

# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH SEPTEMBER 6, 2023 COUNCIL MEETING VIRTUAL MEETING BY ELECTRONIC PARTICIPATION & IN-PERSON AT THE PUSLINCH COMMUNITY CENTRE –

# 23 BROCK RD S, PUSLINCH

Register in advance for this webinar:

https://us02web.zoom.us/webinar/register/WN\_P63RL8PiTGKdmz\_zFvb\_ZA After registering, you will receive a confirmation email containing information about joining the webinar. Or join by phone: +1 778 907 2071 or +1 438 809 7799 or +1 587 328 1099 or +1 613 209 3054 or +1 647 374 4685 or +1 647 558 0588 Webinar ID: 886 4541 6211 Passcode: 260636 International numbers available: https://us02web.zoom.us/u/kdKesXXhNX

# <u>AGENDA</u>

DATE: Wednesday September 6, 2023 CLOSED MEETING: 1:00 P.M. REGULAR MEETING: 10:00 A.M.

### ≠ Denotes resolution prepared

- 1. Call the Meeting to Order
- 2. Roll Call
- 3. Moment of Reflection
- 4. Confirmation of the Agenda ≠

### 5. Disclosure of Pecuniary Interest & the General Nature Thereof

### 6. Consent Agenda ≠

- 6.1 Adoption and Receipt of the Minutes of the Previous Council and Committee Meetings:
  - 6.1.1 August 16, 2023 Council Minutes
  - 6.1.2 July 11, 2023 Committee of Adjustment Minutes
  - 6.1.3 July 11, 2023 Planning and Development Advisory Committee Minutes
- 6.2 Ministry of Infrastructure Red Tape Reduction Measures
- 6.3 Ministry of Municipal Affairs and Housing Building Faster Fund



# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH SEPTEMBER 6, 2023 COUNCIL MEETING VIRTUAL MEETING BY ELECTRONIC PARTICIPATION & IN-PERSON AT THE PUSLINCH COMMUNITY CENTRE – 23 BROCK RD S, PUSLINCH

- 6.4 Ministry of Natural Resources and Forestry Streamlining of Approvals under the Aggregate Resources Act and Supporting Policy
- 6.5 Ministry of the Environment Conservation and Parks Moving to a Project List under the Environmental Assessment Act
- 6.6 City of Guelph Notice of Complete Application Public Meeting Decision Agency 585 Hanlon Creek
- 6.7 City of Guelph Notice of Complete Application 55 Teal Dr
- 6.8 Village of Merrickville-Wolford Proposed Provincial Planning Statement
- 6.9 Municipality of St. Charles Provincial Planning Statement
- 6.10 City of Stratford Strengthen Municipal Codes of Conduct
- 6.11 Northumberland County Legislative Amendments to Improve Municipal Codes of Conduct and Enforcement
- 6.12 Municipality of Powassan Legislative Amendments to Improve Municipal Codes of Conduct and Enforcement
- 6.13 City of Port Colborne Short Term Rentals
- 6.14 Municipality of Dutton Dunwich Special Powers and Duties of Heads of Council
- 6.15 Town of Blind River Special Powers and Duties of Heads of Council
- 6.16 Municipality of St. Charles Bill 5, Stopping Harassment and Abuse from Local Leaders Act
- 6.17 Municipality of St. Charles National Housing Strategy
- 6.18 Municipality of St. Charles Support Municipalities Retaining Surplus from Tax Sales
- 6.19 Town of Amherstburg Violence Against Women
- 6.20 Township of Emo Black Ash Tree
- 6.21 Township of Greater Madawaska The Women of Ontario Say No
- 6.22 Township of Severn Climate Emergency Just Transition Transfer
- 6.23 Township of the Archipelago Request to Province to Establish a Regulatory Framework for global technology platforms affecting municipal rentals
- 6.24 Municipality of Shuniah Changes to Municipal Freedom of Information and Privacy Protection Act
- 6.25 Mill Creek Pit July Monthly Monitoring Report 5738
- 6.26 Grand River Conservation Authority August General Meeting

# 7. Delegations ≠

- 7.1 Specific Interest (Items Listed on the Meeting Agenda)
  - 7.1.1 None
- 7.2 General Interest (Items Not Previously Listed on the Meeting Agenda)7.2.1 None



# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH SEPTEMBER 6, 2023 COUNCIL MEETING VIRTUAL MEETING BY ELECTRONIC PARTICIPATION & IN-PERSON AT THE PUSLINCH COMMUNITY CENTRE – 23 BROCK RD S, PUSLINCH

### 8. Public Meetings

8.1 September 14, 2023 Open House held at 23 Brock Rd S. in-person and by electronic participation through Zoom regarding the following matter:

Local Business Open House

8.2 September 27, 2023 Public Information Meeting held at 23 Brock Rd S. in-person and by electronic participation through Zoom regarding the following matter:

Proposed 2024 User Fees and Charges

### 9. Reports ≠

### 9.1 Puslinch Fire and Rescue Services

9.1.1 None

### 9.2 Finance Department

9.2.1 Report FIN-2023-026 – 2024 Proposed Cost of Living Adjustment≠

### 9.3 Administration Department

- 9.3.1 Report ADM-2023-045 ERO Posting 019-7545 7475 Mclean Road East & ERO Posting 019-7435 Lot 26 & 27 Concession 7≠
- 9.3.2 Report ADM-2023-046 2023 Budget Review Process≠
- 9.3.3 Report ADM-2023-047 Road Management Plan Final Draft≠

# 9.4 Planning and Building Department

- 9.4.1 None
- 9.5 Roads and Parks Department
  - 9.5.1 None
- 9.6 Recreation Department
  - 9.6.1 None

### 10. Correspondence ≠

10.1 Mill Creek Pit (5738) – 2022 Ecological Monitoring Report and 2022 Annual Monitoring Report

10.1.1 2022 Ecological Monitoring Report

10.1.2 Peer Review of 2022 Monitoring Report and 2022 Monitoring Report

(Posted separately on the Township's website)



# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH SEPTEMBER 6, 2023 COUNCIL MEETING VIRTUAL MEETING BY ELECTRONIC PARTICIPATION & IN-PERSON AT THE PUSLINCH COMMUNITY CENTRE – 23 BROCK RD S, PUSLINCH

# 11. Council reports ≠

- 11.1 Mayor' Updates
- 11.2 Council Member Reports (verbal or written updates from members who sit on boards/committees)

# 12. **By-laws** ≠

12.1 First, Second and Third Reading 12.1.1 None

# 13. Announcements

# 14. Closed Session – Pursuant to Section 239 of the Municipal Act, 2001

- 14.1 Confidential report regarding advise that is subject to solicitor-client privilege, including communications necessary for that purpose Telecommunications Tower
- 14.2 Confidential verbal report regarding advice that is subject to solicitor-client privilege, including communications necessary for that purpose Ontario Land Tribunal matter
- 14.3 Confidential verbal report regarding advice that is subject to solicitor-client privilege, including communications necessary for that purpose Ontario Land Tribunal matter

# 15. Business Arising from Closed Session

- 16. Notice of Motion
- 17. New Business
- 18. Confirmatory By-law ≠
  18.1 BL2023-037 Confirm By-law September 6, 2023 ≠
- 19. Adjournment ≠



# MINUTES

DATE: August 16, 2023 CLOSED MEETING: Directly following section 13 Announcements COUNCIL MEETING: 10:00 A.M.

The August 16, 2023 Council Meeting was held on the above date and called to order at 10:00 a.m. via electronic participation and in-person at 23 Brock Rd S, Puslinch.

### 1. CALL THE MEETING TO ORDER

### 2. ROLL CALL

### ATTENDANCE:

Councillor Sara Bailey Councillor Russel Hurst Councillor Jessica Goyda Councillor John Sepulis Mayor James Seeley - absent

### **STAFF IN ATTENDANCE:**

- 1. Glenn Schwendinger, CAO absent
- 2. Mike Fowler, Director of Public Works, Parks and Facilities
- 3. Mary Hasan, Director of Finance/Treasurer
- 4. Courtenay Hoytfox, Municipal Clerk
- 5. Justine Brotherston, Deputy Clerk
- 6. Mirela Oltean, Deputy Treasurer
- 7. Tom Mulvey, Fire Chief
- 8. Andrew Hartholt, CBO

### 3. MOMENT OF REFLECTION

### 4. CONFIRMATION OF THE AGENDA

Resolution No. 2023-244:

Moved by Councillor Hurst and Seconded by Councillor Bailey

### That Council approves the August 16, 2023 Agenda as circulated; and

That Council approves the additions to the agenda as follows:

Consent Item 6.1.4 Questions received from Council seeking additional information and the corresponding responses provided by staff regarding the August 16, 2023 Council agenda; and

That Council approve the changes to the order of business as follows:

- Advance item 9.3.3 Report ADM-2023-039- Township Roads Management Plan to directly following Disclosure of Pecuniary Interest; and
- Advance item 9.3.5 Report ADM-2023-041 Puslinch Land Acknowledgment to directly following item 9.3.3; and
- Advance the Closed Session to 1:00 pm

### CARRIED

#### 5. DISCLOSURE OF PECUNIARY INTEREST & THE GENERAL NATURE THEREOF:



None

# 6. CONSENT AGENDA

6.1 Adoption and Receipt of the Minutes of the Previous Council and Committee Meetings:

- 6.1.1 July 12, 2023 Council Minutes
  - 6.1.2 June 13, 2023 Committee of Adjustment Minutes
  - 6.1.3 June 13, 2023 Planning and Development Advisory Committee Minutes
- 6.1.4 August 16, 2023 Council questions and Staff Responses

6.2 City of Guelph - Notice of Case Management Conference - Zoning By-Law and Official Plan

6.3 City of Guelph - Notice of Decision - 585 Hanlon Creek Boulevard

6.4 City of Guelph - Notice of Adoption - Delegation of Authority Official Plan Amendment 91

6.5 Ministry of Natural Resources and Forestry - Proposal to Amend Three Regulated Manuals under the Crown Forest Sustainability Act

6.6 Ministry of Natural Resources and Forestry - Technical Bulletin - Data Survey and Mapping Specifications

- 6.7 Dufferin Aggregates June 2023 Monthly Monitoring Report Mill Creek Pit 5738
- 6.8 Town of Caledon Illegal Land Use Enforcement Update

6.9 City of Toronto - Planning and Housing Committee - Comments on Provincial Planning Statement

6.10 Federation of Northern Ontario Municipalities - Housing Resolution - Seeking Support

6.11 Town of Parry Sound - Call for Housing & Protection of Water Resources

6.12 Municipality of Chatham Kent - Municipal Freedom of Information and Protection of Privacy Act - Time for Change

6.13 Municipality of South Huron - Time for change of Municipal Freedom of Information and Protection of Privacy Act

6.14 Municipality of Wawa - Ontario to maintain coverage for chronic pain treatments

6.15 City of Ottawa - Donation of Decommissioned Ambulance to St. John Ambulance

6.16 Town of Amherstburg - Local Emergency Response System and Gaps in Healthcare Regarding Code Red 6.17 City of Port Colborne - The Right to Repair Movement

6.18 Greater Napanee - Legislative Amendments to Improve Municipal Codes of Conduct and Enforcement

6.19 Municipality of Grey Highlands - Municipal Codes of Conduct

6.20 Municipality of Huron Shores - Code of Conduct

6.21 Northumberland County - Municipal Codes of Conduct and Enforcement

6.22 Municipality of North Perth - Reducing Municipal Insurance Costs

6.23 Halton Hills - Reducing Municipal Insurance Costs

6.24 Municipality of Chatham-Kent - Support Bill 5 - Stopping Harassment and Abuse by Local Leaders Act

6.25 Halton Hills - School Bus Stop Arm Cameras

6.26 Municipality of Grey Highlands - School Bus Arms

6.27 South Stormont - School Bus Stop Arm Cameras

6.28 Canadian Federation of Independent Business - Construction Mitigation Letter – Puslinch

### Resolution No. 2023-245:

Moved by Councillor Goyda and Seconded by Councillor Hurst

That the Consent Agenda items with the exception of items 6.8, 6.12, 6.13, 6.19, 6.22 & 6.23 and 6.28 listed for AUGUST 16, 2023 Council meeting be received for information.

CARRIED

Council recessed from 12:16pm to 12:25pm

Roll Call Councillor Goyda Councillor Sepulis Councillor Bailey Councillor Hurst Mayor Seeley - absent



Resolution No. 2023-246:

Moved by Councillor Hurst and Seconded by Councillor Bailey

That the Consent Agenda item 6.8 listed for AUGUST 16, 2023 Council meeting be received for information; and

Whereas Township of Puslinch Council supports the resolution from the Town of Caledon regarding illegal land use enforcement;

That Council direct staff to send a support resolution accordingly.

CARRIED

Resolution No. 2023-247:

Moved by Councillor Hurst and Seconded by Councillor Goyda

That the Consent Agenda item 6.19 listed for AUGUST 16, 2023 Council meeting be received for information; and

Whereas Township of Puslinch Council supports the resolution from the Municipality of Grey Highlands regarding legislation to strengthen Municipal Code of Conducts to account for workplace safety and harassment; and

That Council direct staff to send a support resolution accordingly to AMO.

CARRIED

Moved by Councillor Hurst and Seconded by Councillor Bailey

That the Consent Agenda item 6.22 & 6.23 listed for AUGUST 16, 2023 Council meeting be received for information; and

That Council direct staff to continue to investigate and focus on potential opportunities to provide relief to the rising insurance costs.

CARRIED

Resolution No. 2023-249:

Moved by Councillor Goyda and Seconded by Councillor Hurst

That the Consent Agenda item 6.12 & 6.13 listed for AUGUST 16, 2023 Council meeting be received for information; and

Whereas Township of Puslinch Council supports the resolution from the Municipality of Chatham-Kent regarding the need for changes and updating to the Municipal Freedom of Information and Protection of Privacy Act;

That Council direct staff to send a support resolution accordingly.

CARRIED

Resolution No. 2023-250:

Moved by Councillor Bailey and Seconded by Councillor Hurst

That the Consent Agenda item 6.28 listed for AUGUST 16, 2023 Council meeting be received; and

That Council direct staff to forward the letter to the County Economic Development Department and to engage in discussion on how local businesses can be better supported during road construction projects that impact business operations and report back to Council.

CARRIED



### 7. **DELEGATIONS:**

- (a) Specific Interest (Items Listed on the Meeting Agenda) 7.1.1 None
- 7.2 General Interest (Items Not Previously Listed on the Meeting Agenda) 7.2.1 None

### Council recessed from 11:42pm to 11:52pm

Roll Call Councillor Goyda Councillor Sepulis Councillor Bailey Councillor Hurst Mayor Seeley - absent

### 8. PUBLIC MEETINGS:

8.1 September 14, 2023 Open House held at 23 Brock Rd S. in-person and by electronic participation through Zoom regarding the following matter:

Local Business Open House

8.2 September 27, 2023 Public Information Meeting held at 23 Brock Rd S. in-person and by electronic participation through Zoom regarding the following matter:

Proposed 2024 User Fees and Charges

### 9. **REPORTS:**

9.1 Puslinch Fire and Rescue Services

9.1.1 None

### 9.2 Finance Department

9.2.1 Report FIN-2023-025 - 2024 Proposed User Fees and Charges

Resolution No. 2023-251:	Moved by Councillor Hurst and
	Seconded by Councillor Bailey

THAT Report FIN-2023-025 entitled 2024 Proposed User Fees and Charges be received; and

That Council directs staff to proceed with holding a Public Meeting on September 27, 2023 at 7:00 p.m. to obtain public input on the proposed User Fees and Charges By-law as outlined in Schedule A to Report FIN-2023-025; and

That Council direct staff to select approximately 10 'high frequency' user fees and perform a benchmark analysis to demonstrate that the Township's fees are comparable to similar municipalities for the public open house presentation; and

That staff report back to Council with the results of the Public Meeting.

CARRIED

9.3 Administration Department



9.3.1 Report ADM-2023-037 Arkell Trails Parking and Speeding Update

Resolution No. 2023-252:

Moved by Councillor Goyda and Seconded by Councillor Hurst

That Report ADM-2023-037 entitled Arkell Trails Parking and Speeding Update be received; and

Whereas the City of Guelph is undertaking consultation regarding the Arkell Spring Ground Management Plan for potential future uses; and

Whereas there are currently two access points for trail systems including one on Arkell Road and one on Watson Road S; and

Whereas there is currently insufficient parking causing vehicles to park on the shoulder of the roads;

That Council direct staff to send correspondence to the City of Guelph requesting that parking options be included in their considerations of the Arkell Spring Ground Management Plan; and

That Council direct staff to send similar correspondence to the GRCA requesting parking options be considered to the Watson Rd Trails if/when upgrades or maintenance to the area are planned.

CARRIED

9.3.2 Report ADM-2023-038 Sign Variance Request - The Donkey Sanctuary of Canada

Resolution No. 2023-253:

Moved by Councillor Hurst and Seconded by Councillor Goyda

That Report ADM-2023-038 entitled Sign Variance Request – 6981 Concession 4, Puslinch – The Donkey Sanctuary of Canada be received; and

That Council approve the request for relief from the Sign By-law 09/91 to permit a sign with a reduced setback of 11.28 metres from the centre of line of the road allowance.

### CARRIED

9.3.3 Report ADM-2023-039- Township Roads Management Plan

<u>Resolution No. 2023-254:</u>	Moved by Councillor Hurst and
	Seconded by Councillor Goyda

That Report ADM-2023-039 regarding the Township of Puslinch Road Management Plan be received for information.

CARRIED

Resolution No. 2023-255:	Moved by Councillor Hurst and
	Seconded by Councillor Goyda

That staff incorporate Council's final comments into the third draft to be presented at the September 6, 2023 Council meeting as follows:

• Add clarification regarding the purpose of Township roads given the Township road network is primarily used for commuter traffic based on its proximity to the 401 and



neighbouring urban centres (i.e. not designed for walking, cycling) as road network consists of rural platform roads with narrow shoulders;

- Include wording that the current gravel to asphalt conversion criteria are identified as Phase 1 and that the criteria will be reevaluated once the priority list of roads have been converted to asphalt;
- Include a statement in the Introduction section clarifying that the RMP is a guidance document for the Township for the purposes of:
  - 1. maintaining and operating the Township's road network;
  - 2. budgeting for the Township's road network;
  - 3. responding to concerns and requests regarding the Township's road network; and
- $\circ$  Add the wording 'subject to budget considerations' to recommendation no. 1; and
- Clarify recommendation no. 9 regarding section 4.9 Requests for Conversions to Hard-Surface to state that section 4.9 is not in effect until such time that Council passes the associated by-law; and
- $\circ$  Add the wording 'subject to budget considerations' to recommendation no. 10; and
- $\circ$  Add the wording 'subject to budget considerations' to recommendation no. 11; and
- Add the wording ' a speed review for all roads over 60km per/hour' and 'subject to budget considerations including estimated signage and maintenance costs as a phased approach' to recommendation no. 15

CARRIED

9.3.4 Report ADM-2023-040 Site Alteration Agreement 7176 Concession 1

### Resolution No. 2023-256:

Moved by Councillor Goyda and Seconded by Councillor Hurst

That Report ADM-2023-040 entitled Site Alteration Agreement – 7176 Concession 1 be received; and,

That Council gives three reading to By-law 2023-34 being a By-law to authorize the entering into of a Site Alteration Agreement with John Baranski; and further,

That prior to the execution of the agreement by the Mayor and Clerk, the applicant submit securities in a form satisfactory to the Township in the amount of \$21,000.00.

### CARRIED

9.3.5 Report ADM-2023-041 Puslinch Land Acknowledgment

Resolution No. 2023-257:	Moved by Councillor Hurst and
	Seconded by Councillor Bailey

That Report ADM-2023-041 entitled Township of Puslinch Land Acknowledgement & Procedural By-law Amendment be received; and

That Council endorse the Township of Puslinch Land Acknowledgement report prepared by ASI; and

That Council direct staff to forward the report and supporting documents to the Heritage Committee for information and to develop potential public engagement opportunities and report back to Council; and

That Council direct staff to forward the report and supporting documents to the Historical Society for information and for distribution to the public; and



That Council request that the local references noted by Council be included in the report; and

That Council direct staff to develop a webpage dedicated to the Township Land Acknowledgment report and supporting information; and

That Council give three (3) readings to By-law No. 2023-035 being a by-law to amend the Township Procedural By-law No. 2022-046.

CARRIED

9.3.6 Report ADM-2023-042 2022-2026 Committee of Adjustment Goals and Objectives Report

Resolution No. 2023-258:	Moved by Councillor Hurst and
	Seconded by Councillor Goyda

That Report ADM-2023-042 entitled 2022-2026 Committee of Adjustment Goals and Objectives be received; and,

That Council approve the 2022-2026 Committee of Adjustment Goals and Objectives as presented.

### CARRIED

9.3.7 Report ADM-2023-043 2022-2026 Planning and Development Advisory Committee Goals and Objectives Report

Resolution No. 2023-259:

Moved by Councillor Goyda and Seconded by Councillor Bailey

That Report ADM-2023-043 entitled 2022-2026 Planning and Development Advisory Committee Goals and Objectives be received; and,

That Council approve the 2022-2026 Planning and Development Advisory Committee Goals and Objectives as presented.

### CARRIED

9.3.8 Report ADM-2023-044 384 Crawley Road City of Guelph Site Plan Control Application

Resolution No. 2023-260:Moved by Councillor Hurst and<br/>Seconded by Councillor Goyda

That Report ADM-2023-044 entitled Crawley Road City of Guelph Site Plan Control Application (SPA) Review be received; and

That Council direct staff to submit the peer reviews attached as Schedule "A" through Schedule "C" to the City of Guelph for consideration when reviewing the SPA application for completeness in accordance with the Planning Act; and

That Council direct staff to forward the application materials and peer review to the Source Water Protection team for comments as recommended by the Township Hydrogeologist.

### CARRIED

9.4 Planning and Building Department



9.4.1 Report BLD-2023-003 Report for Council (Q2 2023)

Resolution No. 2023-261:

Moved by Councillor Hurst and Seconded by Councillor Bailey

That Report BLD-2023-003 entitled Building Department Second Quarter Update – April to June 2023 be received.

CARRIED

9.5 Emergency Management

9.5.1 None

9.6 Roads and Parks Department

9.6.1 None

9.7 Recreation Department

9.7.1 Report REC-2023-003 - Mid-Term Pilot Program Results

Reso	lution	No.	2023-262:

Moved by Councillor Bailey and Seconded by Councillor Hurst

That Report REC-2023-003 entitled Roller Skating Free Drop-in Time at the ORC Rink – Mid-Term Pilot Program Results be received; and

That staff report back to Council on the results of the pilot program at the end of the 2023 season including number of participants that attended; and

That Schedule A to Report REC-2023-003 outlines the number of participants during the free drop-in fluid schedule and free drop-in scheduled programming for the Roller Skating Pilot Program at the ORC rink from May 22, 2023 to July 30, 2023; and

That Council direct staff to implement a mandatory requirement for hockey helmets for youth 16 years and younger; and

That Council direct staff to extend the Tuesday Inline shinny program to 5:00 pm only if possible with no budget impacts; and

That the following free drop in schedule at the ORC Rink be offered for the remainder of the 2023 season based on the number of participants outlined in Schedule A to Report REC-2023-003:

Month	Tuesday -	Thursday -	Sunday -
	Inline Shinny	Roller-skating	Roller-skating
May to June and	3:00 p.m. to	3:00 p.m. to	10:00 a.m. to
September to	4:30 p.m.	4:30 p.m.	1:00 p.m.
November –			
weather dependent			
July and August	11:00 a.m. to	3:00 p.m. to	10:00 a.m. to
	12:30 p.m.	4:30 p.m.	1:00 p.m.

### CARRIED



### 10. CORRESPONDENCE:

10.1 County of Wellington – Progress Report #9 regarding Official Plan Review

Resolution No. 2023-263:

Moved by Councillor Goyda and Seconded by Councillor Hurst

That Council receives correspondence item 10.1 County of Wellington – Progress Report #9 regarding Official Plan Review for information.

#### CARRIED

10.2 County of Wellington OPP Detachment - Response to Council Resolution 2023-123

Resolution No. 2023-264:

Moved by Councillor Bailey and Seconded by Councillor Hurst

That Council receives correspondence item 10.2 County of Wellington OPP Detachment – Response to Council Resolution 2023-123 for information; and

That Council direct staff to inquire with the OPP regarding how a speed limit change impacts their service levels and any budget impacts that should be considered; and

That Council direct staff to request that the OPP provide information to Puslinch Council that includes the data collected through OPP complaints and speed data collected through the Black Cat.

### CARRIED

10.3 2022 Ground Water Monitoring and 2022 Ecological and Aquatic Monitoring Report Roszell Pit (625189)

Resolution No. 2023-265:

Moved by Councillor Hurst and Seconded by Councillor Goyda

That Council receives correspondence item 10.3 2022 Ground Water Monitoring and 2022 Ecological and Aquatic Monitoring Report Roszell Pit (625189) for information; and

That Council direct staff to send the report and peer review to the pit operator and the MNRF and request that a response be provided to the Township on actions being taken to address Council's ongoing concerns; and

That Council direct staff to provide the TAPMO delegation materials to Council at an upcoming meeting for consideration.

### CARRIED

10.4 2022 Ground Water Monitoring for Cox Puslinch Pit Northeast Extension (625710)

|--|

Moved by Councillor Hurst and Seconded by Councillor Goyda

That Council receives correspondence item 10.3 2022 Ground Water Monitoring for Cox Puslinch Pit Northeast Extension (625710) for information.

CARRIED

10.5 Highway 6/Hanlon Expressway Midblock Interchange Design-Build Project

<u>Resolution No. 2023-267:</u>	Moved by Councillor Bailey and
	Seconded by Councillor Hurst



That Council receives correspondence item 10.5 Highway 6/Hanlon Expressway Midblock Interchange Design-Build Project for information; and

That Council direct staff to request that the Township Traffic Engineering Consultant be requested to review the design in relation to 'hotspots' as previously directed by Council.

### CARRIED

#### 11. COUNCIL REPORTS:

11.1 Mayor' Updates

11.1.1 None

### 11.2 Council Member Reports

11.2.1 Councillor Bailey gave an update on the Youth Committee's upcoming events at the Fall Fair September 8 & 9 2023; and

11.2.2 Councillor Bailey gave an update on the Community BBQ on September 16, 2023

11.2.3 Councillor Bailey remarked that the Puslinch Minor Ball had a very good season

Resolution No. 2023-268:

Moved by Councillor Goyda and Seconded by Councillor Hurst

### That Council receive the Mayors and Council member updates for information.

### CARRIED

#### 12. BY-LAWS:

12.1.1 BL2023-034 Being a By-law to Authorize Entering into a Site Alteration Agreement with John Baranski

12.1.2 12.1.2 BL2023-035 Being a By-law to amend By-law 2022-046 Township Procedural By-law for Meetings of Council and Committees

Resolution No. 2023-269:

Moved by Councillor Bailey and Seconded by Councillor Hurst

### That the following By-laws be taken as read three times and finally passed in open Council:

12.1.1 BL2023-034 Being a By-law to Authorize Entering into a Site Alteration Agreement with John Baranski

12.1.2 12.1.2 BL2023-035 Being a By-law to amend By-law 2022-046 Township Procedural By-law for Meetings of Council and Committees

CARRIED

Council recessed from 1:00pm-1:05pm

Roll Call Councillor Goyda Councillor Sepulis Councillor Bailey Councillor Hurst Mayor Seeley - absent

### 13. CLOSED SESSION:

Council was in closed session from 1:05 p.m. to 2:00 p.m.



The Clerk stopped the recording and removed all public attendees from the webinar. The webinar was then 'locked' so no new participants are able to join.

Resolution No. 2023-270:	Moved by Councillor Goyda and
	Seconded by Councillor Bailey

That Council shall go into closed session under Section 239 of the Municipal Act for the purpose of:

14.1 Confidential report regarding litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board – Ontario Land Tribunal matter

14.2 Confidential verbal report regarding personal matters about an identifiable individual, including municipal or local board employees and advice that is subject to solicitor-client privilege, including communications necessary for that purpose – Human Resources Matter

14.3 Confidential minutes from previous closed meetings:

14.3.1 May 3, 2023 First Closed Meeting Minutes 14.3.2 May 3, 2023 Second Closed Meeting Minutes 14.3.3 June 14, 2023 14.3.4 July 12, 2023

CARRIED

Resolution No. 2023-271:	Moved by Councillor Bailey and
	Seconded by Councillor Hurst

THAT Council moves into open session at 2:00 pm

CARRIED

Council resumed into open session at 2:00 p.m.

Resolution No. 2023-272:	Moved by Councillor Hurst and	
	Seconded by Councillor Bailey	

That Council receives the:

That Council shall go into closed session under Section 239 of the Municipal Act for the purpose of:

14.1 Confidential report regarding litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board – Ontario Land Tribunal matter

14.2 Confidential verbal report regarding personal matters about an identifiable individual, including municipal or local board employees and advice that is subject to solicitor-client privilege, including communications necessary for that purpose – Human Resources Matter

14.3 Confidential minutes from previous closed meetings:

14.3.1 May 3, 2023 First Closed Meeting Minutes14.3.2 May 3, 2023 Second Closed Meeting Minutes14.3.3 June 14, 202314.3.4 July 12, 2023; and

That staff proceed as directed.

CARRIED

#### 14. BUSINESS ARISING FROM CLOSED SESSION: None

15. NOTICE OF MOTION: None



### 16. NEW BUSINESS:

Resolution No. 2023-273:

Moved by Councillor Goyda and Seconded by Councillor Hurst

Whereas the Agricultural Society has expressed a need for Township support relating to its advertising for the Fall Fair and has specifically requested the Township assist with printing the Fall Fair pamphlets as this costs the organization approximately \$1,100 each year;

That Council direct staff to assist the Agricultural Society by printing the pamphlets utilizing the Township printer and paper supplies on an annual basis.

CARRIED

### 17. ANNOUNCEMENTS:

17.1 None

### 18. CONFIRMATORY BY-LAW:

(a) By-Law to confirm the proceedings of Council for the Corporation of the Township of Puslinch

Resolution No. 2023-274:	Moved by Councillor Hurst and	
	Seconded by Councillor Bailey	

That the following By-law be taken as read three times and finally passed in open Council:

By-Law 2023-036 being a by-law to confirm the proceedings of Council for the Corporation of the Township of Puslinch at its meeting held on the 16 day of August 2023.

CARRIED

### 19. ADJOURNMENT:

Resolution No. 2023-275:

Moved by Councillor Goyda and Seconded by Councillor Bailey

That Council hereby adjourns at 2:25 p.m.

CARRIED

John Sepulis, Alternate Mayor

Courtenay Hoytfox, Clerk



# <u>MINUTES</u>

DATE: July 11, 2023 MEETING: 7:00 p.m.

The July 11, 2023 Committee of Adjustment Meeting was held on the above date and called to order at 7:00 p.m. via electronic participation and in-person at 23 Brock Rd S, Puslinch.

# 1. CALL THE MEETING TO ORDER

# 2. <u>ROLL CALL</u>

# ATTENDANCE:

# PRESENT:

Councillor John Sepulis, Chair Chris Pickard Paul Sadhra Jeffrey Born Dennis O'Connor

# ABSENT:

None

# STAFF IN ATTENDANCE:

Lynne Banks, Secretary/Treasurer Courtenay Hoytfox, Municipal Clerk Joanna Salsberg, Planner, County of Wellington

# 3. MOMENT OF REFLECTION

# 4. CONFIRMATION OF THE AGENDA

Resolution No. 2023-055:

Moved by Committee Member Chris Pickard and



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH JULY 11 2023 COMMITTEE OF ADJUSTMENT MEETING IN-PERSON AND VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

Seconded by Committee Member Paul Sadhra

That the Committee approves the July 11, 2023 Agenda as circulated.

CARRIED.

### 5. <u>DISCLOSURE OF CONFLICT OF INTEREST:</u> None

# 6. APPROVAL OF MINUTES

**6.1 Approval of the Minutes** 6.1.1 June 13, 2023

Resolution No. 2023-056:

Moved by Committee MemberJeff Born and Seconded by Committee Member Dennis O'Connor

That the Committee of Adjustment approves the Minutes from the meeting held June 13, 2023.

CARRIED.

**7. APPLICATIONS FOR MINOR VARIANCE OR PERMISSION** under section 45 of the Planning Act to be heard by the Committee this date:

**7.1** Minor Variance Application D13-LIG – Brian and Sharilyn Light – 4396 Wellington Rd 32, Concession 2, Part Lot 5, Township of Puslinch. ≠

Requesting relief of New Comprehensive Zoning By-Law #23-2018, as amended, from Sections 4.31 c., 12.2, table 12.1 and 12.4 to permit:

- 1. Section 4.31 c., to permit a structure accessory to a dwelling in the Natural Environment zone as approved by the Conservation Authority having jurisdiction.
- 2. Section 12.2, Table 12.1, Permitted Uses Other Zones to permit an accessory structure.
- 3. Section 12.4, Natural Environment Zone Requirements to permit an accessory structure.



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH JULY 11 2023 COMMITTEE OF ADJUSTMENT MEETING IN-PERSON AND VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

- Brian Light, owner of the property, provided an overview of the application.
- There were no questions or comments from the public.
- Chris Pickard asked if there is an existing storage facilty that the Township doesn't have a building permitfor.
- Brian Light advised that the
- Chris Pickard asked if the new structure will be located on the same footprint as the previous structure.
- Mr. Light advised that it will be almost the same footprint but slightly larger.
- Chris Pickard asked if the purpose of the structure is to store farm equipment.
- Brian Light advised that is what it will be used for.
- Dennis O'Connor asked if building permit will address the flow of the water across the property.
- Brian Light noted that the water drainage isn't into the field and doesn't drain into neighbours field at 4422 Wellington Rd. 32.
- Courtenay Hoytfox advised that drainage will be looked at during final inspection for the building permit.
- Dennis O'Connor asked if it addressed the bigger picture for agricultural properties
- Brian Light advised that it will drain south away from the structure.
- Courtenay Hoytfox advised that it is not addressed during building permit but if there is a bigger issue with drainage to a neighbouring lot, it would be addressed through the Township's Property Standards By-law.
- John Sepulis asked if the owner will be removing any trees around the proposed structure area.
- Brian Light advised that most of the trees in that area came down during a windstorm.
- There were no further questions or comments from the Committee.

### Resolution No. 2023-057:

Moved by Committee Member Chris Pickard and Seconded by Committee Member Dennis O'Connor

# That the Committee approve Minor Variance Application D13-LIG with the following Conditions:

1. That any concerns of the Conservation Authority are addressed to the satisfaction of the Township.

2. That a Tree Preservation and Compensation Plan is provided to the Township for the purpose of a peer review, prior to building permit submission, minimizing the removal of



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH JULY 11 2023 COMMITTEE OF ADJUSTMENT MEETING IN-PERSON AND VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

trees to the satisfaction of the Township.

3. That the Owner enter into a Development Agreement with the Township of Puslinch for the purpose of the peer review of the Tree Preservation and Compensation Plan to include third party cost recovery.

### CARRIED.

8. New Business

# 8.1 Committee of Adjustment Report 2023-003 – Proposed 2024 Planning and Development Advisory Committee Meeting Schedule

• Lynne Banks provided an overview of the Report advising that the Committee is mandated to meet the second Tuesday of every month and the dates listed in the report reflect the required dates.

**Resolution No. 2023-058:** Moved by Committee Member Dennis O'Connor and Seconded by Committee Member Chris Pickard

That Report 2023-003 be approved.

CARRIED.

### 9. ADJOURNMENT

Resolution No. 2023-059:

Moved by Committee Member Dennis O'Connor and Seconded by Committee Member Chris Pickard

That the Committee of Adjustment hereby adjourns at 7:25 p.m.

CARRIED.



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH JULY 11, 2023 PLANNING AND DEVELOPMENT ADVISORY COMMITEE MEETING IN-PERSON AND VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

# <u>MINUTES</u>

<u>DATE:</u> MEETING:

July 11, 2023 Following Committee of Adjustment

The July 11, 2023 Planning and Development Advisory Committee Meeting was held on the above date and called to order at 7:33 p.m. via electronic participation and in-person at 23 Brock Rd S, Puslinch.

# 1. CALL THE MEETING TO ORDER

# 2. ROLL CALL

# ATTENDANCE:

# PRESENT:

Councillor John Sepulis, Chair Chris Pickard Paul Sadhra Jeffrey Born Dennis O'Connor

# ABSENT:

None

# **STAFF IN ATTENDANCE:**

Lynne Banks, Secretary/Treasurer Courtenay Hoytfox, Municipal Clerk Joanna Salsberg, Planner, County of Wellington

# 3. MOMENT OF REFLECTION

# 4. <u>CONFIRMATION OF THE AGENDA</u> Resolution No. 2023-060:

Moved by Committee Member Paul Sadhra and Seconded by Committee Member Jeff Born



# THE CORPORATION OF THE TOWNSHIP OF PUSLINCH JULY 11, 2023 PLANNING AND DEVELOPMENT ADVISORY COMMITEE MEETING IN-PERSON AND VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

# That the Committee approves the July 11, 2023 Agenda as circulated.

CARRIED.

### 5. DISCLOSURE OF CONFLICT OF INTEREST:

None

### 6. **DELEGATIONS**

None

### 7. CONSENT AGENDA

### 7.1 Approval of the Minutes

7.1.1 June 13, 2023

Resolution No. 2023-061:

Moved by Committee Member Paul Sadhra and Seconded by Committee Member Jeff Born

That the Planning and Development Advisory Committee approves the Minutes from the meeting held June 13, 2023

CARRIED.

7.2 Other Consent Items None

### 8. NOTICE OF PUBLIC MEETINGS/HEARINGS

None

### 9. <u>REPORTS</u>

9.1. LAND DIVISION (CONSENTS) None



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH JULY 11, 2023 PLANNING AND DEVELOPMENT ADVISORY COMMITEE MEETING IN-PERSON AND VIRTUAL MEETING BY ELECTRONIC PARTICIPATION

# 9.2 ZONING BY-LAW AMENDMENT APPLICATIONS

None

### 10. CORRESPONDENCE

None

### 11. NEW BUSINESS

11.1 - Planning and Development Committee Report 2023-002 – Proposed 2024 Planning and Development Advisory Committee Meeting Schedule

Resolution No. 2023-062:	Moved by Committee Member Dennis O'Connor and
	Seconded by Committee Member Chris Pickard

That Report 2023-002 be approved.

CARRIED.

### 12. ADJOURNMENT

Resolution No. 2023-063:Moved by Committee Member Paul Sadhra and<br/>Seconded by Committee Member Jeff Born

That the Planning and Development Advisory Committee hereby adjourns at 7:37 p.m.

CARRIED.

Ministry of Infrastructure	Ministère de l'Infrastructure	Ontario 😵
Infrastructure Programs and Projects Division	Division des programmes et des projets d'infrastructure	
777 Bay Street, 4 <sup>th</sup> Floor, Suite 425 Toronto, Ontario M5G 2E5	777, rue Bay, 4 étage, Suite 425 Toronto (Ontario) M5G 2E5	
MEMORANDUM TO:	Municipal CAOs	
FROM:	Jill Vienneau Assistant Deputy Minister Infrastructure Program and Projects Divisio	on
DATE:	August 14, 2023	
SUBJECT:	Red Tape Reduction for Designated Broad	band Projects

I am pleased to write to you today to provide an update on our efforts to expand highspeed internet access across the province.

