



MUNICIPALITY OF MORRIS-TURNBERRY

COUNCIL AGENDA

Tuesday, July 5th, 2022, 7:30 pm

The Council of the Municipality of Morris-Turnberry will meet in Council Chambers in regular session on the 5th day of July 2022, at 7:30 pm.

1.0 CALL TO ORDER

Disclosure of recording equipment.

2.0 ADOPTION OF AGENDA

*Moved by
Seconded by*

THAT the Council of the Municipality of Morris-Turnberry hereby adopts the agenda for the meeting of July 5th, 2022, as circulated.

3.0 DISCLOSURE OF PECUNIARY INTEREST / POTENTIAL CONFLICT OF INTEREST

4.0 MINUTES

*Moved by
Seconded by*

THAT the Council of the Municipality of Morris-Turnberry hereby adopts the June 21st, 2022, Council Meeting Minutes as written.

5.0 ACCOUNTS

A copy of the July 5th accounts listing is attached.

*Moved by
Seconded by*

THAT the Council of the Municipality of Morris-Turnberry hereby approves for payment the July 1st accounts in the amount of \$770,635.12.

6.0 PUBLIC MEETINGS AND DEPUTATIONS

6.1 ZONING BY-LAW AMENDMENT PUBLIC MEETING

Application MTu Z02-2022 Evergreen Holsteins
Plan 164, Lots 8-11, 34, 35, 48 & 49
91135 Belmore Line, Belmore

*Moved by
Seconded by*

THAT the Council of the Municipality of Morris-Turnberry hereby Adjourns their regular meeting of Council and opens a Public Meeting to consider Zoning By-Law Amendment MTu Z02-2022.

PUBLIC MEETING – ZONING BY-LAW AMENDMENT

6.1.1 Call to Order

6.1.2 Declaration of Pecuniary Interest

6.1.3 Requirement

This Public Meeting is being held under the Planning Act, which requires that Council hold at least one public meeting and that proper notice be given.

6.1.4 MTu Z02-2022 Evergreen Holsteins

We have provided Council with a report prepared by Huron County Planner, Meghan Tydd-Hrynyk, and Manager of Planning, Denise Van Amersfoort regarding the Zoning By-Law Amendment application submitted by agent Nancy Michie on behalf of Evergreen Holsteins (Robert and Andrea Van Ness).

6.1.5 Purpose

This application proposes to amend the zoning on the subject lands from Village Residential – Low Density (VR1) and Development (D) to Village Residential – Medium Density (VR2). This would allow for a tri-plex (3 units) and a semi-detached dwelling (2 units) to be constructed (a total of 5 units).

6.1.6 Application Process

An application was submitted by Nancy Michie and was considered complete on June 1st 2022.

Notice of the Public Meeting was mailed by the municipality to all property owners within 120m of the property on June 15th, 2022, and notice was posted on the subject property.

6.1.7 Comments

- Huron County Planner
- Council's Questions and/or Comments
- Others

6.1.8 Recommendation of the Huron County Planner

It is recommended that zoning by-law amendment application Z02-2022 be **denied**.

6.1.9 Close public meeting

*Moved by
Seconded by*

THAT the Council of the Municipality of Morris-Turnberry hereby closes the Public Meeting to consider Zoning By-Law Amendment MTu Z02-2022 and reconvenes its regular meeting of Council.

6.1.10 Consideration of Zoning By-Law Amendment MTu Z02-2022

*Moved by
Seconded by*

THAT the Council of the Municipality of Morris-Turnberry hereby refuses application MTu Z02-222 to amend Morris-Turnberry Zoning By-law 45-2014 based on being inconsistent with the Provincial Policy Statement, not conforming with the Huron County or Morris-Turnberry Official Plans, and not representing good planning, as detailed in the Planner's report.

6.2 COMMITTEE OF ADJUSTMENT

Application MV03-2022 Coultres
Concession 3, South Part Lot 4, Morris

Moved by
Seconded by

THAT The Council of the Municipality of Morris-Turnberry hereby adjourns their Council Meeting and the Committee of Adjustment hereby opens a meeting to review application for Minor Variance MV03-202, submitted by Dallas Coultres.

COMMITTEE OF ADJUSTMENT MEETING

6.2.1 Call to Order

6.2.2 Declaration of Pecuniary Interest

6.2.3 Purpose

Proposed relief from Section 4.6, to reduce the required Minimum Distance Separation (MDS) setback for the construction of a new house from 470m to 136m as measured from the edge of the beef barn on the property to the south (40453 Cardiff Road – Time View Farms Ltd.) to the proposed location of the house.

6.2.4 Application Process

An application for a Minor Variance was submitted by Dallas Coultres and considered complete on June 17th, 2022.

Notice of a Public Meeting was mailed by the municipality to all property owners within 60m of the property on June 20th, 2022, and notice was posted on the subject property.

A report has been prepared by Huron County Planner Meghan Tydd-Hrynyk regarding this application.

6.2.5 Comments

1. Planner's Report
2. Council's Questions and/or Comments
3. Applicant and/or Agent
4. Others

6.2.6 Recommendation

It is recommended that Application MV03/22 be deferred to allow for staff and the applicant additional time to review the proposed house location in relation to existing barns and discuss options.

6.2.7 Committee of Adjustment Decision

Moved by
Seconded by

THAT The Committee of Adjustment of the Municipality of Morris-Turnberry hereby defers a decision on application MV03-2022 to allow staff and the applicant additional time to review the proposed house location in relation to existing barns and to discuss options.

6.2.8 Close Committee of Adjustment

Moved by
Seconded by

THAT The Committee of Adjustment hereby adjourns their meeting and the Council of the Municipality of Morris-Turnberry hereby reconvenes their Regular Council Meeting.

7.0 STAFF REPORTS

None.

8.0 BUSINESS**8.1 ASSET MANAGEMENT PLAN 2022**

In accordance with O. Reg. 588/17, an asset management plan for core municipal infrastructure assets has been prepared and is provided here for Council approval. Treasurer Sean Brophy will review and present the plan for the information of Council.

*Moved by
Seconded by*

THAT the Council of the Municipality of Morris-Turnberry hereby approves and adopts the 2022 Asset Management Plan as presented.

8.2 NEXT GENERATION 9-1-1 SERVICE AGREEMENT

A report has been prepared by CAO/Clerk Trevor Hallam in this regard.

*Moved by
Seconded by*

THAT the Council of the Municipality of Morris-Turnberry hereby directs staff to return a by-law to the next meeting of Council authorizing the execution of the 9-1-1 Service Agreement with Huron County as presented.

8.3 COUNCIL MEETING STRUCTURE

A report has been prepared by CAO/Clerk Trevor Hallam in this regard.

9.0 COUNCIL REPORTS

Sharen Zinn

Jamie McCallum

Jim Nelemans

Kevin Freiburger

Jamie Heffer

10.0 CORRESPONDENCE, MINUTES, ITEMS FOR INFORMATION

- 10.1 OLT-21-001676 Case Closure Notice – Errington Appeal of Z04-2021
- 10.2 Notice of Public Meeting – North Huron Five Year Official Plan Review
- 10.3 Meeting Highlights – AMDSB June 28, 2022
- 10.4 Outstanding Action Items

11.0 NEW BUSINESS

- 11.1 Items to be placed on the agenda of the next regular Council meeting.

12.0 BY-LAWS AND AGREEMENTS**12.1 MAITLAND VALLEY CONSERVATION AUTHORITY MEMORANDUM OF UNDERSTANDING**

At the May 17th meeting of Council, direction was given to staff to return a Memorandum of Understanding between the Municipality and the Maitland Valley Conservation Authority for all services provided, to be executed under by-law. By-law 26-2022 is presented here for consideration.

*Moved by
Seconded by*

THAT leave be given to introduce By-Law # 26-2022, being a by-law to authorize the execution of a Memorandum of Understanding between the Municipality and the Maitland Valley Conservation Authority for all services provided, and that it now be read severally a first, second, and third time, and finally passed this 5th day of July 2022.

13.0 CLOSED SESSION

No business for closed session.

14.0 CONFIRMING BY-LAW

*Moved by
Seconded by*

THAT leave be given to introduce By-Law # 27-2022, being a by-law to confirm the proceedings of the Municipality of Morris-Turnberry meeting of Council held on July 5th, 2022, and that it now be read severally a first, second, and third time, and finally passed this 5th day of July 2022.

15.0 ADJOURNMENT

*Moved by
Seconded by*

THAT the Council of the Municipality of Morris-Turnberry does now adjourn at ____ pm.

NEXT MEETINGS:

Regular Meeting of Council - Tuesday, July 19th, 2022, 7:30 pm
Regular Meeting of Council - Tuesday, August 9th, 2022, 7:30 pm



MUNICIPALITY OF MORRIS-TURNBERRY

COUNCIL MINUTES

Tuesday, June 21st, 2022, 7:30 pm

The Council of the Municipality of Morris-Turnberry met in Council Chambers in regular session on the 21st day of June 2022, at 7:30 pm.

Council in Attendance

Mayor Jamie Heffer
Deputy Mayor Sharen Zinn
Jamie McCallum
Kevin Freiburger
Jim Nelemans

Staff in Attendance

Trevor Hallam CAO/Clerk
Mike Alcock Director of Public Works

Others in Attendance

Nancy Bridge Municipal Auditor, Seebach and Associates
Jenny Hogervorst Britespan Building Systems Inc.
Stephanie Towton Britespan Building Systems Inc.
Christina Seiber
Trevor Seip Deputy Reeve, North Huron
Mike Wilson Wingham Advance Times
Denny Scott Blyth Citizen

1.0 CALL TO ORDER

Mayor Heffer called the meeting to order at 7:30 pm.

Mayor Heffer noted that Mike Wilson of the Wingham Advance Times disclosed the use of recording equipment for the purpose of writing articles to the Clerk in advance of the meeting.

2.0 ADOPTION OF AGENDA

Mayor Heffer noted an addendum to the Closed Session agenda to include an item regarding the disposition of municipally owned land.

Councilor Nelemans requested an addendum to the Closed Session agenda to include an item regarding a personal matter about an identifiable individual.

Motion 126-2022

*Moved by Sharen Zinn
Seconded by Jamie McCallum*

THAT the Council of the Municipality of Morris-Turnberry hereby adopts the agenda for the meeting of June 21st, 2022, as amended.

Carried.

3.0 DISCLOSURE OF PECUNIARY INTEREST / POTENTIAL CONFLICT OF INTEREST

None.

4.0 **MINUTES**

Motion 127-2022

*Moved by Kevin Freiburger
Seconded by Jamie McCallum*

THAT the Council of the Municipality of Morris-Turnberry hereby adopts the June 7th, 2022, Council Meeting Minutes as written.

Carried.

5.0 **ACCOUNTS**

Motion 128-2022

*Moved by Jim Nelemans
Seconded by Sharen Zinn*

THAT the Council of the Municipality of Morris-Turnberry hereby approves for payment the June 21st accounts in the amount of \$1,158,343.90.

Carried.

6.0 **PUBLIC MEETINGS AND DEPUTATIONS**

6.1 DEPUTATIONS

6.1.1 Britespan Building Systems Inc.

Jenny Hogervorst and Stephanie Towton from Britespan Building Systems Inc. addressed Council regarding their participation in a temporary foreign worker program.

They described their plan for the integration of the workers into the community and engaged in a discussion with Council regarding the benefits and details of the program.

Council expressed support for the initiative taken by Britespan Building Systems to find solutions to the shortage of skilled labour they have experienced.

Ms. Hogervorst and Ms. Towton left the meeting.

6.1.2 Municipal Audit Report 2021

Nancy Bridge of Seebach and Company Chartered Professional Accountants presented the 2021 Financial Statements and Audit Report.

Motion 129-2022

*Moved by Jamie McCallum
Seconded by Jim Nelemans*

THAT The Council of the Municipality of Morris-Turnberry accept the 2021 Audit Report as submitted by Nancy Bridge, Auditor, Seebach and Company Chartered Professional Accountants.

Carried.

Ms. Bridge left the meeting.

6.2 PUBLIC MEETINGS

6.2.1 MEETING TO CONSIDER ENGINEER'S REPORT – ELLISON MUNICIPAL DRAIN

6.2.1.1 Engineer's Report

A Notice of Request for Drain Improvement was received October 12, 2021, for the construction of a new culvert/farm crossing at the South Part Lot 4, Concession 7, Morris Ward. An on-site meeting was held at 10:00am on May 9th.

Notice of the meeting to consider the engineer's report being at 7:30 pm on June 21st 2022 was issued to landowners on May 30th, 2022.

Project Engineer, Ben Gowing, was not in attendance. Staff presented the Engineer's report to Council and those in attendance.

6.2.1.2 Questions and Comments

- Council
 - There were no questions or comments from Council
- Landowners in attendance
 - There were no questions from landowners in attendance

6.2.1.3 Consideration of Provisional By-Law

Motion 130-2022

*Moved by Sharen Zinn
Seconded by Jim Nelemans*

THAT leave be given to introduce By-Law # 23-2022, being a by-law to provisionally adopt the engineer's report for the Ellison Municipal Drain Crossing, and that it now be read a first and second time.

Carried.

6.2.1.4 Date of Court of Revision and instruction to Tender.

Motion 131-2022

*Moved by Jamie McCallum
Seconded by Jim Nelemans*

THAT the Court of Revision for the Ellison Municipal Drain Crossing be set for July 19th, 2022 at 7:30 pm and the project be tendered for results to be presented on August 9th, pending no appeals.

Carried.

6.2.1.5 Appointment of Members to the Court of Revision

Motion 132-2022

*Moved by Jim Nelemans
Seconded by Jamie McCallum*

THAT the members of the Court of Revision for the Ellison Municipal Drain Crossing be:

- 1 – Morris-Turnberry: Jamie Heffer*
- 2 – Morris-Turnberry: Sharen Zinn*
- 3 – North Huron: Deputy Reeve Trevor Seip*

Carried.

Ms. Seiber and Deputy Reeve Seip left the meeting.

7.0 STAFF REPORTS

7.1 PUBLIC WORKS

7.1.1 Operations Update

A report was presented by Director of Public Works Mike Alcock to provide an update on Public Works operations and activities.

Deputy Mayor Zinn and Councillor Nelemans asked for further details on the alternative dust control treatments being trialed, which were answered by Mr. Alcock.

8.0 **BUSINESS**

8.1 SCHWARTZENTRUBER DRAIN S.78 REQUEST

A report prepared by Drainage Superintendent Kirk Livingston in this regard was presented by Mr. Hallam

Motion 133-2022

*Moved by Sharen Zinn
Seconded by Jim Nelemans*

THAT the Council of the Municipality of Morris-Turnberry hereby receives the Notice of Request for Drain Improvement for the Schwartzentruber Municipal Drain, as described in the request submitted by Henry Frishhnecht for North Part Lot 2 and 3, Concession 3 under Section 78(1) of the Drainage Act;

AND FURTHER THAT Council supports proceeding with the drainage works and instructs the Clerk to send the notice required under Section 78(2) of the Drainage Act to the Maitland Valley Conservation Authority, the Ontario Ministry of Agriculture Food and Rural Affairs, and parties who requested the improvement under Section 78(1);

AND FURTHER THAT Headway Engineering be appointed to prepare a report for the improvement of the Schwatrzentruber Drain effective 30 days after the issuance of the notice to the prescribed parties.

Carried.

8.2 RURAL MANAGEMENT INC. 40T22004 AND ZONING BY-LAW AMENDMENT Z01-2022

A report prepared by Huron County Planner Meghan Tydd-Hrynyk in this regard was presented by Mr. Hallam

8.2.1 Zoning By-Law Amendment Z01-2022

As minor changes were made to the proposed zoning since the public meeting, it was recommended that Council consider a motion to confirm that no further notice is to be given in respect of the proposed by-law, in accordance with section 34(12) of the *Planning Act*.

Motion 134-2022

*Moved by Jamie McCallum
Seconded by Sharen Zinn*

WHEREAS Council of the Corporation of the Municipality of Morris-Turnberry has held a Public Meeting pursuant to Section 34(12) of the Planning Act, RSO 1990 with respect to a proposed zoning by-law affecting Plan 410, Park Lot 53 in the Municipality of Morris-Turnberry (zoning by-law amendment application ZBA01-2022);

AND WHEREAS certain changes have been made to the proposed by-law after the holding of the public meeting;

NOW, THEREFORE, the Council of the Corporation of the Municipality of Morris-Turnberry hereby resolves that, pursuant to Section 34(17) of the Planning Act, RSO 1990, no further notice is to be given in respect of the proposed by-law.

Carried.

It was recommended that by-law 24-2022 be approved.

Motion 135-2022

*Moved by Jim Nelemans
Seconded by Kevin Freiburger*

THAT leave be given to introduce By-Law # 24-2022, being a by-law to amend by-law 45-2014 of the Municipality of Morris-Turnberry, and that it now be read severally a first, second, and third time, and finally passed this 2^{1st} day of June 2022.

Carried.

8.2.2 Plan of Subdivision Application 40T22004

It was recommended that Council support Plan of Subdivision Application 40T22004 with the conditions outlined in the report.

Motion 136-2022

*Moved by Sharen Zinn
Seconded by Jamie McCallum*

THAT the Council of the Municipality of Morris-Turnberry hereby supports Plan of Subdivision File 40T22004 with the recommended conditions as set out in the Planner's report dated June 21, 2022, and that the application be forward to the County of Huron for Draft Plan approval.

Carried.

8.3 FCM ASSET MANAGEMENT GRANT APPLICATION

A report was presented by CAO/Clerk Trevor Hallam in this regard.

Motion 137-2022

*Moved by Jamie McCallum
Seconded by Kevin Freiburger*

THAT the Council of the Municipality of Morris-Turnberry herby directs staff to apply for a grant opportunity from the Federation of Canadian Municipalities' Municipal Asset Management Program for Asset Management Plan Renewal.

AND FURTHER THAT the Council of the Municipality of Morris-Turnberry commits to conducting the following activities in its proposed project submitted to the Federation of Canadian Municipalities' Municipal Asset Management Program to advance our asset management program:

- 1. Drafting an O. Reg 588/17 compliant Asset Management Plan*
- 2. Asset data disaggregation, consolidation and refinement*
- 3. Staff and Council asset management training*
- 4. Developing Level of Service frameworks*

AND FURTHER THAT that the Municipality commits \$70,000.00 from its budget toward the costs of this initiative.

Carried.

Mayor Heffer called a 10 minute recess at 8:53 pm

8.4 CROSS BORDER SERVICING AGREEMENT – NORTH HURON

A report was presented by CAO/Clerk Trevor Hallam in this regard.

Mr. Hallam reviewed staff and legal comments on the agreement received from North Huron. Council expressed frustration at the length of negotiations and the time invested in developing the agreement, and that the agreement was unnecessarily more complicated than it needed to be or than others currently in place. There was a consensus of Council that, existing agreements such as that providing servicing to Braemar Retirement Home and reserving servicing to the former Willis Lands should be left out of this agreement.

Motion 138-2022

*Moved by Jamie McCallum
Seconded by Kevin Freiburger*

THAT the Council of the Municipality of Morris-Turnberry hereby extends its regular meeting past 10:30pm.

Carried.

Motion 139-2022

*Moved by Jamie McCallum
Seconded by Kevin Freiburger*

THAT the Council of the Municipality of Morris-Turnberry hereby directs staff to re-engage in discussions with North Huron staff to propose corrections to the agreement executed under North Huron By-Law 49-2022, and to continue discussions on outstanding Council concerns regarding the substance of the agreement.

Carried.

9.0 COUNCIL REPORTS

Sharen Zinn

June 8th attended a Wingham and area health professionals recruitment meeting.

Jamie McCallum

June 8th attended a Coalition for Huron Injury Prevention meeting.
June 10th attended a Sustainable Huron meeting.

Jim Nelemans

June 20th attended a Belmore Arena Board meeting.

Kevin Freiburger

June 11th attended a tractor pull event hosted by the Bluevale Community Committee.
June 15th attended a meeting of the Maitland Valley Conservation Authority board.

Jamie Heffer

No report.

10.0 CORRESPONDENCE, MINUTES, ITEMS FOR INFORMATION

- 10.1 Minutes – Wingham and Area Health Professionals Recruitment – June 8 2022
- 10.2 Correspondence – Federal Funding for Rural Municipalities Forum – Shannon Stubbs, Shadow Minister for Rural Economic Development and Rural Broadband Strategy
- 10.3 Report – Belgrave Water – May 2022
- 10.4 Progress Update – United Way Perth Huron
- 10.5 Outstanding Action Items

Motion 140-2022

*Moved by Jamie McCallum
Seconded by Jim Nelemans*

That the Council of the Municipality of Morris-Turnberry hereby receives and endorses the correspondence received from Shannon Stubbs, Shadow Minister for Rural Economic Development and Rural Broadband Strategy, regarding the forum on federal funding for rural municipalities.

Carried.

11.0 NEW BUSINESS

None.

12.0 BY-LAWS AND AGREEMENTS

None.

Mayor Heffer called a 10-minute recess at 10:40pm.

13.0 CLOSED SESSION**13.1 Enter closed session**

Motion 141-2022

*Moved by Kevin Freiburger
Seconded by Jim Nelemans*

THAT the Council of the Municipality of Morris-Turnberry enter a closed session, with the CAO/Clerk remaining in attendance at 10:49 p.m. for the purpose of discussing confidential matters pursuant to the following sections of the Municipal Act:

- 1. Section 239 (2) (b) regarding personal matters about an identifiable individual, including municipal or local board employees;*
- 2. Section 239 (2) (c) regarding a proposed or pending acquisition or disposition of land by the municipality;*
- 3. Section 239 (2) (i) regarding financial information, supplied in confidence to the municipality, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of an organization;*

Carried.

13.2 Return to open session

Motion 142-2022

*Moved by Jim Nelemans
Seconded by Jamie McCallum*

THAT the Council of the Municipality of Morris-Turnberry rise from a closed session at 11:10 p.m.

Carried.

13.3 Report and Action from Closed Session.

Council received employee pay reports and discussed a personal matter raised by Councillor Nelemans.

Council reviewed and considered a proposal from Public Sector Digest for the provision of services related to the creation of an asset management plan.

Motion 143-2022

*Moved by Jamie McCallum
Seconded by Kevin Freiburger*

THAT the Council of the Municipality of Morris-Turnberry hereby accepts proposal of Public Sector Digest for the provision of services related to the creation of an asset management plan.

Carried.

Council received and considered offers to purchase the remaining lands at 61 Corbett Drive.

Motion 144-2022

*Moved by Sharen Zinn
Seconded by Jamie McCallum*

THAT the Council of the Municipality of Morris-Turnberry hereby accepts the offer of Gary Rutledge and Aaron Harding to purchase Part 15 of Registered Plan 22R7118.

AND FURTHER THAT the CAO/Clerk is hereby authorized and directed to execute all documents necessary in that behalf and to affix thereto the Seal of the Corporation.

Carried.

14.0 CONFIRMING BY-LAW

Motion 145-2022

*Moved by Jamie McCallum
Seconded by Sharen Zinn*

THAT leave be given to introduce By-Law # 25-2022, being a by-law to confirm the proceedings of the Municipality of Morris-Turnberry meeting of Council held on June 21st, 2022, and that it now be read severally a first, second, and third time, and finally passed this 21st day of June 2022.

Carried.

15.0 ADJOURNMENT

Motion 146-2022

*Moved by Kevin Freiburger
Seconded by Jim Nelemans*

THAT the Council of the Municipality of Morris-Turnberry does now adjourn at 11:13 pm.

Carried.

NEXT MEETINGS:

Regular Meeting of Council - Tuesday, July 5th, 2022, 7:30 pm
Regular Meeting of Council - Tuesday, July 19th, 2022, 7:30 pm

Mayor, Jamie Heffer

Clerk, Trevor Hallam

**Municipality of Morris-Turnberry
Account List for**

July 5 2022

General

Hydro One	Belgrave Development	28.78
Bell Canada	Morris Office	441.54
Bell Mobility	Cell Phone	25.07
Telizon	Long Distance Phone	3.73
Huron Clean	Office Cleaning	373.18
PBJ Cleaning Depot	Office Supplies	134.45
Orkin Canada	Pest Control	106.73
Donnelly Murphy, In Trust	Bluevale Road Correction	2,558.56
John Nesbit	Wildlife Damage Compensation Program	133.20
Bluevale Community Committee	Bluevale Hall Rentals	280.00
Minister of Finance	EHT - June 2022	717.25
WSIB	WSIB - June 2022	944.86

Payroll

June 22 2022	Payroll	19,333.03
	Expenses	221.20

25,301.58

Building Department

Bell Mobility	Cell Phone	59.76
Minister of Finance	EHT - June 2022	154.80
WSIB	WSIB - June 2022	227.04

Payroll

June 22 2022	Payroll	4,727.98
	Expenses	-

Building Total 5,169.58

Property Standards

Property Standards Total -

Drainage

Hydro One	Hopper Pump	57.97
GM BluePlan Engineering Limited	Ellison Municipal Drain	689.30
Robinson Farm Drainage Ltd.	Henderson Municipal Drain	8,969.39

Drainage Total 9,716.66

Parks & Cemeteries

Parks & Cemeteries Total -

Belgrave Water

Allstream	Belgrave Water	56.74
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Water Total 56.74

Landfill

Bell Mobility	Cell Phone	8.91
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Landfill Total 8.91

Roads

Bell Canada	Morris Shop	220.77
Bell Mobility	Cell Phones	59.22
Union Gas	Turnberry Shop	27.45
Durst Tech Services	Turnberry Shop Annual Security	339.00
Alpha Agri-Products Inc.	Parts for Water Tank	62.38
Lynn Hoy Enterprises Ltd.	Parts for Water Tank	6.78
Maitland Welding & Machining	Shop Supplies & Parts for 13-03 Grader	196.95
Altruck International Truck Centres	Parts for 19-06 Tandem	294.81
White's Wearparts Ltd.	16-05 & 19-06 Tandem Plow Blades	4,735.76
Brandt London	18-11 A/C Repair	1,157.13
Joe Kerr Ltd.	Maintenance Gravel	444,170.75
Yard Boys Ltd.	Roadside Cutting	11,017.50
Da-Lee Dust Control Ltd.	Dust Control	58,292.29
Pollard Distribution Inc.	Dust Control	8,985.67
Alpine Tree & Stump Service	Tree Removal	1,582.00
Looby Construction Limited	Blind Line Bridge (M230)	171,293.45
Minister of Finance	EHT - June 2022	851.70
WSIB	WSIB - June 2022	1,249.15
Payroll		
June 22 2022	Payroll	25,838.89
	Expenses	-

Roads Total 730,381.65

Account Total **770,635.12**

Approved By Council:

July 5 2022

Mayor - Jamie Heffer

Treasurer- Sean Brophy

To: Morris-Turnberry Council
From: Meghan Tydd-Hrynyk, Planner & Denise Van Amersfoort, Manager of Planning
Date: June 28, 2022

Re: Zoning By-law Amendment Z02-2022
Plan 164, Lots 8-11, 34, 35, 48 & 49 (91135 Belmore Line, Belmore)
Owner: Evergreen Holsteins Inc. c/o Robert & Andrea Van Nes
Agent: Nancy Michie

RECOMMENDATION

It is recommended that zoning by-law amendment application Z02-2022 be **denied**.

PURPOSE

This application proposes to amend the zoning on the subject lands from Village Residential – Low Density (VR1) and Development (D) to Village Residential – Medium Density (VR2). This would allow for a tri-plex (3 units) and a semi-detached dwelling (2 units) to be constructed (a total of 5 units).

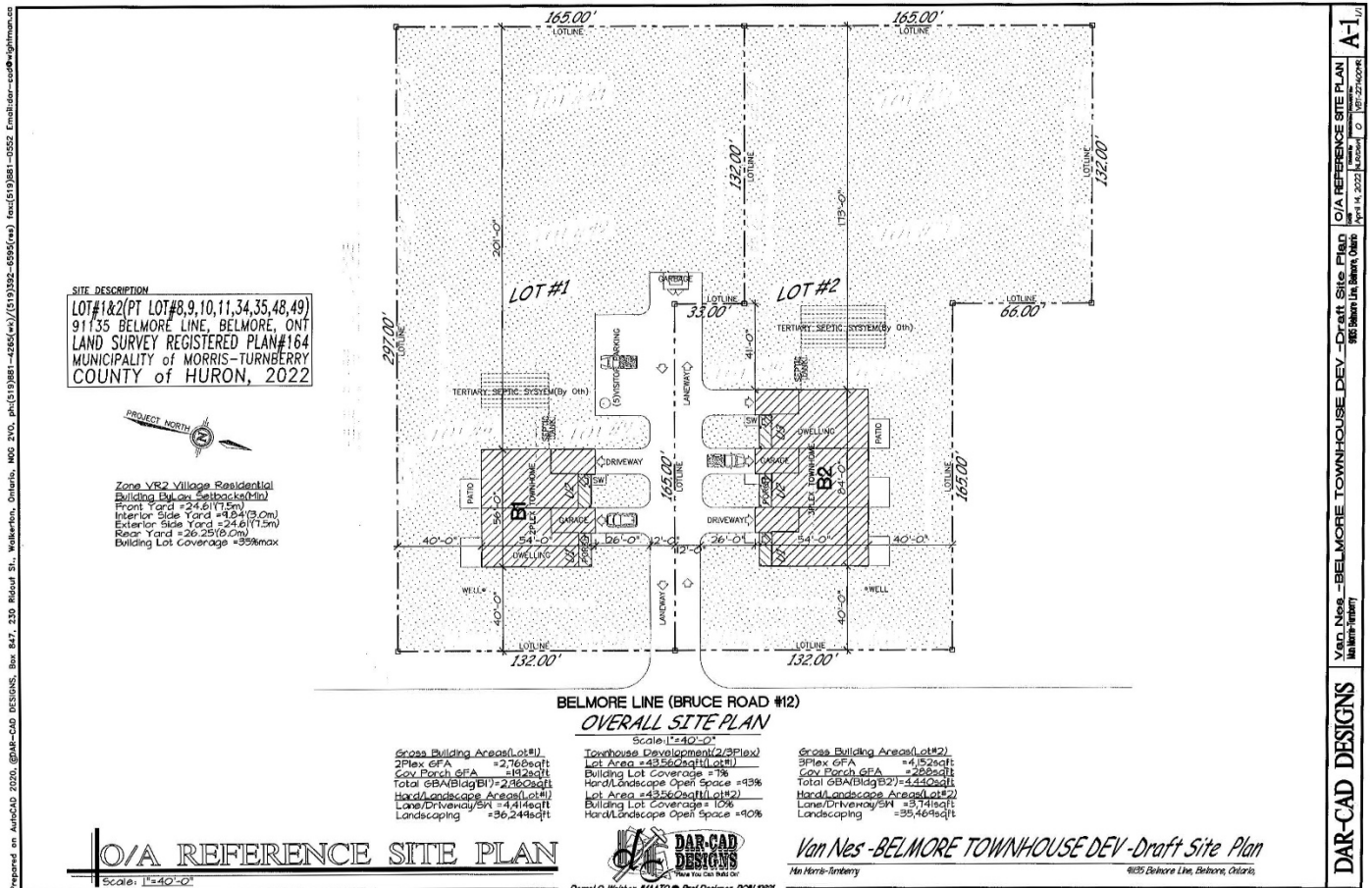
REVIEW

The subject property is designated Residential on Schedule B of the Morris-Turnberry Official Plan and is zoned VR1 (Village Residential – Low Density) and D (Development Zone) in the Morris-Turnberry Zoning By-law (Key Map - Belmore).

Figure 1. Airphoto of Subject Property (outlined in orange)



Figure 2. Site Sketch provided by the applicant



The property is approximately 2 acres (0.8 hectares) in size and currently has one dwelling which the applicant has indicated will be removed for the proposed development. The site is bounded by residential to the north and south and agriculture on the west.

The applicant is proposing lots 35, 34, 10 & 11 be merged via a deeming by-law to create one parcel, while lots 48, 49, 8 & 9 will be merged to create another parcel. A deeming bylaw (By-law No. 59-2001) currently applies to Lots 34, 35 & 48, 49. The repealing of and passing of new deeming by-laws will be heard by Council at a separate time; no application for deeming has been submitted to date.

Section 8.15 of the Morris-Turnberry Official Plan (MT OP) requires that a hydrogeological/ground water impact study be required for development proposed on private sewage services. As such, the applicant submitted a Hydrogeological Nitrate Study to confirm no negative impacts to the groundwater.

