presented in Appendix A.

6.4. User Fee Impact – Water and Wastewater

While the annual funding requirement may fluctuate, it is important for the Township to implement a consistent, yet increasing, annual investment in capital so that the excess annual funds can accrue in capital reserve funds. At the writing of this report, an in-depth analysis of user fees is underway by Watson & Associates Economists Ltd. who have been engaged by the Township in order to complete a rate study for the water distribution system and for the wastewater collection system. The forthcoming reports will guide the asset management plans for both systems, respectively.

7. RECOMMENDATIONS

7.1. Current Considerations

The following recommendations have been provided for consideration:

- That the Township of Malahide Asset Management Plan be received and approved by Council;
- That consideration of this Asset Management Plan be made as part of the annual budgeting process to ensure sufficient capital funds are available to fund the Asset Management Plan; and
- That this Asset Management plan be updated as needed over time to reflect the current priorities of the Township.

Substantial investment in capital will be required over the forecast period, and through the recommendations provided in the funding strategy, proactive steps would be taken to sustainably fund the Township's network of assets. Funding has been recommended to meet the annual lifecycle funding target, which identifies the long-term annual investment level necessary to meet the current levels of service. This funding takes the form of transfers to capital reserves, and is reflected in the sizeable positive balances reached in the final years of the forecast period.

7.2. Future Improvements

Areas of future enhancement to the Township's asset management plan have been noted, and a summary of these improvements has been listed below:

- Levels of Service - Images that illustrate the different condition states of assets can be helpful in communicating levels of service to stakeholders. A number of representative condition sample images could be provided for each Asset Class. The Township should seek to provide additional images in future iterations of this asset management plan.
- Bridges and Culverts: The analysis presented in this report with respect to the Township's bridges and culverts has been based on information contained in the Township's 2020 OSIM report. The next update to this plan should incorporate the findings of the Township's latest biennial 2022 OSIM report. In the next biennial 2024 OSIM RFP, there should be a requirement for the engineer to review non-structural culverts that don't qualify for the legislated inspection (less than 3m span) but which still represent a significant financial risk to the Township. There are large diameter culverts or culverts with a significant amount of overburden which should be inspected and shown on a replacement schedule. The replacement of these culverts (which, for the most part, are located at the bottom of ravines) may be financially challenging for the Township in the near future. A full inventory and inspection of all non-structural culverts should be completed so that a determination can be made to include specific culverts that represent a high financial risk and/or to include all non-structural culverts as a pooled asset in future plan revisions.
- Water and Wastewater Condition Assessments: The condition assessment of water and wastewater assets was largely based on age-based degradation models. Future improvements to these plans should include a more detailed condition review and inspection program. More detail regarding condition assessments is especially important for assets that have been

componentized. Componentized assets require an enhanced level of review of the costs of lifecycle activities required by individual components, not currently tracked separately.

- **Age-Based Assets – Modified Remaining Useful Life:** The lifecycle needs for a number of the Township's asset categories and are currently assessed based on asset age. In the future, it would be beneficial for the Township to assign a remaining useful life to these various assets, based on observed condition and performance. This would enable the Township to more accurately plan for required interventions, such as replacements, based on observed asset characteristics.
- **Growth-Related Capital:** This plan does not currently include the costs associated with the lifecycle activities and maintenance of expansionary capital. Future updates to this plan should incorporate the expected costs of the acquisition, rehabilitation, and replacement of these assets to more fully explore the sustainability of the Township's network of assets. Examining these growth-related capital needs and their impacts on the financing strategy will provide for a comprehensive assessment of the sustainability of the Township's overall asset management system.

Appendix A Financing Strategy Tables – Tax Levy

Table A-1
Roads Capital Expenditure Forecast

Roads Capital Budget Forecast	2023	2024	2025	2026	2027	2028	2029	2030	2031
DSTrehab (DST w 75mm Gran A)	\$ 342,562	\$ 1,028,970	\$ 122,700	\$ 735,166	\$ 336,304	\$ -	\$ 151,928	\$ -	\$ -
DSTrehab2 (DST w 150mm Gran A)	\$ 93,324	\$ 237,933	\$ 508,477	\$ 267,401	\$ -	\$ -	\$ 374,739	\$ -	\$ -
R1 (Basic Resurfacing 1 - 50mm)	\$ -	\$ 12,811	\$ 15,573	\$ -	\$ 46,118	\$ 44,255	\$ -	\$ 22,237	\$ -
R2 (Basic Resurfacing 2 - 100mm)	\$ -	\$ -	\$ -	\$ 96,660	\$ -	\$ -	\$ -	\$ -	\$ 62,173
REC (Reconstruction - Rural)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RSS (Reconstruction with Storm Sewers)	\$ 650,000	\$ 350,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SST (Single Surface Treatment)	\$ 236,819	\$ 142,078	\$ 817,334	\$ 168,237	\$ 1,013,038	\$ 1,390,513	\$ 595,602	\$ 540,533	\$ 1,112,958
SSTedge (Single Surface Treatment with Edge padding)	\$ 154,666	\$ 41,936	\$ -	\$ 129,381					
Roads Needs Study (New every 4, update between)	\$ 8,000	\$ -	\$ 20,000	\$ -	\$ 8,000	\$ -	\$ 20,000	\$ -	\$ 8,000
Roads Safety Study	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures	\$ 1,510,371	\$ 1,813,728	\$ 1,484,084	\$ 1,396,845	\$ 1,403,460	\$ 1,434,768	\$ 1,142,269	\$ 562,770	\$ 1,183,131

Table A-2
Bridge & Culvert Capital Expenditure Forecast

B&C Capital Budget Forecast	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
C-17 Vienna	\$ -	\$ -	\$ 1,220,389	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B-3 Crossley Hunter	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,155	\$ 1,101,700	\$ -	\$ -
B-7 Carter	\$ 144,216	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C-15 Hacienda	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,228,926	\$ -	\$ -	\$ -	\$ -	\$ -
C-7 Pigram	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 38,253	\$ 420,783	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C-4 Dorchester	\$ -	\$ -	\$ -	\$ 93,022	\$ 1,023,247	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C-12 Glencolin	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 58,527	\$ 643,801	\$ -
C-1 Whittaker Con 7 N	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 79,949	\$ 879,435	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C-6 Mapleton	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 240,610	\$ 2,646,707	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C-11 College East	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 52,379	\$ 576,173	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B-11 Hacienda	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 140,069	\$ 1,540,757	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B-12 Rogers South	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 120,675	\$ 1,327,429	\$ -	\$ -	\$ -	\$ -	\$ -
C-19 Finney	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 69,568	\$ 765,248	\$ -	\$ -	\$ -	\$ -	\$ -
C-21 Springwater	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 114,135	\$ 1,255,488	\$ -	\$ -
OSIM Report	\$ -	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ 10,000	\$ -
Total Expenditures	\$ 144,216	\$ 10,000	\$ 1,220,389	\$ 103,022	\$ 1,023,247	\$ 48,253	\$ 500,732	\$ 889,435	\$ 240,610	\$ 2,656,707	\$ 52,379	\$ 726,242	\$ 1,731,000	\$ 3,331,603	\$ -	\$ 224,290	\$ 2,415,715	\$ 653,801	\$ -

Table A-3
Tax Levy Funding Strategy

Capital Budget Forecast	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Roads (Reconstruction)	\$ 1,510,371	\$ 1,811,728	\$ 1,484,084	\$ 1,396,845	\$ 1,403,460	\$ 1,434,768	\$ 1,142,269	\$ 562,770	\$ 1,183,131	\$ 1,466,000	\$ 1,466,000	\$ 1,466,000	\$ 1,466,000	\$ 1,466,000	\$ 1,466,000	\$ 1,466,000	\$ 1,466,000	\$ 1,466,000	\$ 1,466,000
Bridges & Culverts	\$ 144,216	\$ 10,000	\$ 1,220,389	\$ 103,022	\$ 1,023,247	\$ 46,253	\$ 500,732	\$ 889,435	\$ 240,610	\$ 2,656,707	\$ 52,379	\$ 726,242	\$ 1,731,000	\$ 3,331,603	\$ -	\$ 224,290	\$ 2,415,715	\$ 653,801	\$ -
Non-Core Assets	\$ 246,266	\$ 955,679	\$ 1,118,819	\$ 1,297,059	\$ 787,150	\$ 914,372	\$ 1,274,383	\$ 1,833,577	\$ 1,513,224	\$ 1,070,803	\$ 960,055	\$ 1,379,229	\$ 729,652	\$ 1,655,916	\$ 1,791,530	\$ 1,699,382	\$ 726,964	\$ 721,266	\$ 720,500
Total Expenditures	\$ 1,900,853	\$ 2,779,407	\$ 3,823,292	\$ 2,796,926	\$ 3,213,857	\$ 2,397,393	\$ 2,917,384	\$ 3,285,782	\$ 2,936,965	\$ 5,193,510	\$ 2,478,434	\$ 3,571,471	\$ 3,926,652	\$ 6,453,519	\$ 3,257,530	\$ 3,389,672	\$ 4,608,679	\$ 2,851,067	\$ 2,186,500
Gas Tax (Gas Tax Reserve Fund)	\$ 1,225,292	\$ 334,531	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697
OCIF (OCIF Reserve)	\$ 675,561	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384
Provincial/Federal Grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt/Requirement Payments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transfer from Capital Reserves	\$ -	\$ 1,981,492	\$ 3,065,211	\$ 2,038,845	\$ 2,455,776	\$ 1,639,312	\$ 2,159,303	\$ 2,527,701	\$ 2,178,884	\$ 4,435,429	\$ 1,720,353	\$ 2,813,390	\$ 3,168,571	\$ 5,695,438	\$ 2,499,449	\$ 2,631,591	\$ 3,850,598	\$ 2,092,986	\$ 1,428,419
Total Capital Financing	\$ 1,900,853	\$ 2,779,407	\$ 3,823,292	\$ 2,796,926	\$ 3,213,857	\$ 2,397,393	\$ 2,917,384	\$ 3,285,782	\$ 2,936,965	\$ 5,193,510	\$ 2,478,434	\$ 3,571,471	\$ 3,926,652	\$ 6,453,519	\$ 3,257,530	\$ 3,389,672	\$ 4,608,679	\$ 2,851,067	\$ 2,186,500
Total Capital Expenses less Financing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Gas Tax Reserve Fund	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Opening Balance	\$ 970,429	\$ 39,834	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transfer from Operating	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697
Transfer to Capital	\$ 1,225,292	\$ 334,531	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697	\$ 294,697
Closing Balance	\$ 39,834	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OCIF Reserve	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Opening Balance	\$ 212,177	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transfer from Operating	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384
Transfer to Capital	\$ 675,561	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384	\$ 463,384
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tax Levy - Capital Related Reserves	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Opening Balance	\$ 4,588,648	\$ 6,432,988	\$ 6,351,165	\$ 5,251,338	\$ 5,344,986	\$ 5,082,163	\$ 5,698,080	\$ 5,858,148	\$ 5,715,885	\$ 5,990,488	\$ 4,078,637	\$ 4,954,055	\$ 4,810,795	\$ 4,388,944	\$ 1,519,114	\$ 1,926,527	\$ 2,285,490	\$ 1,605,721	\$ 2,797,197
Transfer from Operating	\$ 1,844,340	\$ 1,899,670	\$ 1,965,384	\$ 2,132,493	\$ 2,192,954	\$ 2,255,228	\$ 2,319,371	\$ 2,385,438	\$ 2,453,487	\$ 2,523,578	\$ 2,595,771	\$ 2,670,130	\$ 2,746,720	\$ 2,825,608	\$ 2,906,862	\$ 2,990,554	\$ 3,170,830	\$ 3,284,461	\$ 3,417,505
Transfer to Capital	\$ -	\$ 1,981,492	\$ 3,065,211	\$ 2,038,845	\$ 2,455,776	\$ 1,639,312	\$ 2,159,303	\$ 2,527,701	\$ 2,178,884	\$ 4,435,429	\$ 1,720,353	\$ 2,813,390	\$ 3,168,571	\$ 5,695,438	\$ 2,499,449	\$ 2,631,591	\$ 3,850,598	\$ 2,092,986	\$ 1,428,419
Closing Balance	\$ 6,432,988	\$ 6,351,165	\$ 5,251,338	\$ 5,344,986	\$ 5,082,163	\$ 5,698,080	\$ 5,858,148	\$ 5,715,885	\$ 5,990,488	\$ 4,078,637	\$ 4,954,055	\$ 4,810,795	\$ 4,388,944	\$ 1,519,114	\$ 1,926,527	\$ 2,285,490	\$ 1,605,721	\$ 2,797,197	\$ 3,417,505
Tax Levy - Operating Budget Forecast	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Net Operating Expenditures	\$ 6,010,423	\$ 6,220,788	\$ 6,438,516	\$ 6,663,864	\$ 6,897,099	\$ 7,138,497	\$ 7,388,345	\$ 7,646,937	\$ 7,914,580	\$ 8,191,590	\$ 8,478,295	\$ 8,775,036	\$ 9,082,162	\$ 9,400,038	\$ 9,729,039	\$ 10,069,555	\$ 10,421,990	\$ 10,786,759	\$ 11,164,296
Transfers to Capital-Related Reserves	\$ 1,844,340	\$ 1,899,670	\$ 1,956,660	\$ 2,015,360	\$ 2,075,821	\$ 2,138,095	\$ 2,202,238	\$ 2,268,305	\$ 2,336,354	\$ 2,406,445	\$ 2,478,638	\$ 2,552,997	\$ 2,629,587	\$ 2,708,475	\$ 2,789,729	\$ 2,873,421	\$ 2,959,624	\$ 3,048,412	\$ 3,139,865
Debt Re-Investment	\$ -	\$ -	\$ 8,724	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133	\$ 117,133
Existing Debt Payments	\$ 318,099	\$ 318,099	\$ 309,375	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966	\$ 200,966
New Debt Payments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Net Impact on Taxation	\$ 8,172,862	\$ 8,438,557	\$ 8,713,274	\$ 8,997,322	\$ 9,291,018	\$ 9,594,691	\$ 9,908,682	\$ 10,233,341	\$ 10,569,033	\$ 10,916,134	\$ 11,275,033	\$ 11,646,132	\$ 12,029,848	\$ 12,426,612	\$ 12,836,867	\$ 13,261,075	\$ 13,699,713	\$ 14,153,271	\$ 14,622,260
Prior Year Taxation Levy	\$ 7,915,001	\$ 8,172,862	\$ 8,438,557	\$ 8,713,274	\$ 8,997,322	\$ 9,291,018	\$ 9,594,691	\$ 9,908,682	\$ 10,233,341	\$ 10,569,033	\$ 10,916,134	\$ 11,275,033	\$ 11,646,132	\$ 12,029,848	\$ 12,426,612	\$ 12,836,867	\$ 13,261,075	\$ 13,699,713	\$ 14,153,271
Add: Provision for Assessment Increase	\$ 65,000	\$ 66,300	\$ 67,626	\$ 68,979	\$ 70,358	\$ 71,765	\$ 73,201	\$ 74,665	\$ 76,158	\$ 77,681	\$ 79,235	\$ 80,819	\$ 82,436	\$ 84,084	\$ 85,766	\$ 87,481	\$ 89,231	\$ 91,016	\$ 92,836
Current Year Taxation Levy at 0.0% Increase	\$ 7,980,001	\$ 8,239,162	\$ 8,506,183	\$ 8,782,253	\$ 9,067,680	\$ 9,362,784	\$ 9,667,892	\$ 9,983,346	\$ 10,309,499	\$ 10,646,714	\$ 10,995,368	\$ 11,355,852	\$ 11,728,568	\$ 12,113,933	\$ 12,512,378	\$ 12,924,349	\$ 13,350,307	\$ 13,790,728	\$ 14,246,107
Additional Increase in Taxation Levy for the Year	\$ 192,861	\$ 199,395	\$ 207,092	\$ 215,069	\$ 223,338	\$ 231,908	\$ 240,790	\$ 249,995	\$ 259,534	\$ 269,420	\$ 279,664	\$ 290,280	\$ 301,280	\$ 312,679	\$ 324,489	\$ 336,727	\$ 349,406	\$ 362,543	\$ 376,153
Total Taxation Levy	\$ 8,172,862	\$ 8,438,557	\$ 8,713,274	\$ 8,997,322	\$ 9,291,018	\$ 9,594,691	\$ 9,908,682	\$ 10,233,341	\$ 10,569,033	\$ 10,916,134	\$ 11,275,033	\$ 11,646,132	\$ 12,029,848	\$ 12,426,612	\$ 12,836,867	\$ 13,261,075	\$ 13,699,713	\$ 14,153,271	\$ 14,622,260
Percentage Increase (Factoring in Assessment Growth)	2.42%	2.42%	2.43%	2.45%	2.46%	2.48%	2.49%	2.50%	2.52%	2.53%	2.54%	2.56%	2.57%	2.58%	2.59%	2.61%	2.62%	2.63%	2.64%

Appendix B Financing Strategy Tables – Water Distribution System

Table B-1
Water Distribution System Capital Expenditure Forecast

[illegible]

Table B-2
Water Distribution System Funding Strategy

Capital Budget Forecast	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Total Expenditures	\$ 1,586,461	\$ 22,422	\$ 38,262	\$ 44,621	\$ 535,386	\$ 46,622	\$ 805,066	\$ 118,821	\$ 182,734	\$ 71,568	\$ 33,052	\$ 157,872	\$ 1,166,554	\$ 61,043	\$ 207,517	\$ 93,920	\$ 32,838	\$ 1,563,618	\$ 73,964
Provincial/Federal Grants	\$ 1,157,697	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 157,872	\$ 1,166,554	\$ 61,043	\$ 207,517	\$ 93,920	\$ 32,838	\$ 1,563,618	\$ 73,964
Transfer from Capital Reserves	\$ 428,764	\$ 22,422	\$ 38,262	\$ 44,621	\$ 535,386	\$ 46,622	\$ 805,066	\$ 118,821	\$ 182,734	\$ 71,568	\$ 33,052	\$ 157,872	\$ 1,166,554	\$ 61,043	\$ 207,517	\$ 93,920	\$ 32,838	\$ 1,563,618	\$ 73,964
Total Capital Financing	\$ 1,586,461	\$ 22,422	\$ 38,262	\$ 44,621	\$ 535,386	\$ 46,622	\$ 805,066	\$ 118,821	\$ 182,734	\$ 71,568	\$ 33,052	\$ 157,872	\$ 1,166,554	\$ 61,043	\$ 207,517	\$ 93,920	\$ 32,838	\$ 1,563,618	\$ 73,964
Total Capital Expenses less Financing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water - Capital Related Reserves	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Opening Balance	\$ 531,593	\$ 352,829	\$ 590,407	\$ 822,145	\$ 1,057,524	\$ 812,139	\$ 1,065,516	\$ 570,450	\$ 771,630	\$ 918,895	\$ 1,187,327	\$ 1,504,275	\$ 1,706,403	\$ 900,848	\$ 1,228,805	\$ 1,411,289	\$ 1,717,369	\$ 2,094,531	\$ 950,913
Transfer from Operating	\$ 250,000	\$ 250,000	\$ 270,000	\$ 280,000	\$ 290,000	\$ 300,000	\$ 310,000	\$ 320,000	\$ 330,000	\$ 340,000	\$ 350,000	\$ 360,000	\$ 370,000	\$ 380,000	\$ 390,000	\$ 400,000	\$ 410,000	\$ 420,000	\$ 430,000
Transfer to Capital	\$ 428,764	\$ 22,422	\$ 38,262	\$ 44,621	\$ 535,386	\$ 46,622	\$ 805,066	\$ 118,821	\$ 182,734	\$ 71,568	\$ 33,052	\$ 157,872	\$ 1,166,554	\$ 61,043	\$ 207,517	\$ 93,920	\$ 32,838	\$ 1,563,618	\$ 73,964
Closing Balance	\$ 352,829	\$ 590,407	\$ 822,145	\$ 1,057,524	\$ 812,139	\$ 1,065,516	\$ 570,450	\$ 771,630	\$ 918,895	\$ 1,187,327	\$ 1,504,275	\$ 1,706,403	\$ 900,848	\$ 1,228,805	\$ 1,411,289	\$ 1,717,369	\$ 2,094,531	\$ 950,913	\$ 1,306,940
Water - Operating Budget Forecast	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Net Operating Expenditures	\$ 769,383	\$ 792,465	\$ 816,239	\$ 840,726	\$ 865,948	\$ 891,926	\$ 918,684	\$ 946,244	\$ 974,632	\$ 1,003,871	\$ 1,033,987	\$ 1,065,026	\$ 1,096,957	\$ 1,129,865	\$ 1,163,761	\$ 1,198,674	\$ 1,234,634	\$ 1,271,673	\$ 1,309,823
Transfers to Capital-Related Reserves	\$ 250,000	\$ 260,000	\$ 270,000	\$ 280,000	\$ 290,000	\$ 300,000	\$ 310,000	\$ 320,000	\$ 330,000	\$ 340,000	\$ 350,000	\$ 360,000	\$ 370,000	\$ 380,000	\$ 390,000	\$ 400,000	\$ 410,000	\$ 420,000	\$ 430,000
Total Net Operating Revenue	\$ 1,019,383	\$ 1,052,930	\$ 1,086,239	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476	\$ 1,155,476
Prior Year Revenue	\$ 985,400	\$ 1,019,383	\$ 1,052,465	\$ 1,086,239	\$ 1,120,726	\$ 1,155,948	\$ 1,191,926	\$ 1,228,684	\$ 1,266,244	\$ 1,304,632	\$ 1,343,871	\$ 1,383,987	\$ 1,425,026	\$ 1,466,957	\$ 1,509,865	\$ 1,553,761	\$ 1,598,674	\$ 1,644,634	\$ 1,691,673
Current Year Revenue at 0.0% Increase	\$ 985,400	\$ 1,019,383	\$ 1,052,465	\$ 1,086,239	\$ 1,120,726	\$ 1,155,948	\$ 1,191,926	\$ 1,228,684	\$ 1,266,244	\$ 1,304,632	\$ 1,343,871	\$ 1,383,987	\$ 1,425,026	\$ 1,466,957	\$ 1,509,865	\$ 1,553,761	\$ 1,598,674	\$ 1,644,634	\$ 1,691,673
Additional Revenue Required	\$ 33,983	\$ 33,081	\$ 33,774	\$ 34,487	\$ 35,222	\$ 35,978	\$ 36,758	\$ 37,561	\$ 38,387	\$ 39,239	\$ 40,116	\$ 41,003	\$ 41,950	\$ 42,909	\$ 43,896	\$ 44,913	\$ 45,960	\$ 47,039	\$ 48,150
Total Revenue	\$ 1,019,383	\$ 1,052,465	\$ 1,086,239	\$ 1,120,726	\$ 1,155,948	\$ 1,191,926	\$ 1,228,684	\$ 1,266,244	\$ 1,304,632	\$ 1,343,871	\$ 1,383,987	\$ 1,425,026	\$ 1,466,957	\$ 1,509,865	\$ 1,553,761	\$ 1,598,674	\$ 1,644,634	\$ 1,691,673	\$ 1,739,823
Percentage Increase	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%

Wastewater Collection System Capital Expenditure Forecast

Wastewater Capital Budget Forecast	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Manholes (Replace or Reline)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 355,278	\$ 355,278	\$ 355,278	\$ 355,278	\$ 355,278
Springfield P.S. Roof & Electrical	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 74,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Springfield P.S. HVAC/Exhaust & Wet Well Power Vent	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Springfield P.S. Pumps (Rebuild 10yr & Replace 20yr)	\$ 30,000	\$ -	\$ -	\$ 18,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 105,000	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -
Springfield P.S. Discharge Flow Meter	\$ -	\$ 16,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Springfield P.S. Generator & Transfer Switch	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 125,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Springfield P.S. Level Monitoring Equipment & Transducer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,000	\$ -	\$ -	\$ -	\$ -
Springfield P.S. Wet Well Pipe Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 93,000	\$ -	\$ -
Springfield P.S. One Time Expenses	\$ 4,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OPC P.S. HVAC/Exhaust & Wet Well Power Vent	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OPC P.S. Pump (Rebuild 10yr & Replace 20yr)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 82,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 116,000	\$ -
OPC P.S Level Monitoring Equipment & Radar	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OPC P.S Wet Well Pipe Replacement & Lifting Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,000	\$ -
OPC P.S. One Time Expenses	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCADA PLC (every 12-15 yrs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,000	\$ -	\$ -	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCADA PLC Cabinet (every 25 yrs)	\$ -	\$ -	\$ 4,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 81,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCADA (every 6-8 yrs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 33,000	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Study	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Condition Assessments (every 10 yrs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ -
Maximo Software (OCWA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MCC Inspections (every 10yr)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Force Main 4 Air Release Valves (every 5yrs)	\$ -	\$ -	\$ 6,098	\$ 6,311	\$ -	\$ -	\$ -	\$ 7,242	\$ 7,496	\$ -	\$ -	\$ -	\$ 8,602	\$ 8,903	\$ -	\$ -	\$ -	\$ 10,216	\$ 10,574
Total Expenditures	\$ 34,000	\$ 26,000	\$ 10,098	\$ 24,311	\$ -	\$ 40,500	\$ 74,000	\$ 105,742	\$ 25,496	\$ 48,500	\$ 105,000	\$ 125,000	\$ 141,602	\$ 66,903	\$ 369,278	\$ 370,278	\$ 448,278	\$ 528,494	\$ 365,852

Wastewater Collection System Funding Strategy

Capital Budget Forecast		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Total Expenditures	\$	34,000	\$ 26,000	\$ 10,098	\$ 24,311	\$ -	\$ 40,500	\$ 74,000	\$ 105,742	\$ 25,496	\$ 48,500	\$ 105,000	\$ 125,000	\$ 141,602	\$ 66,903	\$ 369,278	\$ 370,278	\$ 448,278	\$ 528,494	\$ 365,852
Provincial/Federal Grants	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transfer from Capital Reserves	\$	34,000	\$ 26,000	\$ 10,098	\$ 24,311	\$ -	\$ 40,500	\$ 74,000	\$ 105,742	\$ 25,496	\$ 48,500	\$ 105,000	\$ 125,000	\$ 141,602	\$ 66,903	\$ 369,278	\$ 370,278	\$ 448,278	\$ 528,494	\$ 365,852
Total Funding	\$	34,000	\$ 26,000	\$ 10,098	\$ 24,311	\$ -	\$ 40,500	\$ 74,000	\$ 105,742	\$ 25,496	\$ 48,500	\$ 105,000	\$ 125,000	\$ 141,602	\$ 66,903	\$ 369,278	\$ 370,278	\$ 448,278	\$ 528,494	\$ 365,852
Total Capital Expenses Less Funding	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Reserves Forecast																				
Opening Balance	\$	838,248	\$ 958,962	\$ 1,086,676	\$ 1,229,292	\$ 1,356,695	\$ 1,507,409	\$ 1,616,623	\$ 1,691,337	\$ 1,733,308	\$ 1,854,526	\$ 1,951,740	\$ 1,991,454	\$ 2,010,168	\$ 2,011,281	\$ 2,086,092	\$ 1,857,528	\$ 1,626,964	\$ 1,317,400	\$ 926,620
Transfer from Operating	\$	154,714	\$ 153,714	\$ 152,714	\$ 151,714	\$ 150,714	\$ 149,714	\$ 148,714	\$ 147,714	\$ 146,714	\$ 145,714	\$ 144,714	\$ 143,714	\$ 142,714	\$ 141,714	\$ 140,714	\$ 139,714	\$ 138,714	\$ 137,714	\$ 136,714
Transfer to Capital	\$	34,000	\$ 26,000	\$ 10,098	\$ 24,311	\$ -	\$ 40,500	\$ 74,000	\$ 105,742	\$ 25,496	\$ 48,500	\$ 105,000	\$ 125,000	\$ 141,602	\$ 66,903	\$ 369,278	\$ 370,278	\$ 448,278	\$ 528,494	\$ 365,852
Closing Balance	\$	958,962	\$ 1,086,676	\$ 1,229,292	\$ 1,356,695	\$ 1,507,409	\$ 1,616,623	\$ 1,691,337	\$ 1,733,308	\$ 1,854,526	\$ 1,951,740	\$ 1,991,454	\$ 2,010,168	\$ 2,011,281	\$ 2,086,092	\$ 1,857,528	\$ 1,626,964	\$ 1,317,400	\$ 926,620	\$ 697,482
Operating Budget Forecast																				
Net Operating Expenditures	\$	197,313	\$ 203,232	\$ 209,329	\$ 215,609	\$ 222,077	\$ 228,740	\$ 235,602	\$ 242,670	\$ 249,950	\$ 257,449	\$ 265,172	\$ 273,127	\$ 281,321	\$ 289,761	\$ 298,454	\$ 307,407	\$ 316,629	\$ 326,128	\$ 335,912
Net Capital-Related Reserves	\$	154,714	\$ 153,714	\$ 152,714	\$ 151,714	\$ 150,714	\$ 149,714	\$ 148,714	\$ 147,714	\$ 146,714	\$ 145,714	\$ 144,714	\$ 143,714	\$ 142,714	\$ 141,714	\$ 140,714	\$ 139,714	\$ 138,714	\$ 137,714	\$ 136,714
Net Impact on Revenue	\$	352,027	\$ 356,946	\$ 362,043	\$ 367,323	\$ 372,791	\$ 378,514	\$ 384,316	\$ 390,384	\$ 396,664	\$ 403,163	\$ 409,886	\$ 416,841	\$ 424,035	\$ 431,475	\$ 439,168	\$ 447,121	\$ 455,343	\$ 463,842	\$ 472,626
Prior Year Revenue	\$	352,027	\$ 356,946	\$ 362,043	\$ 367,323	\$ 372,791	\$ 378,514	\$ 384,316	\$ 390,384	\$ 396,664	\$ 403,163	\$ 409,886	\$ 416,841	\$ 424,035	\$ 431,475	\$ 439,168	\$ 447,121	\$ 455,343	\$ 463,842	\$ 472,626
Current Year Revenue at 0.0% Use Fee Increase	\$	347,280	\$ 352,027	\$ 356,946	\$ 362,043	\$ 367,323	\$ 372,791	\$ 378,514	\$ 384,316	\$ 390,384	\$ 396,664	\$ 403,163	\$ 409,886	\$ 416,841	\$ 424,035	\$ 431,475	\$ 439,168	\$ 447,121	\$ 455,343	\$ 463,842
Additional Revenue Required	\$	4,747	\$ 4,919	\$ 5,097	\$ 5,280	\$ 5,468	\$ 5,662	\$ 5,862	\$ 6,068	\$ 6,280	\$ 6,499	\$ 6,723	\$ 6,955	\$ 7,194	\$ 7,440	\$ 7,693	\$ 7,954	\$ 8,222	\$ 8,499	\$ 8,784
Total Revenue	\$	352,027	\$ 356,946	\$ 362,043	\$ 367,323	\$ 372,791	\$ 378,514	\$ 384,316	\$ 390,384	\$ 396,664	\$ 403,163	\$ 409,886	\$ 416,841	\$ 424,035	\$ 431,475	\$ 439,168	\$ 447,121	\$ 455,343	\$ 463,842	\$ 472,626
Percentage Increase		1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

Asset Management Plan

Township of Malahide

A proud tradition, a bright future.



Timeline

O. Reg 588/17: Asset Management Planning for Municipal Infrastructure

Strategic Asset
Management
Policy
July 1, 2019

AMP – Current
LOS
Core Assets
July 1, 2022

AMP – Current
LOS
All Assets
July 1, 2024

AMP – Future
LOS
All Assets
July 1, 2025

Core Assets

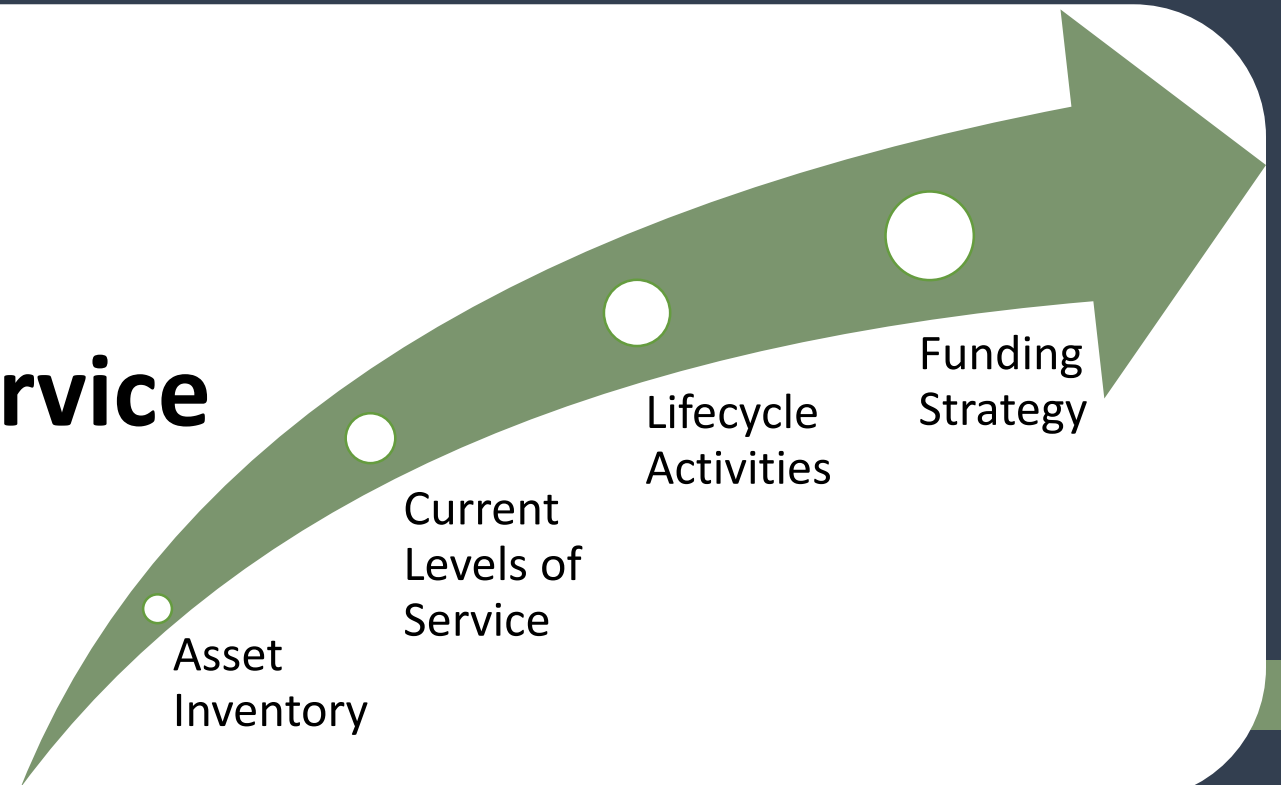
- 1. Roads**
- 2. Bridges and Structural Culverts**
- 3. Water Assets**
- 4. Wastewater Assets**
- 5. Stormwater Assets – Not Applicable**

Update Requirements

O. Reg 588/17: Asset Management Planning for Municipal Infrastructure

July 1, 2022

- **Asset Inventory**
- **Current Levels of Service**
- **Lifecycle Activities**
- **Funding Strategy**



Asset Inventory

- 273 Centerline KM of Roads
- 33 Bridges and Culvert Assets
- Water Distribution System: 22.4 KM Water Mains, 47 Hydrants, 640 Meters, 1 Booster Station, 12 Sample Stations, and SCADA
- Wastewater Collection System: 7.2 KM Collection Mains, 3.6 KM Force Mains, 2 Pump Stations, 80 Manholes, and SCADA

Current Levels of Service - Roads

Safety*

Surfaces in fair condition or better.

Average Pavement Condition:
"Good"

Average Unpaved Surface Condition:
"Fair"

Reliability

Minimal closures.

Planned Closures:
10

Unplanned Closures:
7

Inter-connectivity*

Good connectivity throughout community.

1.39 Lane-KM per Square KM of Land

Arterial: 0.00 KM/KM²
Collector: 1.02 KM/KM²
Local: 0.37 KM/KM²

Current Levels of Service - B & C

Safety*

Assets in good condition or better.

Average Bridge Condition:
"Good"

Average Culvert Condition:
"Good"

Reliability*

Minimal closures or restrictions.

Closures:
0

Usage Restrictions:
Seasonal Only
100%

Inter-connectivity*

Minimal un-serviced right-of-way crossings.

Municipal Right-Of-Way Crossings
Serviced by a Bridge or Culvert Asset:
100%

Current Levels of Service - Water

Safety*

Assets in good condition or better and system compliance with the Safe Drinking Water Act, 2002.

Average Watermain Condition:

“Very Good”

Overall System Condition:

“Good”

Reliability*

Available fire flow coverage and minimal service interruptions.

Days per Year - main breaks or boil water advisories:

0

Properties with Fire Flow Coverage:

18%

Inclusivity*

Minimal number of properties without service.

Percentage of Properties Connected:

26%

Current Levels of Service - Wastewater¹²⁵

Safety

Assets in fair condition or better.

Average Pipe Condition:
"Very Good"

Average Pump Station Condition:
"Brand New"

Reliability*

Minimal overflows and/or basement backups.

Days per Year – Basement Backups:
0

Overflow Events:
0

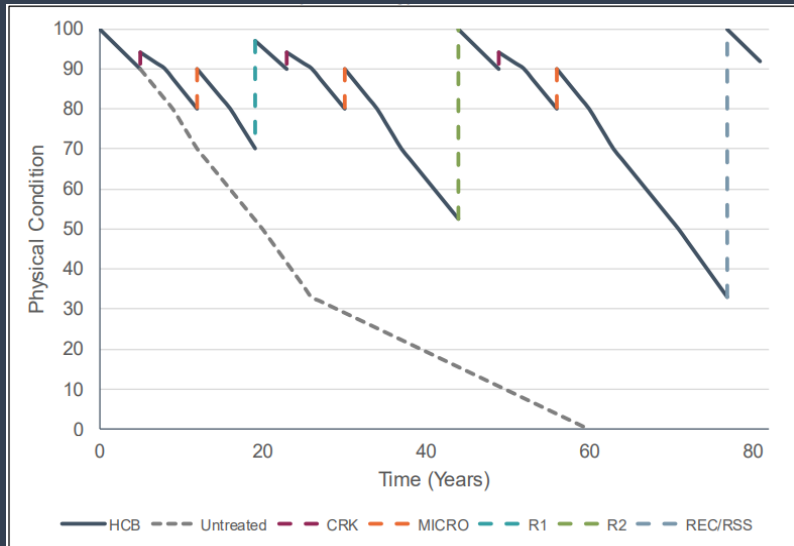
Inclusivity*

Minimal number of properties without service.

Percentage of Properties Connected:
9%

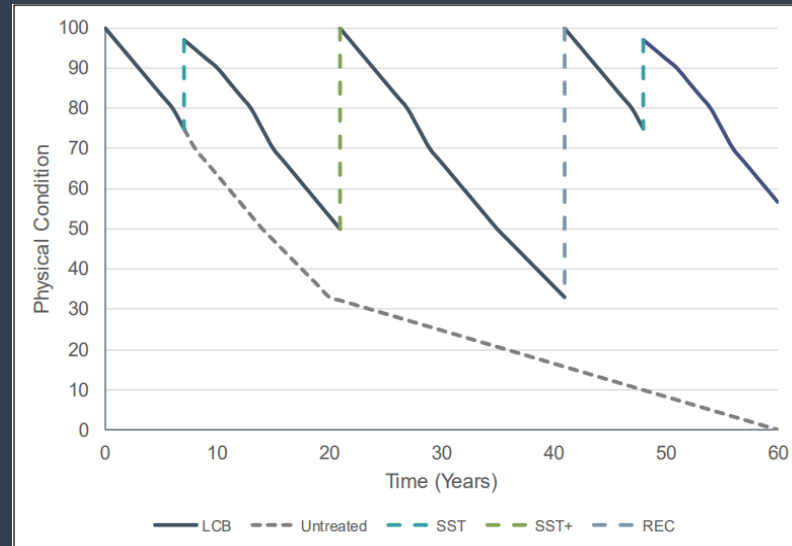
Lifecycle Activities - Roads¹²⁶

HCB Road Strategy



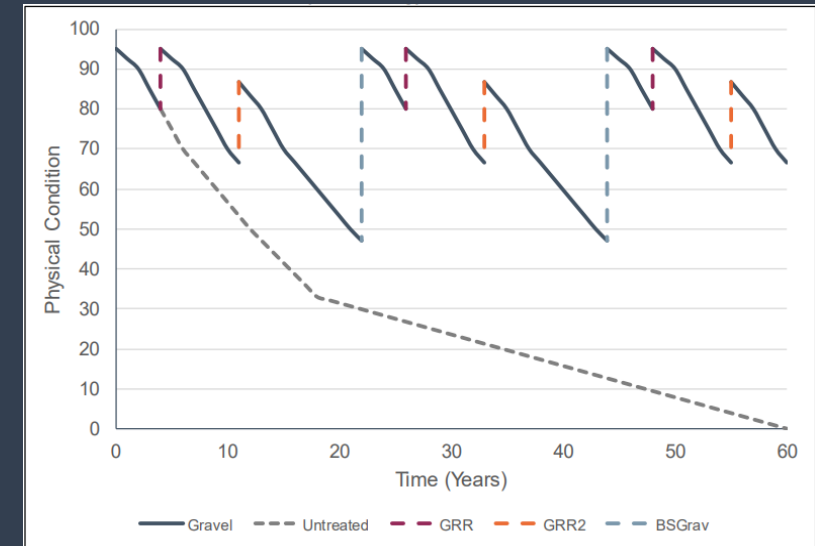
Microsurfacing
Basic Resurfacing
Reconstruction

LCB Road Strategy



Single Surface
Reconstruction

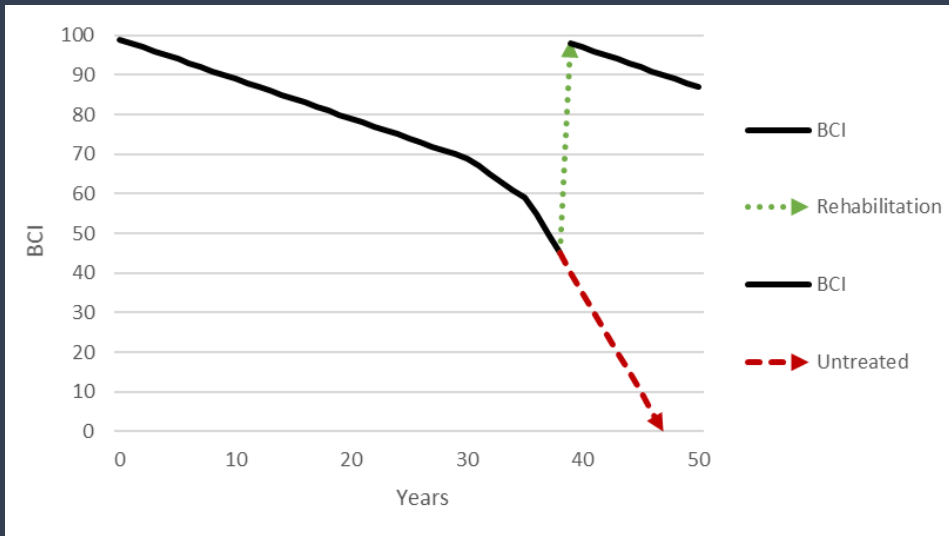
Gravel Road Strategy



Granular A
Base & Surface

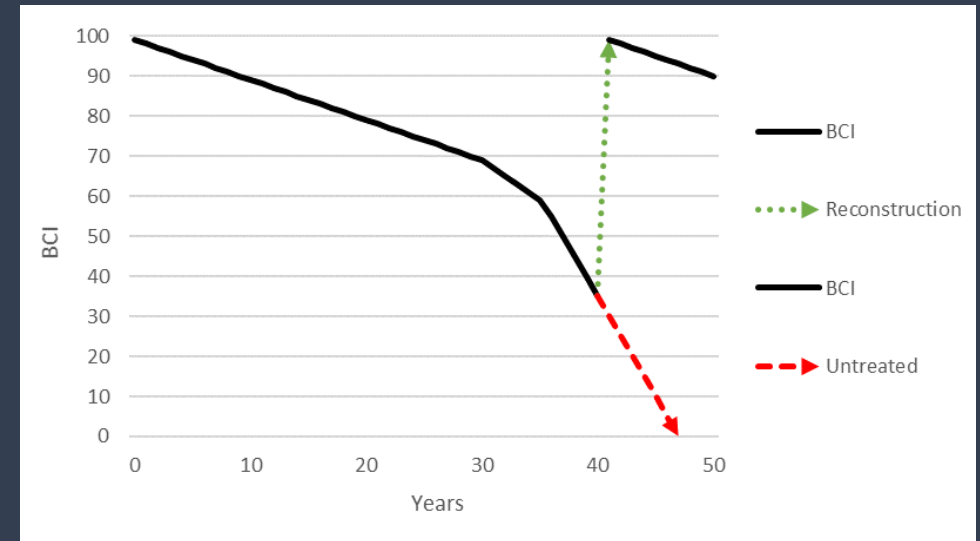
Lifecycle Activities – Bridges & Culverts