In Spring 2023, Ontario introduced the <u>Less Red Tape, Stronger Economy Act, 2023</u> to help build on the government's efforts to reduce burden for businesses, not-for-profit organizations, municipalities and other provincially regulated entities. The Ministry of Infrastructure would like to highlight two measures related to this initiative:

- 1. Amendments to the *Building Broadband Faster Act, 2021* (BBFA) to address barriers to timely municipal permit approvals and efficient infrastructure data collection.
- 2. Updated guidance to broadband stakeholders through a new version of the *Building Broadband Faster in Ontario Guideline.*

# **BBFA Amendments**

The Less Red Tape, Stronger Economy Act, 2023 (formerly Bill 91) received Royal Assent on June 8, 2023, amending the *Building Broadband Faster Act, 2021* (BBFA) to remove further barriers or delays to designated broadband project construction and to support a streamlined approach to the deployment of high-speed internet infrastructure in the province.

The amendments to the BBFA provided the Minister of Infrastructure with authority to set out certain new regulatory requirements related to infrastructure data collection and conditions for municipal permitting. Effective July 1, 2023, O. Reg. 436/22 Definitions

and Prescribed Provisions under the BBFA was amended, by way of a Minister's amending regulation, to set out the following:

- 1. For infrastructure data collection under s. 20.1 of the BBFA: Upon request from the Minister of Infrastructure, certain persons or entities who own or operate utility infrastructure within 100 metres of a designated broadband project must submit the requested data in the form required by the Minister within 15 business days of receiving the request.
- 2. For municipal permitting under s. 10.1 of the BBFA: Municipalities may not require proponents to execute a legal agreement in advance of providing access to municipal rights-of-way under s. 10.1 of the BBFA. However, municipalities may require internet service providers (ISPs) to agree in writing to take steps to negotiate such agreements in good faith as soon as reasonably possible as a condition for providing access to their rights-of-way.

These changes are intended to advance broadband projects and ensure mechanisms are in place to protect the interests of municipalities. The Ministry of Infrastructure is developing resources to support municipalities with cost recovery related to designated broadband projects and will ensure that appropriate measures are in place to protect data that is shared.

# **Building Broadband Faster in Ontario Guideline (Version 3.0)**

The Ministry of Infrastructure and Infrastructure Ontario has also updated the Building Broadband Faster in Ontario Guideline (Version 3.0). This Guideline was first released in April 2021 with input from municipalities, ministries, and other partners as a tool to expedite the delivery of designated high-speed internet projects. It was updated in August 2022 as well as in August 2023, to reflect new regulatory requirements that came into effect after its original release.

Guideline 3.0 provides additional clarity and best practices for completing work for designated broadband projects in compliance with legislative and regulatory requirements under the BBFA, the *Ontario Underground Infrastructure Notification System Act, 2012* (One Call Act) and the *Ontario Energy Board Act, 1998* (OEBA).

Key updates to the Guideline include:

• Information on new regulatory measures, including those under the BBFA mentioned above in addition to amendments to the OEBA and One Call Act regulations.

- A new process to help resolve disputes between parties and work with sectors to ensure that they comply with the laws and regulations that are helping to build broadband faster.
- Clarity on the Ministry of Transportation's efforts to speed up their permit process for provincially funded broadband projects.
- Additional guidance on cost sharing for using electric infrastructure to build these projects.

To review the updated Guideline, please visit Building Broadband Faster in Ontario.

# Support Tools

Infrastructure Ontario has tools in place that will provide assistance to municipalities, proponents of designated broadband projects and other stakeholders related to new requirements under the legislation and the overall implementation of these projects across the province. These include the Technical Assistance Team (TAT) and the use of an online platform called the Broadband One Window (BOW). The TAT plays a key role in supporting permit applications and facilitating resolutions between stakeholders if disputes arise. BOW will help stakeholders work collaboratively to review and approve permitting applications, share data, and provide progress updates on project milestones.

To get in touch with TAT for assistance, you can e-mail <u>TAT@infrastructureontario.ca</u>, or submit a TAT support request through the BOW platform. I also welcome you to contact <u>broadband@ontario.ca</u> if you have general questions about the government's work and wish to speak with a ministry official.

# **Next Steps**

In the coming weeks, the Ministry of Infrastructure will engage the Association of Municipalities of Ontario to co-develop resources intended to support municipalities with timely permit approvals while ensuring they can appropriately control access to their rights-of-way. There is still considerable work underway to bring access to high-speed internet to every community in Ontario by the end of 2025. We appreciate your continued partnership in helping us achieve this important goal. Ministry of Municipal Affairs and Housing

Office of the Minister

777 Bay Street, 17th Floor Toronto ON M7A 2J3 Tel.: 416 585-7000 Ministère des Affaires municipales et du Logement

Bureau du ministre



777, rue Bay, 17e étage Toronto (Ontario) M7A 2J3 Tél. : 416 585-7000

234-2023-4205

August 22, 2023

Dear Head of Council,

### Subject: Building Faster Fund

The housing supply crisis affects all of Ontario – from rural communities to large, urban centres. Our government is committed to building at least 1.5 million homes by 2031, with municipalities across the province as our key partners.

On August 21, 2023, Premier Ford announced the new Building Faster Fund, a new three-year-\$1.2 billion program to help municipalities meet or exceed their share of the province's 1.5 million homes goal.

As announced by Premier Ford, 10% of the overall funding will be set aside for small, rural and northern communities that have not been assigned a housing target by the province, in order to address their unique needs in supporting growth in housing supply.

Ontario will be consulting with the Association of Municipalities of Ontario and the Housing Supply Action Plan Implementation Team on program design details of the Building Faster Fund, including how the funds can best support small, rural and northern communities, and I look forward to sharing more information with you in the future. As Ontario grows, we need to build more homes. I look forward to your support in ensuring that everyone – newcomers, young families and seniors – can afford a place to call home.

Sincerely,

### Steve Clark Minister

 c: Hon. Nina Tangri, Associate Minister of Housing Ryan Amato, Chief of Staff, Minister's Office Martha Greenberg, Deputy Minister Joshua Paul, Assistant Deputy Minister, Market Housing Division Sean Fraser, Assistant Deputy Minister, Planning and Growth Division Caspar Hall, Assistant Deputy Minister, Local Government Division Ministry of Natural Resources and Forestry

Ministère des Richesses Naturelles et des Forêts



Resources Planning and Development Policy Branch Policy Division 300 Water Street Peterborough, ON K9J 3C7 Direction des politiques de planification et d'exploitation des ressources Division de l'élaboration des politiques 300, rue Water Peterborough (Ontario) K9J 3C7

# **RE: Streamlining of Approvals under the** *Aggregate Resources Act* and Supporting **Policy**

Greetings,

Further to my letter dated May 29<sup>th</sup>, I am writing to inform you that after reviewing and considering the feedback received in response to the ministry's proposal (ERO # <u>019-6767</u>), a decision has been made to move forward with the expanded list of changes that can be made to existing pit or quarry site plans in Ontario without ministry approval (provided specific conditions and eligibility criteria are met).

These changes will add five additional activities to the existing list of routine site plan amendments that may be self-filed by authorized pit and quarry operators in Ontario. It's important to note that only those site plan amendments which satisfy all conditions and criteria set out in the updated regulation are eligible for submission under the self-filing process. All other amendments will continue to be subject to review and authorization by the ministry under the formal amendment process.

For complete details of these changes please refer to amended section 7.2 of <u>Ontario</u> <u>Regulation 244/97</u>.

In addition to these changes, we have made administrative updates to the Technical Reports and Information Standards document, as well as the Amendment Without Approval and Objection forms. You can access the latest versions of these documents through our website, at <u>ontario.ca/aggregates</u>.

No decision has been made yet with respect to the proposed amendments policy that was consulted on as part of the same proposal. The ministry continues to review and consider the feedback received in response to the proposed policy and will communicate the outcome once a decision has been reached, including a decision notice on Environmental Registry.

In the meantime, if you have any questions about these changes or should you require a French version of this letter, please contact us by email at <u>aggregates@ontario.ca</u>.

Sincerely,



Jennifer Keyes, Director, Resources Planning and Development Policy Branch

#### Ministry of the Environment, Conservation and Parks

Environmental Assessment Modernization Branch

135 St. Clair Avenue West 4th Floor Toronto ON M4V 1P5

# Ministère de l'Environnement, de la Protection de la nature et des Parcs

Direction de la modernisation des processus d'évaluation environnementale

135, avenue St. Clair Ouest 4<sup>e</sup> étage Toronto ON M4V 1P5

August 9, 2023

Greetings,

Today, I am writing to provide you with an update on recent decisions made by the province to modernize Ontario's environmental assessment (EA) program.

# Moving to a Project List under the Environmental Assessment Act

A key element of the EA modernization initiative is identifying projects that should be subject to EA requirements in a regulation. The move to a project list approach is a shift from the current framework where environmental assessment requirements are based mainly on who is undertaking the project.

In November 2021, the ministry began consultation on a proposal for the projects that would require a comprehensive EA and related actions, and the ministry is now proceeding with certain policy elements from the 2021 proposal. Specifically, the ministry has made amendments to three regulations and updated two related guides, as further described below. The changes will simplify processes and provide new exemptions. The remaining elements of comprehensive EA projects regulation proposal and related actions are under consideration.

In March 2023, the ministry updated the Moving to a Project List Environmental Registry posting with a revised proposal. The revisions to the proposal do not relate to the policy elements discussed within this update.

# Amendments to Certain Regulations under the Environmental Assessment Act

Amendments to three regulations under the *Environmental Assessment Act* have been approved, and related actions have been taken, implementing certain policy elements of the proposal <u>Moving to a project list approach under the Environmental Assessment</u> <u>Act</u>:

 The Waste Management Projects Regulation (Ontario Regulation 101/07) was amended to change the environmental assessment requirements for certain landfill expansion projects and to make the minister the decision-maker for a request to elevate a waste management project following the streamlined environmental assessment process to an individual environmental assessment



- The Transit Projects and Metrolinx Undertakings (Ontario Regulation 231/08) was amended to authorize the minister to amend or revoke conditions previously imposed in a notice given by the minister to allow the proponent to proceed with a transit project.
- The General Regulation (Ontario Regulation 334) was amended to expand the current exemption for Crown undertakings (activities) related to land claim settlements to include those Crown undertakings related to any settlement of the Algonquins of Ontario Land Claim.
  - The Algonquin Land Claim Declaration Order was also amended to align with the exemption in the regulation.

# Updated Guide to Environmental Assessment Requirements for Waste Management Projects

The Guide to Environmental Assessment Requirements for Waste Management Projects (<u>Waste Guide</u>) has been updated to reflect amendments to the environmental assessment requirements set out in Ontario Regulation 101/07, and to make other administrative updates. The changes include:

- Updating the EA requirements for certain landfill expansion projects.
- Making the minister the decision-maker in relation to elevation requests.
- Updating the regulatory terminology and description of EA requirements in light of recent amendments to the Regulation related to thermal treatment, to include advanced recycling and the resulting recovery of materials, and identifying information to be included when undertaking the Environmental Screening Process for an advanced recycling (thermal treatment) project.
- Administrative updates recognizing the Guide was last updated in 2007.

# Updated Guide to Environmental Assessment Requirements for Electricity Projects

The Guide to Environmental Assessment Requirements for Electricity Projects (<u>Electricity Guide</u>) has been updated to change the decision-making authority for elevation requests for electricity projects and make other administrative updates to reflect changes since the guide was last updated. The changes include:

- Adding information to Section A.6.2.3 (Consultation with Indigenous Communities) of the guide to align with the Waste Guide, including in relation to the Crown's duty to consult, contacting the ministry for a list of Indigenous communities for consultation, and documenting the consultation process.
- Updating the ministry's name to "Ministry of the Environment, Conservation and Parks".
- Updating the thresholds for transmission line projects that determine the type of environmental assessment process required.

The regulations were filed and came into force on August 8, 2023 and the updated guides are in effect (posted to the Environmental Registry website on August 8, 2023).

Further details of the amendments to the three regulations and related actions and copies of the updated guides are available on the Environmental Registry of Ontario (ERO 019-4219). Details about the regulatory amendments made with respect to advanced recycling are available here (ERO 019-4867). More information on our other efforts to modernize the EA program can also be found at: Modernizing Ontario's environmental assessment program.

Please do not hesitate to contact my team at <u>EAModernization.mecp@ontario.ca</u> if you have any comments or questions.

Sincerely,



Annamaria Cross Director, Environmental Assessment Modernization Ministry of the Environment, Conservation and Parks

# Notice of Complete Application, Public Meeting And Decision for a Zoning By-law Amendment



585 Hanlon Creek Boulevard

# Legal Description:

Block 2, Plan 61M169, City of Guelph

File No.: 0ZS23-006

# Public Meeting and Decision:

Tuesday September 19, 2023, 6:30 pm

This is a hybrid City Council meeting that can be watched online at guelph.ca/live or in-person in the Council Chambers at Guelph City Hall, 1 Carden Street, Guelph, Ontario.

City staff will be providing a recommendation to Council on this application.

### Key Map:



# Proposal:

To permit a Recreational Facility use to allow for a golf simulator in two of the units.

# **Application Details:**

An application for a Zoning By-law Amendment has been received for the lands municipally known as 585 Hanlon Creek Boulevard on behalf of the owner DBL CRS Sim Lounge, to rezone the subject lands from "Specialized Corporate Business Park" (B.5-3) to "Specialized Corporate Business Park" (B.5-9) under the 1995 Zoning Bylaw and from "Specialized Corporate Business Park" (BP-3) to "Specialized Corporate Business Park" (BP-9) under the 2023 Comprehensive Zoning Bylaw to permit the development of a recreational facility in two of the units.

Further details of the requested Zoning By-law Amendment can be found in the supporting documents submitted with this application.

The proposed conceptual site plan is shown in Schedule 1.

# **Additional Information**

Documents relating to this planning application are available online at guelph.ca/development. Alternate document formats are available upon request.

The Staff Report will be available **Friday September 8, 2023,** after 12:00 p.m. online at guelph.ca/development.

For additional information please contact the planner managing the file:

Eric Rempel, Development Planner Planning and Building Services Phone: 519-822-1260, ext. 2617



# How to Get Involved:

The purpose of a Public Meeting is to share information and to hear and consider public comments regarding development applications which can be reviewed by Staff and applicants prior to Council consideration of applications. The public is invited to watch the remote meeting on guelph.ca/live and participate by submitting written comments and/or speaking to the application.

# To submit written comments:

You can submit written comments any time via email to clerks@guelph.ca and eric.rempel@guelph.ca or by mail to Guelph City Clerk, 1 Carden Street, Guelph ON N1H 3A1 or place them in the mail slot beside the main entrance to City Hall.

If you submit comments by 10:00 a.m. on **Friday, September 15, 2023**, your comments will be included in the City Council Agenda (attachments must not exceed 20 MB).

# To speak to the application:

If you wish to speak to the application, please contact the Clerk's Department no later than 10:00 a.m. on **Friday, September 15, 2023,** by any of the following ways:

- Register online at guelph.ca/delegation
- By phone at 519-837-5603 or TTY 519-826-9771
- By email to clerks@guelph.ca

When we receive your registration, we will send you a confirmation message and instructions for participating in the hybrid public meeting will be provided. Instructions will also be provided during the meeting to ensure that those watching online and attending in-person will be given the opportunity to speak.

# How to Stay Informed:

If you wish to be notified of the Council decision on this application you must make a written request to the City Clerk by way of email, or regular mail as listed above. Please note Council will not make a decision at the Public Meeting.

# **Appeals Information:**

If a person or public body would otherwise have an ability to appeal the decision of the Council of the City of Guelph to the Ontario Land Tribunal but the person or public body does not make oral submissions at a public meeting or make written submissions to the City of Guelph before the by-law is passed, the person or public body is not entitled to appeal the decision.

If a person or public body does not make oral submissions at a public meeting, or make written submissions to the City of Guelph before the by-law is passed, 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 do so.

# **Requirement for Owners of Multi-tenant Buildings**

Upon receiving this Notice, owners of multi-tenant buildings with seven (7) or more residential units are asked to post this Notice of Complete Application and Public Meeting in a location that is clearly visible to all tenants (i.e. building or community notice board).

# **Notice of Collection of Personal Information:**

Personal information is being collected in order to gather feedback and communicate with interested parties regarding this development proposal. Information provided or presented at a public meeting is considered a public record and may be posted on the City's website or made public upon request.

This information is collected under the authority of the Planning Act, R.S.O. 1990, cP.13. Questions about this collection should be directed to the Information and Access Coordinator at 519-822-1260 extension 2349 or <u>privacy@guelph.ca</u>.

# Accessibility:

Alternative accessible formats are available by contacting <u>planning@guelph.ca</u> or TTY 519-826-9771.

# Schedule 1 – Proposed Conceptual Renderings



# File: 0ZS23-006

### **To: Agencies and Departments**

The City of Guelph is currently reviewing an application for a Zoning By-law Amendment for the lands municipally known as 585 Hanlon Creek Boulevard on behalf of the owner, DBL CRS Sim Lounge.

Please submit your comments by **September 1, 2023.** If you have any questions or require further information, please email Eric Rempel at <u>eric.rempel@guelph.ca</u>.

If you have no comments or concerns regarding this File OZS23-006, please sign and submit this form to:

Eric Rempel, Development Planner Planning Services Infrastructure, Development and Enterprise City of Guelph 1 Carden Street Guelph, ON N1H 3A1 Email: eric.rempel@guelph.ca

Agency:

**Representative (Please Print):** 

**Representative (Signature):** 

Date:



# NOTICE OF COMPLETE APPLICATION – DRAFT PLAN OF CONDOMINIUM



Key Map:

# Address of Subject Lands:

55 Teal Drive

# Legal Description:

Block 91, RP 61M-54 and Block 1, RP 61M-169, City of Guelph

Property Size: 15,716 m<sup>2</sup>

File No.: 23CDM-23503

**Proposal:** Standard condominium of twenty-two (48) townhouse units in twelve blocks.

The proposed draft plan of condominium is included in Schedule 1.

# **Application Details:**



A complete application from J.D. Barnes Ltd on behalf of Edgeview Developments for a draft plan of standard condominium has been received by the City of Guelph for the lands municipally known as 55 Teal Dr.

The applicant is requesting draft plan approval for a standard condominium with a total of sixty-eight (68) units, including forty-eight (48) townhouse dwelling units and twenty (20) unitized parking spaces. The condominium units are proposed to be subdivided in accordance with the attached proposed draft plan of condominium in Schedule 1.

The condominium will contain ten (10) parking spaces, including three (3) barrier-free parking spaces as part of the condominium's common elements.

Site plan approval was issued on April 20, 2023 for the development of forty-eight (48) townhouse units split over 12 blocks (Site Plan File No. SP21-027).

### Official Plan Land Use Designation:

Medium Density Residential

# Existing Zoning:

1995 Zoning By-law: R.3A Cluster Townhouse 2023 Zoning By-law: RM.6 Medium Density Residential 6

Existing Land Use: Vacant
#### Additional Information

For additional information please contact the planner managing the file:

Eric Rempel, Planner I Development Planning and Building Services Phone: 519-822-1260, ext. 2617 TTY: 519-826-9771 Email: eric.rempel@guelph.ca

#### How to Get Involved:

Any person or organization may provide written or verbal comments on this application by no later than **September 8, 2023** through any of the following ways:

- By email to eric.rempel@guelph.ca
- By regular mail or courier to Development Planning, 1 Carden Street, Guelph ON N1H 3A1

Please note, all City departments, agencies and organizations circulated on this application will automatically receive a Notice of Decision. However, if any member of the public wishes to be notified of the decision of the City of Guelph in respect of the proposed plan of condominium, you must make a written request to the City Clerk, 1 Carden Street, Guelph ON, N1H 3A1.

#### Appeals Information:

If a person or public body does not make oral submissions at a public meeting, if one is held, or make written submissions to the City of Guelph in respect of the proposed plan of condominium before the approval authority gives or refuses to give approval to the draft plan of condominium, the person or public body is not entitled to appeal the decision of the City of Guelph to the Ontario Land Tribunal.

If a person or public body does not make oral submissions at a public meeting, if one is held, or make written submissions to the City of Guelph in respect of the proposed plan of condominium before the approval authority gives or refuses to give approval to the draft plan of condominium, 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 Ontario Land Tribunal, there are reasonable grounds to do so.

#### **Notice of Collection of Personal Information:**

Personal information is being collected in order to gather feedback and communicate with interested parties regarding this development proposal. Information provided or presented at a public meeting, if one is held, is considered a public record and may be posted on the City's website or made public upon request.

For questions regarding the collection, use and disclosure of this information please contact the Information and Access Coordinator at 519-822-1260 extension 2349 or privacy@guelph.ca.

#### Accessibility:

Alternative accessible formats are available by contacting <u>planning@guelph.ca</u> or TTY 519-826-9771.

#### Schedule 1 – Draft Plan of Condominium



Notice of Complete Application File: 23CDM-23502 Guelph Making a Difference



#### To: Agencies and Departments

The City of Guelph is currently reviewing the Draft plan of Condominium application from J.D. Barnes, for the lands municipally known as 55 Teal Dr.

Please submit your comments by **September 8, 2023**. If you have any questions or require further information, please call Eric Rempel at 519-822-1260 Extension 2617, or email at <u>eric.rempel@guelph.ca</u>.

If you have no comments or concerns regarding File 23CDM-23503, please sign and submit this form to:

Eric Rempel, Development Planner Planning & Building Services Infrastructure, Development and Enterprise City of Guelph 1 Carden Street Guelph, ON N1H 3A1 Email: <u>Eric.Rempel@guelph.ca</u>

Agency:

**Representative (Please Print):** 

**Representative (Signature):** 

Date:

		(	
Established 1793 Incorporated Wolford 1850 Merrickville 1860 Amalgamated 1998	NTOR ORATION		Telephone (613) 269-4791 Facsimile (613) 269-3095
Anagamatoa 1995	VILLAGE OF MERRICK	/ILLE-WOLFORD	For Clerk's use only, if required: Recorded Vote Requested By: Barr Y N Cameron Y N
Resolution Numbe	er: R - 236 - 23		Gural Y N Ireland Y N
Date: July 10, 202	23		Maitland Y N
Moved by: Barr	Gural	Ireland	Maitland
Seconded by: Bar	r Gural	Ireland	Maitland

#### Notice of Motion: Proposed Provincial Planning Statement

Be it hereby resolved that:

**WHEREAS** the goal of increasing housing supply and reducing barriers in planning processes as set out in the recent legislative, regulatory, and policy changes, including new provisions from Bill 23, More Homes Built Faster Act is welcomed; and

**WHEREAS** the proposed Provincial Planning Statement (sections 2.6 and 4.3) would dramatically remove municipal power and render aspects of the Village of Merrickville-Wolford Official Plan and other official plans throughout Ontario inoperative, terminate some local planning autonomy, and directly interfere with municipalities' ability to meet local variation and unique community needs; and

**WHEREAS** the proposed PPS changes that would allow proliferation of lots with protection restricted to specialty crop areas only diminishes the purpose, use and integrity of rural and agricultural lands, thereby removing protection and restricting future uses of those lands; and

WHEREAS the proposed PPS changes encourage sprawl and rural roadway strip development, rather than more fiscally and environmentally sustainable practices like intensification in established settlement areas; and

**WHEREAS** the Rideau Valley Conservation Authority has played a crucial role in providing planning input and reviewing services to assist our municipality and has provided its own comments outlining its concerns and recommendations;

Telephone (613) 269-4791 Facsimile (613) 269-3095

Established 1793 Incorporated Wolford 1850 Merrickville 1860 Amalgamated 1998



#### VILLAGE OF MERRICKVILLE-WOLFORD

**NOW THEREFORE BE IT RESOLVED THAT** the Council of the Corporation of the Village of Merrickville-Wolford urges the province to:

- Pause proposed changes to the PPS, particularly regarding natural heritage (section 4.1) and agricultural lands (sections 2.6 and 4.3)
- Reinvest trust in the local planning authority of all 444 municipalities, recognizing that each one has unique landscapes, housing needs and visions for local planning matters
- Follow the recommendations provided by the Rideau Valley Conservation Authority

**AND THAT** our fellow municipalities be urged to voice their concerns regarding the proposed undermining of local planning authority;

**AND FURTHER THAT** a copy of this resolution be sent to all 444 municipalities, The Hon. Doug Ford, Premier of Ontario, The Hon. Steve Clark, Minister of Municipal Affairs and Housing and MPP for Leeds-Grenville-Thousand Islands and Rideau Lakes, The Hon. Lisa Thompson, Minister of Agriculture, Food and Rural Affairs, The Hon. David Piccini, Minister of Environment, Conservation and Parks, the Association of Municipalities of Ontario, the Rural Ontario Municipal Association and the Federation of Canadian Municipalities.



#### The Corporation of the Municipality of St. Charles RESOLUTION PAGE

#### **Regular Meeting of Council**



Agenda Number: 10.5.

Resolution Number 2023-153

Title:

Date:

Resolution Stemming from June 21, 2023 Regular Meeting of Council - Item 9.1 -Correspondence #11 July 19, 2023

Moved by:Councillor LaframboiseSeconded by:Councillor Loftus

BE IT RESOLVED THAT Council for the Corporation of the Municipality of St. Charles hereby supports the Resolution passed by the Corporation of the County of Prince Edward, on May 9, 2023, regarding the proposed new Provincial Planning Statement;

AND BE IT FURTHER RESOLVED THAT a copy of this Resolution be forwarded to the Honourable Doug Ford, Premier of Ontario; the Ministry of Municipal Affairs and Housing (MMAH); the Ministry of Agriculture, Food and Rural Affairs (OMAFRA); the Ministry of Environment, Conservation and Parks (MOECP), the Association of Municipalities of Ontario (AMO); the local Member of Provincial Parliament (MPP) and all Ontario Municipalities.

		<u> </u>

CARRIED

MAYOR



May 10, 2023

Please be advised that during the Regular Council meeting of May 9, 2023 the following resolution regarding the proposed new Provincial Planning Statement (PPS) was carried:

RESOLUTION NO. 2023-293

DATE: May 9, 2023

MOVED BY: Councillor Hirsch

SECONDED BY: Councillor MacNaughton

**WHEREAS** the goal of increasing housing supply and reducing barriers in planning processes as set out in the recent legislative, regulatory and policy changes, including new provisions from Bill 23, More Homes Built Faster Act, 2022 is welcomed;

**WHEREAS** the proposed PPS (sections 2.6 and 4.3) would dramatically remove municipal power and renders aspects of the County's Official Plan, and other official plans throughout Ontario inoperative, terminating some local planning autonomy, and directly interfering with municipalities' ability to meet local variation and unique community needs;

**WHEREAS** the proposed PPS changes that would allow proliferation of lots with protection restricted to specialty crop areas only diminishes the purpose, uses, and integrity of rural and agricultural lands, thereby removing protection and restricting future uses of those lands;

**WHEREAS** the proposed PPS changes encourage sprawl and rural roadway strip development, rather than more fiscally and environmentally sustainable practices like intensification in established settlement areas; and

**WHEREAS** the province has announced changes will be proposed to natural heritage (section 4.1) that have yet to be published;

**THEREFORE BE IT RESOLVED THAT** the Council of the Corporation of the County of Prince Edward urges the province to:

 pause proposed changes to the PPS, particularly regarding natural heritage (section 4.1) and agricultural lands (sections 2.6 and 4.3)

> MAY 2 9 2023 BY COUNCIL



From the Office of the Clerk The Corporation of the County of Prince Edward T: 613.476.2148 x 1021 | F: 613.476.5727 clerks@pecounty.on.ca | www.thecounty.ca

 reinvest trust in the local planning authority of all 444 municipalities, recognizing that each Ontario municipality has unique landscapes, different housing needs and differing visions for local planning matters;

**THAT** our fellow municipalities be urged to voice their concerns regarding the proposed undermining of local planning authority;

**AND FURTHER THAT** a copy of this resolution be sent to all 444 municipalities, The Hon. Doug Ford, Premier of Ontario, The Hon. Steve Clark, Minister of Municipal Affairs and Housing; The Hon. Lisa Thompson, Ministry of Agriculture, Food and Rural Affairs, The Hon. David Piccini, Minister of Environment, Conservation and Parks, Bay of Quinte MPP, Todd Smith, the Association of Municipalities of Ontario, the Federation of Canadian Municipalities, and the Eastern Ontario Wardens Caucus.

CARRIED

Yours truly.

Catalina Blumenberg, CLERK

cc: Mayor Ferguson, Councillor Hirsch, Councillor MacNaughton & Marcia Wallace, CAO



#### THE CORPORATION OF THE CITY OF STRATFORD Resolution: Strengthen Municipal Codes of Conduct

WHEREAS all Ontarians deserve and expect a safe and respectful workplace;

**WHEREAS** municipal governments, as the democratic institutions most directly engaged with Ontarians need respectful discourse;

**WHEREAS** several incidents in recent years of disrespectful behaviour and workplace harassment have occurred amongst members of municipal councils;

**WHEREAS** these incidents seriously and negatively affect the people involved and lower public perceptions of local governments;

**WHEREAS** municipal Codes of Conduct are helpful tools to set expectations of council member behaviour;

**WHEREAS** municipal governments do not have the necessary tools to adequately enforce compliance with municipal Codes of Conduct;

NOW THEREFORE BE IT RESOLVED THAT the City of Stratford supports the call of the Association of Municipalities of Ontario for the Government of Ontario to introduce legislation to strengthen municipal Codes of Conduct and compliance with them in consultation with municipal governments;

ALSO BE IT RESOLVED THAT the legislation encompass the Association of Municipalities of Ontario's recommendations for:

- 1. Updating municipal Codes of Conduct to account for workplace safety and harassment
- 2. Creating a flexible administrative penalty regime, adapted to the local economic and financial circumstances of municipalities across Ontario
- 3. Increasing training of municipal Integrity Commissioners to enhance consistency of investigations and recommendations across the province

- 4. Allowing municipalities to apply to a member of the judiciary to remove a sitting member if recommended through the report of a municipal Integrity Commissioner
- 5. Prohibit a member so removed from sitting for election in the term of removal and the subsequent term of office;

AND THAT a copy of this resolution be forwarded to all municipalities in Ontario for endorsement.

\_\_\_\_\_

Adopted by City Council of The Corporation of the City of Stratford on July 10, 2023.

The Corporation of the City of Stratford, P.O. Box 818, Stratford ON N5A 6W1 Attention: City Clerk, 519-271-0250 extension 5329, <u>clerks@stratford.ca</u>



#### City of Stratford, Corporate Services Department

Clerk's Office City Hall, P. O. Box 818, Stratford, Ontario N5A 6W1 Tel: 519-271-0250, extension 5237 Email: clerks@stratford.ca Website: www.stratford.ca

August 17, 2023

Association of Municipalities of Ontario (AMO) 200 University Ave., Suite 801 Toronto, Ontario M5H 3C6

resolutions@amo.on.ca

#### Re: Resolution – Strengthen Municipal Codes of Conduct

At their July 10, 2023 Regular Council meeting, Stratford City Council adopted a resolution supporting the call by AMO for the Government of Ontario to introduce legislation strengthening Municipal Codes of Conduct.

A copy of the resolution is attached. We have also provided this resolution to our area MPP Matthew Rae and MP John Nater and respectfully requested support in this matter.

Sincerely,

Tatiana Dafoe, Clerk

Encl. /ja

cc: MPP Matthew Rae MP John Nater All Ontario municipalities



**The Corporation of the County of Northumberland** 555 Courthouse Road Cobourg, ON, K9A 5J6



Northumberland County Council Resolution

#### SENT VIA EMAIL

August 18, 2023

Hon. Paul Calandra (Minister of Long-Term Care)
Hon. Peter Bethlenfalvy (Minister of Finance)
Hon. David Piccini (Minister of Environment, Conservation and Parks & MPP for Northumberland - Peterborough South)
Association of Municipalities of Ontario
All Ontario Municipalities

# Re: Northumberland County Resolution – 'Use of Long Term Care Funding to Support Community Care Services'

At a meeting held on August 16, 2023 Northumberland County Council approved the following Council Resolution # 2023-08-16-556 adopting the below recommendation from the July 31, 2023 Community Health Committee meeting.

Moved by: Councillor Lucas Cleveland Seconded by: Councillor Robert Crate

"**That** the Community Health Committee, having considered correspondence from the City of Pickering regarding 'Use of Long Term Care Funding to Support Community Care Services', recommend that County Council support this correspondence; and

**Further That** the Committee recommend that County Council direct staff to send a copy of this resolution to the Honourable Paul Calandra (Minister of Long-Term Care), the Honourable Peter Bethlenfalvy (Minister of Finance), the Honourable David Piccini (Minister of the Environment, Conservation and Parks and MPP for Northumberland - Peterborough South), the Association of Municipalities of Ontario (AMO), and all Ontario Municipalities."

#### Council Resolution # 2023-08-16-556

Carried



#### **The Corporation of the County of Northumberland** 555 Courthouse Road Cobourg, ON, K9A 5J6

If you have any questions regarding this matter, please do not hesitate to contact the undersigned at <u>matherm@northumberland.ca</u> or by telephone at 905-372-3329 ext. 2238.

Sincerely, Maddison Mather



Manager of Legislative Services / Clerk Northumberland County



# **Council Resolution**

Moved By <u>L</u>	Cleveland
Seconded By	R. Crate

Agenda Item 10 Resolution Number 2023-08-16  $\sim$   $\leq$   $\leq$ 

Council Date: August 16, 2023

"That Council adopt all recommendations from the five Standing Committees, as contained within the Committee Minutes (meetings held July 31, August 1, and August 2, 2023), with the exception of the following items (referenced from the Standing Committee Minutes), that will be held for discussion:

Committ Name	ee Item #	Description	Held By
- C  -  -	ommunity Heal ope 'Public Hea eld by Councille	h Committee, Item 7.b, 'Corre Ith and Opioid Overdose Cris or Cleveland	espondence, Municipality of Port is – Renewal of a Drug Strategy' –

And Further That the items listed above and held for separate discussion each require a separate resolution."

Recorded Vote Requested by		Carried	
_	Councillor's Name	-	Warden's Signature
Deferred		Defeated	
	Warden's Signature	-	Warden's Signature



## **Community Health Committee Resolution**

Committee Meeting Date:	July 31, 2023
Agenda Item:	7.a
<b>Resolution Number:</b>	2023-07-31-516
Moved by:	L. Cleveland
Seconded by:	M. Martin
Council Meeting Date:	August 16, 2023

"That the Community Health Committee, having considered correspondence from the City of Pickering regarding 'Use of Long Term Care Funding to Support Community Care Services', recommend that County Council support this correspondence; and

**Further That** the Committee recommend that County Council direct staff to send a copy of this resolution to the Honourable Paul Calandra (Minister of Long-Term Care), the Honourable Peter Bethlenfalvy (Minister of Finance), the Honourable David Piccini (Minister of the Environment, Conservation and Parks and MPP for Northumberland - Peterborough South), the Association of Municipalities of Ontario (AMO), and all Ontario Municipalities."

Carried	Committee Chairle Cigneture
Defeated	Committee Chair's Signature
Deleateu_	Committee Chair's Signature
Deferred_	Committee Chairle Signature
	Committee Chair's Signature



Sent by Email

May 29, 2023

The Honourable Doug Ford Premier of Ontario Room 281 Legislative Building, Queen's Park Toronto, ON M7A 1A1 premier@ontario.ca

#### Subject: Re: Resolution – Use of Long-Term Care Funding to Support Community Care Services Corr. 24-23 File: A-1400

The Council of The Corporation of the City of Pickering considered the above matter at a Meeting held on May 23, 2023 and adopted the following resolution:

- That Corr. 24-23 from Chris Bantock, Deputy Clerk, City of Stratford, dated April 17, 2023, regarding Resolution – Use of Long-Term Care Funding to Support Community Care Services, be received and endorsed; and,
- That a copy of this Resolution be forwarded to The Honourable Premier Doug Ford, The Honourable Paul Calandra, Minister of Long-Term Care, Matthew Rae, Member of Provincial Parliament, Perth-Wellington, The Honourable Peter Bethlenfalvy, Member of Provincial Parliament, Pickering-Uxbridge, the Association of Municipalities of Ontario (AMO), and all Ontario Municipalities.

A copy of the original correspondence is attached for your reference.

Should you require further information, please do not hesitate to contact the undersigned at 905.420.4660, extension 2019.

Yours truly,

Susan Cassel City Clerk

SC:am

Encl.

Copy: The Honourable Paul Calandra, Minister of Long-Term Care The Honourable Peter Bethlenfalvy, Member of Provincial Parliament, Pickering-Uxbridge Matthew Rae, Member of Provincial Parliament, Perth-Wellington Chris Bantock, Deputy Clerk, City of Stratford The Association of Municipalities of Ontario (AMO) All Ontario Municipalities Chief Administrative Officer

Attachment Corr. 24-23



**City of Stratford Corporate Services Department** Clerk's Office City Hall, P. O. Box 818 Stratford, Ontario N5A 6W1 Tel: 519-271-0250, extension 5237 Email: <u>clerks@stratford.ca</u> Website: <u>www.stratford.ca</u>

April 17, 2023

Via email: ltcminister@ontario.ca

Ministry of Long-Term Care 6<sup>th</sup> Floor, 400 University Avenue Toronto, ON M5G 1S5

Dear Hon. Paul Calandra:

#### Re: Resolution – Use of Long-Term Care Funding to Support Community Care Services

At their April 11, 2023 Regular Council meeting, Stratford City Council adopted the following resolution requesting the provincial government to support community driven home care services through the redirect of ministry beds in abeyance funding:

#### THAT staff be requested to send a letter to the provincial government to endorse the redirect of current ministry beds in abeyance funding towards the support of community care services.

We kindly request your support and endorsement.

Sincerely,

Chris Bantock Deputy Clerk

cc: Premier Doug Ford Matthew Rae, MPP Association of Municipalities of Ontario All Ontario municipalities



Resolution no. 2023 - 248

Date: August 1, 2023

Moved by: R. Hall

Seconded by: M. Wand

That the correspondence from the Women of Ontario Say No regarding Legislative Amendments to Improve Municipal Codes of Conduct and Enforcement be received;

AND FURTHER THAT all Ontarians deserve and expect a safe and respectful workplace; and

THAT municipal governments, as the democratic institutions most directly engaged with Ontarians need respectful discourse; and

THAT several incidents in recent years of disrespectful behaviour and workplace harassment have occurred amongst members of municipal councils; and

THAT these incidents seriously and negatively affect the people involved and lower public perceptions of local governments;

THAT municipal Codes of Conduct are helpful tools to set expectations of council member behaviour; and

**THAT** municipal governments do not have the necessary tools to adequately enforce compliance with municipal Codes of Conduct; and

**THAT** the Municipality of Powassan Council supports the call of the Association of Municipalities of Ontario for the Government of Ontario to introduce legislation to strengthen municipal Codes of Conduct and compliance with them in consultation with municipal governments; and

THAT the legislation encompasses the Association of Municipalities of Ontario's recommendations for:

• Updating municipal Codes of Conduct to account for workplace safety and harassment

• Creating a flexible administrative penalty regime, adapted to the local economic and financial circumstances of municipalities across Ontario

• Increasing training of municipal Integrity Commissioners to enhance consistency of investigations and recommendations across the province

• Allowing municipalities to apply to a member of the judiciary to remove a sitting member if recommended through the report of a municipal Integrity Commissioner

• Prohibit a member so removed from sitting for election in the term of removal and the subsequent term of office, and;

THAT this legislation be prioritized for the fall of 2023 given the urgency of this issue; and

FURTHER THAT this resolution be sent to the Premier of Ontario, MPP Fedeli, Minister of Municipal Affairs, Associate Minister of Women's Social and Economic Opportunity, AMO and all municipalities.