The applicant retained Geoff Rether, Senior Hydrogeologist from Wilson & Associates to complete the Nitrate Study. It should be noted that the Nitrate Study was completed for a concept of 5 lots containing 1 dwelling unit each. The current application is proposing 5 dwelling units on 2 lots (a tri-

plex on the first and a semi-detached dwelling on the second). The development proposal has changed since the hydrogeology study was submitted, but the main findings are still relevant.

The location of the subject lands in Belmore are identified as a Highly Vulnerable Aquifer (HVA) in the Maitland Valley Sourcewater Protection Plan. Sourcewater Protection states “vulnerability is a measure of how easily contaminants may reach a surface water intake, or penetrate the ground to reach the aquifer supplying a well. A Highly Vulnerable Aquifer (HVA) has a relatively fast path for water to travel from the ground’s surface down to the aquifer. Generally, the faster the water is able to flow through the ground to the aquifer, the more vulnerable the area is to contamination. There aquifers typically occur in areas of coarse or sandy soils with a high groundwater table”.

In the submitted Nitrate Study, the upper soil profile of the subject lands is confirmed to consist mainly of sandy silt to sand and that hydrogeological isolation between the sewage effluent and potential groundwater supplies, is not achieved. The Study states that there are shallow wells in the vicinity.

The applicant is proposing to service five (5) dwelling units with tertiary treatment systems, which the Wilson & Associates report concludes to be technically feasible but states that “as advised, it is Huron County’s policy not to permit the use of tertiary treatment units for the purpose of lot creation”. The report concludes that under the Provincial Guideline D-5-4 “Technical Guideline for Individual On-Site Sewage Systems”, one lot or one residential unit is supportable on the 2 acre (0.804ha) site using conventional sewage disposal systems.

The submitted study was peer-reviewed by Andrew Garland, Professional Engineer from B.M. Ross & Associates to gain a better understanding of the potential risks and mitigation measures to address the use of tertiary treatment systems to increase lot density (ie. increase the number of dwelling units permitted) in this specific hydrogeological setting. In review, BM Ross provided the attached letter. A summary of the comments are:

- Not aware of it being common practice to use tertiary treatment to facilitate lot intensification.
- Use of tertiary treatment may not target all wastewater contaminants and therefore, the contaminant loading to the area may be increased as result of the increased volumetric load (from the increase in number of units).
- This area of Belmore does not have aquifer isolation and there are shallow wells in the vicinity;
- The installation of tertiary systems is not the factor that increases the risk to the groundwater supply in the area, but rather the increased number of sewage systems in the area. More sewage systems comes increased wastewater loading and increased risk that improper operation or system failure may impact the groundwater.
- In order for tertiary systems to reduce the nitrate as designed, they must be operated and maintained properly.
- In order to mitigate risk over the long term, the Property Owner and Municipality needs to consider what on-going operating, maintenance, monitoring and reporting requirements will be established to ensure proper system function.

Planning Act

The Planning Act (the Act) is provincial legislation that sets out the parameters for land use planning in Ontario. It describes how land uses may be controlled, and who may control them. Section 2 of the Act states that Municipal Council *in carrying out their responsibilities under this Act, shall have regard to, among other matters, matters of provincial interest such as,*

- (e) the supply, efficient use and conservation of energy and water;*
- (f) the adequate provision and efficient use of communication, transportation, sewage and water services and waste management systems;*
- (h) the orderly development of safe and healthy communities;*
- (j) the adequate provision of a full range of housing, including affordable housing;*
- (n) the resolution of planning conflicts involving public and private interests;*
- (o) the protection of public health and safety;*
- (p) the appropriate location of growth and development;*

This application to recognize a reduced minimum lot size for the establishment of a tri-plex and semi-detached dwelling does not have regard to all matters of provincial interest. While the development would provide a range of housing options for the Village of Belmore, without appropriate servicing considerations and options for the long-term, the application does not allow for the orderly development of a safe community, nor is there regard to public health and safety from a drinking water perspective.

In review of the submitted nitrate study, there are several significant concerns regarding lot intensification on tertiary treatment systems. This application does not have regard to the Planning Act.

Provincial Policy Statement, 2020 (PPS)

The Provincial Policy Statement provides policy direction on matters of provincial interest and planning decisions are required to be consistent with these policy directions. The PPS provides policy direction to ensure that communities are developed in a healthy, safe and efficient manner.

The following PPS policies shown in italics are highlighted for discussion for the subject application:

- 1.1.3.4 Appropriate development standards should be promoted which facilitate intensification, redevelopment and compact form, while avoiding or mitigating risks to public health and safety.*
- 1.6.6.4 Where municipal sewage services and municipal water services or private communal sewage services and private communal water services are not available, planned or feasible, individual on-site sewage services and individual on-site water services may be used provided that site conditions are suitable for the long-term provision of such services with no negative impacts. In settlement areas, individual on-site sewage services and individual on-site water services may be used for infilling and minor rounding out of existing development.*

As discussed in the Background section above, the nitrate report submitted with the application was reviewed by Andrew Garland of BM Ross. Mr. Garland commented that “BMROSS is not aware of it being common practice to use tertiary treatment systems to facilitate lot intensification. The February 8, 2022 Wilson Associates report acknowledges at page 6, “it is Huron County’s policy not to permit the

use of tertiary treatment units for the purpose of lot creation.... County/Municipal support and long term maintenance agreements for individual sewage treatment units are required". The submitted reports suggest that the use of tertiary treatment systems as proposed is technically feasible, but there are broader, long term considerations of risk that are relevant.

Given the undersized subject parcels, an application for a tri-plex and semi-detached dwelling represents intensification on private services. The application and submitted documentation do not confirm that the proposed lot density and site conditions are suitable for the long-term provision of private servicing with no negative impacts. The application is not consistent with the PPS.

Huron County and Morris-Turnberry Official Plans

The Huron County Official Plan considers the Belmore to be a Tertiary Settlement Area. Tertiary Settlement Areas are villages and hamlets which are serviced by individual or private communal on-site services. Development in these areas will be small-scale and limited to infilling and rounding out. These communities are intended to provide fewer opportunities for growth, a limited variety of services, and employment opportunities that are in keeping with the rural setting and character of the community.

The MT OP contains policies for development within the Settlement Areas. Section 6.1.3 of the MT OP states that development in Tertiary Settlement Areas, such as Belmore will be small-scale and limited to infilling and rounding out. Section 6.3 outlines the general policies for intensification. Section 6.3.2.1 states, in Tertiary Settlement areas, increased density and intensification will be based on the provision of adequate services. This application proposes intensification on tertiary septic systems which is not considered to be appropriate due to the fact that there is no mechanism for monitoring the performance of the systems, no mechanism for monitoring impacts to shallow groundwater, no mechanism for determining actual risk to neighbouring shallow wells and no contingency options should the proposed servicing option fail. As such, the application does not conform to the Huron County or Morris-Turnberry Official Plan.

Planning Comments

The subject proposal does not represent infilling or minor rounding out – it is an example of intensification of existing lots.

The development of five (5) dwelling units cannot be supported on conventional septic systems; the calculations based on the nitrate loading of a conventional system demonstrate that only one (1) dwelling unit can be supported.

In order to meet Provincial Guidelines for Nitrate, this proposal requires a tertiary treatment system that removes nitrate and specifically, removes fifty percent (50%) of the nitrate.

Should the system fail to be operated or maintained properly over the long term, it could pose a risk to the aquifer – particularly as the setting is a High Vulnerable Aquifer and there are shallow wells in vicinity.

While the goals of the MT OP (Section 6.2) speak to the implementation of a septic education, maintenance and monitoring plan, no such program has been implemented to date. Both the consulting and peer review hydrogeologist state that a quality assurance program is required to ensure effectiveness and avoid risk over the long term.

Site Design

There is some question as to the appropriateness of the proposed site design which appears to propose the creation of two lots through a deeming bylaw process (including the repealing of an existing deeming bylaw). The site layout provided by the applicant depicts two, odd shaped lots with a shared laneway. The site sketch does not include a full septic design, nor does it include space for a contingency tile bed.

The direction contained in Section 6.5.6 (Hamlet Development Standards) is relevant as it states that severances will be used to infill and to develop small holdings as a logical extension of existing development. When severances are used to develop small holdings, they will be based on a pre-design approved by the Municipality and will indicate how the proposed lots fit into the existing development pattern. Further, it states that lot sizes will be sufficient to accommodate the proposed method of servicing over the long term. Where septic systems are proposed, developments will comply with the provincial groundwater protection criteria for nitrates, and lots will contain a contingency tile bed.

Insufficient information regarding the proposed tertiary treatment system has been provided in order to comment on the viability of the proposed lot layout.

Comments Received

At the time of submission, no comments were received from neighbours or Municipal Staff.

Saugeen Valley Conservation Authority have no concerns from a natural heritage or natural hazard perspective and no SVCA permit is required for the development of this property.

Summary

This application is not consistent with the PPS, does not conform to the Huron County or Morris-Turnberry Official Plans and does not represent good planning. As such, it is recommended that application Z02-2022 be **denied**.

Sincerely,
"original signed by"

Meghan Tydd-Hrynyk, Planner

"original signed by"

Denise Van Amersfoort, Manager of Planning



VIA EMAIL ONLY

June 21, 2022

Denise Van Amersfoort, Planner
Huron, County of - Planning
57 Napier St., 2nd Floor
Goderich, ON N7A 1W2

RE: Review of 91335 Belmore Line Proposal & Use of Tertiary Systems

The County of Huron has provided BMROSS with a February 8, 2022 Wilson Associates Hydrogeological Study (Nitrate Impact) related to proposed residential lot creation at 91335 Belmore Line. The proposed lot creation would serve to intensify development at this parcel. The County asked that BMROSS provide an opinion regarding:

- Potential risks of tertiary systems utilization for intensification in general;
- Potential risks of tertiary system utilization for intensification in this specific hydrogeological setting;
- Possible strategies to mitigate said risks (i.e. monitoring well, mandatory re-inspection, etc.).

The following comments summarize our comments on these matters.

The term “tertiary treatment system” can mean different things in the context of sewage treatment, depending on the parameter(s) being treated for and the level of reduction. The specific interest for the 91135 Belmore Line property is nitrate, to a level N-I treatment (i.e. 50% reduction) under CAN/BNQ 3680-600. Our comments below apply to tertiary treatment systems in general which may include treating for suspended solids (SS), carbonaceous biochemical oxygen demand (BOD), total phosphorus (TP), nitrogen, fecal coliforms and/or *E.Coli*.

1. BMROSS has not had any direct involvement with review or the approval of the use of tertiary treatment systems to support lot intensification within our service area, which includes Huron, Bruce, Grey, Perth, and Lambton Counties. Based on comments received from planning staff, we understand that in recent years the approach has been utilized in Bruce and Perth Counties, though we are uncertain of the specific circumstances surrounding these cases. In general, we have seen the use of tertiary systems for the following conditions:
 - a. Replacement of an aged or failing septic system on an existing single lot with insufficient area to support a conventional Class 4 system (i.e. septic tank + tile bed) that is designed and constructed to current Ontario Building Code (OBC) standards.

- b. On lots that are below minimum area thresholds (e.g. based on Ministry of Environment, Conservation and Parks (MECP) Guideline or local approving agency requirements) and are within or adjacent to areas sensitive to groundwater or surface water impacts.
 - c. In some cases, where change of building use or size on an existing single lot creates a need for additional treatment capacity that cannot be handled with a conventional Class 4 system.
2. In our opinion, some of the general considerations/risks associated with the use of tertiary systems will be the same regardless of the background cause requiring the use of the tertiary system. Such considerations/risks are noted below, in no particular order.
- a. Some tertiary systems rely on mechanical/electrical components. In the event of power outage, the treatment system will cease to function as intended unless standby power is provided.
 - b. The OBC states, at 8.6.2.2.(6), that, “Every operator of a treatment unit shall obtain, from the manufacturer or distributor of the treatment unit, literature that describes the unit in detail and provides complete instructions regarding the operation, servicing, and maintenance requirements of the unit and its related components necessary to ensure the continued proper operation in accordance with the original design and specifications.” The OBC does not define “operator” and therefore we assume this applies to the owner of the system or a party that the owner has contracted to operate the system. Though our experience in this regard is primarily anecdotal, we believe it is not uncommon for property owners to “set and forget” this kind of system.
 - c. The original manufacturer, installer, and/or service provider for a proprietary system may cease to be in operation. This kind of situation may make maintenance or replacement of components difficult, which is not a concern with conventional Class 4 systems. We have experienced this kind of situation with municipal wastewater treatment as well as small private systems.
3. For the case of using tertiary systems to support lot intensification in general, in our opinion there are additional risks:
- a. It is assumed that the intensification will result in additional wastewater volumetric loading for the same equivalent area, as compared to having the subject area remain as a single lot. A tertiary system may target treatment of one or more parameters of interest, but not necessarily all wastewater contaminants; and therefore, for some parameters the contaminant loading to the area may be increased as a result of the increased volumetric load. The significance of this risk is likely to vary from location to location based on other environmental factors (e.g. some locations more sensitive than others to total annual mass of a parameter such as TP that is applied to the receiver through effluent discharge).
 - b. Introduction of a specific tertiary system may limit the lot owner with respect to future options for system replacement.
 - c. In general, whether using a conventional Class 4 system or a tertiary system, in the event that a system does not function as intended or fails, a larger property will provide a greater factor of safety for the surrounding environment relative to a smaller property (all other factors being equal). This is a result of greater separation to lot lines, greater separation from water resources on neighbouring properties, greater area for infiltration of precipitation, and/or greater area to allow wastewater treatment efficiency on the property. Smaller and more numerous lots vs. larger and fewer lots within the same development area sacrifices some factor of safety derived from lot size, regardless of treatment approach.

4. With respect to proposed intensification of the 91135 Belmore Line parcel, it is our opinion that in addition to the considerations/risks noted above, the following specific notes apply:
 - a. The presence of granular overburden in the general vicinity means that hydrogeological isolation (i.e. between the sewage effluent and potential groundwater supplies) is not achieved, as noted in the Wilson Associates Hydrogeological Study. It is also noted that there are at least some shallow wells in the vicinity. The use of tertiary systems is not the factor that increases risk to the groundwater supply in this area, but intensification will by nature create a higher number of sewage systems in the area. With more sewage systems comes an increased volumetric loading to the area (see our note 3.a. above), and an increased risk that improper operation or failure of a system may impact water resources in the area.

5. An observation specific to the four proposed 1,010 m² lots described in the February 8, 2022 Wilson Associates report is that a significant amount of the total lot area will be required to construct the tile bed for the sewage system (i.e. 18% of total lot area for a 2 bedroom home, 26% for a 3 bedroom home, 33% for a 4 bedroom home). Note that these values are based on total lot area, not the area that is actually available for a sewage system once all setbacks from property lines, structures, and wells are applied in conformance with OBC requirements. Note also that this comment is not related to use of tertiary systems; required tile bed area is based on design sewage flow and underlying soil conditions. As the County reviews the proposed project, they may wish to have the property Owner demonstrate what type of residences are proposed and how the proposed sewage systems will be situated to satisfy all required setbacks.

It is our understanding that since the time of the February 8, 2022 report, the proposed development concept has been revised and now includes two lots: one containing a three unit rowhouse, the other containing a two unit rowhouse. Presumably this approach will help address some concern with respect to property line setbacks given there will be an overall reduction in the number of lots, as well as address some concern with well setbacks assuming shared wells among the rowhouses. The general comment regarding the overall percentage of property utilization for the tile bed area will still apply.

6. Should the intensification occur as proposed with the use of tertiary systems, some risk mitigation strategies could be utilized, including:
 - a. Requirement from the Municipality for the system owner to provide tertiary system details including manufacturer, design basis, and a proposed operations and maintenance program to ensure proper ongoing function of the system. The program should include system effluent sampling requirements.
 - b. Requirement for routine (e.g. annual) reporting from the system owner to the Municipality to describe system checks, maintenance carried out, sampling results, etc. for the period being reported on.
 - c. Requirement for the system owner to facilitate Municipal staff, or their representative, to carry out inspection of the system at a desired frequency.
 - d. Installation of lot boundary monitoring well(s) with a regular sampling program.

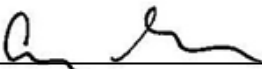
In our opinion, regardless of what mitigation strategies are utilized, the Municipality should consider what would happen in the event that the system or system owner does not satisfy the mitigative requirements.

In summary, BMROSS is not aware of it being common practice to use tertiary treatment systems to facilitate lot intensification. The February 8, 2022 Wilson Associates report acknowledges at page 6, "it is Huron County's policy not to permit the use of tertiary treatment units for the purpose of lot creation." It appears the use of tertiary treatment systems as proposed for this project has potential to be technically feasible, but there are a number of considerations/risks to be considered as described above. In addition to potential limitations with respect to how the proposed lots are developed (see our note 5), if the proposal proceeds we believe the property Owner and Municipality should consider what ongoing operating, maintenance, monitoring, and reporting requirements will be established to ensure proper system function. We also recommend determining what course of action will be taken in the event mitigative measures are not carried out by the property owner or if such measures are not successful.

Yours very truly

B. M. ROSS AND ASSOCIATES LIMITED

Per



Andrew Garland, P. Eng.

AJG:hv



PLANNING & DEVELOPMENT

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To: Mayor and Members of Council, Morris-Turnberry
From: Meghan Tydd-Hrynyk, Planner
Date: June 24, 2022
Re: Minor Variance Application MV03/22 (Dallas Coultres)
Property Address: Concession 3, South Part Lot 4, Morris (Cardiff Road)

Recommendation

It is recommended that Application MV03/22 be deferred to allow for staff and the applicant additional time to review the proposed house location in relation to existing barns and discuss options.

Proposed Variances

Proposed relief from Section 4.6, to reduce the required Minimum Distance Separation (MDS) I setback for the construction of a new house from 470m to 136m as measured from the edge of the beef barn (see "Barn 2" in Figure 1) on the property to the south (40453 Cardiff Road – Time View Farms Ltd.) to the proposed location of the house.

Review

The property is designated Agriculture and Natural Environment on Schedule B of the Morris-Turnberry Official Plan. The property is zoned AG1 (General Agriculture) and NE2 (Natural Environment – Limited Protection Zone) – Key Map Morris (Northwest).

The purpose of this application is to reduce the required Minimum Distance Separation (MDS) I setback to allow for new construction of a house.

Figure 1: Subject Parcel – Aerial Photograph with Proposed House Location

Barn 1 is located on 40324 Cardiff Road and will be referred to as Maple Ridge Beef Farms Ltd.

Barns 2 and 3 are located on 40453 Cardiff Road and will be referred to as Time View Farms Ltd.



Figure 2: Subject Property looking south-east on Cardiff Road



COMMENTS

Minor variances are required to satisfy four tests under the Planning Act before they can be approved. To be approved the requested variance must be:

- 1) minor,
- 2) desirable for the appropriate development or use of the land, building or structure,
- 3) maintain the general intent and purpose of the Zoning By-law, and
- 4) maintain the general intent of the Official Plan.

The purpose of this application is to reduce the required Minimum Distance Separation (MDS) setback to allow for the construction of a new house.

The application proposes to reduce the required MDS setback of 470m to 137m to the neighbouring barn, owned by the applicant's uncle; this represents a 71% deficiency with respect to the required MDS setback.

Under the MDS Formulae, when there are multiple barns on a property the setbacks are calculated as a sum of the two barns and the required setback is measured from the closest barn to the proposed construction.

Chart 1: MDS Calculations for Applicant's Proposed Dwelling Location

	Required Setback	Proposed Setback	Reduction
Farm #1 (Maple Ridge Farms)	333m (1092 ft)	380m (1247 ft)	None Required
Farm #2 (Time View Farms)	470m (1542 ft)	137m (449 ft)	333m (1092 ft) 71%

If the required setback was measured to the livestock facility with the highest odour factor (ie. the hog barn on Time View Farms), the proposed dwelling would be 237m (778 feet) which would meet 50% of the required setback.

While onsite, it is evident that there is a change in grade from the south-west to north-east of the subject property. The applicant stated that in an effort to meet the MDS setback from the barn to the west (Maple Ridge Beef Farms), the proposed dwelling location was located further east. Should the dwelling be shifted further to the north to reduce the MDS impact from the barns to the south, it would increase costs to have utilities and a longer driveway to service the new dwelling. The proposed dwelling location was also chosen due to the existing entrance off Cardiff Road.

The proposed variance is a substantial reduction in the required MDS setback and is not considered minor. In assessing options for the proposed dwelling, County staff identified an alternate location (Figure 3) which would increase the separation between the dwelling and the barn to the south. While the alternate location does encroach into the MDS setback from the barn to the west (located on Maple Ridge Farms), it is seen as a favourable option taking into account the potential for future expansions to the farming operations to both the south and west properties. Should those farming operations have the desire to expand in the future, they will require relief from setbacks to the subject house, but not to the current extent required for the location proposed by the applicant.

Figure 3: Aerial Photograph of Alternate Location (proposed by Planning Staff)



Chart 1: MDS Calculations for Alternate Dwelling Location

	Required Setback	Proposed Setback	Reduction
Farm #1 (Maple Ridge Beef Farms)	333m (1092 ft)	270m (886 ft)	80m (262 ft) – 19%
Farm #2 (Time View Farms)	470m (1542 ft)	253m (830 ft)	217m (712 ft) – 46%

If the required setback was measured to the livestock facility with the highest odour factor (ie. the hog barn on Time View Farms), the proposed dwelling would be approximately 353m (1158 ft) which would meet 75% of the required setback and be 25% deficient.

The applicant has been made aware of the staff recommendation to relocate the dwelling. The applicant stated they would like to proceed with the proposed location as submitted. It is recommended that the application be deferred to allow time for staff and the applicant to have further discussion about the location of the dwelling, to limit the future impact on the surrounding livestock barns.

If deferred, an on-site discussion between the applicant, Chief Building Official, Planning staff and other interested parties is proposed.

Comments Received

No comments were received from Municipal Staff or members of the public at the time of submitting this report.

SUMMARY

It is recommended that Application MV03/22 be **deferred**.

Please note this report is prepared without the benefit of input from the public as may be obtained through the hearing. The Committee should carefully consider any comments and/or concerns expressed at the hearing prior to making their decision on this application.

Sincerely,

“original signed by”
Meghan Tydd-Hrynyk
Planner



2022 Asset Management Plan Municipality of Morris-Turnberry

June 2022

Contents

1. Municipal Information	5
2. Bridges	5
2.1. Inventory Summary.....	5
2.2. Current Replacement Values	5
2.3. Condition.....	6
2.4. Levels of Service.....	7
2.5. Lifecycle Activities	7
2.6. Risks related to lifecycle activities	8
2.7. Economic & Population Growth Assumptions.....	8
2.8. Table 1 – Inventory Summary	9
2.9. Table 2 – Condition Definitions & Criteria	10
2.10. Table 3 – Levels of Service Definitions.....	11
3. Culverts	12
3.1. Inventory Summary.....	12
3.2. Current Replacement Values	12
3.3. Condition.....	13
3.4. Levels of Service.....	13
3.5. Lifecycle Activities	13
3.6. Risks related to lifecycle activities	14
3.7. Economic & Population Growth Assumptions.....	15
3.8. Table 4 – Inventory Summary	16
3.9. Table 5 – Condition Definitions & Criteria	17
3.10. Table 6 – Levels of Service Definitions.....	18
4. Roads – High Class Bituminous (HCB) Paving.....	19
4.1. Inventory Summary.....	19
4.2. Current Replacement Values	19
4.3. Condition.....	19
4.4. Levels of Service.....	20
4.5. Lifecycle Activities	20
4.6. Risks Related to Lifecycle Activities	20
4.7. Economic & Population Growth Assumptions.....	21
4.8. Table 7 – Inventory Summary	22
4.9. Table 8 – Condition Definitions & Criteria	25
4.10. Table 9 – Levels of Service Definitions.....	26

5.	Roads – Low Class Bituminous (LCB) Surface Treatment.....	28
5.1.	Inventory Summary.....	28
5.2.	Current Replacement Values	28
5.3.	Condition.....	28
5.4.	Levels of Service.....	29
5.5.	Lifecycle Activities.....	29
5.6.	Risks Related to Lifecycle Activities	29
5.7.	Economic & Population Growth Assumptions.....	30
5.8.	Table 10 – Inventory Summary	31
5.9.	Table 11 – Condition Definitions & Criteria	32
5.10.	Table 12 – Levels of Service Definitions.....	33
6.	Roads – Gravel Roads.....	35
6.1.	Inventory Summary.....	35
6.2.	Current Replacement Values	35
6.3.	Condition.....	35
6.4.	Levels of Service.....	36
6.5.	Lifecycle Activities.....	36
6.6.	Risks related to lifecycle activities	37
6.7.	Economic & Population Growth Assumptions.....	37
6.8.	Table 13 – Inventory Summary	38
6.9.	Table 14 – Condition Definitions & Criteria	42
6.10.	Table 15 – Levels of Service Definitions.....	43
7.	Belgrave Water System.....	45
7.1.	Inventory Summary.....	45
7.2.	Current Replacement Values	45
7.3.	Condition.....	46
7.4.	Levels of Service.....	47
7.5.	Lifecycle Activities.....	48
7.6.	Risks related to lifecycle activities	48
7.7.	Economic & Population Growth Assumptions.....	49
7.8.	Table 16 – Inventory Summary	50
7.9.	Table 17 – Condition Definitions & Criteria	51
7.10.	Table 18 – Levels of Service Definitions.....	52
8.	Stormwater Assets.....	54
8.1.	Inventory Summary.....	54

8.2.	Current Replacement Values	54
8.3.	Condition.....	55
8.4.	Levels of Service	55
8.5.	Lifecycle Activities	56
8.6.	Risks related to lifecycle activities	56
8.7.	Economic & Population Growth Assumptions.....	57
8.8.	Table 19 – Inventory Summary	58
8.9.	Table 20 – Condition Definitions & Criteria	60
8.10.	Table 21 – Levels of Service Definitions.....	61
	Appendix A - 10 Year Lifecycle Activities	62

1. Municipal Information

The Municipality of Morris-Turnberry is a lower tier Municipality located within the County of Huron. The Municipality is 376.89 square kilometers in size and is largely comprised of rural properties interspersed with urban communities. As of 2021, the municipal population is 3,590 residents among 1,318 households. The municipality's core asset categories are Bridges, Culverts, Roads, Belgrave Water System and Stormwater assets. This asset management plan is endorsed by the executive lead of the municipality and approved by a resolution passed by municipal council.

2. Bridges

2.1. Inventory Summary

There are 21 bridges located within the Municipality of Morris-Turnberry. The bridges vary in size, construction materials and structure type. The average age of the bridges is approximately 58 years old. The construction dates range from an estimated 1910s up to 2021/2022. Structure M230 located on Abraham Road is undergoing a replacement over the 2021 and 2022 fiscal periods.

The traffic supported by the municipal bridges is also varied. Large agricultural equipment, heavy transport vehicles, motor vehicles, emergency vehicles, cyclists and pedestrians all utilize the bridges to travel throughout the municipality.

A summary of the municipality's bridge assets can be found below:

Number of Bridges	Average Span (meters)	Average Age (years)	Bridges with Load or Dimension Restrictions	Total Current Bridge Value	Average Current Bridge Value
21	44.536	58	2	\$40,284,550	\$1,918,312

Of the 21 bridges maintained by the municipality, 2 or 9.5% of these bridges have a load or dimension restrictions. Additional details on specific bridges may be found on Table 1.

All municipal bridges are inspected biannually in compliance with OSIM requirements. The most recent bridge inspection report was conducted in 2020 by B. M. Ross & Associates Limited (B.M. Ross). Details regarding individual bridge components including images may be found in the 2020 bridge inspection report. A copy of the report is available upon request. An updated bridge inspection report is scheduled to be completed in 2022.

2.2. Current Replacement Values

The 2020 bridge inspection report calculated each bridge's current value. This value is a representation of the current structure being replaced by an identical structure using identical design and materials. This value does not take into consideration the costs of removing the existing bridge or the cost of bringing the structure's engineering and construction materials up to a modern standard. New bridges must also meet modern hydrology, safety, and dimension standards. In order to estimate the total replacement cost of a bridge the municipality uses the following methodology based on the span of the

bridge. The structure span values, and anticipated replacement cost ranges were provided by B.M. Ross. The ranges are used to estimate the current replacement costs of the municipality's bridges.

Bridge Span (m)	Anticipated Replacement Cost Range
Less than 6m	\$250,000 to \$450,000
6 m to 12 m	\$400,000 to \$750,000
12m to 18m	\$700,000 to \$1,300,000
18m to 24m	\$1,200,000 to \$1,900,000
24m to 30m	\$1,800,000 to \$2,500,000
30m to 40m	\$2,400,000 to 3,200,000
40m to 50m	\$3,100,000 to \$4,000,000
50m to 60m+	\$3,900,000 to \$5,000,000+

The current replacement values of the municipality's bridges range from \$425,000 up to \$5,990,000. A summary of the replacement values can be found below and values for individual bridges are on table 1.

Summary of Bridge Current Replacement Values		
Range	# Of Bridges	Current Replacement Value
Less than \$1,000,000	3	\$1,586,666
\$1,000,000 to \$2,000,000	1	\$1,025,000
\$2,000,000 to \$3,000,000	1	\$2,752,000
\$3,000,000 to \$4,000,000	8	\$28,467,000
\$4,000,000 to \$5,000,000	5	\$21,524,000
Greater than \$5,000,000	3	\$18,465,000
Total	21	\$73,819,666
Average		\$3,515,222

2.3. Condition

The most recent bridge inspection report conducted in 2020 calculated a Bridge Condition Index (BCI) value for each bridge within the municipality. The BCI values are grouped into the following categories: Excellent, Good, Fair, Poor, Very Poor and Failed. Details regarding the condition ratings and corresponding criteria can be found on Table 2.

Category:	Excellent	Good	Fair	Poor	Very Poor	Failed	Total
BCI Range	100 to 90	89 to 70	69 to 40	39 to 10	9 to 1	0	
# In Category	4	5	12	0	0	0	21
% Of Total	19%	24%	57%	0%	0%	0%	100%

The average BCI rating of the municipality's 21 bridges is 67.8 or an overall Fair condition. The bridge inspection report is scheduled to be updated in 2022.

2.4. Levels of Service

The municipality has established levels of service (LOS) to evaluate each bridge’s operating efficiency, capacity to meet demands, and environmental resiliency. The LOS criteria and ranking definitions are outlined in Table 3.

Average Distribution - Level of Service Ratings						
	Excellent	Good	Fair	Poor	Very Poor	Failed
Operational Functionality	-	15	5	1	-	-
Capacity to Meet Demands	-	21	-	-	-	-
Environmental Resiliency	-	20	1	-	-	-

Each bridge was evaluated and assigned a ranking based on municipal staff’s first-hand knowledge and observation. Any bridge that did not have designs available, a performance-based assessment was conducted, and rating assigned.

Overall, the municipality’s bridges have an average rating of Good in operating efficiency, capacity to meet demands and environmental resiliency.

2.5. Lifecycle Activities

The bridges within the Municipality of Morris-Turnberry have an expected useful life of 80 years. The life cycle activities include a 30-year rehabilitation and a 60-year rehabilitation before a complete replacement at 80 years. The municipality uses the following methodology based on the span of the bridge when calculating the costs of the 30 year and 60-year rehabilitations. The structure span and anticipated rehabilitation cost ranges were provided by B.M. Ross.