Bridge Strategy



Continual Rehabilitation

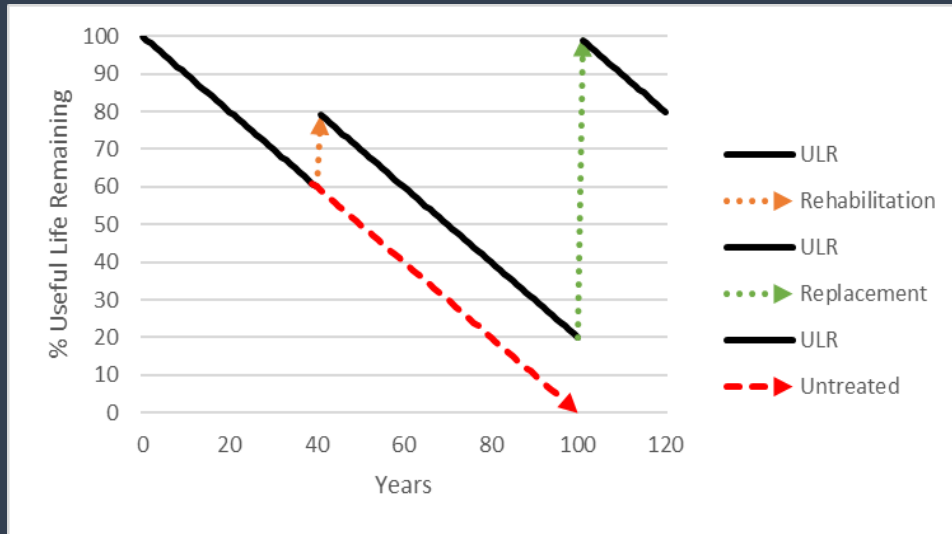
Structural Culvert Strategy



Reconstruction

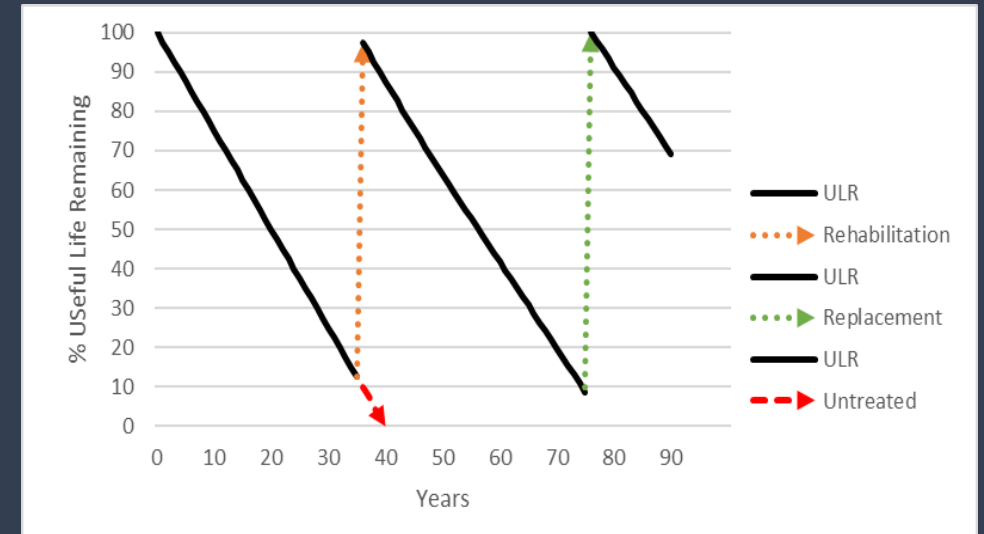
Lifecycle Activities – Water Assets

Water Main Strategy



**Replace Metallic Fittings
Reconstruction**

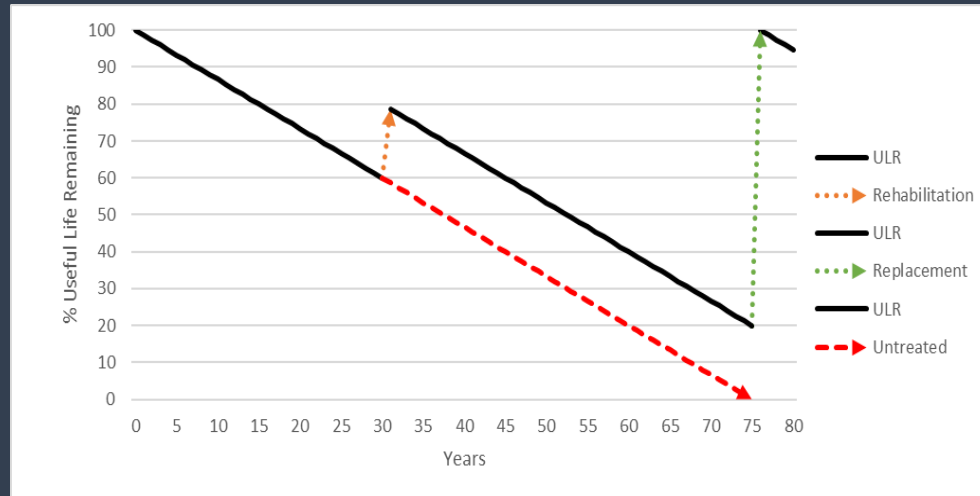
Hydrant Strategy



**Component Rehabilitation
Replacement**

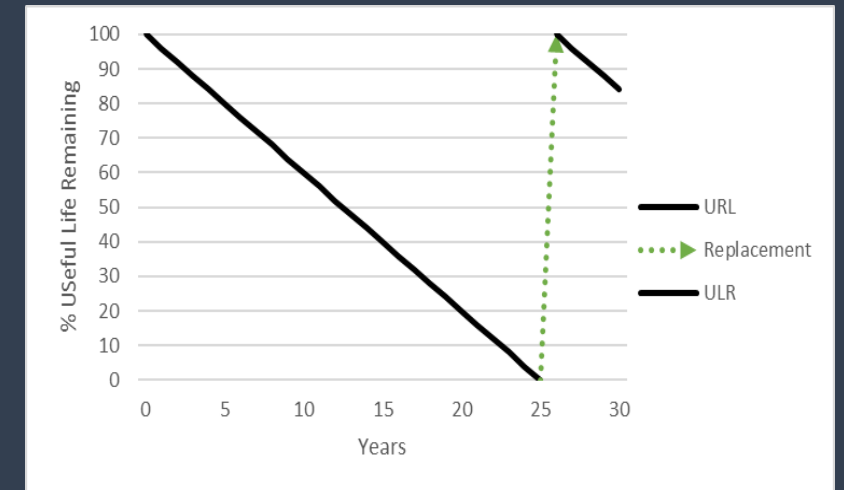
Lifecycle Activities – Water Assets

Booster Station Strategy



Component Rehabilitation
Replacement

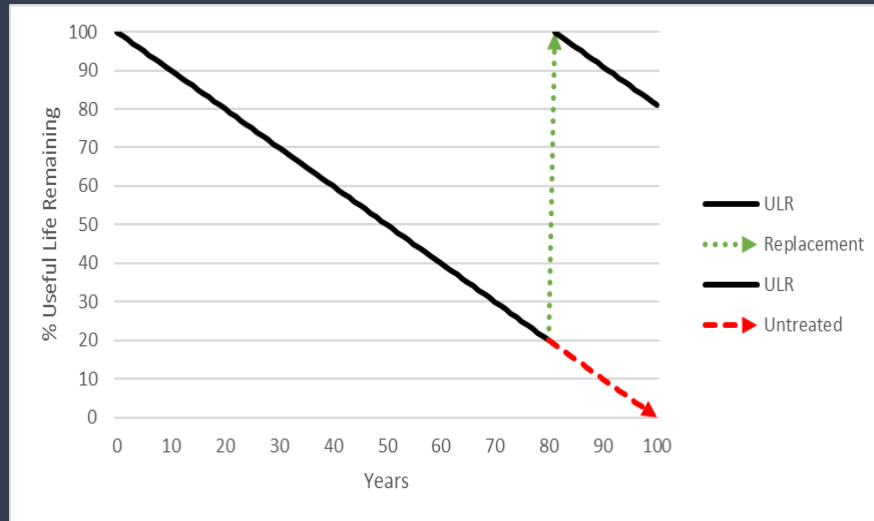
Water Meter & Sample Station Strategy



Replacement

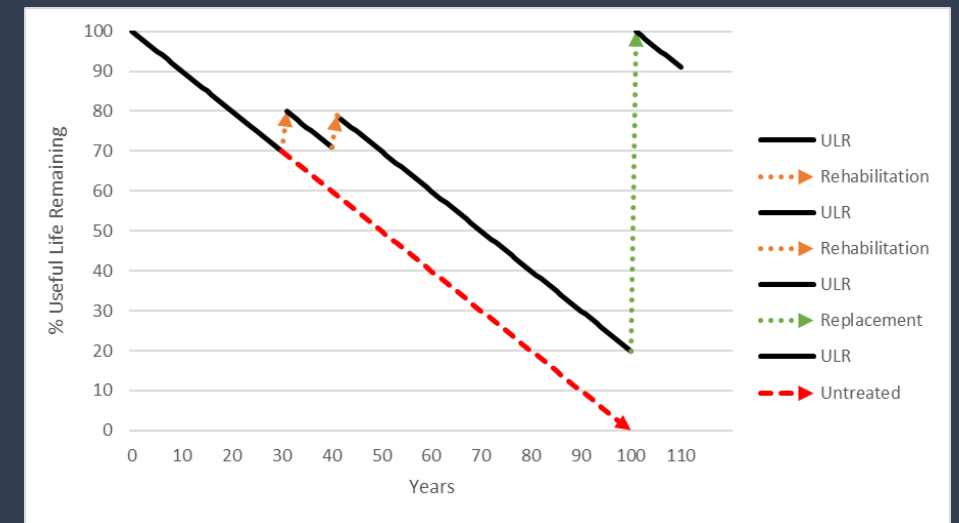
Lifecycle Activities – Wastewater Assets

Collection Main Strategy



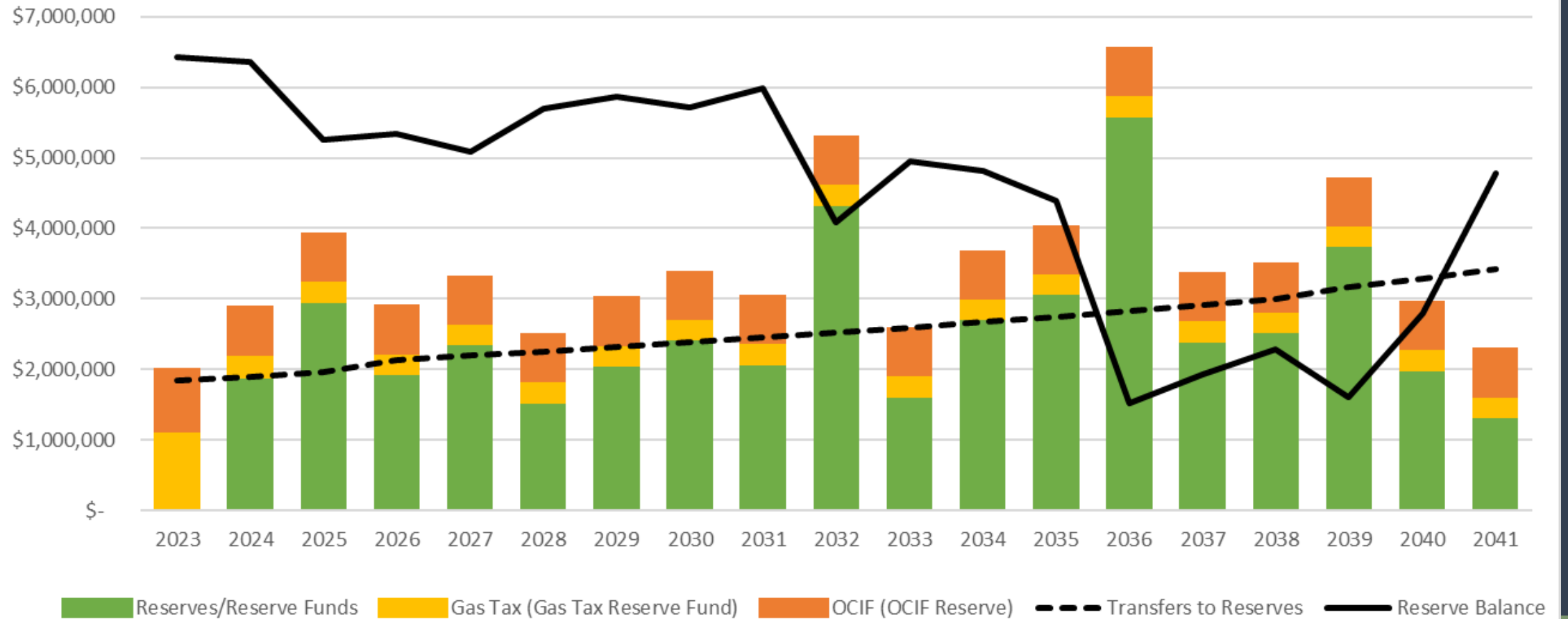
Replacement

Pump Station Strategy

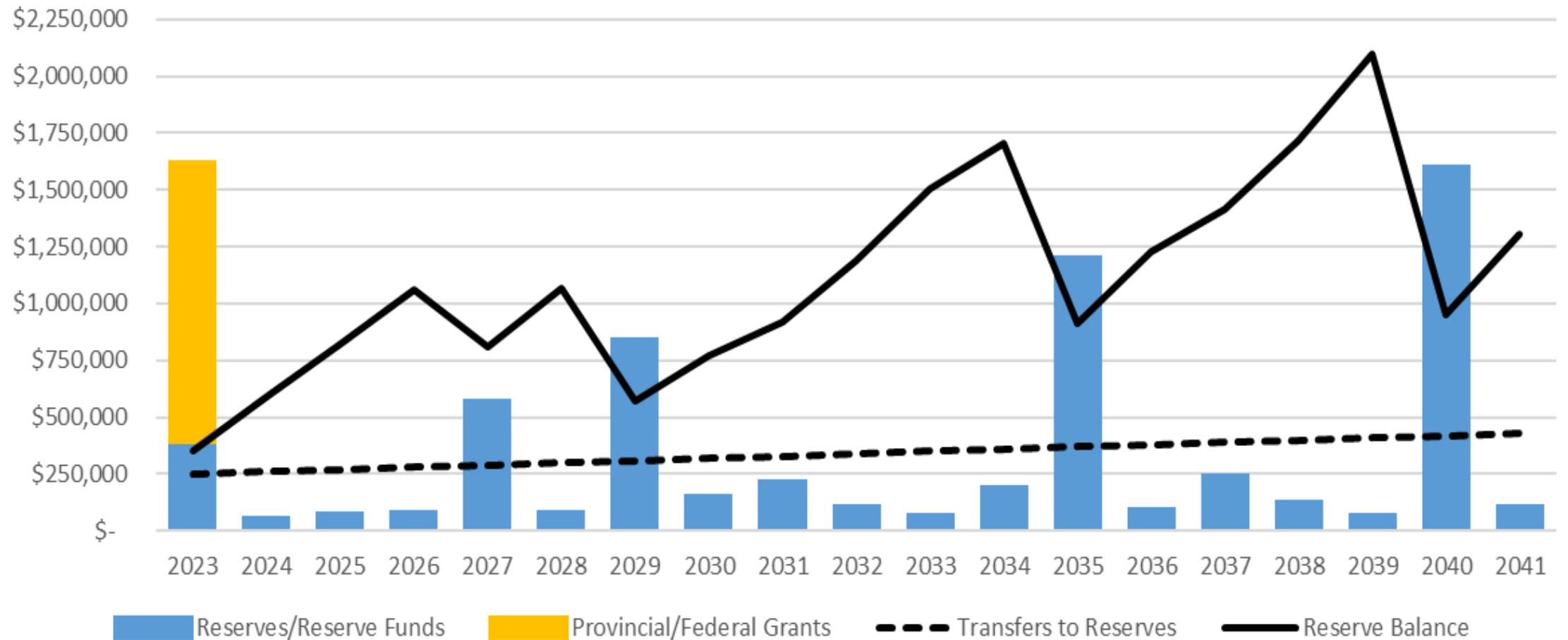


**Component Rehabilitation
Replacement**

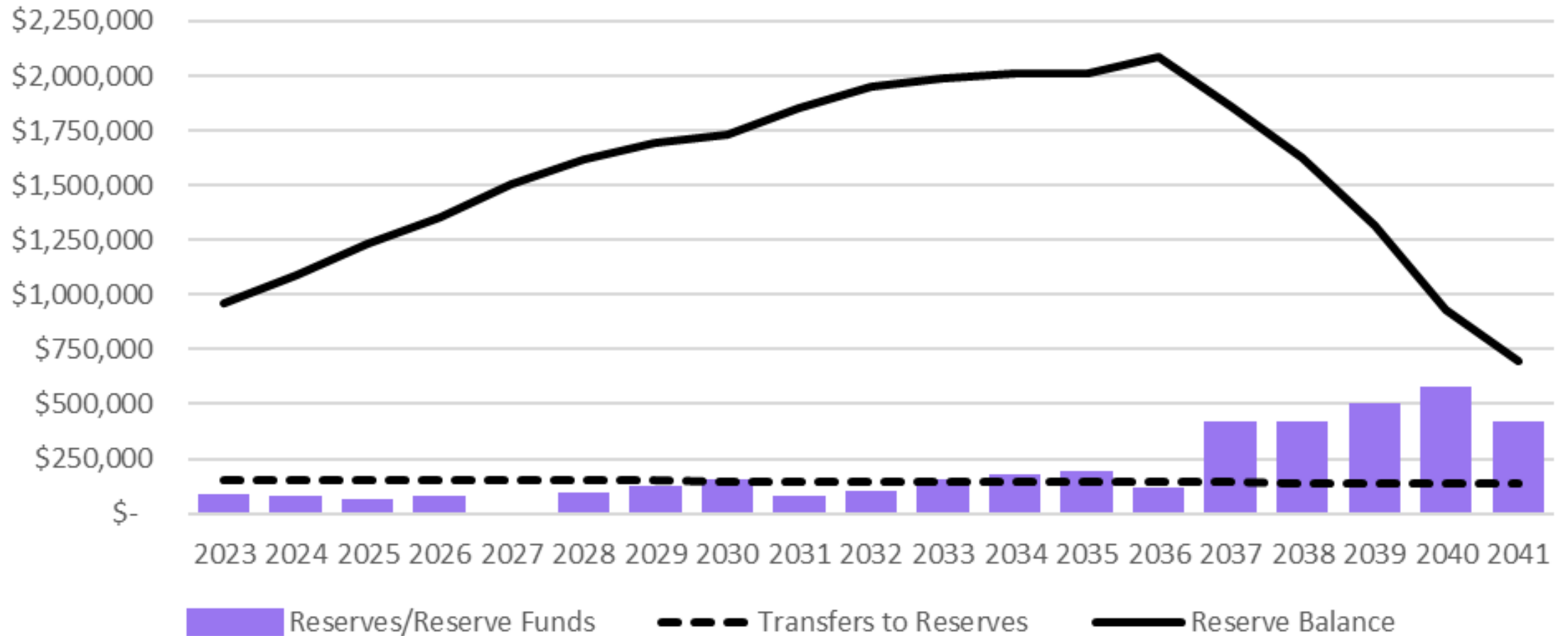
Funding Forecast – Tax Levy



Funding Forecast – Water



Funding Forecast – Wastewater



Future Improvements

- Live Updates;
- Integration into Budgetary Process;
- Non-structural culverts & Growth-related capital;
- Annual Status Reviews.

Next Steps

- Submit AMP to Province to meet legislative requirements;
- Update AMP for all other capital assets;
- Present Budget Committee with updated AMP for 2023 budgetary decision making process.



Report to Council

REPORT NO.: PW-22-38
DATE: June 16, 2022
ATTACHMENT: Agreement
SUBJECT: **CONTRACT EXTENSION: ONTARIO CLEAN WATER AGENCY**

Recommendation:

THAT Report No. PW-22-38 entitled “Contract Extension: Ontario Clean Water Agency” be received;

AND THAT the Township enter into the agreement with the Ontario Clean Water Agency for a 5-year period for the purposes of the operation and maintenance of the Malahide Wastewater Collection Sewer System.

Background:

As the Council is aware the Malahide Wastewater Collection System is operated under contract by the Ontario Clean Water Agency (OCWA).

The Township of Malahide originally signed an operations and maintenance Services Agreement contract with OCWA in 2012. The initial term of the Agreement was for a period of five (5) years which ended on December 31, 2017. The contract was extended for an additional five (5) years in 2017 with the current agreement set to expire on December 31, 2022.

Under the terms and conditions of the Agreement, there is a provision for an extension of the existing agreement for a period of five (5) years. As Council will recall, at their meeting held on June 17, 2021, Malahide Council authorized the township Staff to enter into negotiations with OCWA for the purposes of obtaining a 5-year extension for the operation and maintenance of the system by resolution No. 21-282 (following page):

No. 21-282

Moved by: Rick Cerna

Seconded by: Max Moore

THAT Report No. PW-21-35 entitled "Malahide Sewage Collection System: OCWA Operation and Maintenance Service Agreement" be received;

AND THAT the Staff of the Township of Malahide, be authorized to enter into negotiations with the current Operating Authority, being the Ontario Clean Water Agency, to extend the current term of the existing agreement for a period of five (5) years.

Carried.

Comments/Analysis

The Staff have been satisfied with the manner in which OCWA has operated and maintained the collection system. OCWA has successfully, undertaken capital projects, and through regular reporting and meetings has kept the owners apprised of the condition and operation of the system. They continue to meet or exceed regulatory requirements and have demonstrated their ability to monitor, maintain and ensure quality service in relation to the wastewater collection system.

The attached agreement update has accommodated some minor revisions:

- Schedule A of the agreement has been updated to provide a more comprehensive description of the various infrastructure components that make up the collection system.
- Schedule C has accommodated additional language and descriptions to more clearly define the operational duties of OCWA at the facilities. Additionally, language revisions have been made to reflect changes in the system and actual field practice. Pre-existing Conditions have also been updated as well as some minor language changes which were proposed by OCWA which have been reviewed by the Township Staff and found to be generally acceptable.

As a result of the foregoing, the Staff recommend the Council accept the proposed service agreement contract extension from OCWA for the Operation and Maintenance of the Malahide Wastewater Collection System.

Financial Implications to Budget

Consistent with the previous service agreement, the contract price is based on actual expenses plus a Management Fee. The Management fee is adjusted annually by the Consumer Price Index (Canadian All Items). As shown in Schedule D of the agreement, the estimated cost to operate the System in 2023 is \$ 25,200.00 plus HST and the Management fee is \$6,300.00 plus HST for the first year of the initial term. The operational and maintenance costs are accounted for in the Township's Sewage Rates.

Relationship to Cultivating Malahide

The Cultivating Malahide Integrated Community Sustainability Plan (ICSP) is based upon four pillars of sustainability: Our Land, Our Economy, Our Community, and Our Government. One of the goals that support the “Embody Financial Efficiency throughout Decision-Making” Strategic Pillar is ensuring that the cost of maintaining municipal infrastructure is equitably borne by current and future ratepayers.

Submitted by:	Approved by:	Approved for Council:
Sam Gustavson, Water/ Wastewater Operations Manager	Matt Sweetland, P.Eng., Director of Public Works	Adam Betteridge, Chief Administrative Officer

WASTEWATER SERVICES AGREEMENT
BETWEEN
ONTARIO CLEAN WATER AGENCY
A N D
THE CORPORATION OF THE TOWNSHIP OF MALAHIDE

Table of Contents

RECITALS	1
ARTICLE 1 - INTERPRETATION.....	2
SECTION 1.1 - DEFINITIONS.....	2
ARTICLE 2 - RESPONSIBILITIES OF OCWA	2
SECTION 2.1 - RETENTION OF OCWA.....	2
SECTION 2.2 - PERFORMANCE OF SERVICES	2
SECTION 2.3- STANDARD OF CARE	3
SECTION 2.4 - OCWA AS INDEPENDENT CONTRACTOR	3
SECTION 2.5 - AUTHORIZED REPRESENTATIVES.....	3
SECTION 2.6 - INDEMNIFICATION OF THE CLIENT	3
SECTION 2.7 - WAIVER OF CONSEQUENTIAL DAMAGES	4
SECTION 2.8 - INSURANCE.....	4
SECTION 2.9 - REPRESENTATIONS AND WARRANTIES OF OCWA	5
ARTICLE 3 - RESPONSIBILITIES OF THE CLIENT	5
SECTION 3.1 - OBLIGATIONS OF THE CLIENT.....	5
SECTION 3.2 - COVENANTS OF THE CLIENT	6
SECTION 3.3 - EXONERATION AND INDEMNIFICATION OF OCWA.....	7
ARTICLE 4 - TERM, PAYMENT FOR SERVICES AND OTHER CHARGES	7
SECTION 4.1 - INITIAL TERM OF AGREEMENT	7
SECTION 4.2 - OPERATIONS ESTIMATE.....	7
SECTION 4.3 - PAYMENT OF THE ESTIMATE	8
SECTION 4.4 - RECONCILIATION OF THE ESTIMATE AND ACTUAL CHARGES	8
SECTION 4.5 - MAJOR MAINTENANCE EXPENDITURES	8
SECTION 4.6- OTHER CHARGES	8
SECTION 4.7 - CAPITAL PROJECTS-CHANGED FROM SECTION 4.8 CAPITAL EXPENDITURES IN EXISTING AGREEMENT.....	9
SECTION 4.8 - UNEXPECTED EXPENSES.....	9
SECTION 4.9 - INTEREST ON LATE PAYMENTS.....	10
SECTION 4.10- PARTIAL PAYMENT OF DISPUTED INVOICES	10
SECTION 4.11 - HYDRO COSTS/UTILITY COSTS	10
SECTION 4.12 - OPTIONAL SERVICES	11
SECTION 4.13 - CHANGES TO THE AGREEMENT.....	11
ARTICLE 5 - DISPUTE RESOLUTION	11
SECTION 5.1 - MEDIATION	11
ARTICLE 6 - TERMINATION	12
SECTION 6.1 - TERMINATION OF AGREEMENT.....	12
SECTION 6.2 - EARLY TERMINATION.....	12
SECTION 6.3 - INVENTORY COUNT OF CONSUMABLES/SUPPLIES	12
SECTION 6.4 - FINAL SETTLEMENT.....	13
SECTION 6.5 - TRANSFER OF OPERATIONS	13
SECTION 6.6 - RESTRICTIONS ON RECRUITMENT OF OCWA'S EMPLOYEES	13
ARTICLE 7 - GENERAL	13

SECTION 7.1 - OWNERSHIP OF TECHNOLOGY	13
SECTION 7.2 - AGREEMENT TO GOVERN	14
SECTION 7.3 - ENTIRE AGREEMENT	14
SECTION 7.4 - AMENDMENTS AND WAIVERS	14
SECTION 7.5 - SUCCESSORS AND ASSIGNS	14
SECTION 7.6 - SURVIVAL.....	14
SECTION 7.7 - SEVERABILITY	14
SECTION 7.8 - NOTICES	14
SECTION 7.9 - COUNTERPARTS.....	15
SECTION 7.10 - FREEDOM OF INFORMATION	15
SECTION 7.11 - CONFIDENTIALITY AND SECURITY.....	15
SECTION 7.12 - CHANGE IN CIRCUMSTANCE	16
<i>SCHEDULE A - The Facilities</i>	<i>A-1</i>
<i>SCHEDULE B - Definitions.....</i>	<i>B-1</i>
<i>SCHEDULE D - The Estimate And Other Charges and Adjustments.....</i>	<i>C-1</i>
<i>SCHEDULE E - Insurance</i>	<i>D-1</i>
<i>SCHEDULE F - List of Pre-Existing Conditions</i>	<i>1</i>
INFILTRATION HAS BEEN IDENTIFIED IN THE COLLECTION SYSTEM, AND IS MONITORED BY THE CLIENT EVERY TWO YEARS.	1
<i>SCHEDULE H - Change Order Form.....</i>	<i>E-1</i>
<i>SCHEDULE J - Expenditure Request and Approval to Proceed</i>	<i>F-1</i>

SERVICES AGREEMENT

THIS AGREEMENT effective as of the *1st day of January, 2023* (the “Effective Date”),

B E T W E E N

ONTARIO CLEAN WATER AGENCY/AGENCE ONTARIENNE DES EAUX, a corporation established under the *Capital Investment Plan Act, 1993*, c.23, Statutes of Ontario.

(“OCWA”)

A N D

THE CORPORATION OF THE TOWNSHIP OF MALAHIDE
(the “Client”)

RECITALS

- (a) OCWA is in the business of providing management, operations and maintenance services for wastewater facilities.
- (b) The Client is the owner of the *Malahide Wastewater Collection Facilities* more particularly described in Schedule A (the “Facilities”).
- (c) The Client wishes to retain the services of OCWA to operate and maintain the Facilities in accordance with the provisions of this agreement (the “Agreement”).
- (d) The Client and OCWA (collectively, the “Parties” and each a “Party”) are entering this Agreement to set out their respective rights and obligations with respect to the management, operation and maintenance of the Facilities.
- (e) The Council of the Client on the ____ day of _____, 20__ passed By-Law No. _____ authorizing the Client to enter into this Agreement.

NOW THEREFORE in consideration of the mutual covenants contained in this Agreement and other good and valuable consideration the receipt and sufficiency of which is hereby irrevocably acknowledged, the Client and OCWA agree as follows:

ARTICLE 1 - INTERPRETATION

Section 1.1 - Definitions

In this Agreement, definitions are set out in Schedule B, or within applicable provisions as indicated.

ARTICLE 2 - RESPONSIBILITIES OF OCWA

Section 2.1 - Retention of OCWA

- (a) The Client retains OCWA to provide management, operation maintenance, inspection and reporting services, as described in Schedule C to this Agreement, in respect of the Facilities (the “Services”).
- (b) The Client acknowledges and agrees that for the purposes of Section 449 of the *Municipal Act, 2001*, S.O. 2001, c.25, as amended, OCWA is an agent of the Client.

Section 2.2 - Performance of Services

- (a) OCWA shall deliver the Services in compliance with all applicable Environmental Laws, except as described in Paragraphs 2.2(b) and (c) below and in any of the following circumstances:
 - (i) the Client not making the Major Maintenance Expenditures and/or not undertaking the Capital Projects reasonably recommended by OCWA as per Sections 4.4 and 4.5 herein;
 - (ii) failure of the Client to meet its responsibilities specified in this Agreement;
 - (iii) failure of any equipment at the Facilities, unless the failure is due to OCWA’s negligence;
 - (vi) the quantity of wastewater transmitted to the Facilities exceeds the Facilities design or operating capacity.
- (b) OCWA may temporarily cease to provide or reduce the level of provision of Services in the event of an emergency, a breakdown or any Uncontrollable Circumstance. OCWA shall, when practicable, try to give the Client reasonable advance notice of any such occurrence.
- (c) Notwithstanding any other provision of this Agreement, delay in the performance of, or a failure to perform any term of this Agreement by OCWA, shall not constitute default under this Agreement or give rise to any claim for damages suffered by the Client if and

to the extent caused by occurrences or circumstances beyond the reasonable control of OCWA (an “Uncontrollable Circumstance”), including but not limited to any circumstances set out in Paragraph 2.2(a), decrees of government, acts of God (including but not limited to hurricanes, tornadoes, floods and other weather disturbances), sabotage, strikes, lockouts and other industrial disturbances, insurrections, war, civil disturbances, pandemics, riots, explosions, fire and acts of third parties.

- (d) The Client recognizes that in an emergency situation or where an Uncontrollable Circumstance exists, OCWA’s primary concern will be to use all reasonable efforts to maintain the Facility in compliance with Environmental Laws and that OCWA may be required to correct a deficiency or deal with the emergency situation without obtaining the Client’s prior approval. Should such a situation arise, OCWA will advise the Client as soon as reasonably possible and shall provide as much information as possible to the Client and will work with the Client to ensure the emergency situation is appropriately addressed.

STANDARD OF CARE-

Section 2.3- Standard of Care

OCWA shall deliver the Services as would a reasonable operator with like skills in like circumstances.

Section 2.4 - OCWA as Independent Contractor

In performing the Services, OCWA shall be acting as an independent contractor and only to the extent and for the specific purposes expressly set forth herein. Neither OCWA nor its employees, agents or subcontractors shall be subject to the direction and control of the Client, except as expressly provided in this Agreement.

Section 2.5 - Authorized Representatives

Each of OCWA and the Client shall be entitled to designate in writing to the other, one or more individuals who shall be authorized to represent it in connection with the day-to-day administration of the provisions of this Agreement (the “Authorized Representative(s)”). Each of the Parties shall be entitled to rely on the acts and approvals given by the other Party’s Authorized Representative until such time as it receives a written notification of change of the other Party’s Authorized Representative.

Section 2.6 - Indemnification of the Client

- (a) OCWA shall exonerate, indemnify and hold harmless the Client, its directors, officers, employees and agents from and against Claims which may be suffered or incurred by, accrue against or be charged to or recoverable from the Client to the extent that such

Claim is solely attributed to OCWA's negligence or wilful misconduct when performing the Services, except where such Claim is due to an Uncontrollable Circumstance or to a condition of the Facility which existed prior to OCWA's commencement of the Services (a "Pre-existing Condition"), including but not limited to those listed in Schedule F. Such Pre-existing Conditions shall be the ongoing responsibility of the Client. OCWA, in providing these Services, is not responsible, accountable or liable, in any way, for Pre-existing Conditions, either directly or indirectly.

- (b) The Client shall be deemed to hold the provisions of this Section 2.5 that are for the benefit of the Client's directors, officers, employees and agents in trust for such directors, officers, employees and agents as third party beneficiaries under this Agreement.
- (c) Notwithstanding Paragraph 2.5(a) above, OCWA shall not be liable in respect of any Claim to the extent the Claim is covered by the Insurance.
- (d) Claims by the Client for indemnification from OCWA will follow the Indemnification Process as described in Schedule B.

Section 2.7 - Waiver of Consequential Damages

In no event shall the Parties be liable to each other, and each Party specifically waives as against the other, any and all claims for consequential, incidental, indirect, special or punitive damages resulting in any way from performance or non-performance of this Agreement, whether such damages are characterized as arising under breach of contract or warranty, tort (including negligence), fault, strict liability, indemnity, or other theory of legal liability.

Section 2.8 - Insurance

- (a) OCWA shall maintain, subject to reasonable availability, insurance coverage as described in Schedule E to this Agreement (the "Insurance") and the Client shall be an additional insured under the Commercial General Liability and Contractor's Pollution Liability insurance. The Client acknowledges that, given the unpredictability of the insurance market, deductibles and coverage limits may not be available (or may not be reasonably priced) from year to year. Insurance coverage is reviewed annually and the Client will be notified if there is a change in coverage or a price increase.
- (b) The Client specifically recognizes and agrees that neither OCWA nor the Crown bears any responsibility for the Pre-existing Condition(s) of the Facilities. As such, OCWA is not required to obtain insurance for this purpose and the Client has or will obtain its own insurance.
- (c) The Client shall be responsible for securing its own insurance for any other operations with which it is involved that are not part of the Services. The Client acknowledges that OCWA's Commercial General Liability and Contractor's Pollution Liability insurance shall not extend to cover any claims, exposure or liability beyond those directly linked to the provision of Services by OCWA staff. The Client further acknowledges that it will

have no recourse under OCWA's Commercial General Liability and Contractor's Pollution Liability insurance for any operations that do not form part of the Services. Unless otherwise agreed to in writing by the parties.

- (d) In the event of a claim under the Insurance, the payment of deductibles is as specified in Schedule E.

Section 2.9 - Representations and Warranties of OCWA

OCWA represents and warrants to the Client that the following are true and correct:

- (a) that it has full power and authority and has taken all necessary steps to enter into and perform its obligations under this Agreement; and
- (b) OCWA's staff are trained and capable of providing the Services set out under this Agreement.

ARTICLE 3 - RESPONSIBILITIES OF THE CLIENT

Section 3.1 - Obligations of the Client

- (a) The Client has the full power and authority to enter into and perform its obligations under this Agreement.
- (b) The Client has passed all necessary By-Laws and has obtained all necessary Authorizations to enable it to enter into and perform its obligations under this Agreement and to operate the Facility, (including, without limitation, any Authorizations required from the Local Planning Appeal Tribunal and the Ministry of the Environment, Conservation and Parks (MECP)), and the Authorizations are in good standing.
- (c) The Client has provided OCWA with a true copy of each of the Authorizations referred to in Paragraph 3.1(b) above prior to the date of this Agreement, including a certified copy of each municipal By-Law required to authorize the Client to enter into and perform its obligations under this Agreement.
- (d) As the owner of the Facilities, the Client is fully aware of its responsibilities and obligations regarding the operation and maintenance of the Facilities under Applicable Laws, including without limitation its responsibilities under the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40. (the "OWRA") and the *Occupational Health and Safety Act* (the "OHSA") and their regulations.
- (e) The Client confirms that there are no Pre-existing Conditions existing at the Facility which would affect OCWA's ability to operate the Facility in compliance with the terms

of this Agreement and Applicable Laws, other than what is listed in Schedule F. The Client acknowledges and agrees that the Client shall be responsible for addressing such Pre-existing Conditions.

- (f) The Client confirms that as of the date of execution of this Agreement, to the best of the Client's knowledge, the Facilities is in compliance with all Applicable Laws.
- (g) The Client is not aware of the presence of any designated substances as defined under the *Occupational Health and Safety Act* (the "OHSA") at the Facilities. The Client acknowledges and agrees that it is responsible for dealing with the designated substances (including but not limited to asbestos and lead) in accordance with the OHSA and its regulations and to notify OCWA of the location of any designated substances in the Facility.

Section 3.2 - Covenants of the Client

The Client hereby covenants the following for the benefit of OCWA:

- (a) The Client agrees to promptly pay all amounts owing to OCWA under this Agreement as they become due, including any interest charges on late payments as determined under Section 4.8.
- (b) The Client agrees to promptly provide OCWA with any information relating to the Facility which could have a bearing on the provision of Services by OCWA, including but not limited to any engineering report prepared in respect of the Facility, any Authorization or amendment to any Authorization, as well as any governmental notice or order relating to the Facilities.
- (c) The Client agrees to commit the necessary resources to appropriately address and comply with any such reports, Authorizations, notices or orders.
- (d) The Client shall repair, maintain and keep in a good working state, in accordance with good engineering practices and the standards reasonably applicable to an owner of a like facility, all wastewater works that belong to or are under the control of the Client and that collect and transmit wastewater to the Facilities.
- (e) The Client agrees to promptly commit the necessary resources to appropriately address any health and safety issues identified by OCWA which are the responsibility of the Client.
- (f) The Client shall take reasonable steps to ensure that wastewater transmitted to the Facilities complies with the Client's sewer use by-law and any Environmental Laws. If requested by OCWA, the Client shall provide OCWA with copies of the Client's inspection reports (sewer usage, cross-connections, sump pump connections), if available.

Section 3.3 - Exoneration and Indemnification of OCWA

- (a) Subject to Paragraph 3.3(c) below, the Client shall exonerate, indemnify and hold harmless OCWA, its directors, officers, employees and agents and Her Majesty the Queen in Right of Ontario, as represented by the Minister of the Environment, Conservation and Parks and all directors, officers, employees and agents of the Ministry of the Environment, Conservation and Parks (collectively referred to as the “Indemnified Parties”) from and against any and all Claims which may be suffered or incurred by, accrue against, or be charged to or recoverable from any one or more of the Indemnified Parties that is solely attributed to the Client’s negligence or willful misconduct.
- (b) OCWA shall be deemed to hold the provisions of this Article 3 that are for the benefit of OCWA’s directors, officers, employees and agents and the other Indemnified Parties as defined above, in trust for all such Indemnified Parties as third party beneficiaries under this Agreement.
- (c) Claims by OCWA for indemnification from the Client will follow the Indemnification Process as described in Schedule B.
- (d) Notwithstanding Paragraph 3.3(a) above, the Client shall not be liable in respect of any Claim:
 - (i) to the extent that such Claim is covered by the Insurance; however, the Client shall be responsible for any deduction or self-insured retention amount in accordance with Schedule E; and
 - (ii) to the extent that such Claim is caused solely by OCWA’s negligence or willful misconduct in providing the Services.

ARTICLE 4 - TERM, PAYMENT FOR SERVICES AND OTHER CHARGES

Section 4.1 - Initial Term of Agreement

This Agreement shall start on the Effective Date of **January 1st 2023** and shall continue in effect for an initial term of **five (5) years**, ending on **December 31st 2027** (the “Initial Term”) and then may be renewed for successive five (5)-year terms (each a “Renewal Term”) subject to mutual agreement between the Parties, subject to Section 6.1 of this Agreement.

Section 4.2 - Operations Estimate

Subject to any adjustments made pursuant to other provisions of this Agreement, the Client shall pay OCWA a price for the Services for each Year of the Initial Term as described in Schedule D.

Section 4.3 - Payment of the Estimate

The Client shall pay OCWA the annual Estimate for each Year of the Initial Term or any Current Term, in twelve (12) equal monthly payments, in advance, on the first day of each month. The first payment shall be due and payable on **January 1, 2023**. Payment shall be made by the Client by pre-authorized bank debit from a bank account designated by the Client.

Section 4.4 - Reconciliation of the Estimate and Actual Charges

At the end of each calendar year, OCWA will determine the actual charges for providing the Services to the Client for that year which may include an increase in premium for the Insurance. If the Estimate paid by the Client for the year exceeds the Actual Charges, OCWA will pay the Client the difference within thirty (30) days of OCWA making the determination. If the Actual Charges exceed the Estimate paid by the Client, the Client shall pay OCWA the difference within thirty (30) days of OCWA notifying the Client in writing of the determination.

Section 4.5 - Major Maintenance Expenditures

- (a) “Major Maintenance Expenditures” means the charges for all non-routine, non-repetitive activities, repair or replacement of machinery or equipment required for the continuity of operations, safety, and operating performance of the Facility that are necessary to prevent or correct a failure of any component of the equipment which is not included as part of Routine Maintenance including labour charges, together with the Service Fee or fixed fee basis.
- (b) No later than October 31st of each Year this Agreement is in force, or a date as the Parties may agree in writing, OCWA will provide the Client with rolling six (6)-year recommendations for Major Maintenance Expenditures required for the long term operation of the Facility. The Client’s written approval of the estimate or revised estimate, in the form set out in Schedule “J”, authorizes OCWA to incur the Major Maintenance Expenditures included in the estimate (the “Approved Major Maintenance Expenditures”).
- (c) OCWA will invoice the Client for the Approved Major Maintenance Expenditures together with supporting documentation and the Client shall pay the invoice within thirty (30) days of the date of invoice.
- [(d) OCWA will not be required to obtain the prior approval of the Client for any unbudgeted Major Maintenance item costing less than \$2,000.00.]

Section 4.6- Other Charges

The Estimate, as reconciled with the Actual Charges, includes all charges associated with providing the Services, except for the following:

- (a) OCWA's Management Fee (as described in Section 4.9 below);
- (b) Capital Expenditures (as described in Section 4.7 below);
- (c) Unexpected Expenses (as described in Section 4.8 below); and
- (d) Fees for additional services provided by OCWA (as described in Paragraph 2.3(b) above).

Section 4.7 - Capital Projects-changed from Section 4.8 Capital Expenditures in existing agreement

- (a) "Capital Projects" means changes and improvements to the Facilities which include the installation of new technology, improvements to the efficiency, performance and operation of the Facilities, replacement of major pieces of equipment, structural modifications to the Facilities and the construction and commissioning of new Facilities.
- (b) During the term of this Agreement, the Client may request OCWA to undertake Capital Projects for the Client. The terms and conditions of such Capital Projects including the fee shall be negotiated by OCWA and the Client.

Section 4.8 - Unexpected Expenses

- (a) "Unexpected Expenses" means unanticipated expenditures or additional costs which may include Major Maintenance Expenditures in addition to the Approved Major Maintenance Expenditures, that OCWA reasonably incurs in order to address a Change in Applicable Laws, any Uncontrollable Circumstance, any work required by regulatory order (e.g. MECP or MOL) or identified through an inspection (e.g. ESA, MECP, MOL) that is not solely the result of OCWA's negligence in performing the Services or any other emergency situation, together with the Service Fee.
- (b) In the event that OCWA is required to incur Unexpected Expenses, the prior approval of the Client with respect to those Unexpected Expenses will be required only if time permits. Within ten (10) days of incurring the Unexpected Expenses, OCWA will provide the Client with a report detailing the reasons the Unexpected Expenses were incurred.
- (c) Any Unexpected Expenses will be invoiced to the Client together with appropriate supporting documentation, and the Client should pay the invoice within thirty (30) days of the date of the invoice.

- (d) In the event that OCWA is required to incur Unexpected Expenses, OCWA will not be required to obtain the prior approval of the Client for any Major Maintenance Expenditure item costing less than \$2,000.

Section 4.9 - Interest on Late Payments

- (a) **Monthly Payment of Estimate and Management Fee.** If the Client's monthly payment of the Estimate and Management Fee are not available in its designated bank account on the agreed to date of payment, OCWA will notify the Client that the funds were not available. Interest will be charged to the Client starting from the day after the payment was due in the account. Interest shall be paid at a rate determined by the Minister of Finance, from time to time, as payable on overdue accounts, in accordance with the Lieutenant Governor in Council under s.10(4) of the *Financial Administration Act*, R.S.O. 1990, c.F.12, plus any banking charges and an administrative fee.
- (b) **Other Invoices.** Invoices, other than for the monthly payment set out in Section 4.7(a) above, shall be paid no later than thirty (30) days from the date of the invoice and interest shall begin to accrue one (1) day after the payment is due.