	/			
V				
Capried	Defeated	Deferred	Lost	
Mayor				

Recorded Vote: Requested by

Name	Yeas	Nays	Name	Yeas	Nays
Councillor Randy Hall			Mayor Peter McIsaac		
Councillor Markus Wand					
Councillor Dave Britton					
Councillor Leo Patey					

13.2 DATE OF COUNCIL MTG. C AGENDA ITEM #



**Legislative Services** 

Municipal Offices: 66 Charlotte Street Port Colborne, Ontario L3K 3C8 • www.portcolborne.ca T 905.835.2900 ext. 106 F 905.834.5746 E saima.tufail@portcolborne.ca

August 23, 2023

Honourable Doug Ford Premier of Ontario 99 Wellesley St. W., Toronto, ON M7A 1A1 Via Email: premier@ontario.ca

Dear Honourable Doug Ford:

#### Re: Township of Selwyn – Short Term Rentals

Please be advised that, at its meeting of July 18, 2023, the Council of The Corporation of the City of Port Colborne resolved as follows:

That correspondence from the Township of Selwyn – Short Term Rentals, be supported.

A copy of the above noted resolution is enclosed for your reference.

Sincerely,



Saima Tufail Acting City Clerk

cc. Steve Clark, MMAH - minister.mah@ontario.ca MP Michelle Ferreri - michelle.ferreri@parl.gc.ca Local MP - dave.smithco@pc.ola.org Ontario's Municipal Councils





June 29, 2023

Hon. Doug Ford Premier of Ontario Room 4620 99 Wellesley St. W., Toronto, Ontario M7A 1A1 Via Email: premier@ontario.ca

Please be advised that at its meeting held on the 27th day of June 2023, the Council of the Township of Selwyn passed the following resolution:

#### Resolution No. 2023 – 143 – Notice of Motion – Short-Term Rentals

Councillor Brian Henry - Councillor John Boyko -

Whereas the demand for alternative accommodations has resulted in an increased prominence of residential properties being advertised for short term accommodations through third party companies such as Airbnb and VRBO; a shift from the 'traditional' cottage rental historically managed by a property owner; and

Whereas over the past decade a flood of properties have been removed from the ownership and long-term rental market (*Canada Research Chair in Urban Governance at McGill University*) contributing to housing shortages, increased housing demands and increased housing costs resulting in housing affordability issues, including affordable rentals; and

Whereas short term rentals (STR) can be beneficial, when operated appropriately, by providing solutions for the accommodation industry that supports local tourism and small businesses as well as providing an opportunity for property owners to generate income from their residence (permanent or seasonal) using a convenient third-party system; and

Whereas STR's can create nuisances including noise, parking, high volumes of visitors attending a property, septic capacity and fire safety, for adjacent residential property owners who wish to experience quiet enjoyment of their property; and

Whereas research indicates that demand for STR's is increasing, in part due to vacationers choosing domestic travel options as well as the financial benefits to property owners, demonstrating that STR's are here to stay; and

Mailing Address PO Box 270 Bridgenorth Ontario KOL 1H0

Tel:705 292 9507Fax:705 292 8964

Whereas there are no Provincial regulations in place governing third party STR companies resulting in a variety of regulations/guidelines being implemented at the local municipal level which creates inconsistencies, confusion and frustrations for both consumers and residents across the Province;

That the Township of Selwyn request that the Province move forward as soon as possible to legislate that all third party Short Term Rental brokerage companies, for example Airbnb and VRBO, appropriately manage and be responsible for their listings and to compel compliance that the Province establish the requirement for STR companies to require each rental listing to be registered and to pay an appropriate annual fee and that STR company provide this registry along with the collected fees to the municipality in which the STR properties are located which allows the municipality to be aware of all registered STR properties and to have access to funds for municipal expenses to enforce/respond to issues at a STR property; and further

That the Province require the STR company to de-list/remove the property from the company's listings so that the property cannot be rented where a municipality has identified and verified life, health and/or nuisance infractions including noise, fire safety, septic, etc...

That a copy of this resolution be sent to all Ontario municipalities for support as well as to Minister of Municipal Affairs and Housing Steve Clark, local M.P.P. Dave Smith and M.P. Michelle Ferreri.

Carried.

If you have any questions, please do not hesitate to contact us.

Sincerely,

Megin Hunter Office Assistant/Receptionist mhunter@selwyntownship.ca

cc: steve.clark@pc.ola.org michelle.ferreri@parl.gc.ca dave.smithco@pc.ola.org All Ontario Municipalities



#### MUNICIPALITY OF DUTTON DUNWICH

**Council Meeting** 

Resolution2023.16.22NumberAugust 16, 2023

Moved by:K. LovelandSeconded by:H. Dryfhout

WHEREAS the Government of Ontario, through the Minister of Municipal Affairs and Housing has introduced Bill 3 which is described as "An Act to amend various statutes with respect to special powers and duties of heads of Council";

AND THAT the Council of the Municipality of Dutton Dunwich supports the resolutions of the Township of Puslinch and Municipality of Shuniah petitioning the Government of Ontario that:

- 1. These changes to the Municipal Act, 2001, are unnecessary and will negatively impact the Municipality of Dutton Dunwich;
- 2. That if the Ontario Government deems these changes necessary in large singletier municipalities such as Toronto and Ottawa, that such changes should not be implemented in smaller municipalities;
- 3. That the Ontario Government should listen to concerns raised by Associations such as AMO and AMCTO;
- 4. That if the stated goal of this legislation is to construct more housing in Ontario that this can be accomplished through other means including amendment of the Planning Act and funding of more affordable housing.

AND THAT a copy of this resolution be forwarded to Rob Flack MPP, Karen Vecchio MP, the Township of Puslinch and the Municipality of Shuniah.

Motion: CARRIED



Hon. Ted Arnott, MPP 181 St. Andrew St. East 2nd Floor, Fergus ON N1M 1P9 VIA EMAIL: ted.arnottco@pc.ola.org Hon. Steve Clark 777 Bay St 17<sup>th</sup> Floor, Toronto ON M5G 2E5 VIA EMAIL: steve.clark@pc.ola.org

Township of Puslinch 7404 Wellington Road 34 Puslinch, ON NOB 2J0 www.puslinch.ca

August 8, 2023

Hon. Matthew Rae, MPP 55 Lorne Ave. E Stratford, ON N5A 6S4 VIA EMAIL: Matthew.Rae@pc.ola.org

RE: 6.34 Municipality of Shuniah - Bill 3 - Special Powers and Duties of Heads of Council

Please be advised that Township of Puslinch Council, at its meeting held on July 12, 2023 considered the aforementioned topic and subsequent to discussion, the following was resolved:

#### Resolution No. 2021-090:

Moved by Councillor Goyda and Seconded by Councillor Bailey

That the Consent Agenda item 6.34 listed for JULY 12, 2023 Council meeting be received; and

Whereas Council supports the resolution from Municipality of Shuniah regarding Bill 3 - Special Powers and Duties of Heads of Council; and

That Council direct staff to support and circulate in accordance with the resolution.

Therefore, the Township of Puslinch, passes this resolution to petition the Government of Ontario that:



1. These changes to the Municipal Act, 2001, are unnecessary and will negatively impact the Municipality of Puslinch;

2. That if the Ontario Government deems these changes necessary in large single-tier municipalities such as Toronto and Ottawa, that such changes should not be implemented in smaller municipalities;

3. That the Ontario Government should listen to concerns raised by Associations such as AMO and AMCTO;

4. That if the stated goal of this legislation is to construct more housing in Ontario that this can be accomplished through other means including amendment of the Planning Act and funding of more affordable housing.

#### CARRIED

As per the above resolution, please accept a copy of this correspondence for your information and consideration.

Sincerely, Courtenay Hoytfox Municipal Clerk

CC:

Association of Municipalities of Ontario (AMO) <u>amo@amo.on.ca</u> All Ontario Municipalities



### **COUNCIL RESOLUTION**

Date: Jun 20, 2023

Moved By:		
Seconded By:		

Resolution No.: 232-23

WHEREAS the Government of Ontario, through the Minister of Municipal Affairs and Housing, has introduced Bill 3 which is described as "An Act to amend various statutes with respect to special powers and duties of heads of council";

AND WHEREAS this Bill, if enacted, will give Mayors additional authority and powers, and correspondingly take away authority and powers from Councils and professional staff, and will include giving the Mayor the authority to propose and adopt the Municipal budget and to veto some decisions of Council;

AND WHEREAS this Bill, if enacted, will give authority over professional staff to the Mayor, including that of the Chief Administrative Officer;

AND WHEREAS these changes will result in a reduction of independence for professional staff including the CAO, who currently provide objective information to the Council and public and will now take direction from the Mayor alone when the Mayor so directs;

AND WHEREAS the Government of Ontario is proposing to expand the list of municipalities where the Head of Council has strong mayor powers and duties;

THEREFORE, this Municipality of Shuniah, passes this resolution to petition the Government of Ontario that:

1. These changes to the Municipal Act, 2001, are unnecessary and will negatively affect the Municipality of Shuniah;

2. That if the Ontario Government deems these changes necessary in large single-tier municipalities such as Toronto and Ottawa, that such changes should not be implemented in smaller municipalities;

3. That the Ontario Government should listen to concerns raised by Associations such as AMO and AMCTO;

4. That if the stated goal of this legislation is to construct more housing in Ontario that this can be accomplished through other means including amendment of the Planning Act and funding of more affordable housing.

Council further directs the Clerk to ensure that a copy of this resolution be provided to the Premier of Ontario, the Minister of Municipal Affairs and Housing, Thunder Bay MPP's, the Association of Municipalities of Ontario, and other Municipalities in Ontario."







Deferred

Municipality of Shuniah, 420 Leslie Avenue, Thunder Bay, Ontario, P7A 1X8

Signature



#### **TOWN OF BLIND RIVER Council Meeting**

Agenda Number: 13.8.

**Resolution Number 23-312** 

Title: August 8, 2023. Township of Puslinch, RE: Bill 3, Special Powers and Duties of Heads of Council

**Date:** August 14, 2023

MOVED BY: P. Summers

SECONDED BY: J. Posteraro

"WHEREAS Council supports the resolution from the Township of Puslinch regarding Bill 3 - Special Powers and Duties of Heads of Council; THEREFORE BE IT RESOLVED THAT Council petition the Government of Ontario that:

- 1. These changes to the Municipal Act, 2001, are unnecessary and will negatively impact the Town of Blind River;
- 2. That if the Ontario Government deems these changes necessary in large single- tier municipalities such as Toronto and Ottawa, that such changes should not be implemented in smaller municipalities;
- 3. That the Ontario Government should listen to concerns raised by Associations such as AMO and AMCTO;
- 4. That if the stated goal of this legislation is to construct more housing in Ontario that this can be accomplished through other means including amendment of the Planning Act and funding of more affordable housing;

AND THAT a copy of this resolution be forwarded to AMO and the Township of Puslinch."



#### The Corporation of the Municipality of St. Charles RESOLUTION PAGE

#### **Regular Meeting of Council**



Agenda Number:10.2.Resolution Number2023-150Title:Resolution Stemming from May 17, 2023 Regular Meeting of Council - Item 9.1 -<br/>Correspondence #4, 10, 11, 12, and19Date:July 19, 2023

Moved by:Councillor LaframboiseSeconded by:Councillor Pothier

BE IT RESOLVED THAT Council for the Corporation of the Municipality of St.-Charles expresses support for Bill 5 - Stopping Harassment and Abuse by Local Leaders Act, which would require the Code of Conduct for municipal Councillors and members of local boards to include a requirement to comply with workplace violence and harassment policies and permit municipalities to direct the Integrity Commissioner to apply to the Court to vacate a member's seat if the Commissioner's inquiry determines that the member has contravened this requirement;

AND BE IT FURTHER RESOLVED THAT this Resolution be circulated to the municipalities represented by the Western Ontario Warden's Causus;

AND BE IT FURTHER RESOLVED THAT this Resolution be circulated to the Honourable Doug Ford, Premier of Ontario; the Honourable Steve Clark, Minister of Municipal Affairs and Housing; the Association of Municipalities of Ontario (AMO); the local Member of Parliament (MP); the local Member of Provincial Parliament (MPP); and all Ontario Municipalities.



MAYOR

#### The Corporation of the Municipality of St. Charles RESOLUTION PAGE

#### **Regular Meeting of Council**



 Agenda Number:
 10.6.

 Resolution Number
 2023-154

 Title:
 Resolution Stemming from June 21, 2023 Regular Meeting of Council - Item 9.1 - Correspondence #21

 Date:
 July 19, 2023

Moved by:	Councillor Laframboise
Seconded by:	Councillor Pothier

WHEREAS the Federal and Provincial Governments need to support their most vulnerable households, the ones who are or are at risk of becoming homeless. Overall, housing and services for low-income, vulnerable, or marginalized people should be a primary consideration moving forward so we help those who need it the most;

AND WHEREAS the Municipality of St.-Charles understands every community across Ontario is impacted by a need for affordable housing and support for people at risk of homelessness. Municipal governments are working in collaboration with all orders of government to invest in permanent solutions to the housing and homelessness crisis in Ontario;

AND WHEREAS the Municipality of St.-Charles understands that the Federal National Housing Strategy allocation formula to provinces and territories for jointly funded housing initiatives, roughly follows their share of the national population. This approach leaves Ontario underfunded because, as per the 2021 Census figures, the number of Ontario households in Community Housing Network as a share of the national total is 44.1 percent, which is well above the provincial share of the national population at 38.5 percent. This is also by far the highest share of national Community Housing Network relative to every other province and territories;

AND WHEREAS receiving a by-population allocation from the federal government hampers Ontario's ability to reach more of those households in need that require assistance with housing;

AND WHEREAS the lack of ongoing federal operating funding for National Housing Strategy initiatives leads to significant underfunding for subsidized housing projects and can undermine the physical and financial viability of the community housing stock;

AND WHEREAS a similar situation occurs with federal homelessness funding to Ontario through Reaching Home, where the share allocated to Ontario is also below the provincial share of Community Housing Network nationally;

AND WHEREAS there is an inequitable distribution of Reaching Home funding in Ontario as only 25 of 47 Service Managers have designated communities receiving funding under the program, despite the prevalence of need across the entire Province;

AND WHEREAS the Municipality of St.-Charles understands the federal government takes the position that its role is to provide capital funding while Provinces and Territories are to fund operating expenses, but this approach does not create an equitable sharing of the burden of funding long- term operating costs, which continue for the life of a project;

AND WHEREAS taken altogether, the underfunding to Ontario for housing and homelessness relative to its share of national Canadian Housing Network amounts to approximately \$480 million over the term of the Federal National Housing Strategy;

AND WHEREAS the federal government previously provided leadership in ensuring the long-term financial and physical viability of the social housing stock under the Social Housing Agreement for several decades through federal social housing operating agreements that provided funding for both mortgages and operating costs;

AND WHEREAS without some flexibility on the part of the federal government, Ontario and its municipalities will be poorly positioned to take advantage of this funding, and this will turn into a significant missed opportunity, leading to a further deterioration in the long-term physical and financial sustainability of the community housing stock;

BE IT THEREFORE RESOLVED THAT the Corporation of the Municipality of St.-Charles also supports the provincial ask for federal operating funding for National Housing Strategy initiatives;

AND BE IT FURTHER RESOLVED THAT the Corporation of the Municipality of St.-Charles would appreciate the federal effort to repurpose this funding quickly from the main National Housing Co-Investment Fund program line, Service Managers across the province have indicated their challenges with meeting the terms of the federal proposal, particularly as they relate to cost matching and meeting the requirements for greenhouse gas emissions, energy efficiency and accessibility;

AND BE IT FURTHER RESOLVED THAT the Corporation of the Municipality of St.-Charles would like need-driven indicators incorporated into the funding allocation formulas for all federal programs;

AND BE IT FURTHER RESOLVED THAT the Corporation of the Municipality of St.-Charles appreciates the federal government's commitment to end chronic homelessness and wishes this to be inclusive across all areas of our province by expanding Reaching Home funding to all Service Managers;

AND BE IT FURTHER RESOLVED THAT the Corporation of the Municipality of St.-Charles also supports the provincial position in relation to the provinces and territories Repair Fund under the National Housing Co-Investment Fund;

AND BE IT FURTHER RESOLVED THAT the Corporation of the Municipality of St.-Charles supports the Province of Ontario position on the application-based \$4 billion federal Housing Accelerator Fund. We wish to emphasize the importance of providing municipalities with maximum support in preparing applications to the HAF, understanding that some rural and northern municipalities may face capacity challenges in applying to this program on the anticipated tight timelines;

AND BE IT FURTHER RESOLVED THAT the Corporation of the Municipality of St.-Charles wishes to request that Canadian Mortgage and Housing Corporation consider actions taken by municipalities under the province's Housing Supply Action Plans into account when assessing municipal applications, recognizing that these initiatives have the potential to significantly increase the supply of housing in our communities;

AND BE IT FURTHER RESOLVED THAT the Corporation of the Municipality of St.-Charles believes the lack of ongoing federal operating funding for National Housing Strategy initiatives leads to significant underfunding for subsidized housing projects and can undermine the physical and financial viability of the community housing stock;

AND BE IT FURTHER RESOLVED THAT the Corporation of the Municipality of St.-Charles believes the federal government should heed the precedent of the Social Housing Agreement and recommit itself to funding operating costs that often stretch out over decades for the lifetime of a housing project. As an example, the Rapid Housing Initiative's 20-year affordability requirement and lack of federal operating dollars will very likely result in housing providers asking Service Managers and the provincial government to fund operating expenses to ensure the long-term affordability of units given housing providers' limited revenue-raising capacity;

AND BE IT FURTHER RESOLVED THAT this lack of ongoing federal operating funding for National Housing Strategy initiatives leads to significant underfunding for subsidized housing projects and can

undermine the physical and financial viability of the community housing stock;

AND BE IT FURTHER RESOLVED THAT the Corporation of the Municipality of St.-Charles urges the Federal Government provide additional funding for Ontario so that we can deal with our shortages of safe and affordable housing and at the same time build safer and healthier communities for all our residents;

AND BE IT FURTHER RESOLVED THAT a copy of the Resolution be forward to the individuals listed below for consideration and support, Prime Minister Trudeau; Minister Ahmed Hussen; the local Member of Parliament (MP); Premier Ford; Minister Clark; the local Member of Provincial Parliament (MPP); the Association of Municipalities of Ontario (AMO), and the Federation of Northern Ontario Municipalities (FONOM).



CARRIED

#### The Corporation of the Municipality of St. Charles RESOLUTION PAGE

#### **Regular Meeting of Council**



 Agenda Number:
 10.3.

 Resolution Number
 2023-151

 Title:
 Resolution Stemming from May 17, 2023 Regular Meeting of Council (Item 9.1 - Correspondence #9 and 15) and from the June 21, 2023 Regular Meeting Council (Item 9.1 - Correspondence #19)

 Date:
 July 19, 2023

Moved by: Councillor Loftus

Seconded by: Councillor Lachance

WHEREAS prior to being repealed by the Modernizing Ontario's Municipal Legislation Act, 2017, Section 380(6) of the Municipal Act, 2001, allowed for a municipality to retain surplus proceeds from tax sales within their jurisdiction;

AND WHEREAS the current Public Tax Sale process is a burdensome process to a municipality that invests a considerable amount of time and money recovering these proceeds for the potential sole benefit of the Crown in Right of Ontario;

BE IT RESOLVED THAT Council for the Corporation of the Municipality of St.-Charles supports the Corporation of the Town of Essex in the reinstatement of previous legislation that permitted municipalities to apply for and retain surplus proceeds from tax sales in their jurisdictions;

AND BE IT FURTHER RESOLVED THAT this Resolution be circulated to the Ministry of Municipal Affairs and Housing (MMAH); the Ministry of Finance (MOF); the Ontario Municipal Tax & Revenue Association (OMTRA); the Association of Municipalities of Ontario (AMO), the local Member of Provincial Parliament (MPP); and, all Ontario Municipalities.

		CARRIED
MAYOR		~



# The Corporation of The **Town of Amherstburg**

August 15, 2023

Premier of Ontario Legislative Building Queens Park Toronto, ON, M7A 1A4

#### SENT VIA EMAIL

#### Re: Town of Amherstburg Support Resolution - Violence Against Women

Dear Premier Ford,

Please be advised that the Town of Amherstburg, Town Council passed the following resolution at their regular meeting held on August 14, 2023:

#### That:

- 1. The Town of Amherstburg **RECEIVE** correspondence from Violence Against Women Coordinating Committee Windsor Essex (VAWCCWE);
- 2. The Town of Amherstburg DECLARE Intimate Partner Violence (IPV) as an epidemic; and,
- 3. Correspondence stating such **BE FORWARDED** to the Honourable Doug Ford, Premier of Ontario, Local MPPs, and the Minister of Women's Social and Economic Opportunity.

Motion Carried.

Regards,

Sarah Sabihuddin Deputy Clerk, Town of Amherstburg (519) 736-0012 ext. 2216 ssabihuddin@amherstburg.ca

cc: Minister of Women's Social and Economic Opportunity; Local MPPs; Association of Municipalities of Ontario; All Ontario Municipalities.

> Website: www.amherstburg.ca 271 SANDWICH ST. SOUTH, AMHERSTBURG, ONTARIO N9V 2A5 Phone: (519) 736-0012 Fax: (519) 736-5403 TTY: (519)736-9860



# The Corporation of the Township of Emo

P.O. Box 520, Emo, Ontario, POW 1E0

Website: www.emo.ca E-mail: township@emo.ca Phone: 807-482-2378 Fax: 807-482-2741

August 14, 2023

Via email only

Premier's Office Room 281 Legislative Building Queen's Park Toronto, ON M7A 1A1

Dear Honourable Doug Ford,

#### Re: Black Ash Tree Classification as "endangered" under the Endangered Species Act

Please be advised that the Council of the Municipality of Emo, at its meeting held on Wednesday, June 14, 2023 passed the following resolution.

#### Resolution June 14, 2023 No. 16

WHEREAS the Ministry of Environment, Conservation and Parks listed the Black Ash Tree as endangered in the Province of Ontario as a result of the Emerald Ash Borer infestation in eastern and southern Ontario;

WHEREAS this classification was given even though the Emerald Ash Borer is not known to be widespread in Northwestern Ontario;

WHEREAS the Black Ash Tree is assumed to remain abundant on the landscape of Northwestern Ontario;

WHEREAS the Species at Risk in Ontario (SARO) classification of "endangered" under the Endangered Species Act (ESA) prohibits killing (Harvesting), harming, harassing, possessing, transporting, trading, and selling of live or dead Black Ash, and damaging or destroying its habitat on both Crown and Private Land;



# The Corporation of the Township of Emo

P.O. Box 520, Emo, Ontario, POW 1E0

Website: www.emo.ca E-mail: township@emo.ca Phone: 807-482-2378 Fax: 807-482-2741

WHEREAS the Species at Risk in Ontario (SARO) classification of "endangered", for the Black Ash Tree, came into effect on January 26, 2022;

WHEREAS the Ontario Black Ash Recovery Strategy is proposed to come into enforcement in January 2024;

WHEREAS the strategy is not expected to change the 50-99% destruction of Black Ash by the Emerald Ash Borer;

WHEREAS the strategy contains 170 references to possibilities that "may" be or are "poorly understood", including 80-year climate change models;

WHEREAS one of these unknown factors is the Rainy River forests of Northwestern Ontario;

WHEREAS the Rainy River forests, while having features of Great Lakes – St. Lawrence, also include Boreal and Prairie habitats following a continuum from northern Minnesota rather than from Southern Ontario;

WHEREAS the strategy, if applied, will certainly have severe impact on the economy, agriculture, forestry, tourism, recreation, First Nations and residential landowners of the Rainy River District;

WHEREAS it would be impossible to fully comply with the strategy and continue living in much of the Rainy River District;

WHEREAS consultation on the Black Ash and Emerald Ash Borer did not include the majority of Northwestern Ontario.

NOW THEREFORE BE IT RESOLVED THAT the Council of the Corporation of the Township of Emo urges the Provincial Government to:

- a) Rescind the Ontario Black Ash Recovery Strategy at least as it concerns the Rainy River District and Northwestern Ontario;
- b) Seek further understanding of the health of the Black Ash in the Rainy River District and Northwestern Ontario.
- c) Complete a provincial study regarding socio-economic impact on this part of Northwestern Ontario
in consultation with stakeholders BEFORE any policies are passed and enacted upon.

Should you have any questions, please do not hesitate to contact this office.

Regards,

Crystal Gray CAO/Clerk-Deputy Treasurer Acting Treasurer Township of Emo E: <u>cao@emo.ca</u> P: (807) 482-2378

Thunder Bay – Superior North MP, Marcus Powlowski CC. Premier Doug Ford Kenora-Rainy River MPP, Greg Rickford Ministry of Agriculture, Food, and Rural Affairs Ministry of Northern Development, Mines, Natural Resources and Forestry The Association of Municipalities of Ontario (AMO) The Federation of Northern Ontario Municipalities (FONOM) Northwestern Ontario Municipal Association (NOMA) **Rural Ontario Municipal Association (ROMA)** The Federation of Agriculture **Ontario Federation of Agriculture** Office of the Ontario Regional Chief – Chiefs of Ontario Northwestern Ontario First Nations Rainy River District Municipal Association (RRDMA) Rainy River District Clerks & CAO's



**Council Resolution Form** 

Date: <u>17 Aug 2023</u>

No:

Resolution No.199-23

Moved By: <u>Councillor Popkie</u> Seconded by Councillor Thomson Disposition: <u>CARRIED.</u>

Item No: 12.08.2 Description: Request for Support - The Women of Ontario Say No

### **RESOLUTION:**

Whereas, all Ontarians deserve and expect a safe and respectful workplace; and

Whereas, municipal governments, as the democratic institutions most directly engaged with Ontarians need respectful discourse; and

Whereas, several incidents in recent years of disrespectful behaviour and workplace harassment have occurred amongst members of municipal councils; and

Whereas, these incidents seriously and negatively affect the people involved and lower public perceptions of local governments; and

Whereas, municipal Codes of Conduct are helpful tools to set expectations of council member behaviour; and

Whereas, municipal governments do not have the necessary tools to adequately enforce compliance with municipal Codes of Conduct; and

Now, therefore be it resolved that the Township of Greater Madawaska supports the call of the Association of Municipalities of Ontario for the Government of Ontario to introduce legislation to strengthen municipal Codes of Conduct and compliance with them in consultation with municipal governments; and

Also be it resolved that the legislation encompass the Association of Municipalities of Ontario's recommendations for:

• Updating municipal Codes of Conduct to account for workplace safety and harassment

• Creating a flexible administrative penalty regime, adapted to the local economic and financial circumstances of municipalities across Ontario

• Increasing training of municipal Integrity Commissioners to enhance consistency of investigations and recommendations across the province

• Allowing municipalities to apply to a member of the judiciary to remove a sitting member if recommended through the report of a municipal Integrity Commissioner

• Prohibit a member so removed from sitting for election in the term of removal and the subsequent term of office





Rob Weir, Mayor

Robin Emon, Clerk



Administration Office Mailing address Email Phone 1024 Hurlwood Lane, Severn PO Box 159, Orillia, Ontario L3V 6J3 info@severn.ca 705-325-2315

0

A

in

August 11, 2023

Climate Emergency Unit c/o The David Suzuki Institute 201 Pringle Farm Rd Saltspring Island, BC V8K 2Y2

Dear Erin Blondeau, Director of Communications

Re: Climate Emergency Just Transition Transfer (JTT)

Please be advised that the Council for the Township of Severn received correspondence respecting the Just Transition Transfer (JTT) at their recent August 9<sup>th</sup>, 2023 Council meeting.

Following discussion Motion C2023-042 was passed:

Moved by Councillor - Ward 3 Phil Brennan Seconded by Deputy Mayor Judith Cox

WHEREAS Canada's greenhouse gas (GHG) emissions are slowly starting to trend downward, but the reduction trajectory remains incongruent with what science and justice demands;

WHEREAS Canada must spend what it takes to confront the climate emergency, and there is an urgent need for Canada to spend more on climate infrastructure that would drive down GHGs and hasten the transition off fossil fuels;

WHEREAS Canada needs to make an audacious and hopeful offer to those workers and communities whose employment and economic security is currently tied to the fossil fuel industry (and to a lesser extent the auto, steel, concrete, and agriculture industries, etc., all of which face substantial transition challenges), and to Indigenous communities on the frontlines of fossil fuel extraction;

severn.ca

WHEREAS the federal government has introduced a *Sustainable Jobs Act*, but this Act needs to be paired with and backed-up by a substantial investment in the jobs of the future;

WHEREAS much of the climate infrastructure needed will come under provincial, municipal and Indigenous jurisdiction (renewable energy, grid upgrades, public transit, zero-emission housing, etc.), and training comes under provincial jurisdiction, but it is the federal government that has the greatest capacity to pay;

WHEREAS a new federal Climate Emergency Just Transition Transfer (JTT) specifically linked to funding climate infrastructure projects that would create hundreds of thousands of jobs, along with training and apprenticeships programs for workers and those leaving the oil and gas industry -- would be a transformative program that signals that Canada is indeed entering emergency mode;

WHEREAS the JTT would be an annual transfer of approximately \$25 billion from the federal government to provincial/territorial, municipal and Indigenous governments, purpose-built to meet the climate emergency imperative to decarbonize our society, ensuring communities can fund the infrastructure and training needed to transition off fossil fuels, while creating thousands of sustainable jobs in a way that is specific to their needs and locale;

WHEREAS the JTT's distribution would be based on a formula linked to recent GHG emissions in each province (but fixed from that point onward, so as not to perversely incentivize continued high GHGs), recognizing that some jurisdictions face a more challenging task to transition their local economies;

WHEREAS the JTT would transfer federal funds to newly established just transition agencies in each province and territory -- jointly governed by the federal government, provincial/territorial governments, municipal governments, and local Indigenous nations -- and in some case directly to Indigenous nations, ensuring the transfer money is not simply absorbed into provincial or municipal budgets or used to displace other infrastructure or



(O)

Ø

in

training funds, but rather, ensuring the money is used for its intended purpose, and that fund are allocated in a manner sensitive to local climate action plans, the unique GHG profiles of each region, and to local labour market/training needs;

WHEREAS a JTT could provide significant, stable, multi-year funding for the climate infrastructure and training/employment needs of municipalities, Indigenous communities, energy utilities, public transit authorities and public housing authorities;

WHEREAS the federal government is welcome to title such a new transfer as they see fit (e.g. a Sustainable Jobs Transfer or a Climate Infrastructure Transfer);

NOW THEREFORE BE IT RESOLVED, that the Township of Severn formally endorses the call for a new Just Transition Transfer; and

THAT the Township of Severn urges the federal government to establish a new Just Transition Transfer, starting with a major financial commitment in the next federal budget; and will write to the federal ministers concerned expressing this support;

AND THAT this resolution be circulated to all municipalities.

### Carried

(O)

in

Should you have any questions or concerns, please feel free to contact me at (705) 325-2315 x 232 or by email at <u>agray@severn.ca</u>

severn.ca

Regards,

Alison Gray, BAH, CMO, AOMC Clerk

Cc Ontario Municipalities



### The Corporation of The Township of The Archipelago Council Meeting

Agenda Number:	15.2.
Resolution Number	23-131
Title:	Request to Province to establish a regulatory framework for digital platforms such as Airbnb and VRBO - Resolution to Support
Date:	Friday, August 18, 2023

Moved by:Councillor BartonSeconded by:Councillor Cade Fraser

**WHEREAS** the Council of the Township of The Archipelago has received a request for support from the Town of Fort Erie with regards to Controls on Airbnb, VRBO and other global technology platforms which affect municipal rentals;

**NOW THEREFORE BE IT RESOLVED** that the Council of the Township of The Archipelago hereby supports the Town of Fort Erie's resolution and requests the Government of Ontario to establish a regulatory framework requiring digital platforms such as Airbnb and VRBO to:

- 1. Require owners using the digital platforms to comply with municipal planning and licensing regulations; and
- 2. Prevent advertising of properties that are not registered with the relevant municipality; and
- 3. Provide a contact with the platform to ensure ongoing and effective communications for provincial and municipal officials; and

**BE IT FURTHER RESOLVED** that the Province of Ontario work with municipalities to address situations in which long term housing stock has been lost to corporate ownership of short-term rental properties; and

**BE IT FINALLY RESOLVED** a copy of the resolution be forwarded to the Premier of Ontario (Hon. Doug Ford), the Minister of Municipal Affairs and Housing (Hon. Steve Clarke), local MPPs, the Association of Municipalities of Ontario (AMO) and all municipalities in Ontario.

Carried

	COUI		ΓΙΟΝ	
MUNICIPALITY OF SHUNIAH	Resolutio	n No.: <u>३०५-२२</u>	Date: <u>A</u>	Aug 8, 2023
Moved By:				
Seconded By:				
THAT Council re Huron regarding	ceives and support changes to MFIPP	s the resolutions fro A;	m Chatham-Kent a	nd South
AND THAT Cour Powlowski, MP F Privacy Commiss Legislative and F	ncil directs the Clerk Patty Hajdu, MPP Li sioner of Ontario, A Policy Advisory Com	k to forward a copy ise Vaugeois, MPP ssociation of Munic nmittee and Ontario	of this resolution to Kevin Holland, Infoi ipalities of Ontario, Municipalities.	MP Marcus mation and AMCTO
Carried			Deferred	6
		-	_	Śignature
	Municipality of Shuniah, 4	420 Leslie Avenue, Thunder Ba	ay, Ontario, P7A	$\mathcal{V}$



Dufferin Aggregates 2300 Steeles Ave W, 4<sup>th</sup> Floor Concord, ON L4K 5X6 Canada

August 11th, 2023

Seana Richardson Aggregates Technical Specialist Ministry of Natural Resources and Forestry Guelph District 1 Stone Road West Guelph, Ontario N1G 4Y2 RECEIVED AUG 11 2023 Township of Puslinch

Attention: Ms. Richardson

#### Re: Monthly Monitoring Report – July 2023 Mill Creek Pit, License #5738 Township of Puslinch, Wellington County

Please find enclosed the required monitoring data for the month of July 2023 for those monitoring wells that could be measured. Threshold value exceedances related to the head differences at two well pairs (92-12 to DP17R, and DP6 to DP3) occurred on July 25. The exceedances are attributed to 75 mm of rainfall recorded in the area between July 11 and July 25. It is interpreted that a more rapid groundwater level increase occurred at the creek drive point locations (DP17R and DP3) following the rainfall than at the locations located farther from the creek (92-12 and DP6), which temporarily reduced the head differences at the pairs. Similar occurrences have been observed at the site in previous years. The July 26 groundwater level measurements confirmed that the head differences had returned to values greater than the threshold values at both pairs.

If you have any questions, please do not hesitate to call.