Bridge Span (m)	30 Year Rehabilitation Cost Range	60 Year Rehabilitation Cost Range
Less than 6m	\$85,000 to \$150,000	\$50,000 to \$85,000
6 m to 12 m	\$125,000 to \$350,000	\$100,000 to \$200,000
12m to 18m	\$250,000 to \$450,000	\$150,000 to \$300,000
18m to 24m	\$350,000 to \$550,000	\$250,000 to \$400,000
24m to 30m	\$400,000 to \$650,000	\$300,000 to \$450,000
30m to 40m	\$500,000 to \$750,000	\$400,000 to \$600,000
40m to 50m	\$600,000 to \$850,000	\$500,000 to \$700,000
50m to 60m+	\$750,000 to \$1,000,000	\$600,000 to \$750,000

The municipality takes into consideration the recommendations of the bi-annual bridge inspection report, grant availability and geographic synergies when planning bridge rehabilitations and replacements. Using the lifecycle activities and estimated cost ranges, the anticipated lifecycle costs from 2023 to 2032 are as follows:

Anticipated Bridge Lifecycle Costs (2023 to 2032)										
Year:	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Estimated Cost (\$):	\$91,000	\$145,000	\$510,000	\$-	\$148,000	\$-	\$580,833	\$5,033,000	\$1,225,000	\$618,000

2.6. Risks related to lifecycle activities

Financial Risk

Failure to perform scheduled lifecycle activities or forecast future needs can expose the municipality to financial risk. If a bridge fails due to lack of maintenance and repair, the cost to replace it can be significant. An unbudgeted bridge replacement will have a significant impact on the municipal budget. Cost overruns and volatile market prices can also pose a financial risk to the municipality.

Environmental Risk

Climate change can pose an environmental risk to municipal bridges. Significant weather events have increased in frequency and severity due to climate change. These events can cause damage to a structure during a storm or slowly damage a structure over time. When repairing, rehabilitating, or replacing a bridge, the impact of climate change on the structure will be evaluated.

Economic Risk

Municipal assets with capacity restrictions could potentially deter economic growth within the municipality. Commercial development cannot occur in an area serviced by a bridge that cannot accommodate the size or weight of large commercial vehicles. When repairing, rehabilitating, or replacing a bridge, the municipality will evaluate the economic growth potential of the area and evaluate if the bridge is an impediment to that growth.

Reputation Risk

Municipal bridges are used by motorists and the public daily. If lifecycle activities and general maintenance are postponed the structure can deteriorate. The daily use of a structure in disrepair can result in the public developing a negative impression of the municipality. A tarnished reputation can be exceedingly difficult to correct and can impact a municipality's ability to recruit qualified staff or attract economic growth to the area.

Health & Safety Risk

It is the municipality's goal to maintain bridges to allow for the safe passage of vehicles, cyclists, and pedestrians. If the municipal bridges are not maintained in a timely and appropriate manner, the public could be exposed to an unnecessary health and safety risk. When repairing, rehabilitating, or replacing a bridge, the municipality will consider the health and safety risks to the public. The municipality will also ensure appropriate health & safety measures are taken on the job site while bridge construction is occurring to protect staff and the public.

2.7. Economic & Population Growth Assumptions

Current population and economic growth within Morris-Turnberry is minimal. Recent residential development is small in scale and will have minimal impact on the bridge's lifecycle activities. The municipality is currently serviced by bridges of appropriate size and capacity.

Much of the economic growth within the municipality is related to agricultural operations. The location of this growth is in areas suited for the development and already serviced by bridges capable of accommodating large agricultural machinery. Additional growth in these areas within the municipality will not have a significant impact on the bridge's lifecycle activities. Current lifecycle activities are scheduled to meet the current population and economic activity levels. When a bridge is identified for repair, rehabilitation or replacement, these assumptions will be reevaluated.

Table 1 - Bridges - Inventory Summary

Bridge Number	Structure Name	Road Name	Span (m)	Width (m)	Year Built	Estimated Year Built	Age of Structure	2020 BCI Rating	2020 Bridge Value	Current Replacement Value	Load or Dimension Restrictions
BB1	Victoria St. Bridge	Victoria St. West	53.40	11.90	1975		47	61	\$ 2,730,500	\$ 4,274,000	None
BB2		Clyde Street	34.40	10.15		1970	52	63	\$ 1,569,500	\$ 2,752,000	None
BB3		Ramsay Line	53.00	8.60		1970	52	80	\$ 1,995,200	\$ 4,230,000	None
M040		Elevator Line	9.10	5.90		1940	82	52	\$ 541,800	\$ 580,833	Load Restriction
M060		Moncrieff Road	5.50	8.35	1945		77	58	\$ 328,950	\$ 425,000	None
M110	Martin Bridge	Martin Line	74.60	9.30		1980	42	83	\$ 3,040,100	\$ 6,606,000	None
M120	Clark Bridge	Clyde Line	51.20	9.25	1972		50	71	\$ 2,059,700	\$ 4,032,000	None
M140	Bodmin Bridge	Brandon Road	50.00	8.65		1950	72	40	\$ 1,870,500	\$ 3,900,000	None
M160	Garniss Bridge	Cardiff Road	47.20	8.65	1957		65	63	\$ 1,797,400	\$ 3,748,000	None
M190	Stone School Bridge	Clegg Line	47.60	9.80	1965		57	53	\$ 2,042,500	\$ 3,784,000	None
M200		Browntown Road	9.10	8.60	1962		60	57	\$ 356,900	\$ 580,833	None
M210	Campbell Bridge	Jamestown Road	53.40	9.90	1963		59	52	\$ 2,322,000	\$ 4,274,000	None
M220		Jamestown Road	15.25	8.45		1960	62	68	\$ 589,100	\$ 1,025,000	None
M230	Blind Line Bridge	Abraham Road	38.70	5.05		1910	112	44	\$ 2,618,700	\$ 3,096,000	Load and Dimension
M250	Jamestown Bridge	Jamestown Road	40.90	9.80		1970	52	74	\$ 1,750,100	\$ 3,181,000	None
T010	Lower Town Bridge	Helena Street	69.00	12.40	1991		31	96	\$ 3,710,900	\$ 5,990,000	None
T030	B Line Bridge	B Line Road	57.40	9.75	1977		45	91	\$ 2,472,500	\$ 4,714,000	None
T060	Eadie Bridge	Gilmour Line	67.90	9.30	1982		40	96	\$ 2,782,100	\$ 5,869,000	None
T090	Bolt Bridge	Kieffer Line	44.00	8.65	1975		47	92	\$ 1,672,700	\$ 3,460,000	None
T100	Willit Bridge	Salem Road	47.60	9.86	1966		56	52	\$ 2,094,100	\$ 3,784,000	None
T110	Henning's Bridge	Orange Hill Road	44.60	9.90	1967		55	78	\$ 1,939,300	\$ 3,514,000	None

Summary	Length (m)	Width (m)	Year Built	Approx. Age	BCI Rating	2020 Bridge Value	Replacement Value
21 Bridges							
Average	43.52	9.15	1964	58	68	\$ 1,918,312	\$ 3,515,222
Totals	913.85					\$ 40,284,550	\$ 73,819,666

Table 2 - Bridges - Condition Categories & Corresponding Criteria

	Excellent	Good	Fair	Poor	Very Poor	Failed
BCI	100 to 90	89 to 70	69 to 40	39 to 10	9 to 1	0
	<ul style="list-style-type: none"> • Structure is in a "Excellent" condition overall • Insignificant defects/damage to a few critical load bearing elements • Capacity unaffected • No repairs are required in the foreseeable future 	<ul style="list-style-type: none"> • Structure is in a "Good" condition overall • Minor defects/damage, but may also have some moderate defects to some critical load bearing elements • Capacity unlikely to be affected • Can be upgraded to new condition with little effort and cost • Significant maintenance or repair work is not usually required within the next 10 years 	<ul style="list-style-type: none"> • Structure is in a "Fair" to "Good" condition overall • Minor-to-Moderate defects/damage to several critical load bearing elements • Capacity may be slightly affected • One or more functions of the structure may be significantly affected • Maintenance or repair work is required within 6 to 10 years 	<ul style="list-style-type: none"> • Structure is in a "Fair" to "Poor" condition overall • Moderate-to-Severe defects/damage to many critical load bearing elements • Capacity may be significantly affected • One or more functions of the bridge may be severely affected • Maintenance or repair work is required within 1 to 5 years. 	<ul style="list-style-type: none"> • Structure is in a "Very Poor" condition overall • Severe defects/damage on a number of critical load bearing elements • Failure and/or possible failure of one or more critical load bearing elements • Capacity may be severely affected • Structure may be unserviceable • Emergency work is required within 1 year and/or structure may need to be weight restricted or closed to traffic 	<ul style="list-style-type: none"> • Structure has failed • Structure is unserviceable

Table 3 - Bridges - Levels of Service Definitions

	Level of Service Criteria	Excellent	GOOD	FAIR	POOR	VERY POOR
Operational Functionality	- Appropriate design for traffic volumes and speed limits	- Structure designed to accommodate higher traffic volumes and speed limits	- Design is appropriate for traffic volumes and speed limits	- Design is substandard to modern standards, but sufficient for current volumes and speed limits	- Design is substandard for current traffic volumes and speed limits	- Design is negatively impacting traffic volumes and speed of traffic
	- Sufficient platform to accommodate current traffic volumes and speeds (not related to capacity)	- Structure's platform can accommodate additional traffic volumes and speeds	- Structure's platform accommodates current traffic volumes and speeds	- Platform can accommodate small traffic in both directions, Large vehicles limited to single lane crossing, minimal to no impact on traffic flow	- Single lane crossing for large and small traffic, minimal to no impact on traffic flow	- Single lane crossing for large and small traffic, negatively impacting traffic flow
	- Adequate structural capacity to accommodate traffic volumes and loading	- Structure capacity can accommodate additional traffic volume and loading	- Structure capacity accommodates current traffic volume and loading	- Structure's ability to accommodate heavy vehicles is limited, but no to minimal impact to traffic flow	- Structure's ability to accommodate heavy vehicles is limited, negatively impacting traffic flow	- Structure ability to accommodate heavy and light vehicles is limited, negatively impacting traffic flow
	- Maintenance of bridges is fully compliant with the "Minimum Maintenance Standards for Municipal Highways" (O.Reg 388/18)	- Maintenance exceeds Minimum Maintenance Standards	- Maintenance is fully compliant with Minimum Maintenance Standards	- Maintenance is partially compliant with Minimum Maintenance Standards	- Maintenance is not compliant with Minimum Maintenance Standards	- No Maintenance is conducted on Structures
Capacity to Meet Demands	- Sufficient width and structural capacity to meet peak traffic volumes and loads for given speed limits.	- Structural Capacity exceeds current peak traffic volumes and loads for given speed limits	- Structural capacity meets current peak traffic volumes and loads for given speed limits	- Structural capacity just meets current peak traffic volumes and loads for given speed limits, minimal to no impact on traffic flow	- Structural capacity is below current peak traffic volumes and loads for given speed limits, noticeable impact on traffic flow	- Structural capacity is significantly below current peak traffic volumes and loads for given speed limits, negatively impacting traffic flow
Environmental Resiliency	- Sufficient span and elevation to accommodate a 100-year or regional storm event	- Span and Elevation exceed requirements to accommodate a 100-year or regional storm event	- Span and Elevation are sufficient to accommodate a 100-year or regional storm event	- Span and Elevation barely accommodate a 100-year or regional storm event	- Span and Elevation cannot accommodate a 100-year or regional storm event, minimal repercussions upon failure to accommodate	- Span and Elevation cannot accommodate a 100-year or regional storm event, major repercussions upon failure to accommodate
	- Adequate embankment and watercourse protection to protect the structure during high flows	- Embankment and watercourse protection provides excess protection during high flows	- Embankment and watercourse protection provides adequate protection during high flows	- Embankment and watercourse protection provides barely adequate protection during high flows	- Embankment and watercourse protection does not provide protection during high flows, minimal damage to area	- Embankment and watercourse protection does not provide protection during high flows, major damage to area

3. Culverts

3.1. Inventory Summary

There are 19 culverts greater than 3 meters located within the Municipality of Morris-Turnberry. The culverts vary in length, construction materials and structure type. The average age of the culverts is approximately 50 years old. The construction dates range from an estimated 1950s up to 2016. Structure M020 on McCall Line is undergoing replacement in the 2022 fiscal period.

The traffic supported by the culverts is also varied. Large agricultural equipment, heavy transport vehicles, motor vehicles, emergency vehicles, cyclists and pedestrians all utilize the culverts to travel throughout the municipality.

A summary of the municipality's bridge assets can be found below:

Number of Culverts	Average Span (meters)	Average Age (years)	Culverts with Load or Dimension Restrictions	Total Current Culvert Value	Average Current Bridge Value
19	4.47	50	0	\$5,227,000	\$275,105

None of the 19 culverts maintained by the municipality have load or dimension restrictions. Additional details on specific culverts may be found on Table 4.

All municipal culverts are inspected biannually in compliance with OSIM requirements. The most recent inspection report was conducted in 2020 by B.M. Ross & Associates. Details regarding individual culverts including images may be found in the 2020 bridge inspection report. A copy of the report is available upon request. An updated bridge needs study is scheduled to be completed in 2022.

3.2. Current Replacement Values

The 2020 bridge inspection report calculated each culvert's current value. This value is a representation of the current structure being replaced by an identical structure using identical design and materials. This value does not take into consideration the costs of removing the existing culvert or the cost of bringing the structure's engineering and construction materials up to a modern standard. New culverts must also meet modern hydrology, safety, and dimension standards. In order to estimate the total replacement cost of a culvert the municipality uses the following methodology based on the span of the culvert. The structure span values, and anticipated replacement cost ranges were provided by B.M. Ross. The ranges were used to develop a formula to estimate the current replacement costs of the municipality's culverts.

Culvert Span (m)	Anticipated Replacement Cost Range
Less than 6m	\$250,000 to \$450,000
6 m to 12 m	\$400,000 to \$750,000

The current replacement values of the municipality's culverts range from \$220,000 up to \$425,000. A summary of the replacement values can be found below and values for individual culverts are on Table 4.

Summary of Culvert Replacement Values		
Range	# Of Culverts	Current Replacement Value
Less than \$250,000	2	\$461,000
\$250,000 to \$300,000	4	\$1,087,000
\$300,000 to \$350,000	6	\$1,979,000
\$350,000 to \$400,000	3	\$1,122,000
Greater than \$400,000	4	\$1,636,666
Total	19	\$6,285,666
Average		\$330,825

3.3. Condition

The most recent bridge inspection report conducted in 2020 calculated a Bridge Condition Index (BCI) value for each culvert greater than 3m within the municipality. The BCI values are grouped into the following categories: Excellent, Good, Fair, Poor, Very Poor and Failed. Details regarding the condition ratings and corresponding criteria can be found on Table 5.

Category:	Excellent	Good	Fair	Poor	Very Poor	Failed	Total
BCI Range	100 to 90	89 to 70	69 to 40	39 to 10	9 to 1	0	
# In Category	4	6	8	1	-	-	19
% Of Total	21	32	42	5	-	-	100%

The average BCI rating of the municipality’s 19 culverts is 70.9 or an overall “Good” condition. The bridge inspection report is scheduled to be updated in 2022.

3.4. Levels of Service

The municipality has established levels of service (LOS) to evaluate each culvert’s operating efficiency, capacity to meet demands, and environmental resiliency. The LOS criteria and ranking definitions are outlined in Table 6.

Average Distribution - Level of Service Ratings						
	Excellent	Good	Fair	Poor	Very Poor	Failed
Operational Functionality	-	19	-	-	-	-
Capacity to Meet Demands	-	19	-	-	-	-
Environmental Resiliency	-	18	-	1	-	-

Each culvert was evaluated and assigned a ranking based on municipal staff’s first-hand knowledge and observation. Any bridge that did not have designs available, a performance-based assessment was conducted, and rating assigned. Overall, the municipality’s culverts have an average rating of Good in operating efficiency, capacity to meet demands and environmental resiliency.

3.5. Lifecycle Activities

The culverts within the Municipality of Morris-Turnberry have an expected useful life of 80 years. The life cycle activities include a 30-year rehabilitation and a 60-year rehabilitation before complete

replacement at 80 years. The municipality uses the following methodology based on the span of the culvert when calculating the cost of a 30 year or 60-year rehabilitation. The structure span and anticipated rehabilitation cost ranges were provided by B.M. Ross. The span and cost ranges were used to develop a cost formula to estimate the 30 year and 60-year rehabilitation costs.

Culvert Span (m)	30 Year Rehabilitation Cost Range	60 Year Rehabilitation Cost Range
Less than 6m	\$85,000 to \$150,000	\$50,000 to \$85,000
6 m to 12 m	\$125,000 to \$350,000	\$100,000 to \$200,000

The municipality takes into consideration the recommendations of the bi-annual bridge inspection report, grant availability and geographic synergies when planning culvert rehabilitations and replacements. Using the lifecycle activities and formula for estimated costs, the anticipated lifecycle costs from 2023 to 2032 are as follows:

Anticipated Culvert Lifecycle Costs (2023 to 2032)										
Year:	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Estimated Cost (\$):	\$102,063	\$ -	\$ -	\$121,400	\$ -	\$ -	\$150,000	\$2,531,833	\$109,375	\$ -

3.6. Risks related to lifecycle activities

Financial Risk

Failure to perform scheduled lifecycle activities or forecast future needs can expose the municipality to financial risk. If a culvert fails due to lack of maintenance and repair, the cost to replace it can be significant. An unbudgeted culvert replacement will have a significant impact on the municipal budget. Cost overruns and volatile market prices can also pose a financial risk to the municipality.

Environmental Risk

Climate change can pose an environmental risk to municipal culverts. Significant weather events have increased in frequency and severity due to climate change. These events can cause damage to a structure during a storm or slowly damage a structure over time. When repairing, rehabilitating, or replacing a culvert, the impact of climate change on the structure will be evaluated.

Economic Risk

Municipal assets with capacity restrictions could potentially deter economic growth within the municipality. Development cannot occur in an area serviced by a culvert that cannot accommodate the size or weight of motor vehicles. When repairing, rehabilitating, or replacing a culvert, the municipality will evaluate the economic growth potential of the area and evaluate if the culvert is an impediment to that growth.

Reputation Risk

Municipal culverts are used by motorists and the public daily. If lifecycle activities and general maintenance are postponed the structure can deteriorate. The daily use of a structure in disrepair can result in the public developing a negative impression of the municipality. A tarnished reputation can be exceedingly difficult to correct and can impact a municipality's ability to recruit qualified staff or attract economic growth to the area.

Health & Safety Risk

It is the municipality's goal to maintain culverts to allow for the safe passage of vehicles, cyclists, and pedestrians. If the municipal culverts are not maintained in a timely and appropriate manner, the public could be exposed to an unnecessary health and safety risk. When repairing, rehabilitating, or replacing a bridge, the municipality will consider the health and safety risks to the public. The municipality will also ensure appropriate health & safety measures are taken on the job site while culvert construction is occurring to protect staff and the public.

3.7. Economic & Population Growth Assumptions

Current population and economic growth within Morris-Turnberry is minimal. Recent development is small in scale and will have a minimal impact on the culvert's lifecycle activities. The municipality is currently serviced by culverts of appropriate size and capacity.

Much of the economic growth within the municipality is related to agricultural operations. The locations of this growth are in areas suited for this type of growth and already serviced by culverts capable of accommodating large agricultural machinery. Additional growth in these areas within the municipality will not have a significant impact on the culvert's lifecycle activities. Current lifecycle activities are scheduled to meet the current population and economic activity levels. When a culvert is identified for repair, rehabilitation or replacement, these assumptions will be reevaluated.

Table 4 - Culverts - Inventory Summary

Culvert Number	Structure Name	Road Name	Span (m)	Width (m)	Year Built	Estimated Year Built	Age of Structure	2020 BCI Rating	2020 Bridge Value	Current Replacement Value	Load or Dimension Restrictions
M010		Clyde Line	4.70	12.20		1960	62	58	\$ 290,700	\$ 330,000	None
M020		McCall Line	7.00	12.20		1960	62	24	\$ 433,500	\$ 405,833	None
M030		Walton Road	5.10	19.00	1996		26	98	\$ 329,800	\$ 362,000	None
M050	Brown's Bridge	Martin Line	6.60	17.00	1989		33	75	\$ 380,800	\$ 400,000	None
M070		Moncrieff Road	7.00	9.30		1950	72	59	\$ 442,000	\$ 395,000	None
M080		Clyde Line	5.80	16.70		1950	72	55	\$ 329,800	\$ 350,000	None
M090		Elevator Line	2.70	18.00		1980	42	73	\$ 166,600	\$ 285,000	None
M100		St. Michaels Road	2.20	18.00	2007		15	73	\$ 136,000	\$ 260,000	None
M130		Nichol Line	3.50	14.00	1993		29	100	\$ 249,900	\$ 302,500	None
M150		Brandon Road	2.80	15.00		1950	72	64	\$ 178,000	\$ 241,000	None
M170		Clyde Line	6.80	18.20		1950	72	54	\$ 421,600	\$ 405,833	None
M180		Quarter Line	6.10	18.30		1960	62	75	\$ 380,800	\$ 425,000	None
M240		Clyde Line	5.30	18.70		1950	72	64	\$ 336,600	\$ 365,000	None
T020		Holmes Line	4.20	19.40		1960	62	63	\$ 275,400	\$ 335,000	None
T040		Gilmour Line	4.30	17.00	2001		21	100	\$ 248,200	\$ 325,000	None
T048		Salem Road	1.40	18.30		1980	42	75	\$ 88,400	\$ 220,000	None
T050		Salem Road	2.80	11.70		1950	72	62	\$ 168,300	\$ 270,000	None
T070		Powell Line	2.90	14.60		1960	62	75	\$ 142,800	\$ 272,000	None
T080		Centre Line Road	3.73	18.00	2016		6	100	\$ 227,800	\$ 336,500	None

Summary	Length (m)	Width (m)	Year Built	Approx. Age	BCI Rating	2020 Culvert Value	Replacement Value
19 Culverts							
Average	4.47	16.08	1972	50	71	\$ 275,105	\$ 330,825
Totals	84.93					\$ 5,227,000	\$ 6,285,666

Table 5 - Culverts - Condition Categories & Corresponding Criteria

	Excellent	Good	Fair	Poor	Very Poor	Failed
BCI	100 to 90	89 to 70	69 to 40	39 to 10	9 to 1	0
	<ul style="list-style-type: none"> • Structure is in a "Excellent" condition overall • Insignificant defects/damage to a few critical load bearing elements • Capacity unaffected • No repairs are required in the foreseeable future 	<ul style="list-style-type: none"> • Structure is in a "Good" condition overall • Minor defects/damage, but may also have some moderate defects to some critical load bearing elements • Capacity unlikely to be affected • Can be upgraded to new condition with little effort and cost • Significant maintenance or repair work is not usually required within the next 10 years 	<ul style="list-style-type: none"> • Structure is in a "Fair" to "Good" condition overall • Minor-to-Moderate defects/damage to several critical load bearing elements • Capacity may be slightly affected • One or more functions of the structure may be significantly affected • Maintenance or repair work is required within 6 to 10 years 	<ul style="list-style-type: none"> • Structure is in a "Fair" to "Poor" condition overall • Moderate-to-Severe defects/damage to many critical load bearing elements • Capacity may be significantly affected • One or more functions of the bridge may be severely affected • Maintenance or repair work is required within 1 to 5 years. 	<ul style="list-style-type: none"> • Structure is in a "Very Poor" condition overall • Severe defects/damage on a number of critical load bearing elements • Failure and/or possible failure of one or more critical load bearing elements • Capacity may be severely affected • Structure may be unserviceable • Emergency work is required within 1 year and/or structure may need to be weight restricted or closed to traffic 	<ul style="list-style-type: none"> • Structure has failed • Structure is unserviceable

Table 6 - Culverts - Levels of Service Definitions

	Level of Service Criteria	Excellent	GOOD	FAIR	POOR	VERY POOR
Operational Functionality	- Appropriate design for traffic volumes and speed limits	- Structure designed to accommodate higher traffic volumes and speed limits	- Design is appropriate for traffic volumes and speed limits	- Design is substandard to modern standards, but sufficient for current volumes and speed limits	- Design is substandard for current traffic volumes and speed limits	- Design is negatively impacting traffic volumes and speed of traffic
	- Sufficient platform to accommodate current traffic volumes and speeds (not related to capacity)	- Structure's platform can accommodate additional traffic volumes and speeds	- Structure's platform accommodates current traffic volumes and speeds	- Platform can accommodate small traffic in both directions, Large vehicles limited to single lane crossing, minimal to no impact on traffic flow	- Single lane crossing for large and small traffic, minimal to no impact on traffic flow	- Single lane crossing for large and small traffic, negatively impacting traffic flow
	- Adequate structural capacity to accommodate traffic volumes and loading	- Structure capacity can accommodate additional traffic volume and loading	- Structure capacity accommodates current traffic volume and loading	- Structure's ability to accommodate heavy vehicles is limited, but no to minimal impact to traffic flow	- Structure's ability to accommodate heavy vehicles is limited, negatively impacting traffic flow	- Structure ability to accommodate heavy and light vehicles is limited, negatively impacting traffic flow
	- Maintenance of culverts is fully compliant with the "Minimum Maintenance Standards for Municipal Highways" (O.Reg 388/18)	- Maintenance exceeds Minimum Maintenance Standards	- Maintenance is fully compliant with Minimum Maintenance Standards	- Maintenance is partially compliant with Minimum Maintenance Standards	- Maintenance is not compliant with Minimum Maintenance Standards	- No Maintenance is conducted on Structures
Capacity to Meet Demands	- Sufficient width and structural capacity to meet peak traffic volumes and loads for given speed limits.	- Structural Capacity exceeds current peak traffic volumes and loads for given speed limits	- Structural capacity meets current peak traffic volumes and loads for given speed limits	- Structural capacity just meets current peak traffic volumes and loads for given speed limits, minimal to no impact on traffic flow	- Structural capacity is below current peak traffic volumes and loads for given speed limits, noticeable impact on traffic flow	- Structural capacity is significantly below current peak traffic volumes and loads for given speed limits, negatively impacting traffic flow
Environmental Resiliency	- Sufficient span and elevation to accommodate a 100-year or regional storm event	- Span and Elevation exceed requirements to accommodate a 100-year or regional storm event	- Span and Elevation are sufficient to accommodate a 100-year or regional storm event	- Span and Elevation barely accommodate a 100-year or regional storm event	- Span and Elevation cannot accommodate a 100-year or regional storm event, minimal repercussions upon failure to accommodate	- Span and Elevation cannot accommodate a 100-year or regional storm event, major repercussions upon failure to accommodate
	- Adequate embankment and watercourse protection to protect the structure during high flows	- Embankment and watercourse protection provides excess protection during high flows	- Embankment and watercourse protection provides adequate protection during high flows	- Embankment and watercourse protection provides barely adequate protection during high flows	- Embankment and watercourse protection does not provide protection during high flows, minimal damage to area	- Embankment and watercourse protection does not provide protection during high flows, major damage to area

4. Roads – High Class Bituminous (HCB) Paving

4.1. Inventory Summary

The Municipality segments its HCB roads into individual assets that run from intersection to intersection. Each HCB road segment is assigned a unique road identification number. The entirety of the municipality's HCB road network would be classified as local roads. Details regarding the municipality's HCB road inventory can be found on Table 7.

HCB Road Summary:	Number of Road Segments	Total Kilometers (KMs)	Total Lane Kilometers (KMs)	Average Segment Age (Years)	Total Surface Area (km ²)
Local Roads	100	43.71	87.42	14	0.383

The HCB road network represent 15% of Morris-Turnberry's total road network. The HCB roads have a combined surface area of 0.383 KM² which represents 0.10% of the land area within the Municipality.

4.2. Current Replacement Values

The municipality separates the cost of replacing a road's surface from the cost of replacing a road's base when calculating an estimated replacement value. Using 2022 budget data and staff estimations the cost of surfacing materials, replacing an HCB road's surface would cost approximately \$150,000/km. The cost of replacing a road's base is estimated to be \$175,000/km.

HCB Estimated Replacement Cost	Number of Road Segments	Total Kilometers (KMs)	Estimated Replacement Cost - Surface -	Estimated Replacement Cost - Base -	Estimated Replacement Cost - Total -
Local Roads	100	43.71	\$6,556,500	\$7,649,250	\$14,205,750

4.3. Condition

The Municipality's HCB roads are evaluated on a scale of 100 to 0 and grouped into the following categories. Details regarding the condition ratings and corresponding criteria can be found on Table 8.

	Excellent	Good	Fair	Poor	Very Poor	Failed
Rating:	100 to 90	89 to 70	69 to 40	39 to 10	9 to 1	0
# Of Segments	11	52	37	-	-	-
Length (KMs)	11.2	24.8	7.7	-	-	-

The average condition rating on an HCB road segment is 71.25 or Good.

4.4. Levels of Service

The municipality has established levels of service (LOS) to evaluate each HCB road segment’s operating efficiency, capacity to meet demands, and environmental resiliency. The LOS criteria and ranking definitions are outlined in Table 9.

A summary of the municipality’s 100 HCB road segments are as follows:

Average Distribution - Level of Service Ratings						
	Excellent	Good	Fair	Poor	Very Poor	Failed
Operational Functionality	-	98	2	-	-	-
Capacity to Meet Demands	1	99	-	-	-	-
Environmental Resiliency	-	93	6	1	-	-

Each segment was evaluated and assigned a ranking based on municipal staff’s first-hand knowledge and observation. Any road segment that did not have designs available, a performance-based assessment was conducted, and rating assigned.

Overall, the municipality’s HCB road network has an average rating of Good in operating efficiency, capacity to meet demands and environmental resiliency.

4.5. Lifecycle Activities

An HCB road segment has an estimated useful life of 25 years. When the road segment has reached the end of its useful life, the municipality will repave the road section. The municipality takes into consideration the condition of the pavement, grant availability and geographic synergies when planning HCB paving projects.

Using the 2022 estimated replacement cost of \$150,000/KM and each segment’s last paved date, the municipality can extrapolate the next time a segment will need to be resurfaced and the approximate cost. The municipality strives to implement the right treatment method in the right location at the right time.

Anticipated HCB Lifecycle Costs (2023 to 2032)										
Year:	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Estimated Cost (\$):	\$147,000	\$309,900	\$ -	\$111,750	\$ -	\$ -	\$950,100	\$ -	\$88,500	\$ -

4.6. Risks Related to Lifecycle Activities

Financial Risk

Failure to perform scheduled lifecycle activities or forecast future needs can expose the municipality to financial risk. If an HCB road surface remains in poor condition, the underlying road base may become damaged. Then overall cost to repair the surface and base will be significantly more than just repaving the surface. Cost overruns and volatile market prices for materials can also pose a financial risk to the municipality.

Environmental Risk

Climate change can pose an environmental risk to the municipality's HCB roads. Significant weather events have increased in frequency and severity due to climate change. These events could cause immediate damage to a road or slowly damage them over time. When repaving a road segment, the impact of past weather events and potential future events will be evaluated.

Economic Risk

Municipal assets with capacity restrictions could potentially deter economic growth within the municipality. Development may be deterred if the road network is undersized or in disrepair. When repaving HCB roads, the municipality will evaluate the economic growth potential of the area and evaluate if the HCB road network is an impediment to that growth.

Reputation Risk

HCB roads are used by motorists and the public daily. If lifecycle activities and general maintenance are postponed the road can deteriorate. The daily use of an HCB road in poor condition can result in the public developing a negative impression of the municipality. A tarnished reputation can be exceedingly difficult to correct and can impact a municipality's ability to recruit qualified staff or attract economic growth to the area.

Health & Safety Risk

It is the municipality's goal to maintain the HCB network to allow for the safe passage of motorists. If the roads are not maintained in a timely and appropriate manner, the public could be exposed to an unnecessary health and safety risk. When repaving an HCB road, the municipality will also ensure appropriate health & safety measures are taken on the job site.

4.7. Economic & Population Growth Assumptions

Current population and economic growth within Morris-Turnberry is minimal. Any recent residential development is small in scale and will have minimal to no impact on the municipal HCB network. Much of the municipality's urban development is already serviced by HCB paving and major expansion of the network is not anticipated

Much of the economic growth within the municipality is related to agricultural operations in rural areas. Growth in these areas is not anticipated to impact the HCB road network located mostly in urban areas. Current lifecycle activities are scheduled to meet the current population and economic activity levels. If a significant development is proposed or when an HCB segment is repaved, these assumptions will be reevaluated.