Section 4.10- Partial Payment of Disputed Invoices

- (a) If the Client wishes to dispute any portion of an invoice, within forty-five (45) days from the date on the disputed invoice, the Client must provide written notice to OCWA of the charges in dispute. If no written notice is received within the above forty-five (45) days, the invoice shall be deemed to be approved and interest shall be payable by the Client, if still unpaid after thirty (30) days from the Client's receipt of the invoice.
- (b) If the Client disputes any portion of an invoice, the Client shall nonetheless pay to OCWA the undisputed portion of the invoice by the due date and shall also continue to pay all monthly payments of the Estimate and Management Fee due on the first of each month. If any additional amount is finally determined to be payable to OCWA, the Client shall pay OCWA the additional amount, plus interest as provided in Section 4.7 above, within ten (10) days from the date of final determination.
- (c) If the disputed charges cannot be resolved with a reasonable time, the Parties shall seek resolution in accordance with Article 5, Dispute Resolution.

Section 4.11 - Hydro Costs/Utility Costs

OCWA is not responsible for paying any Hydro/Utility Costs in respect of the Facilities. The Client shall pay all Hydro/Utility Costs. OCWA will reimburse the Client for an increase in electricity costs due to an increase in electricity usage caused by Operator inefficiency.

Section 4.12 - Optional Services

- (a) If requested by the Client, OCWA may provide Optional Services to the Client by Change Order as set out in Schedule H, provided that the Client and OCWA agree in writing to the specific scope of work required.
- (b) Unless otherwise agreed to in writing, fees for Optional Services which OCWA agrees to provide to the Client shall be billed directly to the Client on a time and materials basis as described in Schedule D.
- (c) Once OCWA has agreed to provide Optional Services to the Client, the Optional Services shall be subject to the terms and conditions of this Agreement, with any necessary changes having been made.
- (d) The labour and mileage rates described in Schedule D will be reviewed annually by OCWA and may be subject to change.

Section 4.13 - Changes to the Agreement

- (a) A Change to the Agreement may be carried out after execution of this Agreement by Change Order. A Change Order shall be based upon agreement between the Parties and shall be reflected in a Change Order Form.
- (b) The Parties shall execute a Change Order Form, which shall be substantially in the form found in Schedule H which will state their agreement upon all of the following:
 - (i) the new services to be provided;
 - (ii) fees for the services provided under the Change Order;
 - (iii) the extent of the adjustment to the maintenance and operating schedule, if any;
 - (iv) the extent of any adjustments to the Estimate, if any; and
 - (v) all other effects that the change has on the provisions of this Agreement.

ARTICLE 5 - DISPUTE RESOLUTION

Section 5.1 - Mediation

- (a) If a dispute arises between the Client and OCWA which cannot be resolved within a reasonable time, then the issue shall be referred to a mediator.
- (b) The fees and expenses of the mediator shall be divided equally between the Parties.
- (c) Involvement in mediation is on a without prejudice basis and does not preclude and is not a bar to either Party pursuing whatever legal remedies may be available, including litigation.

ARTICLE 6 - TERMINATION

Section 6.1 - Termination of Agreement

- (a) At least one (1) calendar year before the expiry of the Current Term, the Client shall notify OCWA in writing whether it wishes to terminate or renew this Agreement at the end of the Current Term. However, OCWA reserves the right to decline to renew the Agreement by notifying the Client in writing of its decision to decline, within thirty (30) days of receipt of the Client's written request to renew.
- (b) During the Initial Term or any Renewal Term, this Agreement may only be terminated by either the Client or OCWA by giving at least thirty (30) days' notice in writing to the other Party if:
 - (i) there has been a material breach of the Agreement;
 - (ii) the Party complaining of the breach has given written notice of the breach to the other Party; and
 - (iii) the other Party does not correct the breach within thirty (30) days of receiving the notice.
- (c) If either Party disputes the existence of a breach or that the breach is material, then the dispute may be referred to mediation under Section 5.1 of this Agreement.

Section 6.2 - Early Termination

If this Agreement is terminated for any reason prior to the expiry of the Current Term, then the Client shall pay OCWA for all Services provided up to the date of termination, as well as any costs relating to the early termination, including but not limited to demobilization and severance costs (in accordance with the collective agreements between OCWA and its employees); the costs of cancelling or transferring agreements with suppliers and sub-contractors; as well as any previously incurred Major Maintenance Expenditures, costs related to Capital Projects, Unexpected Expenses and Optional Services.

Section 6.3 - Inventory Count of Consumables/Supplies

OCWA and the Client will conduct an inventory count of consumables/supplies at the Facility on the first day of the Initial Term or as soon as the Parties may agree. If OCWA no longer operates the Facilities at termination of this Agreement, OCWA shall either:

- (a) ensure that there is the same amount of consumables/supplies at the Facilities on the date of termination as there was on the first day of the Initial Term; or
- (b) reimburse the Client for any shortfall.

If the amount of consumables/supplies at the Facilities on the date of termination exceeds the amount on the first day of the Initial term, the Client will either reimburse OCWA for any excess or OCWA may take possession of any excess, as OCWA may determine.

Section 6.4 - Final Settlement

If OCWA ceases to operate and maintain the Facilities, there shall be a final settlement of all accounts with respect to the Estimate and any other expenses incurred by OCWA and amounts owing by or to the Client under this Agreement **[including, but not limited to the outstanding accounts, if any, owed to OCWA]**, no later than ninety (90) days after OCWA ceases to provide the Services or thirty (30) days after OCWA has provided the Client with a final invoice, whichever comes later.

Section 6.5 - Transfer of Operations

Upon the termination of this Agreement, OCWA will return the following to the Client:

- (a) The log book for the Facilities.
- (b) The original operations manual(s) that were provided by the Client to OCWA at the commencement of the Services with all updates to the expiry date of the Agreement.
- (c) A list of emergency phone numbers from the contingency plan binders used by OCWA staff in respect of the Facilities.
- (d) Maintenance and repair records of equipment at the Facilities in electronic format.

Section 6.6 - Restrictions on Recruitment of OCWA's Employees

During the term of this Agreement and for one (1) year following the termination of this Agreement, the Client shall not solicit or recruit any employee of OCWA, nor induce any OCWA employee to leave his or her employ to work at the Facilities, unless mutually agreed to in writing by the Client and OCWA.

ARTICLE 7 - GENERAL

Section 7.1 - Ownership of Technology

The Client acknowledges and agrees that in providing the Services, OCWA may utilize certain technology developed by or for OCWA, for example, OCWA's WMMS, Outpost 5 and/or PDM (the "Technology"). The Client further agrees that use of the Technology by OCWA with respect to the Facilities does not in any way give the Client any ownership or licensing rights in or to the Intellectual Property Rights to the Technology unless otherwise agreed to in writing between the Parties. For greater certainty, nothing in this Section 7.1 shall

be interpreted as requiring OCWA to provide the Client with the Technology or other similar technology in respect of the Facilities as part of the Estimate.

Section 7.2 - Agreement to Govern

If there is any inconsistency between the main body of this Agreement and any Schedule to this Agreement, then the provision in the main body shall govern.

Section 7.3 - Entire Agreement

This Agreement constitutes the entire agreement between the Client and OCWA with respect to the subject matter hereof and cancels and supersedes any prior understandings, undertakings, representations, warranties, terms, conditions and agreements, whether collateral, express, implied or statutory, between the Client and OCWA with respect thereto.

Section 7.4 - Amendments and Waivers

No amendment to this Agreement will be valid or binding unless it is in writing and duly executed by both of the Parties hereto. No waiver of any breach of any provision of this Agreement will be effective or binding unless it is in writing and signed by the Party purporting to give such waiver and, unless otherwise provided, will be limited to the specific breach waived.

Section 7.5 - Successors and Assigns

This Agreement shall operate to the benefit of and be binding upon, the Parties hereto and their successors and assigns. This Agreement may be assigned in the discretion of either Party.

Section 7.6 - Survival

All outstanding payment obligations, and the confidentiality obligation under Section 7.11, shall survive indefinitely the termination of this Agreement.

Section 7.7 - Severability

If any provision of this Agreement is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision and everything else in this Agreement shall continue in full force and effect.

Section 7.8 - Notices

- (a) All notices required or permitted to be given under this Agreement shall be in writing and shall be deemed to be properly given if hand-delivered, sent by email, sent by confirmed facsimile or by registered mail postage prepaid, return receipt requested, or by courier, to the Parties at their respective addresses as set forth below, or to such other addresses as the Parties may advise by like notice. Such notices if sent by email, facsimile, registered mail or courier shall be deemed to have been given when received.

- (i) if to the Client:
The Corporation of the Township of Malahide
87 John Street
Aylmer, ON
N5H 2C3
- Telephone: **(519)-773-5344**
 Fax: **(519)-773-5334**
 Email: **sgustavson@malahide.ca**
 Attention: **Sam Gustavson: Water / Wastewater Operations Manager**
- (ii) if to OCWA:
The Ontario Clean Water Agency
Southwest Region
Suite 370, 450 Sunset Drive
St. Thomas, ON
N5R 5V1
- Telephone: **(519)-791-2922**
 Email: **rtrepanier@ocwa.com**
 Attention: **Robin Trepanier: Business Development Manager**

- (b) A Party to this Agreement may change its address for the purpose of this Section by giving the other Party notice of such change of address in the manner provided in this Section.

Section 7.9 - Counterparts

This Agreement may be executed in counterparts, each of which shall constitute an original and all of which taken together shall constitute one and the same instrument.

Section 7.10 - Freedom of Information

The Parties understand that this Agreement and any materials or information provided to OCWA through the performance of the Services may be subject to disclosure under the *Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, c.F.31, as amended, or as otherwise required by law.

Section 7.11 - Confidentiality and Security

The Parties shall strictly maintain confidential and secure all material and information provided, directly or indirectly, by the other Party pursuant to this Agreement. Subject to relevant legislation related to freedom of information or the protection of privacy and any other laws, neither Party shall directly or indirectly disclose to any person, either during or following

the term of this Agreement, any such material or information provided to it by the other Party without first obtaining the written consent of the Party who provided such material or information, allowing such disclosure.

Section 7.12 - Change in Circumstance

- (a) In the event that there is a change in circumstances or condition that is not covered under the terms of this Agreement, including, without limitation, a Change in Applicable Laws or change in the scope of services provided (a “Change in Circumstance”), then the Party asserting the occurrence of such Change in Circumstance shall give written notice to the other Party, and the written notice shall contain:
 - (i) details of the Change in Circumstance;
 - (ii) details of the inadequacy of this Agreement; and
 - (iii) a proposal for an amending agreement to remedy the Change in Circumstance.
- (b) The Parties shall negotiate in good faith any amendments to this Agreement necessary to give effect to or comply with the Change, including any adjustments to the Annual Price or the Services to be provided, which shall be effected as of the date of the Change. If the Parties dispute the existence of a Change, or the recommendation proposed to rectify the Change or the terms and provisions of any amendment to the Agreement, then either Party may refer the dispute to mediation under Article 5, Dispute Resolution.

IN WITNESS WHEREOF the Parties have duly executed this Agreement.

ONTARIO CLEAN WATER AGENCY

Date of Signing

By: _____
(Authorized Signing Officer)

Date of Signing

By: _____
(Authorized Signing Officer)

**THE CORPORATION OF THE *[INSERT
CLIENT'S NAME]***

Date of Signing

By: _____
(Authorized Signing Officer)

Date of Signing

By: _____
(Authorized Signing Officer)

SCHEDULE A - The Facilities

Part 1. Description of the Facilities

For the purposes of this Agreement, the Facility is comprised of the following:

The community of Springfield is served by the collection system with one pump station; natural gas powered standby generator and a sanitary sewer system.

Certificate of Approval #8317-5TPKCF describes the sanitary sewer extension on Springfield Road.

Certificate of Approval #6643-4P6KZ6 describes the air emissions natural gas standby generator located at the Springfield Pumping Station.

Part 2. Street Address of the Facility

Pumping Station #1

Located at #11690 Springfield Road
East side of Springfield Road, South of the Simpson Drain
Township of Malahide, Ontario

Air relief chambers-location addresses

1. Air Release Chamber #1 – Manhole outside of main door to Springfield Sewage Pumping Station at 11690 Springfield Rd.
2. Air Release Chamber #2 – Approx. 100m north of 11358 Springfield Rd. (E side of Road in ditch)
3. Air Release Chamber #3- Approx. 100m East of 50476 College Line (South of road in ditch)
4. Air Release Chamber #4- Approx. 100m E of OPC Sewage Pumping station along laneway access to station at 10594 Hacienda Rd. (in grass south of roadway)

SCHEDULE B - Definitions

In this Agreement, the following terms are defined below or in the section in which they first appear:

“Actual Charges” is defined in Section 2 under Schedule D of this Agreement.

“Agreement” means this agreement together with Schedules A, B, C, D, E, F, H, I and J attached hereto and all amendments made hereto by written agreement between OCWA and the Client.

“Applicable Laws” means any and all statutes, by-laws, regulations, permits, approvals, standards, guidelines, certificates of approval, licences, judgments, orders, injunctions, authorizations, directives, whether federal, provincial or municipal including, but not limited to all laws relating to occupational health and safety matters, fire prevention and protection, health protection and promotion, land use planning, environment, Building Code, or workers’ compensation matters and includes Environmental Laws.

“Approved Major Maintenance Expenditures” is defined in Paragraph 4.4(b) of this Agreement.

“Authorizations” means any by-laws, licences, certificates of approval, permits, consents and other authorizations or approvals required under Applicable Laws from time to time in order to operate the Facility.

“Authorized Representative(s)” is defined in Section 2.4 of this Agreement.

“Business Days” means a day other than a Saturday, Sunday or statutory holiday in Ontario.

“Business Hours” means the hours between 8:00 a.m. and 4:00 p.m. on a Business Day.

“Capital Projects” is defined in Paragraph 4.5(a) of this Agreement.

“Change in Applicable Laws” means the enactment, adoption, promulgation, modification, issuance, repeal or amendment of any Applicable Laws that occur after the date this Agreement is executed by both Parties.

“Change Order” means the document shown in Schedule “H” describing the changes to the Agreement agreed to by both Parties.

“Chemical Costs” is defined in Section 4.13(a).

“Claim” means any claim, fine, penalty, liability, damages, loss and judgments (including but not limited to, costs and expenses incidental thereto).

“CPI Adjustment” means the percentage difference between the Statistics Canada Consumer Price Index, All Items (Ontario) (“CPI”) during June of the previous Year as compared to the CPI of June of the current Year. For example, the CPI Adjustment for Year 2021, is the CPI (Ontario) of June 2020.

“Current Annual Chemical Cost” is defined in Section 4.13(a).

“Current Annual Natural Gas Cost” is defined in Section 4.12(a).

“Current Term” is defined in Paragraph 4(c) under Schedule D of this Agreement.

“Crown” means Her Majesty the Queen in Right of Ontario.

“Effective Date” is defined on Page 1 of this Agreement.

“Environmental Laws” means, any and all statutes, by-laws, regulations, permits, approvals, certificates of approval, licences, judgments, orders, judicial decisions, injunctions, and authorizations related to environmental matters or occupational health and safety and which are applicable to the operation of wastewater treatment facilities.

“ESA” means the Electrical Safety Authority.

“Estimate” is defined in Section 1 under Schedule D of this Agreement.

“Facilities” is defined in Paragraph (b) of the Recitals to this Agreement and further described in Schedule A.

“Hydro Costs” means hydroelectricity costs due to the operation and maintenance of the Facility.

“Indemnification Process” means the procedures a Party is required to follow to obtain indemnification:

- (a) upon receipt of a Claim, or notice of claim, the Indemnified Party shall immediately forward such Claim or notice of Claim to the Indemnifying Party;
- (b) if requested by the Indemnifying Party, the Indemnified Party shall provide all documentation relating to the Claim or notice of Claim;
- (c) the Indemnified Party shall take such steps necessary to protect its right to defend such Claim or notice of Claim and shall assign such right to the Indemnifying Party including any subrogation rights;

- (d) the Indemnifying Party shall not settle any Claim, or notice of Claim without the prior written consent of the Indemnified Party; and
- (e) the Indemnified Party shall have the right to take-over the defence of any Claim, or notice of Claim and the Indemnifying Party shall fully co-operate with such action.

“Indemnified Parties” is defined in Paragraph 3.3(a) of this Agreement.

“Indemnifying Party” means the Party responsible for dealing with any Claims and paying out any Claims.

“Initial Term” is defined in Section 4.1 of this Agreement.

“Insurance” is defined in Paragraph 2.7(a) and further described in Schedule E.

“Intellectual Property Rights” means any copyright, trademark, patent, registered design, design right, topography right, service mark, application to register any of the aforementioned rights, trade secret, rights in unpatented know-how, right of confidence and any other intellectual or industrial property rights of any nature whatsoever in any part of the world.

“Major Maintenance Expenditures” is defined in Paragraph 4.4(a) of this Agreement

“Management Fee” is defined in Paragraph 4(a) under Schedule D of this Agreement.

“MECP” means the (Ontario) Ministry of the Environment, Conservation and Parks.

“MOL” means the (Ontario) Ministry of Labour.

“OHSA” means the *Occupational Health and Safety Act*, R.S.O. 1990, c. O.1.

“Optional Services” means any services not included in the Estimate that the Client and OCWA agree in writing to designate as “Optional Services” subject to Section 4.11.

“Outpost 5” means a remote monitoring and control system designed and constructed by OCWA and its consultants for the purpose of monitoring and controlling processes at water treatment facilities and their related parts.

“Overall Responsible Operator” means the person who will act as the overall responsible operator pursuant to Section 15 of O. Reg. 129/04 under the *Ontario Water Resources Act*, R.S.O. 1990 (“OWRA”) in respect of the Facility.

“OWRA” means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40.

“Parties” is defined in Paragraph (d) of the Recitals to the Agreement.

“PDM” or “Process Data Management” means technology that allows process data to be entered into a format that can be viewed, manipulated and retrieved in the form of customized reports.

“Pre-existing Condition” is defined in Section 2.5 of this Agreement.

“Renewal Term” is defined in Section 4.1 of this Agreement.

“Routine Maintenance” means regular and/or repetitive activities recommended by the equipment or facility manufacturer or practices of a prudent operator to maintain the reasonably expected service life of the equipment and components thereof and includes preventive maintenance.

“SCADA” means Supervisory Control and Data Acquisition.

“Service Fee” is defined and described in Schedule D.

“Services” is defined in Section 2.1 of this Agreement.

“Technology” is defined in Section 7.1 of this Agreement.

“Uncontrollable Circumstance” is defined in Paragraph 2.2(c) of this Agreement.

“Unexpected Expenses” is defined in Paragraph 4.6(a) of this Agreement.

“Utility Costs” means the costs of natural gas used in the operation of the Facility.

“WMMS” or “Work Management Maintenance System” means a computer program used to determine a program of preventive maintenance activities for equipment in a facility based on a risk analysis that considers factors such as equipment life expectancy, present value and replacement cost.

“Year” means the three hundred and sixty-five (365) day period from January 1st to December 31st of the calendar year.

SCHEDULE C - The Services

A - Services for Wastewater Collection System

Part 1 – Services

OCWA will provide the following services:

1. Staffing

- (a) certified operator(s) to attend at the Facilities as required under normal operating conditions on Business Days and during Business Hours and supply other personnel as may be necessary to operate, maintain and manage the Facilities under normal operating conditions in compliance with the requirements of Applicable Laws, Agreement Terms and Scope of Work (SOW), including management, operation, routine maintenance, administration and reporting;
- (b) supply a certified operator(s), who will be on call 24 hours per day, 365 days per year to respond to emergency conditions in respect of the operation of the Facilities, any such response to be charged to the Client in accordance with Schedule D herein or by way of an annual set amount;
- (c) provide all necessary training and continuing education for staff to ensure the continued operation of the Facilities, in accordance with all Applicable Laws;
- (d) provide an Overall Responsible Operator for the Facilities.

2. **Efficient Operation/Record Keeping**

- (a) OCWA, acting reasonably, is responsible for ensuring the efficient operation of the Facilities processes.
- (b) OCWA will maintain records regarding the operation of the Facilities in compliance with Environmental Laws including TOMRMS.

3. Regulatory Reporting

- (a) prepare and submit all reports to the Client and the MECP respecting the operation and maintenance of the Facilities as required by the MECP or any other regulatory agency or body having jurisdiction at the time of the Agreement;
- (b) review any inspection reports prepared by the MECP in respect of the Facilities and, subject to any approvals of the Client may correct or negotiate with the MECP amendments to a deficiency;
- (c) report to the Client and the MECP non-compliance with a regulatory requirement.
- (d) OCWA shall provide a Facility performance report, within forty-five (45) days of the completion of each quarter or such other period as the Client and OCWA may agree upon.

In the event that a regulatory report is required as a result of OCWA's negligence or misconduct, the Township will not be responsible for payment of such reports.

4. Operations Manuals

- (a) recommend to the Client, any section in the operating manuals that should be modified/changed to ensure that the operating manuals reflect the actual or revised approach to operating the Facilities, which recommendations may require third party assistance.

5. Initial Inventory

- (a) develop and maintain inventory of the Client's original equipment tools and attractables in place as of the date of the Agreement;
- (b) develop inventory of critical spares.

6. Change In Laws

- (a) notify the Client of any modifications or changes to the Services or the Facilities required to comply with any Change in Laws and subject to Client approval make the required modifications or changes at an additional cost.

7. Facilities Emergency Preparedness

- (a) prepare and revise, as necessary, an Emergency Plan for the Facilities consistent with the requirements of the Applicable Laws and the Client's Emergency Plans;

- (b) establish procedures for managing foreseeable emergencies or abnormal conditions affecting the Facilities.

8. General

- (a) good housekeeping to maintain a safe work environment;
- (b) provide security at the Facilities by maintaining the existing fences and gates and locking same and notifying the Client of the need for any repairs
- (c) provide mobile communications services.

9. Routine Operations & Maintenance

- (a) in providing routine operation of the Facilities, OCWA will conduct:
 - (i) visual inspection of all buildings, equipment and Facilities insofar as can be observed while these are in service;
 - (ii) visit the facility at least once weekly;
 - (iii) carry out routine lubrication program including greasing and oiling as required in the lubrication schedule;
 - (iv) perform routine maintenance duties to equipment by following preventative maintenance procedures;
 - (v) instrumentation cleaning, verification of meters, calibrate equipment in accordance with the Facility's ECA.
 - (vi) quarterly inspections and pumping of the four air release valve chambers on the forcemain from the Springfield pump station to the Ontario Police College (OPC) pump station.
 - (vii) annual testing, inspections and pumping of the four air release valve chambers on the forcemain from the Springfield pump station to the OPC pump station.
 - (viii) sampling and/or on-site analysis;
 - (ix) sample collection, preservation, packing and shipment for off-site analysis as required by Applicable Laws at the time of the commencement of this Agreement;
 - (x) laboratory sampling, analysis and reports as required by Applicable Laws at the time of the commencement of this Agreement;
 - (xi) checks and response to alarms during Business Hours;
 - (xii) inspection of process control equipment and force main to ensure proper operation of **[flow meters, check valves, pumps, valves, bar screen and standby power]**;

- (xiii) routinely monitor wastewater collection system for infiltration, illegal connections and illegal discharge of contaminants to the system;
- (xiv) investigate sewer complaints
- (xv) maintenance of daily on-site logs and records, including process control log sheets, laboratory data log sheets, bypass reports, flow data and routine checklists as required by Applicable Laws;
- (xvi) consolidation and processing of OCWA's internal operational data forms for statistical input into a reporting system for the Client Connection report;
- (xvii) recording and analysis of flow readings and pump hours;
- (xviii) utilize Client's SCADA system (if applicable) for trending review and reporting, gap analysis, testing, and compliance; OCWA shall report abnormal conditions or trends from SCADA to the Client.
- (xix) operate generator as per manufacturers recommendations on a monthly basis and schedule and complete annual maintenance inspection and service of stand by generator
- (xx) before October 31st (as per agreement 4.5(b), prepare a report outlining the foreseeable Major Maintenance Expenditures and Capital Projects required for the Facilities, complete with cost estimates for the Client's budgeting purposes;
- (xxi) maintenance of vehicle(s) used in providing the services, including fuel and any other operating costs associated with such vehicle(s);
- (xxii) operate and exercise all isolation valves in dry well of building on annual basis;
- (xxiii) ensure the security of the Facilities by locking doors and gates;
- (b) perform routine preventive maintenance on the equipment used in the operation of the Facilities as specified in the maintenance management system including mechanical and instrumentation.
- (c) implement and utilize a maintenance management system which shall record information related to the maintenance of the Facilities.
- (d) OCWA will provide emergency locates upon request from Client on a Cost Plus basis similar to an Optional Service as described in Part 2 (below).

Part 2 - Optional Services (To Be Provided at the Request of the Client)

OCWA may provide additional services to the Client including but not limited to the Optional Services set out below:

1. Operation Related Services

- (a) operation manual updates;
- (b) maintenance and repair of sewage collection system, including but not limited to, smoke/dye testing, manhole inspections, rodding, CCTV inspections, and tree root removal/treatments;
- (c) sewer system locates as set out by applicable legislation and Ontario One Call;
- (d) new sewer service installation or connection inspection;
- (e) contract repair for sewer line breaks including road restoration;
- (f) inspection of repaired sewer services;
- (g) inspect and flush sanitary collection system, including sewers, manholes and clean outs;
- (h) high pressure sewer flushing;
- (i) acoustic pipe inspection;
- (j) infiltration surveys, sewer cameraing;
- (k) adjust and leveling manholes;
- (l) odour control system.

2. Capital Project Plans

- (a) prepare a detailed Capital Projects Plan for the facility(ies).

3. Engineering Services

- (a) engineering services;
- (b) energy audits;
- (c) provide assistance and/or complete applicable funding applications;
- (d) financial plans.

4. Information Technology Services

- (a) SCADA development and maintenance.

SCHEDULE D - The Estimate And Other Charges and Adjustments

1. Operations Estimate

No later than [October 30th] of each year of the Initial Term or any Renewal Term, OCWA shall prepare and submit to the Client, for its approval, an estimate of the charges associated with the provision of the operational and maintenance Services for the following calendar year. The Client will inform OCWA no later than December 1st whether the estimate is approved or not approved (the approved estimate is referred to as the “Estimate”). If the Client does not provide OCWA with its decision regarding approval by the December 1st date, the Estimate shall be deemed approved. The Estimate shall be OCWA’s authorization to incur the expenditures in the Estimate. The Estimate for the first year of the Initial Term is **\$ 25,200.00.** The Estimate shall be paid by the Client in twelve (12) equal monthly instalments. The monthly payment of the Estimate for Year One of the Initial term shall be **\$ 2,100.00.**

2. Reconciliation of the Estimate and Actual Charges

At the end of each calendar year, OCWA will determine the actual charges for providing the Services to the Client for that year (the “Actual Charges”) which, as indicated in Paragraph 2.7(a), may include an increase in premium for the Insurance. If the Estimate paid by the Client for the year exceeds the Actual Charges, OCWA will pay the Client the difference within thirty (30) days of OCWA making the determination. If the Actual Charges exceed the Estimate paid by the Client, the Client shall pay OCWA the difference within thirty (30) days of OCWA notifying the Client in writing of the determination.

3. Other Charges

The Estimate, as reconciled with the Actual Charges, includes all charges associated with providing the Services, except for the following:

- (a) OCWA’s Management Fee (as described in Section 4 of Schedule D below);
- (b) Capital Projects (as described in Section 4.5);
- (c) Unexpected Expenses (as described in Section 4.6);
- (d) charges for any Optional Services that are provided by OCWA to the Client (as described in Section 5 of this Schedule D);

4. Management Fee

- (a) In addition to payment of the Estimate, as reconciled, with the Actual Charges, the Client shall also pay OCWA an annual management fee (the “Management Fee”) to provide the management Services, which shall be **\$ 6,300.00** for the first year of the Initial Term

("Year One"). The Management Fee shall be paid by the Client in twelve (12) equal monthly instalments at the same time and in the same manner as the Estimate. The monthly payment of the Management Fee for Year One of the Initial term shall be **\$525.00**.

- (b) For the second year ("Year Two") and subsequent years of the Initial term, the annual Management Fee shall be **\$ 6,300.00** plus the June CPI + 2% Adjustment. For example, the CPI Adjustment for Year 2021, is the CPI (Ontario) of June 2020.
- (c) The Management Fee in any Renewal Term shall be as agreed by the Client and OCWA. If the Client and OCWA cannot reach an agreement on the Estimate and Management Fee for any Renewal Term within six (6) months of the beginning of the last year of the current term (whether the Initial Term or a Renewal Term) (the "Current term"), this Agreement will be terminated one year from the last day of the Current Term. The Parties shall treat this final year in the same manner as if the Current term was extended an additional year.

5. Optional Services

Unless otherwise agreed to in writing, fees for Optional Services which OCWA agrees to provide to the Client shall be billed directly to the Client on a time and materials basis at the following rates:

- (a) Labour rates on Business Days, Monday to Friday, (0730 to 1600) shall be billed at \$90.00/hour/person for an operations manager and assistant operations manager, and \$65.00/hour/person for an operator or mechanic, plus vehicle expenses at \$0.75/km/vehicle;
- (b) Labour rates on statutory holidays shall be billed at \$132.50/hour/person for an operations manager and assistant operations manager, and \$97.50/hour/person for an operator or mechanic, with a minimum eight (8) hour charge, plus vehicle expenses at \$0.75/km/vehicle;
- (c) Labour rates at all other times (after hours and on weekends) shall be billed at \$132.50/hour/person for an operations manager and assistant operations manager, and \$97.50/hour/person for an operator or mechanic, with a minimum four (4) hour charge, plus vehicle expenses at \$0.75/km/vehicle;
- (d) Costs for parts, equipment and supplies, and outside labour charges (i.e., contractors), used by OCWA staff to provide the Optional Services shall be billed to the Client, and the Client will pay such costs together with a Service Fee
- (e) Costs for Optional Services provided by OCWA staff (i.e. engineering services, project management, SCADA, innovation technology, process optimization and asset management services) will be based on OCWA's technical services hourly rate schedule. This rate schedule will be set by OCWA at the beginning of each calendar year and will be reviewed by the Client as part of the Optional Services approval process.

6. Service Fee

“**Service Fee**” means an additional fee of [15%] charged to the Client when OCWA purchases materials, supplies, equipment or contractor’s services on behalf of the Client.

SCHEDULE E - Insurance

A summary of the insurance coverage that OCWA will arrange in respect of the facilities is described below:

Property Insurance

Insured Perils: All Risks of direct physical loss or damage (including Flood and Earthquake) occurring during the term of this policy, except as hereinafter excluded.

Policy Limits:

- Replacement Value
- Extra expenses
- Expediting expenses

Insurable Values: Springfield Wastewater Collection System
\$500,000

(Subject to Annual Review by the Client.)

Deductibles: Earthquake – *Facilities and Locations in Earthquake Zones*
5% of the value of the property insured subject to a minimum of \$250,000

Earthquake – *All Other Facilities*
3% of the value of the property insured subject to a minimum of \$100,000.

Flood – *Facilities and Locations in 100 year Flood Zones*
5% of the value of the property insured, subject to a minimum amount of \$250,000.

Flood – *Facilities and Locations in 500 year Flood Zones*
3% of the value of the property insured, subject to a minimum amount of \$250,000.

Flood - *All Other Facilities*
3% of the value of the property insured, subject to a minimum amount of \$100,000. Facilities and Locations, including Newly Acquired until assessed by Insurer(s).

Water Damage - \$130,000

Sewer back-up

2% of the value of the property insured, subject to a minimum amount of \$100,000.

Portable Generators

3% of the value of the property insured, subject to a minimum amount of \$24,500.

Installations, Hook Liability or Portable Water Treatment Facility - \$27,500

Testing & Commissioning - \$27,500

All Other Losses:

<u>Deductible</u>	<u>Facility & Location Insurable Value</u>
\$27,500	with total value up to \$25,000,000

The above is subject to change on an annual basis.

Where the Client's property is repaired or replaced, the Client will pay the deductible. Where OCWA's property is repaired or replaced, OCWA will pay the deductible. In cases where both the Client's and OCWA's property is repaired or replaced, the deductible will be paid by both the Client and OCWA *pro rata* in accordance with the total loss.

Property Insured: Property of every kind and description as declared except as excluded under the "Property Excluded" section of the policy.]

Boiler & Machinery Insurance

Coverage: Sudden & Accidental Breakdown of a Pressure, Mechanical, Electrical Object including Production Machinery as defined under the policy. Coverage applies to the loss of the "Object" itself and for loss to other insured property directly damaged by the "Accident", except as excluded under the policy.

Limit: **Maximum** \$100,000,000 per Accident.

Deductibles: \$5,000 for Property Damage per Accident for the year 2023; subject to changes on an annual basis.

Where the Client's property is repaired or replaced, the Client will pay the deductible. Where OCWA's property is repaired or replaced, OCWA will

pay the deductible. In cases where both the Client's and OCWA's property is repaired or replaced, the deductible will be paid by both the Client and OCWA pro rata in accordance with the total loss.

Automobile Insurance

Coverage: Automobile Liability for OCWA owned or leased vehicles.

Limit: \$5,000,000 per Occurrence

Commercial General Liability Insurance

Coverage: Third party liability including legal fees, for property damage and/or bodily injury as caused by OCWA's negligence arising out of OCWA's operations of the Facilities.

Limit: \$5,000,000 per Occurrence.

Deductible: \$50,000 for the year 2023; subject to change on an annual basis.

Contractor's Pollution Liability/Professional Liability Insurance

Coverage: Professional Liability: To pay on behalf of OCWA sums which OCWA shall become legally obligated to pay as damages and/or claims expense as a result of claims made first against OCWA, and reported to the insurer, in writing during the policy period, automatic extended reporting period (90 days), and by reason of any act, error or omission in professional services rendered or that should have been rendered by OCWA, or by any person for whose acts errors or omissions OCWA is legally responsible, and arising out of the conduct of OCWA's profession.

Pollution legal liability covering third party property damage and bodily injury and clean-up costs for pollution conditions arising out of the performance of the services provided by OCWA.

Limit: \$10,000,000 per loss on a Claims Made basis with automatic, extended reporting periods for Pollution Liability. \$10,000,000 aggregate.

Limit: \$5,000,000 per loss on a Claim Made basis for Professional Liability Insurance

Deductible: \$50,000 for the year 2023; subject to change on an annual basis.

SCHEDULE F - List of Pre-Existing Conditions

As per Paragraph 3.1(e) of this Agreement, the following Pre-existing Conditions have been identified:

Infiltration has been identified in the collection system, and is monitored by the Client every two years.

[illegible]

Cost Breakdown for Change in Services			
Item		One-time Cost	Annual Cost
	Total Cost:		

SCHEDULE J - Expenditure Request and Approval to Proceed

Hub Name
 Hub Address
 City, ON Code
 Phone: XXX-XXX-XXXX Fax: XXX-XXX-XXXX

PART 1

Facility Name:			
Project Name:			
Project Number:		Estimated Project Start Date:	
Total Estimated Cost of the Project:	\$	Detailed Quote Attached:	<input type="checkbox"/> Yes <input type="checkbox"/> No

It is recognized that this is a budget estimate and the final price may vary. OCWA will provide additional justification where the final invoice price varies from the estimate by more than 10%

Type of Project:

- ☐ Maintenance Project
 ☐ Out of Scope Work
 ☐ Contingency
 ☐ Emergency
☐ Health & Safety

Description of Project or Expenditure:**Submission Prepared By:**

 Name (Print) Signature Date

Authorized Representative for the Ontario Clean Water Agency

PART 2**Approval to Proceed:**

☐ Approved
 ☐ Declined
 ☐ Deferred
 Reason if Declined or Deferred

The Ontario Clean Water Agency is authorized to proceed with the project/expenditure according to the description and cost estimate provided above. This may include but not limited to the hiring of sub-contractors, consulting firms, etc. as required. The Municipality agrees to pay OCWA the costs associated with this work upon its completion based on the terms of the Municipality's agreement with OCWA.

Approved By:

 Name (Print) Signature Date

Authorized Representative for the Municipality

PART 3

OCWA Internal Use Only:			
Client PO / Project #:		Date:	
Project Start Date:		Project Completion Date:	
OCWA Invoice #		Date:	
OCWA Account Code:		OCWA Work Order #	



Report to Council

REPORT NO.: PW-22-39
DATE: June 16, 2022
ATTACHMENT: Water Services Operation and Maintenance Agreement
SUBJECT: **CONTRACT EXTENSION: ONTARIO CLEAN WATER AGENCY**

Recommendation:

THAT Report No. PW-22-39 entitled “Contract Extension: Ontario Clean Water Agency” be received;

AND THAT the Township enter into the agreement with the Ontario Clean Water Agency for a 5-year period for the purposes of the operation and maintenance of the Malahide Water System,

AND THAT the Township, on behalf of the PBASWSS and AASWSS Joint Boards of Management, enter into the agreement with the Ontario Clean Water Agency for a 5-year period for the purposes of the operation and maintenance of the Area Secondary Water Supply System, and the Port Burwell Area Secondary Water Supply System

Background:

The Township of Malahide Distribution System, Aylmer Area Secondary Water Supply System, and the Port Burwell Area Secondary Water Supply System are operated under contract by the Ontario Clean Water Agency (OCWA).

The Joint Board of Management for the Aylmer Area Secondary Water Supply System, and the Joint Board of Management for the Port Burwell Area Secondary Water Supply System, and The Township of Malahide originally signed an operations and maintenance Services Agreement contract with OCWA in 2012. The initial term of the agreement was for a period of five (5) years which ended on December 31, 2017. The contract was extended for an additional five (5) years in 2017 with the current agreement set to expire on December 31, 2022.

Under the terms and conditions of the Agreement, there is a provision for an extension of the existing agreement for a period of five (5) years. As Council will recall, at their meeting held on June 17, 2021, Malahide Council authorized the Township Staff to enter into negotiations with the OCWA for the purposes of obtaining a 5-year extension for the operation and maintenance of the system by resolution No. 21-281 (following page):

No. 21-281

Moved by: Chester Glinski

Seconded by: Mark Widner

THAT Report No. PW-21-34 entitled "Malahide Water Distribution System: OCWA Operation and Maintenance Service Agreement" be received;

AND THAT the Staff of the Township of Malahide, be authorized to enter into negotiations with the current Operating Authority, being the Ontario Clean Water Agency, to extend the current term of the existing agreement for a period of five (5) years.

Carried.

Comments/Analysis:

The Staff of the municipalities have been satisfied with the manner in which OCWA has operated and maintained the each of the three (3) water systems. OCWA has successfully implemented an effective DWQMS Operational Plan, undertaken capital projects, and through regular reporting and meetings has kept the owners apprised of the condition and operation of the water systems. They continue to meet or exceed regulatory requirements and have demonstrated their ability to monitor, maintain and ensure quality service in relation to water distribution.

The attached agreement has accommodated some minor revisions.

- Schedule A of the agreement has been updated to provide a more comprehensive description of the various infrastructure components that make up the Malahide Water System and the respective Secondary Systems and a detailed list of chambers, hydrants, sample stations has been added to better describe and outline these various components.

The contract does include \$3300.00 plus HST increase annually which relates to increased vehicle fuel costs required for operations as indicated by OCWA. No other increases have been added to the agreement aside from the annual contract price adjustment for the Consumer Price Index.

Both the Aylmer Secondary and Port Burwell Secondary Joint Boards of Management have accepted the OCWA contract extension for their portion of the agreement and have authorized the Mayor and Clerk for the Township of Malahide to enter into the agreement on their behalf subject to the mutual approval of the Township of Malahide's portion of the agreement with the Ontario Clean Water Agency (OCWA) for a 5-year extension for the operation and maintenance of the Malahide Water System.

At their regular meeting on June 8, 2022, the AASWSS Joint Board of Management accepted the proposal and has granted the contract extension for their portion of the agreement, subject to the mutual approval of the Township's portion of the agreement by resolution indicating:

That the AASWSS Joint Board of Management does hereby authorize the Administering Municipality to enter into an Agreement, on its behalf, for a 5-year period ending December 31, 2027, for the purposes of operating and maintenance of the Aylmer Area Secondary Water Supply System.

Similarly, at their regular meeting on June 8, 2022, the PBASWSS Joint Board of Management accepted the proposal and has granted the contract extension of the agreement, subject to the mutual approval of the Township's portion of the agreement by resolution indicating:

That the PBASWSS Joint Board of Management does hereby authorize the Administering Municipality to enter into an Agreement, on its behalf, for a 5-year period ending December 31, 2027, for the purposes of operating and maintenance of the Port Burwell Area Secondary Water Supply System.

As a result of the foregoing, the Staff recommend the Council accept the Township of Malahide portion of the contract renewal and to also act on the Boards' behalf to enter into the contract extension with OCWA.

Financial Implications to Budget

Consistent with the previous agreement, the contract price is adjusted annually by the Consumer Price Index (Canadian All Items). As shown in Schedule D of the agreement, the cost to operate the Malahide Water System in 2023 is \$83,146.48. The operational and maintenance costs are accounted for in the Township's Water Rates.

Relationship to Cultivating Malahide

The Cultivating Malahide Integrated Community Sustainability Plan (ICSP) is based upon four pillars of sustainability: Our Land, Our Economy, Our Community, and Our Government. One of the goals that support the "Embody Financial Efficiency throughout Decision-Making" Strategic Pillar is ensuring that the cost of maintaining municipal infrastructure is equitably borne by current and future ratepayers.

Submitted by:	Approved by:	Approved for Council:
Sam Gustavson, Water/ Wastewater Operations Manager	Matt Sweetland, P.Eng., Director of Public Works	Adam Betteridge, Chief Administrative Officer

WATER SERVICES AGREEMENT
BETWEEN
ONTARIO CLEAN WATER AGENCY
A N D
THE CORPORATION OF THE TOWNSHIP OF MALAHIDE

Table of Contents

RECITALS	1
ARTICLE 1 - INTERPRETATION.....	2
SECTION 1.1 - DEFINITIONS.....	2
ARTICLE 2 - RESPONSIBILITIES OF OCWA	2
SECTION 2.1 - RETENTION OF OCWA.....	2
SECTION 2.2 - PERFORMANCE OF SERVICES	2
SECTION 2.3 –STANDARD OF CARE.....	3
SECTION 2.4 - AUTHORIZED REPRESENTATIVES.....	3
SECTION 2.5 - INDEMNIFICATION OF THE CLIENT	3
SECTION 2.6 - WAIVER OF CONSEQUENTIAL DAMAGES	4
SECTION 2.7 - INSURANCE.....	4
SECTION 2.8 - REPRESENTATIONS AND WARRANTIES OF OCWA	5
ARTICLE 3 - RESPONSIBILITIES OF THE CLIENT	5
SECTION 3.1 - OBLIGATIONS OF THE CLIENT.....	5
SECTION 3.2 - COVENANTS OF THE CLIENT	6
SECTION 3.3 - EXONERATION AND INDEMNIFICATION OF OCWA.....	7
ARTICLE 4 - TERM, PAYMENT FOR SERVICES AND OTHER CHARGES	7
SECTION 4.1 - INITIAL TERM OF AGREEMENT	7
SECTION 4.2 - ANNUAL PRICE FOR THE INITIAL TERM	7
SECTION 4.3 - THE ANNUAL PRICE IN RENEWAL TERMS	8
SECTION 4.4 - PAYMENT OF THE ANNUAL PRICE	8
SECTION 4.5 - ITEMS NOT INCLUDED IN THE ANNUAL PRICE	8
SECTION 4.6 - MAJOR MAINTENANCE EXPENDITURES	9
SECTION 4.7 - CAPITAL PROJECTS.....	9
SECTION 4.8 - UNEXPECTED EXPENSES.....	9
SECTION 4.9 - INTEREST ON LATE PAYMENTS.....	10
SECTION 4.10 - PARTIAL PAYMENT OF DISPUTED INVOICES	10
SECTION 4.11 - HYDRO COSTS/UTILITY COSTS	11
SECTION 4.12 - OPTIONAL SERVICES	11
SECTION 4.14 - CHANGES TO THE AGREEMENT.....	11
SECTION 4.15 – CHEMICAL COSTS	12
ARTICLE 5 - DISPUTE RESOLUTION	12
SECTION 5.1 - MEDIATION	12
ARTICLE 6 - TERMINATION	13
SECTION 6.1 - TERMINATION OF AGREEMENT.....	13
SECTION 6.2 - EARLY TERMINATION.....	13
SECTION 6.3 - INVENTORY COUNT OF CONSUMABLES/SUPPLIES	14
SECTION 6.4 - FINAL SETTLEMENT.....	14
SECTION 6.5 - TRANSFER OF OPERATIONS	14
SECTION 6.6 - RESTRICTIONS ON RECRUITMENT OF OCWA’S EMPLOYEES	14
ARTICLE 7 - GENERAL	15
SECTION 7.1 - OWNERSHIP OF TECHNOLOGY	15

SECTION 7.2 - AGREEMENT TO GOVERN	15
SECTION 7.3 - ENTIRE AGREEMENT	15
SECTION 7.4 - AMENDMENTS AND WAIVERS	15
SECTION 7.5 - SUCCESSORS AND ASSIGNS	15
SECTION 7.6 - SURVIVAL.....	15
SECTION 7.7 - SEVERABILITY	16
SECTION 7.8 - NOTICES	16
SECTION 7.9 - COUNTERPARTS.....	16
SECTION 7.10 - FREEDOM OF INFORMATION	16
SECTION 7.11 - CONFIDENTIALITY	17
<i>SCHEDULE A - The Facilities</i>	<i>A-1</i>
<i>SCHEDULE B - Definitions.....</i>	<i>B-1</i>
<i>SCHEDULE D - The Annual Price And Other Charges and Adjustments.....</i>	<i>C-13</i>
<i>SCHEDULE E - Insurance</i>	<i>D-1</i>
<i>SCHEDULE F - List of Pre-Existing Conditions</i>	<i>D-1</i>
<i>SCHEDULE H - Change Order Form.....</i>	<i>E-1</i>
<i>SCHEDULE J - Expenditure Request and Approval to Proceed</i>	<i>F-1</i>

SERVICES AGREEMENT

THIS AGREEMENT effective as of the 1st day of January 1st, 2023 (the “Effective Date”),

B E T W E E N

ONTARIO CLEAN WATER AGENCY/AGENCE ONTARIENNE DES EAUX, a corporation established under the *Capital Investment Plan Act, 1993*, c.23, Statutes of Ontario.