Sincerely,

Jonathan Clark Site Superintendent

CC: Township of Puslinch Sonja Strynatka (GRCA) Kevin Mitchell (Dufferin Aggregates) University of Guelph



Date   DP21 (mAS)   Threshold Value (mS1)   Exceedance   BH13 (mAS1)   DP21 (mAS2)   Head Difference (mM)   Threshold Value (m)   Exceedance     21-ul-23   305.82   305.49   NO   12-ul-23   305.83   0.10   NO     12-ul-23   305.83   305.49   NO   12-ul-23   305.83   0.10   NO     21-ul-23   305.83   305.49   NO   12-ul-23   305.83   0.10   NO     21-ul-23   305.84   305.49   NO   12-ul-23   305.83   0.10   NO     21-ul-23   305.84   305.71   NO   12-ul-23   305.63   305.25   0.37   0.06   NO     12-ul-23   305.45   305.17   NO   12-ul-23   305.64   305.29   0.38   0.06   NO     21-ul-23   305.45   305.17   NO   12-ul-23   305.44   0.36   0.36   0.06   NO     21-ul-23   305.81   305.45   NO   12-ul-23   305.44   0.36					Monthly Repo	orting				
Date   DP21 (mAS)   Threshold Value   Exceedance (mAS)   DP11 (mAS)   Pert Mol Value   Exceedance     5-Jul-23   305.78   305.49   NO   305.78   305.49   NO     12-Jul-23   305.83   305.49   NO   305.82   0.32   0.10   NO     21-Jul-23   306.18   305.84   NO   305.83   0.36   0.10   NO     21-Jul-23   306.18   305.84   NO   305.83   0.36   0.10   NO     21-Jul-23   306.18   305.84   0.35   0.10   NO     21-Jul-23   305.71   NO   22-Jul-23   305.84   305.72   0.06   NO     21-Jul-23   305.45   305.17   NO   22-Jul-23   305.84   305.80   0.04   0.06   YE     26-Jul-23   305.45   305.45   305.44   NO   22-Jul-23   305.84   305.80   0.04   0.06   NO     21-Jul-23   304.75   304.54   NO   22-Jul-23					Mill Creek Aggre	gates Pit				
Date   DP21 (mASL)   Threshold Value (mASL)   Exceedance (mASL)   DP21 (mASL)   Head Difference (mASL)   Threshold Value (mASL)   Exceedance (mASL)   DP21 (mASL)   Head Difference (mASL)   Threshold Value (mASL)   Exceedance (mASL)   DP21 (mASL)   Head Difference (mASL)   Threshold Value (mASL)   Exceedance     21-Jul-23   305.82   305.49   NO   305.83   306.10   0.35   0.10   NO     22-Jul-23   306.18   305.84   NO   21-Jul-23   306.10   0.36   0.10   NO     21-Jul-23   305.30   305.17   NO   21-Jul-23   305.64   305.29   0.37   0.06   NO     21-Jul-23   305.80   305.17   NO   21-Jul-23   305.64   305.29   0.36   0.06   NO     21-Jul-23   305.47   NO   21-Jul-23   305.47   NO   21-Jul-23   305.44   0.06   NO     21-Jul-23   305.47   304.44   NO   21-Jul-23   305.45   0.02   0.58   NO     21-Jul-23					July 2023	3				
Date   Dp21 (mAS1)   Threshold Value   Exceedance (mAS1)   Dp21 (mAS1)   Head Difference (mAS1)   Threshold Value (mAS1)   Exceedance (mAS1)   Dp21 (mAS1)   Head Difference   Threshold Value (mAS1)   Exceedance (mAS1)   Dp21 (mAS1)   Head Difference (mAS1)   Threshold Value (mAS1)   Exceedance (mAS1)   Dp21 (mAS1)   Head Difference (mAS1)   Threshold Value (mAS1)   Exceedance (mAS1)   Dp21 (mAS1)   Head Difference (mAS1) <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>										
5-jul-23   305.49   NO     12.jul-23   305.82   305.49   NO     12.jul-23   305.82   305.49   NO     25.jul-23   305.83   305.49   NO     25.jul-23   305.83   305.49   NO     25.jul-23   305.82   305.49   NO     25.jul-23   305.61   305.49   NO     12.jul-23   305.62   305.17   NO     12.jul-23   305.30   305.17   NO     12.jul-23   305.63   305.67   0.35   0.06   NO     12.jul-23   305.63   305.77   NO   12.jul-23   305.63   0.35   0.06   NO     12.jul-23   305.45   305.17   NO   12.jul-23   305.45   0.35   0.06   NO     12.jul-23   305.45   305.17   NO   12.jul-23   305.45   0.35   0.06   NO     12.jul-23   305.47   304.78   304.54   NO   12.jul-23   305.45   0.32 <td>Date</td> <td>DP21 (mASL)</td> <td>Threshold Value (mASL)</td> <td>Exceedance</td> <td>Date</td> <td>BH13 (mASL)</td> <td>DP21 (mASL)</td> <td>Head Difference (m)</td> <td>Threshold Value (m)</td> <td>Exceedance</td>	Date	DP21 (mASL)	Threshold Value (mASL)	Exceedance	Date	BH13 (mASL)	DP21 (mASL)	Head Difference (m)	Threshold Value (m)	Exceedance
12-1ul-23 305.82 305.49 NO   21-1ul-23 305.83 305.49 NO   22-1ul-23 305.18 305.49 NO   22-1ul-23 305.18 305.49 NO   22-1ul-23 305.61 305.49 NO   22-1ul-23 305.62 305.17 NO   12-1ul-23 305.63 305.17 NO   12-1ul-23 305.63 305.17 NO   22-1ul-23 305.64 305.17 NO   22-1ul-23 305.75 S05.17 NO   22-1ul-23 305.75 S05.17 NO   22-1ul-23 305.75 S05.17 NO   22-1ul-23 305.75 S05.17 NO   22-1ul-23 305.74 S05.80 305.80 0.066 NO   22-1ul-23 304.75 305.45 305.17 NO S2-1ul-23 305.80 0.044 0.066 NO   22-1ul-23 304.78 304.54 NO S2-1ul-23 305.45 0.324 0.58 NO   22-1ul-23 305.45	5-Jul-23	305.78	305.49	NO	5-Jul-23	306.10	305.78	0.32	0.10	NO
121-ub-23   305.83   305.49   NO     25-ub-23   306.18   305.49   NO     25-ub-23   306.18   305.49   NO     Date   DP17 (mASL)   Threshold Value (mASL)   Exceedance (mASL)   306.18   0.15   0.10   NO     12.ub-23   305.50   305.17   NO   25.ub-23   305.61   305.62   0.37   0.06   NO     12.ub-23   305.62   305.17   NO   25.ub-23   305.64   305.26   0.37   0.06   NO     25.ub-23   305.65   305.17   NO   25.ub-23   305.64   305.26   0.38   0.06   NO     26.ub-23   306.75   305.17   NO   25.ub-23   305.64   305.26   0.36   0.06   NO     21.ub-23   306.75   304.54   NO   25.ub-23   305.64   305.76   0.32   0.58   NO     21.ub-23   306.78   304.54   NO   25.ub-23   305.77   304.75   0.32   0.58<	12-Jul-23	305.82	305.49	NO	12-Jul-23	306.18	305.82	0.35	0.10	NO
25-Jul-23   306.18   305.49   NO     Date   PP17 (mASL)   Threshold Value (mASL)   Exceedance     5-Jul-23   305.62   305.17   NO     12-Jul-23   305.63   305.17   NO     25-Jul-23   305.63   305.17   NO   305.64   305.29   0.35   0.06   NO     25-Jul-23   305.80   305.17   NO   2Jul-23   305.64   305.29   0.35   0.06   NO     25-Jul-23   305.80   305.17   NO   2Jul-23   305.64   305.29   0.35   0.06   NO     25-Jul-23   305.45   305.17   NO   2Jul-23   305.64   305.80   0.04   0.06   YE     26-Jul-23   304.77   300.54   NO   2Jul-23   305.45   0.36   0.32   0.68   NO     12-Jul-23   304.75   304.78   304.54   NO   2Jul-23   305.71   304.78   0.62   0.58   NO     12-Jul-23   304.12	21-Jul-23	305.83	305.49	NO	21-Jul-23	306.19	305.83	0.36	0.10	NO
Date   DP17 (mASL)   Threshold Value (mASL)   Exceedance (mASL)   BH92-12 (mASL)   DP17 (mASL)   Head Difference (m)   Threshold Value (m)   Exceedance (m)     12.ul-23   305.26   305.17   NO   305.63   305.26   0.37   0.06   NO     21.ul-23   305.63   305.17   NO   305.63   305.29   0.35   0.06   NO     21.ul-23   305.64   305.77   NO   25.ul-23   305.64   305.29   0.35   0.06   NO     21.ul-23   305.45   305.17   NO   25.ul-23   305.84   305.84   0.04   0.06   NS     21.ul-23   305.45   304.54   NO   21.ul-23   305.67   304.78   0.62   0.58   NO     21.ul-23   304.78   304.54   NO   21.ul-23   305.77   304.78   0.62   0.58   NO     21.ul-23   304.78   304.54   NO   21.ul-23   305.77   305.42   0.62   0.58   NO     21.ul-	25-Jul-23	306.18	305.49	NO	25-Jul-23	306.33	306.18	0.15	0.10	NO
Date   DP17 (mAsL)   Threshold Value (mAsL)   Exceedance (mAsL)   Date   BH2:12 (mAsL)   DP17 (mAsL) (mAsL)   Threshold Value (mAsL)   Exceedance (mAsL)     12:Jul-23   305.32   305.17   NO     25:Jul-23   305.80   305.17   NO     25:Jul-23   305.80   305.17   NO     25:Jul-23   305.45   305.17   NO     26:Jul-23   305.45   305.17   NO     26:Jul-23   305.45   305.17   NO     26:Jul-23   305.45   305.45   305.45   305.45     305.45   304.54   NO   26:Jul-23   305.45   304.54     12:Jul-23   304.78   304.54   NO   21:Jul-23   305.76   304.78   0.82   0.58   NO     21:Jul-23   304.78   304.54   NO   21:Jul-23   305.72   305.72   0.62   0.58   NO     21:Jul-23   304.78   304.54   NO   21:Jul-23   305.71   305.71   305.71   305.71   30										
S-Jul-23   305,26   306,17   NO     12.1ul-23   305,30   306,17   NO     12.1ul-23   305,29   305,17   NO     12.1ul-23   305,29   305,17   NO     12.1ul-23   305,80   305,17   NO     25.1ul-23   305,80   305,17   NO     26.1ul-23   305,45   305,17   NO     26.1ul-23   305,45   305,17   NO     26.1ul-23   305,45   305,17   NO     25.1ul-23   305,45   305,17   NO     26.1ul-23   305,45   305,45   305,57   304,75   304,76   304,78   0.06   NO     21.1ul-23   304,78   304,54   NO   12.1ul-23   305,77   304,78   0.02   0.58   NO     25.1ul-23   305,12   304,78   304,54   NO   12.1ul-23   305,77   304,78   0.62   0.58   NO     25.1ul-23   304,12   304,54   NO   10.1   0.58<	Date	DP17 (mASL)	Threshold Value (mASL)	Exceedance	Date	BH92-12 (mASL)	DP17 (mASL)	Head Difference (m)	Threshold Value (m)	Exceedance
12-Jul-23 305.30 306.17 NO   21-Jul-23 305.29 305.17 NO   25-Jul-23 305.80 305.17 NO   25-Jul-23 305.80 305.17 NO   25-Jul-23 305.85 305.17 NO   25-Jul-23 305.84 305.17 NO   Threshold Value (mASL) Exceedance   (mASL) Threshold Value (mASL) Exceedance Date DP3 (mASL) Head Difference (mASL) Threshold Value (mASL) Exceedance   12-Jul-23 304.78 304.54 NO 12-Jul-23 305.67 304.75 0.92 0.58 NO   12-Jul-23 304.78 304.54 NO 12-Jul-23 305.45 0.02 0.58 NO   12-Jul-23 305.45 304.54 NO 12-Jul-23 305.57 304.78 1.01 0.58 NO   12-Jul-23 304.78 304.54 NO 12-Jul-23 305.45 0.32 0.58 NO   12-Jul-23 304.18 303.50 NO 12-Jul-23 304.77 304.03 <td>5-Jul-23</td> <td>305.26</td> <td>305.17</td> <td>NO</td> <td>5-Jul-23</td> <td>305.63</td> <td>305.26</td> <td>0.37</td> <td>0.06</td> <td>NO</td>	5-Jul-23	305.26	305.17	NO	5-Jul-23	305.63	305.26	0.37	0.06	NO
21-jul-23   305.29   305.17   NO     25-jul-23   305.45   305.17   NO     26-jul-23   305.45   305.17   NO     26-jul-23   305.45   305.17   NO     26-jul-23   305.45   305.17   NO     26-jul-23   305.45   305.45   0.36   0.06   YEs     26-jul-23   304.75   304.54   NO   26-jul-23   305.60   304.78   0.82   0.58   NO     12-jul-23   304.78   304.54   NO   12-jul-23   305.67   304.78   0.82   0.58   NO     12-jul-23   305.45   304.54   NO   12-jul-23   305.60   304.78   0.82   0.58   NO     12-jul-23   305.12   304.54   NO   12-jul-23   305.79   304.78   0.32   0.58   NO     12-jul-23   304.12   303.50   NO   12-jul-23   305.77   304.78   0.32   NO     12-jul-23   304.11	12-Jul-23	305.30	305.17	NO	12-Jul-23	305.67	305.30	0.38	0.06	NO
25-jul-23   305.80   305.17   NO     26-jul-23   305.45   305.17   NO     26-jul-23   305.45   305.17   NO     26-jul-23   305.45   305.17   NO     Date   DP3 (mASL)   Threshold Value (mASL)   Exceedance (mASL)   DP3 (mASL)   Head Difference (mASL)   Threshold Value (m)   Exceedance (mASL)   DP3 (mASL)   Head Difference (mASL)   NO     12-jul-23   304.78   304.54   NO   12-jul-23   305.67   304.78   0.82   0.58   NO     25-jul-23   305.12   304.54   NO   12-jul-23   305.77   305.45   0.32   0.58   YES     26-jul-23   305.12   304.54   NO   25-jul-23   305.77   305.45   0.32   NO     21-jul-23   304.13   303.50   NO   12-jul-23   304.78   0.422   0.58   YES     2-jul-23   304.11   303.50   NO   12-jul-23   304.71   0.32   NO     21-jul-23	21-Jul-23	305.29	305.17	NO	21-Jul-23	305.64	305.29	0.35	0.06	NO
26-Jul-23   305.45   305.17   NO     Date   DP3 (mASL)   Threshold Value (mASL)   Exceedance (mASL)   Exceedance (mASL)   DP3 (mASL)   Head Difference (m)   Threshold Value (m)   Exceedance (m)   Exceedance (m)   NO     12-Jul-23   304.75   304.54   NO   5Jul-23   305.65   304.75   0.92   0.58   NO     12-Jul-23   304.78   304.54   NO   12-Jul-23   305.67   304.78   0.82   0.58   NO     25-Jul-23   305.45   304.54   NO   25-Jul-23   305.77   305.45   0.32   0.58   NO     26-Jul-23   305.50   NO   25-Jul-23   305.77   305.45   0.32   0.58   NO     12-Jul-23   304.12   303.50   NO   12-Jul-23   304.76   304.12   0.64   0.32   NO     12-Jul-23   304.19   303.50   NO   12-Jul-23   304.71   0.74   0.32   NO     12-Jul-23   304.31   303.41   3	25-Jul-23	305.80	305.17	NO	25-Jul-23	305.84	305.80	0.04	0.06	YES
Date   DP3 (mASL)   Threshold Value (mASL)   Exceedance (mASL)   DP3 (mASL) (mASL)   Head Difference (mASL)   Threshold Value (mASL)   Exceedance (mASL)     5-Jul-23   304.75   304.54   NO     25-Jul-23   304.78   304.54   NO     25-Jul-23   305.45   304.54   NO     25-Jul-23   305.45   304.54   NO     25-Jul-23   305.512   304.54   NO     25-Jul-23   305.12   304.54   NO     Date   DP2 (mASL)   Threshold Value (mASL)   Exceedance (mASL)     5-Jul-23   304.12   303.50   NO     12-Jul-23   304.19   303.50   NO     12-Jul-23   304.11   303.50   NO     12-Jul-23   304.13   303.50   NO     12-Jul-23   304.31   303.50   NO     12-Jul-23   304.31   303.50   NO     12-Jul-23   304.31   304.31   304.31   0.64   0.32   NO     12-Jul-23   304.37 <td>26-Jul-23</td> <td>305.45</td> <td>305.17</td> <td>NO</td> <td>26-Jul-23</td> <td>305.81</td> <td>305.45</td> <td>0.36</td> <td>0.06</td> <td>NO</td>	26-Jul-23	305.45	305.17	NO	26-Jul-23	305.81	305.45	0.36	0.06	NO
Date   DP3 (mASL)   Threshold Value (mASL)   Exceedance (mASL)   Date   DP3 (mASL) (mASL)   Head Difference (m)   Threshold Value (m)   Exceedance (m)     12-Jul-23   304.78   304.54   NO     12-Jul-23   304.78   304.54   NO     25-Jul-23   305.45   304.54   NO     25-Jul-23   305.12   305.50   NO     12-Jul-23   304.03   303.50   NO     12-Jul-23   304.12   303.50   NO     25-Jul-23   304.12   303.50   NO     25-Jul-23   304.12   303.50   NO     25-Jul-23   304.12   303.50   NO     25-Jul-23   304.34   303.91   NO     25-Jul-23   304.34   303.91   NO     12-Jul										//
5-Jul-23   304.75   304.54   NO     12.Jul-23   304.78   304.78   304.54   NO     21.Jul-23   304.78   304.54   NO     25.Jul-23   305.45   304.54   NO     25.Jul-23   305.12   304.54   NO     25.Jul-23   305.12   304.54   NO     25.Jul-23   305.12   304.54   NO     Date   DP2 (mASL)   Threshold Value (mASL)   Exceedance (mASL)   Esceedance (mASL)   DP2 (mASL)   Head Difference (m)   Threshold Value (m)   Esceedance     12.Jul-23   304.12   303.50   NO   12.Jul-23   304.76   304.12   0.64   0.32   NO     12.Jul-23   304.12   303.50   NO   12.Jul-23   304.13   0.64   0.32   NO     12.Jul-23   304.12   304.12   0.64   0.32   NO     12.Jul-23   304.34   303.50   NO   12.Jul-23   304.31   0.74   0.32   NO     12.Jul-23   <	Date	DP3 (mASL)	Threshold Value (mASL)	Exceedance	Date	DP6 (mASL)	DP3 (mASL)	Head Difference (m)	Threshold Value (m)	Exceedance
12-Jul-23 304.78 304.54 NO   21-Jul-23 304.78 304.54 NO   25-Jul-23 305.45 304.54 NO   25-Jul-23 305.45 304.54 NO   25-Jul-23 305.45 304.54 NO   25-Jul-23 305.12 304.54 NO   Threshold Value (mASL) Exceedance (mASL) DP2 (mASL) Meab Difference (mM) Threshold Value (mM) Exceedance (mASL)   12-Jul-23 304.12 303.50 NO 5-Jul-23 304.12 0.64 0.32 NO   12-Jul-23 304.12 303.50 NO 5-Jul-23 304.19 0.74 0.32 NO   12-Jul-23 304.19 303.50 NO 12-Jul-23 304.19 0.74 0.32 NO   12-Jul-23 304.19 303.50 NO 12-Jul-23 304.19 0.74 0.32 NO   12-Jul-23 304.19 303.50 NO 12-Jul-23 304.19 0.72 0.32 NO   12-Jul-23 304.49 303.50 NO 12-Jul	5-Jul-23	304.75	304.54	NO	5-Jul-23	305.67	304.75	0.92	0.58	NO
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	12-Jul-23	304.78	304.54	NO	12-Jul-23	305.60	304.78	0.82	0.58	NO
25-Jul-23   305.45   304.54   NO     26-Jul-23   305.12   304.54   NO     Date   DP2 (mASL)   Threshold Value (mASL)   Exceedance   0.52   0.62   0.62   0.62   NO     5-Jul-23   304.03   303.50   NO   0.51   0.62   0.62   NO     12-Jul-23   304.12   303.50   NO   0.74   0.32   NO     25-Jul-23   304.19   303.50   NO   0.74   0.32   NO     25-Jul-23   304.19   303.50   NO   0.74   0.32   NO     25-Jul-23   304.19   303.50   NO   21-Jul-23   304.79   0.72   0.32   NO     25-Jul-23   304.29   303.91   NO   25-Jul-23   304.87   304.91   0.74   0.32   NO     21-Jul-23   304.29   303.91   NO   25-Jul-23   304.87   304.29   0.55   0.23   NO     12-Jul-23   304.37   303.91   NO	21-Jul-23	304.78	304.54	NO	21-Jul-23	305.79	304.78	1.01	0.58	NO
26-Jul-23   305.12   304.54   NO     26-Jul-23   305.12   304.54   NO     Date   DP2 (mASL)   Threshold Value (mASL)   Exceedance   Masce   Masce <t< td=""><td>25-Jul-23</td><td>305.45</td><td>304.54</td><td>NO</td><td>25-Jul-23</td><td>305.77</td><td>305.45</td><td>0.32</td><td>0.58</td><td>YES</td></t<>	25-Jul-23	305.45	304.54	NO	25-Jul-23	305.77	305.45	0.32	0.58	YES
Date   DP2 (mASL)   Threshold Value (mASL)   Exceedance     12-Jul-23   304.03   303.50   NO     12-Jul-23   304.12   303.50   NO     12-Jul-23   304.12   303.50   NO     21-Jul-23   304.12   303.50   NO     21-Jul-23   304.11   303.50   NO     25-Jul-23   304.11   303.50   NO     25-Jul-23   304.11   303.50   NO     25-Jul-23   304.11   0.72   0.32   NO     25-Jul-23   304.29   303.91   NO   25-Jul-23   304.85   304.11   0.74   0.32   NO     12-Jul-23   304.11   0.72   0.32   NO   25-Jul-23   304.91   0.74   0.32   NO     12-Jul-23   304.29   303.91   NO   25-Jul-23   304.87   304.29   0.58   0.23   NO     12-Jul-23   304.37   303.91   NO   25-Jul-23   304.81   0.55   0.23   NO	26-Jul-23	305.12	304.54	NO	26-Jul-23	305.74	305.12	0.62	0.58	NO
Date   DP2 (mASL)   Threshold Value (mASL)   Exceedance   Date   BH92-27 (mASL)   DP2 (mASL)   Head Difference (m)   Threshold Value (m)   Exceedance     5-Jul-23   304.03   303.50   NO     12-Jul-23   304.12   303.50   NO     21-Jul-23   304.13   303.50   NO     21-Jul-23   304.11   303.50   NO     25-Jul-23   304.11   303.50   NO     25-Jul-23   304.11   303.50   NO     25-Jul-23   304.11   303.50   NO     25-Jul-23   304.12   304.19   0.72   0.32   NO     25-Jul-23   304.29   303.91   NO   25-Jul-23   304.29   0.58   0.23   NO     12-Jul-23   304.37   303.91   NO   12-Jul-23   304.29   0.58   0.23   NO     12-Jul-23   304.37   303.91   NO   12-Jul-23   304.29   0.58   0.23   NO     12-Jul-23   304.47   303.47 </td <td></td>										
5-Jul-23 304.03 303.50 NO   12-Jul-23 304.12 303.50 NO   21-Jul-23 304.12 303.50 NO   21-Jul-23 304.19 303.50 NO   25-Jul-23 304.11 303.50 NO   25-Jul-23 304.11 303.50 NO   25-Jul-23 304.11 303.50 NO   Date DP1 (mASL) Threshold Value (mASL) Exceedance Mass BH92-29 DP1 (mASL) Head Difference Threshold Value (m) Exceedance   12-Jul-23 304.37 303.31 NO Sol.437 304.32 0.55 0.23 NO   12-Jul-23 304.37 303.91 NO Sol.437 304.34 0.55 0.23 NO   12-Jul-23 304.37 303.91 NO Sol.023 NO Sol.023 NO   25-Jul-23 303.437 303.91 NO Sol.023 304.37 0.63 0.23 NO   25-Jul-23 303.28 302.79 NO Sol.023 Sol.01 NO <td< td=""><td>Date</td><td>DP2 (mASL)</td><td>Threshold Value (mASL)</td><td>Exceedance</td><td>Date</td><td>BH92-27 (mASL)</td><td>DP2 (mASL)</td><td>Head Difference (m)</td><td>Threshold Value (m)</td><td>Exceedance</td></td<>	Date	DP2 (mASL)	Threshold Value (mASL)	Exceedance	Date	BH92-27 (mASL)	DP2 (mASL)	Head Difference (m)	Threshold Value (m)	Exceedance
12-Jul-23 304.12 303.50 NO   21-Jul-23 304.19 303.50 NO   25-Jul-23 304.11 303.50 NO   25-Jul-23 304.11 303.50 NO   25-Jul-23 304.11 303.50 NO   Date DP1 (mASL) Threshold Value (mASL) Exceedance BH92-29 DP1 (mASL) Threshold Value (mASL) Exceedance   5-Jul-23 304.34 303.91 NO Sol.55 0.23 NO   12-Jul-23 304.37 303.91 NO Sol.47 304.29 0.58 0.23 NO   12-Jul-23 304.37 303.91 NO Sol.47 304.37 0.55 0.23 NO   21-Jul-23 304.37 303.91 NO Sol.47 304.37 0.55 0.23 NO   25-Jul-23 304.47 303.91 NO Sol.40 304.37 0.63 0.23 NO   25-Jul-23 304.47 303.91 NO Sol.40 304.47 0.53 0.23 NO   5-Jul-23 303.47	5-Jul-23	304.03	303.50	NO	5-Jul-23	304.77	304.03	0.74	0.32	NO
21-Jul-23 304.19 303.50 NO   25-Jul-23 304.11 303.50 NO   25-Jul-23 304.11 303.50 NO   Date DP1 (mASL) Threshold Value (mASL) Exceedance BH92-29 DP1 (mASL) Head Difference Threshold Value (m) Exceedance   5-Jul-23 304.34 303.91 NO 5-Jul-23 304.87 304.29 0.58 0.23 NO   12-Jul-23 304.37 303.91 NO 12-Jul-23 304.37 0.63 0.23 NO   25-Jul-23 304.47 303.91 NO 305.00 304.37 0.63 0.23 NO   25-Jul-23 303.47 303.91 NO 305.00 304.47 0.53 0.23 NO   25-Jul-23 303.47 303.91 NO 305.00 304.47 0.53 0.23 NO   25-Jul-23 303.28 302.79 NO 304.47 0.53 0.23 NO   5-Jul-23 303.41 302.79 NO 12-Jul-23 303.63 303.28 0.35	12-Jul-23	304.12	303.50	NO	12-Jul-23	304.76	304.12	0.64	0.32	NO
25-Jul-23   304.11   303.50   NO     25-Jul-23   304.11   0.74   0.32   NO     Date   DP1 (mASL)   Threshold Value (mASL)   Exceedance   BH92-29 (mASL)   DP1 (mASL)   Threshold Value (m)   Threshold Value (m)   Exceedance     5-Jul-23   304.29   303.91   NO   S-Jul-23   304.34   303.91   NO     12-Jul-23   304.37   303.91   NO   S-Jul-23   304.37   0.63   0.23   NO     25-Jul-23   304.47   303.91   NO   Softward   0.55   0.23   NO     25-Jul-23   304.47   303.91   NO   Softward   0.53   0.23   NO     25-Jul-23   304.47   303.91   NO   Softward   0.53   0.23   NO     25-Jul-23   303.47   303.91   NO   Softward   0.53   0.23   NO     5-Jul-23   303.41   0.28   0.15   NO   NO     5-Jul-23   303.28   302.79 <t< td=""><td>21-Jul-23</td><td>304.19</td><td>303.50</td><td>NO</td><td>21-Jul-23</td><td>304.91</td><td>304.19</td><td>0.72</td><td>0.32</td><td>NO</td></t<>	21-Jul-23	304.19	303.50	NO	21-Jul-23	304.91	304.19	0.72	0.32	NO
Date   DP1 (mASL)   Threshold Value (mASL)   Exceedance   BH92-29 (mASL)   DP1 (mASL)   Head Difference (m)   Threshold Value (m)   Exceedance     5-Jul-23   304.29   303.91   NO     12-Jul-23   304.34   303.91   NO     21-Jul-23   304.37   303.91   NO     25-Jul-23   304.47   303.91   NO     25-Jul-23   303.41   302.79   NO     5-Jul-23   303.28   302.79   NO     12-Jul-23   303.39   302.79   NO     21-Jul-23   303.55   302.79   NO	25-Jul-23	304.11	303.50	NO	25-Jul-23	304.85	304.11	0.74	0.32	NO
Date   DP1 (mASL)   Threshold Value (mASL)   Exceedance   BH92-29 (mASL)   DP1 (mASL)   Head Difference (m)   Threshold Value (m)   Exceedance     5-Jul-23   304.29   303.91   NO   5-Jul-23   304.34   303.91   NO   5-Jul-23   304.34   0.55   0.23   NO     21-Jul-23   304.37   303.91   NO   304.97   304.34   0.55   0.23   NO     25-Jul-23   304.47   303.91   NO   25-Jul-23   305.00   304.47   0.63   0.23   NO     25-Jul-23   303.40   0.55   0.23   NO   25-Jul-23   305.00   304.47   0.63   0.23   NO     0   DF5CR (mASL)   Threshold Value (mASL)   Exceedance   0W5-84   DP5CR (mASL)   Postod Value (m)   Threshold Value (m)   Exceedance     5-Jul-23   303.28   302.79   NO   2Jul-23   303.63   303.28   0.15   NO     12-Jul-23   303.55   302.79   NO   2Jul-23   303.64									1	
5-Jul-23   304.29   303.91   NO     12-Jul-23   304.34   303.91   NO     21-Jul-23   304.37   303.91   NO     21-Jul-23   304.37   303.91   NO     25-Jul-23   304.47   303.91   NO     25-Jul-23   304.47   303.91   NO     25-Jul-23   304.47   303.91   NO     25-Jul-23   304.47   0.63   0.23   NO     25-Jul-23   304.47   0.53   0.23   NO     Date   DP5CR (mASL)   Threshold Value (mASL)   Exceedance   0W5-84 (mASL)   DP5CR (mASL)   Head Difference (m)   Threshold Value (m)   Exceedance     5-Jul-23   303.28   302.79   NO   5-Jul-23   303.63   303.28   0.35   0.15   NO     12-Jul-23   303.39   302.79   NO   12-Jul-23   303.66   303.39   0.27   0.15   NO     25-Jul-23   303.55   302.79   NO   25-Jul-23   303.74   303.55	Date	DP1 (mASL)	Threshold Value (mASL)	Exceedance	Date	BH92-29 (mASL)	DP1 (mASL)	Head Difference (m)	Threshold Value (m)	Exceedance
12-Jul-23 304.34 303.91 NO   21-Jul-23 304.37 303.91 NO   25-Jul-23 304.47 303.91 NO   25-Jul-23 304.47 303.91 NO   25-Jul-23 304.47 303.91 NO   Date DP5CR (mASL) Threshold Value (mASL) Exceedance Desceedance NO   5-Jul-23 303.41 302.79 NO S-Jul-23 303.63 303.28 0.15 NO   12-Jul-23 303.39 302.79 NO S-Jul-23 303.69 303.41 0.28 0.15 NO   21-Jul-23 303.39 302.79 NO S-Jul-23 303.69 303.41 0.28 0.15 NO   21-Jul-23 303.39 302.79 NO S-Jul-23 303.66 303.39 0.27 0.15 NO   25-Jul-23 303.55 302.79 NO S-Jul-23 303.67 303.55 0.19 0.15 NO	5-Jul-23	304.29	303.91	NO	5-Jul-23	304.87	304.29	0.58	0.23	NO
21-Jul-23 304.37 303.91 NO   25-Jul-23 304.47 303.91 NO   25-Jul-23 304.47 303.91 NO   Date DP5CR (mASL) Threshold Value (mASL) Exceedance Descedance Intershold Value (mASL) Exceedance Intershold Value (mASL) Desce (mASL) Head Difference (mASL) Threshold Value (mASL) Exceedance   5-Jul-23 303.28 302.79 NO S-Jul-23 303.63 303.28 0.35 0.15 NO   12-Jul-23 303.39 302.79 NO S-Jul-23 303.66 303.39 0.27 0.15 NO   25-Jul-23 303.55 302.79 NO S-Jul-23 303.67 303.55 0.19 0.15 NO	12-Jul-23	304.34	303.91	NO	12-Jul-23	304.89	304.34	0.55	0.23	NO
25-Jul-23 304.47 303.91 NO   25-Jul-23 304.47 0.53 0.23 NO   Date DP5CR (mASL) Threshold Value (mASL) Exceedance Image: Comparison of the comparison	21-Jul-23	304.37	303.91	NO	21-Jul-23	305.00	304.37	0.63	0.23	NO
Date   DP5CR (mASL)   Threshold Value (mASL)   Exceedance   Date   OW5-84 (mASL)   DP5CR (mASL)   Head Difference (m)   Threshold Value (m)   Exceedance     5-Jul-23   303.28   302.79   NO   5-Jul-23   303.63   303.28   0.35   0.15   NO     12-Jul-23   303.39   302.79   NO   12-Jul-23   303.66   303.39   0.27   0.15   NO     25-Jul-23   303.55   302.79   NO   25-Jul-23   303.74   303.55   0.19   0.15   NO	25-Jul-23	304.47	303.91	NO	25-Jul-23	305.00	304.47	0.53	0.23	NO
Date   DrSCR (mASL)   Threshold Value (mASL)   Exceedance     5-Jul-23   303.28   302.79   NO     12-Jul-23   303.41   302.79   NO     12-Jul-23   303.39   302.79   NO     12-Jul-23   303.39   302.79   NO     12-Jul-23   303.55   302.79   NO										<u> </u>
5-Jul-23   303.28   302.79   NO     12-Jul-23   303.41   302.79   NO     21-Jul-23   303.39   302.79   NO     25-Jul-23   303.55   302.79   NO     25-Jul-23   303.55   302.79   NO	Date	DP5CR (mASL)	Threshold Value (mASL)	Exceedance	Date	OW5-84 (mASL)	DP5CR (mASL)	Head Difference (m)	Threshold Value (m)	Exceedance
12-Jul-23   303.41   302.79   NO     21-Jul-23   303.39   302.79   NO     25-Jul-23   303.55   302.79   NO	5-Jul-23	303.28	302.79	NO	5-Jul-23	303.63	303.28	0.35	0.15	NO
21-Jul-23   303.39   302.79   NO   21-Jul-23   303.66   303.39   0.27   0.15   NO     25-Jul-23   303.55   302.79   NO   25-Jul-23   303.74   303.55   0.19   0.15   NO	12-Jui-23	303.41	302.79	NO	12-jul-23	303.69	303.41	0.28	0.15	NO
25-Jul-23 303.55 302.79 NO 25-Jul-23 303.74 303.55 0.19 0.15 NO	21-Jul-23	303.39	302.79	NO	21-Jul-23	303.66	303.39	0.27	0.15	NO
	25-Jul-23	303.55	302.79	NO	25-Jul-23	303.74	303.55	0.19	0.15	NO

Note: Threshold value exceedances related to the head differences at two well pairs (92-12 to DP17R, and DP6 to DP3) occurred on July 25. The exceedances are attributed to 75 mm of rainfall recorded in the area between July 11 and July 25. It is interpreted that a more rapid groundwater level increase occurred at the creek drive point locations (DP17R and DP3) following the rainfall than at the locations located farther from the creek (92-12 and DP6), which temporarily reduced the head differences at the pairs. Similar occurrences have been observed at the site in previous years. The July 26 groundwater level measurements confirmed that the head differences had returned to values greater than the threshold values at both pairs.



p

Mill Creek Ag	gregates Pit											
July 2023					Adam Allan	while an east	DT04/ Main Pand	i – – i	May Al	llowable as r	or PTTW_ Silt Pond	1
					(Imperial	able as per	(Litres)	-	(Imperial		(Litres)	
Tatal Manthly Da	colsitation (mask	166.4	Witchener/Materico	(Actual)	Gallons)	ner minute	11 365	1	2.597	per minute	11.806	-
Total Monthly Pa	ecipitation (mm):	09.6	Waterloo Wellington	A (30-year Normal)	1 800 000	per day	8 183 000	4	3 739 477	per day	17.000.000	
Total Monthly No	mai Precipitation (mini).	90.0		A (Jo-year Normal)	1,000,000	peruay	0,103,000	1	0,100,411	portog		h
Date	Below Water Table Extraction Phase 5	Below Water Table Extraction Phase 2	Water Pumped from Main Pond (gals)	Water Pumped from Active Silt Pond (gals)	Main Pond Level (mASL)	Exceedance Y/N (BELOW 305.5 mASL)	Phase 2 Pond Level (mASL)	Exceedance Y/N (BELOW 305.0 mASL)	Phase 3 Pond Level (mASL)	Exceedance Y/N (BELOW 303.85 mASL)	Phase 4 Pond Level (mASL)	Exceedance Y/N (BELOW 304.5 mASL)
1-Jul-23	-	-		-		-		-	-	-	ie.	-
2-Jul-23		-		-				-				· · · ·
3-Jul-23	-	-	-	-	•	-		-		•		-
4-Jul-23	0	0	1,732,258	0	306.34	N	305.87	N	304.94	N	306.04	N
5-Jul-23	0	0	1,758,874	0	306.34	N	305.87	N	304.93	N	306.03	N
6-Jul-23	0	0	1,648,010	0	306.33	N	305.87	N	304.92	N	306.02	N
7-Jul-23	0	0	1,778,451	0	306.36	N	305.89	N	304.95	N	306.05	N
8-Jul-23	-	-	-	•	-	-	1	-	. (5)	-		-
9-Jul-23			k.	-	-	-	-	-		-	•	-
10-Jul-23	0	0	1,396,805	0	306.35	N	305.87	N	304.91	N	306.04	N
11-Jul-23	0	0	1,683,425	0	306.34	N	305.85	N	304.95	N	305.99	N
12-Jul-23	0	0	1,763,273	0	306.34	N	305.87	N	304.95	N	305.97	N
13-Jul-23	0	0	1,758,654	0	306.39	N	305.88	N	304.98	N	305.99	N
14-Jul-23	0	0	1,750,955	0	306.38	N	305.91	N	305.01	N	305.96	N
15-Jul-23	-	-				-	-	-	- A			-
16-Jul-23	-	-		-		-	-	-			· · · · · · · · · · · · · · · · · · ·	-
17-Jul-23	0	0	1,742,596	0	306.39	N	305.91	N	305.07	N	305.90	N
18-Jul-23	0	0	1,426,281	0	306.39	N	305,90	N	305.10	N	305.90	N
19-Jul-23	0	0	1,137,681	0	306,39	N	305,90	N	305,08	N	305.88	N
20-Jul-23	0	0	1,778,451	0	306.41	N	305.90	N	305.08	N	305.87	N
21-Jul-23	0	0	1,265,703	0	306.38	N	305.90	N	305.08	N	305.87	N
22-Jul-23	-	-		-		•	•	•	<b>1</b> 2	-	•	•
23-Jul-23	-	-	-	-	-	-	-	-	-	-		•
24-Jul-23	0	0	1,753,595	0	306.37	N	305.90	N	305.07	N	305.85	N
25-Jul-23	0	0	1,753,595	0	306.38	N	305.89	N	305.08	N	305.91	N
26-Jul-23	0	0	1,760,634	0	306.37	N	305.88	N	305.04	N	305.90	N
27-Jul-23	0	0	1,647,130	0	306.38	N	305,90	N	305.09	N	305.90	N
28-Jul-23	0	0	1,750,075	0	306.39	N	305,90	N	305.09	N	305,90	N
29-Jul-23	0	0	701,482	0	306.39	N	305.90	N	305.09	N	305.90	N
30-Jul-23	-	-	-	-	-	•			-	•	-	
31-Jul-23	0	0	1,794,509	0	306.42	N	305.91	N	305.08	N	305.96	N
Total	0	0	31,987,928	0	· ·	· · ·	-		-	-	-	-

Note: No exceedances to report for the month of July.

### **Hillary Miller**

From: Sent: To: Subject: Attachments: Eowyn Spencer <espencer@grandriver.ca> Friday, August 25, 2023 3:57 PM Eowyn Spencer Summary of the General Membership Meeting – August 25, 2023 image001.emz



Grand River Conservation Authority

Summary of the General Membership Meeting – August 25, 2023

To GRCA/GRCF Boards and Grand River watershed municipalities - Please share as appropriate.

### **Action Items**

The Board approved the resolutions in the following reports as presented in the agenda:

- Ad-hoc Conservation Authorities Act Regulations Committee Minutes August 16, 2023
- GM-08-23-60 Cash and Investment Status
- GM-08-23-62 Financial Summary
- GM-08-23-56 2023 and 2024 Tree Nursery Plan and Tree Planting Fees
- GM-08-23-55 Development, Interference with Wetlands and Alterations to Shorelines Regulation
- GM-08-23-59 ERO Posting 019-6813 Review of proposed policies adapted from A Place to Grow and Provincial Policy Statement

### **Information Items**

The Board received the following reports as information:

- GM-08-23-60 Cash and Investment Status
- GM-08-23-57 Canadian Heritage River 30th Anniversary Report
- GM-08-23-61 Current Watershed Conditions

### Correspondence

The Board received the following correspondence:

- Halton Region re: 2024 Budget Direction
- Mississaugas of the Credit First Nation re: greenbelt removals

### Delegations

There were no delegations.

### **Source Protection Authority**

The General Membership of the GRCA also acts as the Source Protection Authority Board. A meeting of the SPA was not held this month.

For full information, please refer to the <u>August 25 Agenda Package</u>. Complete agenda packages and minutes of past meetings can be viewed on our <u>online calendar</u>. The minutes of this meeting will be posted on our online calendar once they have been approved.

You are receiving this email as a GRCA board member, GRCF board member, or a Grand River watershed member municipality. If you do not wish to receive this monthly summary, please respond to this email with the word 'unsubscribe'.

### **Eowyn Spencer**

Executive Assistant Grand River Conservation Authority

400 Clyde Road, PO Box 729 Cambridge, ON N1R 5W6 Office: 519-621-2763 ext. 2200 Toll-free: 1-866-900-4722 www.grandriver.ca | Connect with us on social



### **REPORT FIN-2023-026**

TO:	Mayor and Members of Council
PREPARED BY:	Mary Hasan, Director of Finance/Treasurer
PRESENTED BY:	Mary Hasan, Director of Finance/Treasurer
MEETING DATE:	September 6, 2023
SUBJECT:	2024 Proposed Cost of Living Adjustment File No. F05 BUD

#### RECOMMENDATIONS

THAT Report FIN-2023-026 entitled 2024 Proposed Cost of Living Adjustment be received; and

THAT Council approve a Cost of Living Adjustment of 4.0% effective January 1, 2024 with the remaining 2.9% Cost of Living Adjustment to be added to the Cost of Living Adjustment approved in the 2025 budget and future year budgets (as needed).

### DISCUSSION

### <u>Purpose</u>

The purpose of this report is to provide a recommendation to Council regarding the Cost of Living Adjustment (COLA) for the 2024 budget in accordance with the Budget Development and Control Policy.

### **Background**

COLA is applied annually to the Township's pay grid to ensure that compensation rates remain comparable to similar municipalities in the area. When a market review is undertaken to ensure wages are at an appropriate level, if regular incremental adjustments are not made, a significant adjustment will need to be made every 3-5 years which will have significant budgetary impacts at that time. Ensuring that the Township's pay grid remains current is essential to ensure that it can retain its skilled and dedicated staff as long as possible and that when recruitment is necessary, that quality candidates can be attracted and brought on to the team.