Table 7 - HCB Paved Roads - Inventory Summary

Road Segment ID	Road Name	Location		Date of Last Paving Project	Length (km)	# of Lanes	Lane-Kilometers	Platform Width (m)	Surface Area (km ²)	Condition Rating
		From:	To:							
9	Huron Bruce Rd	100 m west of Belmore Line	Belmore Line (Cty Rd 12)	2017	0.100	2	0.200	10	0.001000	90
11	Glenannon Rd	Belmore Rd	Lewis Line	2021	0.939	2	1.878	8.1	0.007606	100
12	Glenannon Rd	Lewis Line	2.3km West of Lewis Rd	2021	2.300	2	4.600	8.6	0.019780	100
31	B Line Rd	Harriston Rd	Gilmour Line	2018	2.038	2	4.076	7.7	0.015693	90
32	B Line Rd	Gilmour Line	McLean Line	2012	2.555	2	5.110	9	0.022995	70
33	B Line Rd	McLean Line	0.6km E of London Rd (Hwy 4)	2014	1.417	2	2.834	9	0.012753	70
33.1	B Line Rd	0.6km East of Hwy4	0.3km East of London Rd (Hwy 4)	2014	0.471	2	0.942	9.2	0.004333	70
33.2	B Line Rd	0.3km East of Hwy4	London Rd (Hwy4)	2014	0.286	2	0.572	9.7	0.002774	70
34	North St W	Hwy 4 (London Rd)	Pine St	2012	0.166	2	0.332	9.2	0.001527	70
35	North St W	Pine St	Arthur St	2012	0.412	2	0.824	9.2	0.003790	70
36	North St W	Arthur St	Alice St	2001	0.515	2	1.030	8.3	0.004275	50
41	Josephine St N	London Rd	London Rd	1994	0.951	2	1.902	9	0.008559	55
53	Black Line	B Line Rd	Harriston Rd (Hwy 87)	1999	0.649	2	1.298	9	0.005841	55
61	Fischer Line	Amberley Rd	Dead End	2001	0.230	2	0.460	5	0.001150	75
72	Jamestown Rd	Clegg Line	London Rd	2011	2.026	2	4.052	8.8	0.017829	75
107	Walton Rd	100m E of Ann St in Blyth	Elevator Line	1995	0.812	2	1.624	8	0.006496	70
124	Clyde Line	Blyth Rd	Walton Rd	2021	0.652	2	1.304	8.5	0.005542	100
125	Clyde Line	Walton Rd	Moncrieff Rd	2021	2.040	2	4.080	8.6	0.017544	100
136	Elevator Line	Blyth Rd	Walton Rd	1995	0.645	2	1.290	8.5	0.005483	70
154	Clyde Line	600 m S of Morris St.	Jamestown Rd	2004	1.519	2	3.038	9	0.013671	70
155	Clyde Line	Jamestown Rd	Browntown Rd	2004	2.042	2	4.084	9	0.018378	70
156	Clyde Line	Browntown Rd	Cardiff Rd	2019	2.045	2	4.090	9	0.018405	95
157	Clyde Line	Cardiff Rd	Brandon Rd	2013	2.033	2	4.066	9.8	0.019923	85
158	Clyde Line	Brandon Rd	Morris Rd	2012	2.030	2	4.060	9.8	0.019894	85
1002	Kate St	Turnberry St	Princess St	2004	0.120	2	0.240	7	0.000840	65
1003	Mary St	Princess St	Turnberry St	2015	0.125	2	0.250	7	0.000875	80
1004	Mary St	Turnberry St	Stacey St	2015	0.131	2	0.262	8	0.001048	80
1005	Mary St.	Stacey St	Royal Rd	2015	0.755	2	1.510	9	0.006795	80
1008	Arthur St	North St	Water St	2019	0.468	2	0.936	9.2	0.004306	95
1009	Arthur St	Water St	Royal Rd	1994	0.189	2	0.378	9.2	0.001739	75
1011	Adelaide St	Potter St	Dead End	2004	0.228	2	0.456	7.5	0.001710	80
1012	Laidlaw St	Potter St	Casemore	2004	0.162	2	0.324	7	0.001134	80
1013	Helena St	Royal Rd	Potter St	2010	0.445	2	0.890	8.9	0.003961	80
1014	Helena St	Potter St	Casemore	2010	0.178	2	0.356	8.9	0.001584	80
1015	Helena St	Casemore	MacIntosh St	2010	0.309	2	0.618	8.5	0.002627	80
1016	Helena St	MacIntosh St	Augusta St	1991	0.322	2	0.644	9.9	0.003188	70
1017	Helena St	Augusta St	Amberley Rd (Hwy 86)	1991	0.127	2	0.254	9.9	0.001257	70
1018	Royal Rd	Mary St	Alice St	2015	0.446	2	0.892	8	0.003568	85
1019	Royal Rd	Alice St	Helena St	2015	0.128	2	0.256	8.5	0.001088	85
1020	Royal Rd	Helena St	Arthur St	2015	0.384	2	0.768	8.5	0.003264	85
1021	Potter St	30m E of Helena (dead end)	Helena St	2010	0.142	2	0.284	8.9	0.001264	70
1022	Potter St	Helena St	Adelaide St	2004	0.231	2	0.462	7.5	0.001733	65
1023	Potter St	Adelaide St	Dean End	2004	0.037	2	0.074	7.5	0.000278	65

Table 7 - HCB Paved Roads - Inventory Summary

Road Segment ID	Road Name	Location		Date of Last Paving Project	Length (km)	# of Lanes	Lane-Kilometers	Platform Width (m)	Surface Area (km ²)	Condition Rating
		From:	To:							
1024	Stacey St	Mary St	Dead End	2004	0.157	2	0.314	5.5	0.000864	50
1026	Turnberry St	West St	Kate St	2014	0.267	2	0.534	8	0.002136	85
1027	Turnberry St	Kate St	Mary St	2014	0.223	2	0.446	8	0.001784	85
1028	Turnberry St	Mary St	Helena St	2014	0.570	2	1.140	8	0.004560	85
1029	Princess St	Kate St	Mary St	2004	0.217	2	0.434	7	0.001519	60
1031	Victoria St	Helena St	To Bridge	1991	0.163	2	0.326	8	0.001304	60
1032	Augusta St	Amberley Rd	Helena St	2004	0.210	2	0.420	6.5	0.001365	60
1033	Augusta St	Helena St	100m West	2004	0.104	2	0.208	65	0.006760	60
1035	Maitland	Amberley Rd	Dead End	2004	0.501	2	1.002	5	0.002505	60
2000	Mckinnon Drive	Amberley Rd (Hwy 86)	Dead End	2004	0.198	2	0.396	8	0.001584	55
2001	Queen St.	Amberley Rd	Amberley Rd (Hwy 86)	2006	0.378	2	0.756	6	0.002268	55
2002	Queen St	Amberley Rd	George St	1999	0.072	2	0.144	10	0.000720	55
2003	Queen St	George St	Duncan St	1999	0.119	2	0.238	10	0.001190	55
2004	Queen St	Duncan St	Clyde St	1999	0.120	2	0.240	10	0.001200	55
2005	Orange St	Clyde St	William St	1998	0.103	2	0.206	9	0.000927	60
2006	Orange St	William St	Dead End	1998	0.119	2	0.238	8	0.000952	60
2007	William St	Orange St	Jacob St	1998	0.150	2	0.300	8	0.001200	60
2008	William St	Jacob St	Margaret St	1998	0.146	2	0.292	8	0.001168	60
2009	William St	Margaret St	Dead End	1998	0.107	2	0.214	8	0.000856	60
2010	Margaret St	William St	Victoria St	1998	0.116	2	0.232	7.5	0.000870	60
2011	Victoria St	Margaret St	Jacob St	1998	0.119	2	0.238	8	0.000952	60
2012	Jacob St	Victoria St	William St	1998	0.094	2	0.188	7.5	0.000705	60
2013	Jacob St	William St	Clyde St	1999	0.102	2	0.204	8	0.000816	60
2014	Clyde St	Amberley Rd	Amberley Rd	1999	0.080	2	0.160	9	0.000720	70
2015	Clyde St	80 m S of Amberley Rd	James St	1999	0.164	2	0.328	9	0.001476	45
2016	Clyde St	James St	Jacob St	1999	0.088	2	0.176	10	0.000880	45
2017	Clyde St	Jacob St	Queen St	1999	0.067	2	0.134	10	0.000670	45
2018	Clyde St	Queen St	Morris St	1999	0.253	2	0.506	10	0.002530	45
2019	Clyde St	Morris St	Country	1999	0.618	2	1.236	9	0.005562	45
2021	James St	Clyde St	Amberley Rd (Hwy 86)	2020	0.199	2	0.398	8	0.001592	95
2022	Duncan St	dead end	James St	2004	0.092	2	0.184	6	0.000552	60
2023	Duncan St	James St	Queen St	2020	0.155	2	0.310	8	0.001240	95
2024	Duncan St	Queen St	Bell St	2006	0.145	2	0.290	8	0.001160	65
2025	Bell St	Duncan St	George St	2006	0.133	2	0.266	9	0.001197	65
2026	George St	Bell St	Queen St	2006	0.140	2	0.280	9	0.001260	65
2027	Johnson Lane	Duncan St	Clyde St	2004	0.121	2	0.242	5	0.000605	60
2028	Morris St.	Clyde St	Morris-Turnberry Rd.	2020	0.305	2	0.610	8.5	0.002593	95
2029	Mckinnon Drive	McKinnon Dr	Dead End	2004	0.077	2	0.154	0	0.000000	60
3000	Parker Dr	Queen St	John St	2011	0.144	2	0.288	8	0.001152	75
3001	Parker Dr	John St	King St	2011	0.245	2	0.490	9	0.002205	75
3002	Parker Dr	King St	Corbett Dr	2011	0.134	2	0.268	9	0.001206	75
3003	Corbett Dr	Parker Dr	Crae St	2011	0.122	2	0.244	8.5	0.001037	75
3004	Mccrae St	Corbett Dr	King St	2011	0.127	2	0.254	8.5	0.001080	75

Table 7 - HCB Paved Roads - Inventory Summary

Road Segment ID	Road Name	Location		Date of Last Paving Project	Length (km)	# of Lanes	Lane-Kilometers	Platform Width (m)	Surface Area (km ²)	Condition Rating
		From:	To:							
3005	Mccrae St	King St	Hamilton St	2011	0.116	2	0.232	8.5	0.000986	75
3006	Mccrae St	Hamilton St	John St	2011	0.123	2	0.246	8.5	0.001046	75
3007	King St	McCrae St	Parker Dr	2011	0.123	2	0.246	9	0.001107	75
3008	Hamilton St	McCrae St	Jane St	2011	0.223	2	0.446	8.5	0.001896	75
3009	Hamilton St	Jane St	Brandon St	2011	0.120	2	0.240	8.5	0.001020	75
3010	Jane St	Queen St	John St	2011	0.151	2	0.302	7	0.001057	75
3011	Jane St	John St	Hamilton St	2011	0.121	2	0.242	8.5	0.001029	75
3012	Jane St	Hamilton St	Dead End	2011	0.203	2	0.406	8.5	0.001726	75
3012.1	John St	Parker Dr	McCrea St	2011	0.126	2	0.252	8.5	0.001071	75
3013	John St	McCrae St	Jane St	2011	0.224	2	0.448	8.5	0.001904	75
3014	John St	Jane St	Brandon St	2011	0.120	2	0.240	8.5	0.001020	75
3015	Brandon St	Queen St (Hwy 4)	John St	2011	0.151	2	0.302	9.4	0.001419	75
3016	Brandon St	John St	Hamilton St	2011	0.122	2	0.244	10	0.001220	75
3017	Brandon St	Hamilton St	Brandon Rd	2011	0.223	2	0.446	10.2	0.002275	75

HCB Road Summary	Average Paving Date	Total Length (km)		Total Lane-Kilometers		Total Surface Area (km ²)	Average Condition
100 Road Segments	2007	43.71		87.42		0.383	71.250

Table 8 - HCB Roads - Condition Ratings & Corresponding Criteria						
	Excellent	Good	Fair	Poor	Very Poor	Failed
Condition Rating	100 to 90	89 to 70	69 to 40	39 to 10	9 to 1	0
Surface	In Like New Condition, no defects or repairs required	Minor defects observed with no impact to the function of the road	Multiple defects observed, with minor impact to function of the road. Resurfacing required to restore the road to a good condition.	Multiple defects observed, with major impact to function of the road. Resurfacing required to restore the road to a good condition.	Significate damage to the road Surface. Resurfacing required to restore the road to a good condition	Full reconstruction of the base and double lift repaving.
Base	Structurally Sound, No Repairs Required	Structurally Sound, No Repairs Required	Structurally Sound, No Repairs Required	Road Base Damaged, Minor Repairs Required	Road Base Damaged, Requires Repair	Road Base Damaged, Requires Replacement

Table 9 - HCB Paved Roads - Levels of Service Definitions

	Level of Service Criteria	Excellent	GOOD	FAIR	POOR	VERY POOR
Operational Functionality	- Appropriate speed limits	- Road can accommodate a higher speed limit	- Speed limit is appropriate for the road	- Minimal traffic must travel at speeds lower than the posted limit	- Majority of traffic must travel at speeds lower than the posted limit	- All traffic must travel as speeds lower than the posted speed limit
	- Suitable road surface material type for traffic volumes and speeds	- The road surface material exceeds requirements for the traffic volume and speeds	- The road surface material is appropriate for the traffic volume and speeds	- The road surface material is not appropriate, but successfully accommodates traffic volumes and speeds	- The road surface material is not appropriate for traffic volumes OR - The road surface material is not appropriate for traffic speed	- The road surface material is not appropriate for traffic volumes AND - The road surface material is not appropriate for traffic speed
	- Sufficient road platform (pavement surface and shoulder width) to accommodate current traffic volumes and speeds (not related to capacity)	- The road platform can accommodate additional traffic volume and speeds	- The road platform accommodates current traffic volumes and speeds	- The road platform accommodates the majority of current traffic volume and speeds, with minimal exceptions/problems	- The road platform has difficulty accommodating the majority of current traffic volume and speeds,	- The road platform is insufficient and inhibits current traffic volume and speeds
	- Adequate road structural capacity to accommodate traffic volumes and loading	- Road Structural capacity can accommodate additional traffic volumes and loading	- Road Structural capacity can accommodate current traffic volumes and loading	- Road Structural capacity can accommodate the majority of current traffic volumes and loading, with minimal exceptions/problems	- Road structural capacity has difficulty accommodating the majority of current traffic volumes and loading	- Road Structural capacity does not accommodate additional traffic volumes and loading
	- Adequate elevation and drainage to prevent seasonal and/or reoccurring flooding	- Road elevation and drainage exceeds seasonal and/or reoccurring flooding requirements	- Road elevation and drainage adequately meets seasonal and/or reoccurring flooding requirements	- Road elevation and drainage satisfactory meets seasonal and/or reoccurring flooding requirements, with minimal exceptions	- Road elevation and drainage does not prevent seasonal and/or reoccurring flooding during major events	- Road elevation and drainage does not prevent seasonal and/or reoccurring flooding
	- Roadway flooding during major storm events limited to criteria per MOE Stormwater Planning and Design Manual	- Roadway flooding during major storm events exceeds the criteria per MOE Stormwater Planning and Design manual	- Roadway flooding during major storm events is limited to criteria per MOE Stormwater Planning and Design manual	- Roadway flooding during major storm events meets the majority, but not all of the criteria per MOE Stormwater Planning and Design manual	- Roadway flooding during major storm events meets few of the criteria per MOE Stormwater Planning and Design manual	- Roadway flooding during major storm events fails to meet any of the criteria per MOE Stormwater Planning and Design manual
	- Adequate erosion control	- Road erosion control is adequate and exceeds requirements	- Road erosion control is adequate and meets requirements	- Road erosion control is satisfactory and meets minimal requirements	- Road erosion control is lacking and minimal repairs required to meet minimal requirements	- Road erosion control is lacking and damage has been done to the road
	- Adequate ditching	- Ditching is adequate and exceeds requirements	- Ditching is adequate and meets all requirements	- Ditching is satisfactory and meets minimal requirements	- Ditching is lacking or in need of repair, minimal impact on the operation of the road	- Ditching is non-effective, negatively impacting the operation of the road

Table 9 - HCB Paved Roads - Levels of Service Definitions

	Level of Service Criteria	Excellent	GOOD	FAIR	POOR	VERY POOR
	- Appropriate geometric designs and sightlines for posted speeds (vertical and horizontal alignments)	- Geometric Designs are appropriate, designs exceed current standards	- Geometric Designs are appropriate, designs meet current standards	- Geometric Designs are appropriate, designs do not meet current standards, roadway was not built to an engineered design, but no concerns with geometric design.	- Geometric designs are inappropriate, designs do not meet current standards, design has minimal impact on the function of the road	- Geometric designs are inappropriate, designs do not meet current standards, design negatively impacting function of the road
	- Adequate quantity of roadside safety devices/protection	- Roadside safety devices/protection exceeds requirements	- Adequate quantity of roadside safety devices/protection	- Adequate quantity of roadside safety devices/protection, requiring minimal repairs or maintenance	- Inadequate quantity of roadside safety devices/protection OR - Adequate quantity of roadside safety devices/protection, in disrepair	- Inadequate quantity of roadside safety devices/protection in disrepair
	- Maintenance of the road network is fully compliant with the "Minimum Maintenance Standards for Municipal Highways" (O.Reg 388/18)	- Maintenance exceeds Minimum Maintenance Standards	- Maintenance is fully compliant with Minimum Maintenance Standards	- Maintenance is partially compliant with Minimum Maintenance Standards	- Maintenance is not compliant with Minimum Maintenance Standards	- No Maintenance is conducted on Structures
Capacity to Meet Demands	- Sufficient number of lanes along each road segment to accommodate peak traffic volumes	- Lanes are sufficient to accommodate additional traffic beyond peak traffic volumes	- Lanes are sufficient to accommodate peak traffic volumes	- Lanes are sufficient to accommodate peak traffic volumes, with minimal interruption to traffic flow	- Lanes accommodate off-peak traffic volumes, with regular interruption to traffic flow during peak traffic flows	- Lanes are insufficient to accommodate off-peak traffic flow, with significant interruption to traffic flow during peak traffic volumes
Environmental Resiliency	- Adequate embankment protection/retention	Embankment protection / retention is more than adequate	- Embankment protection/retention is adequate	- Embankment protection/retention is below standard, but no negative effects on the road	- Embankment protection/retention is below standard, with negative effects emerging	- No embankment protection/retention is present
	- Roads surfaces are protected against a 5-year return storm (per reporting requirements of O.Reg 588/17).	- N/A	- Road surface protected against 5-year storm	- Road surface is protected against 5-year storm, except for during seasonal (spring) flooding	- Road surface is not protected against 5-year return storm	- N/A

5. Roads – Low Class Bituminous (LCB) Surface Treatment

5.1. Inventory Summary

The Municipality segments its LCB roads into individual assets that run from intersection to intersection. Each LCB road segment is assigned a unique road identification number. The entirety of the municipality's LCB road network would be classified as a local road. Details regarding the municipality's LCB road inventory can be found on Table 10.

LCB Road Summary:	Number of Road Segments	Total Kilometers (KMs)	Total Lane Kilometers (KMs)	Average Segment Age (Years)	Total Surface Area (km ²)
Local Roads	22	41.17	82.34	3	0.359

The LCB road network represent 14% of Morris-Turnberry's total road network. The LCB roads have a combined surface area of 0.359 KM² which represents 0.10% of the land area within the Municipality.

5.2. Current Replacement Values

The municipality separates the cost of replacing a road's surface from the cost of replacing a road's base when calculating an estimated replacement value. When an LCB road is paved, a double lift is applied in year one and a single layer is applied the following year. Using 2022 budget data and staff estimations of the cost of emulsion and aggregate, the estimated cost of replacing an LCB road's surface is approximately \$75,000/km. The cost of replacing a road's base is estimated to be \$175,000/km.

LCB Estimated Replacement Cost	Number of Road Segments	Total Kilometers (KMs)	Estimated Replacement Cost - Surface -	Estimated Replacement Cost - Base -	Estimated Replacement Cost - Total -
Local Roads	22	41.17	\$3,087,750	\$7,204,750	\$10,292,500

5.3. Condition

The Municipality's LCB roads are evaluated on a scale of 100 to 0 and grouped into the following categories. Details regarding the condition ratings and corresponding criteria can be found on Table 11.

	Excellent	Good	Fair	Poor	Very Poor	Failed
Rating:	100 to 90	89 to 70	69 to 40	39 to 10	9 to 1	0
# Of Segments	-	11	11	-	-	-
Length (KMs)	-	21.1	20.0	-	-	-

The average condition rating on an LCB road segment is 69.09 or Fair.

5.4. Levels of Service

The municipality has established levels of service (LOS) to evaluate each LCB road segment’s operating efficiency, capacity to meet demands, and environmental resiliency. The LOS criteria and ranking definitions are outlined in Table 12.

A summary of the municipality’s 22 LCB road segments are as follows:

Average Distribution - Level of Service Ratings						
	Excellent	Good	Fair	Poor	Very Poor	Failed
Operational Functionality	-	22	-	-	-	-
Capacity to Meet Demands	-	22	-	-	-	-
Environmental Resiliency	-	22	-	-	-	-

Each segment was evaluated and assigned a ranking based on municipal staff’s first-hand knowledge and observation. Any road segment that did not have designs available, a performance-based assessment was conducted, and rating assigned.

Overall, the municipality’s LCB road network has an average rating of Good in operating efficiency, capacity to meet demands and environmental resiliency.

5.5. Lifecycle Activities

An LCB road segment has an estimated useful life of 7 years. When the road segment has reached the end of its useful life, the municipality will repave the road section. The municipality takes into consideration the condition of the pavement, grant availability and geographic synergies when planning LCB paving projects.

Using an estimated replacement cost of \$25,000/KM for the top layer of paving and each road segment’s last paved date, the municipality can extrapolate the next time a segment will need to be resurfaced and the estimated cost.

Anticipated LCB Lifecycle Costs (2023 to 2032)										
Year:	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Estimated Cost (\$):	\$153,750	\$156,775	\$190,500	\$ -	\$222,300	\$305,950	\$ -	\$153,750	\$156,775	\$190,500

5.6. Risks Related to Lifecycle Activities

Financial Risk

Failure to perform scheduled lifecycle activities or forecast future needs can expose the municipality to financial risk. If an LCB road surface remains in poor condition, the underlying paving and road base may become damaged. The overall cost to repair additional layers of paving or damage to the base will be significantly more than just replacing the top layer. Cost overruns and volatile market prices for materials can also pose a financial risk to the municipality.

Environmental Risk

Climate change can pose an environmental risk to the municipality's LCB roads. Significant weather events have increased in frequency and severity due to climate change. These events could cause immediate damage to a road or slowly damage them over time. When repaving a road segment, the impact of past weather events and potential future events will be evaluated.

Economic Risk

Municipal assets with capacity restrictions could potentially deter economic growth within the municipality. Development may be deterred if the road network is undersized or in disrepair. When repaving LCB roads, the municipality will evaluate the economic growth potential of the area and evaluate if the LCB road network is an impediment to that growth.

Reputation Risk

LCB roads are used by motorists and the public daily. If lifecycle activities and general maintenance are postponed the road can deteriorate. The daily use of an LCB road in poor condition can result in the public developing a negative impression of the municipality. A tarnished reputation can be exceedingly difficult to correct and can impact a municipality's ability to recruit qualified staff or attract economic growth to the area.

Health & Safety Risk

It is the municipality's goal to maintain the LCB network to allow for the safe passage of motorists. If the roads are not maintained in a timely and appropriate manner, the public could be exposed to an unnecessary health and safety risk. When repaving an LCB road, the municipality will also ensure appropriate health & safety measures are taken on the job site.

5.7. Economic & Population Growth Assumptions

Current population and economic growth within Morris-Turnberry is minimal. Any recent residential development is small in nature and will have minimal to no impact on the municipal LCB network. The LCB road network services the rural areas of the municipality and major expansion of the network is not anticipated

Much of the economic growth within the municipality is related to agricultural operations in rural areas. Growth in these areas is not anticipated to impact the LCB road network at this time. Current lifecycle activities are scheduled to meet the current population and economic activity levels. If a significant development is brought forward to the municipality or when an LCB road segment is repaved, these assumptions will be reevaluated.

Table 10 - LCB Paved Roads - Inventory Summary

Road Segment ID	Road Name	Location		Date of Last Paving Project	Length (km)	# of Lanes	Lane-Kilometers	Platform Width (m)	Surface Area (km ²)	Condition Rating
		From:	To:							
2	Turnberry-Culross	Kings Rd	Holmes Line	2020	1.000	2	2.000	8.5	0.008500	75
3	Turnberry-Culross	Holmes Line	Versteeg Line	2017	2.053	2	4.106	7.5	0.015398	60
4	Turnberry-Culross	Versteeg Line	London Rd (Hwy 4)	2017	0.384	2	0.768	7.5	0.002880	60
5	Huron Bruce Rd	London Rd (Hwy 4)	Gilmour Line	2021	0.223	2	0.446	9.0	0.002007	80
6	Huron Bruce Rd	Gilmour Line	Jeffray Line	2021	2.049	2	4.098	9.0	0.018441	80
7	Huron Bruce Rd	Jeffray Line	Schiestel Line	2021	2.032	2	4.064	9.0	0.018288	80
8	Huron Bruce Rd	Schiestel Line	100m west of Belmore Line	2021	2.893	2	5.786	9.0	0.026037	80
13	Glenannon Rd	2.3 km west of Lewis Line	Jeffray Line	2017	1.789	2	3.578	8.6	0.015385	60
14	Glenannon Rd	Jeffray Line	Gilmour Line	2016	2.049	2	4.098	8.5	0.017417	55
15	Glenannon Rd	Gilmour Line	London Rd (Hwy 4)	2016	2.048	2	4.096	8.6	0.017613	55
19	Salem Rd	B Line Rd	Gilmour Line	2020	1.761	2	3.522	9.0	0.015849	75
20	Salem Rd	Gilmour Line	Powell Line	2020	2.072	2	4.144	9.6	0.019891	75
21	Salem Rd	Powell Line	Kieffer Line	2021	2.054	2	4.108	8.5	0.017459	80
22	Salem Rd	Kieffer Line	Belmore Line (Cty Rd 12)	2021	2.987	2	5.974	9.0	0.026883	80
39	Holmes Line	Turnberry-Culross Rd	Glenannon Rd	2020	2.036	2	4.072	9.0	0.018324	75
40	Holmes Line	Glenannon Rd	North St. West	2020	2.023	2	4.046	9.0	0.018207	75
84	Brandon Rd	.5 km E of London Rd	Clegg Line	2018	1.502	2	3.004	9.0	0.013518	65
85	Brandon Rd	Clegg Line	Martin Line	2018	2.040	2	4.080	9.0	0.018360	65
86	Brandon Rd	Martin Line	Clyde Line	2018	2.040	2	4.080	9.0	0.018360	65
126	Clyde Line	Moncrieff Rd	St. Michaels Rd	2017	2.045	2	4.090	8.5	0.017383	60
127	Clyde Line	St. Michaels Rd	Cranbrook Rd	2018	2.038	2	4.076	8.5	0.017323	65
128	Clyde Line	Cranbrook Rd	Morris Rd	2016	2.053	2	4.106	7.5	0.015398	55

LCB Road Summary	Average Paving Date	Total Length (km)	Total Lane-Kilometers	Total Surface Area (km ²)	Average Condition
22 Road Segments	2019	41.17	82.34	0.359	69.09

Table 11 - LCB Roads - Condition Ratings & Corresponding Criteria						
	Excellent	Good	Fair	Poor	Very Poor	Failed
Condition Rating	100 to 90	89 to 70	69 to 40	39 to 10	9 to 1	0
Surface	In Like New Condition, no defects or repairs required	Minor defects observed with no impact to the function of the road	Multiple defects observed, with minor impact to function of the road. Resurfacing required to restore the road to a good condition.	Multiple defects observed, with major impact to function of the road. Resurfacing required to restore the road to a good condition.	Significate damage to the road Surface. Resurfacing required to restore the road to a good condition	Full reconstruction of the base and double lift repaving.
Base	Structurally Sound, No Repairs Required	Structurally Sound, No Repairs Required	Structurally Sound, No Repairs Required	Road Base Damaged, Minor Repairs Required	Road Base Damaged, Requires Repair	Road Base Damaged, Requires Replacement

Table 12 - LCB Paved Roads - Levels of Service Definitions

	Level of Service Criteria	Excellent	GOOD	FAIR	POOR	VERY POOR
Operational Functionality	- Appropriate speed limits	- Road can accommodate a higher speed limit	- Speed limit is appropriate for the road	- Minimal traffic must travel at speeds lower than the posted limit	- Majority of traffic must travel at speeds lower than the posted limit	- All traffic must travel as speeds lower than the posted speed limit
	- Suitable road surface material type for traffic volumes and speeds	- The road surface material is exceeds requirements for the traffic volume and speeds	- The road surface material is appropriate for the traffic volume and speeds	- The road surface material is not appropriate, but successfully accommodates traffic volumes and speeds	- The road surface material is not appropriate for traffic volumes OR - The road surface material is not appropriate for traffic speed	- The road surface material is not appropriate for traffic volumes AND - The road surface material is not appropriate for traffic speed
	- Sufficient road platform (pavement surface and shoulder width) to accommodate current traffic volumes and speeds (not related to capacity)	- The road platform can accommodate additional traffic volume and speeds	- The road platform accommodates current traffic volumes and speeds	- The road platform accommodates the majority of current traffic volume and speeds, with minimal exceptions/problems	- The road platform has difficulty accommodating the majority of current traffic volume and speeds,	- The road platform is insufficient and inhibits current traffic volume and speeds
	- Adequate road structural capacity to accommodate traffic volumes and loading	- Road Structural capacity can accommodate additional traffic volumes and loading	- Road Structural capacity can accommodate current traffic volumes and loading	- Road Structural capacity can accommodate the majority of current traffic volumes and loading, with minimal exceptions/problems	- Road structural capacity has difficulty accommodating the majority of current traffic volumes and loading	- Road Structural capacity does not accommodate additional traffic volumes and loading
	- Adequate elevation and drainage to prevent seasonal and/or reoccurring flooding	- Road elevation and drainage exceeds seasonal and/or reoccurring flooding requirements	- Road elevation and drainage adequately meets seasonal and/or reoccurring flooding requirements	- Road elevation and drainage satisfactory meets seasonal and/or reoccurring flooding requirements, with minimal exceptions	- Road elevation and drainage does not prevent seasonal and/or reoccurring flooding during major events	- Road elevation and drainage does not prevent seasonal and/or reoccurring flooding
	- Roadway flooding during major storm events limited to criteria per MOE Stormwater Planning and Design Manual	- Roadway flooding during major storm events exceeds the criteria per MOE Stormwater Planning and Design manual	- Roadway flooding during major storm events is limited to criteria per MOE Stormwater Planning and Design manual	- Roadway flooding during major storm events meets the majority, but not all of the criteria per MOE Stormwater Planning and Design manual	- Roadway flooding during major storm events meets few of the criteria per MOE Stormwater Planning and Design manual	- Roadway flooding during major storm events fails to meet any of the criteria per MOE Stormwater Planning and Design manual
	- Adequate erosion control	- Road erosion control is adequate and exceeds requirements	- Road erosion control is adequate and meets requirements	- Road erosion control is satisfactory and meets minimal requirements	- Road erosion control is lacking and minimal repairs required to meet minimal requirements	- Road erosion control is lacking and damage has been done to the road
	- Adequate ditching	- Ditching is adequate and exceeds requirements	- Ditching is adequate and meets all requirements	- Ditching is satisfactory and meets minimal requirements	- Ditching is lacking or in need of repair, minimal impact on the operation of the road	- Ditching is non-effective, negatively impacting the operation of the road
	- Appropriate geometric designs and sightlines for posted speeds (vertical and horizontal alignments)	- Geometric Designs are appropriate, designs exceed current standards	- Geometric Designs are appropriate, designs meet current standards	- Geometric Designs are appropriate, designs do not meet current standards, roadway was not built to an engineered design, but no concerns with geometric design	- Geometric designs are inappropriate, designs do not meet current standards, design has minimal impact on the function of the road	- Geometric designs are inappropriate, designs do not meet current standards, design negatively impacting function of the road

Table 12 - LCB Paved Roads - Levels of Service Definitions

	Level of Service Criteria	Excellent	GOOD	FAIR	POOR	VERY POOR
	- Adequate quantity of roadside safety devices/protection	- Roadside safety devices/protection exceeds requirements	- Adequate quantity of roadside safety devices/protection	- Adequate quantity of roadside safety devices/protection, requiring minimal repairs or maintenance	- Inadequate quantity of roadside safety devices/protection OR - Adequate quantity of roadside safety devices/protection, in disrepair	- Inadequate quantity of roadside safety devices/protection in disrepair
	- Maintenance of the road network is fully compliant with the "Minimum Maintenance Standards for Municipal Highways" (O.Reg 388/18)	- Maintenance exceeds Minimum Maintenance Standards	- Maintenance is fully compliant with Minimum Maintenance Standards	- Maintenance is partially compliant with Minimum Maintenance Standards	- Maintenance is not compliant with Minimum Maintenance Standards	- No Maintenance is conducted on Structures
Capacity to Meet Demands	- Sufficient number of lanes along each road segment to accommodate peak traffic volumes	- Lanes are sufficient to accommodate additional traffic beyond peak traffic volumes	- Lanes are sufficient to accommodate peak traffic volumes	- Lanes are sufficient to accommodate peak traffic volumes, with minimal interruption to traffic flow	- Lanes accommodate off-peak traffic volumes, with regular interruption to traffic flow during peak traffic flows	- Lanes are insufficient to accommodate off-peak traffic flow, with significant interruption to traffic flow during peak traffic volumes
Environmental Resiliency	- Adequate embankment protection/retention	Embankment protection / retention is more than adequate	- Embankment protection/retention is adequate	- Embankment protection/retention is below standard, but no negative effects on the road	- Embankment protection/retention is below standard, with negative effects emerging	- No embankment protection/retention is present
	- Roads surfaces are protected against a 5-year return storm (per reporting requirements of O.Reg 588/17).	- N/A	- Road surface protected against 5-year storm	- Road surface is protected against 5-year storm, except for during seasonal (spring) flooding	- Road surface is not protected against 5-year return storm	- N/A

6. Roads – Gravel Roads

6.1. Inventory Summary

The Municipality segments its gravel roads into individual assets that run from intersection to intersection. Each gravel road segment is assigned a unique road identification number. The entirety of the municipality's gravel road network would be classified as a local road. Details regarding the municipality's gravel road inventory can be found on Table 13.