(“OCWA”)

A N D

THE CORPORATION OF THE TOWNSHIP OF MALAHIDE

(the “Client”)

RECITALS

- (a) OCWA is in the business of providing management, operations and maintenance services for water facilities.
- (b) The Client is the owner of the ***Malahide Distribution System*** more particularly described in Schedule A (the “Facilities”).
- (c) The Client is the Administering Municipality for the Port Burwell Area Secondary Water Supply System and the Aylmer Area Secondary Water Supply System more particularly described in Schedule A (the “Facilities”).
- (d) The Client wishes to retain the services of OCWA to operate and maintain the Facilities in accordance with the provisions of this agreement (the “Agreement”).
- (e) The Client and OCWA (collectively, the “Parties” and each a “Party”) are entering this Agreement to set out their respective rights and obligations with respect to the management, operation and maintenance of the Facilities.

The Council of the Client on the ____ day of _____, 20____ passed By-Law No. _____ authorizing the Client to enter into this Agreement.

NOW THEREFORE in consideration of the mutual covenants contained in this Agreement and other good and valuable consideration the receipt and sufficiency of which is hereby irrevocably acknowledged, the Client and OCWA agree as follows:

ARTICLE 1 - INTERPRETATION

Section 1.1 - Definitions

In this Agreement, definitions are set out in Schedule B, or within applicable provisions as indicated.

ARTICLE 2 - RESPONSIBILITIES OF OCWA

Section 2.1 - Retention of OCWA

- (a) The Client retains OCWA to provide management, operation and maintenance services, as described in Schedule C to this Agreement, in respect of the Facilities (the “Services”).
- (b) The Client acknowledges and agrees that for the purposes of Section 449 of the *Municipal Act, 2001*, S.O. 2001, c.25, as amended, OCWA is an agent of the Client.

Section 2.2 - Performance of Services

- (a) OCWA shall deliver the Services in compliance with all applicable Environmental Laws, except as described in Paragraphs 2.2(b) and (c) below and in any of the following circumstances:
 - (i) the Client not making the Major Maintenance Expenditures and/or not undertaking the Capital Projects reasonably recommended by OCWA as per Sections 4.6 and 4.7 herein;
 - (ii) failure of the Client to meet its responsibilities specified in this Agreement;
 - (iii) failure of any equipment at the Facilities, unless the failure is due to OCWA’s negligence;
 - (iv) the water transmitted to the Facilities for treatment contains contaminants or pathogens which cannot be treated or removed by the Facilities treatment processes; and
 - (v) the quantity or quality of water transmitted to the Facilities exceeds the Facilities design or operating capacity.
- (b) OCWA may temporarily cease to provide or reduce the level of provision of Services in the event of an emergency, a breakdown or any Uncontrollable Circumstance. OCWA shall, when practicable, try to give the Client reasonable advance notice of any such occurrence.

- (c) Notwithstanding any other provision of this Agreement, delay in the performance of, or a failure to perform any term of this Agreement by OCWA, shall not constitute default under this Agreement or give rise to any claim for damages suffered by the Client if and to the extent caused by occurrences or circumstances beyond the reasonable control of OCWA (an “Uncontrollable Circumstance”), including but not limited to any circumstances set out in Paragraph 2.2(a), decrees of government, acts of God (including but not limited to hurricanes, tornadoes, floods and other weather disturbances), sabotage, strikes, lockouts and other industrial disturbances, insurrections, war, civil disturbances, pandemics, riots, explosions, fire and acts of third parties.
- (d) The Client recognizes that in an emergency situation or where an Uncontrollable Circumstance exists, OCWA’s primary concern will be to use all reasonable efforts to maintain the Facility in compliance with Environmental Laws and that OCWA may be required to correct a deficiency or deal with the emergency situation without obtaining the Client’s prior approval. Should such a situation arise, OCWA shall advise the Client as soon as reasonably possible and shall provide as much information as possible to the Client and will work with the Client to ensure the emergency situation is appropriately addressed.

Section 2.3 – Standard of Care

OCWA shall deliver the Services as would a reasonable operator with like skills in like circumstances.

Section 2.4 - OCWA as Independent Contractor

In performing the Services, OCWA shall be acting as an independent contractor and only to the extent and for the specific purposes expressly set forth herein. Neither OCWA nor its employees, agents or subcontractors shall be subject to the direction and control of the Client, except as expressly provided in this Agreement.

Section 2.4 - Authorized Representatives

Each of OCWA and the Client shall be entitled to designate in writing to the other, one or more individuals who shall be authorized to represent it in connection with the day-to-day administration of the provisions of this Agreement (the “Authorized Representative(s)”). Each of the Parties shall be entitled to rely on the acts and approvals given by the other Party’s Authorized Representative until such time as it receives a written notification of change of the other Party’s Authorized Representative.

Section 2.5 - Indemnification of the Client

- (a) OCWA shall exonerate, indemnify and hold harmless the Client, its directors, officers, employees and agents from and against Claims which may be suffered or incurred by, accrue against or be charged to or recoverable from the Client to the

extent that such Claim is solely attributed to OCWA's negligence or willful misconduct when performing the Services, except where such Claim is due to an Uncontrollable Circumstance or to a condition of the Facilities which existed prior to OCWA's commencement of the Services (a "Pre-existing Condition"), including but not limited to those listed in Schedule F. Such Pre-existing Conditions shall be the ongoing responsibility of the Client. OCWA, in providing these Services, is not responsible, accountable or liable, in any way, for Pre-existing Conditions, either directly or indirectly.

- (b) The Client shall be deemed to hold the provisions of this Section 2.5 that are for the benefit of the Client's directors, officers, employees and agents in trust for such directors, officers, employees and agents as third party beneficiaries under this Agreement.
- (c) Notwithstanding Paragraph 2.5(a) above, OCWA shall not be liable in respect of any Claim to the extent the Claim is covered by the Insurance.
- (d) Claims by the Client for indemnification from OCWA will follow the Indemnification Process as described in Schedule B.

Section 2.6 - Waiver of Consequential Damages

In no event shall the Parties be liable to each other, and each Party specifically waives as against the other, any and all claims for consequential, incidental, indirect, special or punitive damages resulting in any way from performance or non-performance of this Agreement, whether such damages are characterized as arising under breach of contract or warranty, tort (including negligence), fault, strict liability, indemnity, or other theory of legal liability.

Section 2.7 - Insurance

- (a) OCWA shall maintain, subject to reasonable availability, insurance coverage as described in Schedule E to this Agreement (the "Insurance") and the Client shall be an additional insured under the Commercial General Liability and Contractor's Pollution Liability insurance. The Client acknowledges that, given the unpredictability of the insurance market, deductibles and coverage limits may not be available (or may not be reasonably priced) from year to year. Insurance coverage is reviewed annually and the Client will be notified if there is a change in coverage or a price increase.
- (b) The Client specifically recognizes and agrees that neither OCWA nor the Crown bears any responsibility for the Pre-existing Condition(s) of the Facilities. As such, OCWA is not required to obtain insurance for this purpose and the Client has or will obtain its own insurance.
- (c) The Client shall be responsible for securing its own insurance for any other operations with which it is involved that are not part of the Services. The Client acknowledges that OCWA's Commercial General Liability and Contractor's Pollution Liability insurance shall not extend to cover any claims, exposure or liability beyond those directly linked to

the provision of Services by OCWA staff. The Client further acknowledges that it will have no recourse under OCWA's Commercial General Liability and Contractor's Pollution Liability insurance for any operations that do not form part of the Services, unless otherwise agreed to in writing by the parties

- (d) In the event of a claim under the Insurance, the payment of deductibles is as specified in Schedule E.
- (e) The policies of insurance obtained by the Client in subsection 2.7(e) shall be primary, notwithstanding other insurance obtained and maintained by OCWA.

Section 2.8 - Representations and Warranties of OCWA

OCWA represents and warrants to the Client that the following are true and correct:

- (a) that it has full power and authority and has taken all necessary steps to enter into and perform its obligations under this Agreement; and
- (b) OCWA's staff are trained and capable of providing the Services set out under this Agreement.
- (c) OCWA acknowledges that OCWA is the "employer" for the purpose of the *Occupational Health and Safety Act* and its regulations with regards to OCWA's staff and any subcontractors that OCWA hires to perform the Services set out under this Agreement.

ARTICLE 3 - RESPONSIBILITIES OF THE CLIENT

Section 3.1 - Obligations of the Client

- (a) The Client has the full power and authority to enter into and perform its obligations under this Agreement.
- (b) The Client has passed all necessary By-Laws and has obtained all necessary Authorizations to enable it to enter into and perform its obligations under this Agreement and to operate the Facility, (including, without limitation, any Authorizations required from the Local Planning Appeal Tribunal and the Ministry of the Environment, Conservation and Parks (MECP)), and the Authorizations are in good standing.
- (c) The Client has provided OCWA with a true copy of each of the Authorizations referred to in Paragraph 3.1(b) above prior to the date of this Agreement, including a certified copy of each municipal By-Law required to authorize the Client to enter into and perform its obligations under this Agreement.

- (d) As the owner of the Facility, the Client is fully aware of its responsibilities and obligations regarding the operation and maintenance of the Facility under Applicable Laws, including without limitation its responsibilities under the *Safe Drinking Water Act, 2002* (the “SDWA”) and the *Occupational Health and Safety Act* (the “OHSa”) and their regulations.
- (e) The Client confirms that there are no Pre-existing Conditions existing at the Facilities which would affect OCWA’s ability to operate the Facilities in compliance with the terms of this Agreement and Applicable Laws, other than what is listed in Schedule F. The Client acknowledges and agrees that the Client shall be responsible for addressing such Pre-existing Conditions.
- (f) The Client confirms that as of the date of execution of this Agreement, to the best of the Client’s knowledge, the Facilities are in compliance with all Applicable Laws.
- (g) The Client is not aware of the presence of any designated substances as defined under the *Occupational Health and Safety Act* (the “OHSa”) at the Facilities. The Client acknowledges and agrees that it is responsible for dealing with the designated substances (including but not limited to asbestos and lead) in accordance with the OHSa and its regulations and to notify OCWA of the location of any designated substances in the Facilities.

Section 3.2 - Covenants of the Client

The Client hereby covenants the following for the benefit of OCWA:

- (a) The Client agrees to promptly pay all amounts owing to OCWA under this Agreement as they become due, including any interest charges on late payments as determined under Section 4.9.
- (b) The Client agrees to promptly provide OCWA with any information relating to the Facility which could have a bearing on the provision of Services by OCWA, including but not limited to any engineering report prepared in respect of the Facility, any Authorization or amendment to any Authorization, as well as any governmental notice or order relating to the Facility.
- (c) The Client agrees to commit the necessary resources to appropriately address and comply with any such reports, Authorizations, notices or orders.
- (d) The Client shall repair, maintain and keep in a good working state, in accordance with good engineering practices and the standards reasonably applicable to an owner of a like facility, all water works that belong to or are under the control of the Client and that distribute water from the Facility.

- (e) The Client agrees to promptly commit the necessary resources to appropriately address any health and safety issues identified by OCWA which are the responsibility of the Client.

Section 3.3 - Exoneration and Indemnification of OCWA

- (a) Subject to Paragraph 3.3(c) below, the Client shall exonerate, indemnify and hold harmless OCWA, its directors, officers, employees and agents and Her Majesty the Queen in Right of Ontario, as represented by the Minister of the Environment, Conservation and Parks and all directors, officers, employees and agents of the Ministry of the Environment, Conservation and Parks (collectively referred to as the “Indemnified Parties”) from and against any and all Claims which may be suffered or incurred by, accrue against, or be charged to or recoverable from any one or more of the Indemnified Parties that is solely attributed to the Client’s negligence or wilful misconduct.
- (b) OCWA shall be deemed to hold the provisions of this Article 3 that are for the benefit of OCWA’s directors, officers, employees and agents and the other Indemnified Parties as defined above, in trust for all such Indemnified Parties as third party beneficiaries under this Agreement.
- (c) Claims by OCWA for indemnification from the Client will follow the Indemnification Process as described in Schedule B.
- (d) Notwithstanding Paragraph 3.3(a) above, the Client shall not be liable in respect of any Claim:
 - (i) to the extent that such Claim is covered by the Insurance; however, the Client shall be responsible for any deduction or self-insured retention amount in accordance with Schedule E; and
 - (ii) to the extent that such Claim is caused solely by OCWA’s negligence or wilful misconduct in providing the Services.

ARTICLE 4 - TERM, PAYMENT FOR SERVICES AND OTHER CHARGES

Section 4.1 - Initial Term of Agreement

This Agreement shall start on the Effective Date ***January 1st, 2023*** and shall continue in effect for an initial term of **five (5) years**, ending on ***December 31st, 2027*** (the “Initial Term”) and then may be renewed for successive five (5)-year terms (each a “Renewal Term”) subject to mutual agreement between the Parties, subject to Sections 4.3 and 6.1 of this Agreement.

Section 4.2 - Annual Price for the Initial Term

Subject to any adjustments made pursuant to other provisions of this Agreement, the Client shall pay OCWA a price for the Services for each Year of the Initial Term as described in Schedule D.

Section 4.3 - The Annual Price in Renewal Terms

The Annual Price for any Renewal Term will be as agreed between the Client and OCWA. If the Parties cannot agree on the Annual Price for any Renewal Term within six (6) months of the beginning of the last Year of either the Initial Term or the Renewal Term, as the case may be (the “Current Term”), then this Agreement will be terminated twelve (12) months after the last day of the Current Term unless the Parties mutually agree to extend the term of the Agreement. During this twelve (12) month period or mutually agreed upon extension period, the Client shall pay the Annual Price paid for the last Year of the Current Term, plus an adjustment for inflation calculated as described in Schedule D, pro-rated over that period.

Section 4.4 - Payment of the Annual Price

The Client shall pay OCWA the Annual Price for each Year of the Initial Term or any Current Term, in twelve (12) equal monthly payments, in advance, on the first day of each month. The first payment shall be due and payable on ***January 1st, 2023***. Payment shall be made by the Client by pre-authorized bank debit from a bank account designated by the Client.

Section 4.5 - Items Not Included in the Annual Price

The Annual Price, as further described in Schedule “D”, for each Year of the Initial Term and any Renewal Term, covers all charges for the Services, but does not include any charges for the following:

- (a) any Capital Projects (as defined in Section 4.7 below) or costs resulting from any failure of the Client to implement reasonably recommended Major Maintenance Expenditures;
- (b) costs or charges for services resulting from a Change in Applicable Laws;
- (c) Unexpected Expenses (as defined in Paragraph 4.8(a) below);
- (d) Hydro/Utility costs;
- (e) charges for any Optional Services that are provided by OCWA to the Client;
- (f) costs and charges associated with providing and/or maintaining continuous monitoring technology (SCADA technology) used in respect of the Facilities;

- (g) external audits as required by the DWQMS .

Section 4.6 - Major Maintenance Expenditures

- (a) “Major Maintenance Expenditures” means the charges for all non-routine, non-repetitive activities, repair or replacement of machinery or equipment required for the continuity of operations, safety, and operating performance of the Facilities that are necessary to prevent or correct a failure of any component of the equipment which is not included as part of Routine Maintenance including labour charges, together with the Service Fee or fixed fee basis.
- (b) No later than October 31st of each Year this Agreement is in force, or a date as the Parties may agree in writing, OCWA will provide the Client with rolling six (6)-year recommendations for Major Maintenance Expenditures required for the long term operation of the Facilities. The Client’s written approval of the estimate or revised estimate, in the form set out in Schedule “J”, authorizes OCWA to incur the Major Maintenance Expenditures included in the estimate (the “Approved Major Maintenance Expenditures”).
- (c) OCWA will invoice the Client for the Approved Major Maintenance Expenditures together with supporting documentation and the Client shall pay the invoice within thirty (30) days of the date of invoice.
- (d) OCWA will not be required to obtain the prior approval of the Client for any Major Maintenance unbudgeted item costing less than \$2,000.00.

Section 4.7 - Capital Projects

- (a) “Capital Projects” means changes and improvements to the Facilities which include the installation of new technology, improvements to the efficiency, performance and operation of the Facilities, replacement of major pieces of equipment, structural modifications to the Facilities and the construction and commissioning of new Facilities.
- (b) During the term of this Agreement, the Client may request OCWA to undertake Capital Projects for the Client. The terms and conditions of such Capital Projects including the fee shall be negotiated by OCWA and the Client.

Section 4.8 - Unexpected Expenses

- (a) “Unexpected Expenses” means unanticipated expenditures or additional costs which may include Major Maintenance Expenditures in addition to the Approved Major Maintenance Expenditures, that OCWA reasonably incurs in order to address a Change in Applicable Laws, any Uncontrollable Circumstance, any work required by regulatory order (e.g. MECP or MOL) or identified through an inspection (e.g. ESA, MECP, MOL) that is not

solely the result of OCWA's negligence in performing the Services or any other emergency situation, together with the Service Fee.

- (b) In the event that OCWA is required to incur Unexpected Expenses, the prior approval of the Client with respect to those Unexpected Expenses will be required only if time permits. Within ten (10) days of incurring the Unexpected Expenses, OCWA will provide the Client with a report detailing the reasons the Unexpected Expenses were incurred.
- (c) Any Unexpected Expenses will be invoiced to the Client together with appropriate supporting documentation, and the Client shall pay the invoice within thirty (30) days of the date of the invoice.
- (d) In the event that OCWA is required to incur Unexpected Expenses, OCWA will not be required to obtain the prior approval of the Client for any Major Maintenance Expenditure item costing less than \$2,000.

Section 4.9 - Interest on Late Payments

- (a) **Monthly Payment of Annual Price.** If the Client's monthly payment of the Annual Price is not available in OCWA's designated bank account on the agreed-to date of payment, OCWA will notify the Client that the funds were not available. Interest will be charged to the Client starting from the day after the payment was due in the account. Interest shall be paid at a rate determined by the Minister of Finance, from time to time, as payable on overdue accounts, in accordance with the Lieutenant Governor in Council under s.10(4) of the *Financial Administration Act*, R.S.O. 1990, c.F.12, plus any banking charges and an administrative fee.
- (b) **Other Invoices.** Invoices, other than for the monthly payment set out in Section 4.9(a) above, shall be paid no later than thirty (30) days from the date of the invoice and interest shall begin to accrue one (1) day after the payment is due.

Section 4.10 - Partial Payment of Disputed Invoices

- (a) If the Client wishes to dispute any portion of an invoice (including final invoices), within forty-five (45) days from the date on the disputed invoice, the Client must provide written notice to OCWA of the invoice and charge in dispute. If no written notice is received within the above forty-five (45) days, the invoice shall be deemed to be approved and interest shall be charged to the Client effective thirty (30) days from the date of the invoice.
- (b) If the Client disputes any portion of an invoice, the Client shall nonetheless pay to OCWA the undisputed portion of the invoice by the due date and shall also continue to pay all monthly payments of the Annual Price due on the first of each month. If any additional amount is finally determined to be payable to OCWA, the Client shall pay

OCWA the additional amount, plus interest as provided in Section 4.9 (a) above, within ten (10) days from the date of final determination.

- (c) If the disputed charges cannot be resolved within a reasonable time, the Parties shall seek resolution in accordance with Article 5, Dispute Resolution.

Section 4.11 - Hydro Costs/Utility Costs

OCWA is not responsible for paying any Hydro/Utility Costs in respect of the Facility. The Client shall pay all Hydro/Utility Costs. OCWA will reimburse the Client for an increase in electricity costs due to an increase in electricity usage caused by Operator inefficiency.

Section 4.12 - Optional Services

- (a) If requested by the Client, OCWA may provide Optional Services to the Client by Change Order as set out in Schedule H, provided that the Client and OCWA agree in writing to the specific scope of work required.
- (b) Unless otherwise agreed to in writing, fees for Optional Services which OCWA agrees to provide to the Client shall be billed directly to the Client on a time and materials basis as described in Schedule D.
- (c) Once OCWA has agreed to provide Optional Services to the Client, the Optional Services shall be subject to the terms and conditions of this Agreement, with any necessary changes having been made.
- (d) The labour and mileage rates described in Schedule D will be reviewed annually by OCWA and may be subject to change.

Section 4.13- Additional Services and Charges Associated with the MECP's Municipal Drinking Water Licensing Program

Further to Paragraph 4.5(g) above, the Client and OCWA acknowledge that this Agreement does not address any additional services that may be provided by OCWA to the Client that are associated with meeting the requirements of the MECP's Municipal Drinking Water Licensing Program other than as described in Schedule C. The Client and OCWA agree to negotiate, in good faith, any necessary amendments to this Agreement, including adjustments to the Annual Price, required to reflect any such additional services provided by OCWA as well as all costs and charges of OCWA in respect of the Municipal Drinking Water Licensing Program.

Section 4.14 - Changes to the Agreement

- (a) A Change to the Agreement may be carried out after execution of this Agreement by Change Order. A Change Order shall be based upon agreement between the Parties and shall be reflected in a Change Order Form.
- (b) The Parties shall execute a Change Order Form, which shall be substantially in the form found in Schedule H which will state their agreement upon all of the following:
 - (i) the new services to be provided;
 - (ii) fees for the services provided under the Change Order;
 - (iii) the extent of the adjustment to the maintenance and operating schedule, if any;
 - (iv) the extent of any adjustments to the Annual Price, if any; and
 - (v) all other effects that the change has on the provisions of this Agreement.

Section 4.15 – Chemical Costs

- (a) OCWA's initial Annual Price is calculated based upon an estimate of the annual cost of chemicals used in the operation of the facilities (the "Chemical Costs") in the amount of \$2000.00 as per Schedule D, Section 6, (the "Current Annual Chemical Cost"). However, due to the uncertainty of chemical rates, adjustments may have to be made for Chemical Costs increases/decreases as follows:
 - (i) If there is an increase of greater than 10% in total annual Chemical Costs over the Current Annual Chemical Cost in any Year of the Agreement, then the Client shall pay OCWA the entire amount of the increase over and above the Annual Price.
 - (ii) If there is a decrease of greater than 10% in total annual Chemical Costs over the Current Annual Chemical Cost in any Year of the Agreement, then the Client shall be compensated by OCWA for the entire amount of the decrease.
- (b) The calculations for the purpose of this section will take place as soon as it is reasonably possible after OCWA determines the annual Chemical Costs for the year. At the end of each year of this Agreement, OCWA shall deliver an account to the Client. If the Client owes monies to OCWA under this section, then an invoice for that amount will be sent to the Client. If OCWA owes monies to the Client, then a credit will be applied to the Client's account.
- (c) Should the decrease in total annual Chemical Costs be a direct result of an investment by OCWA, then there shall be no credit under (b) above, until such time as OCWA's investment is fully recovered.

ARTICLE 5 - DISPUTE RESOLUTION

Section 5.1 - Mediation

- (a) If a dispute arises between the Client and OCWA which cannot be resolved within 60 days from notice, then the issue shall be referred to a mediator.
- (b) The fees and expenses of the mediator shall be divided equally between the Parties.
- (c) Involvement in mediation is on a without prejudice basis and does not preclude and is not a bar to either Party pursuing whatever legal remedies may be available, including litigation.

ARTICLE 6 - TERMINATION

Section 6.1 - Termination of Agreement

- (a) At least one (1) calendar year before the expiry of the Current Term, the Client shall notify OCWA in writing whether it wishes to terminate or renew this Agreement at the end of the Current Term. However, OCWA reserves the right to decline to renew the Agreement by notifying the Client in writing of its decision to decline, within thirty (30) days of receipt of the Client's written request to renew.
- (b) During the Initial Term or any Renewal Term, this Agreement may only be terminated by either the Client or OCWA by giving at least thirty (30) days' notice in writing to the other Party if:
 - (i) there has been a material breach of the Agreement;
 - (ii) the Party complaining of the breach has given written notice of the breach to the other Party; and
 - (iii) the other Party does not correct the breach within thirty (30) days of receiving the notice.
- (c) If either Party disputes the existence of a breach or that the breach is material, then the dispute may be referred to mediation under Section 5.1 of this Agreement.

Section 6.2 - Early Termination

If this Agreement is terminated for any reason prior to the expiry of the Current Term, then the Client shall pay OCWA for all Services provided up to the date of termination, as well as any costs relating to the early termination, including but not limited to demobilization and severance costs (in accordance with the collective agreements between OCWA and its employees); the costs associated with the removal of remote monitoring and control systems installed by OCWA; the costs of cancelling agreements with suppliers and subcontractors; as well as any previously incurred Major Maintenance Expenditures, costs related to Capital Projects, Unexpected Expenses and Optional Services.

Section 6.3 - Inventory Count of Consumables/Supplies

OCWA and the Client will conduct an inventory count of consumables/supplies at the Facilities on the first day of the Initial Term or as soon as the Parties may agree. If OCWA no longer operates the Facilities at termination of this Agreement, OCWA shall either:

- (a) ensure that there is the same amount of consumables/supplies at the Facilities on the date of termination as there was on the first day of the Initial Term; or
- (b) reimburse the Client for any shortfall.

If the amount of consumables/supplies at the Facilities on the date of termination exceeds the amount on the first day of the Initial Term, the Client will either reimburse OCWA for any excess or OCWA may take possession of any excess, as OCWA may determine.

Section 6.4 - Final Settlement

If OCWA ceases to operate the Facilities, there shall be a final settlement of all accounts with respect to the Annual Price and any other expenses incurred by OCWA and amounts owing by or to the Client under this Agreement [**including, but not limited to any outstanding accounts, if any, owed to OCWA**], no later than ninety (90) days after OCWA ceases to provide the Services or thirty (30) days after OCWA has provided the Client with a final invoice, whichever comes later.

Section 6.5 - Transfer of Operations

Upon the termination of this Agreement, OCWA will return the following to the Client:

- (a) The log book for the Facilities.
- (b) The original operations manual(s) that were provided by the Client to OCWA at the commencement of the Services with all updates to the expiry date of the Agreement.
- (c) A list of emergency phone numbers from the contingency plan binders used by OCWA staff in respect of the Facilities.
- (d) Maintenance and repair records of equipment at the Facilities in electronic format.
- (e) The operational plan under the Drinking Water Quality Management Standard (DWQMS) and any Standard Operating Procedures (SOPs) identified in the operations plan.

Section 6.6 - Restrictions on Recruitment of OCWA's Employees

During the term of this Agreement and for one (1) year following the termination of this Agreement, the Client shall not solicit or recruit any employee of OCWA, nor induce any

OCWA employee to leave his or her employ to work at the Facilities, unless mutually agreed to in writing by the Client and OCWA.

ARTICLE 7 - GENERAL

Section 7.1 - Ownership of Technology

The Client acknowledges and agrees that in providing the Services, OCWA may utilize certain technology developed by or for OCWA, for example, OCWA's WMMS, Outpost 5 and/or PDM (the "Technology"). The Client further agrees that use of the Technology by OCWA with respect to the Facilities does not in any way give the Client any ownership or licensing rights in or to the Intellectual Property Rights to the Technology unless otherwise agreed to in writing between the Parties. For greater certainty, nothing in this Section 7.1 shall be interpreted as requiring OCWA to provide the Client with the Technology and any upgrades or other similar technology in respect of the Facilities as part of the Annual Price.

Section 7.2 - Agreement to Govern

If there is any inconsistency between the main body of this Agreement and any Schedule to this Agreement, then the provision in the main body of this Agreement shall govern.

Section 7.3 - Entire Agreement

This Agreement constitutes the entire agreement between the Client and OCWA with respect to the subject matter hereof and cancels and supersedes any prior understandings, undertakings, representations, warranties, terms, conditions and agreements, whether collateral, express, implied or statutory, between the Client and OCWA with respect thereto.

Section 7.4 - Amendments and Waivers

No amendment to this Agreement will be valid or binding unless it is in writing and duly executed by both of the Parties hereto. No waiver of any breach of any provision of this Agreement will be effective or binding unless it is in writing and signed by the Party purporting to give such waiver and, unless otherwise provided, will be limited to the specific breach waived.

Section 7.5 - Successors and Assigns

This Agreement shall operate to the benefit of and be binding upon, the Parties hereto and their successors and assigns. This Agreement may be assigned in the discretion of either Party.

Section 7.6 - Survival

All outstanding payment obligations, and the confidentiality obligation under Section 7.11, shall survive indefinitely the termination of this Agreement.

Section 7.7 - Severability

If any provision of this Agreement is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision and everything else in this Agreement shall continue in full force and effect.

Section 7.8 - Notices

- (a) All notices required or permitted to be given under this Agreement shall be in writing and shall be deemed to be properly given if hand-delivered, sent by email, sent by confirmed facsimile or by registered mail postage prepaid, return receipt requested, or by courier, to the Parties at their respective addresses as set forth below, or to such other addresses as the Parties may advise by like notice. Such notices if sent by email, facsimile, registered mail or courier shall be deemed to have been given when received.

- (i) if to the Client:

Corporation of the Township of Malahide

87 John Street South

Aylmer, ON N5H 2C3

Telephone: **519-773-5344**

Fax: **519-773-5334**

Email: **Sgustavson@malahide.ca**

Attention: **Mr. Sam Gustavson, Water/Wastewater Operations Manager**

- (ii) if to OCWA:

The Ontario Clean Water Agency

450 Sunset Drive, Suite 370

St. Thomas, ON N5R 5V1

Telephone: **519-791-2922**

Email: **Rtrepanier@ocwa.com**

Attention: **Robin Trepanier, Business Development Manager**

- (b) A Party to this Agreement may change its address for the purpose of this Section by giving the other Party notice of such change of address in the manner provided in this Section.

Section 7.9 - Counterparts

This Agreement may be executed in counterparts, each of which shall constitute an original and all of which taken together shall constitute one and the same instrument.

Section 7.10 - Freedom of Information

The Parties understand that this Agreement and any materials or information provided to OCWA through the performance of the Services may be subject to disclosure under the *Freedom*

of Information and Protection of Privacy Act, R.S.O. 1990, c.F.31, as amended, or as otherwise required by law.

Section 7.11 - Confidentiality

The Parties shall strictly maintain confidential and secure all material and information provided, directly or indirectly, by the other Party pursuant to this Agreement. Subject to relevant legislation related to freedom of information or the protection of privacy and any other laws, neither Party shall directly or indirectly disclose to any person, either during or following the term of this Agreement, any such material or information provided to it by the other Party without first obtaining the written consent of the Party who provided such material or information, allowing such disclosure.

Section 7.12 - Change in Circumstance

- (a) In the event that there is a change in circumstances or condition that is not covered under the terms of this Agreement, including, without limitation, a Change in Applicable Laws or change in the scope of services provided (a “Change in Circumstance”), then the Party asserting the occurrence of such Change in Circumstance shall give written notice to the other Party, and the written notice shall contain:
 - (i) details of the Change in Circumstance;
 - (ii) details of the inadequacy of this Agreement; and
 - (iii) a proposal for an amending agreement to remedy the Change in Circumstance.
- (b) The Parties shall negotiate in good faith any amendments to this Agreement necessary to give effect to or comply with the Change, including any adjustments to the Annual Price or the Services to be provided, which shall be effected as of the date of the Change. If the Parties dispute the existence of a Change, or the recommendation proposed to rectify the Change or the terms and provisions of any amendment to the Agreement, then either Party may refer the dispute to mediation under Article 5, Dispute Resolution.

IN WITNESS WHEREOF the Parties have duly executed this Agreement.

ONTARIO CLEAN WATER AGENCY

Date of Signing

By: _____
(Authorized Signing Officer)

Date of Signing

By: _____
(Authorized Signing Officer)

**THE CORPORATION OF THE
*TOWNSHIP OF MALAHIDE***

Date of Signing

By: _____
(Authorized Signing Officer)

Date of Signing

By: _____
(Authorized Signing Officer)

SCHEDULE A - The Facilities

For the purposes of this Agreement, the description of the Facilities are set out in the following document(s):

1. Malahide Distribution System -

(Drinking Water Licence No. # 051-101 Issue 4 dated May 12, 2020)

The Malahide Distribution System receives water from the Elgin Area Water Supply System.

The Malahide Distribution System services -Waneeta Beach, Port Bruce, Rush Creek Line, Copenhagen Area (sections of Imperial Rd. Imperial Rd., Jamestown Line, Nova Scotia Line W of Imperial, Dixie Estates, Vienna Line, Sparta Line, Calton Line, Pede Road, Dingle St., Hacienda Rd, Norton and Church Street (Orwell), a section of Rogers Rd. and a section of Highway 3 east of Aylmer). There are various size mains and construction material.

In Copenhagen, there is a booster pumping station which provides additional pressure north of the chamber. This station consists of two (2) pumps (1 duty and 1 standby), flow meter, pressure transmitter, piping, sump pump, two (2) chambers and is equipped with a pressure relief valve. This pumping station is connected to the APAM SCADA system which allows for operators to remotely monitor and control the station via computer. This station supplies potable water to residents on Imperial Road, Jamestown Line, Dixie Estates Subdivision and Nova Scotia Line west of Imperial Road. The flow meter and pressure transmitter require annual calibration.

Fire Hydrants: There are forty-seven (47) existing fire hydrants throughout the distribution system which are directly connected to Malahide owned water mains. (Refer to Master List below).

Sample Stations: There are twelve (12) existing sampling stations throughout the distribution system.

1. Sample Station 70: Orwell
2. Sample Station 71: Jamestown Line
3. Sample Station 72: Copenhagen
4. Sample Station 73: Imperial Road at Calton Line
5. Sample Station 74: Vienna Line
6. Sample Station 75: Imperial Road by Vienna Line
7. Sample Station 76: Hacienda Road
8. Sample Station 77: Jamestown Line and Rush Creek
9. Sample Station 78: Port Bruce—Colin Street
10. Sample Station 79: Rush Creek
11. Sample Station 701: Rogers Road
12. Sample Station 711: Talbot Street East (in front of Church)

Blow Offs, Hydrants & Dead Ends:

There are sixteen (16) located throughout the distribution system.

1. Church Street (Orwell)
2. Norton Street (Orwell)
3. Calton/Imperial Line
4. Vienna Line @ SS#74
5. 4826 Granger
6. 4950 Pede St.
7. 48181 Rush Creek Line near SS#79
8. Rush Creek Line @ SS#77
9. 3240 Levi Street (Bottom of hill-Port Bruce)
10. End of Amasa (Port Bruce)
11. Levi Street @ the beach (Port Bruce)
12. 3169 Beach Street (Port Bruce-Behind restaurants)
13. 3389 Waneeta Beach Drive (Waneeta Beach)
14. 49276 Shallom Street (Waneeta Beach)
15. 49189 Vienna Line
16. Hydrant #-7 at 49823 Talbot St E. @ Church

	CHAMBER	LOCATION	TYPE
1	PB01	Imperial and Bank St. (to feed Rusk Creek Line)	Meter, PRV, Isolation
2	PB02	Dexter Line and Bank Street	Meter, PRV, Isolation
3	PB03	3250Levi Street	Air Relief
4	Copenhagen Booster	Imperial Rd. and Nova Scotia Line	Pump Stn., Isolation, Metering
5	Dexter and Imperial	Dexter and Imperial	Chamber owned by PB Secondary-PRV owned by Malahide
6	Waneeta Beach	Imperial Road	Chamber owned by PB Secondary-PRV owned by Malahide

Chambers:

P.B. 01: This chamber is owned by the Port Burwell Area Secondary Water Supply System. The only piece of infrastructure owned within this chamber is the pressure regulating valve.

P.B. 02: This chamber is owned by the Port Burwell Area Secondary Water Supply system. The only piece of infrastructure owned within this chamber is the pressure regulating valve.

P.B. 03: This chamber is owned by the Township of Malahide. This chamber contains an air release valve for releasing air from the distribution system.

Dexter & Imperial: This chamber is owned by PBASWSS, PRV Malahide.

Water Lines:

1. Jamestown Line: Starting at Jamestown and Imperial Road going westerly to Rush Creek Line and southerly on Rush Creek Line ending at 47640 Rush Creek Line: 5,250 m consisting of various sized waterlines (6-inch, 4-inch, and 2-inch).

2. Talbot Street East: Starting at Elk and Talbot Street going easterly to Bethel United Church (49823 Talbot Line): 750 m of (6-inch) 150 mm waterline.

3. Dingle Street: Starting at 49749 Dingle Street going easterly to Hacienda Road: 1050 m of (8-inch) 200 mm waterline.

4. Hacienda: Starting at Hacienda and Dingle Street going northerly on Hacienda and ending at the Ontario Police College: 2,900 m of (8-inch) 200 mm waterline.

5. Port Bruce: Consists of approximately 3,700 m of (6-inch) 150 mm waterline.

6. Waneeta Beach: (Blair Drive and Waneeta Beach Drive): 780 m of (6-inch) 150 mm waterline.

7. Rogers Road South: 400 m of (8-inch) 200 mm waterline.

8. Grovesend South (Granger): 460 m of (4-inch) 100 mm waterline.

9. Copenhagen Area - Imperial Road: Starting from Imperial Road and N.S. Line going northerly to Calton Line-4,500 m of (6-inch) 150 mm and (8-inch) 200 mm waterline.

10. Pede Road: 125 m of (4-inch) 100 mm.

11. Orwell: (Norton and Church streets): 340 m of (6-inch) 150 mm waterline.

12. Dixie Estates (Phase 1) (Mervis Drive and parts of Wales Crescent): 800 m of (6-inch) 150 mm waterline.

13. Dixie Estates (Phase 2) (parts of Mervis Drive): 350 m of (6-inch) 150 mm waterline.

2. Aylmer Area Secondary Water Supply System

(Drinking Water Licence No. #302-101 Issue 4 dated May 7th, 2021)

The Aylmer Area Secondary Water Supply System (AASWSS) obtains water via the Elgin-Middlesex Pumping Station (EMPS). The EMPS receives treated water from the Elgin Area Primary Water Supply System. All components of the AASWSS located at the EMPS are operated and maintained under a separate agreement.

	CHAMBER	LOCATION	TYPE
1	AS-01	43664 Talbot Line	Isolation
2	AS-02	44004 Talbot Line	Drain
3	AS-03	44400 Talbot Line	Isolation and Air Relief
4	AS-04	East of Yarmouth Metal	Drain
5	AS-05	45024 Talbot	Air relief
6	AS-06	East of Quaker	Drain
7	AS-7A	Dead End in New Sarum	Air Relief
8	AS-7B	New Sarum and Belmont	Drain
9	AS-08	46278 New Sarum	Isolation and Air Relief
10	AS-09	46020 Talbot Line	Drain
11	AS-10A	Across 46283 Talbot Line	Drain
12	AS-10B	East of 46400 Talbot Line	Drain

13	AS-11	East of 46496 Talbot Line	Air Relief
14	AS-12	By Bridge/creek	Drain
15	AS-13	Talbot and Springwater (Chamber 13)	Isolation, Meter and Air Relief
16	AS-14		Drain
17	AS-15A	Across from 48103 Talbot	Isolation and Air Relief
18	AS-15B	48180 Talbot Line	Drain
19	AS-16	48470 Talbot Line (Chamber 16)	Isolation, Meter, Air Relief, Swab

The AASWSS consists of a 13.8 km of 18-inch PVC transmission main commencing at the EMPS and going easterly along Highway 3 and terminating at the municipal boundaries of the Town of Aylmer and the Township of Malahide. There are (19) inline chambers along the transmission line used for metering, draining, isolation and air relief. There are five (5) meter chambers which are connected to tertiary spur lines that come off of the 18-inch waterline. There are a total of seven (7) meter chambers, and two (2) pressure transmitters which require annual calibration.

Fire Hydrants: There are sixteen (16) fire hydrants that are owned by the AASWSS throughout the distribution system, (only 4 of these hydrants are in Malahide and are serviced by OCWA). The other 12 fire hydrants are directly connected to the Aylmer Secondary System and are located in Central Elgin and Central Elgin Water Department flushes and maintains these hydrants on an annual basis.(Refer to Master List below)..

Sample Stations: There are five (5) existing sampling stations located throughout the distribution system.

Blow offs: There are no blow offs on the distribution system.

3. Port Burwell Area Secondary Water Supply System

(Drinking Water Licence No. #303-101 Issue 3 dated April 16th, 2021)

The Port Burwell Area Secondary Water supply system receives treated water directly from the Elgin Area Water Treatment Plant.

The Port Burwell Area Secondary Water System is comprised of a 300 mm (12-inch) transmission main that commences at the MV1 metering chamber which is located east of the Elgin Primary Water Treatment Plant. The transmission main runs easterly along Dexter Line and continues northerly on Imperial road and easterly on Nova Scotia Line and terminates at boundary meter chambers V001 (Vienna) and EO38 (Port Burwell). There is also a 1.52 ML (334,000 Imperial Gallon) elevated water tower used to maintain pressures in the system when the tower is not being filled. There are three (3) re-chlorination facilities along the transmission main to maintain chlorine residuals. There are forty (40) inline chambers along the transmission line used for metering, draining, isolation and air relief. There are six (6) boundary billing meter chambers (P.B 01, P.B.02, EO38, V001, Waneeta Beach and Dexter/Imperial) which are connected to tertiary spur lines that come off of the 300 mm (12-inch) transmission line. There are five (5) additional meters, one (1) at the Port Burwell Tower, one (1) at EO14, and one (1) at the Lakeview Booster VC03 – One meter for new line and one meter for old line, in addition to a pressure transmitter at the Port Burwell Tower which require calibration. A total of nine (9) meters require annual calibration.

	CHAMBER	LOCATION	TYPE
1	E001 (Owned by EAPWSS)	43868 Dexter Line	Isolation
2	E002	43922 Dexter Line (VH)	Control Valves
3	E003	Across 44411 Dexter Line	Drain
4	E004	Across 44583 Dexter Line	Air Relief
5	E005	44804 Dexter Line	Drain
6	E006	Dexter and Yarmouth	Isolation
7	E007	45349 Dexter Line	Air Relief
8	E008		Drain
9	E009	46199 Dexter Line	Air Relief
10	E010	Dexter and Quaker (South)	Isolation
11	E011	Dexter and Quaker (North)	Drain
12	E012	Dexter and Quaker	Isolation
13	E013	By culvert	Drain
14	E014		Meter
15	E015	Top of hill north side	Air Relief
	E016		

16	E017	Dexter and Imperial	Isolation
17	E018	South side of creek	Isolation
18	E019	3344 Bank Street	Isolation
19	E020	Imperial Road	Air Relief
20	E021	4857 Imperial Road	Isolation
21	E022	50073 Nova Scotia Line	Air Relief
22	E023	50159 Nova Scotia Line	Isolation
	E024	Washed out—no chamber	
23	E025	Nova Scotia Line	Air Relief
24	E026	51003 Nova Scotia Line	Isolation
25	E027	Nova Scotia and Sawmill	Drain
26	E028	51959 Nova Scotia Line	Air Relief
27	E029	Nova Scotia Line	Drain
28	E030	52323 Nova Scotia Line	Isolation (West of Tower)
29	E031	52323 Nova Scotia Line	Isolation (Tower)
30	E032	52323 Nova Scotia Line	Isolation (East of Tower)
31	Tower	Base of Tower	Isolation
32	E033		Drain
33	E034	Nova Scotia Line (Lakeview)	Meter and Injection
34	E035		Isolation
35	E036	54667 Nova Scotia Line	Air Relief
36	E037	54971 Nova Scotia Line	Air Relief
37	E038		Meter
38	V001		Meter
39	PB01	Imperial and Bank St (to feed Rush Creek)	Meter, Isolation- PRV owned by Malahide
40	PB02	Dexter and Bank St.	Meter, Isolation- PRV Owned by Malahide
41	Dexter and Imperial	Dexter and Imperial	Meter, Isolation-PRV owned by Malahide
42	Waneeta Beach	Waneeta Beech @ Dexter Line	Meter, Isolation-PRV owned by Malahide

43	VC-01	Beginning of new Dexter Line	Isolation
44	DC-01		Drain
45	ARC-01		Air Release
46	DC-02		Drain
47	ARC-03		Air Release
48	VC-02	At Dexter Line Re-Chlorination	Isolation
49	VC-03	At Dexter Line Re-Chlorination	Isolation, meters, Injection, Check Valve
50		54667 Nova Scotia Line	Meter for 4" service line to Holy Cross Trinity Church

Port Burwell Elevated Water Tower:

Two (2) chemical metering pumps, one (1) duty and one (1) standby each rated at 1.4 L/hr. and flow paced to both water flow and chlorine residual concentration. Automatic switchover capability is included. A 100 L sodium hypochlorite solution tank with spill containment is on site along with a free chlorine residual analyzer and a 300 mm (12-inch) bi-directional magnetic flow meter to/from the elevated tower. This facility is connected to the APAM SCADA system which allows for operators to remotely monitor and control the station via computer.