### **Budget Development and Control Policy**

Clause 8c of the Budget Development and Control Policy includes information regarding COLA as outlined below:

The Director of Finance/Treasurer or designate will determine and incorporate in the base operating budget a cost of living adjustment (COLA) based on:

- i. The CPI for Ontario from May to May for the current proposed budget year and present to Council for approval prior to the preparation of the proposed operating budget.
- ii. If the CPI for Ontario from May to May in any given year, results in a negative CPI percentage, the pay band grid will remain the same as the previous year. In the following year, the negative CPI percentage will be netted against the positive CPI percentage.
- iii. If the CPI for Ontario from May to May in any given year, results in a CPI percentage increase greater than 4%, the pay band grid will be increased by 4%. In the following year, any resulting shortage will be added to that year's increase. The annual increase will not exceed 4% in any given year. Amounts in excess of 4% will continue to be carried forward each year until caught up within the 4% cap.
- iv. The available COLA's approved or proposed by comparator municipalities surveyed in the Township's Compensation Review will be provided for Council's information.
- v. The available COLA's approved or proposed by boundary municipalities will be provided for Council's information.

The above policy enables the Township to buffer the extremes, phase in any significant COLA increases over time, and it provides certainty.

Summarized in Schedule A to Report FIN-2023-026 is the following:

- The average approved COLA from 2018 to 2023 in the comparator municipalities in the Township's 2020 Compensation Review.
- The Township's approved COLA from 2018 to 2023.
- Many municipalities have not approved the COLA for 2024 but utilize CPI as a benchmark.

Summarized in Schedule B to Report FIN-2023-026 is the COLA's approved or proposed by Wellington County and other boundary municipalities. These municipalities are not comparator municipalities in the Township's 2020 Compensation Review and are therefore reported on separately in Schedule B.

Council at its meeting held on December 7, 2022 passed Council Resolution No. 2022-395

THAT Council approve a Cost of Living Adjustment of 4.0% effective January 1, 2023 with the remaining 3.8% Cost of Living Adjustment to be added to the Cost of Living Adjustment approved in the 2024 budget and future year budgets (as needed).

The table below further outlines staff's recommendation for COLA effective January 1, 2024 based on the approved Budget Development and Control Policy and based on Council Resolution No. 2022-395:

Effective Date	CPI for Ontario from May to May	Previous Year COLA Carry- forward Utilization	Proposed/ Approved COLA	Following Year COLA Carry- Forward
January 1, 2023	7.8% (May 2021 to May 2022)	0.0%	4.0%	3.8%
January 1, 2024	3.1% (May 2022 to May 2023)	0.9%	4.0%	2.9%

Based on the table above and the approved Budget Development and Control Policy, it is recommended that Council approve a Cost of Living Adjustment of 4.0% effective January 1, 2024 with the remaining 2.9% Cost of Living Adjustment to be added to the Cost of Living Adjustment approved in the 2025 budget and future year budgets (as needed).

#### FINANCIAL IMPLICATIONS

The COLA approved by Council will be incorporated in the proposed 2024 Operating Budget.

Please note, the Township has also incorporated a Compensation and Benefits Review in its Capital Budget and Forecast at an estimated cost of \$25K in 2024, 2028 and 2032. ML Consulting (the Township's previous consultant who completed the 2020 compensation and benefits review) outlined in a presentation dated January 15, 2020 to Council, that compensation studies should be completed on a cyclical basis every 3 to 5 years (ie. once during the term of Council) in order to mitigate large market adjustments to the salary grid in any one year to achieve competitive rates. The last compensation study adjusted rates effective January 1, 2020.

The County-wide municipalities are currently in discussions regarding their respective timelines for completing a Compensation and Benefits review to determine if a joint project can be completed with the County-wide municipalities.

#### APPLICABLE LEGISLATION AND REQUIREMENTS

Municipal Act, 2001

### ATTACHMENTS

Schedule A – COLA's from Comparator Municipalities in the Township's 2020 Compensation Review

Schedule B - COLA's from Non-Comparator Municipalities

**Respectfully submitted:** 

**Reviewed by:** 

Mary Hasan Director of Finance/Treasurer Courtenay Hoytfox Municipal Clerk

Municipality	2018	2019	2020	2021	2022	2023	2024	2024 Proposed or Approved	Comments
									The average of the CPI for Ontario from August to August as established by Statistics Canada, for the current proposed budget year and the previous two years. If the formula in a given year, results in a negative %, the pay band grid will remain
Blandford Blenheim	1.50%	3.10%	1.90%	0.10%	4.00%	6.90%	Not yet determined	N/A	the same as the previous year.
Centre Wellington	1.64%	1.77%	1.89%	0.00%	2.20%	1.65%	1.87%	Approved	These amounts are negotiated with the Staff Association and approved by Council.
Clearview	N/A	1.80%	1.75%	1.75%	1.80%	1.90%	Not yet determined	N/A	Will be negotiated with CUPE in March of 2024 and will take effect April 1 to coincide with the CUPE agreement in place – this will be for all staff, both unionized and non-unionized. At the time of negotiations, it will be approved by Council as a part of the ratification of the agreement.
Erin	1.70%	1.90%	1.90%	0.00%	4.40%	4.50%	Not yet determined	N/A	Set by the CAO based on CPI
Grey Highlands	1.70%	1.70%	1.70%	0.60%	2.50%	3.00%	Not yet determined	N/A	CPI and surrounding municipalities.
Guelph Eramosa	1.70%	2.20%	1.70%	0.70%	4.40%	5.00%	Not yet determined	N/A	Third quarter CPI is typically used as the bases for the annual COLA with the exception of 2023 as the CPI was sitting around 6.9%.
Mapleton	1.30%	2.90%	1.90%	0.00%	4.10%	7.00%	Not yet determined	N/A	August Ontario CPI, however, Council put forward a motion to have that policy rescinded. The motion will be discussed at the next Council Meeting scheduled on September 12, 2023.
Minto	2.00%	2.00%	2.00%	0.50%	4.40%	4.00%	Not yet determined	N/A	The 2023 approved COLA was 4.0%, with 2.4% potentially carried forward to 2024 or future years if the 4% cap is exceeded. Policy is to index wages based upon the September CPI.
Mono	1.70%	2.20%	2.00%	1.00%	2.40%	4.00%	Not yet determined	N/A	Typically 12 month average of Ontario CPI from October to September.
Wellesley	1.70%	2.50%	1.70%	0.70%	2.90%	3.80%	Not yet determined	N/A	CPI median rate October to October.
Wellington North	2.10%	1.90%	0.00%	3.20%	3.20%	4.00%	Not yet determined	N/A	Non-union employees - September CPI capped at 4%. Union employees are part of a multi year collective agreement which is expiring.
Woolwich Average	N/A 1.70%	1.75% <b>2.14%</b>	1.85%	1.95% <b>0.88%</b>	2.10%	2.10% 3.99%	2.20%	Approved	Collective Agreement – when Council ratifies the Collective Agreement, staff seek Council's approval for COLA to apply to both union and non-union employees.
									See Report FIN-2023-026 and the approved Budget Development and Control
Puslinch	1.69%	2.33%	1.90%	0.00%	4.00%	4.00%	4.00%	Proposed	Policy.

Municipality	2018	2019	2020	2021	2022	2023	2024		2024 Proposed or Approved	Comments
			•	1			Not	yet		Negotiated and non-union mirrors CUPE 1882 which is determined through
Cambridge		n,	/a		1.50%	1.50%	determined		N/A	negotiations.
Cuelph					1 750/	1.05%	Not	yet	N/A	In general, non-union annual merit increases are based on the external market data and the performance of employees in relation to their annual objectives. In determining the maximum annual merit increase, Guelph uses direct comparators, Ontario CPI (all items), and/or other internal employee groups. Please note, Guelph does not formally tie increases to COLA. Union annual increases are based on negotiations; however, Council approves the bargaining mandate. The maximum allowable non-union annual merit increase is approved by Council based on recommendations from Human Resources during the budget process.
Hamilton	n/a			1.60%	2.50%	2.50%		Proposed - Union Negotiations are ongoing	Estimate prepared by Human Resources (HR) staff to achieve the 50th percentile of comparator group. The Total Compensation and Salary Administration Policies (HR strategy) in terms of achieving the 50th percentile of the comparator group is approved by Council and staff present the forecasted increase in the recommended annual budget. Staff do not include a recommendation on the cost of living adjustment in the annual budget.	
Milton	n/a			1.80%	2.00%	Not determined	yet	N/A	The percentage increase is based on input received from a third party firm specializing in compensation and based on their assessment of likely market changes as well as consideration of the Town's collective agreements.	
Wellington County	2 00%	2 00%	2 00%	1 90%	1 90%	5.00%	Not	yet	N/A	The recommendation for an annual Non-union Economic Adjustment will consider a number of factors including CPI for Canada, Ontario and Toronto, annual economic adjustments for the approved municipal market comparators, general municipal averages, internally negotiated Collective Agreements, and the County's ability to pay for such increases.



### **REPORT ADM-2023-045**

TO:	Mayor and Members of Council
PREPARED BY:	Courtenay Hoytfox, Municipal Clerk (Interim CAO)
PRESENTED BY:	Courtenay Hoytfox, Municipal Clerk (Interim CAO)
MEETING DATE:	September 6, 2023
SUBJECT:	ERO Posting 019-7545 - 7475 Mclean Road East & ERO Posting 019-7435 - Lot 26 & 27 Concession 7

#### RECOMMENDATION

That Report ADM-2023-045 entitled ERO Posting 019-7545 - 7475 McLean Road East & ERO Posting 019-7435 – Lot 26 & 27 Concession 7 be received; and

That Council direct staff to submit comments to the ERO as recommended throughout the report.

### <u>Purpose</u>

The Township was notified through the Environmental Registry of Ontario portal of the following proposals:

- ERO Posting 019-7545 Environmental Compliance Approval (sewage) for the property located at 7475 McLean Road East for sewage works serving two (2) new warehouse buildings;
- ERO Posting 019-7435 Environmental Compliance Approval (sewage) for the property located at Lot 26 & 27 Con. 7 for the establishment of a new subservice disposal works to serve a proposed industrial building to be used for warehouse/logistics operations

The ERO information for each proposal are attached to this report as Schedule "A" and "B". Staff are recommending that Council submit comments to the ERO posting as noted throughout the report.

### **Background**

### ERO Posting 019-7545 (7475 McLean Road East)

The property recently completed the Township Site Plan Control and Agreement process and is working through the building permit process for two (2) new buildings. The property was previously developed and had existing buildings and sewage system which were demolished in accordance with the Site Plan Control and building permit process. Staff have no concerns with the proposal and do not recommend that Council submit comments to the ERO.

### ERO Posting 019-7435 (Lot 26 & 27 Con. 7)

The property has specialized zoning for industrial site specific (IND-10) and natural environment and is subject to a holding zone provision (h-7). The zoning by-law is attached as Schedule "C". The Township zoning by-law defines a dry industrial as as follows:

"any premises used for manufacturing, processing, fabrication and assembly of raw materials or repair, servicing, distribution and storage of materials; where

a. No significant water requirements are necessary as part of the assembly, manufacture, fabrication, repair, packaging and storage activities; and;

b. No significant sewage disposal requirements are necessary as part of the assembly, manufacture, fabrication, repair, packaging and storage activities; and,

c. For the purpose of this definition, significant water requirements are defined as water use requiring a Permit to Take Water and/or greater than 50,000 litres of water per day.

d. For the purpose of this definition, significant sewage disposal requirements are defined as sewage disposal systems that exceed 10,000 litres per day of discharge."

Staff recommend that the following comments be submitted to the ERO posting as follows:

"The Township has not received a formal Site Plan Control application for this property detailing the proposed use and therefore, objects to approval of an ECA application until such time that the proponent demonstrates the proposed use complies with the Township's Zoning By-law."

### **Financial Implications**

None

**Applicable Legislation and Requirements** 

None

Engagement Opportunities

None

### **Attachments**

Schedule "A" ERO Posting 019-7545 (7475 McLean Road East) Schedule "B" ERO Posting 019-7435 (Lot 26 & 27 Con. 7) Schedule "C" Zoning By-law 2017-041

Respectfully submitted,

Courtenay Hoytfox Municipal Clerk (Interim CAO)



# 7475 McLean Road East Inc.

# Instrument type: <u>Environmental Compliance Approval (sewage)</u> (/index.php/taxonomy/term/375)

<u>ERO (Environmental</u> Registry of Ontario) number	019-7545
Ministry reference number	1000240561
Notice type	Instrument
Act	Environmental Protection Act, R.S.O. 1990
Posted by	Ministry of the Environment, Conservation and Parks
Notice stage	Proposal
Proposal posted	August 25, 2023
Comment period	August 25, 2023 - October 9, 2023 (45 days) pen
Last updated	August 25, 2023

This consultation closes at 11:59 p.m. on:

October 9, 2023

# **Proposal summary**

This proposal is for a new Environmental Compliance Approval for 7475 McLean Road East <u>Inc. (Incorporated</u>) for sewage works serving two (2) new warehouse buildings located at 7475 McLean Road East in the Township of Puslinch, Ontario.

# Location details

### Site address

7475 McLean Road East Puslinch, ON Canada

### Site location map

The location pin reflects the approximate area where environmental activity is taking place.

<u>View this location on a map (https://maps.google.com/?</u> <u>q=43.460826,-80.129937)</u>

# Proponent(s)

7475 McLean Road East Inc. 2201 Bristol Circle , Unit 600 Oakville, ON L6H 0J8 Canada

# Proposal details

This proposal is for a new Environmental Compliance Approval for 7475 McLean Road East <u>Inc. (Incorporated</u>) for sewage works serving two (2) new warehouse buildings located at 7475 McLean Road East in the Township of Puslinch, Ontario.

This application is for two (2) new sewage systems, each rated for 49,500 litres per day. Each sewage system will consist of a Waterloo Biofilter treatment system with discharge of treated effluent to a Type A dispersal bed. The total cumulative sewage flow for the property is 99,000 litres per day.

# Supporting materials

### View materials in person

Some supporting materials may not be available online. If this is the case, you can request to view the materials in person.

Get in touch with the office listed below to find out if materials are available.

**Client Services and Permissions Branch** 

135 St. Clair Avenue West Floor 1 Toronto, ON M4V 1P5 Canada

& <u>416-314-8001 or 1-800-461-6290</u>

### Comment

Let us know what you think of our proposal.

Have questions? Get in touch with the contact person below. Please include the ERO (Environmental Registry of Ontario) number for this notice in your email or letter to the contact.

Read our commenting and privacy policies. (/page/commenting-privacy)

### Submit by mail

**Client Services and Permissions Branch Client Services and Permissions** Branch 135 St Clair Ave West 1st Floor Toronto, ON M4V 1P5 Canada

# **Connect** with

us

### Contact

**Client Services and Permissions Branch** 

& <u>416-314-8001 or 1-800-461-6290</u>

enviropermissions@ontario.ca  $\mathbf{\Sigma}$ 



# Puslinch Park GP Inc. as general partner for an on behalf of Puslinch Park Limited Partnership Instrument type: <u>Environmental Compliance Approval (sewage)</u> (/taxonomy/term/375)

<u>ERO (Environmental</u> Registry of Ontario) number	019-7435
Ministry reference number	6193-CSJPFC
Notice type	Instrument
Act	Environmental Protection Act, R.S.O. 1990
Posted by	Ministry of the Environment, Conservation and Parks
Notice stage	Proposal
Proposal posted	August 2, 2023
Comment period	August 2, 2023 - September 16, 2023 (45 days) Open
Last updated	August 2, 2023

This consultation closes at 11:59 p.m.

on:

**September 16, 2023** 

# **Proposal summary**

This proposal is for a new Environmental Compliance Approval (sewage) for Puslinch Park <u>GP (general partnership)</u> Inc. (incorporated), as general partner for an on behalf of Puslinch Park Limited Partnership, for the establishment of a new subservice disposal works to serve a proposed industrial building to be used for warehouse/logistics operations, located in the Town of Puslinch. Location details

### Site address

Lots 26-27, Concession 7, Geographic township of Puslinch Puslinch Township, ON Canada

### Site location map

The location pin reflects the approximate area where environmental activity is taking place.

<u>View this location on a map (https://maps.google.com/?</u> <u>q=43.479196,-80.14138)</u>

# Proponent(s)

Puslinch Park GP Inc. as general partner for an on behalf of Puslinch Park Limited Partnership 16766 Route Transcanadienne Kirkland, QC H9H 4M7 Canada

# Proposal details

This proposal is for a new Environmental Compliance Approval (sewage) for Puslinch Park <u>GP (general partnership) Inc. (incorporated</u>), as general partner for an on behalf of Puslinch Park Limited Partnership, for the establishment of a new subservice disposal works to serve a proposed industrial building to be used for warehouse/logistics operations, located at lot 26 and 27 Concession 7, Town of Puslinch.

The proposed works include an intelligent & Quantify Moving Bed Biofilm Reactor that discharges to a series of sub-surface shallow buried trench cells and the south east corner of the site. The onsite wastewater system will have a capacity greater than 10  $m^3$  (cubic metres)/day.

The ministry may require monitoring of the industrial wastewater and stormwater effluent discharge leaving the site.

# Supporting materials

### View materials in person

Some supporting materials may not be available online. If this is the case, you can request to view the materials in person.

Get in touch with the office listed below to find out if materials are available.

Client Services and Permissions Branch 135 St. Clair Avenue West Floor 1 Toronto, ON M4V 1P5 Canada

🧏 <u>416-314-8001 or 1-800-461-6290</u>

# Comment

Let us know what you think of our proposal.

Have questions? Get in touch with the contact person below. Please include the <u>ERO (Environmental Registry of Ontario</u>) number for this notice in your email or letter to the contact.

Read our commenting and privacy policies. (/page/commenting-privacy)

### Submit by mail

Client Services and Permissions Branch Client Services and Permissions Branch 135 St Clair Ave West 1st Floor Toronto, ON M4V 1P5 Canada

# Connect with Contact US Client Services and Permissions Branch

& <u>416-314-8001 or 1-800-461-6290</u>

enviropermissions@ontario.ca

### THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

### BY-LAW NUMBER 041-2017

### A BY-LAW TO AMEND BY-LAW NUMBER 19/85, AS AMENDED, BEING THE ZONING BY-LAW OF THE TOWNSHIP OF PUSLINCH

**WHEREAS**, the Council of the Corporation of the Township of Puslinch deems it appropriate and in the public interest to amend By-Law Number 19/85, pursuant to Section 34 and 36 of the Planning Act, R.S.O. 1990 as amended;

# NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF PUSLINCH ENACTS AS FOLLOWS:

- That Schedule 'A' of Zoning By-law 19/85 is hereby amended by rezoning Part of Lots 26 & 27, Concession 7, from Agricultural (A) Zone and Natural Environment (NE) Zone to the INDUSTRIAL SITE SPECIFIC (IND-10) ZONE subject to HOLDING ZONE PROVISIONS (h-7) and NATURAL ENVIRONMENT (NE) ZONE.
- 2. That subsection 15(4) SPECIAL PROVISIONS is amended by adding the following new exception:

### "(j) IND-10 (L. Ferraro Inc.) Part of Lots 26 & 27, Concession 7

Notwithstanding Section 3(15) OPEN STORAGE and any other provisions of this By-law to the contrary, within the land zoned IND-10 on Schedule 'A' hereto, open storage shall not be permitted."

3. That subsection 4(6) HOLDING ZONES – 'h' is amended by adding the following:

### "(g) HOLDING ZONE PROVISIONS (L. Ferraro Inc.) Part of Lots 26 & 27, Concession 7

(i) **Purpose of 'h-7'** 

The purpose of this holding provision is to ensure that land acquisition and financial contributions for any necessary road improvements to McLean Road West in support of industrial development are secured.

(ii) At such time in the future that the Council of the Township of Puslinch is satisfied than an appropriate development agreement has been entered into covering such matters as road improvements and related financial contributions, Council may remove the holding symbol **'h-7'** by

amendment subject to the requirements of Section 36 of the Planning Act, R.S.O. 1990, as amended.

- (iii) Until the holding symbol 'h-7' is removed, the uses permitted on the subject land shall be limited to those permitted by the Agricultural (A) Zone and the applicable regulations of this By-law. No new buildings or structures shall be permitted."
- 4. This By-law shall become effective from the date of passage by Council and come into force in accordance with the requirements of the Planning Act, R.S.O. 1990, as amended.

# READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 19th DAY OF JULY, 2017.

Dennis Lever, Mayor

Karen Landry, C.A.O./Clerk

### THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

### BY-LAW NO. 041-2017

### SCHEDULE "A"



This is Schedule "A" to By-law No. 041-2017

Passed this 19th day of July, 2017.

Dennis Lever, Mayor

Karen Landry, C.A.O./Clerk



### **REPORT ADM-2023-046**

TO:	Mayor and Members of Council
PREPARED BY:	Courtenay Hoytfox, Municipal Clerk (Interim CAO)
PRESENTED BY:	Courtenay Hoytfox, Municipal Clerk (Interim CAO)
MEETING DATE:	September 6, 2023
SUBJECT:	Budget Process and Service Level Review

#### RECOMMENDATIONS

THAT Report ADM-2023-046 entitled Budget Process and Service Level Review be received for information; and

- 1. That the current Budget Development and Control Policy be utilized as the guiding document for the preparation of the 2023 Budget [or amended as follows\_\_\_\_\_]
- 2. That staff be directed to prepare the 2023 budget and/or report back with more information based on the following:
  - a. Service level increases as follows\_\_\_\_\_
  - b. Service level decreases as follows\_\_\_\_\_
  - c. Service levels added as follows\_\_\_\_\_
  - d. Service levels removed as follows\_\_\_\_\_
  - e. Legislative or policy directions or initiatives resulting in \_\_\_\_\_
  - f. Legislative or policy directions or initiatives implemented\_\_\_\_\_
  - g. New projects as follows\_\_\_\_\_
  - h. Remove Projects as follows\_\_\_\_\_
  - i. New programs as follows\_\_\_\_\_
  - j. Specific overall big picture direction to staff as follows\_\_\_\_\_
  - k. Target increase be in terms of a percentage as follows\_\_\_\_\_
  - I. Theme of the next budget as follows\_\_\_\_\_

### <u>Purpose</u>

In an effort of continuous improvement, following the conclusion of the preparation of the 2023 corporate budget, feedback was requested from members of Council as well as the Leadership Team about the budget process. The consolidated comments received from Council and the Leadership team are attached to this report as Schedule "B" and "C".

Looking forward to the 2024 corporate budget, a series of questions were posed to members of Council and the Leadership Team to obtain suggestions for consideration. The consolidated comments received from Council and the Leadership team are attached to this report as Schedule "D" and "E".

### **Discussion**

### Budget Process

A series of targeted, specific questions were forwarded to obtain input on the existing Budget Development and Control Policy. This is the Policy that the Township follows to develop its annual Capital and Operating Budgets. This is a complex document approved by Council each year. The intent of the Policy is to ensure that appropriate consideration is given to several contributing factors which impact the budget. The responses received have been compiled in the attached Schedules as received. Shaded sections indicate no comment received for that particular question. These are presented for Council's information. Staff is seeking Council direction with respect to any desired amendments to the Budget Development and Control Policy following review of the comments received.

### **Budget Content/Service Levels**

A series of targeted, specific questions were forwarded to obtain input on desired points for consideration regarding service levels, projects, programs, etc. that directly impact of the preparation of the upcoming budget. The responses received have been compiled in the attached Schedules as received. Shaded sections indicate no comment received for that particular question. These are presented for Council's information. Staff are seeking Council direction with respect to which items to incorporate into the upcoming budget.

A refined process was utilized last budget cycle based on experience during the previous budget process. As Council may recall, a significant number of items were brought forward to Council and staff were directed to assess and analyze essentially all items and bring this information forward at a future meeting for Council's consideration. This resulted in an immense workload with the resources available at the Township.

Out of respect for Council's time reviewing matters and considering the staffing resources available, the same refined approach is being utilized this year. It is suggested/requested that

Council have a discussion on each of the items prior to directing staff to incorporate into the budget or analyze and report back. This will focus time and resources on items with the majority of Council support.

If questions arise regarding a particular comment, it is requested that the commenter be prepared to speak to it. Staff are hear to help. Staff are more than happy to try to answer any questions that may come up to the best of their ability to help Council decide if an item should proceed to budget or not. This approach will help streamline future budget meetings and focus discussions on items council has a desire to move forward with.

### FINANCIAL IMPLICATIONS

Decisions made on service levels and projects will directly impact operating and capital budgets.

APPLICABLE LEGISLATION AND REQUIREMENTS

None

### ENGAGEMENT OPPORTUNITIES

None

### ATTACHMENTS

Schedule "A" Budget Development and Control Policy

Schedule "B" Council Compiled Comments – Budget Process

Schedule "C" Leadership Compiled Comments – Budget Process

Schedule "D" Council Compiled Comments – Budget Content and Service Levels

Schedule "E" Leadership Compiled Comments – Budget Content and Service Levels



Title:	Budget Development and Control Policy
Date:	January 13, 2022
	Adoption: October 27, 2021 through Council Resolution No. 2021-332 Amendment: January 13, 2022 through Council Resolution No. 2022-002 Amendment: September 7, 2022 through Council Resolution No. 2022-282
Subject:	BUDGET DEVELOPMENT AND CONTROL POLICY File No: A09 BUD

### 1. Purpose

The Budget Development and Control Policy has been developed by the Township of Puslinch ("**Township**") to serve as a guideline for the development and control of the **Township**'s annual budgets.

### 2. Definitions

- a) Balanced Budget: Operating and capital revenue and expenditures are balanced with funding sources for the budget period. Transfers to and from applicable **Reserves** as approved by Council may be required to balance differences between budgeted revenues and budgeted expenditures. Current operations are financed from current revenues.
- b) **Director of Finance/Treasurer:** means the individual appointed by **Township** Council in accordance with the Municipal Act.
- c) Discretionary Reserves: Council has the authority to establish Discretionary Reserves in accordance with the Municipal Act. Discretionary Reserves do not require the physical segregation of money or assets. Discretionary Reserves are part of the general revenue fund, and therefore, do not earn interest on their own. In order to reduce, and, if possible avoid short-term borrowing, a Discretionary Reserve is one financial management technique that can be helpful and provides a cash management device to enhance cash flow. It also eliminates the need to levy for the full cost of various capital projects in one particular budget year.
- d) **Long Term Financing:** This includes debt or any other obligation for the repayment of money. For Ontario municipalities, debt would normally consist of debentures as well as either notes or cash from financial institutions, but could also include loans from **Reserves.**


- e) **Modified Accrual Basis:** Transactions are recognized in the period in which the transactions occur or are received. The budget includes capital expenditures rather than amortization expense. Revenues and expenditures are reported as a gross amount rather than a net revenue or net expense amount.
- f) Reserves: Discretionary Reserves and Restricted Reserves are formed to meet various liabilities such as the replacement and/or acquisition of capital assets or the stabilization of the tax levy. Both Discretionary Reserves and Restricted Reserves are considered during the annual operating and capital budget process and for the purpose of long-term financial planning.
- g) Restricted Reserves: Restricted Reserves are established through legislation or grant funding agreements. For example, the Development Charges Act, the Planning Act, the Building Code Act, and other legislation require that municipal governments maintain specific Restricted Reserves. Restricted Reserves are comprised of funds received for special purposes and are segregated from the general revenues of the Township. All earnings derived from such investments must form part of the Restricted Reserve. Restricted Reserves are created solely for the purpose prescribed for them.

Examples of **Restricted Reserves** include:

- Monies received in lieu of land for park purposes as set out in the Planning Act (ie. Cash in Lieu of Parkland);
- Monies received as development charges (DC's) as set out in the Development Charges Act (ie. Administrative Studies DC, Parks and Recreation Services DC, Fire Services DC, and Roads and Related Services DC); and
- Monies received as part of the Canada Community-Building Fund (previously known as the Federal Gas Tax Fund).
- h) Township: means the Corporation of the Township of Puslinch.

# 3. Budget Principles and the Basis of Budgeting

- a) Council's responsibility is to approve appropriate budgets and financial policies for the **Township**. Approval reference throughout this policy that infers Department Head, Chief Administrative Officer, **Director of Finance/Treasurer**, and Council will progress with initiation from the Department Head, reporting to the Chief Administrative Officer, and **Director of Finance/Treasurer**, with final reporting to Council.
- b) All programs/service levels approved by Council are carried out within the approved annual budget.



- c) Budget planning and administration are a primary responsibility of Department Heads.
- d) The Township operates by way of a Balanced Budget.
- e) The Township's budget is prepared on a Modified Accrual Basis.
- f) Long-term financial sustainability of the Township's services and the development of adequate Discretionary Reserves to fund the Township's financial requirements is a priority during budget development.
- g) Commitment is to deliver services in a cost effective manner that balances investments made in **Township** priorities with mitigating cost increases to taxpayers.
- h) Annual budgets and associated documents are living documents that are updated annually and are realistic and sustainable for the established/approved service levels.
- i) Operating and capital expenditures are funded through an optimal mix of public funding, user fees and charges, grants, **Discretionary Reserves**, **Restricted Reserves**, and other self-generated revenue to minimize impacts to taxpayers.
- j) The operating and capital funding requested in the annual budget will consider the existing base operating and capital funding allocation to avoid significant shifts between operating and capital programs.
- k) Long Term Financing for capital projects may be considered based on the life of the proposed asset being acquired.

#### 4. Guiding Principles

- a) The **Township**'s budget development will be guided by the initiatives, priorities and timelines identified by:
  - i. Asset Management Plan (AM Plan)
  - ii. Development Charges Study
  - iii. Energy Conservation and Demand Management Plan
  - iv. Recreation and Parks Master Plan or other related plans
  - v. Master Fire Plan or other related plans
  - vi. Roads Management Plan or other related plans
  - vii. Ontario Structure Inspection Manual Report (Bridges and Culverts) or other related inspections for **Township** infrastructure
  - viii. Council Objectives Direction to Staff or other related Council resolutions or directions provided throughout the year.



- b) No expenditures shall be incurred until the budget for the current fiscal year has been approved by Council unless Council provides a pre-budget approval for the expenditure.
- c) Staff prepares a budget for Council's consideration incorporating a **Township** total tax increase on the median/typical Single Family Home not greater than the proposed budget year's Consumer Price Index (CPI) inflation rate as outlined in the Ontario Budget and as determined by Statistics Canada and Ontario Ministry of Finance before adding on the dedicated capital levy impact for the proposed budget year.

#### 5. User Fees and Charges

- a) User fees and charges shall be automatically adjusted annually based on the CPI for Ontario from May to May.
- b) When recommending a new user fee and charge or where the pressure on user fees and charges indicates an alternate rate change over and above the CPI inflation rate to ensure tax subsidization does not increase, the **Township** will consider changes to the user fees and charges that closely reflect the actual cost for providing the service while keeping in line with comparator municipalities.

# 6. Ten Year Capital Budget and Forecast

- a) The ten year capital budget and forecast is prepared based on revenue and expenditure projections using the most current information available and will be updated annually as detailed information becomes available including an adjustment for CPI over the forecast period. Impacts will be mitigated where possible to maintain the forecast within budget guidelines.
- b) The current year capital budget is approved by Council with the remaining forecast period provided for information and for planning purposes. The forecast may change in future budget deliberations based on new and more up to date information.
- c) Capital budget sheets will be prepared by Department Heads for current year proposed projects and will include a brief description of the project, explanation of the need for the project, operating cost impacts, and any link to AM Plan, other master plans, studies, inspections, etc.
- d) The Director of Finance/Treasurer or designate will provide an analysis of the balance in each capital Discretionary Reserve and capital Restricted Reserve based on the current year proposed projects, capital carry forward projects, and recommended current year budget contributions to capital Discretionary Reserves. The projected balance will be as of



the end of the proposed capital budget year. This will be provided when the first draft of the capital budget is provided for Council's consideration.

- e) The **Director of Finance/Treasurer** or designate will provide an analysis of major known capital grant or other third party funding including amounts per year. This will be provided when the first draft of the capital budget is provided for Council's consideration.
- f) The **Director of Finance/Treasurer** or designate will provide Council with the following as part of the first draft of the capital budget for Council's consideration:
  - i. Comparison of the current year capital program compared to previous years.
  - ii. Comparison of the current year ten-year forecast compared to previous years.
  - iii. Capital budget and forecast funding sources by year (ie. grant funding, levy funding, **Discretionary Reserve** funding, **Restricted Reserve** funding).
- g) In the event that a property owner or a group of property owners request that the Township undertake a capital project not included in the ten-year capital budget and forecast, such expenditures may be considered provided that the individual(s) making the request agree to fund the expenditure. The degree of funding will be determined by Council on a project by project basis to a maximum level of 100%.
- h) A lifecycle based capital forecast based on the **Township**'s AM Plan and updated inspections, studies, plans, etc. will be established for asset replacement projects and updated annually by Department Heads based on current documented costing.
- i) Any new **Township** capital infrastructure is required to be added to the Asset Management Plan in order to ensure replacement based on its lifecycle.

# 7. Allocation of Capital Funds

Capital funding will be allocated to projects according to the following principles:

- a) Capital funding will be used only for capital projects that are approved by Council.
- b) Capital projects will be closed upon completion. Every effort will be made by the Department Head to complete capital projects within a reasonable time frame.
   Consideration will be given to recommending the closing of capital projects as a result of unexpected significant delays in project completion.
- c) The annual capital budget will include new capital requirements and amounts approved in prior year budgets that have not yet been completed.



- d) Surplus capital funding determined at the fiscal year-end, for each open capital project, will be reported in the capital carry forward **Discretionary Reserve** or remain in the appropriate **Discretionary Reserve** as a source of financing for future years upon project completion.
- e) Surplus capital funding, determined upon capital project closure, will be transferred to the appropriate **Discretionary Reserve** in accordance with the approved budget or be transferred to the general corporate surplus.

# 8. Operating Budget Methodology

- a) The department's base operating budget will be prepared by the Department Head in collaboration with the **Director of Finance/Treasurer** using the following methodology with focus on the **Township**'s key initiatives as previously approved by Council:
  - i. 2-years of historical data, current year to date data, and prior year approved budget will be reviewed in developing the proposed base operating budget.
  - ii. CPI adjustments for volatile commodity price shifts (ie. fuel, natural gas, etc.).
  - iii. Unavoidable price changes as per contractual obligations (ie. insurance, etc.).
  - iv. Provincial or Federal funding announcements.
  - v. Efficiencies and cost savings achieved through new innovative approaches to delivering services.
  - vi. Revenue and recovery amounts based on the approved User Fees and Charges By-law.
- b) The **Director of Finance/Treasurer** or designate will update salaries, wages, benefits based on salary grid movements and approved staffing changes in the base operating budget.
- c) The **Director of Finance/Treasurer** or designate will determine and incorporate in the base operating budget a cost of living adjustment (COLA) based on:
  - i. The CPI for Ontario from May to May for the current proposed budget year and present to Council for approval prior to the preparation of the proposed operating budget.
  - ii. The available COLA's approved or proposed by comparator municipalities surveyed in the **Township**'s Compensation Review will also be provided for Council's information.



- d) Department Heads will provide to the Director of Finance/Treasurer as part of the draft operating budget a detailed listing of the following in accordance with the **Township**'s Staff Expense Policy:
  - i. Conference, Seminar and Training Budget
  - ii. Memberships and Associations Budget
  - iii. Uniforms and Special Clothing Budget
  - iv. Council will be provided the above detailed listing(s) if there are any changes being proposed.
- e) Base budget increase requests are provided separately via a Base Budget Increase form and require approval from the Chief Administrative Officer and **Director of Finance/Treasurer** prior to being presented to Council. Base budget increase requests are required if an operating line item expenditure is increasing due to a proposed new project/initiative/service level/governing legislation. These requests are not incorporated in the base operating budget. The Department Head must indicate whether the base budget increase request is one-time or recurring.
- f) Any increase or decrease to service levels or addition of new Township capital infrastructure requires a staff report on resources (staffing and equipment) and operating cost impacts.

#### 9. Fund Allocation Principles

- a) Any deviation from approved budgets shall be reported to and approved by the Department Head, reporting to the Chief Administrative Officer, **Director of Finance/Treasurer** and ultimately Council as required by this Policy.
- b) Fund re-allocation between the approved operating budget and the approved capital budget is not permitted.
- c) The following re-allocation of funds may occur with approval from Council and the appropriate source of funding is maintained:
  - i. Transfers between open capital projects; and
  - ii. Unbudgeted transfers from Discretionary Reserves to capital projects; and
  - iii. Unbudgeted transfers from **Discretionary Reserves** to operating programs.
- d) Where it is desirable to reallocate funds between detailed operating accounts within the approved budget allocations in order to achieve the most efficient and effective use of resources, said reallocations shall be carried out in accordance with this policy and reported to Council through the quarterly financial reporting process.



- i. The Chief Administrative Officer may approve requests from Department Heads to reallocate current budget funds between detailed accounts within approved budget allocations within their own department to a maximum of \$10,000.
- ii. Where it is proposed to reallocate current budget funds in excess of \$10,000, the reporting Department Head along with the **Director of Finance/Treasurer** shall prepare a report seeking Council's approval for the reallocation.

#### **10.** Discretionary Reserve Financing and Balances

- a) Council has the authority to establish **Discretionary Reserves** as a financial management tool in accordance with the Municipal Act.
- b) The **Township** will adopt **Discretionary Reserve** financing and **Discretionary Reserve** balances that consider the following:
  - i. Mitigation of current and future risks.
  - ii. Stabilization of the tax levy.
  - iii. Reduce exposure to unpredictable revenues and unplanned funding requests.
  - iv. Multi-year financing of capital projects.
  - v. Replacement value of tangible capital assets.
- c) The use or transfer from any **Discretionary Reserve** requires the approval of Council.
- d) All proposals to establish and maintain **Discretionary Reserves** in any year, whether for current or capital purposes, shall be contained in the budget and shall be presented to Council for approval.
- e) Annual budgets shall not commit to financing from **Reserves** an amount greater than the **Reserve** balance in the account.
- f) Council shall determine annually during the budget process, an amount to be contributed to each **Discretionary Reserve**.
  - a. The **Director of Finance/Treasurer** or designate will provide an analysis of the recommended contributions to **Discretionary Reserves** based on the proposed budget presented and compare these contributions to the previous year approved budget and the current balances in each **Discretionary Reserve**.



g) The **Township**'s operating and capital **Discretionary Reserves** including their use are outlined in Schedule A to this Policy.

# **11. General Corporate Surplus**

- a) Where funds have been appropriated but not incurred prior to the end of the fiscal year, and no legal obligation to expend said funds has been entered into prior to the end of the fiscal year, said funds shall be included in the general corporate surplus and shall be submitted for Council's consideration to be contributed to the AM **Discretionary Reserve** in accordance with Council Resolution No. 2019-347 or to another **Discretionary Reserve** based on Council's direction.
- b) The policy adopted by Council through Council Resolution No. 2019-347 states that Council authorizes the allocation of all budget surpluses into the Township's AM Discretionary Reserve for the purpose of meeting future AM obligations.