Gravel Road Summary:	Number of Road Segments	Total Kilometers (KMs)	Total Lane Kilometers (KMs)	Average Segment Age (Years)	Total Surface Area (km ²)
Local Roads	124	210.60	421.2	N/A	1.52

The gravel road network represents 71% of Morris-Turnberry's total road network. The gravel roads have a combined surface area of 1.52 KM² which represents 0.40% of the land area within the Municipality. Gravel roads have evolved through the years. Due to the continuously renewal nature of a gravel road many segments are estimated to be well over 100 years old.

6.2. Current Replacement Values

The municipality separates the cost of replacing a road's surface from the cost of replacing a road's base when calculating an estimated replacement value. When a new gravel road is constructed, a nominal amount of granular M gravel is placed as the initial driving surface. Using 2022 budget data and staff estimations of the cost of gravel, the cost of replacing a gravel road's surface is approximately \$5,000/km. The cost of replacing a road's base is estimated to be \$175,000/km.

Gravel Road Estimated Replacement Cost	Number of Road Segments	Total Kilometers (KMs)	Estimated Replacement Cost - Surface -	Estimated Replacement Cost - Base -	Estimated Replacement Cost - Total -
Local Roads	124	210.60	\$1,053,000	\$36,855,000	\$37,908,000

6.3. Condition

The Municipality's gravel roads are evaluated on a scale from excellent to failed. The Details regarding the condition ratings and corresponding criteria can be found on Table 14.

	Excellent	Good	Fair	Poor	Very Poor	Failed
# Of Segments	-	119	5	-	-	-
Length (KMs)	-	203.3	7.3	-	-	-

The average condition of a gravel road segment is Good.

6.4. Levels of Service

The municipality has established levels of service (LOS) to evaluate each gravel road segment’s operating efficiency, capacity to meet demands, and environmental resiliency. The LOS criteria and ranking definitions are outlined in Table 15.

A summary of the municipality’s 127 gravel road segments are as follows:

Average Distribution - Level of Service Ratings						
	Excellent	Good	Fair	Poor	Very Poor	Failed
Operational Functionality	-	108	19	-	-	-
Capacity to Meet Demands	-	118	9	-	-	-
Environmental Resiliency	-	122	5	-	-	-

Each segment was evaluated and assigned a ranking based on municipal staff’s first-hand knowledge and observation. Any road segment that did not have designs available, a performance-based assessment was conducted, and rating assigned.

Overall, the municipality’s gravel road network has an average rating of Good in operating efficiency, capacity to meet demands and environmental resiliency.

6.5. Lifecycle Activities

A gravel road segments do not require replacement but are maintained annually. The annual activities conducted by the municipality to maintain an overall “Good” condition are road grading and the application of dust control. New gravel is applied to gravel road segments every two years. One half of the municipality’s roads are treated each year, resulting in an alternating two-year cycle of new gravel application. When planning annual lifecycle activities, the municipality takes into consideration staff & financial resources available, geographic synergies and the impact of weather events. These costs are funded through the road department’s maintenance budget.

Using the 2022 budgeted values as a benchmark and grossing them up by 2.5% per year, the estimated lifecycle costs for the 2023 to 2032 period are:

Anticipated Gravel Road Lifecycle Costs (2023 to 2032)											
Year:	2022 (Budget)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
New Gravel	\$450,000	\$461,250	\$472,781	\$484,601	\$496,716	\$509,134	\$521,862	\$534,909	\$548,281	\$561,988	\$576,038
Road Grading	\$100,000	\$102,500	105,063	\$107,689	\$110,381	\$113,141	\$115,969	\$118,869	\$121,840	\$124,886	\$128,008
Dust Control	\$170,000	\$174,250	\$178,606	\$183,071	\$187,648	\$192,339	\$197,148	\$202,077	\$207,128	\$212,307	\$217,614
Total	\$720,000	\$738,000	\$756,450	\$775,361	\$794,745	\$814,614	\$834,979	\$855,854	\$877,250	\$899,181	\$921,661

6.6. Risks related to lifecycle activities

Financial Risk

Failure to perform scheduled lifecycle activities can expose the municipality to financial risk. If a gravel road is not maintained, the road base may become damaged. The overall cost to repair the road base will be significantly more than just maintaining the road's gravel surface. Cost overruns and volatile market prices for materials can also pose a financial risk to the municipality.

Environmental Risk

Climate change can pose an environmental risk to the municipality's gravel roads. Significant weather events have increased in frequency and severity due to climate change. These events could cause immediate damage to a road or slowly damage them over time. Gravel roads are more susceptible to washouts when compared to paved roads. When maintaining a gravel road segment, the impact of past weather events and potential future events will be evaluated.

Economic Risk

Municipal assets with capacity restrictions could potentially deter economic growth within the municipality. Development may be deterred if the road network is undersized or in disrepair. When development is proposed in a rural area serviced by gravel roads, the municipality will evaluate if the gravel roads are an impediment to that growth. If the gravel roads are impacting growth in an area, that road may be a candidate for LCB or HCB paving.

Reputation Risk

Gravel roads are used by motorists and the public daily. If lifecycle activities and general maintenance are postponed the road can deteriorate. The daily use of a gravel road in poor condition can result in the public developing a negative impression of the municipality. A tarnished reputation can be difficult to correct and can impact a municipality's ability to recruit qualified staff or attract economic growth to the area.

Health & Safety Risk

It is the municipality's goal to maintain the gravel road network to allow for the safe passage of motor vehicles. If the roads are not maintained in a timely and appropriate manner, the public could be exposed to an unnecessary health and safety risk. The dust generated by traveling on a gravel road is a unique health and safety hazard. This dust can impact the safe travel of vehicles and negatively impact properties alongside the road. When performing annual maintenance of a gravel road, the municipality will also ensure appropriate health & safety measures are taken on the job site.

6.7. Economic & Population Growth Assumptions

Current population and economic growth within Morris-Turnberry is minimal. Any recent residential development is small in nature and will have minimal to no impact on the municipal gravel road network. The gravel road network services the rural areas of the municipality and major expansion of the network is not anticipated.

Much of the economic growth within the municipality is related to agricultural operations in rural areas. Growth in these areas is not anticipated to impact the gravel road network at this time. Current lifecycle activities are scheduled to meet the current population and economic activity levels. If a significant development is brought forward to the municipality these assumptions will be reevaluated.

Table 13 - Gravel Roads - Inventory Summary

Road Segment ID	Road Name	Location		Length (km)	# of Lanes	Lane-Kilometers	Platform Width (m)	Surface Area (km ²)	Condition Rating
		From:	To:						
1	Turnberry-Kinloss	S Kinloss Ave.	Turnberry Culross	0.395	2	0.790	4.5	0.001778	Fair
1.1	Turnberry-Culross	Turnberry-Kinloss Rd	Kings Rd	0.976	2	1.952	4.5	0.004392	Fair
2	Turnberry-Culross	Kings Rd	Holmes Line	0.844	2	1.688	8.5	0.007174	Good
4.1	Versteeg Line	Turnberry-Culross Rd	London Rd	0.383	2	0.766	8.7	0.003332	Good
10	Renwick Rd	Belmore Rd	Dean End	0.065	2	0.130	7.5	0.000488	Good
16	Glenannon Rd	Hwy 4 (London Rd)	Holmes Line	2.047	2	4.094	7.0	0.014329	Good
17	Glenannon Rd	Holmes Line	North St	2.199	2	4.398	7.5	0.016493	Good
18	Gibbons Line	North St	Amberley Rd.	2.067	2	4.134	5.0	0.010335	Fair
23	Orange Hill Rd	Belmore Line Cty Rd 12	Kieffer Line	2.987	2	5.974	8.5	0.025390	Good
24	Orange Hill Rd	Kieffer Line	Powell Line	2.060	2	4.120	8.5	0.017510	Good
24.1	Orange Hill Rd	Powell Line	B Line Rd	1.600	2	3.200	8.5	0.013600	Good
25	McDonald Line	Amberley Rd	C Line Rd	2.035	2	4.070	7.5	0.015263	Good
26	McDonald Line	C Line Rd	Brussels Line	2.197	2	4.394	7.5	0.016478	Good
27	Gough Rd	Brussels Line	McDonald Line	0.244	2	0.488	6.5	0.001586	Good
28	C Line Rd	McDonald Line	Brussels Line	2.028	2	4.056	4.0	0.008112	Fair
29	C Line Rd	Brussels Line	Kieffer Line	1.930	2	3.860	7.0	0.013510	Good
30	C Line Rd	Kieffer Line	Harriston Rd (Hwy87)	1.897	2	3.794	7.0	0.013279	Good
37	North St W	Alice St	West St	0.936	2	1.872	8.3	0.007769	Good
38	North St W	West St	Gibbons Line	1.309	2	2.618	6.8	0.008901	Good
42	Bok Line	London Rd	Howick-Turnberry Rd	0.605	2	1.210	6.5	0.003933	Good
43	Bok Line	Howick-Turnberry Rd	B Line Rd	1.785	2	3.570	5.0	0.008925	Fair
44	Gilmour Line	B Line Rd	Salem Rd	1.602	2	3.204	7.0	0.011214	Good
45	Gilmour Line	Salem Rd	Howick-Turnberry Rd	2.044	2	4.088	8.0	0.016352	Good
46	Gilmour Line	Howick-Turnberry Rd	Glenannon Rd	2.078	2	4.156	7.0	0.014546	Good
47	Gilmour Line	Glenannon Rd	Huron-Bruce Rd	2.043	2	4.086	8.0	0.016344	Good
48	Jeffray Line	Huron Bruce Rd	Glenannon Rd	2.043	2	4.086	7.0	0.014301	Good
49	Jeffray Line	Glenannon Rd	Howick-Turnberry Rd	2.167	2	4.334	6.0	0.013002	Good
50	Powell Line	Howick-Turnberry Rd	Salem Rd	2.045	2	4.090	6.5	0.013293	Good
51	Powell Line	Salem Rd	Orange Hill Rd	2.047	2	4.094	7.0	0.014329	Good
52	Black Line	Orange Hill Rd	B Line Rd	0.584	2	1.168	7.5	0.004380	Good
54	Kieffer Line	C Line Rd	Harriston Rd (Hwy87)	1.278	2	2.556	5.5	0.007029	Good
55	Kieffer Line	Harriston Rd (Hwy 87)	Orange Hill Rd	2.051	2	4.102	7.0	0.014357	Good
56	Kieffer Line	Orange Hill Rd	Salem Rd	2.049	2	4.098	7.0	0.014343	Good
57	Kieffer Line	Salem Rd	Howick-Turnberry Rd	2.050	2	4.100	7.0	0.014350	Good
58	Lewis Line	Glennanon Rd	Dean End	0.585	2	1.170	5.0	0.002925	Good
59	Schiestel Line	Huron Bruce Rd	Dean End	0.524	2	1.048	4.5	0.002358	Good
62	McClean Line	Amberley Rd (Hwy 86)	B Line Rd	2.071	2	4.142	7.5	0.015533	Good
63	Maple Rd	Amberley Rd	Amberley Rd.	0.425	2	0.850	5.0	0.002125	Good
64	Former Mto Park	Amberley Rd	Dean End	0.312	2	0.624	8.0	0.002496	Good

Table 13 - Gravel Roads - Inventory Summary

Road Segment ID	Road Name	Location		Length (km)	# of Lanes	Lane-Kilometers	Platform Width (m)	Surface Area (km ²)	Condition Rating
		From:	To:						
65	Morris-Turnberry Rd	Morris St	Wheeler Line	1.851	2	3.702	8.5	0.015734	Good
66	Morris-Turnberry Rd	Wheeler Line	Ramsay Line	2.063	2	4.126	8.5	0.017536	Good
67	Jamestown Rd	Brussels Line	Ramsay Line	2.040	2	4.080	8.5	0.017340	Good
68	Jamestown Rd	Ramsay Line	Wheeler Line	2.039	2	4.078	8.5	0.017332	Good
69	Jamestown Rd	Wheeler Line	Clyde Line	2.040	2	4.080	9.0	0.018360	Good
70	Jamestown Rd	Clyde Line	Abraham Line	2.197	2	4.394	9.0	0.019773	Good
71	Jamestown Rd	Abraham Line	Clegg Line	2.121	2	4.242	9.0	0.019089	Good
73	Stone School Rd	London Rd	Clegg Line	2.024	2	4.048	8.0	0.016192	Good
74	Brownstown Rd	Clegg Line	Clyde Line	4.126	2	8.252	8.0	0.033008	Good
75	Brownstown Rd	Clyde St	Quarter Line	2.039	2	4.078	8.0	0.016312	Good
76	Brownstown Rd	Quarter Line	Ramsay Line	2.041	2	4.082	8.0	0.016328	Good
77	Brownstown Rd	Ramsay Line	Brussels Line	2.027	2	4.054	8.0	0.016216	Good
78	Cardiff Rd	Brussels Line	Mair Line	2.022	2	4.044	8.0	0.016176	Good
79	Cardiff Rd	Mair Line	Quarter Line	2.043	2	4.086	8.0	0.016344	Good
80	Cardiff Rd	Quarter Line	Clyde Line	2.042	2	4.084	8.0	0.016336	Good
81	Cardiff Rd	Clyde St	Higgins Line	2.038	2	4.076	8.0	0.016304	Good
82	Cardiff Rd	Higgins	Clegg Line	2.039	2	4.078	8.0	0.016312	Good
83	Cardiff Rd	Clegg Line	London Rd	2.019	2	4.038	8.5	0.017162	Good
87	Brandon Rd	Clyde Line	Mari St.	4.097	2	8.194	8.0	0.032776	Good
88	Brandon Rd	Mair Line	Brussels Line	2.026	2	4.052	8.5	0.017221	Good
89	Cranbrook Rd	Brussels Line	Nichol Line	2.025	2	4.050	9.0	0.018225	Good
90	Cranbrook Rd	Nichol Line	Button Line	2.042	2	4.084	8.0	0.016336	Good
91	Cranbrook Rd	Button Line	Clyde Line	2.044	2	4.088	8.5	0.017374	Good
92	Cranbrook Rd	Clyde Line	Martin Line	2.048	2	4.096	7.5	0.015360	Good
93	Cranbrook Rd	Martin Line	Clegg Line	2.035	2	4.070	7.5	0.015263	Good
94	Cranbrook Rd	Clegg Line	London Rd	1.985	2	3.970	7.5	0.014888	Good
95	St.Michaels Rd	London Rd	Elevator Line	1.979	2	3.958	8.0	0.015832	Good
96	St.Michaels Rd	Elevator Line	Martin Line	2.033	2	4.066	8.5	0.017281	Good
97	St.Michaels Rd	Martin Line	Clyde Line	2.046	2	4.092	8.0	0.016368	Good
98	St.Michaels Rd	Clyde Line	Button Line	2.040	2	4.080	7.0	0.014280	Good
99	St.Michaels Rd	Button Line	Nichol Line	2.038	2	4.076	7.0	0.014266	Good
100	St.Michaels Rd	Nichol Line	Brussels Line	2.034	2	4.068	9.0	0.018306	Good
101	Moncrieff Rd	Brussels Line	McCall Line	2.036	2	4.072	9.0	0.018324	Good
102	Moncrieff Rd	McCall Line	Button Line	2.047	2	4.094	8.8	0.018014	Good
103	Moncrieff Rd	Button Line	Clyde Line	2.040	2	4.080	8.0	0.016320	Good
104	Moncrieff Rd	Clyde Line	Martin Line	2.038	2	4.076	8.0	0.016304	Good
105	Moncrieff Rd	Martin Line	Elevator Line	2.033	2	4.066	8.8	0.017890	Good
106	Moncrieff Rd	Elevator Line	London Rd	1.975	2	3.950	8.5	0.016788	Good
108	Walton Rd	Elevator Line	Martin Line	2.035	2	4.070	9.0	0.018315	Good

Table 13 - Gravel Roads - Inventory Summary

Road Segment ID	Road Name	Location		Length (km)	# of Lanes	Lane-Kilometers	Platform Width (m)	Surface Area (km ²)	Condition Rating
		From:	To:						
109	Walton Rd	Martin Line	Clyde Line	2.040	2	4.080	8.5	0.017340	Good
110	Walton Rd	Clyde Line	Button Line	2.036	2	4.072	8.5	0.017306	Good
111	Walton Rd	Button Line	McCall Line	2.049	2	4.098	8.5	0.017417	Good
112	Walton Rd	McCall Line	Brussels Line	2.023	2	4.046	8.5	0.017196	Good
114	McCall Line	Blyth Rd	Walton Rd	0.677	2	1.354	5.0	0.003385	Good
115	McCall Line	Walton Rd	Moncrieff Rd	2.040	2	4.080	5.5	0.011220	Good
116	Nichol Line	St. Michaels Rd	Cranbrook Rd	2.037	2	4.074	4.0	0.008148	Good
117	Nichol Line	Cranbrook Rd	Morris Rd	2.025	2	4.050	5.5	0.011138	Good
118	Nichol Line	Morris Rd	Dean End	2.000	2	4.000	4.5	0.009000	Good
119	Button Line	Morris Rd	Cranbrook Rd	2.034	2	4.068	7.0	0.014238	Good
120	Button Line	Cranbrook Rd	St. Michaels Rd	2.039	2	4.078	4.5	0.009176	Good
121	Button Line	St. Michaels Rd	Moncrieff Rd	2.053	2	4.106	4.3	0.008828	Good
122	Button Line	Moncrieff Rd	Walton Rd	2.037	2	4.074	4.5	0.009167	Good
123	Button Line	Walton Rd	Blyth Rd	0.653	2	1.306	4.5	0.002939	Good
129	Martin Line	dead end	Brandon Rd	0.207	2	0.414	4.5	0.000932	Good
130	Martin Line	Brandon Rd	Morris Rd	2.039	2	4.078	6.0	0.012234	Good
131	Martin Line	Morris Rd	Cranbrook Rd	2.039	2	4.078	7.0	0.014273	Good
132	Martin Line	Cranbrook Rd	St. Michaels Rd	2.044	2	4.088	7.0	0.014308	Good
133	Martin Line	St. Michaels Rd	Moncrieff Rd	2.044	2	4.088	7.0	0.014308	Good
134	Martin Line	Moncrieff Rd	Walton Rd	2.038	2	4.076	7.0	0.014266	Good
135	Martin Line	Walton Rd	Blyth Rd	0.646	2	1.292	6.5	0.004199	Good
137	Elevator Line	Walton Rd	Moncrieff Rd	2.032	2	4.064	7	0.014224	Good
138	Elevator Line	Moncrieff Rd	St. Michaels Rd	2.036	2	4.072	5.5	0.011198	Good
139	Elevator Line	St. Michaels Rd	Dean End	0.618	2	1.236	5.5	0.003399	Good
140	Clegg Line	Cranbrook Rd	Morris Rd	2.052	2	4.104	7.0	0.014364	Good
141	Clegg Line	Morris Rd	Brandon Rd	2.032	2	4.064	7.0	0.014224	Good
142	Clegg Line	Brandon Rd	Cardiff Rd	2.049	2	4.098	7.0	0.014343	Good
143	Clegg Line	Cardiff Rd	Browntown Rd	2.224	2	4.448	7.0	0.015568	Good
144	Clegg Line	Browntown Rd	Jamestown Rd	1.852	2	3.704	8.0	0.014816	Good
145	Higgins Line	Cardiff Rd	Dean End	0.355	2	0.710	4.2	0.001491	Good
146	Abraham Line	Jamestown Rd	Dean End	0.418	2	0.836	5.0	0.002090	Good
147	Wheeler Line	Jamestown Rd	Morris-Turnberry Rd	2.041	2	4.082	4.0	0.008164	Good
148	Ramsay Line	C-Line Rd	Amberley Rd.	2.040	2	4.080	5.5	0.011220	Good
149	Ramsay Line	Amberley Rd	Jamestown Rd	2.026	2	4.052	5.0	0.010130	Good
150	Ramsay Line	Jamestown Rd	Brownstown Rd	2.043	2	4.086	7.5	0.015323	Good
151	Ramsay Line	Brownstown Rd	Dean End	0.100	2	0.200	5.0	0.000500	Good
152	Quarter Line	Brownstown Rd	Cardiff Rd	2.040	2	4.080	5.0	0.010200	Good
153	Mair Line	Cardiff Rd	Brandon Rd	2.040	2	4.080	4.0	0.008160	Good
1000	West St	North St. W	Turnberry St. W	1.546	2	3.092	7.0	0.010822	Good

Table 13 - Gravel Roads - Inventory Summary									
Road Segment ID	Road Name	Location		Length (km)	# of Lanes	Lane-Kilometers	Platform Width (m)	Surface Area (km ²)	Condition Rating
		From:	To:						
1001	West St	Turnberry St	Dean End	0.091	2	0.182	7.0	0.000637	Good
1006	Mary St	Royal Rd	North St W	0.654	2	1.308	6.0	0.003924	Good
1007	Alice St	North St. W	Royal Rd	0.654	2	1.308	6.0	0.003924	Good
1025	Casemore St	Helena St	Laidlaw St	0.129	2	0.258	8.1	0.001045	Good
1030	Princess St	Mary St	Dead End	0.069	2	0.138	5.0	0.000345	Good
1034	Augusta St	100 m west of Helena	Dead End	0.411	2	0.822	5.0	0.002055	Good
2020	Park Rd	Clyde St	Dead End	0.172	2	0.344	5.0	0.000860	Good

Gravel Road Summary	Total Length (km)	Total Lane-Kilometers	Total Surface Area (km ²)	Average Condition
124 Road Segments	210.60	421.20	1.517	Good

Table 14 - Gravel Roads - Condition Rankings & Corresponding Criteria

	Excellent	Good	Fair	Poor	Very Poor	Failed
Surface	- N/A	Little to no defects impacting the function of the road. Scheduled maintenance sufficient to maintain road function	Multiple defects observed, with minimal impact to function of the road. Scheduled maintenance sufficient to maintain road function.	Multiple defects observed, impacting the function of the road. Additional maintenance suggested in conjunction with annual maintenance to restore road back to desired condition	Multiple defects observed, impacting the function of the road. Immediate maintenance suggested to restore road back to operational condition	Road Failed
Base	- N/A	Structurally Sound, No Repairs Required	Structurally Sound, No Repairs Required	Road Base Damaged, Minor Repairs Required	Road Base Damaged, Requires Repair	Road Base Damaged, Requires Replacement

Table 15 - Gravel Roads - Levels of Service Definitions

	Level of Service Criteria	Excellent	GOOD	FAIR	POOR	VERY POOR
Operational Functionality	- Appropriate speed limits	- Road can accommodate a higher speed limit	- Speed limit is appropriate for the road	- Minimal traffic must travel at speeds lower than the posted limit	- Majority of traffic must travel at speeds lower than the posted limit	- All traffic must travel as speeds lower than the posted speed limit
	- Suitable road surface material type for traffic volumes and speeds	- The road surface material exceeds requirements for the traffic volume and speeds	- The road surface material is appropriate for the traffic volume and speeds	- The road surface material is not appropriate, but successfully accommodates traffic volumes and speeds	- The road surface material is not appropriate for traffic volumes OR - The road surface material is not appropriate for traffic speed	- The road surface material is not appropriate for traffic volumes AND - The road surface material is not appropriate for traffic speed
	- Sufficient road platform (pavement surface and shoulder width) to accommodate current traffic volumes and speeds (not related to capacity)	- The road platform can accommodate additional traffic volume and speeds	- The road platform accommodates current traffic volumes and speeds	- The road platform accommodates the majority of current traffic volume and speeds, with minimal exceptions	- The road platform has difficulty accommodating the majority of current traffic volume and speeds,	- The road platform is insufficient and inhibits current traffic volume and speeds
	- Adequate road structural capacity to accommodate traffic volumes and loading	- Road Structural capacity can accommodate additional traffic volumes and loading	- Road Structural capacity can accommodate current traffic volumes and loading	- Road Structural capacity can accommodate the majority of current traffic volumes and loading, with minimal exceptions	- Road structural capacity has difficulty accommodating the majority of current traffic volumes and loading	- Road Structural capacity does not accommodate additional traffic volumes and loading
	- Adequate elevation and drainage to prevent seasonal and/or reoccurring flooding	- Road elevation and drainage exceeds seasonal and/or reoccurring flooding requirements	- Road elevation and drainage adequately meets seasonal and/or reoccurring flooding requirements	- Road elevation and drainage satisfactory meets seasonal and/or reoccurring flooding requirements, with minimal exceptions	- Road elevation and drainage does not prevent seasonal and/or reoccurring flooding during major events	- Road elevation and drainage does not prevent seasonal and/or reoccurring flooding
	- Roadway flooding during major storm events limited to criteria per MOE Stormwater Planning and Design Manual	- Roadway flooding during major storm events exceeds the criteria per MOE Stormwater Planning and Design manual	- Roadway flooding during major storm events is limited to criteria per MOE Stormwater Planning and Design manual	- Roadway flooding during major storm events meets the majority, but not all of the criteria per MOE Stormwater Planning and Design manual	- Roadway flooding during major storm events meets few of the criteria per MOE Stormwater Planning and Design manual	- Roadway flooding during major storm events fails to meet any of the criteria per MOE Stormwater Planning and Design manual
	- Adequate erosion control	- Road erosion control is adequate and exceeds requirements	- Road erosion control is adequate and meets requirements	- Road erosion control is satisfactory and meets minimal requirements	- Road erosion control is lacking and minimal repairs required to meet minimal requirements	- Road erosion control is lacking and damage has been done to the road
	- Adequate ditching	- Ditching is adequate and exceeds requirements	- Ditching is adequate and meets all requirements	- Ditching is satisfactory and meets minimal requirements	- Ditching is lacking or in need of repair, minimal impact on the operation of the road	- Ditching is non-effective, negatively impacting the operation of the road

Table 15 - Gravel Roads - Levels of Service Definitions

	Level of Service Criteria	Excellent	GOOD	FAIR	POOR	VERY POOR
	- Appropriate geometric designs and sightlines for posted speeds (vertical and horizontal alignments)	- Geometric Designs are appropriate, designs exceed current standards	- Geometric Designs are appropriate, designs meet current standards	- Geometric Designs are appropriate, designs do not meet current standards, roadway was not built to an engineered design, but no concerns with geometric design.	- Geometric designs are inappropriate, designs do not meet current standards, design has minimal impact on the function of the road	- Geometric designs are inappropriate, designs do not meet current standards, design negatively impacting function of the road
	- Adequate quantity of roadside safety devices/protection	- Roadside safety devices/protection exceeds requirements	- Adequate quantity of roadside safety devices/protection	- Adequate quantity of roadside safety devices/protection, requiring minimal repairs or maintenance	- Inadequate quantity of roadside safety devices/protection OR - Adequate quantity of roadside safety devices/protection, in disrepair	- Inadequate quantity of roadside safety devices/protection in disrepair
	- Maintenance of the road network is fully compliant with the "Minimum Maintenance Standards for Municipal Highways" (O.Reg 388/18)	- Maintenance exceeds Minimum Maintenance Standards	- Maintenance is fully compliant with Minimum Maintenance Standards	- Maintenance is partially compliant with Minimum Maintenance Standards	- Maintenance is not compliant with Minimum Maintenance Standards	- No Maintenance is conducted on Structures
Capacity to Meet Demands	- Sufficient number of lanes along each road segment to accommodate peak traffic volumes	- Lanes are sufficient to accommodate additional traffic beyond peak traffic volumes	- Lanes are sufficient to accommodate peak traffic volumes	- Lanes are sufficient to accommodate peak traffic volumes, with minimal interruption to traffic flow	- Lanes accommodate off-peak traffic volumes, with regular interruption to traffic flow during peak traffic flows	- Lanes are insufficient to accommodate off-peak traffic flow, with significant interruption to traffic flow during peak traffic volumes
Environmental Resiliency	- Adequate embankment protection/retention	Embankment protection / retention is more than adequate	- Embankment protection/retention is adequate	- Embankment protection/retention is below standard, but no negative effects on the road	- Embankment protection/retention is below standard, with negative effects emerging	- No embankment protection/retention is present
	- Roads surfaces are protected against a 5-year return storm (per reporting requirements of O.Reg 588/17).	- N/A	- Road surface protected against 5-year storm	- Road surface is protected against 5-year storm, except for during seasonal (spring) flooding	- Road surface is not protected against 5-year return storm	- N/A

7. Belgrave Water System

7.1. Inventory Summary

The Hamlet of Belgrave is split along London Road (County Road 4) between the Municipality of Morris-Turnberry and the Township of North Huron. The Belgrave Water System provides services to all users located in Belgrave. In 2004, a Schedule B Class Environmental Assessment was completed to determine the most cost-effective method of delivering water to Belgrave. The recommendation was to interconnect the existing small water systems by constructing a new pumphouse and reservoir. The Belgrave Water System now consists of two groundwater wells (Jane Well and McCrea Well) a pumphouse containing treatment and control facilities, and an in-ground storage reservoir and distribution system. The pumphouse is equipped with a dedicated standby generator to provide standby power in the event of a power outage. The system is sized such that it could serve the entire Hamlet of Belgrave rather than just the current serviced areas. The capacity is sufficient to accommodate additional users as they connect in the future. There are 201 properties eligible to connect to the water system. The daily operation of the system is contracted to a third-party operator Veolia Water Canada.

Belgrave Water System Statistics	2021	2020	2019	2018	2017	5yr Average
Properties Connected:	140	134	128	125	122	130
% Of total eligible properties	70%	67%	64%	62%	61%	65%
# Of Boil Water Advisories	0	0	0	0	0	0
# Of Connection Days Lost – Boil Water	0	0	0	0	0	0
Water Main Breaks	0	0	0	0	0	0
# Of Connection Days Lost - Main Breaks	0	0	0	0	0	0
Total Treated Water Flows (m ³)	35,078	37,984	21,129	27,964	23,510	29,133
System Energy Use (kWh/yr.)	82,235	87,603	74,552	68,120	61,177	74,737
Energy Consumption kWh/m ³	2.34	2.31	3.53	2.44	2.60	2.57

The Belgrave Water System does not provide water for fire protection. None of the properties located in Belgrave have access to fire flow.

7.2. Current Replacement Values

The municipality separates the in-ground infrastructure from the building and equipment. The assets are further separated between the new system constructed in 2006 and the remaining legacy assets constructed in the 1980s. The 75mm diameter water lines run from the wells to the treatment facility. They are estimated to have a current replacement cost of \$700/m. The 150mm water lines run from the treatment facility to users of the systems. They are estimated to have a current replacement cost of \$800/m. There is a service stub located at each property capable of connecting to the system. The stubs have an estimated current replacement value of \$2,500/stub.