Lakeview Re-chlorination Facility:

This facility is used to boost chlorine residuals to the Municipality of Bayham and to measure flows entering into the Municipality of Bayham. This chamber consists of two (2) chemical metering pumps (one duty and one standby each rated at 0.59 L/hr.), sodium hypochlorite solution tank, free chlorine residual analyzer and a 100 mm (4-inch) mag flow meter, pressure transmitter. This facility is connected to the APAM SCADA system which allows for operators to remotely monitor and control the station via computer.

MV1 / Dexter Line Re-Chlorination Facility Metering Chamber:

This facility is the beginning of the PBASWSS and the termination point for the Primary Water Board. This chamber is used to measure flows into the PSASWSS for billing purposes by the Primary Water Board and also used to allow operators control tower levels through the Pressure Regulating Valve. This chamber consists of piping, gate valves, SCADA controlled pressure regulating valve, automatic valve, by-pass line, ventilation system, and 8-inch flow meter and pressure relief valve, 2 chemical feed pumps SCADA, 2 mag meters, pressure transmitter. Certain components of this chamber are jointly shared between the PBASWSS and the Primary Water Board. A new joint ownership agreement is to be developed with details of ownership and chamber responsibilities. This facility is connected to the APAM SCADA system which allows for operators to remotely monitor and control the MV1 station via computer.

Fire Hydrants: There are eleven (11) municipal fire hydrants connected to the Port Burwell Secondary System and, these hydrants are owned by the PBASWSS located throughout the distribution system. (1 hydrant is at Quaker an Dexter and is flushed and serviced by Central

Elgin Staff which is included in the total of 11 hydrants). There is one private AVK fire hydrant that is not to be flushed, located on the private property of 54637 Nova Scotia Line. The one (1) fire hydrant is not owned by the PBASWSS and is not legally responsible to maintain this hydrant.(Refer to Master List below).

Sample Stations: There are five (5) existing sampling stations located throughout the distribution system.

Blow offs: There are no blow offs on the distribution system.

Master Hydrant List

Hydrant #	Civic Address	Hydrant Make and Model (YEAR)	Year	Flow Rating NFPA- Colour Code	Corrective Action Required	Water System (owner)
1	49831 Dingle St.	Century Valve (CV)		Orange		Malahide
2	49989 Dingle St.	CV	1995	Orange		Malahide
3	50170 Dingle St.	CV	2005	Red		Malahide
4	10342 Hacienda Rd.	CV	2005	Red		Malahide
5	South of 10716 Hacienda Rd. (OPC)	CV		Red	Isolation valve box broken	Malahide
6	49720 Talbot St.	CV	1998	Red		Malahide
7	49823 Talbot St.	CV		Red	Traffic flange low	Malahide
8	9186 Rogers St.	CV		Blue		Malahide
9	49300 Nova Scotia Line W.	CV	1997	Red		Malahide
10	49210 Nova Scotia Line W.	CV	1997	Red		Malahide
11	48430 Rush Creek Ln.	McAvity	2012	Orange	No #	Malahide
12	48411 Rush Creek Ln.	McAvity	2012	Red	No #	Malahide
13	48306 Rush Creek Ln.	McAvity	2012	Red		Malahide
14	48209 Rush Creek Ln.	McAvity	2012	Red		Malahide
15	49485 Dexter Ln.	McAvity	2012	Orange		Malahide
16	3451 Colin St.	McAvity	2012	Green		Malahide

17	E of 3253 Colin St.- (W of X of Levi and Colin)	McAvity	2012	Orange		Malahide
18	3330 Colin St.	McAvity	2012	Red		Malahide
19	3258 Colin St. (Across)	McAvity	2012	Red		Malahide
20	3174 Colin St.	McAvity	2012	Red		Malahide
21	3157 Hale St.	McAvity	2012	Red		Malahide
22	3240 Levi St.	McAvity	2012	Red		Malahide
23	3186 Levi St.	McAvity	2012	Red		Malahide
24	3164 Lindley St.	McAvity	2012	Red	Isolation valve box broken	Malahide
25	3371 Lakeview	McAvity	2012	Red		Malahide
26	3487 Imperial Rd.	McAvity	2012	Red	No #	Malahide
27	3421 Imperial Rd.	McAvity	2012	Red		Malahide
28	3585 Imperial Rd.	McAvity	2012	Red		Malahide
29	3411 Waneeta Beach	McAvity	2012	Orange		Malahide
30	49225 Blair Dr.	McAvity	2012	Orange		Malahide
31	49325 Dexter Ln.	McAvity	2012	Red	Tree Trimming req'd	PB Sec.
32	49365 Dexter Ln. (Across from 49352 Dexter)	CV	2012	Orange		PB Sec.
33	49428 Dexter Ln.	CV		Green		PB Sec.
34	3344 Bank St.	McAvity	2012	Green		PB Sec.
35	4849 Imperial Rd.	CV	2009	Orange		PB Sec.
36	5020 Imperial Rd. SE corner of Imperial and Nova Scotia	Darling B- 50-B-18	2007	Orange		PB Sec.
37	51003 Nova Scotia Ln.	CV	2006	Green		PB Sec.
38	52429 Nova Scotia Ln.	CV	2001	Blue		PB Sec.
39	53485 Nova Scotia @ Lakeview	CV	2001	Blue		PB Sec.
40	54667 Nova Scotia Ln.	AVK	1999	Green		PB Sec. - PRIVATE HYDRANT
41	5137 Imperial Rd.	CV	2001	Red		Malahide
42	Across from 5240 Imperial Rd. (NW corner of Jamestown & Imperial Rd.)	CV	2003	Red		Malahide

43	4895 Mervis Dr. (SE corner of Mervis and Jamestown)	CV	2003	Red		Malahide
44	49237 Jamestown Ln.	CV	2003	Red		Malahide
45	South of 5572 Imperial Rd.	CV	2003	Red		Malahide
46	5843 Imperial Rd. (NW corner of Imperial & Vienna Ln.)	CV	2003	Red		Malahide
47	49382 Vienna Ln.	CV	2003	Red		Malahide
48	6247 Imperial Rd. (NW corner of Imperial and Sparta Ln.)	CV	2003	Red		Malahide
49	6663 Imperial Rd.	CV	2003	Red		Malahide
50	48140 Talbot St.	McAvity-Brigadier M-67	1994	Blue		Aylmer Sec.
51	47980 Talbot St.	CV	2003	Blue		Aylmer Sec.
52	47320 Talbot St.	McAvity Brigadier M-67		Blue		Aylmer Sec.
53	5038 Wales Cr.	McAvity Brigadier M-67	2006	Red		Malahide
54	5100 Wales Cr.	McAvity Brigadier M-67	2006	Red		Malahide
55	5140 Wales Cr.	McAvity Brigadier M-67	2006	Red		Malahide
56	5180 Wales Cr.	McAvity Brigadier M-67	2006	Red		Malahide
57	47334 Church St. (NW corner of Norton & Church St.)	CV	2007	Blue		Malahide
58	48401 Talbot St.	CV		Blue		Aylmer Sec.
59	Across from 48789 Dexter Line (did not get flow tested in 2018)	CV		Red	Not Flow Tested in 2018 (New Subdivision)	PB Secondary

60	4975 Mervis Drive	McAvity	?	Not Flow tested	Not Flow Tested in 2018 (New Subdivision)	Malahide
61	Across from 4945 Mervis Drive	McAvity	?	Not flow tested	Not Flow Tested in 2018 (New Subdivision)	Malahide
62	49200 Mervis Drive	McAvity	?	Not Flow tested	Not Flow Tested in 2018 (New Subdivision)	Malahide

Aylmer Secondary Hydrants in Central Elgin (Maintained by Central Elgin Staff)

- 43870 Talbot Line
- 43920 Talbot Line
- 44004 Talbot Line
- 44415 Talbot Line
- 9462 Tower Road
- 44656 Talbot Line
- 45052 Talbot Line
- 45246 Talbot Line
- 9404 Belmont Road
- 9434 Powers Road
- SE corner of Penhale and Talbot
- 47138 Talbot Line

Port Burwell Secondary Hydrants in Central Elgin (Maintained by Central Elgin Staff)

- SW corner of Dexter line and Quaker Road (Hydrant was missed in 2018 Flow Test)

SCHEDULE B - Definitions

In this Agreement, the following terms are defined below or in the section in which they first appear:

“Agreement” means this agreement together with Schedules A, B, C, D, E, F, H, I and J attached hereto and all amendments made hereto by written agreement between OCWA and the Client.

“Annual Price” is defined in Section 1 under Schedule D of this Agreement.

“Applicable Laws” means any and all statutes, by-laws, regulations, permits, approvals, standards, guidelines, certificates of approval, licences, judgments, orders, injunctions, authorizations, directives, whether federal, provincial or municipal including, but not limited to all laws relating to occupational health and safety matters, fire prevention and protection, health protection and promotion, land use planning, environment, Building Code, or workers’ compensation matters and includes Environmental Laws.

“Approved Major Maintenance Expenditures” is defined in Paragraph 4.6(b) of this Agreement.

“Authorizations” means any by-laws, licences, certificates of approval, permits, consents and other authorizations or approvals required under Applicable Laws from time to time in order to operate the Facility.

“Authorized Representative(s)” is defined in Section 2.4 of this Agreement.

“Business Days” means a day other than a Saturday, Sunday or statutory holiday in Ontario.

“Business Hours” means the hours between 7:30 a.m. and 4:00 p.m. on a Business Day.

“Capital Projects” is defined in Section 4.7(a) of this Agreement.

“Change in Applicable Laws” means the enactment, adoption, promulgation, modification, issuance, repeal or amendment of any Applicable Laws that occur after the date this Agreement is executed by both Parties.

“Change Order” means the document shown in Schedule “H” describing the changes to the Agreement agreed to by both parties.

“Chemical Costs” is defined in Section 4.15 (a).

“Claim” means any claim, fine, penalty, liability, damages, loss and judgments (including but not limited to, costs and expenses incidental thereto).

“CPI Adjustment” means the percentage difference between the Statistics Canada Consumer Price Index, All Items (Ontario) (“CPI”) during June of the previous Year as compared to the CPI of June of the current Year. For example, the CPI Adjustment for Year 2021, is the CPI (Ontario) of June 2020.

“Current Annual Chemical Cost” is defined in Section 4.15(a).

“Current Annual Natural Gas Cost” is defined in Section 4.14 (a).

“Current Term” is defined in Section 4.3 of this Agreement.

“Crown” means Her Majesty the Queen in Right of Ontario.

“Drinking Water Quality Management Standard (DWQMS)” means the standard that sets out the minimum requirements for the operation of a drinking water system.

“Effective Date” is defined on Page 1 of this Agreement.

“Environmental Laws” means, any and all statutes, by-laws, regulations, permits, approvals, certificates of approval, licences, judgments, orders, judicial decisions, injunctions, and authorizations related to environmental matters or occupational health and safety and which are applicable to the operation of water treatment facilities.

“ESA” means the Electrical Safety Authority.

“Facilities” is defined in Paragraph (b) of the Recitals to this Agreement and further described in Schedule A.

“Hydro Costs” means hydroelectricity costs due to the operation and maintenance of the Facilities.

“Indemnification Process” means the procedures a Party is required to follow to obtain indemnification:

- (a) upon receipt of a claim, or notice of claim, the Party shall immediately forward such claim or notice of claim to the Indemnifying Party;
- (b) if requested by the Indemnifying Party, the Party shall provide all documentation relating to the claim, or notice of claim;
- (c) the Party shall take such steps necessary to protect its right to defend such claim, or notice of claim, and shall assign such right to the Indemnifying Party including any subrogation rights;

- (d) the Indemnifying Party shall not settle any claim, or notice of claim, without the prior written consent of the Party; and
- (e) the Party shall have the right to take-over the defence of any claim, or notice of claim and the Indemnifying Party shall fully co-operate with such action.

“Indemnified Parties” is defined in Paragraph 3.3(a) of this Agreement.

“Indemnifying Party” means the Party responsible for dealing with any Claims and paying out any Claims.

“Initial Term” is defined in Section 4.1 of this Agreement.

“Insurance” is defined in Paragraph 2.7(a) and further described in Schedule E.

“Intellectual Property Rights” means any copyright, trademark, patent, registered design, design right, topography right, service mark, application to register any of the aforementioned rights, trade secret, rights in unpatented know-how, right of confidence and any other intellectual or industrial property rights of any nature whatsoever in any part of the world.

“Major Maintenance Expenditures” is defined in Paragraph 4.6(a) of this Agreement.

“MECP” means the (Ontario) Ministry of the Environment, Conservation and Parks.

“MOL” means the (Ontario) Ministry of Labour.

“Natural Gas Costs” is defined in Section 4.14(a).

“OHSA” means the *Occupational Health and Safety Act*, R.S.O. 1990, c. O.1.

“Optional Services” means any services not included in the Annual Price that the Client and OCWA agree in writing to designate as “Optional Services” subject to Section 4.12.

“Outpost 5” means a remote monitoring and control system designed and constructed by OCWA and its consultants for the purpose of monitoring and controlling processes at water treatment facilities and their related parts.

“Overall Responsible Operator” means the person who will act as the overall responsible operator pursuant to Section 23 of O. Reg. 128/04 under the *Safe Drinking Water Act, 2002* (the “SDWA”) in respect of the Facility.

“Parties” is defined in Paragraph (d) of the Recitals to the Agreement.

“PDM” or “Process Data Management” means technology that allows process data to be entered into a format that can be viewed, manipulated and retrieved in the form of customized reports.

“Pre-existing Condition” is defined in Section 2.5(a) of this Agreement.

“Renewal Term” is defined in Section 4.1 of this Agreement.

“Routine Maintenance” means regular and/or repetitive activities recommended by the equipment or facility manufacturer or practices of a prudent operator to maintain the reasonably expected service life of the equipment and components thereof and includes preventative maintenance.

“SCADA” means Supervisory Control and Data Acquisition.

“SDWA” means the *Safe Drinking Water Act, 2002*, S.O. 2002 c.32.

“Service Fee” is defined and described in Schedule D.

“Services” is defined in Section 2.1 of this Agreement.

“Technology” is defined in Section 7.1 of this Agreement.

“Uncontrollable Circumstance” is defined in Paragraph 2.2(c) of this Agreement.

“Unexpected Expenses” is defined in Paragraph 4.8(a) of this Agreement.

“Utility Costs” means the costs of natural gas used in the operation of the Facility.

“WMMS” or **“Work Management Maintenance System”** means a computer program used to determine a program of preventive maintenance activities for equipment in a facility based on a risk analysis that considers factors such as equipment life expectancy, present value and replacement cost.

“Year” means the three hundred and sixty-five (365) day period from *January 1st* to *December 31st* of the calendar year.

SCHEDULE C - The Services

A - Services for Water Distribution System

Part 1 - Services included in the Annual Price

OCWA will provide the following services:

1. Staffing

- (a) certified operator(s) to attend at the Facilities as required under normal operating conditions on Business Days and during Business Hours and supply other personnel as may be necessary to operate, maintain and manage the Facilities under normal operating conditions in compliance with the requirements of Applicable Laws, Drinking Water Works Permit (DWWP) and the Municipal Drinking Water License (MDWL), terms of an Agreement, including management, operation, routine maintenance, administration and reporting;
- (b) supply a certified operator(s), who will be on call 24 hours per day, 365 days per year to respond to emergency conditions in respect of the operation of the Facilities, any such response to be charged to the Client in accordance with Schedule D herein or by way of an annual set amount;
- (c) provide all necessary training and continuing education for staff to ensure the continued operation of the Facilities, in accordance with all Applicable Laws;
- (d) new employees will receive locate training within their first six months of employment with OCWA in this Client area and provide to Client appropriate training records to verify training for each employee;
- (e) perform all the duties outlined in the Operational Plan;
- (f) provide an Overall Responsible Operator for the Facilities.

2. Regulatory Reporting

- (a) prepare and submit all reports to the Client and the MECP respecting the operation and maintenance of the Facilities as required by the MECP or any other regulatory agency or body having jurisdiction at the time of the Agreement;

- (b) review any inspection reports prepared by the MECP in respect of the Facilities and, subject to any approvals of the Client, either correct or negotiate with the MECP amendments to a deficiency;
- (c) report to the Client and the MECP non-compliance with a regulatory requirement;
- (d) maintain Drinking Water Quality Management System plan.;
- (e) OCWA shall provide a Facilities performance report, within forty-five (45) days of the completion of each quarter or such other period as the Client and OCWA may agree upon.
- (f) In the event that a regulatory report is required as a result of OCWA's negligence or misconduct, the Township will not be responsible for payment of such reports.

3. Operations Manuals

- (a) recommend to the Client, any section in the operating manuals that should be modified/changed to ensure that the operating manuals reflect the actual or revised approach to operating the Facilities; which recommendations may require third party assistance.

4. Initial Inventory

- (a) develop and maintain an inventory of the Client's original equipment tools and attractables in place as of the effective date of the Agreement;
- (b) develop inventory of critical spare parts in consultation with Owner.

5. Change In Laws

- (a) notify the Client of any modifications or changes to the Services or the Facilities required to comply with any Change in Laws and subject to Client approval make the required modifications or changes at an additional cost.

6. Facility Emergency Preparedness

- (a) prepare and revise, as necessary, an Emergency Plan for the Facilities consistent with the requirements of the Applicable Laws and the Client's Emergency Plans;
- (b) establish procedures for managing foreseeable emergencies or abnormal conditions affecting the Facilities.

7. General

- (a) OCWA will be responsible for snow removal and custodial services at the Facilities to maintain a safe work environment;
- (b) provide security at the Facilities by maintaining the existing fences and gates and locking same and notifying the Client of the need for any repairs;
- (c) provide mobile communications services.

8. Operations & Maintenance

- (a) in providing routine operation of the Facilities, OCWA will conduct:
 - (i) visual inspection of all buildings, equipment and Facilities insofar as can be observed while these are in service;
 - (ii) on an annual basis, visually inspect distribution system for leaks;
 - (iii) instrumentation cleaning, verification of meters;
 - (iv) flushing will be conducted on an as required basis to maintain adequate chlorine residuals;
 - (v) sampling and/or on-site analysis;
 - (vi) sample collection, preservation, packing and shipment for off-site analyses as required by Applicable Laws at the time of the commencement of this Agreement;
 - (vii) laboratory sampling, analysis and reports as required by Applicable Laws at the time of the commencement of this Agreement;
 - (viii) coordination of chemical supply with chemical vendors;
 - (ix) checks and response to alarms during Business Hours;
 - (x) inspection of process control equipment to ensure proper operation of all equipment [**disinfection system, pumps, valves, chemicals system**];
 - (xi) maintenance of daily on-site logs and records, including process control log sheets, laboratory data log sheets, bypass reports and routine checklists as required by Applicable Laws;
 - (xii) consolidation and processing of OCWA's internal operational data forms for statistical input into a reporting system for the *Client Connection* report;
 - (xiii) detection of significant water loss based on monitoring of [**flow readings, tower and pressures**];
 - (xiv) recording and analysis of flows, chemicals used, residuals and other process readings as required;
 - (xv) utilize Client's SCADA system (if applicable) for trending review and reporting, gap analysis, testing, and compliance;

- (xvi) before October 31st (as per agreement 4.6(b) prepare a report outlining the foreseeable Major Maintenance Expenditures and Capital Projects required for the Facilities, complete with cost estimates for the Client's budgeting purposes;
- (xvii) maintenance of vehicle(s) used in providing the services, including fuel and any other operating costs associated with such vehicle(s);
- (b) perform Routine Maintenance on the equipment used in the operation of the Facilities as specified in the maintenance management system;
- (c) implement and utilize a maintenance management system which shall record information related to the maintenance of the Facilities;
- (d) OCWA will use a metal detector and maps provided by the system owner to locate valves when performing locates, flushing, valve exercising, routine and emergency maintenance and shall hand dig up to 2' deep to expose and operate valves;
- (e) OCWA will systematically operate valves bi-annually to ensure all valves in distribution system are located and maintained and provide record to the owner of valves which are inoperable. OCWA shall operate valves in accordance with the QEMS Distribution Valves SOP.

9. Scheduled and Emergency Repairs: The Client will take the lead on the coordination of Scheduled and Emergency Repairs. OCWA shall provide assistance to the Township for Scheduled and Emergency repairs which occur during normal business hours, require less than 2 OCWA staff members, and are less than 4 hours in duration at no additional charge to the Client. For Emergency or Scheduled Repairs occurring outside of normal business hours, or that exceed the maximum 4 hour period during Business Hours, OCWA will bill the Township in accordance with Section 4.11 Optional Services.

10. Fire Hydrants:

- (i) semi-annual flushing, opening, exercising and winterizing of water hydrants as required; perform routine maintenance on each hydrant as per manufacturer specifications and in accordance with OCWA QEMS Hydrant Flushing SOP. Operators shall remove and inspect all hydrant ports and gaskets and replace gaskets as required and lubricate threads and all caps. Remove hydrant operating nut and lubricate as required;
- (ii) pump out barrels when required and ensure each hydrant is drained fully and all ports are secure. Re-inspect hydrants after fall flushing and pump out as required prior to winter freezing period annually;

- (iii) on an annual basis (spring) OCWA in conjunction with flushing of all hydrants will exercise hydrant auxiliary valves down 100%;
- (iv) OCWA will conduct fire flow testing and colour coding of all hydrants as per the NFPA 291. A new cycle of fire flow testing will commence every 5 year term.

11. Air Relief Chambers:

- (i) Annually OCWA will conduct an inspection of all air release chambers which includes manually testing the air release according to manufacturer's specifications, draining all meter, valve and air relief chambers. OCWA will then provide an inspection sheet with the results of the inspection, pictures and recommendations;
- (ii) On a monthly basis OCWA will conduct a visual inspection of all air release chambers by opening the chamber lid and visually inspecting the internal components of the chamber. OCWA will pump out the chambers on an as required basis;
- (iii) During wet weather periods where chambers require more frequent pumping, OCWA will conduct the required pumping and will bill the client on an hourly basis of \$65.00 plus mileage during regular business hours. In the event that pumping is required after hours the hourly rate will be \$97.50 plus mileage.

Part 2 – Services Specific to Malahide Distribution System:

- (a) Calibrate 1 main line flow meter and 1 pressure transmitter on an annual basis;
- (b) Malahide may add up to 1,000 meters of waterline with no extra cost over the term of the contract;
- (c) Annually OCWA will conduct the first 15 emergency locates on the Malahide water system which do not exceed 1.5 hours, each locate thereafter will be billed as an Optional Service in accordance with Section 4.11 of this Agreement;
- (d) Annually OCWA will provide the first five (5) (after hour) call-outs on the Malahide water system which do not exceed four (4) hours per call; each call-in thereafter will be billed to the Municipality as an Optional Service in accordance with Section 4.11 of this Agreement;

- (e) An allocation of \$5,000.00 for Routine and Breakdown maintenance has been included in the Annual Price. OCWA will provide a report on the status of this allocation at each quarterly meeting with the total amount to be spent by year end.

Part 3 – Services Specific to Aylmer Area Secondary Water Supply System:

- (a) Calibrate 7 main line flow meters and two pressure transmitters on an annual basis;
- (b) Record, analyze and report water flow from the main line meters to the Township on a monthly basis;
- (c) Quarterly and Annual inspections and pumping of the 5 tertiary metering chambers on the **Aylmer Area Secondary Water Supply System**: (Tower Rd., Belmont Rd., Norton St., Springwater Rd., and Rogers R.);
- (d) OCWA will be responsible for receiving, performing and closing of all locates and documentation on the **Aylmer Area Secondary Water Supply System** which do not exceed 1.5 hours each, any time exceeding 1.5 hours will be billed to Client. Any locates exceeding 100 per year will be billed to Client. Monthly reports of locates completed will be provided to Client;
- (e) Annually OCWA will provide the first five (5) (after hour) call-outs on the **Aylmer Area Secondary Water Supply System** which do not exceed 4 hour;, each call-out thereafter will be billed as an Optional Service in accordance with Section 4.11 of this Agreement;
- (f) An allocation of \$5,000.00 for Routine and Breakdown maintenance has been included in the annual charge. OCWA will provide a report on the status of this allocation at each quarterly meeting with the total amount to be spent by year end.

Part 4 – Services Specific to Port Burwell Area Secondary Water Supply System:

- (a) Calibrate 9 main line flow meters and 1 pressure transmitter on an annual basis;
- (b) Record, analyze and report water flow from the main line meters to the Township on a monthly basis;
- (c) Operation of the water tower including inspections taking place every 5 years;
- (d) Monitor and pay for the annual inspection of cathodic protection system at the elevated tank;
- (e) OCWA will be responsible for receiving, performing and closing of all locates and documentation on the Port Burwell Secondary Water System which do not exceed 1.5

hours each, any time exceeding 1.5 hours will be billed to Client. Any locates exceeding 100 per year will be billed to Client. Monthly reports of locates completed will be provided to Client;

- (f) Annually OCWA will provide the first five (5) (after hour) call-outs on the Port Burwell Secondary Water Supply System which do not exceed 4 hour;, each call- out thereafter will be billed as an Optional Service in accordance with Section 4.11 of this Agreement;
- (g) An allocation of \$5,000.00 for Routine and Breakdown maintenance has been included in the annual charge. OCWA will provide a report on the status of this allocation at each quarterly meeting with the total amount to be spent by year end.

Part 5 - Optional Services (To Be Provided at the Request of the Client)

OCWA may provide additional services to the Client including but not limited to the Optional Services set out below:

5.1 Operation Related Services

- (a) operation manual updates;
- (b) water meter installation/ replacement/reading;
- (c) water service disconnect and reconnect;
- (d) new water service installation or connection inspection;
- (e) well cameraing/well level monitoring;
- (f) clearwell cleaning;
- (g) back flow prevention measures.

5.2 Watermain Services

- (a) contract repair for watermain breaks including road restoration;
- (b) inspection of repaired water pipes;
- (c) thawing water pipes;
- (d) new watermain conditioning;
- (e) watermain swabbing;
- (f) leak detection;

5.3 Engineering Services

- (a) engineering services;
- (b) energy audits;
- (c) water tower painting and repair;
- (d) provide assistance and/or complete applicable funding applications;
- (e) initial condition inspection;
- (f) financial plans for water infrastructure.

5.4 **Hydrant Services**

- (a) hydrant repairs;
- (b) painting hydrants.

5.4 **Information Technology Services**

- (a) SCADA development and maintenance.

SCHEDULE D - The Annual Price And Other Charges and Adjustments

1. Annual Price for the Initial Term

In accordance with Section 4.2 and subject to any adjustments made pursuant to other provisions of this Agreement, the Client shall pay OCWA a price for the Services for each Year of the Initial Term in the following amounts (the “Annual Price”):

- (i) For Year One from **January 1st, 2023** through to **December 31st, 2023** inclusive:
\$266,430.48
Malahide Water System Annual Price- \$ \$83,146.48
Aylmer Secondary System Annual Price- \$92,557.90
Port Burwell Area Secondary System Annual Price- \$90,726.10
- (ii) For Year Two and subsequent Years: **\$266,430.48** plus the CPI Adjustment, plus an adjustment for maintaining the Insurance which is renewed annually by OCWA. The CPI Adjustment shall be calculated (using June CPI + 2%) as soon as necessary information is available from Statistics Canada. In Year Two of the Agreement, the CPI Adjustment shall be added to the Annual Price for Year One of the Agreement and for subsequent Years, on a cumulative basis.

2. Payment of the Annual Price

In Year One of the Initial Term, the monthly payment of the Annual Price shall be \$ 22,202.54.

Malahide Water System Monthly Price - \$6,928.87
Aylmer Secondary Water System Monthly Price - \$7,713.16
Port Burwell Secondary Water System Monthly Price - \$7,560.51

3. Optional Services

Unless otherwise agreed to in writing, fees for Optional Services which OCWA agrees to provide to the Client shall be billed directly to the Client on a time and materials basis at the following rates which may be adjusted on an annual basis:

- (a) Labour rates on Business Days, Monday to Friday, (0730 to 1600) shall be billed at \$90.00/hour/person for an operations manager and assistant operations manager, and \$65.00/hour/person for an operator or mechanic, plus vehicle expenses at \$0.75/km/vehicle;

- (b) Labour rates on statutory holidays shall be billed at \$132.50/hour/person for an operations manager and assistant operations manager, and \$97.50/hour/person for an operator or mechanic, with a minimum eight (8) hour charge, plus vehicle expenses at \$0.75/km/vehicle;
- (c) Labour rates at all other times (after hours and on weekends) shall be billed at \$132.50/hour/person for an operations manager and assistant operations manager, and \$97.50/hour/person for an operator or mechanic, with a minimum four (4) hour charge, plus vehicle expenses at \$0.75/km/vehicle;
- (d) Costs for parts, equipment and supplies, and outside labour charges (i.e., contractors), used by OCWA staff to provide the Optional Services shall be billed to the Client, and the Client will pay such costs together with a Service Fee;
- (e) Costs for Optional Services provided by OCWA staff (i.e. engineering services, project management, SCADA, innovation technology, process optimization and asset management services) will be based on OCWA's technical services hourly rate schedule. This rate schedule will be set by OCWA at the beginning of each calendar year and will be reviewed by the Client as part of the Optional Services approval process.

4. Service Fee

“Service Fee” means an additional fee of 15% charged to the Client when OCWA purchases materials, supplies, equipment or contractor's services on behalf of the Client.

SCHEDULE E - Insurance

A summary of the insurance coverage that OCWA will arrange in respect of the facilities is described below:

Property Insurance

Insured Perils: All Risks of direct physical loss or damage (including Flood and Earthquake) occurring during the term of this policy, except as hereinafter excluded.

Policy Limits:

- Replacement Value
- Extra expenses
- Expediting expenses

Insurable Values: Malahide Water Distribution System - \$300,000

Port Burwell Secondary Water Distribution System - \$3,236,500

Aylmer Secondary Water Distribution System - \$500,000

(Subject to Annual Review by the Client.)

Deductibles: Earthquake – *Facilities and Locations in Earthquake Zones*
5% of the value of the property insured subject to a minimum of \$250,000

Earthquake – *All Other Facilities*
3% of the value of the property insured subject to a minimum of \$100,000.

Flood – *Facilities and Locations in 100 year Flood Zones*
5% of the value of the property insured, subject to a minimum amount of \$250,000.

Flood – *Facilities and Locations in 500 year Flood Zones*
3% of the value of the property insured, subject to a minimum amount of \$250,000.

Flood - *All Other Facilities*
3% of the value of the property insured, subject to a minimum amount of \$100,000. Facilities and Locations, including Newly Acquired until assessed by Insurer(s).

Water Damage - \$130,000

Sewer back-up

2% of the value of the property insured, subject to a minimum amount of \$130,000.

Portable Generators

3% of the value of the property insured, subject to a minimum amount of \$24,500.

Installations, Hook Liability or Portable Water Treatment Facility - \$27,500.

Testing & Commissioning - \$27,500

All Other Losses:

<u>Deductible</u>	<u>Facilities & Location Insurable Value</u>
<u>\$27,500</u>	with total value up to \$25,000,000

The above is subject to change on an annual basis.

Where the Client's property is repaired or replaced, the Client will pay the deductible. Where OCWA's property is repaired or replaced, OCWA will pay the deductible. In cases where both the Client's and OCWA's property is repaired or replaced, the deductible will be paid by both the Client and OCWA *pro rata* in accordance with the total loss.

Property Insured: Property of every kind and description as declared except as excluded under the "Property Excluded" section of the policy.

Boiler & Machinery Insurance

Coverage: Sudden & Accidental Breakdown of a Pressure, Mechanical, Electrical Object including Production Machinery as defined under the policy. Coverage applies to the loss of the "Object" itself and for loss to other insured property directly damaged by the "Accident", except as excluded under the policy.

Limit: **Maximum** \$100,000,000 per Accident.

Deductibles: \$5,000 for Property Damage per Accident for the year 2023; subject to changes on an annual basis.

Where the Client's property is repaired or replaced, the Client will pay the deductible. Where OCWA's property is repaired or replaced, OCWA will

pay the deductible. In cases where both the Client's and OCWA's property is repaired or replaced, the deductible will be paid by both the Client and OCWA pro rata in accordance with the total loss.

Automobile Insurance

Coverage: Automobile Liability for OCWA owned or leased vehicles.

Limit: \$5,000,000 per Occurrence

Commercial General Liability Insurance

Coverage: Third party liability including legal fees, for property damage and/or bodily injury as caused by OCWA's negligence arising out of OCWA's operations of the Facilities.

Limit: \$5,000,000 per Occurrence.

Deductible: \$50,000 for the year 2023; subject to change on an annual basis.

Contractor's Pollution Liability/Professional Liability Insurance

Coverage: Professional Liability: To pay on behalf of OCWA sums which OCWA shall become legally obligated to pay as damages and/or claims expense as a result of claims made first against OCWA, and reported to the insurer, in writing during the policy period, automatic extended reporting period (90 days), and by reason of any act, error or omission in professional services rendered or that should have been rendered by OCWA, or by any person for whose acts errors or omissions OCWA is legally responsible, and arising out of the conduct of OCWA's profession.

Pollution legal liability covering third party property damage and bodily injury and clean-up costs for pollution conditions arising out of the performance of the services provided by OCWA.

Limit: \$10,000,000 per loss on a Claims Made basis with automatic, extended reporting periods for Pollution Liability. \$10,000,000 aggregate.

Limit: \$5,000,000 per loss on a Claim Made basis for Professional Liability Insurance

Deductible: \$50,000 for the year 2023; subject to change on an annual basis.

SCHEDULE F - List of Pre-Existing Conditions

As per Paragraph 3.1(e) of this Agreement, the following Pre-existing Conditions have been identified:

1. **Malahide Distribution System:**

Copenhagen Pumping Station: The pumping station currently doesn't have the capacity to provide fire flow rates on all fire hydrants connected to the pumping station distribution system. Additionally, current flow rates are not capable of providing a minimum scouring velocity of 2.50 feet/second as recommended as a minimum in AWWA C-651 Disinfecting Water Mains.

2. **Aylmer Area Secondary Water Supply System:**

There are no pre-existing conditions on the Aylmer Area Secondary Water Supply System.

3. **Port Burwell Area Secondary Water Supply System:**

The Port Burwell Area Secondary Water Supply System is at risk of losing a section of waterline located west of Port Bruce due to Lake Bank erosion. This could result in a catastrophic failure of the transmission line.

PBASWSS- the 3.5km section of 12'' watermain west of Pt. Bruce was re-aligned in 2016 and is no longer at risk of failure due to erosion. However, the re-aligned section did not abandon the watermain located on Old Dexter Line which is still in service and is at risk of failure due to shoreline erosion which will not impact the overall operation of the pipeline.

SCHEDULE H - Change Order Form



Change Order Form

Change Being Requested			
Name of Change:			
Ontario Clean Water Agency (OCWA)	Per: _____ Name: _____ Title: _____	Date (YYYY/MM/DD):	
Client	Per: _____ Name: _____ Title: _____	Date (YYYY/MM/DD):	

Adjustment	
Check Appropriate Type of Change	
Apply (Y/N)	Type of Change:
	Adjustment to Annual Price
	Change to Service
	Impact

Adjustment to Annual Price
Description – Attach Additional Documentation if Required

[illegible]

Cost Breakdown for Change in Services			
Item		One-time Cost	Annual Cost
	Total Cost:		

SCHEDULE J - Expenditure Request and Approval to Proceed

Hub Name
 Hub Address
 City, ON Code
 Phone: XXX-XXX-XXXX Fax: XXX-XXX-XXXX

PART 1

Facility Name:			
Project Name:			
Project Number:		Estimated Project Start Date:	
Total Estimated Cost of the Project:	\$	Detailed Quote Attached:	<input type="checkbox"/> Yes <input type="checkbox"/> No

It is recognized that this is a budget estimate and the final price may vary. OCWA will provide additional justification where the final invoice price varies from the estimate by more than 10%

Type of Project:

- ☐ Maintenance Project
 ☐ Out of Scope Work
 ☐ Contingency
 ☐ Emergency
 ☐ Health & Safety

Description of Project or Expenditure:**Submission Prepared By:**

 Name (Print) Signature Date

Authorized Representative for the Ontario Clean Water Agency

PART 2**Approval to Proceed:**

☐ Approved
 ☐ Declined
 ☐ Deferred
 Reason if Declined or Deferred

The Ontario Clean Water Agency is authorized to proceed with the project/expenditure according to the description and cost estimate provided above. This may include but not limited to the hiring of sub-contractors, consulting firms, etc. as required. The Municipality agrees to pay OCWA the costs associated with this work upon its completion based on the terms of the Municipality's agreement with OCWA.

Approved By:

 Name (Print) Signature Date

Authorized Representative for the Municipality

PART 3

OCWA Internal Use Only:			
Client PO / Project #:		Date:	
Project Start Date:		Project Completion Date:	
OCWA Invoice #		Date:	
OCWA Account Code:		OCWA Work Order #	



Report to Council

REPORT NO.: CLERK-22-08
DATE: June 16, 2022
ATTACHMENT: None
SUBJECT: **APPOINTMENT OF INTEGRITY COMMISSIONER/CLOSED MEETING INVESTIGATOR/OMBUDSMAN SERVICES**

Recommendation:

THAT Report No. CLERK-22-08 entitled “Appointment of Integrity Commissioner/Closed Meeting Investigator/Ombudsman Services” be received;

AND THAT the Township partner in a joint RFP with the County of Elgin and interested Local Municipal Partners to secure a new service provider to fulfill the transparency and accountability roles of Integrity Commissioner, Closed Meeting Investigator and Municipal Ombudsman.

Background:

Bill 68, Modernizing Ontario’s Conflict of Interest Act was introduced on November 16, 2016 and advanced through the legislative process requiring municipalities implement requirements for codes of conduct, conflict of interest and integrity commissioner services by March 2019.

In October 2017, a Request for Proposal (RFP) was jointly issued by Elgin County and Middlesex County seeking an Integrity Commissioner, Closed Meeting Investigator and Ombudsman. Elgin County’s Municipal Partners were invited to participate in this agreement. Through Council resolution, the Township chose to utilize the service of Independent Resolutions Inc., represented by Mark McDonald for these services. The original agreement term was set to expire ending on December 31, 2020 and was extended for another two years to expire on December 31, 2022. Mark McDonald recently provided notice, in conformance with the requirements of the Agreement, that Independent Resolutions Inc. will no longer provide services to County and Municipal Partners after September 30, 2022.

Comments/Analysis:

Combining the transparency and accountability of these three roles: Integrity Commissioner, Closed Meeting Investigator, and Municipal Ombudsman, will provide one point of contact for Council, members of the public, and staff.

Integrity Commissioner

The Integrity Commissioner is an independent accountability officer given authority under the *Municipal Act, 2001*, including Ontario Regulation 55/18 Codes of Conduct and the *Municipal Conflict of Interest Act, 1990*. Municipalities are required to at all times have an Integrity Commissioner. The Integrity Commissioner is responsible for administering relevant portions of Council's Code of Conduct. This includes conducting investigations in an independent manner, in accordance with the accountability and transparency provisions of the *Municipal Act, 2001* and the Council Code of Conduct Policy, for both Council and Boards.

The Integrity Commissioner has a statutory right to delegate tasks to qualified person(s) which may include the provision of legal advice, particularly where the Integrity Commissioner is not licensed to practice law.

Closed Meeting Investigator

The Closed Meeting Investigator is responsible for investigating complaints relative to Section 239.2 of the *Municipal Act, 2001*, in an independent manner, as to whether the municipality has complied with the open meeting requirements of the *Municipal Act, 2001* or a Municipal Procedural By-Law in respect of a meeting or part of a meeting that was closed to the public. The Closed Meeting Investigator's duties include reporting on the investigation.

Municipal Ombudsman

The Municipal Ombudsman is responsible for investigating and reporting to Council in an independent manner on any decision or recommendation made or act done or omitted in the course of the administration of the municipality and its local boards in accordance with section 223.13(1-2) of the Act. The Act designates the Ombudsman as the default investigator for municipalities that have not appointed their own.

The County will take the lead in developing a joint RFP for Elgin County and interested Local Municipal Partners. The County will take the lead in developing and issuing the RFP in consultation with participating LMPs. In addition to creating a workflow efficiency on behalf of local municipalities who are interested in this approach, a jointly issued RFP for multiple participating municipalities is likely to provide a greater response to the RFP. Jointly retained services will also support our efforts to maintain similar standards for service throughout Elgin County.

The County will take the lead in developing and issuing the RFP in consultation with participating Local Municipal Partners. In addition to creating a workflow efficiency on behalf of local municipalities who are interested in this approach, a jointly issued RFP for multiple participating municipalities is likely to provide a greater response to the RFP. Jointly retained services will also support our efforts to maintain similar standards for service throughout Elgin County.

Additionally, the intent of the proposed RFP is to allow the municipalities, each with their own Code of Conduct, to cross-appoint the same successful Proponent(s) as its Integrity Commissioner and/or Closed Meeting Investigator and/or Municipal Ombudsman, on the terms acceptable to each respective Council and the Successful Proponent.

Financial Implications to Budget:

There is no impact to the 2022 Budget at this time. Revised pricing will be presented to Council once the results of the RFP have been received.

Relationship to Cultivating Malahide:

The Cultivating Malahide Integrated Community Sustainability Plan (ACSP) is based upon four pillars of sustainability: Our Land, Our Economy, Our Community, and Our Government.

One of the goals that support the “Our Local Government” Strategic Pillar relates to “Embody Financial Efficiency throughout Decision-Making”. Reviewing existing policies and by-laws provides flexibility to respond to changing legislation.

Submitted by:	Approved by:
A. Adams, Manager of Legislative Services/Clerk	A. Betteridge, Chief Administrative Officer



Report to Council

REPORT NO.: CAO-22-09
DATE: June 16, 2022
ATTACHMENT: WT Infrastructure Solutions Final Report
SUBJECT: **FEASIBILITY ANALYSIS FOR POTABLE WATER
DISTRIBUTION TO THE VILLAGE OF SPRINGFIELD**

Recommendation:

THAT Report No. CAO-22-09, and the presentation of WT Infrastructure Solutions Inc., both entitled “Feasibility Analysis for Potable Water Distribution to the Village of Springfield” be received;

AND THAT the Final Report of WT Infrastructure Solutions Inc. entitled “Village of Springfield - Feasibility Study and Action Plan for Potable Water Distribution” and dated May 13, 2022 be received;

AND THAT Administration be directed to proceed accordingly with the “Next Steps” of the Final Report;

AND THAT Administration follow-up with a report to Council with regards to proceeding with a Class EA process for servicing the Village of Springfield.

Background:

The Township’s “Service Delivery & Organizational Review - Final Report 2020” included amongst its recommendations that, in order to secure financial sustainability, the Township should establish a 3-year business plan related to servicing the Village of Springfield for new growth and assessment. This was recommended to be a top priority (i.e., a “Do Now”) item, and was built upon prior recommendations from the Township’s 2019 Development Charge Background Study.

Accordingly, the Council included a “Springfield Water Servicing Expansion Feasibility Study” as a new project in the 2021 budget, and in April Requests for Proposals (“RFP”) were called for the Township to obtain proposals to prepare a “Feasibility Analysis and Action Plan” for potable water distribution to the Village of Springfield.

In June, 2021, WT Infrastructure Solutions Inc. was selected by the Township to undertake the Feasibility Analysis and Action Plan Project.

Comments/Analysis:

The purpose and scope of this project was to obtain the preparation of a feasibility analysis and action plan for potable municipal water servicing (as well as possible future expansion of existing sewage infrastructure) in and around the Springfield area of the Township to pre-assess the proposal from an economical cost/benefit perspective, and evaluate possible funding and cost-recovery options and strategies prior to initiating a Municipal Class Environmental Assessment.

Also, when there are discussions about providing municipal services to existing areas there are often common pre-conceived notions that doing so will cause extra financial burden on ratepayers (i.e., by causing rates to increase), force the de-commissioning of wells/septic systems, and/or cause water/sewer rates to increase, etc.

The intent of retaining an experienced firm to conduct a feasibility analysis and develop an action plan is that it would allow the Township Staff and Council to have confidence that any infrastructure investments would be undertaken to achieve the highest return (socially, economically, and environmentally) to the community, while ensuring that current ratepayers are not shouldering all of the burden.

The consultants' presentation and attached final report provides their findings. Township staff have been involved throughout the process.

The final report provides for "Next Steps" under section 9.6 (page 41 of the Final Report). It is recommended that Staff be authorized to complete a specific and detailed economic analysis of Alternative C in consideration of proceeding with the required Class EA.

Financial Implications to Budget:

This Feasibility Analysis report was included in the 2021 Budget as a growth-related initiative funded from the DC Reserve.

Moving forward, however, initiating and proceeding through the Class Environmental Assessment ("EA") process will have implications on the Budget. Such could be considered as moving forward with servicing Springfield, however it is the planning process that includes formal public consultation, and, once finalized, would place the Township in a position to be eligible for grants/funding opportunities from upper government. Deciding to move forward through the Class EA process does not signify that the Township is indeed moving forward with an infrastructure project, but rather placing itself in a ready position once defined and adopted financial opportunities arise.

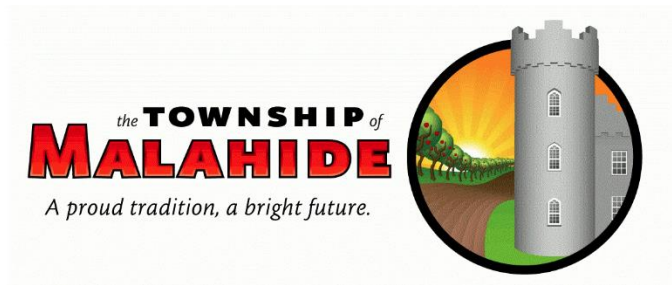
It is recommended that Staff follow-up to Council with a report that would provide more details and approximate costs associated with the Class EA process.