Target Dates	Item	Purpose
June	Council Objectives – Direction to Staff	This meeting allows for discussion
		between Council and Department Heads
		regarding the overall direction of the
		proposed budget including the overall
		direction of service levels. Resolutions
		passed by Council will be used as the basis
		for initiating the budget creation process.
July/August	Director of Finance/Treasurer or	
	designate provides user fees and charges	
	and budget instructions to Department	
	Heads.	
August	Proposed User Fees and Charges Report	
	and Proposed By-law prior to presenting	
	at the Public Information Meeting.	
August	EngagePuslinch.ca Survey for proposed	
	User Fees and Charges	
September	Department Heads meet with Director of	
	Finance/Treasurer and Chief	
	Administrative Officer to discuss	
	proposed Capital and Operating budgets.	
September	Public Information Meeting regarding	
	Proposed User Fees and Charges By-law	

# 12. Budget Calendar – Annual Target Dates



October	Approval of User Fees and Charges By-law by Council	Public comments received will be provided for Council's information.
October	Road and Facility Tour with Department Heads and Council	To provide Council with key projects, vehicles, equipment that have been completed as part of the past year's budget and proposed for consideration prior to formal budget presentations.
October	Present Proposed Capital Budget and Ten Year Forecast to Council including Capital Budget Sheets	This meeting provides Council with a preliminary look at the proposed Draft Capital Budget and Forecast. Any direction provided by Council will be used to finalize the Draft Capital Budget and Forecast.
October	EngagePuslinch.ca Survey for proposed Budget	Community engagement through EngagePuslinch.ca will take place up until after the Public Information Meeting in January.
November	Present proposed base operating budget to Council including both detailed and summary expense, <b>Reserve</b> transfer, and revenue reporting.	This meeting provides Council with a preliminary look at the proposed Draft Operating Budget. Any direction provided by Council will be used to finalize the Draft Operating Budget. This meeting also provides Council with answers to questions or updates to the proposed budget based on direction from Council from the October Capital Budget Meeting.
November	The <b>Director of Finance/Treasurer</b> or designate will provide the grant applications and amounts requested including previous year approved grant funding allocations for each organization. Category 3 applicants for funds requested of greater than \$3,000 must delegate to Council in accordance with the Grant	Council will approve the budget grant application allocations to applicants through Council Resolution to be incorporated in the proposed Operating Budget. Funds available under the Grant Application Program are limited to a maximum of 0.50% of the previous year's
	Application Policy.	taxation levy per calendar year.
December/	Provide Council with the updated Capital	The <b>Director of Finance/Treasurer</b> or
January	direction from the October and November budget meetings to be	the proposed levy on the median/typical properties (Single Family Home, Farmland,



	presented at the Public Information	Small Retail Commercial, and Standard
	Meeting in January.	Industrial) in the <b>Township</b> based on
		MPAC's returned assessment roll received
		in December which incorporates new
		assessment growth. This analysis will
		include the County of Wellington's
		proposed tax rate and the Education
		estimated tax rate. This analysis will also
		include the 1% tax rate increase amount
		with assessment growth.
January	Public Information Meeting regarding	The presentation materials will include
	Proposed Budget.	charts and other graphs regarding the
		proposed budget for the Public's
		consideration.
By the end of	Last date for submitting current	
the first week of	expenditures, revenues and adjustments	
January of each	by Department Heads	
fiscal year		
February	Balances in Discretionary Reserves and	Balances as of the end of the current fiscal
	Restricted Reserves	year and over the ten year forecast period.
February	Current Year Completed Capital Projects	Includes engineering/project management
	including how each project's actual costs	costs as a percentage of total project costs.
	were funded.	
February	The Director of Finance/Treasurer or	Public comments received will be provided
	designate will provide a Report to Council	for Council's information.
	with the final budget compared to the	
	prior year approved budget.	Budget By-law approval with a media
		release issued upon approval of the
	The final report will include charts and	budget by-law.
	other graphs regarding the final approved	
	budget.	
April	General Corporate Surplus Allocation	This will be provided after the completion
	Report to Council	of the <b>Township</b> 's annual audit.
May	Tax Rate By-law approval	This will be provided after the County's
		passing of its Tax Ratio and Tax Reductions
		By-law and after the Education rates have
		been set by the Province through Ontario
		Regulation under the Education Act, as
		amended.
Quarterly	Quarterly financial reports presented to	
	Council showing budget to actuals.	



Target dates will be adjusted to accommodate on municipal election years.

#### **13.** Reporting Requirements

- 1.) The **Director of Finance/Treasurer** or designate shall produce and forward quarterly operating budget versus actual reports to Department Heads and the Chief Administrative Officer for review.
- 2.) The **Director of Finance/Treasurer** or designate shall review the quarterly reports and forward comments to the Department Head and the Chief Administrative Officer on significant account variances.
- 3.) The Department Head shall prepare reasons for any significant variances to provide to the **Director of Finance/Treasurer** and Chief Administrative Officer.
- 4.) The **Director of Finance/Treasurer** or designate shall include for Council's review quarterly financial reports which include departmental detail, expense and revenue summaries, and other pertinent financial data.

# 14. Attachments

Schedule A – Listing of Operating and Capital Discretionary Reserves

#### **Operating Discretionary Reserves**

The Township of Puslinch's operating discretionary reserves are outlined below:

- a) Broadband Strategy Implementation
  - i. Funding for the recommendations that came out of the broadband strategy.
- b) Corporate Insurance Contingency Discretionary Reserve
  - i. Funding the unrecoverable portion of insurance claims
- c) Corporate Legal Contingency Discretionary Reserve
  - i. Funding major unrecoverable legal matters.
- d) Election Discretionary Reserve
  - i. Funding the costs of the election every four years.
- e) Operating Carry forward Discretionary Reserve
  - i. Maintaining allocated funding for operational items approved in a previous budget but not yet complete.
- f) Outstanding Deposits Discretionary Reserve
  - i. To account for security and grading deposits ten years or older for the purpose of determining the status of these outstanding deposits.
- g) Public Works Winter Maintenance Discretionary Reserve
  - i. Funding winter maintenance costs as needed to offset unusual/severe winter weather conditions
  - ii. Surplus funds from the winter maintenance operating accounts are captured annually and are allocated to the Public Works Winter Maintenance Discretionary Reserve. If the winter maintenance expenditures exceed the amount budgeted, the deficit is drawn from the Winter Maintenance Discretionary Reserve.

# **Capital Discretionary Reserves**

The Township of Puslinch's capital discretionary reserves are outlined below:

- a) Asset Management Discretionary Reserve
  - i. Implementing the funding requirements for current infrastructure as noted in the 2019 Asset Management Plan.

- ii. The 2019 Asset Management Plan recommended that the Township maintain a minimum target balance of 2.0 million and a maximum target balance of 4.0 million in its Asset Management Discretionary Reserve.
- b) Capital Carry forward Discretionary Reserve
  - i. Maintaining allocated funding for capital projects approved in a previous budget but not yet complete
- c) Corporate Information Technology Discretionary Reserve
  - i. Implementing the recommendations from the County of Wellington and its member municipalities Operational Services Efficiency Review in response to the Provincial Modernization Grant.
- d) Gravel Roads Improvement Discretionary Reserve
  - Improving the Township's gravel roads as authorized by Council at its January
     2, 2020 Budget Meeting

# **Council Input – Budget Process**

	Budget Process	James Seeley	Sara Bailey	Russel Hurst	Jessica Goyda	John Sepulis
		Α	В	С	D	E
C-1	What went well during the Budget Process?			a. I wasn't part of the previous years budget process, but from what I read it appeared to be a very methodical and thorough process which I appreciate.	<ul> <li>a. I continue to find the training session/tours valuable. It is a great way to see firsthand projects that have been completed over the past year, projects that are coming up for capital works and to ask questions on sites that assist in decision making and prioritizing during budget discussion.</li> <li>b. Also, the COLA discussions were much improved this past year with a clear policy moving forward.</li> </ul>	a. The sequence of meetings leading to the final budget was logical and well structured.
C-2	Were there parts that were cumbersome?			a. Understanding budget items that are the responsibility of the township vs which ones are high tier responsibility. This is just an onboarding process for me to fully understand the process.		<ul> <li>Making decisions to add items to the budget early in the process without knowing the projected tax increase caused debates on whether or not to add, or modify budget items.</li> </ul>

Compiled Comments received regarding the 2023 Budget preparation process

	Budget Process	James Seeley	Sara Bailey	Russel Hurst	Jessica Goyda	John Sepulis	
		A	В	С	D	E	
C-3	Are there suggestions that would improve or streamline the process?	<ul> <li>a. more flexibility in the budget to allow staff to react quickly to priority issues in the community</li> <li>b. Items that are consistently added by council at the end of budget cycle (increases to the paving roads reserve) should be included in the budget process earlier as it's clear that council had a direction</li> <li>c. With expected growth the budget should be increased to use this growth proactively</li> <li>d. One time budget items shall not be used as a levy increase. Only reoccurring items</li> <li>e. Incorporating growth numbers into the budget in line with when the the county provides them</li> </ul>	a. Linking a budget item to an asset	<ul> <li>a. When I prepare my own budgets I usually try and produce three ranges for consideration. Down, flat, upor some variation of that. It might be something that could be considered. Ultimately I think the public will accept a slightly increased budget given the cost of living, but there needs to be a level of sustainability over the course of time.</li> </ul>	a. Knowing early on the projected revenue due to growth.	<ul> <li>a. By knowing early in the process the estimates for the asset management reserve, tax proposed by County, and tax revenue due to growth Council can focus on adjusting funding for other budget items.</li> <li>b. I think reordering the budget documents to have the summaries up front instead of the back would be beneficial. One could then readily flag the areas to review in depth.</li> <li>c. Revenue in the budget sheets is reported as a negative number and tracked as such. It takes a bit of time to re-understand the trends when analyzing the columns of data.</li> </ul>	
C-4	Did you have the information needed to make informed decisions?			a. I would find it valuable to benchmark similar townships for comparisons at a high level.	<ul> <li>b. Yes – reports were well written and provided good information including financial implications.</li> </ul>	<ul> <li>a. Yes ultimately see first comment under</li> <li>3 above.</li> </ul>	
C-5	Was there too much information?			a. It appeared to be robust. I prefer more information vs less.	Νο	No	

C-6	Are you comfortable proceeding with the Budget preparation under the current policy? If you could improve one	a. Knowing about new	Yes	Yes a. A spreadsheet that	а. а.	Yes except for the COLA. Knowing early in the
	thing in the budget process, what would it be?	potential grant opportunities available. Some might help start up projects that community could partner with.	because I haven't been through a full budget process yet.	<ul> <li>allows council to see how various decisions (additions/deletions) impact the big picture in real time as these decisions are being made.</li> <li>b. Just a general comment – It would be good to reflect on the above questions shortly after the budget has been approved while it is still fresh in mind while service level questions are beneficial to consider later in the year. Maybe something to consider is reflection questions as a separate process from future budget content/service level questions.</li> </ul>		process the estimates for the asset management reserve, tax proposed by County, and tax revenue due to growth.

# Leadership Team Input – Budget Process

Compiled Comments received regarding 2023 Budget Process

	Budget Process Glenn Schwendinger CAO		Mary Hassan Director of Finance	Andrew Hartholt CBO	Courtenay Hoytfox Clerk (Interim CAO)	Mike Fowler Director of Public Works, Parks, and Facilities	Tom Mulvey Fire Chief	
		Α	В	С	D	E	F	
L-1	What went well during the Budget Process?	Α	<ul> <li>B</li> <li>a. Further implementation and updates to the Budget Development and Control Policy.</li> <li>b. Budget Review and Looking Forward to 2023 – Meeting with Council and staff for direction on the preparation of the 2023 budget.</li> <li>c. Council Goals and Objectives for the 2022 to 2026 Term incorporated in proposed budget.</li> <li>d. Continued public engagement of the full budget process through the following avenues: <ul> <li>Advisory Committee Budget Input</li> <li>Social Media Posts and/or Advertisements at Facebook.ca/TownshipofPuslinch and Twitter.com/TwpPuslinchON</li> <li>Township Website Banner and Budget Page at puslinch.ca/government/budget/</li> <li>Community Engagement Survey at EngagePuslinch.ca</li> <li>Public Information Meeting on January 25, 2023</li> <li>Media releases related to EngagePuslinch.ca survey and final budget highlights sent with the final tax bill in August 2023.</li> </ul> </li> </ul>	c	<ul> <li>D</li> <li>a. The collaboration between departments and finance worked well.</li> <li>b. The meeting schedule was slightly revised due to the municipal and school boards election, however still worked well.</li> <li>c. Public engagement increased compared to the previous year budget process. Survey contributions on Engage Puslinch increased 191% over the previous year.</li> </ul>	E a. Collaboration with Finance worked really well.	F a. I started with the township very late in the budget process, that being said I thought it was a good process and easy to follow.	

Budget Process Glenn Schwendinger CAO		Mary Hassan Director of Finance	Andrew Hartholt CBO	Courtenay Hoytfox Clerk (Interim CAO)	Mike Fowler Director of Public Works, Parks, and	Tom Mulvey Fire Chief
	_	-			Facilities	_
	A	B Additional community ongagement	С	D	E	F
	Α	<ul> <li>B</li> <li>e. Additional community engagement regarding proposed user fees and charges and the annual grant application program.</li> <li>f. Road and Facility Tour for current year completed capital projects and proposed capital projects.</li> <li>g. Annual corporate workplan and ensuring projects in the workplan align with the approved capital and operating budgets.</li> <li>h. Continued contributions to the Asset Management Discretionary Reserve in order to maintain a minimum target balance of \$2.0 million and a maximum target balance of \$4.0 million as recommended in the 2019 Asset Management Plan.</li> <li>i. Continued contributions to the Gravel Roads Improvement Discretionary Reserve.</li> <li>j. Contributing the 2022 surplus to the Asset Management Discretionary Reserve in accordance with past practise.</li> </ul>	C	D	E	F
		<ul> <li>k. Increase in the Ontario Community Infrastructure – Formula Based Funding based on notification from the Province.</li> <li>I. Completing the proposed budgets collaboratively prior to presenting to Council: <ul> <li>Base budget input is completed collaboratively with department heads and the Director of Finance/Treasurer.</li> <li>All proposed capital budget sheets are prepared by department heads and reviewed by the Director of Finance/Treasurer and the Chief Administrative Officer.</li> </ul> </li> </ul>				

Budget Process	Glenn Schwendinger CAO	Mary Hassan Director of Finance	Andrew Hartholt CBO	Courtenay Hoytfox Clerk (Interim CAO)	Mike Fowler Director of Public Works, Parks, and Facilities	Tom Mulvey Fire Chief
	Α	В	С	D	E	F
		<ul> <li>All operating base budget increase requests due to new projects, initiatives and service levels which have not been previously approved by Council were reviewed by the Chief Administrative Officer and the Director of Finance/Treasurer prior to being presented to Council.</li> </ul>				
		<ul> <li>m. Continued use of pie chart graphs in reports and presentation materials which outline how the total tax bill is allocated to the Township, County and Education.</li> </ul>				
L-2 Were there parts that were cumbersome?		a. It would be helpful if specific direction was provided on the budget process and service levels review as there were a significant amount of suggestions provided through this process in the previous year. A number of the items were reported back on by staff. Specific direction should be provided so that staff understand what Council's priorities are for reporting back on the numerous items.	a. None from the building department's perspective.	a. None from the Clerks department	a. None from Public Works, Parks and Facilities	
L-3 Are there suggestions that would improve or streamline the process?		<ul> <li>a. Implementation of the budget system (2023/2024) and asset management system (2024/2025) in accordance with the Goals and Objectives adopted by Council at their meeting held on January 18, 2023.</li> </ul>		a. Staff engaged directly with Committees and provided budget training in advance of the 2024 budget process in order to streamline the Committee goals and objectives setting with budget impacts.		
L-4 Did you have the information needed to make informed decisions?						

	Budget Process	Glenn Schwendinger CAO	Mary Hassan Director of Finance	Andrew Hartholt CBO	Courtenay Hoytfox Clerk (Interim CAO)	Mike Fowler Director of Public Works, Parks, and Facilities	Tom Mulvey Fire Chief
		Α	В	С	D	E	F
L-5	Was there too much information?						a. I don't think you can ever have too much information.
L-6	Are you comfortable proceeding with the Budget preparation under the current policy?						
L-7	If you could improve one thing in the budget process, what would it be?		a. Council/Department Heads provide new/changes to service levels that they would like to see incorporated in the proposed budget as early as possible. Department heads to research and provide updated costing for capital projects and operating budget line items based on the most recent information available.		<ul> <li>a. Collaboration and information sharing can always be improved. Likewise, the Township continues to improve its public engagement.</li> </ul>		a. Informal conversations with all parties involved. This may have been part of the process before Covid.

# **Council Input – Budget Content/Service Levels**

Compiled Comments received regarding suggested items for consideration for the 2024 Budget

	Budget Content		James Seeley		Sara Bailey		Russel Hurst		Jessica Goyda		John Sepulis	
			Α		В		С		D		E	
C-1	Are there any service levels you would like to see increased?	a. b.	More frequent cleaning of facilities. A thorough full cleaning/maintenance of all facilities every spring. More frequent cleaning of washrooms at ball diamonds. Regular re-grading of diamonds to ensure proper drainage.	a. b.	Parks maintenance service levels to meet the current upkeep needs and the needs of the changes with the parks revitalization upgrades. Would like to see an increase where the millennial garden has a one time spring landscape clean up at the beginning of the season – this will allow volunteers to maintain it in a reasonable capacity. Assessment of our bookings program that services staff use. Need to improve the	a.	Ash tree removal, speed enforcement, snow removal (but I would defer to public works on setting realistic expectations).	a.	Road Speed Mitigation/Enforcement throughout the township.	a.	Removal of dead trees	

		<ul> <li>process for adding insurance to a booking and paying online via credit card or e-transfer. Make bookings easy. Can reservations be done without services staff?</li> <li>c. Once the Site Alteration by-law is in place, want to ensure we have enough staff support to fulfill the monitoring obligations.</li> </ul>		
C-2	Are there any service levels that you would like to see decreased?		a. Not that I am aware of or have been given feedback on.	
C-3	Are there any service levels you would like to see added?	<ul> <li>a. Would like to see an increase in recreation programming</li> </ul>	a. I think engage Puslinch/social media is a forum	

		options for Buslinch		that could soo	
		residents Adding a		futuro growth	
		lisison norman to	l.	Interegrowin	
		haison person to	ΰ.	I think we should	
		sport organizations,		have a discussion	
		community		about supporting	
		partners, local		Township staff	
		residents to run		professional	
		programs out of our		development. We	
		facilities for our		have a fairly	
		community kids (in		new/younger staff	
		conjunction with		that we need to	
		running programs		invest in.	
		for kids from			
		outside Puslinch)			
		and help with the			
		registration process			
		(and board			
		advertising).			
	b.	Would like to see			
		speed mitigation			
		options proposed			
		when roadwork is			
		in design stage and			
		added into the road			
		work projects			
		(similar for wildlife			
		mitigation work).			
	c.	Adding lighting to			
		Millennial garden.			

		d. e.	Follow up on delegation from Ken DeHart regarding pit tax assessments – helicopter fly over. Starting a Heritage Fund similar to the County's CIP but for private homes on the heritage registry ("Heritage Improvement Program").			
C-4	Are there any service levels you would like to see removed?	a.	Would like to know if any current services are inefficient for discussion,	a.	Not that I am aware of or have been given feedback on.	

C-5	Are there any potential legislative or policy directions or initiatives that may be coming that you are concerned about?	a.	Bill 99 Garrett's Legacy Act (Requirements for Movable Soccer Goals)	a.	Soil management regulations, aggregate licencing, rural internet.	a.	Continuation of rising costs associated with labour, construction, fuel, insurance etc. and it's impact not only on current budget year but also future capital forecast costs - for example – are we forecasting adequate replacement values in our Asset Management Plan? Do we need to increase the target balance in that reserve?	a. b. c. d.	Bill 23 Bill 97 Unbridled growth of gravel pits Ensuring all residents have access to at least consistent 50/10 internet service
C-6	Are there any potential legislative or policy directions or initiatives that you would like to see implemented?	a.	Follow up on discussion around increased community safety zones within the Township and implementation of speed cameras, etc.	a.	Not at this time.	a. b. c. d.	Implementation of Asset Management Software. Improved Public Access to Puslinch Lake. Implementation of Roads Management Plan including speed mitigation. Movement toward a solution for permanent council chambers.	a. b. c. d. e.	See 7.1 below. Actively move on providing natural gas service to residents. Work toward removing rail storage tracks at Arkell. Improved accessibility to Puslinch Lake. Implementation of Road Master Plan including signage

						and cameras at Aberfoyle and Lake Road. f. Implementation of software to manage asset management reserve.
						<ul> <li>g. More movement on County KPMG study efficiency recommendations.</li> <li>h. Finalization of Fill by-law.</li> <li>i. Economic sustainability of the Township.</li> <li>j. Pressure to reprioritize Morriston Bypass.</li> <li>k. Planning revitalization of Aberfoyle between the two roundabouts.</li> </ul>
C-7	Are there any new projects	a. New lights at Morriston meadows	a. Lighting for Badenoch soccer	a. Reasonable Puslinch lake	a. Expanding our Community	a. Study and consultation with
	you would like		pitch and for	access (vis GRCA),	Improvement Plan in	Province to look at

to see added for consideration?	and Badenoch soccer field.	Morriston Meadows ball diamond.	speed enforcement (via camera), Hwy 6 bypass push.	<ul> <li>partnership with</li> <li>County Economic</li> <li>Development</li> <li>Department. Currently,</li> <li>the Puslinch</li> <li>Community</li> <li>Improvement Plan</li> <li>applies only to</li> <li>Aberfoyle and</li> <li>Morriston but all of</li> <li>Puslinch could benefit</li> <li>from the goals and</li> <li>objectives of the CIP.</li> <li>b. Consideration of</li> <li>updating Parks Master</li> <li>Plan.</li> </ul>	<ul> <li>limiting the area of Township land actively used for gravel extraction to a fixed percentage at any point in time.</li> <li>Public docks at Puslinch Lake.</li> <li>High Level Study to provide order of magnitude costs and the viability of train whistle cessation agreement at all Township crossings.</li> </ul>
					<ul> <li>d. Technical support for review of Morrison Bypass components.</li> <li>e. Technical support for creation of economic area (being undertaken by County).</li> <li>f. Expansion of Township Offices</li> </ul>

								to accommodate staff and new Council Chambers.
C-8	Are there any projects you would like to see considered for removal from past plans?		a.	Not at this time.				
C-9	Are there any new programs you would like to see considered?		a.	Working with County economic development more closely. Further collaboration with conservation authorities to foster access to conservation areas.	a.	Implementation of a Seniors Committee	a	. See items under 6 and 7 above.

C-10	What would the overall big picture direction to staff be that you would like considered?	a. Our budget should reflect Council's goals.	a. Keep to a long term vision for the Township, sustainable tax increases that are comparable to other regions.	a. Fair tax rate increase to residents and businesses.
C-11	Given the current situation what would your target increase be in terms of a percentage?			a. I would support a 3.5% increase or higher as long as the blended tax rate with County is at 3.5%.
C-12	In one sentence, what would you like the theme of the next budget to be?		a. "Puslinch Township: focused on being a safe community, fostering connectivity and ensuring a vibrant quality of life for our residents and businesses"	a. Managing Inflation Equitably for All

# Leadership Team Input – Budget Content/Service Levels

	Budget Content	Glenn Schwendinger	Mary Hassan	Andrew Hartholt	Courtenay Hoytfox	Mike Fowler	Tom Mulvey
		CAU	Director of Finance	Сво	Cierk (Interim CAO)	Director of Public Works, Parks and Facilities	Fire Chief
		Α	В	С	D	E	F
L-1	Are there any service levels you would like to see increased?				a. Bill 23 introduced legislative changes affecting the Heritage Act. In response, Council has initiated the work to designate priority properties through consultation with the Heritage Committee and	a. The Puslinch Community a Centre is currently not staffed during weekend rentals. Part time facility staff are scheduled to clean and 'turn over' the facility in between rentals. It is becoming increasingly difficult to	<ul> <li>Puslinch Fire &amp; Rescue Department continues to increase the amount of Public Education and Fire Prevention, however the number of preventable fire deaths in Ontario continue to increase. We need to</li> </ul>
					<ul> <li>the property owners.</li> <li>Staff are developing a</li> <li>Heritage Permit and</li> <li>Screening process which</li> <li>will include a delegated</li> <li>authority by-law. This</li> <li>will enable staff to</li> <li>screen out projects that</li> <li>meet specific criteria</li> <li>and therefore not be</li> <li>required to come before</li> <li>Council/Committee for</li> <li>approval.</li> <li>b. Bill 23 introduced</li> <li>legislative changes</li> <li>affecting the Planning</li> <li>Act. In response, the</li> <li>Township has passed a</li> <li>mandatory pre-</li> <li>consultation by-law that</li> </ul>	manage large scale events with no staffing presence. The facility is being damaged on a more regular basis, as well as rentals are exceeding occupant loads. This is being communicated to full time facility staff by the students working at the ORC. Often renters are not fulfilling their contract obligations in resect to cleaning of the facility upon departure. It is also being reported that some large scale rentals are avoiding the Alcohol Risk	continue increasing the amount of Public Education & Fire Prevention.
					requirement to consult with the Township. Staff recommend that Council consider amending this by-law to include	drinking in the PCC parking lot and grounds and not in the facility. Full time staff are aware of this activity as they often clean the PCC	

Compiled Comments received regarding suggested items for consideration for the 2024 Budget

			· · · ·
			grounds the following
			Monday and are finding
			bottles. Staff strongly
			suggest that a lower
			occupant maximum be
			set for the facility as the
			cleaning associated with
			large groups (250+) is
			not feasible with current
			staffing levels. In
			addition, staff suggest
			that Facility staff work
			on a rotational basis in
			order to have a full time
			staff person present at
			all times when the PCC is
			being rented. Staff are
			preparing an
			information report with
			detailed costing for
			Council's consideration.
			This would include
			reducing the number of
			part time hours and
			adding a third facility
			operator in order to
			develop a rotational
			shift schedule.
			b. The Parks department
			has one (1) truck for
			three (3) employees;
			Within the Parks
			department, there is one
			crew cab pick-up
			responsible for
			transporting staff and
			mowers to the various
			sites in the Township. In
			addition to parks duties
			Parks staff are required
			to complete garbage
			removal from parks;

Budget Content	Glenn Schwendinger	Mary Hassan	Andrew Hartholt	Courtenay Hoytfox	Mike Fowler	Tom Mulvey
	CAO	Director of Finance	СВО	Clerk (Interim CAO)	Director of Public Works,	Fire Chief
					Parks, and Facilities	
	A	В	С	D	E	F
				c. severance applications,	daily baseball diamond	
				condominium and	dragging; washroom	
				subdivision applications,	cleanings; part and	
				and applications that	supplies pick-ups during	
				include official plan	the week. With the	
				amendments. Council	addition of a second	
				has approved the	truck, the three parks	
				addition of a Township	workers could more	
				Planner and this position	efficiently complete	
				would be responsible for	tasks. Currently all three	
				the increased service	staff must travel	
				levels associated with	together in the one	
				planning and	truck. The Township has	
				development.	two mowers and so it	
				d. Staff are currently	would be much more	
				developing detailed user	efficient if a second	
				guides for all planning	truck was added to	
				applications to assist the	parks in order for the	
				public. In addition, staff	third park's employee to	
				are developing a	complete additional	
				detailed guide for	tasks at a different site.	
				applicants that pre-	The addition of the	
				consult with the	second truck for Parks	
				Township on proposed	would be beneficial in	
				developments. The aim	advance of the new PCC	
				is to include funding	grounds being	
				opportunities in the	completed as this site	
				guide to attract new	will require additional	
				businesses and promote	maintenance and up-	
				existing business	keep.	
				expansion in the		
				Township.		

Budget Content	Glenn Schwendinger CAO	Mary Hassan Director of Finance	Andrew Hartholt CBO	Courtenay Hoytfox Clerk (Interim CAO)	ا Directo Park
	Α	B	C	<ul> <li>D</li> <li>e. Staff have developed an online webpage dedicated to roads and public works service requests. This includes requests for service regarding road maintenance, trees, dead animals, sidewalks, etc. This is an improved service level that aims to streamline the process and is being supported with existing staff resources in the Public Works department and Clerks department.</li> <li>f. The Township continues to improve its communication programs with existing resources. Staff aim to focus more in 2024 on ways the Township can support its local community groups and external committees through the Communication Policy. In addition, the Township is developing its video and image assets relating to media advertising and promotions. This would allow the Township to limit the use of stock images.</li> </ul>	

Vike Fowler	Tom Mulvey
or of Public Works,	Fire Chief
s, and Facilities	
E	F

Budget Content	Glenn Schwendinger	Mary Hassan	Andrew Hartholt	Courtenay Hoytfox	Ν
	CAO	Director of Finance	СВО	Clerk (Interim CAO)	Directo Park
	Α	В	С	D	
				g. As a result of the pandemic and shifting the majority of Township services to be available online in addition to in-person, staff have identified a need to audit the Township's existing IT infrastructure. Given the Township's currently service delivery model, staff recommend Council consider engaging an IT specialist to develop an IT strategy to outline the Township's current state, its targeted future state, the gaps to be resolved, and a detailed plan outlining how to proactively manage and support the Township's technology needs. The County of Wellington completed a County- wide IT Service Delivery Review in November 2020 which would be included in the Township specific IT infrastructure review.	

Vike Fowler	Tom Mulvey		
or of Public Works,	Fire Chief		
s, and Facilities			
E	F		

	Budget Content	Glenn Schwendinger CAO	Mary Hassan Director of Finance	Andrew Hartholt CBO	Courtenay Hoytfox Clerk (Interim CAO)	Mike Fowler Director of Public Works,	Tom Mulvey Fire Chief
		Α	В	C C	D	Parks, and Facilities	F
L-2	Are there any service levels that you would like to see decreased?						
L-3	Are there any service levels you would like to see added?			a. Consider the addition of a dedicated position in the Building Department to help process building permits. The new position would fall between our current Building Official position and Customer Service Coordinator. The position would be a technical role responsible to closely monitor current and issued permit applications, complete plans review and inspections (as needed) on smaller projects. This position would also provide coverage for the Building Official position and would be available in the office to provide technical support to the public as needed.	<ul> <li>a. Continue to develop a local Economic Development program.</li> <li>b. Increase social media presence with the addition of a Township LinkedIn account to improved Township recruitment.</li> <li>c. Develop a Corporate-wide Health and Safety and wellness program to be led by HR in consultation with department heads and CAO to increase awareness of Township support programs, policies, and other resources available to staff.</li> <li>d. Aerial survey work related to aggregate industrial lands for compliance and taxation purposes</li> </ul>		a. Puslinch Fire & Rescue provide a great service to the community, Puslinch is one of the busiest departments in the county. It would be difficult to add any more services if we stay as a Volunteer Department.
L-4	Are there any service levels you would like to see removed?						

	Budget Content	Glenn Schwendinger	Mary Hassan	Andrew Hartholt	Courtenay Hoytfox	N
		CAO	Director of Finance	СВО	Clerk (Interim CAO)	Directo Park
		Α	В	С	D	
L-5	Are there any potential legislative or policy directions or initiatives that may be coming that you are concerned about?		<ul> <li>a. The implications associated with Bill 23 and the results of the Province's third party audit process of municipal finances and development fees (ie. audits of Toronto, Peel Region, Mississauga, Caledon, Brampton and Newmarket).</li> <li>b. Increasing insurance premium costs due to Ontario's joint and several liability system.</li> <li>c. Increasing cost of fuel - many of the Township's suppliers have implemented a fuel surcharge on their invoices.</li> <li>d. Due to the COVID-19 pandemic, the Ontario government had postponed the 2020 Assessment Update. Property assessments for the 2023 property tax years continued to be based on the January 1, 2016 values. Property assessment for the 2023 property tax year were the same as the 2021 and 2022 tax year, unless there had been changes to the property.</li> </ul>		<ul> <li>a. Proposed changes to the Aggregate resources Act</li> <li>b. Bill 190 refund and timeline implications continues to be a concern and are being monitoring by Township staff in accordance with Township procedures related to Planning Act applications.</li> <li>c. Proposed changes to the PPS.</li> <li>d. Bill 23 and the changes to the Heritage Act are in place and the Township is implementing a number of changes related to this legislation.</li> </ul>	

Vike Fowler	Tom Mulvey						
or of Public Works,	Fire Chief						
s, and Facilities							
E	F						
Budget Conte	tent	Glenn Schwendinger CAO	Mary Hassan Director of Finance	Andrew Hartholt CBO	Courtenay Hoytfox Clerk (Interim CAO)	Mike Fowler Director of Public Works,	Tom Mulvey Fire Chief
---	---	---------------------------	---	------------------------	---	--	--
		Α	В	С	D	E	F
			<ul> <li>As of August 8, 2023, there has been no update from the Province on the reassessment for the 2024 property tax year.</li> <li>e. Ontario's increases to the minimum wage rate effective October 1, 2023. There will likely be further increases announced in 2024.</li> <li>f. The increasing retirement workforce has an impact on attracting and retaining staff.</li> </ul>				
L-6 Are there any legislative or directions or that you wou implemented	y potential r policy r initiatives uld like to see d?				<ul> <li>a. Delegated Authority By- law related to Heritage Permitting Process</li> <li>b. Amending the Township Pre-Consultation By-law to include County planning applications</li> </ul>		a. I would like to see the township enter an agreement with Fire Marque. Fire Marque is a great source of revenue and cost recovery that has no financial impact on Insurance policy holders
L-7 Are there any projects you see added fo consideration	y new would like to or n?		a. Further information technology enhancements to assist with modernization and digitization efforts		<ul> <li>a. Present building concept designs related to the Municipal Facility for Council consideration</li> <li>b. Policy and By-law audit to develop a schedule for regular review and updates.</li> </ul>	a. The back senior soccer filed turf unfortunately did not take with many efforts taken by Township staff.	a. All-terrain vehicle to assist with grass fires

	Budget Content	Glenn Schwendinger	Mary Hassan	Andrew Hartholt	Courtenay Hoytfox	Mike Fowler	Tom Mulvey
		CAO	Director of Finance	СВО	Clerk (Interim CAO)	Director of Public Works,	Fire Chief
						Parks, and Facilities	
		Α	В	C	D	E	F
			<ul> <li>b. Further opportunities for working collaboratively with the Township's municipal partners (ie. implementation of shared service delivery agreements, etc.)</li> <li>c. Continued updates to the Capital Budget and Forecast and Asset Management Plan based on more current information being available (ie. the results of the Roads Management Plan, 2023 OSIM inspection results, etc.)</li> <li>d. Cost estimate and funding strategy for the Public Administration and Operations Facilities after the detailed design is complete.</li> <li>e. Operating budget implications associated with the parks revitalization projects that are currently underway.</li> </ul>			<ul> <li>b. The Puslinch Soccer Club has identified concerns with the turf playing conditions as well and has highlighted this concern in advance of the 2024 playing season. The Fall Fair is utilizing the field for their 2023 events including tents and animal exhibits. Staff recommend that Council consider re- sodding the field in late fall after the Fall Fair while the current contractor is on site and available to do the work. Staff can provide detailed costing for consideration should Council give that direction.</li> </ul>	
L-8	Are there any projects you would like to see considered for removal from past plans?						

	Budget Content	Glenn Schwendinger	Mary Hassan	Andrew Hartholt	Courtenay Hoytfox	Mike Fowler	Tom Mulvey
		CAO	Director of Finance	СВО	Clerk (Interim CAO)	Director of Public Works, Parks, and Facilities	Fire Chief
		Α	В	С	D	E	F
L-9	Are there any new programs you would like to see considered?				<ul> <li>a. Program related to the Township Economic Development initiative</li> <li>b. Corporate-wide Health and Safety and wellness program to be lead by HR to increase awareness of Township support programs, policies, and other resources available to staff.</li> </ul>		
L-10	What would the overall big picture direction to staff be that you would like considered?						a. To continue to see value in our staff while they provide a cost effective service to Residents and visitors to the Township of Puslinch
L-11	Given the current situation what would your target increase be in terms of a percentage?						
L-12	In one sentence, what would you like the theme of the next budget to be?				a. Focus on sustainable growth	a. Ensure the budget reflects the pressures from inflation while ensuring resources are available to support the expected service levels.	<ul> <li>a. Cost effective high quality service to the residents and visitors of the Township of Puslinch.</li> </ul>



## **REPORT ADM-2023-047**

TO:	Mayor and Members of Council
PREPARED BY:	Courtenay Hoytfox, Municipal Clerk (Interim CAO)
PRESENTED BY:	Courtenay Hoytfox, Municipal Clerk (Interim CAO) Mike Fowler / Director of Public Works, Parks and Facilities
MEETING DATE:	September 6, 2023
SUBJECT:	Township of Puslinch Roads Management Plan Final Draft

## RECOMMENDATIONS

That Report ADM-2023-047 regarding the Township of Puslinch Road Management Plan (RMP) be received for information; and

Whereas the Township RMP has been prepared by the Township Engineering Consultant in consultation with staff; and

Whereas Council has thoroughly reviewed and provided input into the RMP; and

Whereas the public has been provided opportunity to comment on the RMP during the development process;

Therefore, that Council approve the RMP as [presented/amended] to be used as a key tool regarding maintaining and operating the Township's road network; budgeting for the Township's road network; and responding to concerns and requests regarding the Township's road network; and

That the recommendations outlined in the RMP are endorsed by Council subject to budget considerations; and further

That Council direct staff to include the RMP on the Township website and that staff develop a tracking database as outlined in the report.

## <u>Purpose</u>

The purpose of this report is to provide Council with the most recent draft of the Township of Puslinch Road Management Plan (RMP) prepared by GM BluePlan. The RMP is prepared in response to direction received from Council to develop a standardized document to deal with

concerns and requests received regarding the Township's road network and to provide evaluations and recommendations necessary for appropriate budgeting into the future.

## **Discussion**

Council reviewed the RMP at the August 16, 2023 Council meeting and directed staff as follows:

- Add clarification regarding the purpose of Township roads given the Township road network is primarily used for commuter traffic based on its proximity to the 401 and neighbouring urban centres (i.e. not designed for walking, cycling) as road network consists of rural platform roads with narrow shoulders;
- Include wording that the current gravel to asphalt conversion criteria are identified as Phase 1 and that the criteria will be re-evaluated once the priority list of roads have been converted to asphalt;
- Include a statement in the Introduction section clarifying that the RMP is a guidance document for the Township for the purposes of:
  - 1. maintaining and operating the Township's road network;
  - 2. budgeting for the Township's road network;
  - 3. responding to concerns and requests regarding the Township's road network; and
- Add the wording 'subject to budget considerations' to recommendation no. 1; and
- Clarify recommendation no. 9 regarding section 4.9 Requests for Conversions to Hard-Surface to state that section 4.9 is not in effect until such time that Council passes the associated by-law; and
- $\circ$  Add the wording 'subject to budget considerations' to recommendation no. 10; and
- Add the wording 'subject to budget considerations' to recommendation no. 11; and
- Add the wording ' a speed review for all roads over 60km per/hour' and 'subject to budget considerations including estimated signage and maintenance costs as a phased approach' to recommendation no. 15

The revisions have been incorporated into the RMP attached as Schedule "B" and summarized in the memo prepared by GM BluePlan attached as Schedule "A" to this report. It is recommended that the wording "subject to budget considerations" be included in the Council resolution adopting the RMP rather than in the policy document. Staff suggest that the Council resolution adopting the RMP be include on the cover page to provide further clarification when utilizing the document.

## Next Steps:

As previously reported, the Grant Agreement from the Federation of Canadian Municipalities indicates that costs are eligible from January 5, 2022 to September 30, 2023. Therefore, staff recommend that Council consider the revisions outlined in the final draft and approve the RMP as presented/amended at the September 6, 2023 Council meeting.