To calculate the current replacement value of the treatment facility and equipment a historical cost approach was used. The original construction costs from 2006 were inflated using the Non-Residential Buildings CPI (NRBCPI) for Toronto, from Q1 2006 to Q1 2022.

The McCrea well is currently undergoing a replacement during the 2021/2022 budget year. Costs to date plus anticipated costs to complete the project will be approximately \$210,000. These costs include land acquisition, engineering, permit fees, well construction, regulator, and source water management costs.

Category	Description	Count	Length (m)	Replacement Method	Current Replacement Cost
In Ground Infrastructure					
- 150mm Water Mains	New System	-	1,915	\$/Unit	\$1,532,000
- 75mm dia water line	New System	-	410	\$/Unit	\$287,000
- 150mm Water Mains	Legacy System	-	600	\$/Unit	\$480,000
- Service Stubs	Total System	201	-	\$/Unit	\$502,500
Pumphouse	New System	1	-	NRBCPI	\$970,284
Pumphouse Equipment	New System	1	-	NRBCPI	\$2,263,998
McCrea Well	Legacy System	1	-	\$/Unit	\$210,000
Jane Well	Legacy System	1	-	\$/Unit	\$210,000
Total					\$6,455,782

7.3. Condition

The Belgrave Water System utilizes an age-based condition assessment for its in-ground infrastructure and facilities. The condition ratings and definitions are on Table 17. Estimated useful lives are assigned to each category. These are the expected service life for an asset in that category. Inspection of the McCrea well in 2017 has revealed the well casing is near failure. Once replaced the estimated useful life of the new well will be 80 years.

Category	Description	Date Constructed / Est Date Constructed	Age	Estimated Useful Life (EUL)	EUL Remaining	Condition Rating
In Ground Infrastructure						
- 150mm Water Mains	New System	2006	16	80	64	Excellent
- 75mm dia water line	New System	2006	16	80	64	Excellent
- 150mm Water Mains	Legacy System	1985 est	37	80	43	Excellent
- Service Stubs	Total System	2006	16	80	64	Excellent
Pumphouse	New System	2006	16	50	34	Excellent
Pumphouse Equipment	New System	2006	16	25	9	Fair
McCrea Well	Legacy System	1987 est	35	50	15	Good
Jane Well	Legacy System	1983 est	39	50	11	Good

The average age-based condition of the Belgrave Water System is Good to Excellent.

7.4. Levels of Service

The municipality has established levels of service (LOS) to evaluate the in-ground infrastructure and above ground facilities and equipment operating functionality, capacity to meet demands, and operational resiliency. The LOS criteria and ranking definitions are outlined in Table 18.

In-Ground Infrastructure	Operational Functionality	Level of Service Criteria	Water Mains - New System	Water Mains - Legacy	Service Stubs
		- Constructed using appropriate materials	Good	Fair	Fair
		- Asset dimensions meet current standards	Good	Fair	Fair
		- Minimal system leakage/water loss	Good	Good	Fair
Capacity to Meet Demands	- Able to provide adequate minimum pressures and flows for peak operating hours		Good	Good	Good
Operational Resiliency	- System designed to withstand maximum operating pressures plus the transient pressures including negative pressures		Good	Good	Good

Buildings & Equipment	Operational Functionality	Level of Service Criteria	Pumphouse & Equipment (32 McCrea)	McCrea Well & Equipment	Jane Well & Equipment
		- Systems and technology meet current standards	Good	Good	Good
		- Systems operate within recommended minimum and maximum pressures and flows during normal conditions	Good	Good	Good
		- Efficient and effective chemical application and disinfection processes	Good	Good	Good
Capacity to Meet Demands	- Compliant with Provincial and Municipal codes/Regulations		Good	Good	Good
Operational Resiliency	- Able to provide adequate minimum pressures and flows for peak operating hours		Good	Good	Good
	- Adequate back-up / units for critical pumping station processes		Good	Good	Good
Operational Resiliency	- Adequate standby power generation capacity		Good	Good	Good
	- Adequate site and facility security		Good	Good	Good

Each asset category was evaluated and assigned a ranking based on municipal staff's first-hand knowledge and observation. Anything that did not have designs available, a performance-based assessment was conducted, and rating assigned.

Overall, the in-ground infrastructure has a rating of Fair for operational functionality, and Good for capacity to meet demands and operational resiliency. The buildings and equipment have a rating of Good for operational functionality, capacity to meet demands and operational resiliency.

7.5. Lifecycle Activities

Each asset category is assigned an Estimated Useful Life (EUL) based on how long the asset is expected to last before replacement. In-ground infrastructure is estimated at 80 years, buildings 50 years, equipment 25 years and wells 50 years. The McCrea well is undergoing replacement over the 2021/2022 fiscal periods. Once replaced, the well will meet modern standards and will be expected to last approximately 80 years. Due to the similar material and age of the McCrea and Jane wells, it is anticipated that the Jane well will need to be replaced within the next 3-5 years. The Jane well is scheduled to be inspected in 2023. When planning the water system’s lifecycle activities, the municipality takes into consideration staff & financial resources available, geographic synergies and the impact of weather events.

Anticipated Water System Lifecycle Costs (2023 to 2032)										
Year:	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
In-Ground Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pumphouse	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pumphouse Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
McCrea Well	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jane Well	\$ -	\$ -	\$210,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$210,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

7.6. Risks related to lifecycle activities

Financial Risk

Failure to perform scheduled lifecycle activities can expose the municipality to financial risk. If the water system is not maintained, the individual components can degrade faster than anticipated. The overall cost to repair the water system is borne by the connected users of the system therefore, the Municipality must make sound financial decisions on behalf of all the users. Cost overruns and volatile market prices for materials can also pose a financial risk to the water system.

Environmental Risk

Climate change can pose an environmental risk to the Belgrave Water System. Significant weather events have increased in frequency and severity due to climate change. These events could cause damage to above ground buildings or equipment. The municipality will evaluate the risk of climate change whenever a component of the Belgrave Water System is replaced, the effects of past weather events and potential future events will be evaluated. The municipality will also evaluate and purchase environmentally friendly alternatives whenever economically or practically possible.

Economic Risk

Municipal assets with capacity restrictions could potentially deter economic growth within the municipality. Development within Belgrave may be deterred if the water system is undersized or in disrepair. When development is proposed in Belgrave, the system's capacity to accommodate additional connections will be evaluated. If the size of the water system is preventing growth within Belgrave, the cost of constructing additional capacity will be compared to the benefit of additional growth.

Reputation Risk

Residents utilize the Belgrave Water System daily. Maintaining the system in a good working condition is essential. Failing to provide a reliable source of treated water would harm the Municipality's reputation of providing effective and efficient services. A tarnished reputation can be difficult to correct and can impact a municipality's ability to recruit qualified staff or attract economic growth to the area.

Health & Safety Risk

It is the municipality's responsibility to maintain the Belgrave Water System to provide reliable and potable drinking water. The system is subject to numerous legislative requirements and regular testing and inspections occur. The system is operated by Veolia Canada and regulated by the Ministry of the Environment, Conservation and Parks. Annual operation and maintenance reports are published and available to the public.

7.7. Economic & Population Growth Assumptions

Much of the economic growth within the municipality is related to agricultural operations located outside the area serviced by the Belgrave Water System. Current lifecycle activities are scheduled to meet the current population and economic activity levels. Residential development within the hamlet of Belgrave is anticipated to be approximately 15 households within the next 5 years. As more eligible users connect to the system, the operational costs become more economically affordable for all users.

Table 16 - Belgrave Water System - Summary

Category	Description	Count	Length (m)	Date Constructed	Estimated Date Constructed	Approximate Age	Current Replacement Value
In Ground Infrastructure							
- 150mm Water Mains	New System		1,915	2006		16	\$ 1,532,000
- 75mm dia water line	New System		410	2006		16	\$ 287,000
- 150mm Water Mains	Legacy System		600		1985	37	\$ 480,000
- Service Stubs	Total System	201		2006		16	\$ 502,500
Pumphouse	New System	1	-	2006		16	\$ 970,284
Pumphouse Equipment	New System	1	-	2006		16	\$ 2,263,998
McCrea Well	Legacy System	1	-		1987	35	\$ 210,000
Jane Well	Legacy System	1	-		1983	39	\$ 210,000

Table 17 - Belgrave Water System - Condition Ratings & Corresponding Criteria

	Excellent	Good	Fair	Poor	Very Poor	Failed
Est Useful Life Remaining:	20+ Years Remaining	10 to 19 Years Remaining	5 to 10 Years Remaining	1 to 5 Years Remaining	Less than 1 Year Remaining	0
In-Ground Infrastructure	In Like New Condition, no defects or repairs required	Minor defects observed with no impact to the asset's function	Multiple defects observed, with minor impact to function of the asset. Possible failure within the next 5 to 10 years.	Multiple defects observed, with major impact to function of the asset. Possible failure likely within the next 5 years. Repair required.	Significant damage observed. Possible failure within the year. Replacement required.	Asset has failed. Replacement required
Pumphouse						
Pumphouse Equipment						
Wells						

Table 18 - Belgrave Water System - Levels of Service Definitions

		Level of Service Criteria	Excellent	GOOD	FAIR	POOR	VERY POOR
In Ground Infrastructure	Operational Functionality	- Constructed using appropriate materials	- Construction material exceed modern requirements	- Construction material meet modern requirements	- Construction material does not meet current standards or are unknown, but are not impacting the system	- Construction material does not meet current standards or are unknown, with minimal negative impact on the system	- Construction material does not meet current standards or are unknown, with significant negative impact on the system
		- Asset dimensions meet current standards	- Dimensions exceed current standards	- Dimensions meet current standards	- Asset is undersized or unknown, but not impacting system operations	- Asset is undersized or unknown, and negatively impacting system operations	- Asset is undersized or unknown, and significantly impacting system operations
		- Minimal system leakage/water loss	- No water leakage/loss is detected	- Minimal water leakage/loss is detected	- Minimal water leakage/loss is detected, with minimal impact on system operations	- Water leakage/loss is detected, impacting the operations of the system	- Significant water leakage/loss is detected
	Capacity to Meet Demands	- Able to provide adequate minimum pressures and flows for peak operating hours	- Able to provide adequate minimum pressures and flows at peak operating hours, with no interruptions	- Able to provide adequate minimum pressures and flows at peak operating hours, with occasional interruptions related to system maintenance	- Able to provide adequate minimum pressures and flows at peak operating hours, with occasional interruptions	- System struggles to provide adequate minimum pressures at peak operating hours, with regular interruptions	- Cannot provide minimum pressures and flows at peak operating hours
Operational Resiliency	- System designed to withstand maximum operating pressures plus the transient pressures including negative pressures	- System designed to withstand excessive operating pressures	- System designed to withstand operating pressures	- System design does not meet modern code, but can withstand operating pressures	- System design does not meet modern code, operating pressures causing minimal damage to system	- System design cannot withstand operating pressures resulting in system damage	

Table 18 - Belgrave Water System - Levels of Service Definitions

		Level of Service Criteria	Excellent	GOOD	FAIR	POOR	VERY POOR
Buildings & Equipment	Operational Functionality	- Systems and technology meet current standards	- Systems and technology exceed current standards	- Systems and technology meet current standards	- Systems and technology do not meet current standards, but are considered acceptable legacy systems	- Systems and technology do not meet current standards, but are considered acceptable legacy systems, but should be replaced as soon as possible	- Systems and technology do not meet current standards and pose a risk to system users, should be replaced immediately
		- Systems operate within recommended minimum and maximum pressures and flows during normal conditions	- Systems operate without exceeding recommended minimum and maximum pressures and flows	- Systems rarely exceed recommended minimum and maximum pressures and flows, with satisfactory explanation	- Systems occasionally exceed recommended minimum and maximum pressures and flows, with satisfactory explanation	- Systems occasionally exceed recommended minimum and maximum pressures and flows, with unknown explanation	- Systems regularly operate beyond the recommended minimum and maximum pressures and flows
		- Efficient and effective chemical application and disinfection processes	- Chemical application and disinfection process exceed efficiency and effectiveness requirements	- Chemical application and disinfection process meet efficiency and effectiveness requirements	- Chemical application and disinfection process is satisfactory with minimal discrepancy from expected cost or material usage	- Chemical application and disinfection process is satisfactory, with a large discrepancy from expected cost or material usage	- Chemical application and disinfection process is not effective or efficient
		- Compliant with Provincial and Municipal codes/Regulations	- Building and equipment exceed provincial and municipal codes and regulations	- Buildings and equipment are compliant with provincial and municipal codes and regulations	- Buildings and equipment are compliant with all provincial codes and regulation and partially compliant with municipal codes and regulations	- Buildings and equipment are partially compliant with provincial and municipal codes and regulations	- Buildings and equipment are not compliant with provincial and municipal codes and regulations
	Capacity to Meet Demands	- Able to provide adequate minimum pressures and flows for peak operating hours	- Able to provide adequate minimum pressures and flows at peak operating hours, with no interruptions	- Able to provide adequate minimum pressures and flows at peak operating hours, with occasional interruptions related to system maintenance	- Able to provide adequate minimum pressures and flows at peak operating hours, with occasional interruptions	- System struggles to provide adequate minimum pressures at peak operating hours, with regular interruptions	- Cannot provide minimum pressures and flows at peak operating hours
	Operational Resiliency	- Adequate back-up / units for critical pumping station processes	- More than an adequate number of backup units on site	- Adequate number of backup units on site	- Appropriate backup units available, but stored offsite	- Backup units available, but they do not meet current standards	- No backup units available
		- Adequate standby power generation capacity	- Extra standby power generation capacity available	- Adequate standby power generation capacity available to operate all systems	- Adequate standby power generation capacity available for critical systems	Standby power not adequate to power critical systems.	- No standby power generation capacity available
		- Adequate site and facility security	- Site and facility security exceeds requirements	- Site and facility security is adequate	- Security is adequate, rare unauthorized attempts to access site prevented with minimal damage	- Security is inadequate, unauthorized attempts to access site successful, but access to critical systems prevented	- Security is inadequate, regular security breaches occurring, access to critical systems not prevented

8. Stormwater Assets

8.1. Inventory Summary

The Municipality of Morris-Turnberry's stormwater assets are located in the hamlets of Belmore, Belgrave, Bluevale and Lower Town, Wingham. The pipes vary in length, diameter, materials used, date constructed and design. Numerous pipes throughout the various systems are undersized and use materials that do not meet current standards. The systems resiliency to a 5-year storm is estimated by considering the systems design, pipe size, material used and actual performance. Overall, the municipality estimates 54.80% of its stormwater assets would be resilient to a 5-year storm. Based on staff observation and the actual performance of the existing stormwater assets, it is not believed the stormwater assets were designed for, or provide protection from, a 100-year storm.

Location	Estimated Construction Date	Pipe Length (m)	# Of Catch Basins	Estimated % of System Resilient to 5-Year Storm	# Of Properties in Service Area	# Of Properties Protected from 100-Year Storm
Belmore	2017	245	12	100%	18	0
Belgrave	1966	3,055	68	40%	166	0
Bluevale	1997	1,129	17	70%	149	0
Lower Town, Wingham	1990	1,118	26	70%	200	0
Total		5,547	123	54.8%	533	0

Additional details can be found on Table 19

8.2. Current Replacement Values

The municipality separates its stormwater assets into pipes and catch basins. Any pipe under 300mm in diameter is considered undersized and would need to be replaced with a 300mm diameter or larger pipe.

Total of All Systems	Replacement Cost (\$/Unit)	Length of Pipe (m) and # of Catch Basins	Current Replacement Value
150mm Pipe	\$500.00	137.0	\$68,500
200mm Pipe	\$500.00	1,090.0	\$545,000
250mm Pipe	\$500.00	760.0	\$380,000
300mm Pipe	\$500.00	1,330.4	\$665,200
350mm Pipe	\$550.00	640.0	\$352,000
400mm Pipe	\$600.00	370.0	\$222,000
450mm Pipe	\$650.00	582.3	\$378,495
500mm Pipe	\$700.00	416.0	\$291,200
525mm Pipe	\$750.00	21.2	\$15,900
600mm Pipe	\$800.00	200.0	\$160,000
Catch Basins	\$5,000.00	123.0	\$615,000
Total			\$3,693,295

Details for specific areas are available on Table 19.

8.3. Condition

The stormwater assets utilize an age-based condition assessment to calculate the estimated useful life remaining. The condition ratings and definitions are in Table 20. Estimated useful lives of 80 years are assigned to the pipes and catch basins. These are the expected service life for an asset in that category.

Location	Estimated Construction Date	Estimated Useful Life	Estimated Useful Life Remaining	Aged Based Condition
Belmore	2017	80	75	Excellent
Belgrave	1966	80	24	Excellent
Bluevale	1997	80	55	Excellent
Lower Town, Wingham	1990	80	48	Excellent

The average age-based condition of the stormwater assets is Excellent due to the expected useful life remaining exceeding 20 years.

8.4. Levels of Service

The municipality has established levels of service (LOS) to evaluate the stormwater infrastructure’s operating functionality, capacity to meet demands and environmental resiliency. The LOS criteria and ranking definitions are outlined in Table 21.

	Level of Service Criteria	Belgrave Stormwater System	Belmore Stormwater System	Bluevale Stormwater System	Lowertown Stormwater System
Operational Functionality	- Materials used meet modern standards	Very Poor	Excellent	Excellent	Good
	- Asset dimensions meet modern standards	Poor	Excellent	Good	Good
	- System design meets modern standards	Poor	Good	Fair	Fair
Capacity to Meet Demands	- Capacity meets the standards for the sizing as set by the municipality.	Poor	Good	Good	Good
	- Adequate capacity to limit roadway flooding during major storm events per MOE Stormwater Planning and Design Manual	Fair	Good	Good	Good
Environmental Resiliency	- Percentage of the municipal stormwater system resilient to a 5-year return storm. (Per O.Reg 588/17)	Fair	Excellent	Good	Good

Each asset category was evaluated and assigned a ranking based on municipal staff’s first-hand knowledge and observation. Anything that did not have designs available, a performance-based assessment was conducted, and rating assigned.

Overall, Belmore, Bluevale and Lowertown have a rating of Good for operational functionality, capacity to meet demands and environmental resiliency. Belgrave has a rating of poor in operational functionality and poor to fair in capacity to meet demands and environmental resiliency.

8.5. Lifecycle Activities

The stormwater pipes and catch basins have an Estimated Useful Life (EUL) of 80 years. At that time, the asset would be scheduled to be replaced, with consideration given to the assets overall condition and performance. A flush and camera of the stormwater assets occurs approximately every 10 years. Spot repairs are performed as required and cleanout of the catch basins is performed annually. Currently half of the Belgrave stormwater assets are scheduled to be flushed and camera in 2022. An inflator of 2.5% has been applied to the 2022 budgeted cost of the catch basin cleanout to estimate future annual costs.

Anticipated Stormwater System Lifecycle Costs (2023 to 2032)										
Year:	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Belgrave	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Belmore	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bluevale	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lowertown, Wingham	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Catch Basin Cleanout – All Areas	\$3,075	\$3,152	\$3,231	\$3,311	\$3,394	\$3,479	\$3,566	\$3,655	\$3,747	\$3,840
Total	\$3,075	\$3,152	\$3,231	\$3,311	\$3,394	\$3,479	\$3,566	\$3,655	\$3,747	\$3,840

8.6. Risks related to lifecycle activities

Financial Risk

Failure to perform scheduled lifecycle activities can expose the municipality to financial risk. If the stormwater systems are not maintained, the individual components can degrade faster than anticipated. The overall cost to replace components ahead of schedule would be greater than the cost to maintain the systems. Cost overruns and volatile market prices for materials can also pose a financial risk when repairing or replacing parts of the stormwater system.

Environmental Risk

Climate change can pose an environmental risk to the stormwater systems. Significant weather events have increased in frequency and severity due to climate change. These events could cause damage to the stormwater systems. It is more important than ever that the stormwater systems function as designed to protect the residents from the effects of climate change. The municipality will evaluate the effects of past weather events and potential future events when a part of a stormwater system is repaired or replaced.

Economic Risk

Municipal assets with capacity restrictions could potentially deter economic growth within the municipality. Development within an area serviced by a stormwater system may be deterred if the system is not functioning properly. When a development is proposed in an area serviced by a stormwater system the municipality will evaluate the impact of the development on the current system and if additional system capacity is required.

Reputation Risk

The stormwater systems are utilized when major or minor weather events occur. Maintaining the system in a good working condition is essential to protect municipal and resident's property from flooding. Failing to provide a reliable stormwater system can harm the Municipality's reputation of providing effective and efficient services. A tarnished reputation can be difficult to correct and can impact a municipality's ability to recruit qualified staff or attract economic growth to the area.

Health & Safety Risk

It is the municipality's responsibility to maintain the stormwater systems to provide reliable stormwater management during weather events. The system protects municipal roads from flooding and allows motorists to use the roads safely. A properly functioning stormwater system also assists with the prevention of flooding on private property. Many basement drains are connected to stormwater. Failure in the system could back up water and cause health hazard to connected homes or flooding septic systems causing health hazards.

8.7. Economic & Population Growth Assumptions

Much of the economic growth within the municipality is related to agricultural operations located outside the areas serviced by the stormwater assets. Current stormwater systems are built to accommodate the current population and economic activity. Current lifecycle activities are scheduled to meet the current population and economic activity levels. Any significant development within a service area will require a stormwater management plan. As additional development occurs, the municipality's stormwater systems will grow to accommodate.

Table 19 - Stormwater - Summary

Location	Description	Count	Length (m)	Date Constructed	Approximate Date Constructed	Estimated Replacement Cost	# of Properties Serviced	# of Properties Protected from 100-Year Storm
Belgrave Stormwater Assets	150mm Pipe	3	68.0		1966	\$ 34,000	166	0
	200mm Pipe	27	817.0		1966	\$ 408,500		
	250mm Pipe	11	715.0		1966	\$ 357,500		
	300mm Pipe	20	793.0		1966	\$ 396,500		
	350mm Pipe	1	107.0		1966	\$ 58,850		
	400mm Pipe	5	240.0		1966	\$ 144,000		
	450mm Pipe	2	150.0		1966	\$ 97,500		
	500mm Pipe	2	165.0		1966	\$ 115,500		
	525mm Pipe	-	-		1966	\$ -		
	600mm Pipe	-	-		1966	\$ -		
Catch Basins/Manholes	68	N/A		1966	\$ 340,000			
Belmore Stormwater Assets	150mm Pipe	-	-	2017		\$ -	18	0
	200mm Pipe	-	-	2017		\$ -		
	250mm Pipe	-	-	2017		\$ -		
	300mm Pipe	9	177.4	2017		\$ 88,700		
	350mm Pipe	-	-	2017		\$ -		
	400mm Pipe	-	-	2017		\$ -		
	450mm Pipe	1	46.3	2017		\$ 30,095		
	500mm Pipe	-	-	2017		\$ -		
	525mm Pipe	1	21.2	2017		\$ 15,900		
	600mm Pipe	-	-	2017		\$ -		
Catch Basins/Manholes	12	N/A	2017		\$ 60,000			
Bluevale Stormwater Assets	150mm Pipe	1	9.0		1997	\$ 4,500	149	0
	200mm Pipe	2	188.0		1997	\$ 94,000		
	250mm Pipe	-	-		1997	\$ -		
	300mm Pipe	3	173.0		2019	\$ 86,500		
	350mm Pipe	5	401.0		1997	\$ 220,550		
	400mm Pipe	3	110.0		1997	\$ 66,000		
	450mm Pipe	3	248.0		1997	\$ 161,200		
	500mm Pipe	-	-		1997	\$ -		
	525mm Pipe	-	-		1997	\$ -		
	600mm Pipe	-	-		1997	\$ -		
Catch Basins/Manholes	17	N/A		1997	\$ 85,000			

Table 19 - Stormwater - Summary

Location	Description	Count	Length (m)	Date Constructed	Approximate Date Constructed	Estimated Replacement Cost	# of Properties Served	# of Properties Protected from 100-Year Storm
Lowertown, Wingham Stormwater Assets	150mm Pipe	3	60.0		1990	\$ 30,000	200	0
	200mm Pipe	1	85.0		1990	\$ 42,500		
	250mm Pipe	2	45.0		1990	\$ 22,500		
	300mm Pipe	7	187.0		1990	\$ 93,500		
	350mm Pipe	3	132.0		1990	\$ 72,600		
	400mm Pipe	2	20.0		1990	\$ 12,000		
	450mm Pipe	2	138.0		1990	\$ 89,700		
	500mm Pipe	4	251.0		1990	\$ 175,700		
	525mm Pipe	-	-		1990	\$ -		
	600mm Pipe	2	200.0		1990	\$ 160,000		
	Catch Basins/Manholes	26	N/A		1990	\$ 130,000		
Total	150mm Pipe	7	137.0			\$ 68,500.00	533	-
	200mm Pipe	30	1,090.0			\$ 545,000.00		
	250mm Pipe	13	760.0			\$ 380,000.00		
	300mm Pipe	39	1,330.4			\$ 665,200.00		
	350mm Pipe	9	640.0			\$ 352,000.00		
	400mm Pipe	10	370.0			\$ 222,000.00		
	450mm Pipe	8	582.3			\$ 378,495.00		
	500mm Pipe	6	416.0			\$ 291,200.00		
	525mm Pipe	1	21.2			\$ 15,900.00		
	600mm Pipe	2	200.0			\$ 160,000.00		
		Catch Basins/Manholes	123	N/A				

Table 20 - Stormwater Assets - Condition Ratings & Corresponding Criteria

	Excellent	Good	Fair	Poor	Very Poor	Failed
Est Useful Life Remaining:	20+ Years Remaining	10 to 19 Years Remaining	5 to 10 Years Remaining	1 to 5 Years Remaining	Less than 1 Year Remaining	0
Pipes	In Like New Condition, no defects or repairs required	Minor defects observed with no impact to the function of the pipe	Multiple defects observed, with minor impact to function of the pipe. Possible failure within the next 5 to 10 years.	Multiple defects observed, with major impact to function of the pipe. Possible failure likely within the next 5 years. Repair required.	Significate damage observed. Possible failure within the year. Replacement required.	Pipe has failed. Replacement required
Catch Basins/ Manholes	Structurally Sound, No Repairs Required	Structurally Sound, Standard Maintenance Required	Structurally Sound with minor defects. Spot repairs required	Structure compromised or about to be compromised. Repair required.	Structure damaged beyond repair. Replacement Required	Structure Failed. Replacement required.

Table 21 - Stormwater Assets - Levels of Service Definitions

	Level of Service Criteria	Excellent	GOOD	FAIR	POOR	VERY POOR
Operational Functionality	- Materials used meet modern standards	- Greater than 90% of the system would meet modern standards	- 70 to 89% of the system would meet modern standards	- 40% to 69% of the system would meet modern standards	- 20% to 39% of the system would meet modern standards	- Less than 20% of the system would meet modern standards
	- Asset dimensions meet modern standards	- 90%+ of the system would meet modern dimension standards	- 70 to 89% of the system would meet modern standards	- 40% to 69% of the system would meet modern standards	- 20% to 39% of the system would meet modern standards	- Less than 20% of the system would meet modern standards
	- System design meets modern standards	- System designs exceeds modern standards	- System design meets modern standards	- System design does not meet modern standards, but is not negatively impacting overall system function	- System design does not meet modern standards, and is negatively impacting overall system function	- System design does not meet modern standards and is impeding the system's ability to function
Capacity to Meet Demands	- Capacity meets the standards for the sizing as set by the municipality.	- Capacity exceeds the standards for sizing of stormwater assets as set out by the municipality	- Capacity meets the standards for sizing of stormwater assets as set out by the municipality	- Capacity meets the standards for sizing of stormwater assets as set out by the municipality with seasonal exceptions	- Capacity struggles to meet the standards for sizing of stormwater assets as set out by the municipality	- Capacity does not meet the standards for sizing of stormwater assets as set out by the municipality
	- Adequate capacity to limit roadway flooding during major storm events per MOE Stormwater Planning and Design Manual	- Stormwater system has excess capacity to limit roadway flooding during major storm events	- Stormwater system has adequate capacity to limit roadway flooding during major storm events	- Stormwater system has adequate capacity to limit roadway flooding during major storm events, with seasonal exceptions	- Stormwater system struggles to limit roadway flooding during major storm events.	- Stormwater system does not limit roadway flooding during major storm events
Environmental Resiliency	- Percentage of the municipal stormwater system resilient to a 5-year return storm. (Per O.Reg 588/17)	- Greater than 90% of the system is resilient to a 5-year storm	- 70 to 89% of the system is resilient to a 5-year storm	- 40% to 69% of the system is resilient to a 5-year storm	- 20% to 39% of the system is resilient to a 5-year storm	- Less than 20% of the system is resilient to a 5-year storm

Appendix A: Anticipated Lifecycle Activity Costs (2023 to 2032) Summary										
Category:	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Bridges	\$ 91,000	\$ 145,000	\$ 510,000	\$ -	\$ 148,000	\$ -	\$ 580,833	\$ 5,033,000	\$ 1,225,000	\$ 618,000
Culverts	\$ 102,063	\$ -	\$ -	\$ 121,400	\$ -	\$ -	\$ 150,000	\$ 2,531,833	\$ 109,375	\$ -
HBC Roads	\$ 147,000	\$ 309,900	\$ -	\$ 111,750	\$ -	\$ -	\$ 950,100	\$ -	\$ 88,500	\$ -
LCB Roads	\$ 153,750	\$ 156,755	\$ 190,500	\$ -	\$ 222,300	\$ 305,950	\$ -	\$ 153,750	\$ 156,775	\$ 190,500
Gravel Roads	\$ 738,000	\$ 756,450	\$ 775,361	\$ 794,745	\$ 814,614	\$ 834,979	\$ 855,854	\$ 877,250	\$ 899,181	\$ 921,661
Belgrave Water System	\$ -	\$ -	\$ 210,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stormwater Assets	\$ 3,075	\$ 3,152	\$ 3,231	\$ 3,311	\$ 3,394	\$ 3,479	\$ 3,566	\$ 3,655	\$ 3,747	\$ 3,840
Total	\$ 1,234,888	\$ 1,371,257	\$ 1,689,092	\$ 1,031,206	\$ 1,188,308	\$ 1,144,408	\$ 2,540,353	\$ 8,599,488	\$ 2,482,578	\$ 1,734,001

MUNICIPALITY OF MORRIS-TURNBERRY

REPORT TO COUNCIL

TO: Mayor and Council

PREPARED BY: Trevor Hallam, CAO/Clerk

DATE: July 5, 2022

SUBJECT: Next Generation 9-1-1 Agreement with Huron County

RECOMMENDATION

THAT the Council of the Municipality of Morris-Turnberry hereby directs staff to return a by-law to the next meeting of Council authorizing the execution of the 9-1-1 Service Agreement with Huron County as presented.

BACKGROUND

The Canadian Radio-television and Telecommunications Commission is a federal body that regulates telecommunications providers, the companies that create the networks that connect 9-1-1 calls to emergency call centres. When a 9-1-1 call is received, these centres dispatch emergency responders, such as police, firefighters, and paramedics.

Telecommunications networks have greatly evolved since 9-1-1 services were first developed. In addition to phone calls, those reporting an emergency can also send texts, videos and photos. The CRTC will be making changes over the coming years to ensure that emergency services can benefit from these advancements.

These expanded services are called Next-Generation 9-1-1 (NG9-1-1) services. As a first step, the CRTC has directed all phone and cell service companies to update their networks from analog to digital, so they are ready to provide NG9-1-1 voice and text messaging services. This will enable them to carry these NG9-1-1 calls and connect them to call centres. At the same time, provincial, territorial and municipal governments will need to ensure their emergency call centres are ready for the new service.

The CRTC directed all telecommunications providers to update their networks for NG9-1-1 voice services as of March 1, 2022. A deadline for providing NG9-1-1 real-time text messaging services to the public will be set at a later date. The full transition to NG9-1-1 is mandated to take place by March 4, 2025.

COMMENTS

The 9-1-1 system that services Morris-Turnberry is administered by Huron County with support from Morris-Turnberry staff. Effective March 4, 2025, the current 9-1-1 system will be replaced with a Next Generation 9-1-1 system. While the transition date is a few years away, significant work will be required by County staff to ensure that addressing data is compliant with the new requirements.