Relationship to Cultivating Malahide:

The Cultivating Malahide Integrated Community Sustainability Plan (ICSP) is based upon four pillars of sustainability: Our Land, Our Economy, Our Community, and Our Government. It was developed in consultation with community members to provide direction on environmental, culture, social, and economic objectives.

One of the goals that support the “Our Land” Strategic Pillar relates to managing a secure supply of clean water, including initiating discussions with partners (e.g. Ontario Police College) to upgrade water distribution infrastructure. This Strategic Pillar also seeks to “Promote growth in a responsible manner to minimize encroachment on natural and agricultural lands”.

Submitted and Approved by:
Adam Betteridge, Chief Administrative Officer



DRAFT REPORT

FEASIBILITY STUDY AND ACTION PLAN FOR POTABLE WATER DISTRIBUTION

May 13, 2022



May 13, 2022

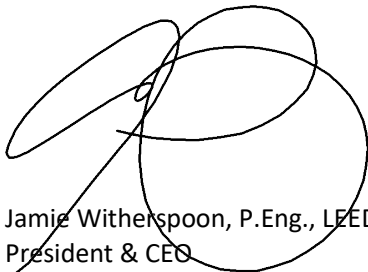
The Corporation of the Township of Malahide
87 John Street South
Aylmer, ON N5H 2C3

Re: Feasibility Study and Action Plan for Potable Water Distribution to The Village of Springfield
21-2026 | VERSION 5


WT Infrastructure Solutions Incorporated (WT) is pleased to submit the following report as part of the project delivery for the Feasibility Study and Action Plan for Potable Water Distribution to The Village of Springfield summarizing the background and alternative evaluation portion of the project.

If you have any questions or comments, please do not hesitate to contact the undersigned.

Respectfully submitted,
WT INFRASTRUCTURE SOLUTIONS INCORPORATED



Jamie Witherspoon, P.Eng., LEED AP
President & CEO


17-370 Stone Road P.O. Box
25002 Stone Road PO
Guelph, ON N1G 4T4


jamie.witherspoon@
wtinfrastructure.ca


519.400.6701


@solutions_wt

COVER LETTER**TABLE OF CONTENTS**

1	INTRODUCTION	4
1.1	Background	4
1.2	Scope of Work.....	4
2	BACKGROUND REVIEW	4
2.1	Planning Studies.....	5
2.2	Study Area Population	7
2.3	Service Area	8
2.4	Water System Description	8
2.4.1	Water Distribution	8
2.4.2	Wastewater Treatment.....	9
2.5	Current Domestic Water Demand	9
2.5.1	Domestic Water Demand.....	9
2.6	Projected Water Demand	9
2.6.1	Domestic Water Demand.....	10
2.6.2	Emergency Water Demand	10
3	PROBLEM IDENTIFICATION.....	12
3.1	Service Requirements	12
3.2	Water Supply Affordability	13
4	WATER SERVICING DESIGN CRITERIA.....	17
5	ALTERNATIVES DEVELOPMENT.....	18
5.1	Alternative A: Do nothing	18
5.2	Alternative B: Ground Water Supply	18
5.2.1	Alternative B.1: Full build-out groundwater supply.....	18
5.2.2	Alternative B.2: Interim Solution Groundwater Supply + Ultimate Build-out Connection to Watermain.....	18
5.3	Alternative C: Ground Level Storage.....	22
5.4	Alternative D: In-Line Booster and Elevated Storage	24
5.5	Alternative E: Direct Transmission Main from Aylmer Secondary Water Supply System	26
5.6	Alternative F: Joint Elevated Storage.....	28

6	CAPITAL COST ESTIMATE.....	30
7	EVALUATION OF ALTERNATIVES	30
8	FINANCIAL IMPLICATIONS.....	33
8.1	General Project Viability	33
8.2	Basic Cost Recovery	34
8.3	Growth Implications.....	35
8.4	Financing Opportunities.....	36
8.5	Current Development Charges Impact	37
8.6	Relationship to Wastewater Capacity.....	37
9	CONCLUSIONS AND RECOMMENDATIONS.....	39
9.1	Conclusions	39
9.2	Bulk Water Pricing.....	40
9.3	Timing Consideration	40
9.4	Funding Requirements.....	40
9.5	Innovative Approaches	41
9.6	Next Steps	41

LIST OF FIGURES

Figure 1-1	Aerial photo of the Village of Springfield (right) within the Township of Malahide (left).....	4
Figure 2-1	Proposed Springfield Settlement Area Expansion - Background Report & Recommendations..	6
Figure 3-1	Current and Future Water Demand Allocation	12
Figure 5-1	- Alternative B.1: Full build-out groundwater supply.	20
Figure 5-2	- Alternative B.2: Interim Solution Groundwater Supply + Ultimate Build-out Connection to Watermain	21
Figure 5-3	- Alternative C: Ground Level Storage.	23
Figure 5-4	- Alternative D: In-Line Booster and Elevated Storage.	25
Figure 5-5	- Alternative E: Direct Transmission Main from Aylmer Secondary Water Supply System.....	27
Figure 5-6	- Alternative F: Joint Elevated Storage.....	29
Figure 8-1:	Township Debt Relationship to Development.....	35

LIST OF TABLES

Table 2-1	Projected Population Growth in Malahide	5
Table 2-2	Land allocation for future expansion	7
Table 2-3	Current Population of Settlements Areas in Malahide	7
Table 2-4	Estimated units and population growth for the Village of Springfield	8

Table 2-5 Current Domestic Water Demand	9
Table 2-6 Projected Domestic Water Demand	10
Table 2-7 Projected Emergency Water Demand	11
Table 3-1 - Alternative Affordability Approaches	15
Table 3-2 Affordability Metrics	16
Table 6-1 - Capital Cost Estimate Summary.....	30
Table 7-1 - Alternative comparison.....	32
Table 8-1 Project Viability Advantages/Disadvantages	33
Table 8-2: Funding Option Scenarios	37

APPENDIX

Appendix A – Assumptions

1 INTRODUCTION

1.1 Background

The Township of Malahide (The Township) has identified the Village of Springfield as a preferred location for redeployed development within the Township. Homes and businesses in the Village of Springfield are currently serviced by individual, private, on-site water systems. To support the future growth of the Village and to distribute water to a larger area without negative impacts to the underlying aquifer caused by increased demand, the Township has identified the need to expand the existing water supply network to provide a municipal water supply to the Village. The project study area is illustrated in the below.



Figure 1-1 Aerial photo of the Village of Springfield (right) within the Township of Malahide (left)

The basis of this study is to determine the feasibility of connecting Springfield to the existing Aylmer Water Supply System to provide a municipal water supply to the Village and to accommodate future growth. The intent of this report is to identify key areas of concerns, opportunities, and challenges related to the water system implementation, with the intent to provide a clear understanding of the project drivers and limitations.

1.2 Scope of Work

We have developed the following scope of work to achieve the project objective:

- Review of the background information and studies (i.e., conditions of the existing water systems, water demand projections, and results of past planning studies).
- Preparation of an evaluation and recommendation report detailing opportunities and challenges related to the water system implementation for the future growth of Springfield.
- Virtual meeting to review the report summary.
- Issuance of final report.

2 BACKGROUND REVIEW

The following information was used as background material to inform the development of this report.

1. Township of Malahide Official Plan – Office consolidation, April 2021
2. Five Year Official Plan Update and Comprehensive Review

3. Provincial Policy Statement published by the Province of Ontario, 2020
4. Development Charges Background Study – Watson & Associates Economists Ltd, June 2021
5. Township of Malahide, Service Delivery & Organizational Review – Performance Concepts, Final Report, 2020
6. Village of Springfield Agri-Industrial Park Water Supply Municipal Class EA - Revised Project File Report, December 2010

2.1 Planning Studies

In 2001, the Township of Malahide adopted an Official Plan to provide the strategy and policy framework to guide development and growth over a 25-year period.

A “5-year Update and Comprehensive Review” amendment to the Official Plan was approved in 2013, and another 5-year Update and Comprehensive Review has been adopted by Malahide Council, however, it is awaiting final approval by the County of Elgin. The adopted Update and Comprehensive Review proposes that the Township’s future growth be focused on the Village of Springfield, as will be discussed further below.”

Projections of long-term change in population and associated housing and employment are fundamental to a community’s ability to plan for land use, housing needs, land requirements, transportation and infrastructure, financing, recreational and social needs, and other basic services. Existing population, growth projections and the Provincial Policy Statement play a fundamental role in the development of the Plan.

Developed by the Ontario Ministry of Municipal Affairs and Housing, the Provincial Policy Statement (“PPS, 2020”) published by the Province of Ontario highlights the importance of preserving agricultural lands for agricultural use within new settlement areas. Thus, the preservation of highly productive agricultural lands and the accommodation of non-farm development on lands are the key policy issues of the Official Plan.

Growth projections begin with the population growth as the foundation for future housing and population needs. New projections are required to estimate the growth that will occur over the long period. Thus, background studies where population and growth projections for the new settlement and existing areas within the Township set the basis of the Official Plan. According to the Development Charge Study, the Township of Malahide is expecting a population growth of approximately 0.85% annually in the next 25 years. The table below summarizes the long-term population forecast reported in the Official Plan.

Table 2-1 Projected Population Growth in Malahide

Year	Population	Average Annual Growth Rate	Persons per Unit
2019	9,820	1.0%	3.13
2029	10,780	1.0%	3.10
2039	11,450	0.6%	3.08
2045	11,860	0.6%	3.07

The Village of Springfield, due to the highest concentration and diversity of land uses, is the focus of future growth and development as it contains the highest concentration and diversity of land uses and

is the only settlement area in the Township with municipal sanitary sewers, providing a strong potential to offer full municipal services in the future.

The lands to be allocated to Springfield under the proposed Official Plan Review are divided between the following land use designations:

- **Next 5 years: 79 ha**
 - Residential (including Home-Based Industrial): 43 ha
 - Commercial: 6.2 ha
 - Industrial: 29.8 ha
- **Next 25 years: 93.78 ha**
 - Future Urban Growth: 93.78 ha

The proposed expanded Springfield settlement area (subject to approval of the Township's 5-year Official Plan Review as proposed by and, based on the Background Report and Recommendations - Township of Malahide Official Plan Update) is detailed below:

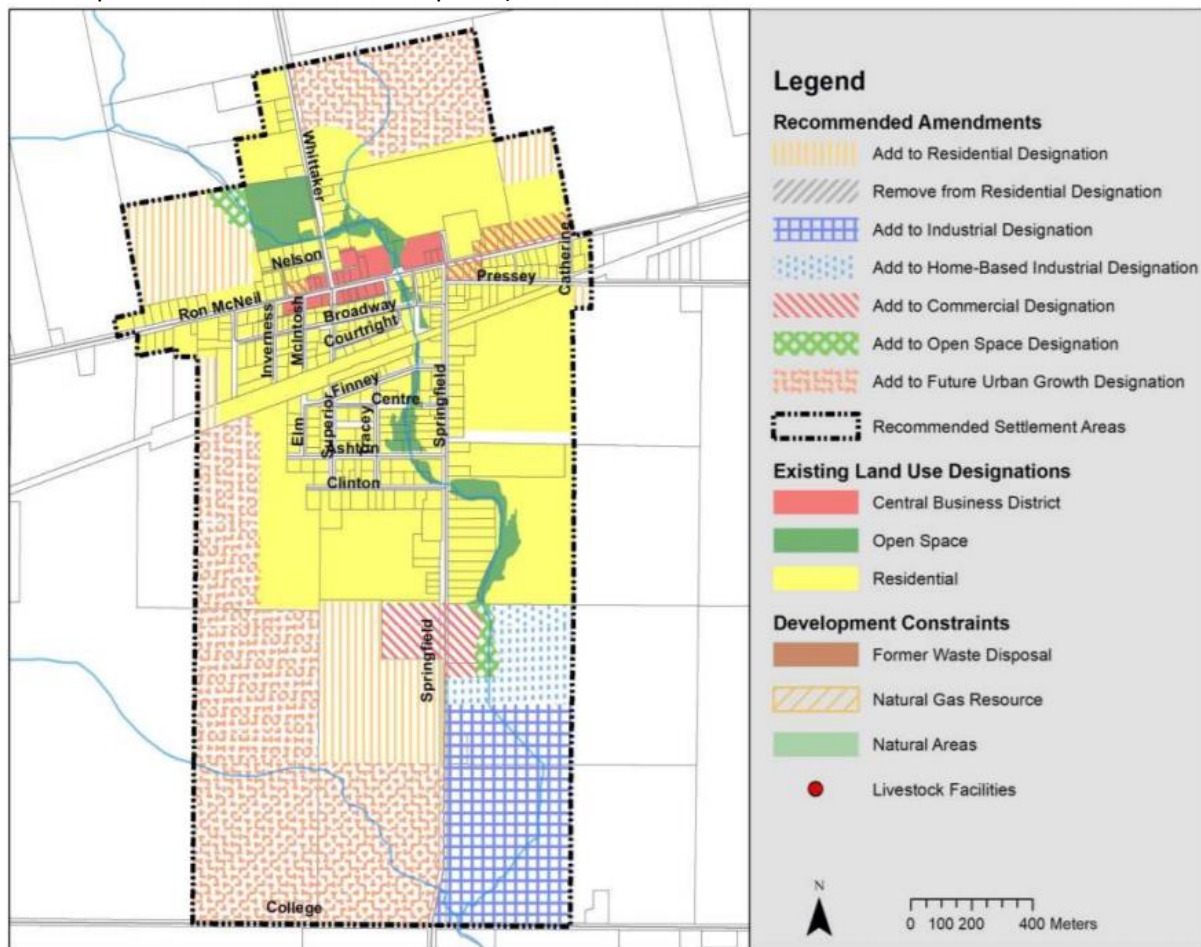


Figure 2-1 Proposed Springfield Settlement Area Expansion - Background Report & Recommendations

For the next 5 years, 54% of the land available for development will be used for residential expansion. Being a high-level recommendation by the Township's planning consultants (who are tasked with updating the Official Plan), the proposed expansion of the Springfield Settlement Area provides no details regarding how the 93.78 ha of land allocated for future urban growth would be divided in the

next 25 years if the Official Plan Review is ultimately adopted. Thus, for the purpose of this report, we assumed that the same 54% of the total 93.78 ha will be allocated to residential land use.

Table 2-2 Land allocation for future expansion

	Residential	Commercial + Industrial
Next 5 years	43.0 ha	36.0 ha
Next 25 years	50.6 ha	43.1 ha
Total	93.6 ha	79.1 ha

The zoning by-law permits single-detached dwelling lots with a density of 20 units per hectare (low-density). If municipal water services are extended then it is anticipated that other dwelling types such as street-front townhouses, low-rise apartments or nursing homes would further increase the density of development, contributing towards achieving a more complete and inclusive community. For the purposes of this report, only the low-density development has been considered.

2.2 Study Area Population

Current

The population in Malahide has been gradually increasing over the past 25 years. The table below summarizes the population for settlement areas based on the Development Charges Background Study by Watson & Associates Ltd.

Table 2-3 Current Population of Settlements Areas in Malahide

	Villages		Aylmer	Hamlets	Rural Areas	Total
	<i>Springfield</i>	<i>Port Bruce</i>				
Population	890	625	670	2,455	5,177	9,820

Proposed

The Development Charge Study estimated a net population increase of 793 in the next 25 years based on available wastewater capacity from the sewage lagoons as of April 2019. However, it should be noted that the potential growth of Springfield could be higher than what was reported by Watson & Associates Ltd if not constrained to the wastewater capacity. This is discussed in detail in Section 8.6.

Considering a low-density of 20 units per hectare as reported in the Official Plan, and a land available for residences equal to 93.6 ha (paragraph 2.1), a total of 1,872 potential units could be build in the Village in the next 25 years. Based on an average of 3.4 person per low-density unit reported by Watson & Associates Ltd in the Development Charges, a total of 6,365 new residents are expected. Data are summarized in the table below.

Table 2-4 Estimated units and population growth for the Village of Springfield

	Projected	
	Wastewater Treatment Capacity Allocation	Not constrained by Wastewater Treatment Capacity
Population	793	6,365
Units	237	1,872

2.3 Service Area

The following were considered as areas of service for the water system implementation and have been used to calculate the current and projected water demand/wastewater production:

- Municipal services within the Village of Springfield.
- Water Emergency needs within the Village of Springfield.
- New residential growth within the Village of Springfield settlement area.

2.4 Water System Description

2.4.1 Water Distribution

Water for the Village of Springfield is currently provided by individual private wells. With the growth pressures in the service area, the Township is examining extending the existing municipal water distribution system from the Town of Aylmer to the Springfield settlement area to allow for future development and intensification opportunities.

The Aylmer Area Secondary Water Supply System is part of the Elgin Area Primary Water Supply System that was built in 1969 and provides municipal drinking water to the communities of London, St. Thomas, Aylmer, Bayham, Central Elgin, Malahide (i.e., Ontario Police College) and Southwold. When the system was constructed, a chamber was provided at Rogers Road and Talbot Line with the intention of providing a future service to the Village of Springfield. The system is characterized by two supply pumps (1 duty, 1 standby) at the terminal reservoir complex in St. Thomas with rated capacity of 8,640 m³/d, re-chlorination facilities, and a transmission main to the Town of Aylmer.

From the Aylmer Area Secondary Water Supply System, water is pumped to the Town of Aylmer by the Elgin Middlesex Pumping Station (EMPS) via a 450 mm diameter transmission main along Highway 3 (Talbot Line). The Aylmer Water Supply System provides potable water to Aylmer, to a limited number of residents in Malahide Township east of the Town, and to the Ontario Police College (OPC). The water tower in the Town of Aylmer provides back-pressure to the transmission main by gravity when pumps are not running at the EMPS.

Municipal Drinking Water License #044-101 allocated 4,233 m³/d of the Elgin Area Primary Water Supply System to the Town of Aylmer. The Town of Aylmer typically takes between 2,500 and 3,500 m³/d and provides potable water to Aylmer and to a limited number of residents in Malahide east and the Ontario Police College.

Any changes to the daily volume of water taken by each party to the Elgin Area Primary Water Supply System will need to be negotiated with the Board.

2.4.2 Wastewater Treatment

The Village of Springfield is serviced by a public sewage collection system. Sewage is pumped from the Village of Springfield to an intermediate sewage pumping station located at the Ontario Police College and is then directed to the Town of Aylmer Lagoon facility for treatment.

When the Village of Springfield sewage collection system was installed, the Town of Aylmer Sewage Treatment Lagoons were upgraded, and 469 m³/d of treatment capacity was assigned to the Township of Malahide.

Approximately 285 dwellings were identified through a review of 2018 aerial photography and, based on this estimation and the data reported in the Municipal Class EA, the Village is currently utilizing an average of 240 m³/d of the 469 m³/d allotment.

2.5 Current Domestic Water Demand

2.5.1 Domestic Water Demand

The current water demand is based on the domestic water supply needs. The calculation of the domestic water demand can be based on the type of unit or the number of occupants in each unit. In the EA, the water demand was based on sewage pumping data reporting that the Village of Springfield produced an average of 240 m³/d of sewage which is equivalent to 270 L/c/d. Based on water records, the Ontario Police College is currently using 160 m³/d of water of the total 240 m³/d reported; however, we have not been able to confirm the source of that information. Moreover, the average daily sewage production used to calculate the domestic water demand in the Municipal Class EA represents the average flow over a 24-hour period and does not reflect the fact that there are maximum day and peak hour demands in the system each day which will exceed the average value by a significant amount.

Maximum day and peak hour demands must be considered since the distribution systems should be capable to adequately handle the peak hourly demand or maximum day demand without overtaxing the source or resulting in excessive pressure loss in the distribution system.

The calculation of maximum day and peak hour demands can be based on the MECP Design Guidelines and data are reported in Table 2-5. These quantities will be carried through the design to establish system sizing requirements and to establish the agreement quantities.

Table 2-5 Current Domestic Water Demand

Domestic Water Demand		Reference
Average Daily Flow	240 m ³ /d	MECP Design Guidelines (Sec. 3.4.2) ~ 285 units x 3.12 people per unit x 270 L/c/d
Maximum Daily Flow	660 m ³ /d	MECP Design Guidelines (Sec. 3.4.2) ~ 240 m ³ /d x 2.75 maximum day factor
Peak Hour Flow	41.3 m ³ /hr (or 11.4 L/s)	MECP Design Guidelines (Sec. 3.4.2) ~ 240 m ³ /d x 4.13 peaking factor

2.6 Projected Water Demand

The projected water demand of a water system is based on the following components:

1. **Domestic water supply needs** – These are the demands that can be expected to be used daily within the system by users.
2. **Emergency water supply needs** – These are demands that are typically associated with fire flow demand, equalization storage and emergency storage.

2.6.1 Domestic Water Demand

As indicated in Section 2.5.1, the calculation of the domestic water demand can be based on the type of unit or the number of occupants in each unit. In Section 2.1, it was estimated that a total of 1,872 potential units could be built in the Village in the next 25 years. Therefore, the following water demand scenarios will apply:

Per Capita Calculation - Municipal Supply 270 to 450 L per capita per day (L/c/d) (MECP Section 3.4.2 – Domestic Water Demands). For the Village of Springfield, a water supply of 300 L/c/d is reasonable. This would equate to:

- $1,872 \text{ units (projected)} \times 3.4 \text{ people per unit} \times 300 \text{ L/c/d} = 1,909 \text{ m}^3/\text{day} + 240 \text{ m}^3/\text{d}$ (current water demand of existing units) = $2,150 \text{ m}^3/\text{d}$ 13.

In accordance with MECP design guidelines (Table 3-1 Peaking Factors Section 3.4.2) for a population of 3001-10000 the peaking factors for the Village of Springfield should be as follows:

- Minimum rate factor (minimum hour) – 0.50
- Maximum day factor – 2.00
- Peak Rate Factor (peak hour) – 3.00

Therefore, the estimated domestic water demand for the Village of Springfield is detailed in the table below.

Table 2-6 Projected Domestic Water Demand

	Projected Domestic Water Demand		References
	Domestic Water Demand	No. of units served	
Average Daily Flow	2,150 m ³ /d	285 existing units + 1,872 new units	MECP Design Guidelines (Sec. 3.4.2) ~ (n° of units x 3.4 people per unit x 300 L/c/d) + 240 m ³ /d current water demand of existing units
Maximum Daily Flow	4,299 m ³ /d		MECP Design Guidelines (Sec. 3.4.2) ~ Avg daily flow x maximum day factor
Peak Hour Flow	268.6 m ³ /hr (74.6 L/s)		MECP Design Guidelines (Sec. 3.4.2) ~ Avg daily flow x peaking rate factor

2.6.2 Emergency Water Demand

It is a municipal responsibility to meet critical water demands during fire flow and emergency conditions. Treated water storage facilities should be designed to allow maintenance of adequate

flows and pressures in the distribution system during peak hour water demand, and to meet emergency conditions.

In accordance with the MECP design guidelines (Section 8), the Total Treated Water Storage Requirement is equal to the following:

- Total Treated Water Storage Requirement = A + B + C

Where, A = Fire Storage; B = Equalization Storage (25% of maximum day demand); and C = Emergency Storage (25% of A + B).

The estimated emergency water demand for the Village of Springfield is detailed in the table below.

Table 2-7 Projected Emergency Water Demand

Emergency Water Demand			
	Full build-out	Constrained to Wastewater Capacity*	Reference
Fire Storage (A)	168.6 L/s (or 1,214 m ³ of storage)	38 L/s (or 273.6 m ³ of storage)	MECP Design Guidelines (Sec. 8) - Table 8-1: Fire Flow Requirements based on equivalent population
Equalization Storage (B)	1,075 m ³	324 m ³	MECP Design Guidelines (Sec. 8) ~ 25% of the maximum day demand
Emergency Storage (C)	572 m ³	149.4 m ³	MECP Design Guidelines (Sec. 8) ~ 25% of A + B
Total Emergency Water Demand (A + B + C)	2,861 m ³	747 m ³	

* Calculated based on current allowable build-out per data reported in Table 2-4

3 PROBLEM IDENTIFICATION

3.1 Service Requirements

Based on the Official Plan, the future growth of Springfield could accommodate 1,872 potential units in the next 25 years. However, the growth of the Village is currently limited by the wastewater treatment capacity.

The 285 existing units in the Village currently use 240 m³/d of the total 469 m³/d of treatment capacity at the Aylmer Wastewater Treatment Facility. Therefore, the remaining 229 m³/d of treatment capacity available can only support a population of 805 (approximately 237 new potential units at 3.4 person per unit). Any further growth will trigger a need to expand the wastewater treatment system either with Aylmer, or independently.

Additionally, to meet the future growth of the Village, an additional 4,299 m³/d of potable water needs to be supplied. To date, out of 4,233 m³/d already supplied by the Elgin Area Primary Water Supply System, only 733 m³/d of water is potentially available and may be used to serve the existing 285 units in the Village of Springfield. However, to meet the total water demand for the future growth of the Village, the Township would need to stipulate an agreement with the Aylmer Water Supply System or with the Elgin Area Primary Water Supply System to allocate an additional 3,566 m³/d of potable water to support the growth of Springfield in the next 25 years.

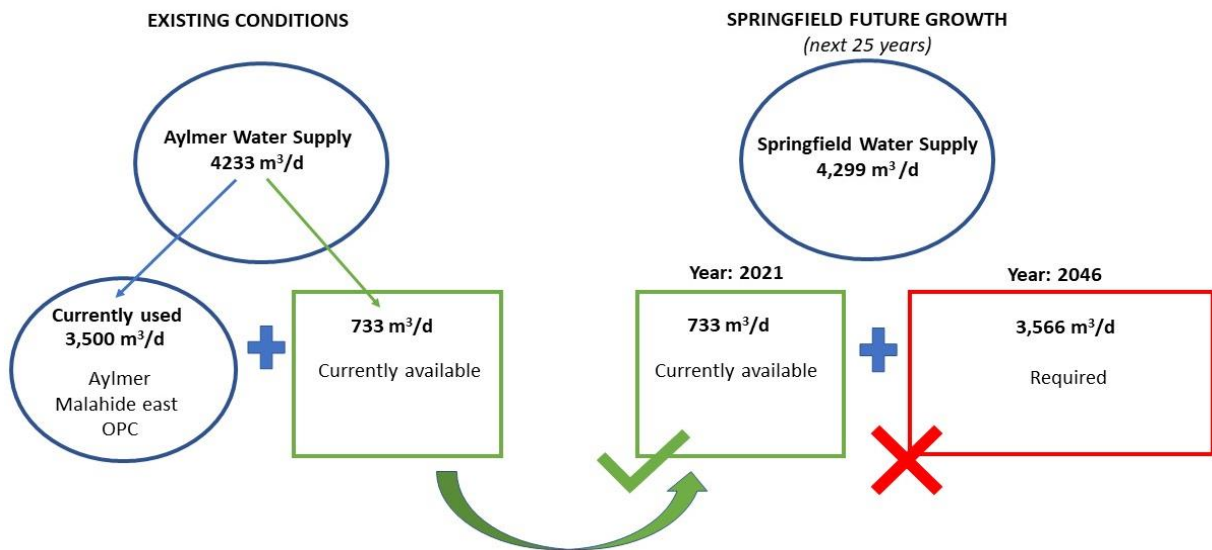


Figure 3-1 Current and Future Water Demand Allocation

Moreover, the analysis of background information suggests that to maintain an adequate pressure to satisfy pressure requirements to support the growth of Springfield could be challenging with the current system.

All water mains should be designed to maintain a minimum pressure of 140 kPa (20 psi) at ground level at all points in the distribution system under maximum day demand plus fire flow conditions. The normal operating pressure in the distribution system should be approximately 350 to 480 kPa (50 to 70 psi) and not less than 275 kPa (40 psi) while the maximum pressures in the distribution system should not exceed 700 kPa (100 psi). It has been assumed for the purposes of this study that a

connection to the Aylmer system will be able to meet the supply needs without supplemental upgrades to their system.

3.2 Water Supply Affordability

Malahide is a slow growth municipality and, as reported in the Service Delivery & Organizational Review, the Township requires a medium-term to long-term revenue enhancement strategy to generate financial sustainability to cover COVID debt loads.

Significant revenue generation has been predicted by the Township with the serviced growth expansion. The DC Background Study has assembled the high-level business case for expanded residential development in Springfield. The key is the provision of a water service to the Village.

Based on the previously completed EA to provide a water service to the Agri-Industrial Park, it was estimated that it would cost approximately \$15.4M to implement a water servicing extension project for a transmission main, a water tower/booster pump, special chambers/connections. It is anticipated that the cost for water servicing extension will increase to about \$20M if watermains and servicing are included. A preliminary cost breakdown for the water servicing extension would be as follows:

- Transmission Main Including Standard Chambers - \$6M
- Special Chambers/Connections - \$1.5M
- Water Tower and Booster Pumping Station - \$6M
- Watermains/Services - \$5M
- Other Miscellaneous - \$1.5M

To estimate the project affordability, it will be assumed that the government would fund \$10.3M (2/3 funding) of the project through grants, subsidies, and other contributions attributable to the new development. The remaining \$9.7M would be funded by the Township via a low-interest debenture (3% interest (subject to update)) and would be recovered as follows:

- \$2.9M would be recovered by future DC payments and hook-up charges for new serviced system from existing well-based households.
- \$3.5M would be recovered by future growth payments.
- \$3.3M would be deducted for benefit to existing development.

One factor that is important in the development of this type of project is the affordability for current residents that will be connected to the system. For future connections, the capital cost will be a factor in the decision to move to Springfield, but it will not typically be the limiting factor as the cost of installing a new water system for a rural property may be more expensive and higher risk in the long term. One option is to assess the affordability based on the ability to pay.

Using the most recent census median single after-tax income household is a conservative approach that can assist in determining the ability to pay. This is intended to model the typical lowest income ratepayers that would be able to pay. There are always going to be exceptions, such as seniors on fixed incomes, and families on social assistance, which may not have the ability to pay for the additional works.

Using the most recent Census Data, the following measures of affordability can be used:

- If the annual household cost of extending the service is equal to, or less than 5% of the median after-tax household income, the project would be considered affordable.

- If the annual household cost of the extending services is equal to or greater than 10% of the median after tax household income, the project may be deemed unaffordable for both the Township and the benefitting property owners as it may be too much of a burden.
- If the annual household cost of the extending service is greater than 5% but less than 10% of the median after tax household income, the project would require additional analysis to determine affordability, including:
 - Consideration of local support of servicing extension.
 - Consideration of additional financial support from the Township in order for the project to proceed to meet the affordability threshold of 5%.

The 2016 Census Data indicates that the Springfield median single after-tax income is \$33,216. It is anticipated that the next Census is being completed in 2021 with data anticipated in 2022. Therefore, the current data being used for the affordability assessment is quite dated and probably does not represent current income in the community.

Affordability is a different metric to assess as it applies differently depending on each individual's situation. For the purpose of this analysis, affordability should be assessed based on two primary factors, income and percentage of income applied to housing. The Canada Mortgage and Housing Corporation (CMHC) defines that spending more than 30% of household income on housing as unaffordable. Housing includes mortgage, property tax and utilities of which water supply would be a utility.

The average household after tax income in Springfield was \$83,107. The average monthly housing costs for owned houses were \$1,239 or \$14,868 per year (Census, 2016). This equates to an average housing cost of 17.9%, which is significantly lower than the 30% metric. This would mean that the maximum affordability percentage that could be applied to a project would be 12% of household income or \$9,972 per year.

In the 2016 census, 13% of the residents in Springfield were paying 30% or more for housing. For these residents, any additional cost may be considered as unaffordable.

The question of affordability is difficult to assess due to the fact that some can afford the additional cost of a project like this, and some can't. Using the average capacity to afford the project is a reasonable approach and some considerations for addressing those that cannot afford the project either through favorable payment terms, subsidies, or connection deferrals.

There is a gap of 13% of income between what the residents spend on housing (17%) versus the amount that CHMC assesses as maximum affordability. It is not reasonable to expect that if this project were to fill the gap between current cost of housing and maximum reasonable cost of housing that that it would be acceptable or affordable to impacted residents. As such, the alternatives reviewed below address potential solutions that are more practical.

Table 3-1 illustrates some potential affordability options that could be considered.

Table 3-1 - Alternative Affordability Approaches

Alternative	Monthly Cost	Annual Cost	10-year payback	20-year payback
10% increase on current housing cost	\$123.90	\$1,486.80	\$12,682.71	\$22,119.83
5% of after-tax single income	\$138.40	\$1,660.80	\$14,166.96	\$24,708.51
\$100 per month	\$100	\$1,200.00	\$10,236.40	\$17,852.97

There are an infinite number of iterations that can be considered including longer debenture periods up to 25 or 30 years and any capital charges by-law can require that the debt be fully repaid upon change of property ownership in order to extinguish the debts faster.

The consideration of the wastewater capacity in our opinion is not entirely relevant to the consideration of affordability to current landowners. If the wastewater capacity is exceeded, then the increase of capacity would be paid for through servicing charges to new developments and the capital cost would not be recovered from current connections.

The water servicing extension project has been designed to serve 2,157 units with the understanding that there is wastewater capacity for 525 units available and that the wastewater capacity restriction would need to be lifted in order for full cost recovery. The following is the affordability metrics for each scenario listed above considering the total project cost and based on 2,157 units.

The numbers below are strictly theoretical and reflect the maximum that the Municipality may be able to afford. This does not consider the Township's current debt capacity or available credit. This table is meant to define upper and lower limits of affordability for reference purposes.

Table 3-2 Affordability Metrics

Total Affordable Capital Cost*		Initial Municipal Debt to be paid off by development
Option A – No Development/No Municipal Debt – 285 residential units		
10% increase on current housing cost	\$6.3M	0
5% of after-tax single income	\$7.0M	0
\$100 per month	\$5.1M	0
Option B – Development up to Sanitary Sewer Capacity – 525 residential units		
10% increase on current housing cost	\$11.6M	\$5.3M
5% of after-tax single income	\$13M	\$6.0M
\$100 per month	\$9.4M	\$4.3M
Option C – Full Build-out – 2,157 residential units		
10% increase on current housing cost	\$47.7M	\$41.4M
5% of after-tax single income	\$53.3M	\$46.3M
\$100 per month	\$38.5M	\$33.4M

* 20-year payback and 3% annual interest.

As illustrated in the Table above, if the affordability metrics are reasonable and no funding is available, the ultimate build-out funding option provides the most budget flexibility, but also the most debt that would be incurred by the Township until the development were to occur.

Affordability is a very subjective thing that is defined by the demographics of the area and, while the goal should be to base it on those who can least afford it, that is very limiting. In Springfield, with the Census data indicating that 13% of the residents are currently over the housing cost percentage of income, it will be important to develop a strategy for those individuals to ensure that this project is not a burden.

The census information does not differentiate to whether those individuals are renters or owners. If they are renters, then it should not be a concern, as the landowner will be responsible for the costs, although there is some risk that these costs would be pushed through to the tenant. If they are landowners, then the Township could, on a case-by-case basis, carry the debt and then collect the payment upon land sale or transfer through a lien on title.

The objective of the affordability assessment should be to select an approach that represents:

- the value of the proposed works to the end user,
- the duty of care to the Township finances relative to debt servicing capacity, and
- an approach that promotes development in the Township within planning and provincial policy.

4 WATER SERVICING DESIGN CRITERIA

The key driving force for the construction of the water distribution system object of this study is to serve the current and future water demand within the Village of Springfield.

Two primary requirements must be considered:

- The system needs to deliver adequate amounts of water to meet consumer consumption requirements plus needed fire flow requirements.
- The water system needs to be reliable; the required amount of water needs to be available 24 hours a day, 365 days a year.

Therefore, the proposed alternatives were developed considering the follows:

- **Water supply and storage requirements:** The water distribution system for the current and future growth of Springfield needs to be designed in order to meet the maximum daily flow of 4,350 m³/d and to store approximately 2,877 m³ of water for emergency water supply requirements.
- **Sources of water:** The proposed alternatives were developed considering three principal sources of water: Groundwater supply, Elgin Area Primary Water Supply System and Aylmer Area Secondary Water Supply System.
- **Pressure requirements:** All water mains should be designed to maintain a minimum pressure of 140 kPa (20 psi) at ground level at all points in the distribution system under maximum day demand plus fire flow conditions. The normal operating pressure in the distribution system should be approximately 350 to 480 kPa (50 to 70 psi) and not less than 275 kPa (40 psi) while the maximum pressures in the distribution system should not exceed 700 kPa (100 psi).
- **Transmission main feasibility:** All the proposed routing alternatives are based on the available municipal right-of-way and available connection points.

Due to the nature and scale of the potential growth of Springfield, our recommended approach to the implementation of the municipal water service is a staged approach. Therefore, the proposed alternatives were developed in order to first extend the municipal water service to the 285 existing units. However, it is our goal to develop an efficient strategy for implementing upgrades to the water infrastructure for the purpose of expanding the water supply system in a logically staged approach, thereby matching increasing levels of demand with increasing levels of capacity. This will allow for a gradual implementation of construction upgrades as needed.

5 ALTERNATIVES DEVELOPMENT

The proposed alternatives have been developed considering the following questions:

- Does the alternative provide a viable solution to the problem or opportunity to be addressed?
- Is the alternative technically feasible?
- Is the alternative consistent with planning policies?
- Can the alternative be carried out without significant effects to important environmental receptors?
- Is the alternative practical, financially realistic, and economically viable?

Based on the aforementioned questions, five (5) potential alternatives were generated as described in the following sections.

5.1 Alternative A: Do nothing

The “Do Nothing” alternative means that the project would not proceed. The decision of not proceeding with the project is the benchmark against which the consequences of implementing the project can be measured. Comparison of the advantages and disadvantages of proceeding with the project with the “Do Nothing” alternative provides the basis for selecting the preferred alternative. This comparison ensures that a decision to proceed with the project would not result in substantial negative effects that could negate the obvious positive effects of the urban development.

5.2 Alternative B: Ground Water Supply

This alternative considers the option to obtain water from groundwater wells. Based on an analysis of existing water wells, the maximum well capacity in the area would be approximately 7 m³/h on 16 hour per day of pump operation. Two solutions are suggested:

5.2.1 Alternative B.1: Full build-out groundwater supply.

Since 4,350 m³/d of potable water needs to be supplied to meet water demands under maximum build-out, this solution requires:

1. Construct well houses sized for ultimate demand (max daily flow + one site out of service). UV disinfection and Chlorination systems will be installed in each well house to meet the level of treatment required.
2. Construct an elevated storage reservoir sized for ultimate demand (max daily flow + one site out of service) considering distribution pressure requirements. The proposed location for the Water Reservoir is between Hacienda Road and Imperial Road, north of College Road and south of Ron McNeil Line. Refer to **Figure 1** for a potential siting location.
3. The distribution system would be extended to the limit of the current community limits, with 250mm diameter watermains on the main streets, 200mm diameter on the side streets, and 300mm watermains along the route to the reservoir.

This would most likely require the acquisition of land for the well sites and will be considered a Schedule C Class EA. The estimated preliminary cost of this alternative is in the range of \$91M (+/- 25%).

5.2.2 Alternative B.2: Interim Solution Groundwater Supply + Ultimate Build-out Connection to Watermain.

This solution would require a staged approach where groundwater supply will be used to meet current water demand of the existing units (Stage 1) while a future extension of the watermain would be required to meet future demand (Stage 2).

Stage 1:

1. Construct 2 well houses (2 wells for each site) sized to meet the water demand of existing units (max daily flow + one site out of service). UV disinfection and Chlorination systems will be installed in each well house to meet the level of treatment required.
2. Construct an elevated storage reservoir sized for max build-out ultimate demand (max daily flow + fire flow + emergency storage) considering fire demands and distribution pressure requirements. The proposed location for the Water Reservoir is indicated in **Figure 2**.
3. The distribution system would be extended to limit of current community limits, with 250mm diameter watermains on the main streets, 200mm diameter on the side streets, and 300mm watermains along the route to the reservoir.

This would be considered a Schedule C Class EA and land acquisition would likely be required.

Stage 2:

4. Extend the watermain 4.6 km from the current connection at the Ontario Police College property (OPC) to Springfield, or 11 km from the current connection between Elgin and Aylmer system on the west side of Aylmer. The estimated size of this watermain would be 300mm.
5. Construct an inline booster station sized for maximum day flow (allowing for pump down time and maintenance) pump operation. Pumps would be sized to meet pressure requirements of the distribution system at maximum day demand. The inline booster station would be located between the OPC and the Springfield distribution system.

The expansion of the water system would be a Schedule A or A+ project and the construction of the booster station would be considered a Schedule B project due to the land acquisition requirement. The estimated preliminary cost of this alternative is in the range of \$30M (+/-25%).

Key alignment features:

- Well water relies on rain and other precipitation to replenish the supply. Therefore, if a period of drought occurs, it will affect not only the replenishment of the water, but the quality of the water that it delivers. However, this risk is limited by the construction of an elevated storage that will provide emergency water supply if needed.
- The maximum well capacity in the area is limited. Therefore, an elevated number of well houses would be required to meet water demand for full build-out which will result in high capital costs.

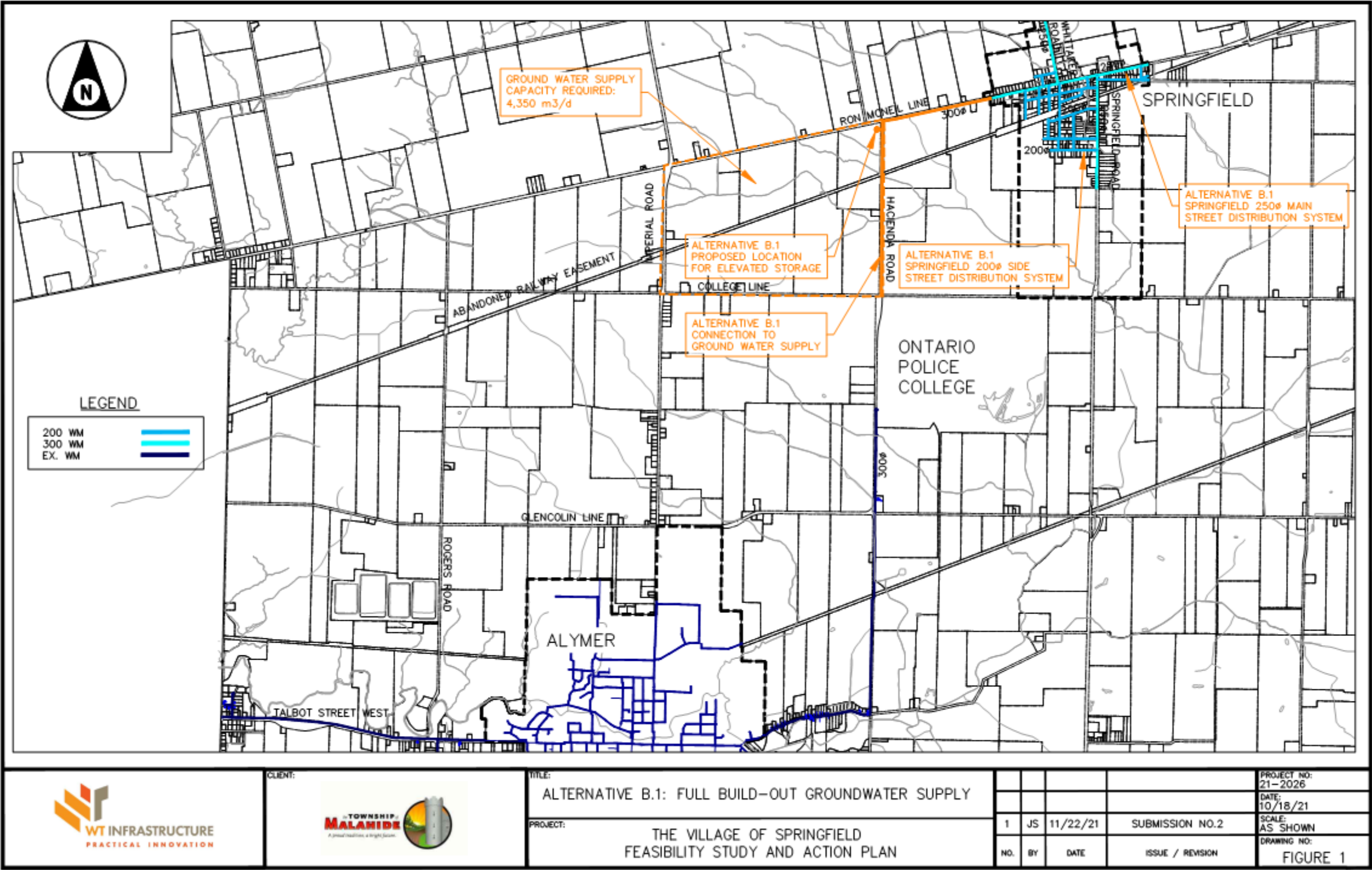


Figure 5-1 - Alternative B.1: Full build-out groundwater supply.