Once the RMP is endorsed by Council, staff recommend that it be added to the 'Local Roads & Sidewalks' page on the Township website <u>https://puslinch.ca/for-residents/utilities-</u> <u>services/local-roads-sidewalks/</u> Staff also suggest that the web page include OPP contact information for reporting speeding on Township and County roads.

Staff will develop a formal tracking database in order to track requests and responses. As outlined in the RMP, any request that results in a recommended action will be included in a staff report to Council in accordance with the annual budget process.

## **Financial Implications**

Any budget implications associated with the approved RMP will be incorporated in the proposed 2024 capital budget and forecast and the 2024 operating budget.

## **Applicable Legislation and Requirements**

As outlined in the Township of Puslinch Road Management Plan.

## **Engagement Opportunities**

Social Media Engagement; Township Website; Media Release.

## **Attachments**

Schedule "A" Memo summarizing revisions prepared by GM BluePlan Schedule "B" Township of Puslinch Road Management Plan

Respectfully submitted,

Courtenay Hoytfox Municipal Clerk (Interim CAO)



Date:	August 30, 2023	File:	121149
То:	Courtenay Hoytfox		
	Township of Puslinch		
From:	Matt Scott		
Project:	Puslinch Roads Managen	nent Pla	n
Subject:	Summary of Revisions to	RMP	

## TECHNICAL MEMO

This memo has been prepared by GM BluePlan Engineering Limited (GMBP) to summarize the revisions that have been made to the Roads Management Plan (RMP) since the August 16, 2023 presentation to Township of Puslinch (Township) Council. A revised RMP was submitted to the Township of Puslinch on August 30, 2023 for presentation to Council with the following updates:

- Added a statement describing the intended use of the RMP at the end of Section 1.1 (Page 1).
- Added Section 1.3 "Township Road Characterization" to describe the intended function of Township roads (Page 2).
- Added statements regarding the criteria for converting gravel roads to hard-surface and documentation at the end of Section 4.7.1 (page 19).
- Added recommendation to document modifications to the guidelines for converting a gravel road to hard-surface in Section 10 (page 78).
- Revised the recommendation for a comprehensive speed limit review to only include roads with a posted speed above 60 km/h in Section 10 (Page 79)

END OF MEMO

Prepared By:



in association with:





# Township of Puslinch

# Roads Management Plan

**GMBP File: 121149** 

August 30, 2023





GUELPH | OWEN SOUND | LISTOWEL | KITCHENER |LONDON | HAMILTON | GTA 650 Woodlawn Rd. W., Block C, Unit 2, Guelph ON N1K 1B8 P: 519-824-8150 www.GMBLuePlan.ca



## TABLE OF CONTENTS

1	IN'	TRODUCTION AND APPROACH	1
-	1.1	INTRODUCTION	1
	1.2	SCOPE OF WORK	1
	1.3	TOWNSHIP ROAD CHARACTERISATION	2
	1.4	POLICY, REGULATIONS, AND STANDARDS	2
2	PR	ROJECT TEAM	3
3	RC	DAD CONDITION ASSESSMENT	4
3	3.1	ROAD NETWORK INVENTORY	4
3	3.2	CONDITION EVALUATION	4
4	RC	DAD DESIGN STANDARDS	9
2	1.1	BACKGROUND INFORMATION	9
2	1.2	DESIGN STANDARDS FOR PROPOSED ROADS	9
2	1.3	DESIGN STANDARDS FOR EXISTING ROADS	10
2	1.4	ROAD SURFACING TYPES	11
2	1.5	ROAD IMPROVEMENT TYPES (INVENTORY MANUAL)	14
2	1.6	ADDITIONAL ROAD IMPROVEMENT TYPES NOT CONSIDERED FOR TOWNSHIP	15
2	1.7	GRAVEL ROAD CONVERSIONS TO HARD-SURFACE	17
2	1.8	PLANNING CHECKLIST FOR CAPITAL ROAD PROJECTS	20
2	1.9	REQUESTS FOR CONVERSIONS TO HARD-SURFACE	21
5	TR	RAFFIC COUNT COLLECTION & GROWTH PROJECTION	23
Ę	5.1	MAINTENANCE CLASS	23
6	RC	DAD MAINTENANCE STRATEGY	24
6	6.1	MAINTENANCE ACTIVITIES: OPERATIONAL PLAN	25
6	6.2	SCHEDULE OF PLANNED ACTIVITIES	40
6	6.3	REGULATORY MAINTENANCE ACTIVITIES	42
7	CA	APITAL NEEDS REQUIREMENTS	43
7	7.1	TIME OF NEED	43
7	7.2	PRIORITY RATING	44
8	TR	RAFFIC MANAGEMENT POLICIES	47
8	3.1	TRAFFIC CALMING	47
8	3.2	SPEED LIMIT AND COMMUNITY SAFETY ZONE POLICY	60
8	3.3	TRUCK ROUTE POLICY	65
9	PU	JBLIC ENGAGEMENT	77
10	RE	ECOMMENDATIONS & CONCLUSIONS	77
11	BI	BLIOGRAPHY	80



Township of Puslinch Roads Management Plan GMBP File: 121149 August 30, 2023

## **APPENDICES**

APPENDIX A: TOWNSHIP ROAD NETWORK INVENTORY TABLES AND ROAD PCI MAPS

- APPENDIX B: EXCERPTS FROM MTO INVENTORY MANUAL
- APPENDIX C: RECOMMENDED CROSS-SECTION FOR EXISTING ROADS
- APPENDIX D: COST ESTIMATES FOR SURFACING OPTIONS
- APPENDIX E: ROAD AGE CALCULATIONS
- APPENDIX F: GRAVEL ROAD CONVERSION FLOW CHART
- APPENDIX G: PRELIMINARY DESIGN CHECKLIST FOR TRANSPORTATION CAPITAL PROJECTS
- APPENDIX H: CURRENT TRAFFIC COUNTS AND 10 YEAR FORECAST
- APPENDIX I: TRAFFIC COUNT LOCATIONS AND TRAFFIC RANGE ESTIMATES
- APPENDIX J: ROAD MAINTENANCE ACTIVITY SPREADSHEET
- APPENDIX K: TIME OF NEED AND PRIORITY RATINGS
- APPENDIX L: TRAFFIC CALMING TOOLBOX
- APPENDIX M: COMMUNITY TRAFFIC ISSUE REPORTING FORM
- APPENDIX N: WARRANTS FOR COMMUNITY SAFETY ZONES
- APPENDIX O: TRUCK ROUTE BY-LAW TEMPLATE
- APPENDIX P: WEB PAGE OUTLINE, HEAVY TRUCK USAGE
- APPENDIX Q: PUBLIC ENGAGEMENT, COMMENTS AND RESPONSES

## **REVISION HISTORY**

Revision	Date	Description	Revised by
1	August 26, 2022	Draft Submission	RG, GC
2	October 7, 2022	Draft Submission	RG, GC
3	October 12, 2022	Final Submission	RG, GC
4	November 4, 2022	Revised Final Submission per Council Comments	RG, GC
5	August 8, 2023	Added Process for Requesting Conversion to Hard-surface Road (Section 4.9), revised Capital Program costs based on recent local tender pricing, added Public Engagement (Section 9)	RG, GC
6	August 30, 2023	Issued for Council Approval	RG, GC

#### © 2023, Corporation of the Township of Puslinch. All Rights Reserved.

The preparation of this project was carried out with assistance from the Government of Canada and the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them.



## **TOWNSHIP OF PUSLINCH**

### **ROADS MANAGEMENT PLAN**

#### GMBP FILE: 121149

## AUGUST 30, 2023

## 1 INTRODUCTION AND APPROACH

#### **1.1** INTRODUCTION

The Township of Puslinch (Township) retained GM BluePlan Engineering Limited (GMBP) to prepare a Roads Management Plan in response to a high-priority need identified by the Council of the Township of Puslinch. The purpose of this Plan is to:

- Allow the Township to appropriately plan and undertake maintenance on the Township's road network as well as to plan and prioritize the appropriate capital work.
- Establish criteria and steps to follow for responding to service requests or service upgrades relating to the Township's road network (e.g., paving, sidewalks, street lights, changes to speed limits).
- Identify road rehabilitation needs to assist the Township in developing a realistic annual capital budget to provide an adequate service level.
- Assist the Township in formalizing an ongoing road maintenance operation and to facilitate proactive planning for future operations, replacements, and upgrades.

This Plan has been developed into a single document consisting of current practices and proposed practices to fit the local conditions. It is intended to be used as a guidance document for Township staff for the purposes of maintaining and operating the Township's road network, budgeting for capital and maintenance expenditures for the Township's road network, and providing a mechanism to respond to concerns and requests from residents regarding the Township's road network.

## 1.2 SCOPE OF WORK

The scope of work associated with this assignment includes the following:

- Updating of the Township existing inventory and pertinent attributes that are key to the analysis and scope of this assignment.
- Pavement and gravel road condition assessments for the entire network.
- Recommendations for design standards for existing and proposed roads and a preliminary design checklist for new roads and rehabilitation road projects.
- Updated traffic counts for 28 mid-block locations and growth projections.
- Review of the existing services and updates based on the review of current best practices, amendments to the Minimum Maintenance Standards (MMS, O.Reg. 366/18) and Township-identified specific local requirements.
- Development of road capital rehabilitation needs including timing, improvement type and costs.
- Development of recommendations for traffic calming, speed control and truck routes.



## **1.3 TOWNSHIP ROAD CHARACTERISATION**

Township roads are classified as "Local Roads", in that they are a road intended to provide access to development only (e.g., residents, businesses, etc.). It is understood that the Township's road network is occasionally used for agricultural vehicles and modes of active transportation (walking, cycling, etc.); however, the Township's road network does not have dedicated facilities for these types of users within the available road platform.

The Township of Puslinch is uniquely situated between three major urban centres (City of Guelph, City of Cambridge and City of Hamilton) as well as in close proximity to Greater Toronto Area centres. There are two major Provincial highways that bisect the Township both north-south and east-west (Highways 6 and 401, respectively), as well as major County-level roads. Under specific circumstances (e.g., major closures or traffic incidents), Township roads can become temporarily congested and overwhelmed with traffic from these major routes. Township roads are neither designed nor intended to accommodate intermittent and unpredictable major traffic events and, therefore, it is not the intention of the Township to expand their existing road network's capacity and facilities to accommodate these temporary conditions.

## 1.4 POLICY, REGULATIONS, AND STANDARDS

All recommendations put forward in this report are based on review and input from the following policies, regulations, standards and guidelines.

- Accessibility for Ontarians with Disabilities Act, 2005, S.O. 2005, c. 11
- City of Hamilton, *City of Hamilton Truck Route Master Plan Study* (2010)
- Highway Traffic Act, R.S.O. 1990, c. H.8
- Institute of Transportation Engineers, *Subcommittee of Traffic Calming* (1997)
- Institute of Transportation Engineers, Trip Generation Manual (2021)
- Ministry of Transportation of Ontario, *Freight Supportive Guidelines* (2016)
- Ministry Transportation of Ontario (MTO), Inventory Manual (1991)
- Ministry of Transportation of Ontario, SP 022 Manual for Condition Rating of Flexible Pavement Rating Guidelines for Municipalities (1989)
- Ministry of Transportation of Ontario, *SP 024 Manual for Condition Rating of Flexible Pavements* (2016)
- Ministry of Transportation of Ontario, *SP 025 Manual for Condition Rating of Gravel Surface Roads* (1989)
- Ministry of Transportation of Ontario, Ontario Structure Inspection Manual (2018)
- Ministry of Transportation of Ontario, Ontario Traffic Manual Book 5: Regulatory Signs (2021)
- O. Reg 239/02. & O. Reg. 366/18: Minimum Maintenance Standards for Municipal Highways
- O.Reg. 586/06: Local Improvement Charges Priority Lien Status
- Ontario Provincial Standard Drawings (OPSD)
- Ontario Provincial Standard Specifications (OPSS)
- Ontario Trucking Association, Local Truck Routes: A Guide for Municipal Officials (2011)
- Township of Puslinch, *Municipal Development Standards* (2019) available at: https://puslinch.ca/doingbusiness/planning-and-development/
- Transportation Association of Canada, *Canadian Guidelines for Establishing Posted Speed Limits* (2009)
- Transportation Association of Canada, Canadian Guide to Traffic Calming (2016)
- Transportation Association of Canada (TAC), Geometric Design Guide for Canadian Roads (2017)
- Wellington County, *Official Plan* (1999)



## 2 PROJECT TEAM

Sections 1-7 of this Plan were authored by GMBP. Section 8 of this Plan was authored by Paradigm Transportation Solutions Limited (Paradigm). Section 9 of this plan was authored jointly by GMBP and Paradigm.

Refer to **Figure 1** for the multidisciplinary project team that provided input during the preparation of this Plan to the Township of Puslinch

#### Figure 1: Roads Management Plan Project Team





## **3 ROAD CONDITION ASSESSMENT**

### 3.1 ROAD NETWORK INVENTORY

This study inventoried and assessed a total of 179.1 km of roadway within the Township. No considerations or allowances were made for 4.0 km of boundary roads. Prior to undertaking this assessment, the Township database inventory and pertinent attributes related to this assignment was updated to reflect current conditions. Note that centreline km differ from lane km (e.g., a typical Township road that is 1 centreline km long has 2 lane km of road).

The road network is comprised of hot mix asphalt and gravel road surfaces. Refer to **Table 1** for the distribution of surface type within the Township's road network.

#### Table 1: Assessed Road Network Surface Type Distribution

Surface Type	Centreline Kilometres	Percentage of Network
Asphalt	128.0	71.5%
Gravel	51.1	28.5%

The Township's road network is mostly rural in nature with sparse urbanized centres and residential neighbourhoods. These "Roadside Environments" are divided into three classes, Rural, Semi-Urban, and Urban. Rural Environment means roads that generally abut agricultural lands or open spaces such as forests, have relatively high posted speed limits and infrequent entrances, and typically have open drainage conveyance. Semi-Urban roads are those which are adjacent to or inside of built-up areas (residential or commercial development), but do not include curb & gutter or storm sewers. Urban Environment refers to roadways that are in an urban or built-up area, generally have low to moderate posted speeds and frequent entrances, may have features such as sidewalks and on-street parking, and generally include curb & gutter and storm sewers for conveying drainage. Refer to **Table 2** for the distribution of roadside environment within the Township's road network.

#### Table 2: Road Network Roadside Environment Distribution

Roadside Environment	Centreline Kilometres	Percentage of Network
Rural	164.2	91.7%
Semi-Urban	8.8	4.9%
Urban	6.0	3.4%

The Township's asphalt road network is comprised of both single-lift and double-lift asphalt wearing surfaces. Refer to **Appendix A** for a summary of the Township's road network inventory as well as road sections that are assumed to be double-lift roads for the purposes of this Plan.

## 3.2 CONDITION EVALUATION

In April 2022, the condition of all Township roads was assessed by GMBP. The condition assessments were conducted in accordance with the procedures outlined in the following guidelines for evaluating the condition of municipal roadways:

- SP 022 Manual for Condition Rating of Flexible Pavement Rating Guidelines for Municipalities for paved urban/residential roadways
- SP 024 Manual for Condition Rating of Flexible Pavements for paved rural/semi-urban roads
- SP 025 Manual for Condition Rating of Gravel Surface Roads for gravel roads



### 3.2.1 Distress Manifestation Index

Regardless of the road surface material or roadside environment, the condition evaluations are based on the type, severity ("how bad is it") and density ("how much is there") of specific pavement or gravel distresses.

A Distress Manifestation Index (DMI) is computed based on these parameters and represents the overall effect that each observed distress has on the condition of the roadway. The DMI is a 0-10 scale index whereby the higher the DMI number, the better the surface condition of the road. To compute the DMI, each distress was assigned a weighting factor based on the relative importance of the distress type and its impact on the potential deterioration of the roadway.

Refer to **Table 3** for a summary of the distresses for asphalt and gravel road surface types. Weight factors used in calculating the DMI are provided in parentheses after each distress.

SP 022 Distresses	SP 024 Distresses	SP 025 Distresses
(Urban/Residential Asphalt)	(Rural/Semi Urban Asphalt)	(Gravel)
Raveling (3.0)	Raveling (3.0)	Loose Gravel (3.0)
Flushing (1.5)	Flushing (1.5)	Dust (2.0)
Potholes (3.0)	Rippling and Shoving (1.0)	Potholes (1.0)
Pavement Edge Breaks (3.0)	Wheel Track Rutting (3.0)	Breakup (1.0)
Rippling and Shoving (1.0)	Distortion (3.0)	Washboard (1.0)
Wheel Track Rutting (3.0)	Longitudinal Wheel-track – Single or Multiple (1.5)	Rutting (1.0)
Distortion (3.0)	Longitudinal Wheel-track – Alligator (3.0)	Flat/Reverse Crown (3.0)
Patching/U-Cuts (1.0)	Centerline Cracking – Single or Multiple (0.5)	Distortion (2.0)
Longitudinal Cracking (1.0)	Centerline Cracking – Alligator (2.0)	
Transverse Cracking (1.0)	Pavement Edge – Single or Multiple (0.5)	
Pavement Edge Cracking (3.0)	Pavement Edge – Alligator (1.5)	
Map Cracking (1.0)	Transverse Cracking – Half, Full or Multiple (1.0)	
Alligator Cracking (3.0)	Transverse Cracking – Alligator Cracking (3.0)	
	Linear Meander or Mid-lane Cracking (1.0)	
	Random/Map Cracking (0.5)	

#### **Table 3: Pavement Distresses (and Weight Factors)**

For asphalt roadways, distress severity and extent limits used in calculating the DMI are summarized in **Table 4**, as taken from SP 022 and SP 024.

#### Table 4: SP 022 and SP 024 Asphalt Distress Severity and Extent Limits

Rating	Severity	Extent (% Surface Area)	Rating
1	Very Slight	0 to 10	Occasional
2	Slight	10 to 20	Intermittent
3	Moderate	20 to 50	Frequent
4	Severe	50 to 80	Extensive
5	Very Severe	>80	Throughout

For gravel roadways, distress severity and extent limits used in calculating the DMI are summarized in Table 5.

#### Table 5: SP 025 Gravel Distress Severity and Extent Limits

Rating	Severity	Extent (% Surface Area)	Rating
1	Slight	0 to 20	Intermittent
2	Moderate	20 to 50	Frequent
3	Severe	50 to 100	Extensive



Using the above tables, the DMI is calculated based on the following formulas:

SP 022 (Urban/Semi-urban, asphalt):	$DMI = 10 \times \left[153 - \sum \frac{W_i \times (S_i + D_i)}{153}\right]$
SP 024 (Rural, asphalt):	$DMI = 10 \times \left[208 - \sum \frac{W_i \times (S_i + D_i)}{208}\right]$
SP 025 (All gravel roads):	$DMI = 10 \times \left[96 - \sum \frac{W_i \times (S_i + D_i)}{96}\right]$

Where  $W_i$  is the weighting an individual distress,  $S_i$  is the severity the same distress, and  $D_i$  is the density of the same distress.

## 3.2.2 Ride Condition Rating

A Ride Condition Rating (RCR) was assigned to each road section based on the criteria summarized in **Table 6**, which are generally consistent across all guideline documents.

RCR	Description	Criteria
8 – 10	Excellent	Very Smooth
6 – 8	Good	Smooth with a few bumps and depressions
4 – 6	Fair	Comfortable with intermittent bumps or depressions
2 – 4	Poor	Uncomfortable with frequent bumps or depressions. Unable to maintain speed at lower end of the scale
0 – 2	Very Poor	Very uncomfortable with constant jarring bumps or depressions. Unable to maintain posted speed and need to steer constantly to avoid bumps and depressions

#### Table 6: RCR Criteria

For all roads surface types, the inspector assigned the RCR score based on their perception of the rideability of the road, which is generally accepted within the industry to be a subjective component of the rating process.

#### 3.2.3 Pavement Condition Index

An overall Pavement Condition Index (PCI) was established for each road section by combining the DMI scores and RCR scores. The PCI formula is derived from MTO's "PAV-86-02 Pavement Condition Index (PCI) for Flexible Pavements" (1992). The PCI ranges from 0-100, where the lower the PCI score the worse overall condition of the roadway.

The following formulas were used based on the roadway surface type:

Asphalt:

Gravel:

 $PCI = 13.75 + (9 \times DMI) - \left(\frac{7.5 \times e^{[8.5 - RCR]}}{3.02}\right)$  $PCI = 12.75 + (9 \times DMI) - \left(\frac{5.5 \times e^{[9.94 - RCR]}}{3.46}\right)$ 



Where **DMI** is the Distress Manifestation index and **RCR** is the Ride Condition Rating.

Using the above PCI rating criteria and calculation methods, the Township's paved road network **average PCI** was determined to be approximately **77.3**, weighted by centerline length of road. Refer to **Table 7** and **Figure 2** for a summary of the distribution of roadway condition across the Township's paved road network. A map of the Township's asphalt road PCI ratings is provided in **Appendix A**.

Condition	PCI	Centerline Kilometres	% Paved Road Network
Very Good	>85	57.00	45%
Good	70-85	22.45	18%
Fair	55-70	33.51	26%
Poor	40 - 55	15.01	12%
Very Poor	< 40	0.0	0.0
	Total	127.97	

#### Table 7: Paved Road Network PCI Distribution (April 2022)





The average PCI for the Township's gravel road network was determined to be approximately 65.0, weighted by centerline length of road. Refer to **Table 8** for a summary of the distribution of roadway condition across the Township's gravel road network. A map of the Township's gravel road PCI ratings is provided in **Appendix A**.

Condition	PCI	Centerline Kilometres	% Gravel Road Network
Good	>75	14.18	28%
Fair	50-75	27.97	55%
Poor	<50	8.91	17%
	Total	51.06	

Table 8: Gravel Road Network PCI Distribution	(A	pril 2022	2)
			•1



At the time of the inspection approximately 14.2 km or 28% of the gravel road network was considered in good condition with approximately 8.9 km or 17% of the network was considered in poor condition.

Refer to **Table 9** for gravel road sections with a PCI < 50, indicating that the road sections were assessed to be in Poor condition at the time of the inspection in April 2022, which may indicate recurring spring thaw issues in these areas or other problematic drainage or road base/subbase issues.

Asset ID	Road Name	From Road	To Road	Length (km)	PCI
64	Maltby Road East	Concession 11	Nassagaweya-Puslinch Townline	0.31	22.0
114	Concession 7	Calfass Road	Concession 2A	1.62	35.7
43	Sideroad 17	Nassagaweya-Puslinch Townline	Concession 11	0.38	39.6
112	Sideroad 25 North	Concession 7	End	0.57	42.9
105	Sideroad 20 South	Concession 1	Concession 2	2.09	45.1
64	Maltby Road East	Watson Road South	Concession 11	2.07	46.0
91	Sideroad 10 South	Gore Road	Concession 1	1.88	46.0
			Total	8.92	

#### Table 9: Gravel Road Sections with PCI < 50 (April 2022)

It must be noted that the gravel road condition assessments were done just after spring thaw and during gravel road grading operations. As a result, these findings may not be representative of the Township's gravel roads throughout the year. Condition ratings completed at different times of the year can greatly vary. It is generally accepted that gravel road conditions after the spring thaw would be markedly improved, with the possible exception of known issues of subbase and drainage deficiencies.

**For comparison purposes**, a small subset of gravel roads with low PCI scores in the spring was undertaken in September of 2022. As can be seen in **Table 10**, the PCI of these gravel roads improved significantly due to completion of spring and summer maintenance activities.

Asset ID	Road Name	From Road	To Road	PCI (April 2022)	PCI (Sept 2022)
64	Maltby Road East	Concession 11	Nassagaweya- Puslinch Townline	22.0	80.1
64	Maltby Road East	Watson Road South	Concession 11	46.0	76.9
95	Sideroad 10 North	County Road 34	Concession 4	56.6	80.7
43	Sideroad 17	Nassagaweya- Puslinch Townline	Concession 11	39.6	80.1
105	Sideroad 20 South	Concession 1	Concession 2	45.1	75.9
112	Sideroad 25 North	Concession 7	End	42.9	84.0

#### Table 10: Gravel Road Sections PCI Comparison (September 2022)



## 4 ROAD DESIGN STANDARDS

#### 4.1 BACKGROUND INFORMATION

The Township maintains an inventory of urban and rural roads for residential, commercial, industrial and agricultural use. These roads are generally either asphalt or gravel, though we understand that some boundary roads have a bituminous surface treatment ("tar-and-chip") wearing surface, but these roads are typically maintained by the adjacent municipality with the Township only providing financial contributions.

Since 2011, GMBP has assisted the Township in executing their annual asphalt program, mainly with preparing bidding documents and administering construction. The program laid out by the Township has typically included the following scope of work:

- Small-diameter culvert replacements (typically 900 mm diameter or less)
- Pulverizing the existing road surface, or removal of the road surface where an increase in road elevation cannot be accommodated
- Re-grading the pulverized/gravel surface to provide a minimum 2% cross-fall
- For rural and urban residential roads that do not require truck traffic considerations:
  - Single lift of HL 4 Surface Course asphalt at a thickness of approximately 50 mm for a paved width of 7 m (3.5 m wide lanes)
  - Minimum 0.5 m wide granular shoulders (thickness to match asphalt thickness)
- For rural and urban roads that require truck traffic considerations:
  - Single lift of HL 8 Binder Course asphalt at a thickness of approximately 50 mm and single lift of HL 4 Surface Course asphalt at a thickness of approximately 50 mm for a paved width of 7 m to 8.5 m (3.5 m to 4.25 m wide lanes), depending on available platform
  - Minimum 0.5 m wide granular shoulders (thickness to match asphalt thickness), with preference given to shoulders at least 1.0 m wide on busier truck routes

The following additional improvements have been applied on a case-by-case basis where budget permits:

- Rip-rap ditching along steep slopes susceptible to erosion
- Paved shoulders on steep slopes
- Concrete curb and gutter around curves on steep slopes
- Paved shoulders on inside radii of curves
- Increased asphalt depth to minimum 60 mm thickness (single lift asphalt roads)

Through the Roads Management Plan, the Township has requested that standards be developed for existing and proposed roads, preliminary design checklists be developed for existing and proposed roads, and discussion of various re-surfacing methods be evaluated to develop a road management strategy for gravel roads.

## 4.2 DESIGN STANDARDS FOR PROPOSED ROADS

Proposed (new) roads are generally anticipated to be required as part of a new development, and therefore, would be expected to be designed by the developer's engineer and reviewed by the Township. Design of these roads shall follow the recommendations contained within the Township's *Municipal Development Standards*, Section 3.0 Roads.

These standards reference Ontario Provincial Standard Specifications (OPSS), Ontario Provincial Standard Drawings (OPSD), and the *Geometric Design Guide for Canadian Roads*.

For new roads that are designed by the Township, design shall follow the Township's *Municipal Development Standards*.



## 4.3 DESIGN STANDARDS FOR EXISTING ROADS

It is our experience that existing road networks often cannot meet the requirements of development standards for proposed (new) roads, as they were constructed during time periods when their use was much different than current demands. Therefore, following the Township's *Municipal Development Standards* may not be practical when assessing capital needs for the existing road network.

We do not believe that the Township has specific standards for its existing road network, and we don't believe that many local municipalities have their own standards. We estimate that most adjacent municipalities rely heavily on the *Inventory Manual*, OPSS, OPSD and the *Geometric Design Guide for Canadian Roads*, and recommend a similar approach for the Township.

Before completing capital works on existing roads, specific locations with known issues should be investigated through additional engineering review (e.g., topographic survey, geotechnical investigation). Issues that may trigger review would include, but not be limited to, the following:

- Premature failure of wearing surface (extensive cracking, rutting, etc.)
- Sight line issues at driveways/intersections
- History of accidents or collisions
- Change in road use due to development or change in public driving habits or increased traffic volumes
- Drainage concerns

We estimate that applying the Township's Typical Rural Cross-Section (STD-102) of the *Municipal Development Standards* will not be possible on the majority of the Township's existing road network due to factors such as inadequate Right-of-Way width, existing topography and budget. Therefore, we suggest that the Township consult road cross-section geometry as provided in the *Inventory Manual* for the following:

- Surface width following Table 85R for Rural Sections or Table 93R for Minimum Tolerable Surface Width for Rural Sections
- Shoulder width following Table 84R for Rural Sections
- Road Classifications per Item 33 for Rural Sections
- Road Design Standards per Table F-1 for Rural Roads

Excerpts from the *Inventory Manual* are attached to this Plan in **Appendix B**. We recognize that the *Inventory Manual* is a relatively dated publication; however, it is still generally accepted as one of the prevailing guidance documents for geometric road criteria for Ontario municipalities.

The majority of the Township's Roads are estimated to fall between a Road Class of 100 to 500 as defined by the *Inventory Manual*. The minimum acceptable dimensions for a road platform and road construction within the manual for these road classes would be:

- 5.0 m to 6.0 m road surface width (3.0 m lanes)
- 0.5 m to 2.5 m wide shoulders
- Overall platform width of 6.0 m to 8.5 m
- Road construction:
- Gravel surface for roads up to Class 200, double surface treatment for roads up to Class 300, 50 mm hot mix asphalt for roads up to Class 500
- 150 mm Granular 'A'
- 300 mm Granular 'B' for roads up to Class 300, 450 mm Granular 'B' for roads up to Class 500



Refer to **Appendix C** for a cross-section adapted from the Township's *Municipal Development Standards* for paving of existing roads. This is a suggested starting point to use when reviewing existing roads for resurfacing and reconstruction needs.

While the practice of surfacing a road with a single lift of asphalt at 50 mm depth is supported in the *Inventory Manual*, our opinion is that this is the minimum thickness that asphalt should be applied at for a single lift road. Issues have been observed when the specified thickness of 50 mm is not achieved in isolated sections due to construction tolerances, causing premature failure of these areas. For example, prior to paving a road the existing granular base is to be graded, typically to *Ontario Provincial Standards*. Ontario Provincial Standard – Municipal 314 allows for tolerances of up to 30 mm in finished granular courses from specified grade. To mitigate risks of paving at thicknesses below 50 mm, we have had success in the past of specifying a thickness of 60 mm for single lift roads.

## 4.4 ROAD SURFACING TYPES

## 4.4.1 Gravel Road Resurfacing

Fresh gravel is typically applied to gravel roads every 2-3 years to maintain performance of the road. In our research and discussion with other industry professionals, gravel is recommended to be added to the roads at a <u>minimum</u> thickness of three times the largest aggregate size (Granular 'M' has 19 mm aggregate x 3 = 57 mm), though a ratio of 3.5 - 4.0 times the largest aggregate size is ideal.

For a 1 km section of road with a platform width of 8.0 m, applying Granular 'M' at a minimum thickness of 57 mm is estimated to cost approximately \$15,000-\$20,000 + HST. This cost accounts for supply of the granular material and grading time by Township staff to grade and compact the supplied material to the appropriate cross-fall. This does not account for any associated improvements such as ditching, road widening, culvert replacements, subbase improvements, etc., nor does it account for any engineering or construction administration. Costs are based on 2022 pricing.

Note that a platform width of 8.0 m was assumed for this analysis to be consistent with other non-truck route surfacing options. To our knowledge, the majority of the Township's gravel roads have an estimated platform width of 6.0 - 7.0 m.

Additional Granular 'M' would need to be added to the road surface every 2-3 years in perpetuity. The Township currently places Granular 'M' on its roads every two years at an estimate thickness of approximately 25-50 mm (based on budget and the length of the Township's gravel road network). If the thickness were increased to the recommended 3.5-4.0 times the largest aggregate size, we believe it may be possible to increase the frequency of additional granular material to every three years.

We understand that the Township switched from Granular 'A' to Granular 'M' in approximately 2019, and has subjectively noted an improvement in the consistency of material and performance of its gravel roads.

The Township's 2022 budget for resurfacing half of its gravel road network was approximately \$80,000.

#### 4.4.2 Surface Treatment

The process of surface treating roads is an iterative process. The general methodology for hard-surfacing and maintaining a surface treated road is as follows:

- When first surface treating a road, a double-lift of surface treatment is applied to the granular base.
- In the year immediately following the first double-lift application, a single-lift of surface treatment is applied.



- Every 5-7 years following the third application layer, asphalt padding is used to mitigate wheel-track rutting and potholes prior to another single-lift of surface treatment being applied.
- After each application, sweeping of loose stones and cleaning stones from ditches is often required.

Due to the thin application of surface treatment lifts, shouldering is not completed. Instead, the surface treatment is generally extended to the top of the road platform.

For a 1 km section of road with a platform width of 8.0 m, applying the double lift of surface treatment in year 1 would cost approximately \$85,000-\$90,000 + HST. A single lift of surface treatment in year 2 would cost approximately \$45,000-\$50,000 + HST. At year 8, asphalt padding and another single lift of surface treatment would be applied at a cost of approximately \$55,000-\$60,000 + HST. As the Township does not have any previous surface treatment pricing, so estimates in this section have been based on tenders in adjacent municipalities between 2019 and 2022.

Note that a platform width of 8.0 m was assumed for this analysis to be consistent with other non-truck route surfacing options.

These costs account for pulverizing, grading and compacting the existing road base in year 1 as well as the application of small amounts of Granular 'A' for grading purposes to allow the road to receive the initial double lift of surface treatment. We do not believe it is typical practice in other municipalities to pulverize the existing road, especially when the existing road is a gravel road; however, in discussion with Township staff and to be consistent with asphalt surfacing options, a pulverizing item has been considered.

These costs do not account for any associated improvements such as ditching, road widening, culvert replacements, subbase improvements, etc., nor do they account for any engineering or construction administration.

We note that requirement for regular additional lifts of surface treatment needs to be considered as part of any lifecycle costing, and not just the initial investment.

#### 4.4.3 Asphalt Wearing Surface (No Truck Traffic Considerations)

We believe the typical practice for paving typical rural asphalt roads without special consideration for truck traffic would include pulverizing the existing road surface, applying amounts of Granular 'A' to assist with grading and provide minor profile / cross-fall corrections, paving the asphalt wearing surface to the desired width and thickness, then completing shouldering.

A 1 km section of road with a paved width of 7.0 m and 0.5 m wide shoulders, providing a 50 mm thick HL 4 Surface Course (current Township practice) is estimated to cost approximately \$110,000-\$115,000 + HST.

<u>For comparison purposes only</u>, a 1 km section of road with a paved width of 7.0 m and 0.5 m wide shoulders, providing a 60 mm thick HL 8 Binder Course and 35 mm thick HL 3 Surface Course (asphalt thickness matching the Township's *Municipal Development Standards*) is estimated to cost approximately \$170,000-\$175,000 + HST.

<u>Also for comparison purposes only</u>, increasing the thickness of a single lift road from 50 mm to 60 mm is estimated to increase the overall cost of a 1 km section of road with a paved width of 7.0 m and 0.5 m wide shoulders by approximately \$7,000 + HST.

These costs do not account for any associated improvements such as ditching, road widening, culvert replacements, subbase improvements, etc., nor do they account for any engineering or construction administration. Costs are based on 2022 pricing.



Historically, the Township's single lift asphalt roads have had a service life between 15-20 years, depending on quality of subbase materials. Typically, opportunities have been minimal for the Township to complete additional capital investments to extend the service life of the roads (e.g., crack sealing, overlays, slurry seal, etc.) as the failure mechanisms tend to be "bottom-up" resulting from inadequate drainage and inadequate subbase strength.

We anticipate that increasing the asphalt thickness to 95 mm would provide greater opportunities for maintenance activities to be utilized for extending the service life of its asphalt road network. However, geotechnical investigations should be completed as part of the design process to confirm recommended asphalt thicknesses.

## 4.4.4 Asphalt Wearing Surface (Truck Traffic Considerations)

We believe the typical practice for paving typical rural and industrial roads that have significant truck traffic roads would be similar to that for asphalt roads without considerations for truck traffic, but the platform width would be increased as well as the asphalt and granular thicknesses. In our opinion, truck traffic considerations need to be made with the percentage of truck traffic is more than 10% of the total traffic volume.

A 1 km section of road with a paved width of 7.5 m and 1.0 m wide shoulders, providing a 50 mm thick HL 8 Binder Course and 50 mm thick HL 4 Surface Course (current Township practice) is estimated to cost approximately \$200,000-\$205,000 + HST.

<u>For comparison purposes only</u>, a 1 km section of road with a paved width of 7.5 m and 1.0 m wide shoulders, providing a 60 mm thick HL 8 Binder Course and 50 mm thick HL 4 Surface Course (asphalt thickness matching the Township's *Municipal Development Standards*) is estimated to cost approximately \$220,000-\$225,000 + HST.

These costs do not account for any associated improvements such as ditching, road widening, culvert replacements, subbase improvements, etc., nor do they account for any engineering or construction administration. Costs are based on 2022 pricing.

We anticipate that double lift roads would be able to provide a service life between 15-20 years if left unmaintained, depending on quality of subbase materials; however, this would be anticipated to allow for maintenance activities such as crack sealing, overlays, and slurry seals to prolong the service life to beyond 20 years, if they were appropriately timed and proper drainage and subbase materials were present.

## 4.4.5 Summary of Road Surfacing Types

Provided below in **Table 11** is a summary of the road surfacing types discussed, as well as their suggested implementation triggers as outlined in the *Inventory Manual*.

Surface	Initial Capital Investment (per km)*	Anticipated Future Capital Investments	Suggested Implementation Triggers
Gravel	\$15,000-\$20,000	\$15,000-\$20,000 every 2-3 years	<ul> <li>Dead end roads</li> <li>&lt;200 AADT</li> <li>No truck traffic</li> </ul>
Surface Treatment	\$130,000-\$140,000 (years 1 & 2)	\$55,000-\$60,000 every 7 years	<ul><li>&gt;200 &amp; &lt;400 AADT</li><li>No truck traffic</li></ul>
Asphalt Road (No Truck Traffic Considerations)	\$110,000-\$175,000**	\$5,000-\$10,000 for crack sealing or other maintenance activities, every 5-10 years	<ul><li>&gt;200 AADT</li><li>Minimal truck traffic</li></ul>

#### Table 11: Road Surfacing Types Summary



Surface	Initial Capital	Anticipated Future Capital	Suggested
	Investment (per km)*	Investments	Implementation Triggers
Asphalt Road (Truck Traffic Considerations)	\$200,000-\$225,000**	\$5,000-\$10,000 for crack sealing or other maintenance activities, every 5-10 years	Where significant heavy truck traffic is permitted

\*Costs normalized to a minimum 8 m wide platform for comparison purposes.

\*\*Ranges in cost reflect differences between current Township practices and those identified in the Township's *Municipal Development Standards* for applied asphalt thickness.

Refer to **Appendix D** for breakdowns of estimated costs presented in this table.

For all road surfacing options, it is important to distinguish that all roads, regardless of wearing surface, require adequate consideration for drainage and subbase strength. These considerations are not specifically dealt with in this section, as they are needs for any road surfacing option.

Cost estimates provided in this section are based on construction costs only (2022 pricing) for the <u>surfacing</u> <u>works only</u>. The cost estimates do not include drainage / subbase improvements, engineering, contingencies, permit approval fees, utility relocations, property acquisitions, etc., and <u>should not be used for budgetary</u> <u>purposes</u> without further considerations for all project-related costs. <u>These values do not correspond with</u> <u>the budgetary values presented in Section 7 of this Plan</u>.