To prepare and plan for the implementation of NG9-1-1 it is being strongly encouraged that the County go through the process of standardizing and synchronizing their existing GIS data with the MSAG (municipal street addressing guide) managed by 9-1-1 Service Provider, Bell (in Ontario). It is recommended that the MSAG and GIS data reach a 98% or greater match rate prior to March 2025. The Huron County match rate is currently 53%.

Additionally, the County will be required to ensure that current Public Safety Answering Points (PSAP) and Secondary Public Safety Answering Points (S-PSAP) are compliant with specifications and guidelines outlined in their agreement with Bell. The County manages the contract for the PSAP (currently Northern Communications) and lower tiers manage the Secondary PSAP's with respect to local Fire services.

The County's 9-1-1 Coordinator has been in discussions with Fire Chief Marty Bedard with respect to the implications locally for the transition to NG9-1-1, particularly with the fire dispatch services - SPSAPs.

While the County and lower tiers have successfully managed the 9-1-1 program together in partnership for many years now, with the enhanced data requirements, required data cleansing, and new system requirements with the PSAP/SPAP's, the County is requesting to enter into a formal agreement with all lower tiers which defines the existing partner obligations. A draft of the attached agreement was circulated to Morris-Turnberry staff for comment in April, and no concerns were raised. County Council reviewed and approved the agreement at their May 25th meeting, and on June 21st County staff requested that it be considered by lower tier Councils with the goal of having an executed agreement by the end of July.

There are no changes to Morris-Turnberry's existing obligations in the agreement, outside of ensuring all PSAP/SPAPS will be NG compliant. This will help to ensure that the County can demonstrate accountability in meeting their obligations with Bell Canada. Fire Chief Marty Bedard was consulted by Morris-Turnberry staff in regard to this additional requirement, and had no concerns with ensuring SPAPS will be compliant.

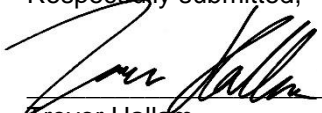
ATTACHMENTS

1.0 DRAFT 9-1-1 Servicing Agreement

OTHERS CONSULTED

Kim Johnston, Deputy Clerk
Michael Blumhagen, Treasurer, Huron County
Marty Bedard, Fire Chief

Respectfully submitted,



Trevor Hallam,
CAO/Clerk



9-1-1 Service Agreement

between

The County of Huron

and

[Municipality name]

9-1-1 Service Agreement

This Agreement made shall be effective as of the day of , 2022.

BETWEEN:

THE CORPORATION OF THE COUNTY OF HURON
(the "County")

and

THE CORPORATION OF THE [MUNICIPALITY NAME]
(the "Municipality")

(each, a "Party" and, collectively, the "Parties")

RECITALS

WHEREAS the County has entered into a Next Generation 9-1-1 Authority Service Agreement with Bell Canada as per Bell Canada National Services Tariff Item 601 as approved and amended from time to time by the Canadian Radio-Television and Telecommunications Commission or its successors;

AND WHEREAS the Bell Next Generation 9-1-1 Authority Service Agreement requires the County to implement and ensure the operation of a twenty-four (24) hours a day, seven (7) days per week Primary Public Safety Answering Point (P.P.S.A.P.) for the 9-1-1 Serving Area in a manner that meets quality standards generally accepted in North America for such services;

AND WHEREAS the County has obligations under the Bell Next Generation 9-1-1 Authority Service Agreement to ensure that correct and timely information is provided to a P.P.S.A.P. in order to correctly direct a 9-1-1 call to the appropriate Secondary Public Safety Answering Point (S.P.S.A.P.) as arranged by the Municipality;

AND WHEREAS the Parties have a joint interest in the proper operation of the County NG9-1-1 System;

NOW THEREFORE the Parties, in consideration of the mutual promises contained herein, agree as follows:

1. DEFINITIONS

1.1 For the purposes of this Agreement, capitalized terms have the meanings ascribed below:

- (a) **Bell PERS:** The Public Emergency Reporting Service - Ontario, which is a telecommunications service provided by Bell Canada pursuant to Bell Canada National Services Tariff Item 601 to municipalities for the delivery of 9-1-1 calls to the P.P.S.A.P. and S.P.S.A.P. and pursuant to the agreement between Bell Canada and the County.
- (b) **NG9-1-1:** means a secure, IP-based, open-standards based system comprised of hardware, software, data, and operational policies and procedures that (a) provides standardized interfaces from emergency call and message services to support emergency communications, (2) processes all types of emergency calls, including voice, text, data, and multimedia information, (3) acquires and integrates additional emergency call data useful to call routing and handling, (4) delivers the emergency calls, messages and data to the appropriate PSAP and other appropriate emergency entities based on the location of the caller, (5) supports data, video, and other communications needs for coordinated incident response and management and (6) interoperates with services and networks used by first responders to facilitate emergency response. NG9-1-1 and 9-1-1 are used interchangeably throughout this Agreement.
- (c) **Huron County 9-1-1 Coordinator:** A designated employee of the County with responsibilities relative to the County 9-1-1 System including management oversight of this Agreement.
- (d) **County 9-1-1 System:** An emergency response system that provides the public within Huron County with access via one easy 3-digit (9-1-1) telephone number to a P.P.S.A.P. with the capability of quickly transferring and conferencing calls to the appropriate S.P.S.A.P. The 9-1-1 System provides a Next Generation 9-1-1

service to the public within Huron County. Next Generation 9-1-1 makes it possible to display the 9-1-1 caller's location information and phone number and will allow the call taker to subsequently transfer the call to a S.P.S.A.P.

- (e) **Effective Date:** The date on which this Agreement is executed by the Parties or such other date as agreed to in writing by the Parties.
- (f) **Emergency Service Zone (E.S.Z.):** The geographic area served by designated police or ambulance services.
- (g) **Fire Polygon:** The geographic area served by a designated fire department(s).
- (h) **M.F.I.P.P.A.:** The Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c M. 56 and regulations, as amended, or any successor provincial legislation that governs access to public information and the protection of personal information and privacy.
- (i) **9-1-1 Serving Area:** The geographic area as determined by the County from which all 9-1-1 calls will be directed to a P.P.S.A.P.
- (j) **Primary Public Safety Answering Point (P.P.S.A.P.):** A 24 hour per day, 7 days per week, communication center that is the first point of reception of 9-1-1 calls, that in turn, transfers the 9-1-1 calls to the appropriate S.P.S.A.P. based on the need for fire, police or ambulance services.
- (k) **Secondary Public Safety Answering Point (S.P.S.A.P.):** The communication center to which 9-1-1 emergency calls are transferred from the P.P.S.A.P.; and which will be the police, fire or ambulance agency; within each E.S.Z. (police and ambulance) and/or Fire Polygon (fire).

2. OBJECT

- 2.1 Municipalities are required to ensure that access to 9-1-1 service is available to their communities and as such the County is responsible for the provision of the 9-1-1 service for all municipalities in the County.

- 2.2 9-1-1 service in the County of Huron is funded by the County and provided via a contract with a third party acting as the Primary Public Safety Answering Point. The P.P.S.A.P. is the first point of contact for people calling 9-1-1. The first question that is asked to people calling 9-1-1 is if their emergency is for police, fire or ambulance. Based on the initial information provided, the caller is then transferred to a Secondary Public Safety Answering Point as the most appropriate agency required for the response
- 2.3 In order for the County 9-1-1 System to operate it requires the County and the Municipality to work together.

3. CONSIDERATION

- 3.1 The Parties agree that this Agreement is for their mutual advantage and is designed to meet the requirements of the served population within the 9-1-1 Serving Area.
- 3.2 No monetary consideration is payable under this Agreement.

4. MANAGEMENT OF COUNTY 9-1-1 SYSTEM

- 4.1 The County may alter the manner in which the County 9-1-1 System is delivered including but not limited to the termination of a third party service, alteration of contract terms with a third party service etc. at its sole discretion. The County 9-1-1 System shall be delivered as a County function with the ultimate responsibility resting with the Council of the Corporation of the County of Huron.
- 4.2 The County may consult with the Municipality regarding changes to the County 9-1-1 System.

5. HURON COUNTY OBLIGATIONS

- 5.1 The County agrees to:
- (a) Provide and operate a P.P.S.A.P. for the 9-1-1 Service Area on a twenty-four (24) hours a day, seven (7) days per week basis. The County may contract with a

third party service provider for the management and operation of the P.P.S.A.P. but in such event the County shall remain responsible for all aspects of the P.P.S.A.P. and shall not be relieved of its obligations under this Agreement.

- (b) Ensure that there is a designated back-up to the P.P.S.A.P. to which 9-1-1 calls will be directed in the event the primary P.P.S.A.P. is unable to accept the calls for any reason.
- (c) Co-ordinate participation of all S.P.S.A.P. as identified by the Municipality in the 9-1-1 Serving Area including:
 - i. determining the ESZ's and Fire Polygons served by the P.P.S.A.P. and S.P.S.A.P.;
 - ii. providing and validating to Bell Canada all geographical data, including street names, addresses, and borders of the 9-1-1 Serving Area and E.S.Z.'s;
 - iii. informing Bell Canada of all changes in the geographical data that may occur.

6. MUNICIPAL OBLIGATIONS

6.1 The Municipality agrees to:

- (a) Provide and operate a S.P.S.A.P. for the E.S.Z.'s and Fire Polygon's applicable to the Municipality on a twenty-four (24) hours a day, seven (7) days per week basis. The Municipality may contract with a third party service provider for the management and operation of the S.P.S.A.P. but in such event the Municipality shall remain responsible for all aspects of the S.P.S.A.P. and shall not be relieved of its obligations under this Agreement.
- (b) Ensure that there is a designated back-up to the S.P.S.A.P. to which 9-1-1 calls will be directed in the event the primary S.P.S.A.P. is unable to accept the calls for any reason.
- (c) Ensure that identified/contracted S.P.S.A.P. is conformant to the NENA i3 standard (NENA-STA-010), which is capable of receiving IP-based signaling and media for delivery of emergency calls.

- (d) Inform the County of changes in its identified/contracted S.P.S.A.P. in a timely manner.
- (e) Ensure that the Municipality S.P.S.A.P.(s) coordinate/co-operate, wherever required, with the P.P.S.A.P. as identified by the County.
- (f) Implement 9-1-1 addressing in conformity with the County of Huron Emergency Services 911 Policies and Procedures (as amended from time to time by the County) and provide such information to the County in a format acceptable to the County and in a timely manner.
- (g) Ensure that the Municipality communicates any municipal annexations/amalgamations to the County 9-1-1 Coordinator.
- (h) Send all necessary information about street name changes and new street names, change of civic addressing and extension of street addressing, new construction and new subdivisions to the Huron County 9-1-1 Coordinator.

7. COMPLAINTS

- 7.1 Should a Municipality feel there is a problem or complaint with the County 9-1-1 System, a P.P.S.A.P. or the operation of a P.P.S.A.P., the problem shall be referred to the Huron County 9-1-1 Coordinator in writing.
- 7.2 The Huron County 9-1-1 Coordinator shall provide a response to the problem or complaint, in writing, within thirty (30) days.
- 7.3 If a Municipality reporting the problem or complaint is not satisfied with the response given by the Huron County 9-1-1 Coordinator, the problem or complaint may be referred to the County of Huron Clerk in writing.
- 7.4 The decision of the County of Huron will be final.

8. ACCESS TO RECORDED P.P.S.A.P. CALLS

- 8.1 9-1-1 calls are recorded at the Primary Public Safety Answering Point from the time the call is answered until the P.P.S.A.P. releases the call to a S.P.S.A.P.
- 8.2 The Chief Administrative Officer or delegated senior staff member of a Municipality or legal counsel of a Municipality and/or a delegated staff member of a S.P.S.A.P. designated by the Municipality may listen to a recording(s) at a time and place as arranged by the P.P.S.A.P.
- 8.3 The County shall ensure that recordings of 9-1-1 calls received at a P.P.S.A.P. will be held for a minimum period of six (6) months, and for an indefinite period of time upon request from a Municipality for evidence or legal purposes.

9. FORCE MAJEURE

- 9.1 Neither the County nor the Municipality shall be held responsible for any damages or delays as a result of any event that is beyond the County's or Municipality's reasonable control.
- 9.2 The County and Municipality agree that in the event of force majeure all involved Parties will co-operate and make all reasonable efforts to provide temporary replacement service until permanent service is completely restored.

10. INDEMNIFICATION & LIMIT OF LIABILITY

- 10.1 Subject to force majeure, each Party shall, from time to time and at all times hereafter, save, defend, keep harmless and fully indemnify the other Party, its successors and assigns, from and against all actions, claims and demands whatsoever that may be brought against or made upon the other Party, and against all loss, liability, judgments, claims, costs, demands or expenses that the other Party may sustain, suffer or be put to, resulting from or arising out of the first Party's negligence or failure to exercise reasonable care, skill or diligence in the performance, non-performance or rendering of any work or service required to be performed or rendered by it, its agents, officials, employees or contract agencies or any of them in accordance with the provisions of this Agreement.
- 10.2 Notwithstanding any other provision in this Agreement, the County shall not be

responsible or liable for any injury, death or property damage to the Municipality, its employees, subcontractors or agents, or for any claim by any third party against the Municipality, its employees, subcontractors or agents arising from:

- (a) The accuracy or completeness, or lack thereof, of any information the County receives from the Municipality which the County relies on in providing services under this Agreement;
- (b) Equipment or services provided by any third party service provider, including the failure of any other third party service provider to provide equipment or services, which the County relies on to provide services under this Agreement.

11. INSURANCE

11.1 General Liability Insurance

General Liability Policy insuring against injury or damage to persons or property, underwritten by an insurer licensed to conduct business in the Province of Ontario with a limit of not less than \$ 5 million. The policy shall be endorsed to include each party to the agreement as an additional insured with respect to the Mutual Aid Ambulance Services as per the signed agreement. The policy shall further be endorsed to include:

- (a) cross-liability,
- (b) contractual liability,
- (c) personal injury, and
- (d) Non-owned Automobile Coverage with a limit of not less than \$ 5 million and shall include contractual non-owned coverage.

12. MEDIA CONTACT

12.1 General Inquiries from the media about the Huron County 9-1-1 System will be handled by the County.

12.2 Inquiries regarding a specific emergency service S.P.S.A.P. will be directed to the Municipality.

13. TERM OF AGREEMENT

13.1 This Agreement shall run for an indeterminate period.

13.2 The Parties further agree that this Agreement shall be considered null and void if the benefits to either Party are nullified by changes in directives or regulations issued by the C.R.T.C.; legislation or regulation enacted by the Province of Ontario; withdrawal by Bell Canada of the Next Generation 9-1-1 Authority Service Agreement.; or the termination or expiration of the Bell Next Generation 911 Authority Service Agreement between Bell Canada and the County.

14. AMENDMENTS

14.1 This Agreement may be amended upon consent of the Parties as evidenced in writing refusal of such shall not be unreasonably denied.

15. NOTICE

15.1 Any notice required to be given or served on either Party under this Agreement must be in writing and delivered personally, electronically, by facsimile transmission or by prepaid registered mail, addressed to the County or the Municipality respectively as set out below. Service of notice is effective on the next business day following the date of personal delivery, electronic delivery and facsimile transmission or, in the case of a registered letter, on the third business day following the date of mailing.

To the County at:

County of Huron
1 Court House Square
Goderich, ON N7A 1M2
Attention:
Phone: (519) 524-8394
Fax:
Email:

To the Municipality at:

Xxxx

Xxxx

or to such other addresses as either Party may from time to time designate by written notice to the other Party.

16. ENTIRETY

16.1 This Agreement and the Annexes attached form the entirety of the understanding between the Parties and supersede any other understanding or agreement, collateral, oral or otherwise, regarding the provision of 9-1-1 services, existing between the Parties at the date of execution of this Agreement. No supplement, modification, waiver or termination of this Agreement shall be binding unless executed in writing by the Party to be bound. No waiver of any provision of this Agreement shall be deemed to or shall constitute a waiver of any other provisions, whether or not similar, nor shall such waiver constitute a continuing waiver unless expressly provided.

17. CONFIDENTIALITY

17.1 The County shall maintain the confidentiality of and shall not, except as required in order to carry out services, at any time during or following the term of this Agreement, use, disclose, release or permit the disclosure or release of any information disclosed by the Municipality or any information communicated to or acquired by the County during the course of providing services without obtaining the prior written consent of the Municipality.

17.2 The Municipality shall maintain the confidentiality of and shall not, except as required in order to carry out services, at any time during or following the term of this Agreement, use, disclose, release or permit the disclosure or release of any information disclosed by the County or any information communicated to or acquired by the Municipality during the course of providing services without obtaining the prior written consent of the County.

17.3 The Parties agree that any information collected or exchanged between the Parties, pursuant to the terms of this Agreement, is subject to the provisions of M.F.I.P.P.A., as amended.

18. COMPLIANCE

18.1 Both Parties shall comply with all legislation, regulations, bylaws, rules, orders, and other requirements enacted or imposed by federal, provincial, municipal or other government bodies, agencies, tribunals, or other authorities which may be applicable to this Agreement.

19. GOVERNING LAW

19.1 This Agreement is governed by the laws of Ontario and the applicable laws of Canada.

20. NATURE OF RELATIONSHIP

20.1 Nothing in this Agreement will be construed so as to imply a partnership between the Parties.

21. FURTHER ASSURANCES

21.1 The Parties agree that they will at their own expense from time to time, and at all times, upon every reasonable request of the other, promptly make, do, execute and deliver or cause to be made, done, executed and delivered all such further acts, deeds or assurances as may be reasonably required for purposes of implementing the matters contemplated by this Agreement and establishing and protecting the rights, interests and remedies intended to be created by this Agreement.

22. SURVIVAL

22.1 Section 10.0 shall survive any termination, expiration, nullification etc. of this Agreement.

23. ANNEXES

23.1 The following Annex/Annexes shall be incorporated in and form part of this Agreement:

- (a) Annex A – Municipal E.S.Z.'s and Fire Polygons served by the P.P.S.A.P. and S.P.S.A.P.
- (b) Annex B - Municipal S.P.S.A.P. Providers

24. COUNTERPARTS

24.1 This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original but all of which taken together constitute an original understanding and will be effective when one or more counterparts have been signed by each of the Parties.

25. EXECUTION

25.1 This Agreement may be executed in any number of counterparts with the same effect as if all Parties had signed the same document. All counterparts shall be construed together and shall constitute one and the same Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement under the hands of their authorized signing officers in that behalf on the date indicated.

This Agreement is effective on the date stated in the introductory clause.

IN WITNESS WHEREOF each of the [Municipality of XXX] and the Corporation of the County of Huron have caused this Agreement to be signed and delivered by its duly authorized representative:

For the [municipality name]:

Name:
Position:

For the County:

Name: Susan Cronin
Position: County Clerk

Name: Glen McNeil
Position: Warden

DRAFT

**Annex A - Municipal E.S.Z.'s and Fire Polygons served by the P.P.S.A.P. and
S.P.S.A.P.**

DRAFT

Annex B - Municipal S.P.S.A.P. Providers

DRAFT

MUNICIPALITY OF MORRIS-TURNBERRY

REPORT TO COUNCIL

TO: Mayor and Council
PREPARED BY: Trevor Hallam, CAO/Clerk
DATE: July 5, 2022
SUBJECT: Council Meeting Schedule

RECOMMENDATION

That Council give consideration to adjusting the times and structure of meetings to improve efficiency and cost effectiveness by holding the first meeting of the month in person during office hours, and the second meeting of the month virtually in the evening.

BACKGROUND

Council currently meets regularly on the first and third Tuesdays of each month at 7:30 pm, in person, with some limited exceptions as needed.

Council last considered the effectiveness of the dates and times for regular Council meetings through a staff report from the then Administrator/Clerk-Treasurer in 2019, and opted to maintain the established schedule. With the benefit of data gathered while experiencing changes to meeting structure and how municipal business has been conducted over the last two years, information regarding the experience of neighbouring municipalities who have made changes to their meeting times and structures, and the approach of a new term of Council, staff recommend that consideration be given to adjusting the timing and structure of meetings once more.

COMMENTS

This report will consider the benefits and drawbacks of in person and virtual meetings, as well as day and evening meetings. Times throughout the report are in the HH:MM format, and the data provided is derived from 3 years of meeting statistics from January 1, 2019, through to December 31, 2021.

As Council is aware, the Municipality relies on the expertise and knowledge of staff through reports and recommendations to inform the decisions of Council and conduct regular business. While staff reports can be provided without the author present, allowing Council to have access to staff's in-depth knowledge and expertise on a given subject matter can be invaluable in making informed decisions. Reduced attendance of staff at Council meetings can present some challenges in this respect. There have been numerous occasions where the CAO/Clerk or another has presented a report on behalf of another staff person, but was not able to adequately answer the questions of Council given a lack of intimate knowledge of the subject matter. The result is that an additional clarifying report must be returned to a future meeting of Council. Further clarifying reports tie up considerable staff time in their drafting, as well as time during the Council meeting to which they are returned. The efficiency with which the Municipality can conduct business is negatively affected when matters that are presented to Council are delayed two to three weeks depending on the meeting schedule because a follow up report is required before council can provide direction to staff or make a decision. In the majority of cases, follow up reports can be avoided with the attendance of the staff person who authored the report. An additional benefit of having staff provide reports directly to Council at meetings is the potential for improved relationships, familiarity and trust between staff and Council.

While the attendance of staff at Council meetings is beneficial, there are also financial implications to having staff attend. The decision to minimize staff attendance at meetings is a conscious one, as there are increased costs associated with compensating staff for their time outside of office hours. Staff attending meetings are compensated using the meeting rate established under the Council Pay by-law, with the exception of the CAO/Clerk who is compensated as if for regular hours. The additional hours accumulated are used on a time in lieu of compensation basis, the result being that for any hours banked, the CAO/Clerk will be absent from the office and inaccessible for the corresponding amount of time during regular office hours. Staff costs and banked hours for the period reviewed have been calculated and are as follows:

	Regular Meetings	Special Meetings	Cost to Municipality for staff to attend	Hours banked by CAO/Clerk (or ACT)	Planner Attendance	Other Consultant Attendance
2019	23	7	\$4,510.98	150:14	10	18
2020	22	3	\$3,585.72	69.47	9	7
2021	21	5	\$4,296.90	56.15	12	4

The amounts above are indicative of the cost of having staff attend meetings after hours only when necessary, with the CAO/Clerk providing many reports for other staff if it is anticipated that the need for additional information will be minimal. Were Council meetings held during office hours, staff would receive no additional compensation, and would be available to address Council and answer questions more readily.

Another variable that contributes to the cost and effectiveness of Council meetings is their length. An analysis of the length of meetings shows a large difference when comparing virtual and in person meetings. While the length of meetings does vary based on the business on the agenda, virtual regular meetings have been consistently shorter:

	Average Meeting Length	Cumulative Meeting Hours	Number of meetings
In Person	2 hours 48 minutes	103 hours 52 minutes	28
Virtual	1 hour 38 minutes	86 hours 44 minutes	39

Considering these figures exclude any time required for Council, staff and the public to travel to and from the office to attend Council Chambers, virtual meetings may be a more efficient use of time for all concerned. The small size of Council Chambers is also a limiting factor for in person meetings when anticipating high meeting attendance numbers from the public.

Shorter meetings are more cost effective, while showing no evidence of decreased effectiveness and no reduction in the ability of the Municipality to conduct business. Staff and Council are paid a lower rate to be at meetings that are under two hours, with staff only being compensated if the meeting is outside of office hours. Costs to the municipality for regular virtual meetings have been an average of \$494 per meeting for Council and \$171 per meeting for staff other than the CAO/Clerk, while in person meeting costs have averaged \$610 per meeting for Council and \$165 per meeting for staff. The increased attendance and therefore higher cost for staff to attend virtual meetings is estimated to be due to the relative ease of attending virtually to provide reports as opposed to the option of having a report presented by the CAO/Clerk at an in person meeting. Virtual meetings make it easier and more efficient for staff to attend only for the amount of time required to give their report.

As with meeting length, public involvement and attendance varies based on the nature of business on the agenda alone. In 2019 the municipality dealt with issues such as the Property Standards by-law which had increased public interest and engagement, and in early 2020 Provincial Orders kept Council from considering many planning matters which would usually lead to meetings with a high level of public attendance and engagement. For the period reviewed average public attendance at was 2.73 people per in person meeting, and 2.15 people per virtual meeting. Given the reduced number of public meetings during the height of COVID restrictions, the difference in attendance between in person and virtual meetings is relatively minor.

Call to order times are another factor in the effectiveness of Council meetings. Using the meeting length averages above, an in person meeting beginning at 7:30pm would not adjourn until 10:18 pm. Starting the meeting earlier, for example 5:30 pm, would put an average adjournment time at 8:18 pm, leading to less fatigue and more business being conducted during hours when Council and staff are alert and more engaged.

Staff have also conducted a survey of the meeting times of neighbouring municipalities for reference. Those who have included daytime meetings cite the benefits of staff attendance and cost savings, and of those listed two are considering changes to either partially virtual or daytime meetings at the staff level for reasons similar to those in this report.

Municipality	Meeting 1	Time	Meeting 2	Time
Ashfield Colborne Wawanosh	First Tuesday	9:00 AM	Third Tuesday	9:00 AM
Bluewater	First Monday	6:30 PM	Third Monday	6:30 PM
Central Huron	First Monday	5:00 PM	Third Monday	5:00 PM
Goderich	First Monday	4:00 PM	Third Monday	4:00 PM
Howick	First Tuesday	9:00 AM	Third Tuesday	7:00 PM
Huron County	First Wednesday	9:00 AM	Third Wednesday	9:00 AM
Huron East	First Tuesday	7:00 PM	Third Tuesday	7:00 PM
Huron Kinloss	Second Tuesday	6:00 PM	Fourth Tuesday	6:00 PM
Morris-Turnberry	First Tuesday	7:30 PM	Third Tuesday	7:30 PM
North Huron	First Monday	6:00 PM	Third Monday	6:00 PM
South Bruce	First Monday	6:00 PM	Third Monday	6:00 PM
South Huron	First Monday	6:00 PM	Third Monday	6:00 PM
West Perth	First Monday	7:00 PM	Third Monday	7:00 PM

Options for the timing and structure of meetings for the 2022-2026 term of Council include but are not limited to:

1. Make no change to the time or place of meetings.
2. Change meeting time to an earlier evening time while maintaining all meetings in person.
 - This would be more convenient for any who are required to or wish to attend Council meetings and would allow for more business to be conducted during periods of higher alertness, but no benefit is expected in terms of the cost of meetings or length of meetings.
3. Change to two day-time meetings while maintaining all meetings in person.
 - Council will receive better information in a more timely manner as staff are available to give reports and answer questions without extra cost to the municipality. Planners, engineers and other consultants can attend during their normal work hours. Members of the public may be less likely to attend and participate in council meetings due to work or other commitments during the day, and Councilors may not be able to take time from their regular employment to attend day meetings.
4. Adopt a mixed approach with one meeting a month in the evening and one during the day.
 - Staff reports and other routine matters can be handled during the day meeting, public meetings, planning and drainage matters can be held during the evening meeting.
5. An added consideration to any of the above options is to include one virtual and one in person meeting a month. Virtual meetings can be more accessible to a wider variety of people as travel to the municipal office is not required. Virtual hosting can also be beneficial during the times of the year when driving conditions can be unpredictable or unsafe.

Staff recommend an approach that takes advantage of the lower cost and improved access to information for Council of daytime meetings and the efficiency and accessibility of virtual meetings through the following approach: Establish one regular meeting on the first Tuesday of the month, in person, during office hours. Effort would be made during agenda and project planning to have this as the meeting at which all staff reports and related business will be scheduled. This will allow Council access to all staff for the presentation of reports and answering questions without any additional cost to the Municipality for staff attendance. For the second meeting, continue to hold it on the third Tuesday of the month in the evening, but change to hosting the meeting virtually rather than in person. This will allow for more convenient public access to Council meetings that include planning matters, drainage matters, and other matters where public input and participation is required.

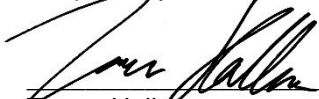
ATTACHMENTS

None.

OTHERS CONSULTED

Kim Johnston, Deputy Clerk

Respectfully submitted,



Trevor Hallam,
CAO/Clerk

MUNICIPALITY OF MORRIS-TURNBERRY

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Shorter meetings are more cost effective, while showing no evidence of decreased effectiveness and no reduction in the ability of the Municipality to conduct business. Staff and Council are paid a lower rate to be at meetings that are under two hours, with staff only being compensated if the meeting is outside of office hours. Costs to the municipality for regular virtual meetings have been an average of \$494 per meeting for Council and \$171 per meeting for staff other than the CAO/Clerk, while in person meeting costs have averaged \$610 per meeting for Council and \$165 per meeting for staff. The increased attendance and therefore higher cost for staff to attend virtual meetings is estimated to be due to the relative ease of attending virtually to provide reports as opposed to the option of having a report presented by the CAO/Clerk at an in person meeting. Virtual meetings make it easier and more efficient for staff to attend only for the amount of time required to give their report.

As with meeting length, public involvement and attendance varies based on the nature of business on the agenda alone. In 2019 the municipality dealt with issues such as the Property Standards by-law which had increased public interest and engagement, and in early 2020 Provincial Orders kept Council from considering many planning matters which would usually lead to meetings with a high level of public attendance and engagement. For the period reviewed average public attendance at was 2.73 people per in person meeting, and 2.15 people per virtual meeting. Given the reduced number of public meetings during the height of COVID restrictions, the difference in attendance between in person and virtual meetings is relatively minor.

Call to order times are another factor in the effectiveness of Council meetings. Using the meeting length averages above, an in person meeting beginning at 7:30pm would not adjourn until 10:18 pm. Starting the meeting earlier, for example 5:30 pm, would put an average adjournment time at 8:18 pm, leading to less fatigue and more business being conducted during hours when Council and staff are alert and more engaged.

Staff have also conducted a survey of the meeting times of neighbouring municipalities for reference. Those who have included daytime meetings cite the benefits of staff attendance and cost savings, and of those listed two are considering changes to either partially virtual or daytime meetings at the staff level for reasons similar to those in this report.

Municipality	Meeting 1	Time	Meeting 2	Time
Ashfield Colborne Wawanosh	First Tuesday	9:00 AM	Third Tuesday	9:00 AM
Bluewater	First Monday	6:30 PM	Third Monday	6:30 PM
Central Huron	First Monday	5:00 PM	Third Monday	5:00 PM
Goderich	First Monday	4:00 PM	Third Monday	4:00 PM
Howick	First Tuesday	9:00 AM	Third Tuesday	7:00 PM
Huron County	First Wednesday	9:00 AM	Third Wednesday	9:00 AM
Huron East	First Tuesday	7:00 PM	Third Tuesday	7:00 PM
Huron Kinloss	Second Tuesday	6:00 PM	Fourth Tuesday	6:00 PM
Morris-Turnberry	First Tuesday	7:30 PM	Third Tuesday	7:30 PM
North Huron	First Monday	6:00 PM	Third Monday	6:00 PM
South Bruce	First Monday	6:00 PM	Third Monday	6:00 PM
South Huron	First Monday	6:00 PM	Third Monday	6:00 PM
West Perth	First Monday	7:00 PM	Third Monday	7:00 PM

Options for the timing and structure of meetings for the 2022-2026 term of Council include but are not limited to:

1. Make no change to the time or place of meetings.
2. Change meeting time to an earlier evening time while maintaining all meetings in person.
 - This would be more convenient for any who are required to or wish to attend Council meetings and would allow for more business to be conducted during periods of higher alertness, but no benefit is expected in terms of the cost of meetings or length of meetings.
3. Change to two day-time meetings while maintaining all meetings in person.
 - Council will receive better information in a more timely manner as staff are available to give reports and answer questions without extra cost to the municipality. Planners, engineers and other consultants can attend during their normal work hours. Members of the public may be less likely to attend and participate in council meetings due to work or other commitments during the day, and Councilors may not be able to take time from their regular employment to attend day meetings.
4. Adopt a mixed approach with one meeting a month in the evening and one during the day.
 - Staff reports and other routine matters can be handled during the day meeting, public meetings, planning and drainage matters can be held during the evening meeting.
5. An added consideration to any of the above options is to include one virtual and one in person meeting a month. Virtual meetings can be more accessible to a wider variety of people as travel to the municipal office is not required. Virtual hosting can also be beneficial during the times of the year when driving conditions can be unpredictable or unsafe.