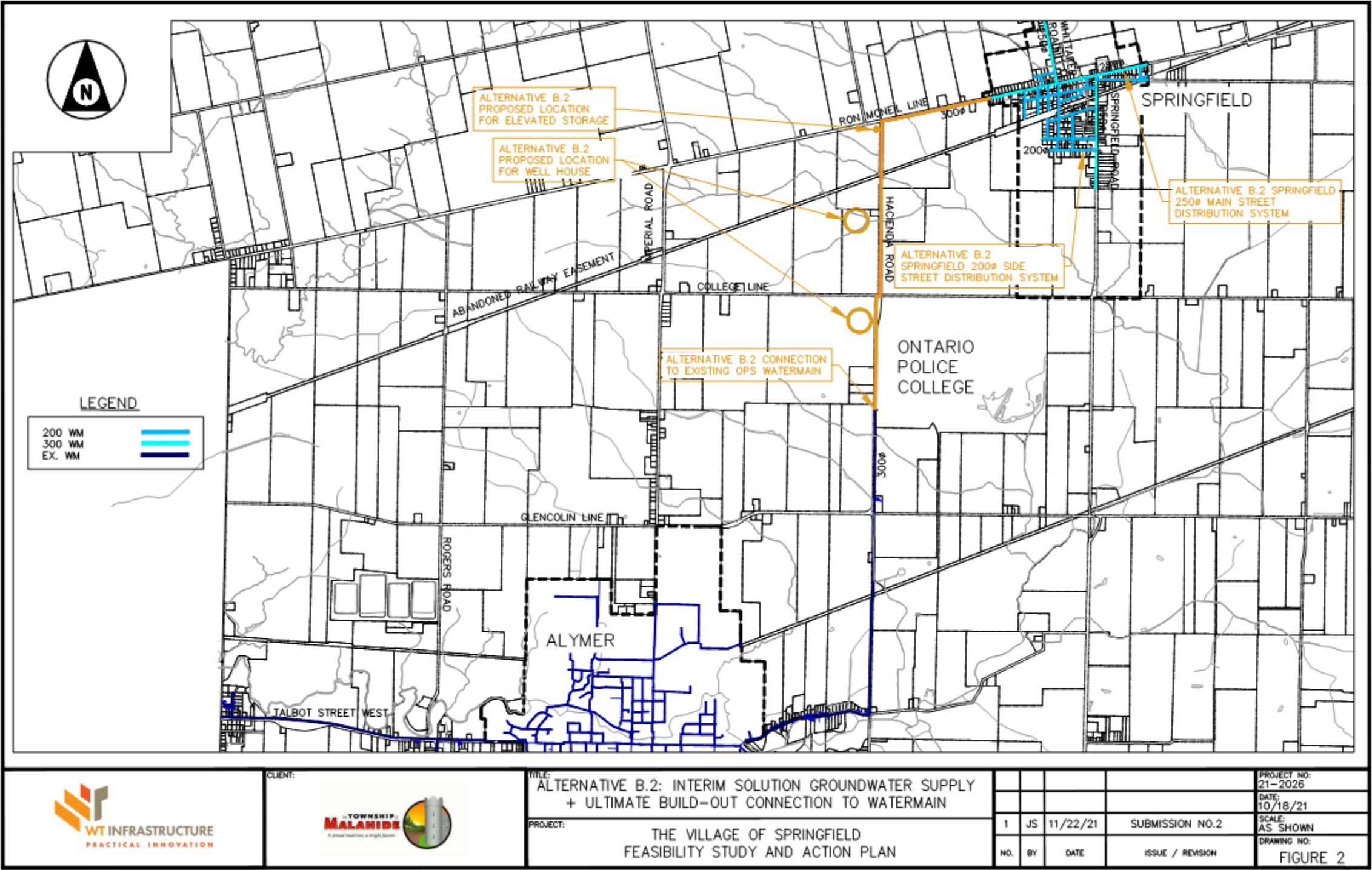


Figure 5-2 - Alternative B.2: Interim Solution Groundwater Supply + Ultimate Build-out Connection to Watermain

5.3 Alternative C: Ground Level Storage

This alternative requires the construction of a ground level reservoir. Ground Level Storage typically has a lower capital cost and provides more operational flexibility as changing pumps can provide a different pressure output. This alternative consists of:

1. Extend watermain 4.6 km from the current connection at OPC to Springfield. Install a metering chamber at the boundary between the OPC and Malahide supply.
2. Install a ground level storage reservoir sized for the current demand with the potential to expand for ultimate build-out. Pumps would be sized for maximum day plus fire flow and would be located between the OPC and the Springfield distribution system in a location where the minimum operating pressure (275 kPa) could be maintained at the inlet of the reservoir.
3. The distribution system would be to the limit of current development, with 300mm diameter watermains on the main streets, and 200mm diameter on the side streets. The new water distribution system would be 11 km in length.

This would be considered a Schedule B project due to potential land acquisition and the construction of storage. The estimated preliminary cost of this alternative is in the range of \$18.2M (+/-25%). **Figure 3** illustrates the potential layout of this alternative.

Key alignment features:

- Ground level storage reservoirs are generally inconspicuous and can be effectively landscaped, thus limiting any visual impediment.
- This type of pressure system takes pressurized water and allows it to return to atmospheric pressure, which must then be repressurized with a pump to distribute to the community. This wastes some energy which increases the pumping costs. Furthermore, pumping water into a system without an elevated storage is less energy efficient during low demand periods.
- This type of system requires back-up generation with limited downtime potential compared to an elevated storage tank.

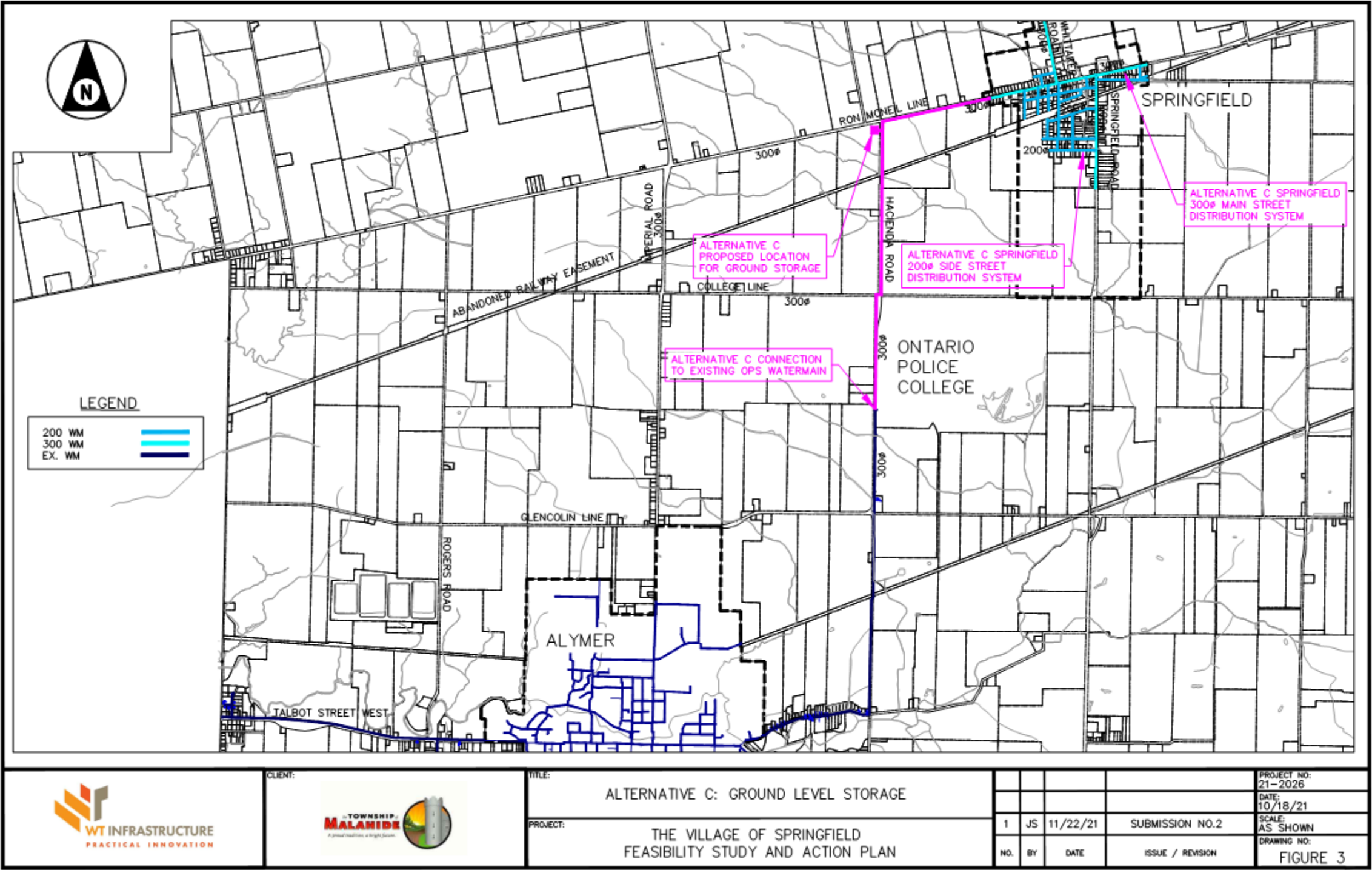


Figure 5-3 - Alternative C: Ground Level Storage.

5.4 Alternative D: In-Line Booster and Elevated Storage

This alternative is similar to Alternative C; however, in place of a ground level reservoir, an elevated storage is proposed. An elevated storage reservoir will allow for more stable pressure along the system since the output pressure is typically set. This alternative consists of the following components:

1. Extend watermain 4.6 km from the current connection at the Ontario Police College property (OPC) to Springfield. Install a metering chamber at the boundary between the OPC and Malahide supply. The estimated size of this watermain would be 300mm.
2. Construct an inline booster station sized for maximum day flow (allowing for pump down time and maintenance) pump operation. Pumps would be sized to meet the pressure requirements of the distribution system at maximum day demand. The inline booster station would be located between the OPC and the Springfield distribution system.
3. Construct an elevated storage reservoir sized for ultimate demand (max daily flow + fire flow + emergency storage) considering fire demands and distribution pressure requirements. The proposed location for the Water Reservoir is between Hacienda Road and Imperial Road, north of College Road and south of Ron McNeil Line. Refer to **Figure 4** for a potential siting location.
4. The distribution system would be extended to limit of current community limits, with 250mm diameter watermains on the main streets, 200mm diameter on the side streets, and 300mm watermains along the route to the reservoir. The total length of new distribution main will be 11 km.

This would be considered a Schedule B project due to potential land acquisition and the construction of elevated storage. The estimated preliminary cost of this alternative is in the range of \$22.2M (+/- 25%).

Key alignment features:

- Elevated storage provides stable pressures throughout the system and provides a reservoir of water to accommodate surges in demand. Additionally, since the elevated storage system will operate on demand, this will allow for uniform flow rates and pressures throughout the water system reducing the pumping system costs.
- Elevated storage will provide emergency water supply during power failures or system maintenance as once the water is elevated, it meets the pressure demands of the system.
- Elevated storage provides a community icon that can be used as an economic development tool. For some, that icon will be considered a visual impediment which must be considered in the design.
- The construction of booster station and elevated storage may require the acquisition of land by the Township. Land acquisition is a trigger to a Municipal Class EA Schedule B.

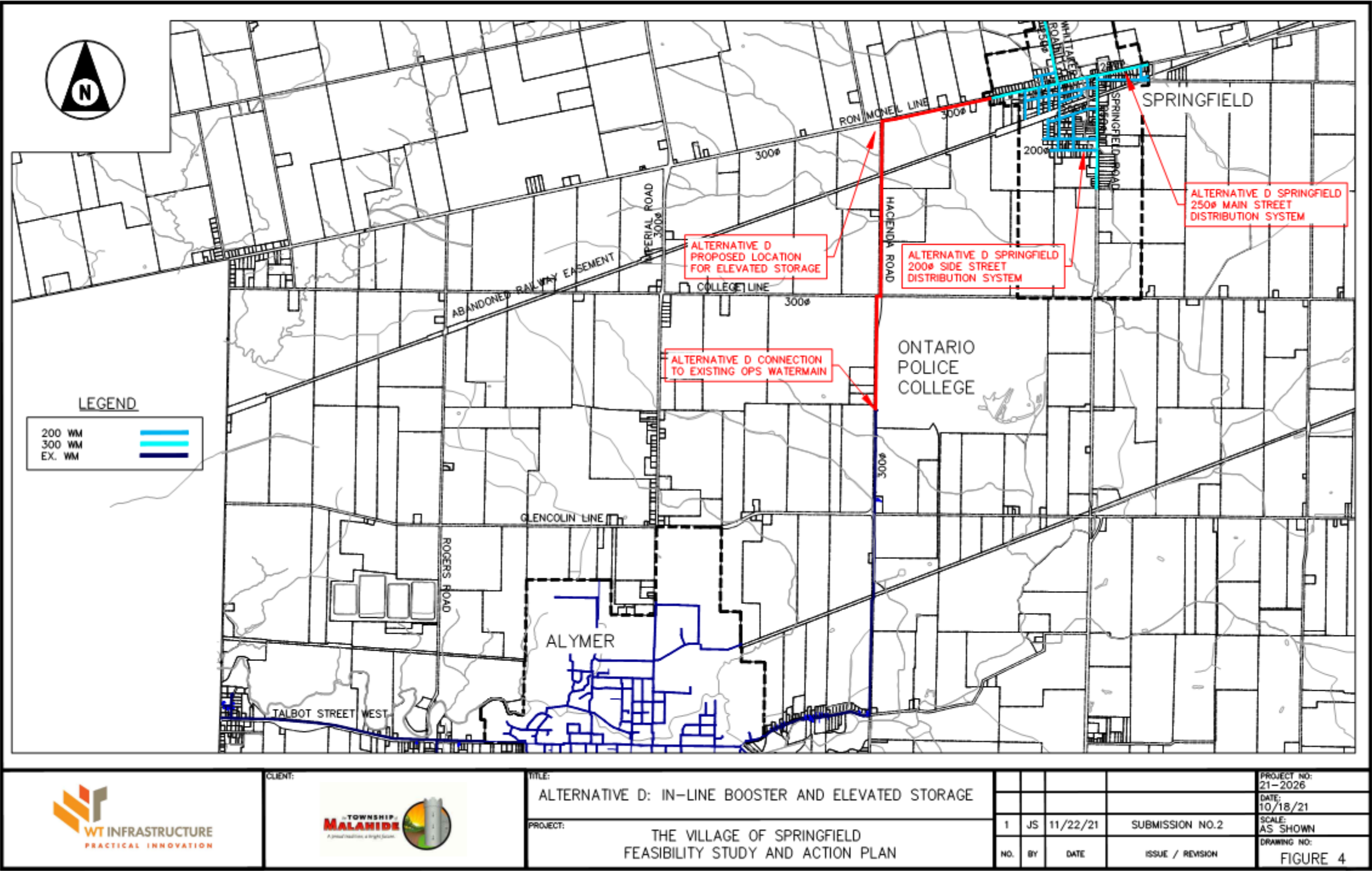


Figure 5-4 - Alternative D: In-Line Booster and Elevated Storage.

5.5 Alternative E: Direct Transmission Main from Aylmer Secondary Water Supply System

This alternative is similar to Alternative D but makes a direct connection to the Aylmer Secondary Water Supply System on the west side of Aylmer rather than purchasing water from Aylmer directly. This alternative is illustrated in **Figure 5** and consists of:

1. Extend watermain 11 km from the current connection between the Elgin and Aylmer systems on the west side of Aylmer.
2. Install an inline booster station sized for maximum day flow located and designed similar to Alternative D. This would be located between the connection and the Springfield distribution system at a point where the pressure was to drop to less than 275 kPa (40 psi) during normal operation and 138 kPa (20 psi) under emergency demands.
3. Install an elevated storage reservoir sized for ultimate demand (max day + fire flow + emergency storage). This would be located in the same or similar location to Alternative D.
4. The distribution system would be to the limit of current development, with 250mm diameter watermains on the main streets, 200mm diameter on the side streets, and 300mm watermains along the route to the reservoir. The total length of the new water distribution main would be 17.5 km.

This would be considered a Schedule B project due to potential land acquisition and the construction of elevated storage. The estimated preliminary cost of this alternative is in the range of \$32.4M (+/- 25%).

Key alignments features:

- This alternative would provide a separate connection to the AASWSS and would expand the area of Malahide that could be serviced. It would also result in an approximately 45% savings in water cost vs. purchasing through the Town of Aylmer system. This equates to approximately \$1.02 per cubic metre. Assuming current serviced community only, the anticipated annual savings associated with the reduced water cost would be \$55,500.
- The additional length of watermain will be an additional capital and operating cost relative to the base alternatives.
- There are an additional 30 properties along the alignment that could be connected immediately and there would be the potential for connection of agricultural high demand users, subject to zoning and capacity requirements.

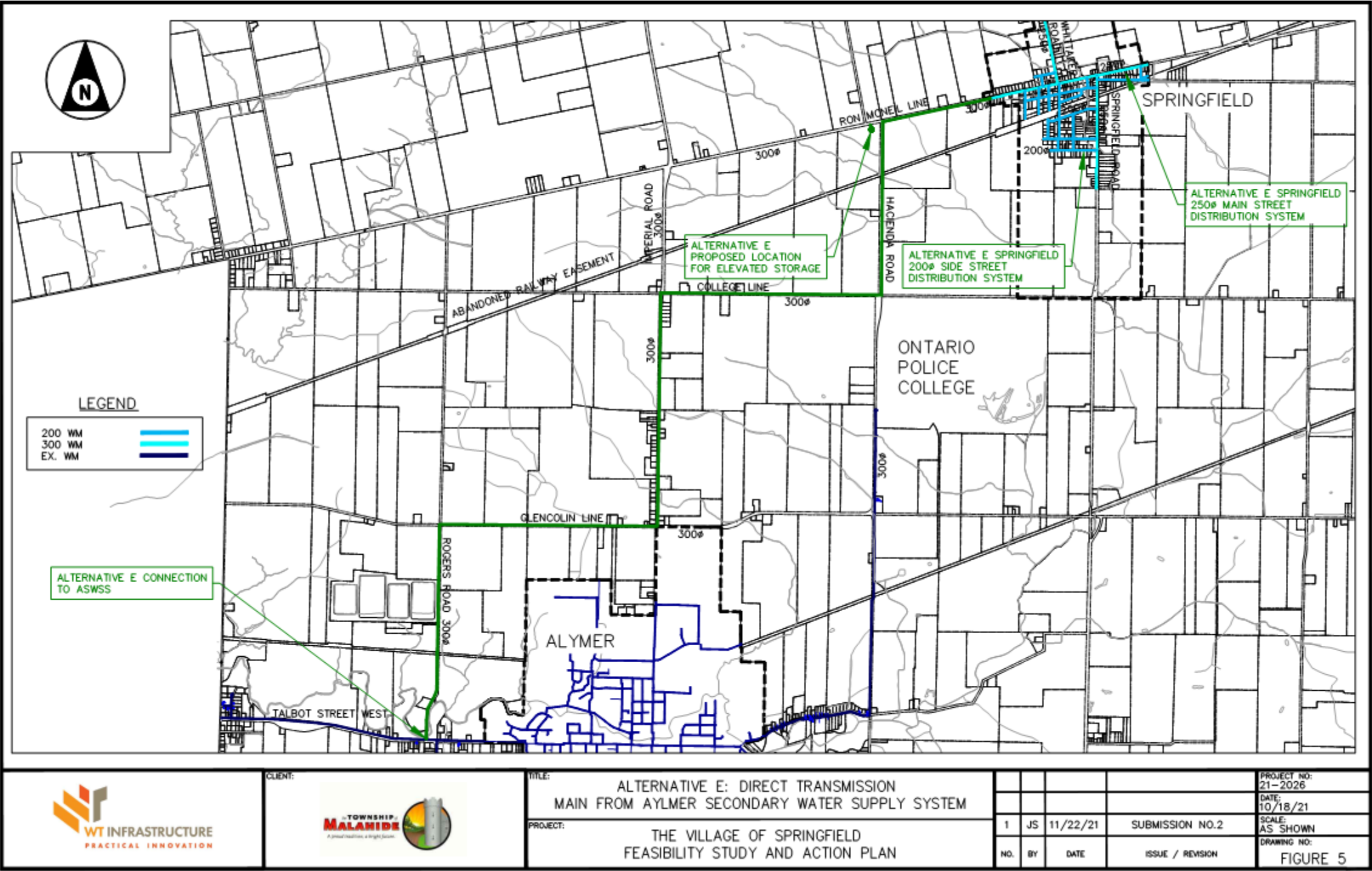


Figure 5-5 - Alternative E: Direct Transmission Main from Aylmer Secondary Water Supply System.

5.6 Alternative F: Joint Elevated Storage

As Malahide north of Aylmer is the higher ground, there is the potential of developing a single elevated storage that services:

- Aylmer and Springfield or
- Ontario Police College and Springfield or
- All three systems

This alternative consists of the following components and is illustrated in **Figure 6**:

1. Extend watermain 4.6 km from current connection at OPC to Springfield for an OPC partnership or 11 km from current connection between Elgin and Aylmer system on the west side of Aylmer for an Aylmer partnership. Install a metering chamber on Glencolin Line between the OPC and Aylmer supply. Upsize the watermain as necessary to reduce pressure loss.
2. Partner with either OPC, Aylmer, or both to build a single storage suitable for both systems in terms of maximum day plus fire flow plus emergency storage. Economies of scale would reduce the total storage volume compared with two independent system.
3. Install an elevated storage reservoir sized for ultimate demand (max day + fire flow + emergency storage). The system would be designed such that the operational level could be increased as demand required rather than having stagnant water. The proposed location for the Water Reservoir is between Hacienda Road and Imperial Road, north of College Road and south of Ron McNeil Line. Refer to **Figure 6** for a potential siting location. It should be noted that the proposed Water Tower location is suitable for either a partnership with Aylmer or the OPC.
4. A booster station may be required in order to meet the hydraulic gradeline requirements and allowances will need to be made to ensure that Springfield has basic water supply during elevated storage maintenance or emergencies.
5. The distribution system would be to the limit of current development, with 300mm diameter watermains on the main streets, 200mm diameter on the side streets, and 400-450mm watermains along the route to the reservoir.

The estimated preliminary cost of this alternative is in the range of \$33M (+/-25%). However, the cost would be shared based on the percentage of water stored. Assuming Malahide will own 45% of water storage, the cost attributable to Malahide would be in the order of \$20.7M (+/-25%). This would be considered a Schedule B project due to potential land acquisition and the construction of elevated storage, although the Town of Aylmer is already proceeding with the project as a Schedule B as part of their requirements, but it is not designed for the Malahide supply.

Key alignment features:

- This alternative provides the possibility to share associated costs related to the construction of a water tower. Those costs would be shared as a percentage of the total water stored with approximately 45% of water storage owned by Malahide.
- The construction of booster station and elevated storage may require the acquisition of land. This alternative would provide the possibility to share the aforementioned costs.
- There are an additional 30 properties along the alignment that could be connected immediately and there would be the potential for connection of agricultural high demand users, subject to zoning and capacity requirements.

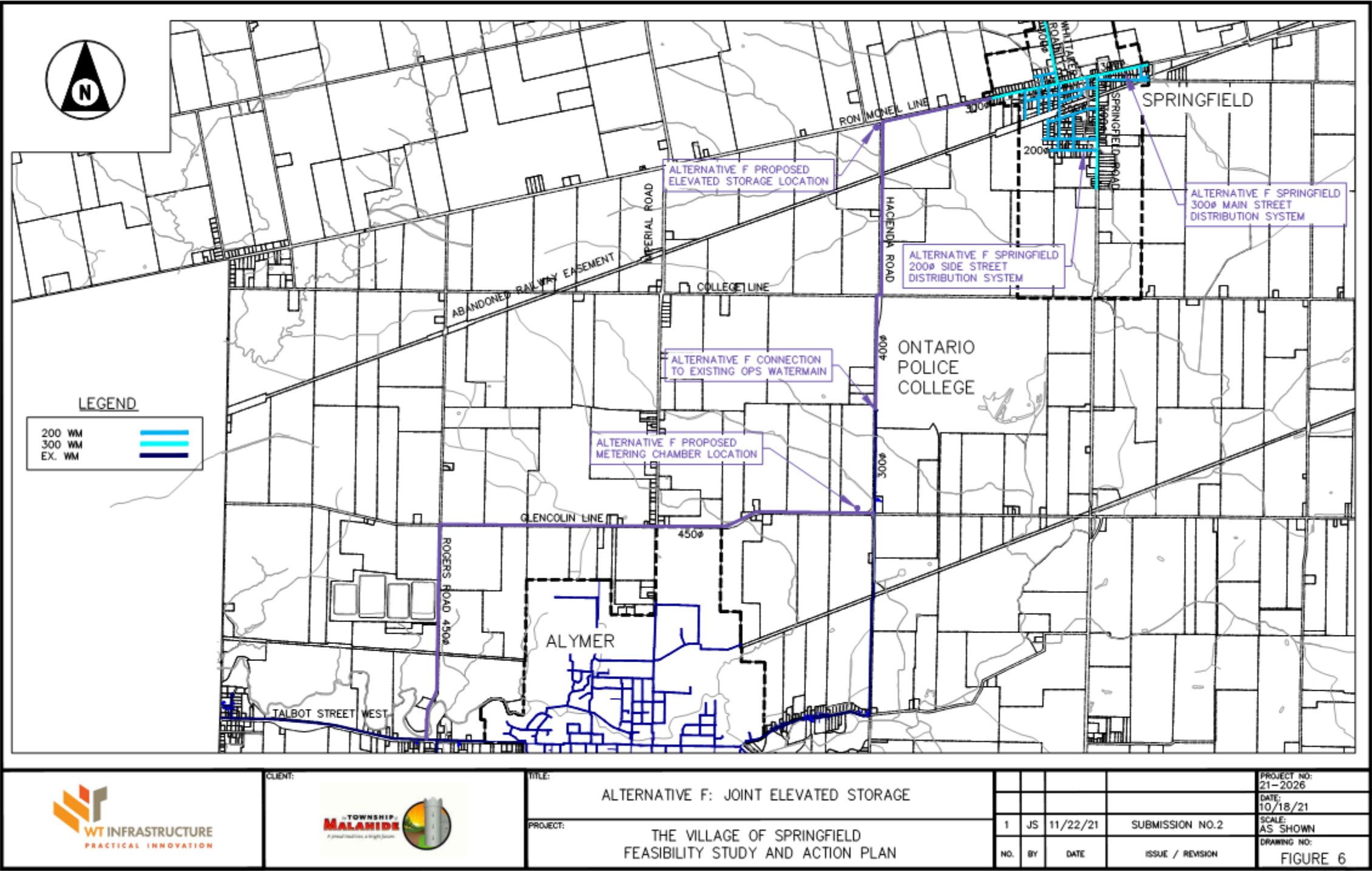


Figure 5-6 - Alternative F: Joint Elevated Storage.

6 CAPITAL COST ESTIMATE

Table 1 illustrates the estimated capital cost associated with each of the alternatives.

Table 6-1 - Capital Cost Estimate Summary

	Watermain and Distribution System	Water Storage	Booster Station	Metering Chamber	Well House	Total*
Alternative A – Do nothing	-	-	-	-	-	-
Alternative B.1: Full build-out groundwater supply	\$10.5M	\$1.9M	-	\$0.2M	\$48.4M	\$91M
Alternative B.2: Interim Solution Groundwater Supply + Ultimate Build-out Connection to Watermain	\$10.5M	\$1.9M	\$2.4M	\$0.2M	\$4.8M	\$30M
Alternative C – Ground Level Storage	\$10.5M	\$1.6M	-	\$0.2M	-	\$18.2M
Alternative D – In-Line Booster and Elevated Storage	\$10.5M	\$1.9M	\$2.4M	\$0.2M	-	\$22.2M
Alternative E – Direct Transmission Main from Elgin Water Supply System	\$17.2M	\$1.9M	\$2.4M	\$0.2M	-	\$32.4M
Alternative F – Joint Elevated Storage	\$17M	\$2.3M**	\$2.4M	\$0.2M	-	\$33M

*Including Bonding, Engineering and Contingency costs..

** Cost for water storage and land acquisition are shared with partners

7 EVALUATION OF ALTERNATIVES

In order to determine the preferred alternative, a detailed evaluation of the alternatives will be carried out after consultation with major stakeholders. During the consultation process, any potential effects on the environment or local community will be discussed with the intent to get the required feedbacks and provide common sense solutions.

Table 2 compares the proposed alternatives. For the purposes of the report, the following were the basis of evaluation:

- **Total Length of Watermain Required**
- **Capital Cost** – Class “D” Cost Estimate level of accuracy 25%
- **Technical Effectiveness** – The technical evaluation considers constructability, operability, construction risk and effectiveness of the solution to address the problems in terms of meeting domestic and emergency demand, pressure along the transmission main route, water quality.

- **Environmental Impacts** – The environmental evaluation considers the potential impacts of the solution to the environment (i.e., resource depletion, natural heritage, tree removal, agricultural resources).
- **Social Impacts** – The social evaluation considers the potential impacts of the solution to the cultural sphere (i.e., cultural heritage, land-use), to the existing and/or planned residences, businesses, community, institutional, or recreational facilities.
- **Planning Impacts** – The political evaluation considers potential land requirements and compliance with planning policies.

The preferred alternative will be selected by using a weighted matrix where the weightings of each criterion are based on the feedback received from stakeholders, ratepayers, the Township, and the public.

Table 7-1 - Alternative comparison

	Total Length of Watermain Required	Capital Costs	Technical Effectiveness	Environmental Impacts	Social Impacts	Planning Impacts
Alternative A – Do nothing	0 km	\$0	Does not address the problem	No changes	No changes	Does not meet planning studies
Alternative B.1: Full build-out groundwater supply.	11 km	\$91M	Low Impacts: wide road shoulders can easily accommodate watermain construction. No booster station required.	Low Impacts: Limited water crossings and trees removal – mostly agricultural land	Low Impacts: 2 businesses along the route. Access to properties can be maintained. Minor disruption to traveling public due to shorter route.	Low Impacts: Transmission main to be predominately located within road ROW. Land acquisition required for well houses.
Alternative B.2: Interim Solution Groundwater Supply + Ultimate Build-out Connection to Watermain.	11 km	\$30M	Low-Medium Impacts: wide road shoulders can easily accommodate watermain construction.	Low-Medium Impacts: Multiple watercourse crossings and trees removal	Low-Medium Impacts: Impacts are mitigated due to staged approach. Several businesses and 1 noteworthy farm along the route. Access to properties can be maintained. Higher disruption to traveling public due to longest route and higher number of businesses along the route during stage 2.	Low Impacts: Transmission main to be predominately located within road ROW. Land acquisition required for booster station, water tower and well houses.
Alternative C – Ground Level Storage	11 km	\$18.2M	Low Impacts: wide road shoulders can easily accommodate watermain construction. No booster station required.	Low Impacts: Limited water crossings and trees removal – mostly agricultural land	Low Impacts: Several businesses along the route. Access to properties can be maintained. Minor disruption to traveling public due to shorter route	Low Impacts: Transmission main to be predominately located within road ROW. Land acquisition required for the ground level storage
Alternative D – In-Line Booster and Elevated Storage	11 km	\$22.2M	Low-Medium Impacts: wide road shoulders can easily accommodate watermain construction.	Low Impacts: Limited water crossings and trees removal – mostly agricultural land	Low Impacts: Several businesses along the route. Access to properties can be maintained. Minor disruption to traveling public due to shorter route.	Low Impacts: Transmission main to be predominately located within road ROW. Land acquisition required for booster station and water tower.
Alternative E – Direct Transmission Main from Elgin Water Supply System	17.5 km	\$32.4M	Low-Medium Impacts: wide road shoulders can easily accommodate watermain construction.	Low-Medium Impacts: Multiple watercourse crossings and trees removal	Medium Impacts: Several businesses and 1 noteworthy farm along the route. Access to properties can be maintained. Higher disruption to traveling public due to longest route and higher number of businesses along the route.	Low Impacts: Transmission main to be predominately located within road ROW. Land acquisition required for booster station and water tower.
Alternative F – Joint Elevated Storage	17.5 km	\$33M (Costs of water storage and land acquisition are shared with partners)	Low-Medium Impacts: wide road shoulders can easily accommodate watermain construction. Economies of scale would reduce total storage volume compared with two independent system.	Low-Medium Impacts: Multiple watercourse crossings and trees removal	Low-Medium Impacts: 2 businesses along the route. Access to properties can be maintained. Minor disruption to traveling public due to shorter route.	Low Impacts: Transmission main to be predominately located within road ROW. Land acquisition required for booster station and water tower.

8 FINANCIAL IMPLICATIONS

Ultimately, the preferred solution from a technical and environmental perspective is only part of the picture. Even the least cost alternative may put excessive fiscal burden on the Township and ratepayers. The following sections details considerations with respect to the financial implications of the potential project.

8.1 General Project Viability

One of the important considerations for this type of project is the economic and social viability of the project. The technical viability has been confirmed. The economic viability is tied to the cost benefit analysis. The social viability is associated with the non-economic benefits associated with the supply of water.

For the Town of Springfield, as there is sanitary sewage collection and communal treatment, there is not an environmental driver for existing properties to connect to water. However, for new development the limitations of installing wells on each property both in terms of cost and impact of lot size require that is required are major drivers to the addition of water servicing to the Springfield Area.

In addition, there is currently a limitation on wastewater capacity that will only allow for 793 additional residents before wastewater upgrades are required.

Therefore, if there is not a major push for this project from the existing residents, but a significant need for this project for future development, it will be important to assess the benefits of the projects both to existing and future residents.

The following table details the advantages and disadvantages to existing and development lands within the Springfield area:

Table 8-1 Project Viability Advantages/Disadvantages

	Existing Residents	Development
Advantages	<ul style="list-style-type: none"> • Safe Water • Improved Fire Protection • Increases water supply reliability • Impacts of increased tax base • Higher real estate values • Rejuvenation of the Village: school stays open, businesses thrive, new residents to be involved with community. 	<ul style="list-style-type: none"> • Safe Water • Allows for increased density • Cost in comparison individual wells • Higher real estate values
Disadvantages	<ul style="list-style-type: none"> • Cost • Ongoing Operating Cost • Construction Disruption • Increased Density 	<ul style="list-style-type: none"> • Ongoing operating cost • Construction Disruption

In summary, there are advantages and disadvantages to both existing residents and development lands in Springfield; however, the benefits to the development lands are greater than existing properties that have well that is operating adequately. Therefore, it is important that for equity purposes, that the existing residents are non-equally burdened by project impacts. This needs to be assess in the cost recovery analysis.

8.2 Basic Cost Recovery

The number and type of potential service connections to the project is a function of both the preferred alternative selected and the approach to cost recovery. As identified in Table 7-1, Alternative C and D are the least capital cost alternatives and do not have any other major impediments from proceeding. Alternative E is more expensive by approximately \$10.2 million but does provide some additional opportunities related to servicing and lower operating costs. Based on the \$55,500 annual savings, the present value of that savings based on a 50-year infrastructure lifespan and 3% annual interest is \$1.4 million. In order to be capital cost neutral, the revenue associated with this alternative alignment would need to be approximately \$340,000 per year. Assuming that the water rates were not adjusted for the reduction in cost by not going through the Aylmer system, this equates to revenue from the sale of approximately 930 m³/day. If 2/3 funding is secured, then the breakeven point would reduce to 310 m³/day, which is still significant for an area with 30 current connection opportunities. The anticipated residential population necessary to achieve this revenue would be an additional 1,000 residents, which would not be achievable through strip development in the necessary timeframe to achieve the necessary payback.

Realistically, only Alternatives C, D and F are feasible from a cost perspective, with Alternative F requiring agreements with the Town of Aylmer or OPC. For the purpose of the assessment of costs, Alternatives C and D will be used. In the event the preferred alternative changes, then the analysis could be modified through interpolation.

The total estimated cost of these alternatives is:

- Alternative C – \$18.2 M
- Alternative D - \$22.2 M

The ultimate build-out of the Springfield planning area will consist of the existing 285 units and an additional 1,872 equivalent residential units for a total of 2,157 units.

Therefore, the simple cost recovery approach would be an approximate cost of \$8,450 - \$10,292 per equivalent residential unit. However, as indicated in the previous section, the current development is restricted by wastewater capacity to 1,084 units before additional wastewater capacity is required. This increases the cost per equivalent unit to \$16,790 – \$20,480.

The cost recovery approach indicated in the previous paragraph does not address the capacity of the proposed water servicing extension and the associated scenarios that will occur when the wastewater limitation kicks in.

Firstly, any additional wastewater capacity should be entirely captured through cost recovery or development charges to the new properties necessitating the expanded system. Furthermore, as Aylmer is also growing and there will be a need to upgrade the wastewater facility to meet the combined needs, those needs should include the additional plant capacity for the ultimate build-out of Springfield if the Township determines that continuing with agreement with Aylmer for wastewater treatment. Therefore, since additional wastewater capacity is anticipated to be required within the next 10 years or less and that the ability to recover those costs would be covered by new development, then the impact of that restriction should be able to be ignored in the overall approach to financial management associated with this project.

However, it is important to note that for all future development within Springfield, that Development Charges should be developed in order to facilitate the funding of the growth of the wastewater treatment capacity or securing a new system if that is the preferred approach.

8.3 Growth Implications

One of the challenges with a project such as this is that, in order to service the area, the majority of the infrastructure will need to be in place prior to any connections. As such, the project will need to be financed prior to the development being permitted to occur. In larger growth areas, this front-end financing may only be a few years in advance of full build-out; however, in Malahide, while the growth is anticipated, the interval between water supply and full build-out is difficult to predict.

The current population that could be connected to the project is approximately 890 people or approximately 285 connections.

In the worst-case scenario, with no growth, the project would be overbuilt and would put the burden on the existing landowners. The cost per unit would be \$63,900 - \$77,900. As indicated in Section 7.1, the development lands gain the greatest benefit from the extension of water servicing and as such, this approach would be inequitable.

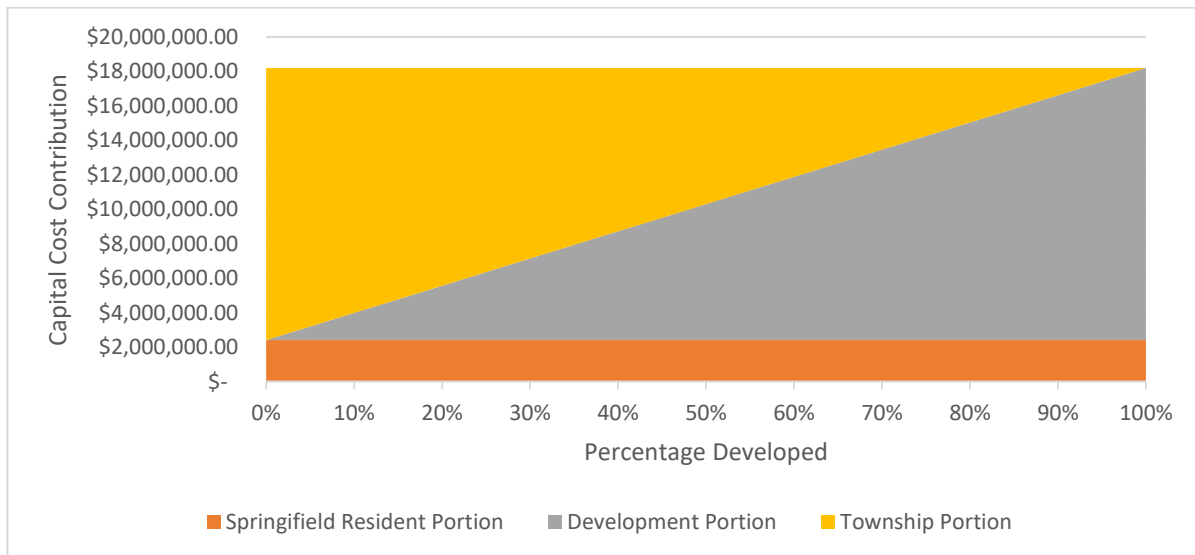
As indicated in the previous section, if we consider:

- Full build-out, then the cost of extending the water supply is less than \$10,000 per unit.
- Wastewater restricted capacity, then the cost of extending the water supply is approximately \$20,000 per unit.
- No development contribution, then the cost of extending water supply is less than \$80,000 per unit

The problem with this analysis is that the obvious solution is full build-out, all impacted existing units pay less than \$10,000. However, in that scenario, the Township will have to finance \$15.8M to 19.3M

Figure 7.1 illustrates the graph of the amount of development required relative to the potential town debt impacts. This graph illustrates that this approach is equitable in terms of pay for use, but if development does not occur, then the Township (Yellow) will be on the hook for those costs until development (Grey) occurs.

Figure 8-1: Township Debt Relationship to Development



There are two primary approaches that the Township could consider.

1. Township Debt Financing

2. Local Improvement Full Cost Recovery

Township debt financing would be similar to the graph above where the Township carries the debt for unpaid connections until the point where they are made. The intent would be to recover the full costs including interest costs until the land is built out. The risk with this approach is that if the land was not developed, then the Township would remain responsible for the debt incurred.

The second option is to use a local improvement through the Municipal Act to recover all of the costs from the existing lands. This approach would recover the costs through a levy based on frontage along the project in order to divide the cost. This approach would avoid any risk of unpaid municipal debt; however, it may unduly burden properties that are not planning to develop in the foreseeable future.

While assessing costs may treat every metre of frontage equally, it is not necessarily equitable. In the existing residential area, different sized lots with similar single-family dwellings would pay different amounts. The Municipality could treat developed and undeveloped lands differently by charging existing properties on their current use and vacant properties using the frontage and/or area to determine the potential contribution to the water system.

The selection of the preferred method of capital recovery for the project is highly dependent on risk. If the development markets see Springfield as an opportunity and is already in the process of securing land, then the Township debt financing solution may be preferred to minimize the front-end costs for development; however, the cost charged to new connections should consider both the principal and interest incurred by the Township to finance the debt.

Alternatively, if the growth is unknown, then applying all of the costs upfront to all existing properties and lands zoned for development, reduces the risk the most and will promote the development or sale of property to developers in order to extinguish the capital project debt. In this scenario, it would be especially important to develop broad financing options to minimize the annual cost and maximize the affordability of the project.

8.4 Financing Opportunities

As indicated in Section 3.2, a potential pre-requisite for the implementation of this project would be some level of upper tier funding. Funding programs are typically tied to replacement of existing infrastructure to help municipalities close the infrastructure gap or for supply to address identified issues with the private supply. The Investing in Canada Infrastructure Program (ICIP), Green Infrastructure Fund is probably the preferred funding option for Malahide and the application will need to be tied to extending water supplies to the existing community of Springfield. Typically, however, the funding programs will not fund for growth alone and often will exclude growth from the funding mechanism.

There is currently \$278.15M of the Green Infrastructure Fund that is not allocated and will likely be released with a 2022 Intake. The funding percentages under ICIP do vary, but 40-60% is a reasonable expectation. However, since the Township has already secured some funding from ICIP under the same program for the Talbot St. East Watermain Replacement, the Township's ability to secure additional funding may not be prioritized in comparison with other municipalities that have yet to receive funding under this program. Additionally, in review of the funded programs, with the exception of new treatment facilities for First Nations, the majority of the projects appear to be tied to rehabilitation, repair, and replacement of existing infrastructure rather than servicing new areas. It will be important to consider the benefits to existing residents beyond the opportunity for community growth in order to develop an application that meets the program criteria and solves an identified problem.

It is important to note that the evaluated alternatives include servicing to the limits of the currently developed areas of Springfield and, in order to service growth, that additional infrastructure will need to be added. This would be paid directly by the developers or funded via development charges. Therefore, the estimates included in this study would be generally fully eligible for funding under the current criteria. There may be some allowances that need to be made due to the sizing of the elevated storage or watermains, but the impact on the overall project cost would be limited.

Therefore, looking at the two preferable solutions, Direct supply from Aylmer via inground storage (Alternative C) and Direct supply from Aylmer via elevated storage (Alternative D), the funding scenarios that could be anticipated are illustrated in Table 8-2.

Table 8-2: Funding Option Scenarios

Funding Scenario	Alternative C – \$18.2M Capital Cost		Alternative D – \$22.2M Capital Cost	
	Cost per residential unit	Township Debt Impact	Cost per residential unit	Township Debt Impact
0% Funding	\$8,400	\$15.8M	\$10,300	\$19.3M
40% Funding	\$5,100	\$9.5M	\$6,200	\$11.6M
60% Funding	\$3,400	\$6.3M	\$4,100	\$7.7M
66% Funding	\$2,900	\$5.4M	\$3,500	\$6.6M

As indicated in Section 3.2, all of the affordability considerations are well above the residential unit cost assessed in the above table; however, all of the project alternatives include significant Township debt that will need to be covered by development. The timing of the development will be critical to ensure that the cost recovery can be achieved in a timely manner to avoid long-term debt limitations.

8.5 Current Development Charges Impact

The 2021 Development Charges Background Study used an updated cost estimate of the 2010 AECOM project cost for \$16M and assumed 2/3 funding for the project based on 848 units that could be serviced by the system as defined by the AECOM report.

After 2/3 funding, the costs were allocated with \$1.8M to existing residents and \$1.6M to growth for a total of \$3.4M divided by 848 units (\$4,010/unit). Conversely, with 2/3 funding for a total of \$5.4M to \$6.6M divided by the build-out of 2157 units (\$2,900 to \$3,500/unit). Therefore, the cost per unit is similar under this funding scenario. It will be necessary to update the Development Charges Report based on the proposed ultimate development or scale the project to the 848 units in order ensure that the project is adequately funded through development charges.

Furthermore, the absence development charges related to wastewater, this will need to be updated as current once an additional 237 units are developed in Springfield, the allocated capacity will be exceeded and upgraded capacity will be required in order to meet either the 848 unit or 2,157-unit residential growth objective.

8.6 Relationship to Wastewater Capacity

As identified in the background section of the report, the current allocation for Springfield is 469 m³/day, of which 50% of the allocation is currently being used by existing residents. Therefore, there is capacity for an additional 237 units before wastewater will become an issue. Considering that the 237 units is only 13% of the proposed build-out and that the financial viability of the project is dependent on how fast that development could occur to maximize capital cost recovery, the

relationship between the wastewater capacity and water supply is a critical bottleneck issue that will need to be addressed in parallel to the advancement of the water supply.

The options that the Township has are as follows:

1. Aylmer System – The Township could continue to work with Aylmer and participate in the expansion of their system; however, they would be limited by the schedule of another municipality to get the work completed. It is estimated that the Township's contribution to this project would be in the order of magnitude of \$10-20M.
2. Independent System – The Township could develop an independent treatment facility for the community that could be advanced without any coordination with Aylmer. Due to the location of Springfield and the lack of a significant watercourse, advanced treatment would be required. It is estimated that the cost of this project would be the order of \$20M-30M.

The estimates are strictly order of magnitude as siting and a Class EA will need to be completed in order to determine the preferred project type and cost. The estimated timeline for this work would be approximately as follows:

- 2 years for Class EA and preliminary design,
- 1 year for detailed design and tendering, and
- 2 years for construction and commissioning.

This timeline would be similar for either the Aylmer or Malahide option; however, with the Malahide option, the Township would have control over when the project begins.

9 CONCLUSIONS AND RECOMMENDATIONS

9.1 Conclusions

While the Village of Springfield is serviced by a municipal sewage collection system, potable water for the Village is provided via individual private wells. Significant revenue generation has been predicted by the Township with the serviced growth expansion and connection of the future growth of Springfield to the to existing Aylmer Water Supply System.

The following conclusions can be made based on the review of the background information and studies:

- In the next 25 years, the estimated future growth of Springfield is of 793 additional residents. However, this estimation has been made based on the available wastewater treatment allocation as of April 2019. The potential growth of Springfield could be higher, counting 1,872 potential units, if an expansion of the wastewater treatment system is provided either with Aylmer or independently.
- A future water demand equal to 4,299 m³/d of potable water needs to be supplied for the 1,872 new units. Therefore, the Township would need to stipulate an agreement either with the Aylmer Water Supply System or the Elgin Area Primary Water Supply System to meet the future water demand. An upgrade of the existing distribution system may be required in order to distribute the required flow and satisfy pressure water requirements.

An evaluation of alternatives to service the area included groundwater, extensions from the Aylmer system, a direct connection to the Elgin system and do nothing was completed with the following conclusions.

- Alternative A does not address the primary objective; thus, is not considered as viable solution.
- Alternative B.1 and B.2 would allow to use groundwater supply by installing well-houses along the alignment. Alternative B.1 is the highest cost alternative due to the elevated number of well-houses that need to be installed to meet ultimate demand during full build-out. Alternative B.2 allows a staged approach with the construction of two well-houses to meet current need and the possibility to extend existing watermain to meet ultimate water demand under full-build-out.
- Alternative C is the lowest cost alternative and requires the construction of an in-ground water storage; however, there are advantages to Alternative D associated with the construction of an elevated water tower and booster station that would allow to provide stable pressures throughout the system and to accommodate surges in demand.
- Alternatives E and F are the longest routes, but they allow to have thirty (30) additional properties along the alignment that could be connected. Moreover, Alternative E would allow to have a separate connection to the AASWSS, resulting in an approximately 45% savings in water cost for a total annual savings of \$55K. Alternative F would allow to share associated costs related to the construction of a water tower and booster station with Aylmer and/or OPC. Also, economies of scale would reduce total storage volume compared with two independent systems.

Based on the evaluation, Alternatives C and D are preferred and should be optimized with a review of lifecycle costs to determine the preferred alternative as the lower capital cost associated with Alternative C is attractive; however, ground level storage requires continuous pumping to maintain system pressures, where an elevated storage allows for single stage pumping, which will lower the operating costs of the facility and will improve reliability of the system.

The affordability of the project is a function of three primary components.

1. Upper Tier Government Funding Availability
2. Township Debt Servicing Capacity
3. Development Implementation Timing

If upper tier government funding is not available and development implementation up to build-out is not going to occur for 25 years, then this project is not likely going to be feasible unless the debt burden is applied to current residents. The approach of building for growth and recovering the growth cost from current users is not an equitable approach, therefore, the current development charges approach is a reasonable method to recover the cost.

With respect to the limits on affordability to existing ratepayers, consideration for addressing those residents for which any additional cost would be considered a burden will be an important factor in ensure that the project objectives respect the demographics of the area.

9.2 Bulk Water Pricing

One of the challenges is the mark-up that Aylmer is placing on the water between the Elgin System and the delivery to the Malahide system. It is recommended that the Township enter into an agreement that sets the pricing based on actual costs that can be attributable to the supply of water through the Aylmer system. Furthermore, it should be integrated into that agreement the capacities required for build-out of the system in order to secure that capacity for the future.

9.3 Timing Consideration

This study has been completed in advance of the completion of a Class EA, funding applications, design, and construction of the proposed works. Assuming that as a result of this project, the Township were to proceed to a Class EA, the following would be an approximate timeline for project implementation for development:

- Class EA – Summer 2022 to Spring 2023
- Design and Funding – Spring 2023 – Spring 2024
- Construction – Spring 2024 – Fall 2025
- Commencement of Cost Recovery – Fall 2025

Therefore, it will take a minimum of three years to implement this project and is subject to funding program availability.

9.4 Funding Requirements

The funding requirements for projects vary from program to program, but are typically assessed based on criteria related to:

- Jobs & Growth – Targeted at boosting GDP
- Sustainable & Resilient – Address and reduce the impacts of climate change.
- Inclusive & Accessible – Targeted at all Canadians through social inclusivity

For the water and wastewater projects specifically, the Green Infrastructure streams would be preferred due to the provision of safe water and improved environmental impacts of wastewater in the community.

The application process is relatively straight forward for all of these types of projects and preference is often given to “shovel ready projects”; however, for some of the programs, work completed before the application may not be considered as eligible for funding.

The typical requirements for a program funding application are addressed through the Class EA process where the problem identification, alternative evaluation and business plan are developed. Furthermore, depending on the program, more focus on the green or climate change resilience of the project may be applicable.

One of the more recent focuses has been on clear definition of need and benefit of the project as well as support from Council and the public. Issues such as Places to Grow and planning requirements to promote increased densities are also relevant to minimize urban sprawl and develop communities that have a combination of business and residential uses rather than a strictly suburban commuter community.

Finally, general alignment of the project goals with the three primary criteria (GDP growth, climate change and inclusivity) combined with a well defined plan for effective implementation are critical for funding success. Optimally, for Upper Tier funding it should be low risk and maximum impact to the community. Projects with significant benefit that can be completed on-time and on-budget are more likely to be funded in comparison with projects with significant unknowns or public opposition.

9.5 Innovative Approaches

For a community of the size of Springfield, which does not have the existing population density to fund this type of project directly and where the Township debt servicing capacity may be impeded by a large capital expense such as this, innovative approaches may provide an opportunity to implement the project in a timelier manner.

One innovative funding opportunity would be to consult with potential developers regarding options to have the developers front end the costs for the project to mitigate debt impacts on the Townships and allow the developers to advance their projects in parallel with the water supply project to avoid any significant gap between the water project completion and the first property occupancy in the new development area.

This approach could be made more attractive if was completed concurrently with a wastewater capacity expansion that would allow for full build-out and maximize the economies of scale for development.

9.6 Next Steps

The following are the next steps to successfully complete the water system implementation feasibility study for the growth of the Village of Springfield:

- Meet with Township staff members to workshop alternatives and cost recovery mechanisms.
- Confirm the alternatives and approach with the Township including the economic feasibility of the alternatives.
- Complete an economic analysis of the relative risk of the Township taking on debt associated with the project implementation in advance of development versus the timeline for cost recovery and the increase in tax revenue that will be associated with new development with the goal of determining a break even point where the combination of development charges and tax revenues exceed the cost and impact of reduction in debt servicing capacity.
- Consult with Aylmer and Central Elgin regarding the potential changes to the AAWSS agreement.
- Complete an assessment of the wastewater capacity and options related to address that issue as it will need to advance in parallel to the water project in order to facilitate the future growth potential.

- Consult with stakeholders regarding the various alternatives and obtain their input relative to the assessment criteria.
- Confirm and optimize the preferred alternative including proceeding through the Class EA process to facilitate project implementation.
- As part of the EA process and problem definition stages, complete a groundwater quality assessment of the area to determine if there is an existing groundwater quality concern that could support the upper tier funding application in terms of addressing an existing problem.

APPENDIX A

Assumptions

ASSUMPTIONS

2.1 Planning studies

In the report, it was assumed that the land available for development used for residential expansion would be equal to 54% of the total 93.78 ha allocated to residential land use by the proposed Official Plan Review in the next 25 years

3.1 Service requirements

It has been assumed for the purposes of this study that a connection to the Aylmer system will be able to meet the supply needs without supplemental upgrades to their system.

3.2 Water Supply Affordability

According to the 2021 Development Charges Background Study, to estimate the project affordability, it was assumed that the government would fund \$10.3M (2/3 funding) of the project through grants, subsidies, and other contributions attributable to the new development. The remaining \$9.7M would be funded by the Township via a low-interest debenture.

It was assumed a 3% annual interest rate for the low-interest debenture.

5.5 Alternative E: Direct Transmission Main from Aylmer Secondary Water Supply System

The anticipated annual savings associated with the reduced water cost was estimated to be \$55,500 assuming Malahide current serviced community only.

5.6 Alternative F: Joint Elevated Storage

The cost attributable to Malahide were estimated to be in the order of \$20.7M (+/-25%) assuming Malahide will own 45% of water storage.

6 Capital Cost Estimate

Capital costs are in 2022 dollars

8.2 Basic Cost Recovery

The cost recovery periods are as identified:

Alternative	Monthly Cost	Annual Cost	10-year payback	20-year payback
10% increase on current housing cost	\$123.90	\$1,486.80	\$12,682.71	\$22,119.83
5% of after-tax single income	\$138.40	\$1,660.80	\$14,166.96	\$24,708.51
\$100 per month	\$100	\$1,200.00	\$10,236.40	\$17,852.97

The cost recovery developed in the report is based on the assumption that the water rates were not adjusted for the reduction in cost by not going through the Aylmer system and that 2/3 of the project costs are covered by government funds.

Assumptions reported as follow:

- “Assuming that the water rates were not adjusted for the reduction in cost by not going through the Aylmer system, this equates to revenue from the sale of approximately 930 m³/day”
- “If 2/3 funding is secured, then the breakeven point would reduce to 310 m³/day, which is still very significant for an area with 30 current connection opportunities”

9.3 Timing Consideration

This study has been completed in advance of the completion of a Class EA, funding applications, design, and construction of the proposed works. The timeline reported in the report is based on the assumption that the Township will proceed to a Class EA as a result of this project.



the **TOWNSHIP** of
MALAHIDE
A proud tradition, a bright future.

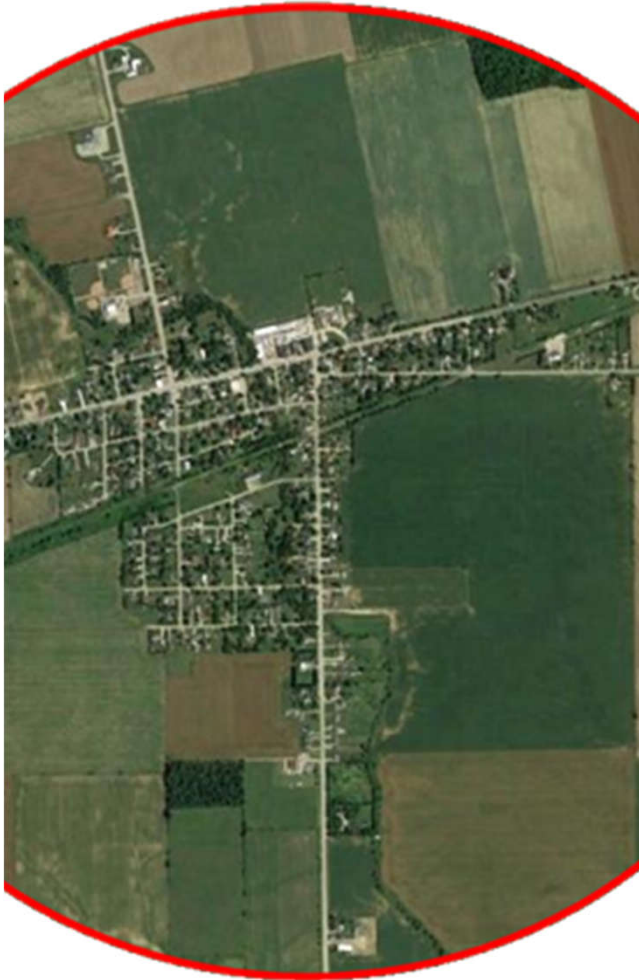


FEASIBILITY STUDY FOR POTABLE WATER DISTRIBUTION TO THE VILLAGE OF SPRINGFIELD

JUNE 16, 2022

OVERVIEW

- Background
- Growth
- Water Supply Options
- Preferred Set of Alternatives
- Cost Estimate
- Affordability
- Wastewater Implications
- Conclusions
- Recommendations
- Next Steps

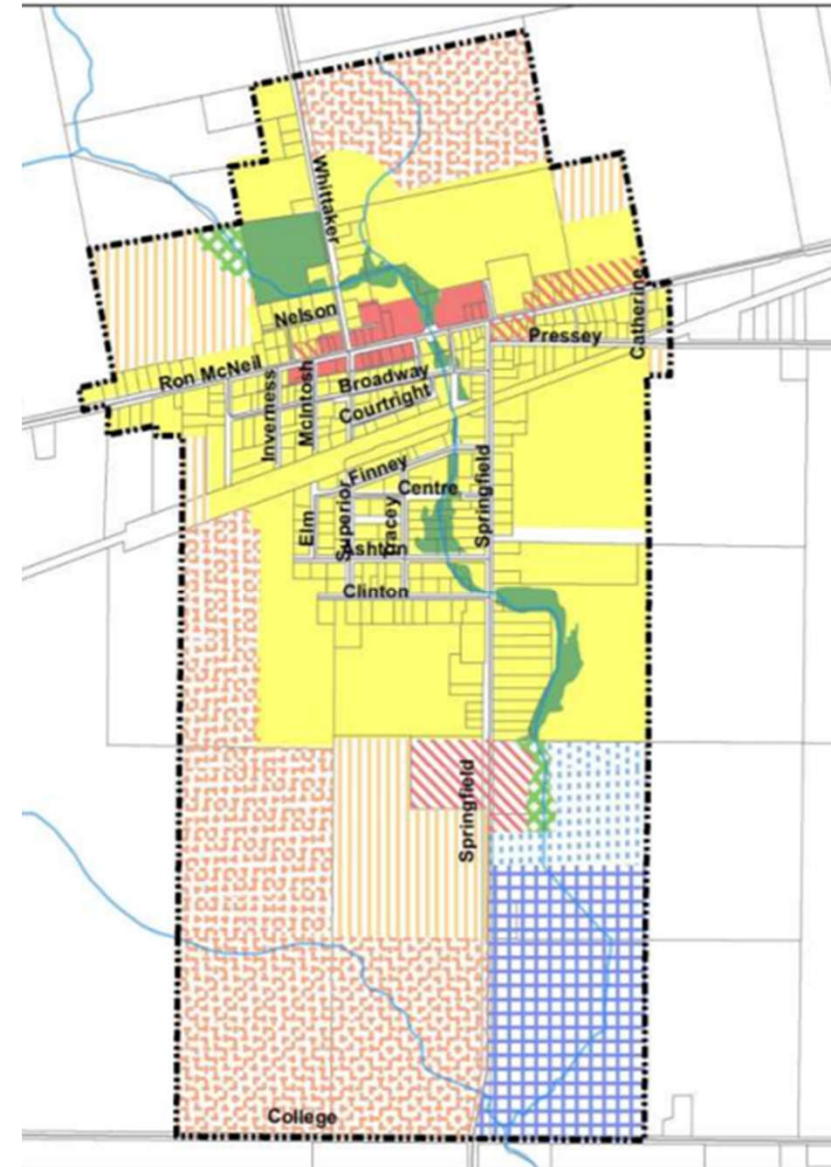


BACKGROUND – VILLAGE OF SPRINGFIELD

- Current Population: 890 (285 residential units)
- Water Supply: Private Wells
- Wastewater: Pumping Station to Aylmer Lagoons
- Wastewater Capacity: Allocated 469 m³/day capacity. Currently using 240 m³/day (~50%)

COMMUNITY GROWTH

- Recent 5-year Update and Comprehensive Review of Official Plan focuses Township growth in Springfield.
- 5-year growth – 79 hectares (43 hectares of residential) - ~ 860 residential units (~2,900 people)
- 25-year growth – 93.8 hectares (50.6 hectares of residential) – 1012 residential units (~3,400 people)
- Associated water/wastewater demand
 - 5 year – 2,200 m³/day
 - 25 year – 4,300 m³/day
- Growth is limited by water supply and wastewater capacity.



WATER SUPPLY OPTIONS

Alternative A – Do
Nothing

Alternative B.1 – Full
Build-out Groundwater
Supply

Alternative B.2 – Interim
Groundwater Supply
plus Watermain from
Aylmer for Ultimate
Build-out

Alternative C – Aylmer
Supply with Ground
Level Storage

Alternative D – Aylmer
Supply with Inground
Storage

Alternative E – Direct
Supply from Aylmer
Secondary Water Supply
System

Alternative F – Joint
Elevated Storage with
Aylmer and/or OPC.

REJECTED OPTIONS

Alternative A – Do
Nothing

Alternative B.1 – Full
Build-out Groundwater
Supply

Alternative B.2 – Interim
Groundwater Supply
plus Watermain from
Aylmer for Ultimate
Build-out

Alternative F – Joint
Elevated Storage with
Aylmer and/or OPC.

POTENTIALLY FEASIBLE OPTIONS

Alternative C – Aylmer
Supply with Ground
Level Storage

- \$18.2M

Alternative D – Aylmer
Supply with Inground
Storage

- \$22.2M

Alternative E – Direct
Supply from Aylmer
Secondary Water Supply
System

- \$32.4M

PREFERRED OPTIONS

Alternative C – Aylmer Supply with Ground Level Storage

- Lowest Capital Cost - \$18.2M
- Unfunded Cost per residence - \$8,500
- Higher Operating Costs

Alternative D – Aylmer Supply with Inground Storage

- Higher Capital Cost - \$22.2M
- Unfunded Cost per residence - \$10,300
- Lower Operating Costs
- More reliable

COST ASSUMPTIONS

- Capital cost includes watermains and infrastructure
- Individual site servicing is an additional cost (\$5,000 – \$10,000 per property)
- 25% contingency included in costs.
- Total Cost per property - \$13,500 - \$20,300.

PROJECT VIABILITY

Existing Residents

Advantages

- Safe Water
- Improved Fire Protection
- Increases water supply reliability
- Impacts of increased tax base
- Higher real estate values
- Rejuvenation of the Village: school and businesses are supported by new growth, new residents for community involvement.

Disadvantages

- Cost
- Ongoing Operating Cost
- Construction Disruption
- Increased Density

Development

- Safe Water
- Allows for increased density
- Cost in comparison individual wells
- Higher real estate values

- Ongoing Operating Cost
- Construction Disruption

AFFORDABILITY

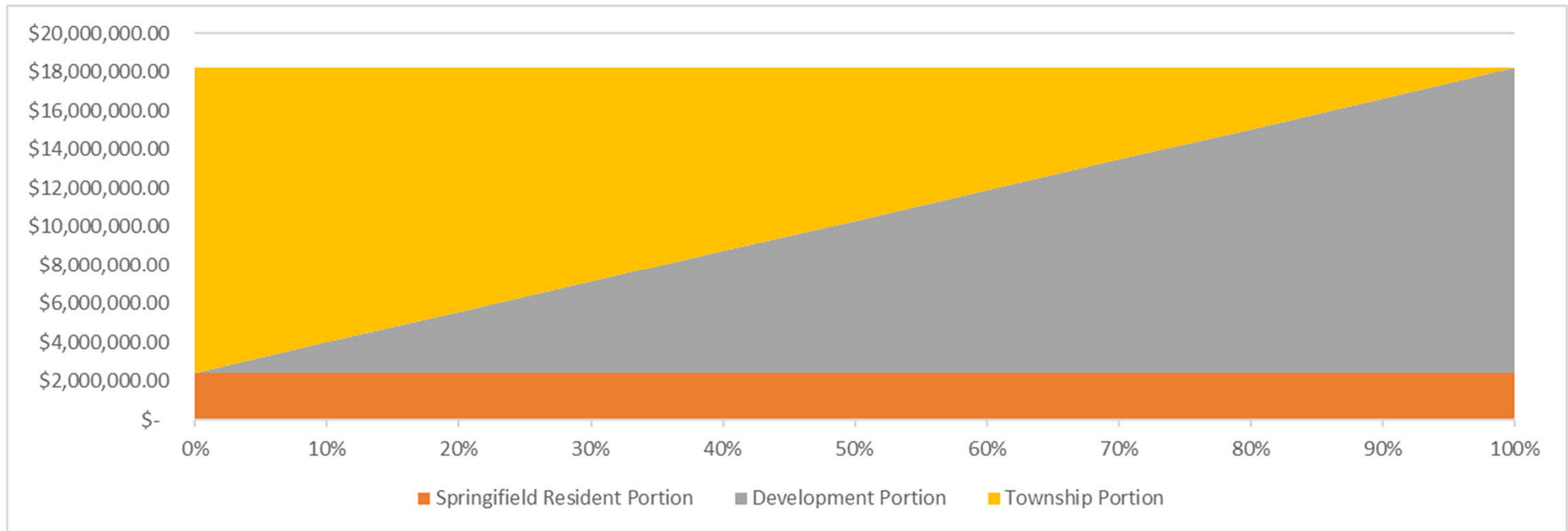
- Cost shared between existing users and growth.
- Growth does not occur immediately and is not guaranteed.
- Affordability to existing residents is more of a consideration than cost to growth.

EXISTING RESIDENT AFFORDABILITY

Alternative	Monthly Cost	Annual Cost
10% increase on current housing cost	\$123.90	\$1,486.80
5% of after-tax single income	\$138.40	\$1,660.80
\$100 per month	\$100.00	\$1,200.00

- Based on \$22.2M project cost and upper servicing cost (\$20,300 per residence), financed (3.5% interest rate) annual payments would be:
 - 10-yr financing - \$2,440
 - 20-yr financing - \$1,430
 - 25-yr financing - \$1,230
 - 30-yr financing - \$1,100

FINANCING RISK



UPPER TIER FUNDING IMPLICATIONS

Unfunded – All costs by Municipal Ratepayers

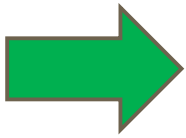
- \$22.2M plus servicing costs
- Existing Ratepayers - \$2.4M
- Development - \$15.8M

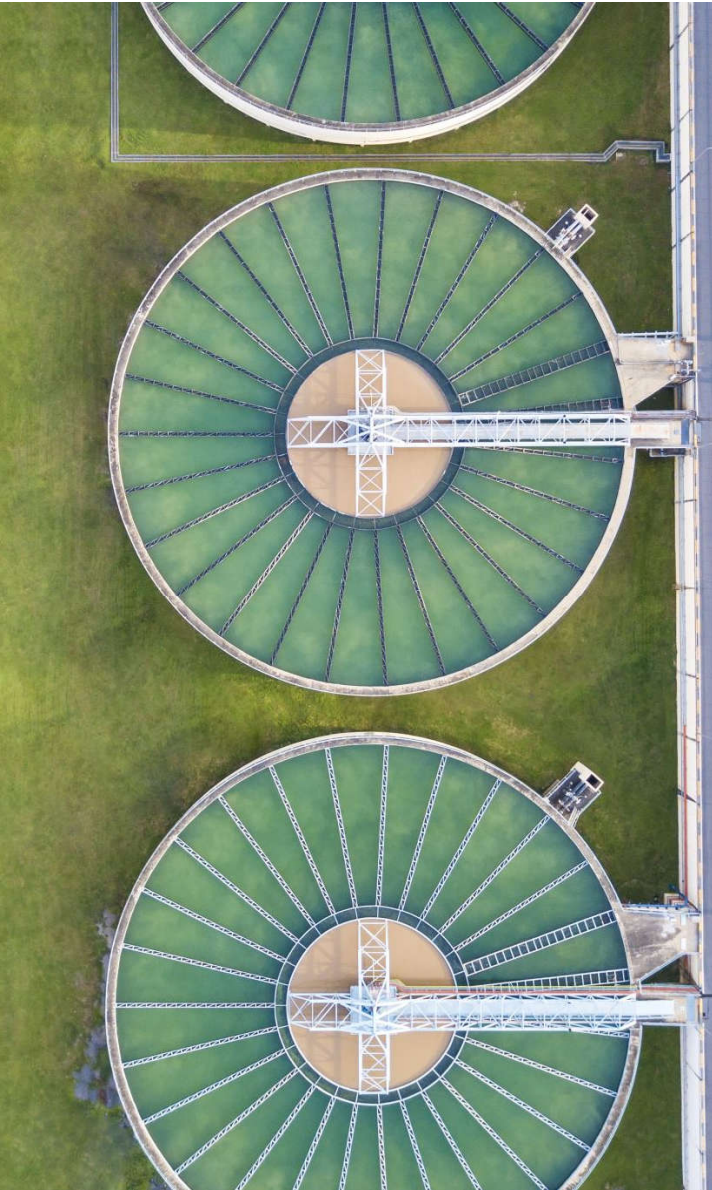
Fully Funded (66% - 1/3 Province, 1/3 Federal)

- \$7.4M plus 1/3 servicing costs (to property line)
- Existing Ratepayers - \$1M
- Development - \$6.4M

UPPER TIER
FUNDING
IMPACTS ON
AFFORDABILITY

■ 10-yr financing - \$2,440		\$815
■ 20-yr financing - \$1,430		\$475
■ 25-yr financing - \$1,230		\$410
■ 30-yr financing - \$1,100		\$370





WASTEWATER IMPLICATIONS

- Township has committed allocation of wastewater capacity in the Aylmer Wastewater Treatment Facility for an additional 237 units
- 25-year build-out is 1872 units with 860 considered in 5 years.
- Therefore, assuming linear development, once development starts, capacity will be reached in about 1 to 1.5 years.
- Options
 - Negotiate with Aylmer to participate in anticipated expansion – Est. \$10-20M
 - Independent treatment system for Springfield – Est. \$20-30M
- Cost would be borne entirely by development.
- Timing is important.
 - Aylmer Collaboration – 3-5 years
 - Independent Plant – 5 years

CONCLUSIONS

- In order to facilitate planned development, water project is required and is potentially affordable under both funded and unfunded scenarios. Funded is obviously preferred.
- Affordability is contingent on development as debt servicing will be a concern if development is delayed. Upper tier funding would mitigate that risk.
- Wastewater will need to be addressed very soon as system will reach capacity within 1-1.5 years after development begins.
- Negotiations with Aylmer and Water Board are important to secure capacity, bulk water pricing and to determine wastewater solution approach.

RECOMMENDATIONS /NEXT STEPS

- Enter into discussions with Aylmer and Water Board to confirm capacity availability and pricing structure.
- Enter into discussions with Aylmer regarding wastewater capacity and timing for upgrade to their facility.
- Build business case for upper tier funding through Green Infrastructure Stream or identified water problem due to groundwater quality in Springfield.
- Commence Schedule B Class EA for Water Supply Project.
- Begin economic development efforts to engage developers to minimize risk of delay between provision of services and collection of development charges.

TIMELINE



Water Supply Class EA (Schedule B) – Public Process

Start Fall 2022

Complete Fall 2023



Design and Procurement

Start Fall 2023

Watermain Tender – Winter 2024

Pumping Station and Reservoir
Tender – Fall 2024



Water Supply Construction

Water Transmission Main – Summer 2024

Distribution Mains – Summer 2024 – Fall
2026

Pumping Station and Reservoir – Fall 2025

THANK YOU FOR
YOUR TIME

QUESTIONS?

Jamie Witherspoon, P.Eng., LEED AP, ENV SP
President – WT Infrastructure Solutions Inc.

jamie.witherspoon@wtinfrastructure.ca





LONG POINT REGION CONSERVATION AUTHORITY
Board of Directors Virtual Meeting Minutes of May 4, 2022
Approved June 1, 2022

The Board of Directors Meeting was held via videoconference, on Wednesday, May 4, 2022, pursuant to section C.9, of the LPRCA's Administrative By-Law.

Members in attendance:

John Scholten, Chair	Township of Norwich
Michael Columbus, Vice-Chair	Norfolk County
Dave Beres	Town of Tillsonburg
Robert Chambers	County of Brant
Valerie Donnell	Municipality of Bayham/Township of Malahide
Tom Masschaele	Norfolk County
Stewart Patterson	Haldimand County
Ian Rabbitts	Norfolk County
Peter Ypma	Township of South-West Oxford

Regrets:

Kristal Chopp	Norfolk County
Ken Hewitt	Haldimand County

Staff in attendance:

Judy Maxwell, General Manager
 Aaron LeDuc, Manager of Corporate Services
 Lorrie Minshall, Special Projects
 Zachary Cox, Marketing Coordinator
 Dana McLachlan, Executive Assistant

1. Welcome and Call to Order

The chair called the meeting to order at 6:30 p.m., Wednesday, May 4, 2022.

The Chair notified the members that Ken Hewitt will be running as a candidate for Haldimand-Norfolk in the upcoming provincial election. Therefore, he is stepping away from the LPRCA Board until further notice, pending the outcome of the election.

2. Additional Agenda Items

There were no additional agenda items.

3. Declaration of Conflicts of Interest

None were declared.

FULL AUTHORITY COMMITTEE MEMBERS

Dave Beres, Robert Chambers, Kristal Chopp, Michael Columbus, Valerie Donnell,
 Ken Hewitt, Tom Masschaele, Stewart Patterson, Ian Rabbitts, John Scholten, Peter Ypma

4. Minutes of the Previous Meeting

a) Board of Directors Meeting of April 6, 2022

There were no questions or comments.

A-48/22

Moved by T. Masschaele

Seconded by D. Beres

THAT the minutes of the LPRCA Board of Directors Meeting held April 6, 2022 be adopted as circulated.

CARRIED

5. Business Arising

There was no business arising from the previous minutes.

6. Review of Committee Minutes

There were no Committee Minutes presented.

7. Correspondence

a) Paul De Cloet – Thank you

b) Ken Hewitt – Election

Ken Hewitt's email regarding stepping away from LPRCA board duties was included as an additional item of correspondence.

A-49/22

Moved by R. Chambers

Seconded by P. Ypma

THAT the correspondence outlined in the Board of Director's Agenda of May 4, 2022 with additions be received as information.

CARRIED

8. Development Applications

a) Section 28 Regulations Approved Permits

Through the General Manager's delegating authority, 18 applications were approved in the past month, LPRCA-66/22, LPRCA-68/22, LPRCA-69/22, LPRCA-70/22, LPRCA-71/22, LPRCA-72/22, LPRCA-73/22, LPRCA-75/22, LPRCA-76/22, LPRCA-77/22, LPRCA-78/22, LPRCA-80/22, LPRCA-81/22, LPRCA-82/22, LPRCA-83/22, LPRCA-84/22, LPRCA-87/22, and LPRCA-88/22.

FULL AUTHORITY COMMITTEE MEMBERS

Dave Beres, Robert Chambers, Kristal Chopp, Michael Columbus, Valerie Donnell,
Ken Hewitt, Tom Masschaele, Stewart Patterson, Ian Rabbitts, John Scholten, Peter Ypma

All of the staff-approved applications met the requirements as set out in Section 28 of the *Conservation Authorities Act*.

A-50/22

Moved by M. Columbus

Seconded by V. Donnell

THAT the LPRCA Board of Directors receives the Staff Approved Section 28 Regulations Approved Permits report as information.

CARRIED

b) New Business

a) General Manager's Report

The General Manager provided an overview of operations this past month.

The General Manager and Vice-Chair attended the Conservation Ontario Annual General Meeting, held virtually on April 11, 2022. Alan Revill, Cataraqui Region Conservation Authority, was elected as Conservation Ontario Chair, and Alan Dale, Upper Thames River Conservation Authority, was elected as Conservation Ontario Vice-Chair for 2022.

The Province released the Phase 2 Regulations defining rules for the 2024 budget discussions. Staff is reviewing the regulations and a report will be brought back to the board with further details.

The parks and campgrounds opened on May 1 and seasonal sites continue to be filled.

Tree planting is ongoing but has been delayed somewhat by rain.

A-51/22

Moved by P. Ypma

Seconded by S. Patterson

That the LPRCA Board of Directors receives the General Manager's Report for April 2022 as information.

CARRIED

b) Q1 Financial Report – March 31, 2022

The Manager of Corporate Services reviewed the financials up to and including March 31, 2022.

Revenues to date represent 26.6% of the annual budget and expenditures 15.1%. Planning revenues are \$128,007 and are in line with the previous year. Forestry revenues are currently \$195,175 and are projected to meet target.

FULL AUTHORITY COMMITTEE MEMBERS

Dave Beres, Robert Chambers, Kristal Chopp, Michael Columbus, Valerie Donnell,
Ken Hewitt, Tom Masschaele, Stewart Patterson, Ian Rabbitts, John Scholten, Peter Ypma

To date, 396 seasonal campsites have been paid and seasonal camping revenues are projected to meet or exceed budget.

Overall, the Authority is in a positive financial position up to, and including, March 31, 2022.

A-52/22

Moved by T. Masschaele

Seconded by I. Rabbitts

THAT the LPRCA Board of Directors receives the Q1 Financial Report – March 31, 2022 for the period up to and including March 31st, 2022 as information.

CARRIED

c) Authorization Federal Funding Agreement

In July 2021, staff submitted a federal grant application to help fund the Backus Revitalization Project.

The grant was approved for \$143,250 in March 2022. To fully execute the agreement, a Board resolution of authorization was required.

To date, \$242,091 has been raised, including this grant funding, toward the estimated project cost of \$250,000.

A-53/22

Moved by P. Ypma

Seconded by V. Donnell

THAT the LPRCA Board of Directors pass a resolution to authorize execution of the funding agreement with the Federal Government for eligible funding totaling \$143,250.

CARRIED

Adjournment

The Chair adjourned the meeting at 6:55 p.m.

John Scholten
Chair

Judy Maxwell
General Manager/Secretary-Treasurer

/dm

FULL AUTHORITY COMMITTEE MEMBERS

Dave Beres, Robert Chambers, Kristal Chopp, Michael Columbus, Valerie Donnell,
Ken Hewitt, Tom Masschaele, Stewart Patterson, Ian Rabbitts, John Scholten, Peter Ypma

THE CORPORATION OF THE TOWNSHIP OF MALAHIDE**BY-LAW NO. 22-40**

Being a By-law to authorize the execution of an Amending Agreement with the Ontario Clean Water Agency for the provision of operations and maintenance services for water facilities.

WHEREAS Section 5(3) of the Municipal Act, 2001, c. 25, as amended, authorizes a municipality to pass by-laws to exercise its municipal powers;

AND WHEREAS the Ontario Clean Water Agency, a corporation established under the Capital Investment Plan Act, 1993, c.23, is in the business of providing operations and maintenance services for water facilities;

AND WHEREAS The Corporation of the Township of Malahide is the owner of the Malahide Distribution System;

AND WHEREAS The Corporation of the Township of Malahide is the Administering Municipality for the Port Burwell Area Secondary Water Supply System and the Aylmer Area Secondary Water Supply System;

AND WHEREAS the Council of The Corporation of the Township of Malahide is desirous of entering into an Amending Agreement with the Ontario Clean Water Agency for the operation and maintenance of the Malahide Distribution System, the Port Burwell Area Secondary Water Supply System, and the Aylmer Area Secondary Water Supply System;

NOW THEREFORE the Council of The Corporation of the Township of Malahide **HEREBY ENACTS AS FOLLOWS:**

1. **THAT** the entering into of an Amending Agreement with the Ontario Clean Water Agency, a corporation established under the Capital Investment Plan Act, 1993, c.23, is hereby approved and authorized.
2. **THAT** the Mayor and the Clerk be and they are hereby authorized and directed to execute on behalf of The Corporation of the Township of Malahide the said Amending Agreement in substantially the same form as that attached hereto as Schedule "A" and forming a part of this By-law.
3. **THAT** the said Amending Agreement shall take effect and come into force upon the signing thereof by all parties thereto.
4. **THAT** this By-law shall come into force and take effect on the final passing thereof.

READ a **FIRST** and **SECOND** time this 16th day of June, 2022.

READ a **THIRD** time and **FINALLY PASSED** this 16th day of June, 2022.

Mayor, D. Mennill

Clerk, A. Adams

THE CORPORATION OF THE TOWNSHIP OF MALAHIDE**BY-LAW NO. 22-41**

Being a By-law to authorize the execution of an Amending Agreement with the Ontario Clean Water Agency for the provision of operations and maintenance services for Malahide Wastewater Collection System.

WHEREAS Section 5(3) of the Municipal Act, 2001, c. 25, as amended, authorizes a municipality to pass by-laws to exercise its municipal powers;

AND WHEREAS the Ontario Clean Water Agency, a corporation established under the Capital Investment Plan Act, 1993, c.23, is in the business of providing operations and maintenance services for wastewater collection facilities;

AND WHEREAS The Corporation of the Township of Malahide is the owner of the Malahide Wastewater Collection System;

AND WHEREAS the Council of The Corporation of the Township of Malahide is desirous of entering into an Amending Agreement with the Ontario Clean Water Agency for the operation and maintenance of the Malahide Wastewater Collection System;

NOW THEREFORE the Council of The Corporation of the Township of Malahide **HEREBY ENACTS AS FOLLOWS:**

1. **THAT** the entering into of an Amending Agreement with the Ontario Clean Water Agency for the operation and maintenance of the Malahide Wastewater Collection System is hereby approved and authorized.
2. **THAT** the Mayor and the Clerk be and they are hereby authorized and directed to execute on behalf of The Corporation of the Township of Malahide the said Amending Agreement in substantially the same form as that attached hereto as Schedule "A" and forming a part of this By-law.
3. **THAT** the said Amending Agreement shall take effect and come into force upon the signing thereof by all parties thereto.
4. **THAT** this By-law shall come into force and take effect on the final passing thereof.

READ a **FIRST** and **SECOND** time this 16th day of June, 2022.

READ a **THIRD** time and **FINALLY PASSED** this 16th day of June, 2022.

Mayor, D. Mennill

Clerk, A. Adams

THE CORPORATION OF THE TOWNSHIP OF MALAHIDE**BY-LAW NO. 22-18**

Being a By-law to amend Schedule "A" to By-law No. 21-16 insofar as it prescribes to incorporate various parcels as part of the public highways located within the Township of Malahide.

WHEREAS Section 31 of the Municipal Act, S.O. 2001, c. 25 authorizes a municipality to open by by-law any highway within its jurisdiction;

AND WHEREAS the Council of The Corporation of the Township of Malahide has acquired land for the purpose of widening various public highways located within the municipality;

NOW THEREFORE the Council of The Corporation of the Township of Malahide **HEREBY ENACTS AS FOLLOWS:**

1. THAT the lands and premises described in Schedule "A" to By-law No. 21-16, insofar as it prescribes to incorporate various parcels as part of the public highways located within the Township of Malahide, be and the same is hereby replaced in its entirety with Schedule "A" attached hereto.
2. THAT this By-law shall come into force and take effect on the final passing thereof.

READ a **FIRST** and **SECOND** time this 16th day of June, 2022.

READ a **THIRD** time and **FINALLY PASSED** this 16th day of June, 2022.

Mayor, D. Mennill

Clerk, A. Adams

THE CORPORATION OF THE TOWNSHIP OF MALAHIDE

**SCHEDULE "A"
TO
BY-LAW NO. 22-18**

DESCRIPTION	AUTHORIZING BY-LAW	PURPOSE
Chalet Line		
Part of Lot 17, Concession 5 Part 4, Reference Plan 11R-5582 Instrument No. 412057 Registered on 2001/10/30	00-02	Road Widening
Part of Lot 18, Concession 5 Part 11, Reference Plan 11R-5596 Instrument No. 413107 Registered on 2001/12/07	00-02	Road Widening
Part of Lot 18, Concession 5 Part 10 and 12, Reference Plan 11R-5596 Instrument No. 412047 Registered on 2001/10/30	00-02	Road Widening
Part of Lot 19, Concession 6 Part 5, Reference Plan 11R-5596 Instrument No. 412059 Registered on 2001/10/30	00-02	Road Widening
Part of Lot 18, Concession 6 Part 3, Reference Plan 11R-5596 Instrument No. 412058 Registered on 2001/10/30	00-02	Road Widening
Part of Lot 19, Concession 6 Part 7, Reference Plan 11R-5596 Instrument No. 412060 Registered on 2001/10/30	00-02	Road Widening
Part Lot 94, Concession STR Part 2, Reference Plan 11R-5607 Instrument No. 412056 Registered on 2001/10/30	00-02	Road Widening

Part of Lot 21, Concession 5 Part 3, Reference Plan 11R-5607 Instrument No. 412048 Registered on 2001/10/30	00-02	Road Widening
Part Lots 95 & 96, Concession STR Part 1, Reference Plan 11R-5657 Instrument No. 412054 Registered on 2001/10/30	00-02	Road Widening
Part of Lot 22, Concession 5 Part 4, Reference Plan 11R-5657 Instrument No. 412049 Registered on 2001/10/30	00-02	Road Widening
Part Lot 96, Concession STR Part 2, Reference Plan 11R-5657 Part of Lot 24, Concession 5 Part 3, Reference Plan 11R-5891 Instrument No. 412053 Registered on 2001/10/30	00-02	Road Widening
Part Lot 98, Concession STR Part 1, Reference Plan 11R-5898 Instrument No. 412051 Registered on 2001/10/30	00-02	Road Widening
Part Lot 101 and 102, Concession STR Part 7, Reference Plan 11R-6062 Instrument No. 412050 Registered on 2001/10/30	00-02	Road Widening
Part Lot 25, Concession 5 Parts 6, 7 and 8 Reference Plan 11R-5898 Instrument No. 412045 Registered on 2001/10/30	00-02	Road Widening
Part of Lot 25, Concession 5 Part 9, Reference Plan 11R-5898 Instrument No. 413112 Registered on 2001/12/07	00-02	Road Widening
Part Lot 25, Concession 5 Part 10, Reference Plan 11R-5898 Instrument No. 412044 Registered on 2001/10/30	00-02	Road Widening

Part of Lot 26, Concession 5 Part 14, Reference Plan 11R-5898 Instrument No. 413109 Registered on 2001/12/07	00-02	Road Widening
Part of Lot 27, Concession 5 Part 2, Reference Plan 11R-6062 Instrument No. 412043 Registered on 2001/10/30	00-02	Road Widening
Part of Lot 28, Concession 5 Part 4, Reference Plan 11R-6062 Instrument No. 412039 Registered on 2001/10/30	00-02	Road Widening
Part of Lot 29, Concession 5 Part 5, Reference Plan 11R-6062 Instrument No. 412038 Registered on 2001/10/30	00-02	Road Widening
Part of Lot 94, Conc. South Talbot Road Part 1, Reference Plan 11R-5607 Part 3, Reference Plan 11R-7785 Instrument No. 423509 Registered on 2003/02/19	00-02 and 02-48	Road Widening Daylight Corner

THE CORPORATION OF THE TOWNSHIP OF MALAHIDE**BY-LAW NO. 22-49**

Being a By-law to adopt, confirm and ratify matters dealt with by resolution of the Township of Malahide.

WHEREAS Section 5(3) of the Municipal Act, 2001, c. 25, as amended, provides that the powers of every council are to be exercised by by-law;

AND WHEREAS in many cases, action which is taken or authorized to be taken by the Township of Malahide does not lend itself to the passage of an individual by-law;

AND WHEREAS it is deemed expedient that the proceedings of the Council of the Township of Malahide at this meeting be confirmed and adopted by by-law;

NOW THEREFORE the Council of The Corporation of the Township of Malahide **HEREBY ENACTS AS FOLLOWS:**

1. THAT the actions of the Council of the Township of Malahide, at its regular meeting held on June 16, 2022, in respect of each motion, resolution and other action taken by the Council of the Township of Malahide at such meeting is, except where the prior approval of the Ontario Municipal Board or other authority is required by law, is hereby adopted, ratified and confirmed as if all such proceedings were expressly embodied in this By-law.
2. THAT the Mayor and the appropriate officials of the Township of Malahide are hereby authorized and directed to do all things necessary to give effect to the action of the Council of the Township of Malahide referred to in the proceeding section.
3. THAT the Mayor and the Clerk are hereby authorized and directed to execute all documents necessary in that behalf and to affix thereto the corporate seal of the Township of Malahide.
4. THAT this By-law shall come into force and take effect upon the final passing thereof.

READ a **FIRST** and **SECOND** time this 16th day of June, 2022.

READ a **THIRD** time and **FINALLY PASSED** this 16th day of June, 2022.

Mayor, D. Mennill

Clerk, A. Adams