Staff recommend an approach that takes advantage of the lower cost and improved access to information for Council of daytime meetings and the efficiency and accessibility of virtual meetings through the following approach: Establish one regular meeting on the first Tuesday of the month, in person, during office hours. Effort would be made during agenda and project planning to have this as the meeting at which all staff reports and related business will be scheduled. This will allow Council access to all staff for the presentation of reports and answering questions without any additional cost to the Municipality for staff attendance. For the second meeting, continue to hold it on the third Tuesday of the month in the evening, but change to hosting the meeting virtually rather than in person. This will allow for more convenient public access to Council meetings that include planning matters, drainage matters, and other matters where public input and participation is required.

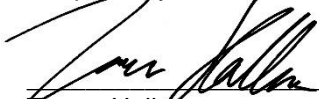
ATTACHMENTS

None.

OTHERS CONSULTED

Kim Johnston, Deputy Clerk

Respectfully submitted,



Trevor Hallam,
CAO/Clerk

Ontario Land Tribunal

655 Bay Street, Suite 1500
Toronto ON M5G 1E5
Telephone: (416) 212-6349
Toll Free: 1-866-448-2248
Website: olt.gov.on.ca

**Tribunal ontarien de
l'aménagement du territoire**

655 rue Bay, suite 1500
Toronto ON M5G 1E5
Téléphone: (416) 212-6349
Sans Frais: 1-866-448-2248
Site Web: olt.gov.on.ca



Date: June 27, 2022

Gregory Stewart,
18 Courthouse Square
Goderich, ON N7A 3Y7
Email: gstewart@dmlaw.ca

Re: OLT Case Number(s): OLT-21-001676 and OLT-21-001646
OLT Lead Case Number: OLT-21-001676
Municipality/Upper Tier: Morris-Turnberry/Huron
Subject Property Address: Plan 410, Park Lot 77
Reference Number(s): BL 38-2021 and C53-2021

Subsection 34(23.1) of the Planning Act provides;

(23.1) If all appeals to the Tribunal under subsection (19) are withdrawn and the time for appealing has expired, the Tribunal shall notify the clerk of the municipality and the decision of the council is final and binding.

And Subsection 53(29) of the Planning Act provides;

(29) If all appeals under subsection (19) or (27) are withdrawn and the time for appealing has expired, the Tribunal shall notify the council or the Minister, as the case may be, and subject to subsection (23), the decision of the council or the Minister to give or refuse to give a provisional consent is final.

I am writing to advise that the appeal by Jordan Errington was withdrawn by letter dated June 27, 2022.

There are no outstanding appeals in this matter, and our file is closed.

Yours truly;

Euken Lui
Acting Registrar

Encl.

C.C.

Jordan Errington, jordanauto89@gmail.com

John McKercher, jmckercher@devereauxmurray.ca

OLT Coordinator, MMA



NOTICE OF PUBLIC MEETING

Proposed Official Plan Amendment for a Five-Year Review of the North Huron Official Plan

The Township of North Huron has initiated a review of its Official Plan. After ongoing community consultation and revisions to Official Plan policies and mapping, the Council of the Township of North Huron has scheduled a public meeting to gather public input before they may consider adopting the draft amendment.

The North Huron community is invited to participate in an in-person Public Meeting on **Monday, July 25th at 6:00pm at the North Huron Town Hall Theatre, 274 Josephine St., Wingham, Township of North Huron.** During this time, the Township of North Huron will be considering the Official Plan amendment.

The Proposed Changes:

A number of policy and mapping changes are proposed in the Official Plan Amendment as a result of the review. Key proposed changes include:

- Permitting additional residential units in both urban and agricultural settings;
- Promoting a wider range of residential building types to address local housing shortages;
- Updating mapping for urban settlement, agricultural, natural environment, and flood hazard areas.

If approved, these changes would apply across the Township of North Huron.

Have Your Say:

Any person may attend the public meeting and/or make written or verbal representation, either in support of or in opposition to the proposed official plan amendment.

1. You may submit comments, objections, or concerns by email to Hanna Holman, Planner, at hholman@huroncounty.ca or to Carson Lamb, Clerk, at clamb@northhuron.ca.
2. You may speak during the public meeting. Individuals are encouraged to submit their comments before the meeting for consideration.

Comments and opinions submitted on the Official Plan Review, including the originator's name and address, become part of the public record, and may be viewed by the general public and may be published in a planning report and Council agenda. We encourage written comments to be submitted by **July 19, 2022**.

Learn More:

Further information regarding the Official Plan Review can be found on the Huron County Connects project page at: connectedcountyofhuron.ca/north-huron-official-plan-review

Your Rights:

If a person or public body does not make oral submissions at a public meeting or make written submissions to the Township of North Huron before the Official Plan Amendment is adopted, the person or public body is not entitled to appeal the decision of the County of Huron to the Ontario Land Tribunal.

If a person or public body does not make an oral submission at a public meeting or make written submissions to the Township of North Huron before the Official Plan Amendment is adopted, the person

or public body may not be added as a party to the hearing of an appeal before the Ontario Land Tribunal unless, in the opinion of the Tribunal, there are reasonable grounds to add the person or public body.

Dated at the Township of North Huron

This 28th day of June, 2022

274 Josephine Street, Wingham ON

N0G 2W0

(519)-357-3550

Good News

Congratulations to our New Superintendent!



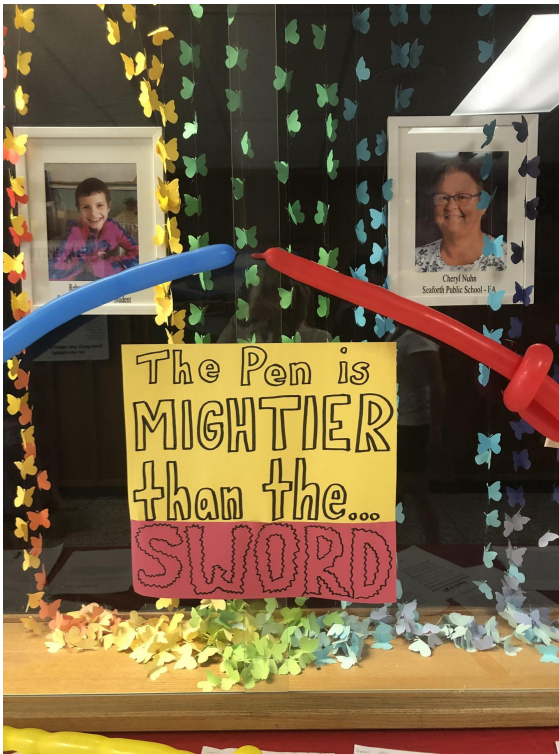
The Trustees were happy to announce the appointment of System Principal Kathy Boyd to the position of Superintendent of Education. Kathy brings an extensive background teaching in elementary grades. She was Vice-Principal at Listowel Central PS and then Principal at Listowel Eastdale PS and Listowel Central PS, and opened and established North Perth Westfield ES. Kathy has been System Principal of Student Support Services since April 2021, working with schools to support portfolios including mental health and well-being and safe schools. This past year, Kathy facilitated the Collaborative Professionalism Committee with representatives from all of our union partner groups, system and school administrators and managers, and she has served on various committees for the board over the years, and represented AMDSB at various conferences. Kathy replaces Superintendent Jeff Bruce and will assume her new position on August 1, 2022. Congratulations Kathy!

Congratulations AMDSB Graduates!!

All across the district, schools celebrated Grade 8 and 12 graduates, as well as celebrating Grade 6 students who were leaving the school for Grade 7. A variety of celebrations were hosted, many of which were in person in a traditional format. A few notable highlights include Brookside PS' guest speaker, 2020 Olympian and Brookside alum, Julie-Anne Staehli, John Nater (MP Perth-Wellington) as a special guest for Mitchell District High School students, and a commemorative quilt for Grade 6s at Upper Thames ES. Watch a [video compilation](#) of some of the highlights.

Seaforth PS Hosts Successful Literacy Night

Superintendent Creery was pleased to share that on June 15, Seaforth PS hosted their first literacy night. It was organized by Principal Donna Gregus, Vice-Principal Sarah Gerber and music teacher Heather Dawe. The event was very well attended, and Superintendent Creery reported that several parents complemented the engaging evening and were thrilled to come together in person.



AMDSB Celebrates National Indigenous Peoples Day



Superintendent Kate Creery reported that schools across the board celebrated National Indigenous Peoples Day in a variety of ways. The Education Centre hosted a lunch featuring Indigenous tacos.

Foundation for Education Hosts Charity Golf Tournament - Join Today!

Trustee Schenk reported that the Foundation for Education is still hoping to recruit golfers to register for their charity golf tournament happening on July 22-24. Participants can golf anytime over that weekend. They can choose to play a regular game of golf with their foursome or go with the best ball format. The cost is \$75 and includes 18 holes, a power cart and a chance at a door prize. They are inviting golfers to come out to enjoy a day of golf while also enhancing the life of a local student. Tickets can be purchased on the [Foundation for Education website](#).

GDCI Receives Sanofi Biogenius Grant

Trustee Carmichael was proud to announce that [Goderich District Collegiate Institute was recently awarded the second annual Sanofi Biogenius Grant](#). This \$50,000 grant will be put towards building a hands-on STEM learning centre in S Hall. Robotics, VR, 3D Printers, and more are in the plans! Can't wait to see this dream come to life!

Summer Learning Opportunities

Superintendent Jeff Bruce was pleased to report that there has been a significant response to our Summer Lexia and Summer Empower programs this year. Approximately 600 students will be involved with the Summer Lexia program, which runs for six weeks this summer. Teachers will monitor and check in with students throughout the summer. Also, 52 students have committed to the Summer Empower program. This is a two-week extension program for students who are currently in the Empower reading program. Teachers will meet with small groups of students for synchronous online lessons. Many thanks to Principals Marie McDade and Missy Pfaff for their leadership of these summer programs.

A Long-Awaited and Welcome Return to Athletics

Communications Manager Chera Longston reported that schools were abuzz with athletic activity throughout the spring. Sports including rugby, track and field, softball, tennis, badminton, soccer, field hockey, basketball and more were occurring and students were thrilled to be back! Student athletes had success at the local, regional and provincial levels and we are so proud of their achievements!



Board Approves the 2022/2023 Budget

The Board of Trustees received and approved the 2022/2023 Budget at the meeting on Tuesday, June 28. The operating budget presented includes Operating Revenues and Transfers of Reserves of \$225,935,727 and Operating Expenses of the same. The capital budget approved includes Capital Spending of \$22,211,806. While the operating budget is compliant with the Ministry of Education's budget compliance rule, the total operating deficit for the 2022/2023 year is expected to be \$1,647,181. The approved Budget package can be viewed on the [Budget & Finances page of the Board Website](#).

North Perth Boundary Review Project Update

Superintendent Cheri Carter provided a brief recap of the recommendations that Trustees received at the [April 26](#) and [May 24](#), 2022 Board Meetings. Since the May meeting, Board staff have received a few additional questions from the North Perth community, which have been answered on the [North Perth Boundary Review page](#). For this meeting, staff provided a recommendation for Trustees to consider. The Trustees approved the following motion:

That the Avon Maitland District School Board direct Board Staff to begin the implementation process to adjust the following boundaries effective for the 2023/2024 school year:

- *Adjust the boundary between Listowel Eastdale Public School and North Perth Westfield Elementary School, as defined in area #1 of the map presented in the [April 26 report](#)*
- *Adjust the boundary between Listowel Eastdale Public School and Elma Township Public School as defined in area #2 of the map presented in the [April 26 report](#)*

And,

Continue to follow [Administrative Procedure 302: Student Enrolment](#) when considering renewal of existing Border Crossers and future Border Crossers.

Full details of this information will be communicated to the North Perth community in the coming days.

Staff Presentations

Director's Work Plan Update (*I Am Prepared*)

Superintendent Paul Langis presented an update on the Leadership Development series for

Principals and Vice-Principals focused on enhancing their personal leadership skills. Topics for this year included: Influence and Inspirational Leadership, Reflection and Feedback, Communication and Having Difficult Conversations, and Psychological Safety and Teaming. He also provided a brief update on the Emerging Leadership Development Program that welcomed over 60 staff members interested in future leadership opportunities.

Student Trustee Update

Student Trustees Elizabeth Benoit and Abigail Peel were not able to attend tonight's meeting. Their update was provided in [video format](#). Abigail will be returning as Student Trustee along with Alex Dolmage. Elizabeth has graduated and we wish her all the best in her future endeavours!

Chair's Update

Acting Chair Rothwell reported that she attended the Specialist High Skills Major (SHSM) certification at the Pathway Innovation Center (PIC) located within Stratford Intermediate School on June 1 (day one of two days). Superintendent Morris shared that they partnered with Apple Canada to offer two days of SHSM certifications for our business and ICT SHSM, as well as Energy and Environment SHSM students from across the Board. Pathways Advisory Committee meetings indicated that the industry partners asked us to build in more "soft skills", and this session was coordinated in direct response to that request. Workshops offered included: crafting a visual narrative; developing a digital portfolio; art of the invitation; podcasting: the power of voice; 3D design, and robotics. An open house for the PIC is being planned for the end of August and Acting Chair Rothwell hopes to host a Board meeting at this location.

She also expressed recognition to outgoing Superintendent Jeff Bruce who is taking a position as Superintendent with Thames Valley DSB (from where he originated) effective August of this year. She indicated that the trustees wished to recognize his contributions to Avon Maitland and wish him well in the next step of his career!

Acting Chair Rothwell also participated in Superintendent interviews with Acting Vice Chair Hunking, wrote letters to thank staff, bus operators and drivers, retirees and years of service recipients, and student senators/trustees. She also wrote letters of congratulations to MPP Matthew Rae (Perth-Wellington) and MPP Lisa Thompson (Huron-Bruce). Finally, she wished all of those in attendance a relaxing, restful and enjoyment-filled summer!

Senior Staff Updates

Learning Services Team Helps Support Ukrainian Refugees

Superintendent Jeff Bruce reported that the English Language Learner team is helping to welcome students (and families) from Ukraine. They are ensuring that the families are connected with appropriate programs and benefit from a supportive transition to AMDSB schools. A number of schools are welcoming students, including: Goderich PS, Sprucedale PS, Central Perth ES, Howick PS, St. Marys DCVI, Stratford District SS, Little Falls PS, and Elma PS.

Future Board Meetings

This was the last meeting for the 2021/2022 school year. Meetings will resume in September and dates will be posted on the [Board Meeting page](#).

Future Meetings/Events with Trustee Representation

Meetings will resume in September.

**Outstanding Action Items
Open Session**

July 5

Meeting Date	Action Item	Action By	Current Status	Last Action Date	Next Step
November 10, 2021	Zoning/OP Housing Friendly Amendments	CAO/Planning	Planning Department preparing Zoning By-Law and OP amendments. New planner has been made aware this is a priority to have in place in 2022	June 15, discussed timing of amendments with Planner.	Report to Council with suggested amendments.
May 17, 2022	MVCA Memorandum of Understanding	CAO	Presented for Council consideration July 5		None.
June 21, 2022	FCM Asset Management Grant	CAO	Application being prepared		Submit application and report back to council on result when available.
June 21, 2022	Cross Border Servicing Agreement	CAO	In contact with North Huron Staff regarding Council feedback		Report back to Council when update is available.



**CORPORATION OF THE MUNICIPALITY OF MORRIS-
TURNBERRY BY-LAW NO. 26-2022**

Being a by-law to authorize the Mayor and Clerk to execute and affix the Corporate Seal to an agreement between the Municipality of Morris-Turnberry and the Maitland Valley Conservation Authority.

WHEREAS Section 9 of the Municipal Act 2001, S.O. 2001, c. 25 provides that a municipality has the capacity, rights, powers, and privileges of a natural person for the purpose of exercising its authority under that or any other Act;

AND WHEREAS the Council of the Corporation of the Municipality of Morris-Turnberry deems it necessary and desirable to enter into and execute an agreement between the Municipality of Morris-Turnberry and the Maitland Valley Conservation Authority with regard to all services provided to the Municipality by the Maitland Valley Conservation Authority;

NOW THEREFORE, the Council of the Corporation of the Municipality enacts as follows:

1. That the Mayor and Clerk of the Municipality are hereby authorized to execute and affix the Corporate Seal to enter into the Agreement between the Corporation of the Municipality of Morris-Turnberry and the Maitland Valley Conservation Authority, attached hereto Schedule 'A', and forming part of this by-law; and
2. That this by-law shall come into effect on the day it is passed.

Read a FIRST and SECOND time this 5th day of July 2022

Read a THIRD time and FINALLY PASSED this 5th day of July 2022

Mayor, Jamie Heffer

Clerk, Trevor Hallam

AGREEMENT FOR SERVICES

THIS AGREEMENT dated this 16th day of June 2022.

BETWEEN:

THE MAITLAND VALLEY CONSERVATION AUTHORITY
(hereinafter called "Authority")

OF THE FIRST PART

– and –

THE CORPORATION OF THE TOWNSHIP OF NORTH HURON, THE CORPORATION OF THE TOWNSHIP OF MAPLETON, THE CORPORATION OF THE TOWN OF MINTO, THE CORPORATION OF THE TOWN OF GODERICH, THE CORPORATION OF THE MUNICIPALITY OF HURON EAST, THE CORPORATION OF THE MUNICIPALITY OF WEST PERTH, THE CORPORATION OF THE MUNICIPALITY OF NORTH PERTH, THE CORPORATION OF THE TOWNSHIP OF HURON KINLOSS, THE CORPORATION OF THE MUNICIPALITY OF SOUTH BRUCE, THE CORPORATION OF THE MUNICIPALITY OF MORRIS TURNBERRY, THE CORPORATION OF THE MUNICIPALITY OF CENTRAL HURON, THE CORPORATION OF THE TOWNSHIP OF HOWICK, THE CORPORATION OF THE TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH
(Hereinafter called the "Members")

OF THE SECOND PART

WHEREAS, pursuant to Ontario Regulation 686/21 Conservation Authorities are authorized to charge a levy to their members for delivery of mandatory services under the Regulation;

AND WHEREAS pursuant to Ontario Regulation 687/21 Conservation Authorities are required to enter into an agreement to levy members for services provided to Members other than mandatory services;

AND WHEREAS the Conservation Authority is prepared to provide certain non-mandatory services to its Members;

AND WHEREAS the Members wish to avail themselves of these services and to pay the amount levied for the services;

NOW THEREFORE, in consideration of the terms of this Agreement and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. The Authority agrees to provide to the Members the services outlined in the Inventory of Services and Programs attached hereto as Schedule "A".
2. The Members agree to be charged a levy for such services in accordance with the levy stated in Schedule "A" to be apportioned among the Members.
3. The Authority will not add to or delete from the services or programs funded through the levy without first consulting with the Members. Any such change would require an amendment to this Agreement agreed to by all parties.
4. The parties will maintain the current annual approval process for increasing the levy and budget (i.e. weighted vote based upon current value assessment in the watershed for approval of the levy).
5. The Members will continue to support the current Inventory of Services and Programs throughout the period of this Agreement.
6. This Agreement will be for a Term of four (4) years commencing on the date of the signature by the last of the parties.

7. This Agreement may be executed in any number of counterparts and by the parties hereto by separate counterparts, each of which when so executed and delivered shall be an original but such counterparts together shall constitute one and the same instrument.”

SIGNED SEALED AND DELIVERED THIS 16th DAY OF JUNE 2022.

THE MAITLAND VALLEY CONSERVATION
AUTHORITY

Per:



Chair –

Per:



General Manager Secretary Treasurer –

I/we have the authority to bind the Corporation

Schedule "A"

Category 1: Mandatory Services: Risk of Natural Hazards: Flood and Erosion Safety Services

a) Preparedness

- i) Flood & or Erosion Risk Emergency response planning with municipalities
- ii) Flood & or erosion risk mapping updates
- iii) Administration of Development, Interference, Alteration Regulation in flood prone, shoreline, river valleys, dynamic beaches, wetlands, and watercourses
- iv) Plan input and review support to municipalities regarding natural hazard policies and development applications.

b) Monitoring

- i) Year-round monitoring and data acquisition for river levels, snowpack, precipitation, and runoff potential
- ii) Maintenance of all rainfall and streamflow monitoring equipment
- iii) Development and maintenance of flood forecasting software and hardware
- iv) Monitoring bluff collapse, gully, and toe erosion along the Lake Huon shoreline

c) Flood and Erosion Control Infrastructure: (Listowel Flood Control Structures, Goderich Bluffs Stabilization Project and McGuffin Gully Erosion Control Project)

- i) Annual inspections
- ii) Annual minor maintenance
- iii) Major maintenance planning in conjunction with the

d) Response

- i) provide flood and or erosion warnings and updates to municipalities regarding flood and or erosion events

Required Services: Ontario Regulation 686/21

Identification of Additional & or Enhanced Services to Meet Regulatory Requirements

1. Managing the risk posed by the natural hazards within their jurisdiction, including flooding, erosion, dynamic beaches, hazardous sites, hazardous lands, low water, or drought conditions. This program or service shall be designed to:

Develop an awareness of areas important for the management of natural hazards (e.g., wetlands, rivers or streams, shoreline areas, unstable soils, etc.)

Understand risks associated with natural hazards and how they will change as the climate warms

Manage risks associated with natural hazards

Promote public awareness of natural hazards

- MVCA will need to develop a more comprehensive communications, education, and outreach program to meet these regulatory requirements. Currently MVCA does not have the resources to provide a program to the extent required.
- MVCA will need identify where we can find the expertise needed to develop a better understanding of the impact of climate change on natural hazards and low water or drought conditions in the watershed.

2. Ice management services (preventative or remedial) as appropriate and as supported by a CA-approved ice management plan, including:

- MVCA is required to develop an ice management plan for the mouth of the Nine Mile River and the Maitland River plan on or before December 31, 2024

3. Infrastructure: Operation, maintenance, repair and decommissioning of Flood and Erosion Control Structures:

- MVCA is required to develop an operational and asset management plan for the Goderich Bluffs, Listowel Conduit and McGuffin Gully by December 31, 2024

4. Review of applications and issuance of permits under section 28 and 28.0.1 of the Conservation Authorities Act, including associated enforcement activities

- MVCA will require some additional technical support for reviewing applications for development in flood and erosion prone areas along the Lake Huron shoreline.

Category 1: Mandatory Services: Conservation Areas:

Conservation Areas Services:

Includes the management, development, and protection of significant natural resource lands, features, and infrastructure on authority owned property. MVCA has 28 conservation areas with a land area of 4,600 acres (1,862 hectares).

Service Components:

a) Management & Development of Authority Lands

- Build resiliency and demonstrate good resource management on 28 Conservation areas ranging from day-use parklands, wetlands, and forest tracts
- i) Lands and Infrastructure - inspections, maintenance, and enforcement
 - Identification and removal of hazards to reduce liability
 - Maintain essential infrastructure and dispose of surplus items
 - Manage public use that is compatible with the land and enforcement of regulations.
- ii) Water Control Structures - inspections, maintenance, and operations
 - Operation of recreational dams following regulatory requirements
 - Develop and monitor funding agreements with municipalities where dams are located for maintenance and major repairs
- iii) Forest Management
 - Implement activities identified in managed forest plans to improve forest health including harvesting, tree planting and monitoring of woodlots.
 - Removal of invasive species and monitoring of disease and pests
- iv) Administration
 - Development of policies and procedures for conservation area use

b) Land Acquisition:

- i) Review land donations or purchases for conservation purposes
 - Identify benefits and concerns for potential land acquisitions for members direction.

c) Leasing & Agreements on Authority Lands

- i) Review agreements that are compatible with the land use
- ii) Monitoring of agreements

Required Services: Ontario Regulation 686/21

Identification of Additional & or Enhanced Services to Meet Regulatory Requirements

1. A conservation area strategy, prepared on or before December 31, 2024 for all lands owned or controlled by the authority. The strategy will include:
 - Objectives to provide decision making on lands including acquisition and disposition.
 - An assessment of how lands owned may augment natural heritage and integrate with provincial, municipal, or publicly accessible lands and trails.
2. A land inventory, prepared on or before December 31, 2024, including:
 - Identification of all parcel details including historical information, location, and surveys
 - Designation of land use categories based on activities or other matters of significance related to the parcel.
3. Programs and services to ensure that the authority performs its duties, functions, and responsibilities to administer regulations made under section 29 of the Conservation Authorities Act.
 - Enforcement of Regulation 688/21: Rules of conduct in conservation areas. Enhanced enforcement and control measures are required to limit trespassing of unauthorized vehicles on conservation area lands.

Category 1: Watershed Monitoring & Reporting	Required Services: Ontario Regulation 686/21
Services & Programs: Category 1: Mandatory Program	Identification of Additional & or Enhanced Services to Meet Regulatory Requirements
Monitoring and Reporting i) Provincial Water Quality Monitoring Network ii) Ground Water - Monitoring Network	Programs and services to support the authority's functions and responsibilities related to the development and implementation of a watershed-based resource management strategy on or before December 31, 2024.

<p>Drinking Water Source Protection: Category 1 Mandatory Service</p>	<p>Additional Regulatory Requirements: Ontario Regulation 686/21</p>
<p>Services</p> <p>a) Governance - Leadership:</p> <ul style="list-style-type: none"> • Maitland Source Protection Authority; Source Protection Committee; Joint Management Committee • Maintenance of local source protection program, including issues management <p>b) Communications:</p> <ul style="list-style-type: none"> • Promote the local source protection program <p>c) Program Implementation:</p> <ul style="list-style-type: none"> • Ongoing support of local source protection program • Implementation of Source Protection Plan policies where applicable • Review of local applications / planning proposals / decisions in vulnerable areas to ensure source protection is considered <p>d) Technical Support:</p> <ul style="list-style-type: none"> • Support the preparation of amendments to local assessment report and source protection plan to incorporate regulatory changes as well as technical assessment completed for new and expanding drinking water systems 	<p>Additions or Enhancements needed to Existing Program</p> <p>No additional changes need to be made to existing services.</p>

- | | |
|--|--|
| <ul style="list-style-type: none">• Issuance of confirmation notices to system owners under the Clean Water Act O. Reg. 287/07, as required, for new or altered drinking water systems.• Review technical information received regarding changes to the landscape, such as new transport pathways in WHPA and IPZ, to determine if assessment reports or source protection plans should be revised. | |
|--|--|

Note: This program is currently funded by the Ministry of Environment, Conservation and Parks.

Category 1: Mandatory Services:	Required Services: Ontario Regulation 686/21
Corporate Services:	Identification of Additional and or Enhanced Services to Meet Regulatory Requirements
<ul style="list-style-type: none"> a) Governance & Leadership Responsibilities (MVCA-MSPA) <ul style="list-style-type: none"> i) Setting Priorities & Policies ii) Financial Planning & Monitoring iii) Services and Project Development iv) Conservation Ontario Council & Committees v) Reporting to Member Municipalities b) Administration / Human Resources / Equipment <ul style="list-style-type: none"> i) Human Resources Planning and Administration ii) Workspace and Equipment Management iii) Records Retention and Management iv) Compliance with Legislation related to Employment, Health & Safety, Accessibility etc. c) Financial Management <ul style="list-style-type: none"> i) Bookkeeping, Investments, Banking, Financial Planning ii) Tangible Capital Asset Management iii) Management of Financial Agreements with External Funders d) Communications <ul style="list-style-type: none"> i) Communications strategy development and implementation e) Information Technology and Geographic Information System <ul style="list-style-type: none"> i) Provide IT and GIS support 	No additional requirements.

<p>f) Vehicles, Equipment & Infrastructure:</p> <ul style="list-style-type: none"> i) Provide & maintain vehicles and equipment ii) Maintain & upgrade buildings and related infrastructure 	
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Category 2: Huron Clean Water Project	Agreement: County of Huron-MVCA-ABCA
County of Huron	
<ul style="list-style-type: none"> - Watershed Stewardship extension staff from ABCA and MVCA deliver this project on behalf of the County of Huron: - assist landowners in the County of Huron to apply for funding for eligible stewardship projects - assist landowners with applications for funding - present the projects to the review committee for approval - review projects upon completion 	<p>The County of Huron has retained the services of project of the Ausable Bayfield Conservation Authority and the Maitland Valley Conservation Authority to deliver this project.</p> <p>Agreement between the County of Huron and ABCA & MVCA signed: May 4, 2016</p>

Category 3: Watershed Stewardship Extension, Forestry & Monitoring Services

Provide stewardship services to watershed landowners and municipalities that will:

- a) Help improve the health and resiliency of rivers, soil, and forests.
- b) Help keep soil and nutrients on the land and out of watercourses

2. Restoration of Natural Areas:

- Projects include: floodplains, river valleys, riparian areas, forests and wetlands
- Technical support for landowners
- Support with funding applications
- Coordination of planting projects **is funded by a user fee to cover the cost of this service.**
- Purchase trees and shrubs in bulk for municipalities and residents **is funded by a user fee to cover the cost of this service.**
- Benefits include:
 - Increases natural areas on the landscape
 - Improves water quality
 - Climate change resilience

3. Soil & Water Conservation:

- Rural Storm Water Management and Cover crops
- Technical support for landowners
- Support with funding applications
- Benefits: reduces soil erosion & improves soil health for agricultural production

4. Watershed Stewardship Programs and Projects:

- Delivery of rural water quality programs for Huron and Wellington Counties
- Leverage other funding to support our extension work
- Develop proposals and necessary partnerships to secure funding
- Key examples are Healthy Lake Huron and Middle Maitland Restoration Project

5. Watershed Health Monitoring and Reporting:

- Monitor and report on the health of forests, rivers, and soil.
- Used to help focus our extension services.
- Used to determine extent and type of stewardship work needed in the watershed
- This information is required to support the need for funding for stewardship projects when applying to Provincial and Federal Agencies

Category 3: Falls Reserve Campground Service

- MVCA provides overnight and seasonal camping at the Falls Reserve Conservation Area The conservation area is also funded by user fees charged for day use to the area.
- The campground is funded through user fees.
- The revenue raised is used to fund the operations of the campground. Any surplus revenue is used to fund infrastructure upgrades and major maintenance to equipment and facilities.

Category 3: Wawanosh Campground Service

- MVCA provides seasonal camping at the Wawanosh Campground. This campground is located on the Wawanosh Valley Conservation Area.
- Fees from seasonal camping and day use fund the operation of the campground.
- Any surplus revenue raised is used to fund infrastructure upgrades and major maintenance to facilities.



CORPORATION OF THE MUNICIPALITY OF MORRIS-TURNBERRY

BY-LAW NO. 27-2022

Being a by-law to confirm the proceedings of the Council of the Corporation of the Municipality of Morris-Turnberry, for its meeting held on July 5th, 2022.

WHEREAS Section 9 of the *Municipal Act 2001, S.O. 2001, c. 25* provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

AND WHEREAS Section 5 (3) of the *Municipal Act 2001, S.O. 2001, c. 25* provides that a municipal power, including a municipality's capacity, rights, powers and privileges under Section 9, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise;

AND WHEREAS it is deemed expedient that the proceedings of the Council of the Corporation of the Municipality of Morris-Turnberry for the July 5th, 2022, meeting be confirmed and adopted by By-law;

NOW THEREFORE, the Council of the Corporation of the Municipality of Morris-Turnberry enacts as follows:

1. The action of the Council of the Corporation of the Municipality of Morris-Turnberry at its meeting held the 5th day of July 2022, in respect of each recommendation contained in the Minutes and each motion and resolution passed and other action taken by the Council of the Corporation of the Municipality of Morris-Turnberry at the meeting, is hereby adopted and confirmed as if all such proceedings were expressly embodied in this By-Law; and
2. The Mayor and proper officials of the Corporation of the Municipality of Morris-Turnberry hereby authorize and direct all things necessary to give effect to the action of the Council to the Corporation of the Municipality of Morris-Turnberry referred to in the preceding section thereof;
3. The Mayor and CAO/Clerk are authorized and directed to execute all documents necessary in that behalf and to affix thereto the Seal of the Corporation.

Read a FIRST and SECOND time this 5th day of July 2022

Read a THIRD time and FINALLY PASSED this 5th day of July 2022

Mayor, Jamie Heffer

Clerk, Trevor Hallam