## 4.5 ROAD IMPROVEMENT TYPES (INVENTORY MANUAL)

Improvement types that would be applicable to the Township's road network are described in the *Inventory Manual*, and summarized below:

- **Basic Resurfacing (code R1 or R2):** hot mix asphalt padding, addition of single or double lift hot mix asphalt, addition of granular material to raise shoulders to new edge of pavement.
- This option would generally be considered an "asphalt overlay".
- To be applicable, the existing asphalt surface would need to be generally in good condition with minimal rutting and cracking as well as adequate subbase construction and drainage.
- We believe this option would be most-applicable when there is a change in use or public driving habits on a section of road.
- **Pulverizing and Resurfacing (code PR1 or PR2):** pulverize existing road surface, addition of single or double lift hot mix asphalt, addition of granular material to raise shoulders to new edge of pavement.
- To be applicable, the existing road surface would need to have adequate subbase construction and drainage.
- This is the option that the Township generally employs on all its roads, with the application of additional Granular 'A' before paving to assist with grading, add material to the road base, and complete minor profile / crossfall adjustments.
- **Base and Surface (BS):** place granular base and surface material, minimal shouldering widening and ditching, addition of surface gravel / surface treatment / hot mix asphalt (depending on road class).
- To be applicable, the existing road surface would need to have adequate subbase construction and drainage.
- This describes the Township's maintenance of gravel roads, and preparation of existing asphalt roads that have been pulverized and will be re-paved.

The Township's practice of pulverizing and placing a minimum of 50 mm asphalt wearing surface is supported within the *Inventory Manual* as an acceptable asphalt thickness for roads with an Annual Average Daily Traffic (AADT) up to 1,999 vehicles (PR1 or PR2 above, supplemented with BS), notwithstanding road base, subbase and drainage conditions. Based on data provided by the Township and our recent involvement in the Township's



annual asphalt program, this practice has been allowing the Township to realize a service life of its asphalt roads averaging 19 years. In our opinion, a target service life for a township-level road would be approximately 15-22 years. Refer to **Appendix E** for a summary of road age data for recent asphalt program works.

For roads that have an AADT between 2,000 and 4,000 vehicles, a minimum 100 mm asphalt wearing surface is recommended, notwithstanding road base, subbase and drainage conditions. Township roads that currently meet this criteria that only have an asphalt thickness of approximately 50 mm include:

- Victoria Road South, Maltby Road East to Wellington County Road 36
- Watson Road South, Arkell Road to Maltby Road East
- Niska Road, Whitelaw Road to bridge

Note that AADT values for the road sections noted above have been assumed based on the traffic counts completed as part of this Plan; however, the traffic counts completed as part of this Plan do not constitute sufficient data for confirming the AADT. Additional studies for road sections identified as potential candidates may be required.

In reviewing adjacent municipal annual paving programs, we are aware of the following typical asphalt restoration thicknesses for typical rural road sections:

- Township of Woolwich: 60 mm HL 4 Binder Course, 50 mm HL 3 Surface Course (Source: RFT 2021-05 – 2021 Paving Program)
- Township of North Dumfries: 50 mm HL 4 Binder Course, 50 mm HL 3 Surface Course (Source: ND-RFT-EPW01-2022 – Road Resurfacing 2022)
- Township of Centre Wellington: 50 mm HL 4 Binder Course, 50 mm HL 4 Surface Course (Source: RFT 15-21 – Asphalting of Various Roads, 2021)

This suggests that other lower-tier municipalities in Wellington County and Waterloo Region are moving towards a two-lift system for all paved rural roads. We estimate that contributing factors to these decisions could include geotechnical investigations / recommendations, anticipated changes in public driving habits, anticipated increased truck / farm vehicle traffic, and improved ability to utilize maintenance strategies on double lift roads (for example, crack sealing on single lift roads is generally less effective than on thicknesses less than 60 mm).

Cost implications from an initial capital investment standpoint are highlighted in **Section 4**. However, it is estimated that double lift roads would be able to withstand increased traffic volumes and provide more opportunities for maintenance activities. However, additional asphalt thickness should not be taken as a substitute for proper subbase construction and drainage.

#### 4.6 ADDITIONAL ROAD IMPROVEMENT TYPES NOT CONSIDERED FOR TOWNSHIP

The following additional maintenance and improvement types were reviewed, and deemed not to be appropriate for the Township to implement on its own.

#### 4.6.1 Microplaning or Micro Milling

Microplaning is the process of milling an asphalt surface using a specialty milling machine with more teeth on the milling drum than a standard milling machine drum. This allows for removal of the surface asphalt at thinner depths than a standard milling machine. It can be used to address profile deficiencies in the road surface to create a smoother ride. It can also be used to prepare a surface for application of a thin overlay.

Microplaning can be used as a maintenance practice to address the ride quality of existing road surfaces; however, it is not intended to appreciably extend the life of a road surface.



Due to the class of roads maintained by the Township, we do not believe that Microplaning is a viable maintenance practice for the Township.

## 4.6.2 Asphalt Recycling

Asphalt recycling refers to the process of reusing material from the existing asphalt surface to form part of a new asphalt surface. There are many types of asphalt recycling distinguished by the milling depth, the process used to rejuvenate the asphalt and the materials used to reconstruct the road.

**Full depth reclamation (FDR)**, also known as pulverizing, is the process of uniformly pulverizing the full thickness of asphalt and a specified thickness of the upper portion of the granular road base. This process blends the pulverized asphalt aggregate with the granular road base to improve the strength and consistency. This is the process that the Township currently uses for rehabilitation of its paved roads as it is typically more cost effective than removing the asphalt. FDR is not suitable for roads that cannot accommodate an increase in road profile. When this is the case, asphalt removal is required.

**Cold In-Place Recycling (CIR)** is the process of cold milling the existing asphalt surface to a specified depth, screening the material to a desired aggregate distribution, mixing the aggregate with an asphalt binder and relaying the mixture in one continuous operation. Roads that have a well drained and structurally adequate road base and subbase are ideal candidates for this process. Since the process is completed in the absence of heating, it reduces the energy required as compared to the process for hot mix asphalt. Asphalt laid as part of the CIR process is overlain by one or more lifts of hot mix asphalt or surface treatment.

**Hot In-Place Recycling (HIR)** is a similar process to CIR but involves heating the milled asphalt along with adding material to regain workability. HIR involves the milling, heating, scarify, stripping, mixing and repaving of the existing asphalt to remediate of the road surface. Asphalt additives such as binders and fine aggregate as well a surface layer may need to be incorporated to create a good quality driving surface.

CIR and FDR can be supplemented by Expanded Asphalt Stabilization to improve the strength of the existing road structure. We understand from conversations with adjacent municipalities that complete an Expanded Asphalt Stabilization program that there needs to be a long, continuous stretch of road to be resurfaced for this process to be cost effective. In our opinion, and based on discussions with adjacent municipalities, the Township would need to complete road resurfacing of a minimum of 6 km of continuous road for Expanded Asphalt Stabilization to begin to be cost-effective from a lifecycle perspective. As the Township's annual paving program generally consists of 4-8 km of road, and generally not continuous stretches, we do not believe that this is a viable resurfacing process for the Township. The same logic would apply to HIR.

#### 4.6.3 Slurry Seal

A slurry seal is a thin layer of asphalt placed over an existing surface that delays the appearance of surface defects caused by environmental factors (e.g., oxidization) by helping to seal any voids in the surface. This seal protects pavement by providing a new 1 mm to 6 mm driving surface. Slurry seals are a low-cost option to correct minor surface problems such as cracks and provide winter benefits such as reduced salt absorption and skid resistance. The new driving surface has characteristics similar to an HL 3 surface course and is only suitable for low volume roads. Fog seals can be used for high volume roads, as their composition differs in that it does not contain aggregate.

In our experience, the majority of asphalt defects that present themselves on the Township's road network are "bottom up" defects such as alligator cracking, tire rutting and edge cracking due to inadequate platform width. Therefore, we do not believe that slurry seals are a viable maintenance practice for the Township.



## 4.6.4 Preservation Seal

A preservation seal can be added to new or used pavement to reduce life-cycle cost and environmental impact. The seal penetrates the pavement creating a more durable pavement by rebalancing the chemistry of oxidized asphalt to delay the aging process, which is estimated to add approximately 5-7 years of additional service life to the road. An example of a proprietary product used as a preservation seal is Reclamite.

The general practice is to place preservation seals in the same year as paving operations. Subsequent treatments are applied every seven years after the initial treatment.

In our experience, the majority of asphalt defects that present themselves on the Township's road network are "bottom up" defects such as alligator cracking, tire rutting and edge cracking due to inadequate platform width. Therefore, we do not believe that preservation seals are a viable maintenance practice for the Township.

## 4.7 GRAVEL ROAD CONVERSIONS TO HARD-SURFACE

The Township has expressed interest in understanding the process of converting existing gravel roads to hardsurfaced roads, either with surface treatment or asphalt. The proposed approach to the Township for conversion of gravel roads is provided below, along with a flow chart attached to this Plan.

#### 4.7.1 Step 1: Desktop Evaluation for Improvement

The following criteria have been proposed for assessing the need to convert a gravel road to hard-surface for a given road segment:

- Is full regrading completed more than four times during each of two consecutive non-winter periods (May 1 to November 1)? If yes, criterion is met.
- Does the traffic volume (annual average daily traffic, AADT) exceed 200 vehicles? If yes, criterion is met.
- Is the road section isolated from the Public Works Yard? If yes, criterion is met.
- Is the road is connected to other paved roads? If yes, criterion is met.
- Is there future development planned on the road section that would affect the current use of the road (e.g., Upper-tier or Provincial Road Network expansions)? If no, criterion is met.
- Is there a high relative rural population density? If yes, criterion is met.

Relative prioritization between sections meeting the above criteria would be at the Township's discretion.

Refer to **Table 12** for the desktop evaluation completed by the project team. Note that AADT values have been assumed based on the traffic counts completed as part of this Plan; however, the traffic counts completed as part of this Plan do not constitute sufficient data for confirming the AADT. Additional studies for road sections identified as potential candidates may be required.

The proposed criteria above are based on similar programs implemented in other municipalities. If the Township has alternative or additional criteria specific to Puslinch that they would like to consider, staff and Council can review and implement these criteria, as appropriate.



#### Table 12: Desktop Evaluation of Gravel Roads

Asset ID	Street Name	From Street	To Street	# Times Re-graded May – November	ADT	Isolated from Township Yard	Paved Connection	Future Development	High Rural Population Density
211	Ann Street	County Road 36 (Badenoch Street)	dead end	<4	0-49	Y	Y	N	Y
200	Boyce Drive	County Road 46	dead end	<4	0-49	Y	Y	N	Y
27	Calfass Road	Concession 7	Victoria Street	<4	50-199	N	Y	Y	N
27B	Carter Road	Arkell Road (County Road 37)	Cooks Mill Road	<4	200-499	Y	Y	N	N
129	Concession 11	Little Road	Leslie Road East	<4	50-199	Y	N	N	N
142	Concession 11	Sideroad 17	County Road 36	<4	50-199	Y	Y	N	N
143	Concession 11	County Road 34	Sideroad 17	<4	50-199	Y	Y	Ν	Ν
144	Concession 11	Maltby Road East	County Road 34	<4	50-199	Y	Y	Ν	Ν
145	Concession 11	Hume Road	Maltby Road East	<4	50-199	Y	Y	Ν	Ν
146	Concession 2	Concession 2/2A	Concession 7	<4	0-49	Ν	Y	Y	Ν
113	Concession 7	Concession 1	Gore Road	>4	200-499	Ν	Y	Ν	Ν
118	Concession 7	County Road 34	pavement transition	<4	50-199	N	Y	Y	N
81	Cooks Mill Road	Carter Road	Bridge	<4	200-499	Y	Y	Ν	N
71	Farnham Road	Arkell Road (County Road 37)	Carter Road	<4	50-199	Y	Y	N	N
47	Gilmour Road	Victoria Road South	new subdivision	>4	200-499	N	Y	N	Y
53	Hammersley Road	County Road 46	dead end	<4	0-49	N	Y	N	N
157	Jones Baseline	Stone Road East	dead end	<4	0-49	Y	Y	N	N
31	Little Road	Nassagaweya-Puslinch Townline	County Road 36	<4	50-199	Y	Y	N	N
8	MacPherson's Lane	Puslinch-Flamborough Townline	Highway 6	<4	0-49	Y	Y	N	N
64	Maltby Road East	Watson Road South	Concession 11	<4	50-199	N	Y	Ν	N
65	Maltby Road East	Concession 11	Nassagaweya-Puslinch Townline	<4	50-199	N	Y	Ν	N
158	McLean Road East	Victoria Road South	dead end	<4	0-49	Y	Y	N	N
149	Nassagaweya-Puslinch Townline	Leslie Road East	Sideroad 10 Nassagaweya	<4	50-199	Y	N	N	N
150	Nassagaweya-Puslinch Townline	Leslie Road East	Little Road	<4	50-199	Y	N	N	N
152	Nassagaweya-Puslinch Townline	Sideroad 17	dead end	<4	50-199	Y	Y	N	N
103	Pioneer Trail	Laird Road West	Niska Road	<4	50-199	Y	Y	N	Y
98	Sideroad 10 North	County Road 34	Concession 4	<4	50-199	N	Y	Y	N
95B	Sideroad 10 North	Laird Road West	dead end	<4	0-49	Y	Y	N	N
91	Sideroad 10 South	Gore Road	Concession 1	<4	50-199	Y	Y	N	N
92	Sideroad 10 South	Concession 1	Concession 2	<4	200-499	Y	Y	N	N
93	Sideroad 10 South	Concession 2	Concession 2	<4	50-199	Y	Y	N	N
101	Sideroad 12 North	Concession 4	dead end	<4	0-49	Y	Y	N	N
100	Sideroad 12 North	Forestell Road	Concession 4	<4	50-199	N	Y	N	N
43	Sideroad 17	Nassagaweya-Puslinch Townline	Concession 11	<4	50-199	Y	Y	N	N
106	Sideroad 20 North	County Road 34	dead end	<4	0-49	N	Y	N	N
104	Sideroad 20 South	Gore Road	Concession 1	<4	50-199	Y	Y	N	N
105	Sideroad 20 South	Concession 1	Concession 2	<4	50-199	Y	Y	N	N
112	Sideroad 25 North	Concession 7	dead end	<4	50-199	N	Y	N	N
110	Sideroad 25 South	Concession 1	Gore Road	<4	50-199	Y	Y	N	N
111	Sideroad 25 South	Concession 2	Concession 1	<4	50-199	Y	Y	N	N
26	Small Rd/Leslie Rd E	Nassagaweya-Puslinch Townline	Concession 11	<4	50-199	Y	N	Ν	N



Based on **Table 12**, **none of the road sections meet all the recommended criteria for further consideration to be converted to a hard-surfaced road**; however, we understand that the Township has prioritized hardsurfacing of its gravel road network. The Township may, at its discretion, choose to weight specific criteria moreheavily than others or remove specific criteria to mee their objective with regards to the gravel road network. Should the Township wish to proceed with hard-surfacing gravel roads, the following road sections have the fewest criteria not met under the current evaluation framework:

- Carter Road, Arkell Road (County Road 37) to Cooks Mill Road
- Cooks Mill Road, Carter Road to Bridge
- Concession 7, Concession 1 to Gore Road
- Gilmour Road, Victoria Road South to new subdivision
- Pioneer Trail, Laird Road West to Niska Road
- Sideroad 10 South, Concession 1 to Concession 2

In our opinion, all of the road sections identified above would require some level of upgrade prior to hardsurfacing. We anticipate that upgrades may include, but not be limited to, ditching, isolated full depth reconstruction, drainage improvements, platform widening and small diameter culvert replacements for all road sections identified.

Prior to proceeding with the hard-surfacing of additional gravel roads, we suggest that Council document the revised criteria used for this evaluation and develop guidelines for staff to administer the decision making process.

#### 4.7.2 Step 2: Field Review

Once the desktop review has been completed, field reviews should be completed on each road section to assess the following from a visual perspective:

- Condition of existing drainage (ditches, culverts, etc.)
- Existing platform / shoulder width
- Sightlines at intersections and driveways

As part of the field review, considerations should be given to additional studies, investigations or data collection that will be important for design of the road section including:

- Inspection of the gravel base confirming the road can support hard-surfacing
- Horizontal and vertical alignment of the existing road and associated speed limits
- Inspection of any culvert or bridge structures on the road section

Collection of this data may require expenditures by the Township to retain the services of qualified firms to complete the data collection, analysis and provide recommendations.

At this time, the Township should also complete additional investigations such as geotechnical investigations, legal surveys, utility daylighting, etc.

#### 4.7.3 Step 3: Design and Construction for Gravel Road Improvement (if required)

Once the necessary information has been collected as part of the field review, a preliminary scope of work should be prepared including an estimated construction cost estimate. This estimate should include the costs to prepare the existing road to receive hard-surfacing (e.g., road base upgrades, ditching, road widening, vertical/horizontal realignment, etc.) and associated works (e.g., mobilization, traffic control, bonding and insurance, contingencies, materials testing, etc.). The estimated construction cost estimate and engineering costs should be compared



against the Township's available capital works budget to confirm that the project has the necessary allocation of funds.

This step involves taking an in-depth look at the performance of the existing road section. The Township should take this opportunity to assess whether the road meets current safety and geometric standards based on its road classification and determine whether to fully upgrade the road to meet the applicable standards or to accept the risk of maintaining the road in a substandard condition.

This step would not be required if the gravel road section being considered does not have any geometric or performance issues that would cause premature failure of hard-surfacing.

#### 4.7.4 Step 4: Desktop Evaluation for Hard-surfacing

At the Township's discretion, there may be a desire to hard-surface roads that do not meet all the criteria of their Asset Management Plan. Provided that Steps 1 to 3 have been completed, and the Township has the approved funding to complete the project, we do not foresee a technical issue with the Township removing the AADT and/or number of times the road is maintained in non-winter periods criteria from consideration.

There may be sections of road that, upon completing the gravel road improvement, are functioning to a level that meets the Township's desired level of service. In these instances, the Township may elect to maintain the road as a gravel road surface. As such, budget would not be allocated to hard-surfacing of this section of road and it would be maintained as a gravel road.

#### 4.7.5 Step 5: Design and Construction for Hard-surfacing

At this stage, the Township can evaluate the selected road surface for the appropriate hard-surfacing alternative. Factors such as cost, quality of road base, type of vehicle traffic, connectivity to other hard-surface roads and AADT can be contributing factors to this selection. This step is optional based on the evaluation in Step 4.

It is recommended to maintain road sections that have had road base and subbase improvements as a gravel road for at least one winter season to assess the performance of the improvement and make any necessary adjustments prior to hard-surfacing.

#### 4.7.6 Additional Considerations for Hard-surfacing Roads

Upgrading existing gravel road sections and maintaining additional lengths of hard-surfaced roads should not come at the expense of maintaining the Township's current inventory of hard-surfaced roads. Therefore, it is suggested that this work would need to be completed in addition to the current annual capital program.

Historic costing for previous asphalt paving projects that included isolated improvements / reconstruction within the Township suggest that the increase to the per kilometre capital cost can be as much as 2.0-3.0 times more than the cost of hard-surfacing with a single lift of asphalt, alone. We recognize that this is based on limited data from projects within the Township, but it does provide evidence that isolated improvements / reconstruction work can add a substantial amount to the capital cost of a road surfacing project.

For conversion of existing gravel roads to hard-surfaced roads, refer to **Appendix F** a flow chart that the Township can use that outlines the entire recommended process for completing a gravel road conversion.

### 4.8 PLANNING CHECKLIST FOR CAPITAL ROAD PROJECTS

To assist the Township with planning considerations for road surfacing and reconstruction projects, we have developed a planning checklist that can be used by the Township or an external consultant to document the planning process used for capital upgrade projects. Refer to **Appendix G** for the recommended checklist, which is intended to outline the following topics:



- Project Definition
- Background Review
- Existing Conditions
- Existing Geometry
- Structures and Drainage
- Utilities
- Construction Staging
- Anticipated Approvals/Permits
- Summary and Recommendations

The purpose of this checklist is to take a "snap-shot" look at a section of road that is scheduled for capital works in the next five years. The checklist is recommended to be completed within 2 years prior to planned works so that additional investigations, engineering and studies can be scoped and completed to inform the upcoming capital works and budgets can be adjusted accordingly.

Where projects are delayed, this checklist should be revised so that it has been updated within 2 years of the planned implementation.

## 4.9 REQUESTS FOR CONVERSIONS TO HARD-SURFACE

The following section addresses requests from property owners to have the roadway their property fronts onto upgraded from a gravel road to a hard-surface road, provided that it is a Township Road. Property owners that live on a Wellington County or Provincial Road would have to submit any requests related to those roadways to the corresponding level of government. This section does not cover requests related to traffic management (e.g., speed limits, traffic calming). Refer to **Section 8** of the report for more information on the process used for these requests.

Township property owners may submit a request to upgrade a road that their property fronts onto from a gravel wearing surface to an asphalt wearing surface. The following process is suggested for the Township's consideration to be further evaluated and enhanced for inclusion as a practice endorsed by Council. This process is based on our understanding of the *Local Improvement Charges – Priority Lien Status* legislature.

- A property owner submits a formal request in writing (e.g., signed letter or email) for a road upgrade (the "Request") including the following information:
  - Identify the road that the upgrade is being requested on (include "to" and "from" limits along road).
  - State the nature of the requested upgrade (e.g., upgrade the existing gravel road on Sideroad ## between Concession ## and Concession ## to an asphalt wearing surface).
  - If multiple Requests are received for the same upgrade, the Township will only correspond directly with the property owner that submitted the initial Request until the review process has been completed.
- The Township evaluates the Request for completeness and responds to the property owner acknowledging the Request has been received, confirming any details, and identifying the next steps.
- The Township reviews the Request against established Township standards for the conversion of gravel roads to hard-surface (Appendix F) and/or other appropriate criteria (e.g., relevant design guidelines or standards). This may include additional review by an engineering consultant retained by the Township.
- The Township issues a formal response (e.g., signed letter or email) to the property owner(s) that submitted the Request summarizing the review, outcome(s) and next steps. A benchmark cost estimate will be provided within the formal response for preliminary budgeting purposes.
  - If the Request is deemed to meet the criteria for establishment of a Project, Township staff will inform the property owner(s) of the details of the improvement Project and prepare a report for



Council consideration to include the Project within the Capital Program. Prioritization within the Capital Program will be based on available funding and relative priority to other projects already programmed for construction. Detailed design and tendering will be commenced based on the year that the Project is scheduled for construction. Should Council approve the report, the Capital Program will be updated accordingly. No further action on the part of the property owner(s) is required.

- If the Request does not meet the criteria, or Council does not approve the Project despite meeting the criteria, Township staff will inform the property owner(s) that the Request has been denied and will not be included within the Capital Program.
- For Requests that are denied, either at the staff level or by Council, property owner(s) may elect to submit a Petition under the *Local Improvement Charges Priority Lien Status* legislation to complete the project as a Local Improvement. A sufficient Petition under this legislation must include signature in agreement from at least two-thirds of the property owners representing at least 50% of the value of lots liable to be assessed under the Request / Project. The value of lots is determined by the last returned assessment roll. As part of the Petition, property owners would be consenting to funding the entire project costs (including all costs incurred prior to commencement of construction) through special charges levied on their property tax, including financing options and costs. Property owners may choose to pay the entire lump sum or their assessed value or finance the amount over a specified repayment period as outlined in the by-law passed by Council.
- Once a sufficient Petition has been received, the Township will issue notice to all affected property owners including the estimated total cost of the upgrade, next steps in the process and requirements for submitting a Petition against undertaking the proposed work.
- If there is agreement by the property owners to proceed, the Township will retain an engineering consultant to proceed with engineering design and approvals. The Township will issue notices to affected property owners at milestones prescribed in the Local Improvement Charges Priority Lien Status legislation providing updates on the process, updated cost estimates and timelines. If the property owner(s) request that the Project not proceed to construction, Township staff will request a Petition from the property owner(s) <u>against</u> the Project.
- If the Petition against the Project is sufficient, all Project costs incurred to the date of the Petition would be charged to the property owner(s) (e.g., engineering costs, administrative costs, etc.). A sufficient Petition against the Project requires signature in agreement from at least two-thirds of the property owners representing at least 50% of the value of lots liable to be assessed under the Project.
- Provided that a sufficient Petition against the Project is not received, Council will award the construction contract and the Township will assess properties to determine the final estimated charges per property. The total costs assessed to the property owner(s) will be in accordance with the *Local Improvement Charges Priority Lien Status* legislation.
- Council will pass a Local Improvement by-law for the purposes of levying special charges to the assessed properties.
- Upon completion of construction, the Township will issue notice to the property owner(s) confirming the final charges to be assessed.
- Property owner(s) will pay their assessed charge through property tax over the stipulated horizon, including financing costs. The recommended period for projects covered under this practice is 10 years.
- The Township will not entertain new requests for upgrades to a road that has been reviewed for a similar request and denied within the previous three years, subject to no major changes in land use or planning in the immediate vicinity of the Township Road.

Should Council consider this practice, the next steps would involve the development of a program that may include a by-law, financing options, Petition form, user guide and relevant background information for Council approval.



## 5 TRAFFIC COUNT COLLECTION & GROWTH PROJECTION

Traffic counts were collected at 28 locations across the Township. These traffic counts were used to update the traffic data for road segments in the vicinity of the count locations. Given the limited number of traffic count locations, and the age of historical counts, only an estimate of traffic count ranges could be assumed on the majority of the road segments. This process involved a general review of probable traffic flows between adjacent road segments and County roads, as well as input from Township staff. Ten year forecasted traffic counts were calculated for all road segments using a 0.5 %annual growth rate on most of the Township roads. A 2% annual growth rate was applied to segments of Forestell Road, Laird Road West, Roszell Road, Victoria Road South and Watson Road South based on feedback from Township staff. **Appendix H** lists the current traffic counts and 10 year forecasted traffic counts.

Table 13 below provides a breakdown of the road network by 2022 traffic ranges

Traffic Volume (ADT)	Centreline Kilometres	Percentage of Network
0 -49	5.4	3.0%
50 - 199	48.3	27.0%
200 - 499	42.7	23.9%
500 - 999	26.5	14.8%
1000 - 1999	37.1	20.7%
2000 - 2999	12.5	7.0%
3000 - 3999	4.5	2.5%
4000 - 4999	2.1	1.2%

#### Table 13: Traffic Volume (ADT) Distribution across Road Network

#### 5.1 MAINTENANCE CLASS

The Maintenance Class of a roadway is set as per Section 1(4) of *Minimum Maintenance Standards for Municipal Highways*. Maintenance Class is determined by using a combination of the posted speed of a highway, and the Average Daily Traffic (ADT). The Maintenance Class helps to set the level of service offered by the Township, in accordance with the Regulations. The classification chart is illustrated in **Table 14**. Note that the classification chart provided in the *Minimum Maintenance Standards for Municipal Highways* does have higher daily traffic counts than what is shown in this table.

#### Table 14: Classification of Road Maintenance Class (Minimum Maintenance Standards for Municipal Highways)

Average Daily Traffic (vehicles)	91 - 100 km/h speed limit	81 - 90 km/h speed limit	71 - 80 km/h speed limit	61 - 70 km/h speed limit	51 - 60 km/h speed limit	41 - 50 km/h speed limit	1 - 40 km/h speed limit
4,000 - 4,999	1	2	3	3	3	4	4
3,000 - 3,999	1	2	3	3	3	4	4
2,000 - 2,999	1	2	3	3	4	5	5
1,000 - 1,999	1	3	3	3	4	5	5
500 - 999	1	3	4	4	4	5	5
200 - 499	1	3	4	4	5	5	6
50 - 199	1	3	4	5	5	6	6
0 - 49	1	3	6	6	6	6	6

When the classifications are applied to the known and estimated traffic volumes, and speed limits of the Township's roads, the distribution of Maintenance Classification is provided in **Table 15**.



Maintenance Class	Centreline Kilometres	Percentage of Network
Class 3	27.2	15.2%
Class 4	78.0	43.5%
Class 5	62.0	34.7%
Class 6	11.8	6.6%

#### Table 15: Maintenance Class Distribution for Road Network

**Appendix I** provides a map of all traffic count locations and estimated traffic ranges used in this analysis. Due to the MMS, the Township should look to review the speed limits and estimated counts in this report, and update traffic counts on a regular basis. Priority for additional traffic counts should be on roads where the current estimated traffic count is near the next Maintenance Class.

## 6 ROAD MAINTENANCE STRATEGY

The Township has identified the need for the activities identified within the current Roads Maintenance Budget to be reviewed and updated based on current best practices, amendments to the *Minimum Maintenance Standards for Municipal Highways* and Township identified specific unique local requirements. This review has led to the development of an updated set of recommendations for maintenance activities for the following asset groups:

- Hard surface and gravel roads and shoulders
- Storm drainage catchbasins, storm sewers, ditches
- Sidewalks
- Bridges and culverts
- Signs & pavement markings
- Lighting

The maintenance activities identified within this document focus on ensuring that the Township roads continue to provide a safe environment for the travelling public. The maintenance activities defined are categorized by the following classifications:

- **Routine:** regular scheduled activities including crack sealing, patching, pothole filling, cleaning, grass cutting, debris management and landscape maintenance, cleaning bridge drainage
- **Regulatory:** *Minimum Maintenance Standards for Municipal Highways* inspections to identify safety & maintenance repairs
- Winter Maintenance: winter patrols, salting/brining, snow clearing
- Storm Water Management: watercourse maintenance/inspection

**Table 16** summarizes the recommended maintenance activities for each of the major asset types. It should be noted that Winter Maintenance & Road/Traffic Patrol & Inspection have been identified separately.

Asset Type / Major Activity	Asset Component	Maintenance Activity
Roadway	Roadway	Pothole Repair
Roadway	Roadway	Grading
Roadway	Roadway	Crack Sealing/Filling
Roadway	Shoulders	Repair
Roadway	Crash Attenuators	Safety Barrier Repair
Roadway	Sidewalks	Repair/Maintenance/Replacement
Roadway	Curbs	Repair/Maintenance

#### **Table 16: Maintenance Activities**



Asset Type / Major Activity	Asset Component	Maintenance Activity	
Drainage	Catch Basins	Catch Basin Cleaning	
Drainage	Catch Basins	Catch Basin Repairs	
Drainage	Culverts	Culvert Cleaning	
Drainage	Culverts	Culvert Repair/Replacement	
Drainage	Inlets/Outlets	Inlet/Outlet Cleaning	
Drainage	Pipes	Storm Sewer CCTV & Cleaning	
Bridges & Structural Culverts	Bridges	Bridge Maintenance - Own Forces.	
Bridges & Structural Culverts	Structural Culverts	Repair/Maintenance	
Traffic	Signs & Supports	Sign Placement New	
Traffic	Signs & Supports	Sign Repair or Replacement	
Traffic	Delineators	Repair/Maintenance/Replacement	
Traffic	Lighting	Street Lighting Lamp Replacement	
Traffic	Pavement Markings	Centre and Edge Line	
Traffic	Pavement Markings	Zone Painting (i.e. turn lanes, stop bars etc.)	
Winter Control	Roadway	Anti-Icing - Activation	
Winter Control	Roadway	Patrolling/Weather Monitoring	
Winter Control	Roadway	Plowing - Activation	
Vegetation/ Cleaning & Debris Management	Roadway	Grass and Weed Control Management and Debris Pickup	
Vegetation/ Cleaning & Debris Management	Roadway	Sweeping	
Vegetation/ Cleaning & Debris Management	Roadway	Tree Maintenance - General	
Road Patrol & Inspection	Roadway	Road Patrol & Inspection	
Road Patrol & Inspection	Traffic	Traffic Sign Patrol & Inspection	

## 6.1 MAINTENANCE ACTIVITIES: OPERATIONAL PLAN

Details of the recommended maintenance activities and the associated schedules are set out below and a detailed summary of the maintenance activities are included in **Appendix J**. In addition to the activity description, the following classifications/drivers for each of the activities have been included:

- In-house staff: activity carried out by Township staff
- Contracted Service: activity carried out by contractors
- **Regulatory**: activity is identified in current regulations such as *Minimum Maintenance Standards for Municipal Highways*
- **Safety**: activity is required to maintain the safety of the roadway
- Maintenance: the activity is required for asset operation
- Asset Preservation: activity will contribute to the extension of the asset life by increasing the time between major interventions
- Planned: activity is part of an ongoing maintenance program and is budgeted and funded
- **Reactive**: activity will be completed as required when identified through complaints, inspections and/or road patrols
- Closure Activity: activity requires the closure of either a lane or the entire width of the road
- **Frequency**: how often will the activity be completed
- **Costs Recoverable:** the activity is typically associated with damage resulting from accidents and the costs are recoverable from insurance companies and/or individuals

The current version of the *Minimum Maintenance Standards for Municipal Highways* can be downloaded from the Ontario government website using the URL: https://www.ontario.ca/laws/regulation/020239.



## 6.1.1 Roadway

## POTHOLE REPAIR

#### **Description:**

Two types of repair procedures are available for pothole repair, semi-permanent repair and temporary repair. A semi-permanent repair is an effective patching method that results in long term durability of the repaired pothole and that of the surrounding distressed area which may often extend well beyond the location of the actual pothole. A temporary repair of a pothole and/or distressed area is conducted for restoring rideability and safety as quickly as possible; it is intended to prevent/restrict moisture from penetrating into the road base.

#### Semi-permanent repair:

Hot Mix Patching: means a single lift of hot mix surface course placed over short segments of distressed pavement (30 m in length or less) generally for improving strength, ride ability or safety. Hot mix patching is a permanent repair that includes grinding cleaning, application of a tack coat, and a single lift of hot mix asphalt.

#### **Temporary repairs:**

Installation and compaction of cold mix asphalt in potholes as part of ongoing routine maintenance in the winter. Installation and compaction of hot mix asphalt in potholes ongoing routine maintenance in the warmer months.

Procedures shall follow Pothole Patching Procedure (PW-OPS-RD-OP-01).

Reference Minimum Maintenance Standards for Municipal Highways Section 6.

In-House Staff	~	Contracted Service	×
Regulatory	$\checkmark$	Safety	$\checkmark$
Maintenance	$\checkmark$	Asset Preservation	$\checkmark$
Planned	×	Reactive	$\checkmark$
Closure Activity	×		
Frequency	Repair within 7 to 30 days on roadway. Repair within 14 to 60 days on shoulder for class 3 to 5 roads.	Costs Recoverable	×


## CRACK SEALING/FILLING

# Description:

Crack sealing involves placement of a variety of specialized materials or sealant products into working cracks using unique configurations. Working cracks are defined as those that experience significant horizontal movements, generally greater than 2.5 mm (0.1 in). The process consists of mechanically cutting a sealant reservoir of a desired shape at the working crack, cleaning and drying with hot compressed air, and filling the formed reservoir with the specified materials.

Crack Filling involves cleaning and placement of materials into non-working cracks in the bituminous pavement surface.

Reference *Minimum Maintenance Standards for Municipal Highways* section 8.

In-House Staff	×	Contracted Service	×
Regulatory	$\checkmark$	Safety	$\checkmark$
Maintenance	✓	Asset Preservation	✓
Planned	×	Reactive	×
Closure Activity	×		
Frequency	* Repair within 60 to 180 days.	Costs Recoverable	×

\*This is currently not undertaken by the Township, but is being considered as an option for maximizing the service life of the paved roads.

# **CRASH ATTENUATORS – SAFETY BARRIER REPAIR**

<b>Description:</b> Remove/install/repair anchors, guide rail posts, guide wire, guide rails, compact fill material and all other pertinent devices.			
In-House Staff	~	Contracted Service	~
Regulatory	×	Safety	$\checkmark$
Maintenance	$\checkmark$	Asset Preservation	×
Planned	×	Reactive	$\checkmark$
Closure Activity	×		
Frequency	As Required	Costs Recoverable	$\checkmark$



## CURB REPAIR/MAINTENANCE

<b>Description:</b> Task includes on-site concrete preparation for repairs and repairing defects in concrete surfaces, using mortar or grout and trowel, and smoothing rough spots using chisel and abrasive stone.				
In-House Staff	×	Contracted Service	~	
Regulatory	×	Safety	×	
Maintenance	✓	Asset Preservation	✓	
Planned	×	Reactive	✓	
Closure Activity	×			
Frequency	As Required	Costs Recoverable	×	

# 6.1.2 Drainage

## **CATCH BASIN CLEANING**

<b>Description:</b> Removal and disposal of debris and sediment from catch basin chambers to maintain surface water flow into the storm sewers and the cleaning of catch basin leads are required.				
In-House Staff	×	Contracted Service	✓	
Regulatory	×	Safety	×	
Maintenance	$\checkmark$	Asset Preservation	$\checkmark$	
Planned	$\checkmark$	Reactive	$\checkmark$	
Closure Activity	×			
Frequency	Every 2 years	Costs Recoverable	×	



## CATCH BASIN REPAIRS

<b>Description:</b> Replace damaged/fractured catch basin lids and repair of concrete deficiencies, to maintain the flow of surface water into the storm system.				
In-House Staff	×	Contracted Service	$\checkmark$	
Regulatory	×	Safety	$\checkmark$	
Maintenance	$\checkmark$	Asset Preservation	$\checkmark$	
Planned	$\checkmark$	Reactive	$\checkmark$	
Closure Activity	Lane			
Frequency	As Required	Costs Recoverable	×	

## **CULVERT CLEANING**

<b>Description:</b> Remove sediment, leaves, and debris from culverts to maintain the flow of surface water into the storm system.				
In-House Staff	1	Contracted Service	1	
Regulatory	×	Safety	×	
Maintenance	✓	Asset Preservation	1	
Planned*	$\checkmark$	Reactive	$\checkmark$	
Closure Activity Lane				
Frequency	5 Years	Costs Recoverable	×	



# CULVERT REPAIR/REPLACEMENT

# Description:

Repair defects or replace culverts when defects are identified with the cleaning program. Includes culverts with a shorter span of less than 3 m.

In-House Staff	~	Contracted Service	1
Regulatory	×	Safety	×
Maintenance	✓	Asset Preservation	✓
Planned	$\checkmark$	Reactive	$\checkmark$
Closure Activity	Lane		
Frequency	15 Years	Costs Recoverable	×

# INLET/OUTLET CLEANING

<b>Description:</b> Remove sediment, leaves, and debris from inlets/outlets to maintain the flow of surface water into the storm system.			
In-House Staff	~	Contracted Service	×
Regulatory	×	Safety	×
Maintenance	✓	Asset Preservation	×
Planned	$\checkmark$	Reactive	$\checkmark$
Closure Activity	×		
Frequency	As required	Costs Recoverable	×



## **STORM SEWER CCTV & CLEANING**

# **Description:**

Flushing to remove sediment, leaves, and debris from storm sewer system to maintain the flow of surface water into the storm system. This will be carried out in-conjunction with CCTV inspection using PACP (Pipeline Assessment Certification Program) defect coding to identify future repair needs.

In-House Staff	×	Contracted Service	✓
Regulatory	×	Safety	×
Maintenance	$\checkmark$	Asset Preservation	✓
Planned	$\checkmark$	Reactive	$\checkmark$
Closure Activity	×		
Frequency	As required	Costs Recoverable	×

# 6.1.3 Bridges & Structural Culverts

### **BRIDGE WASHING, FLUSHING, CLEANING**

<b>Description:</b> Bridge washing, power washing, flushing, inspections. and cleaning including abutments, bearings, deck, drainage, joints, parapets, piers, wing walls; typically carried out in Spring.				
In-House Staff	✓	Contracted Service	×	
Regulatory	×	Safety	×	
Maintenance	$\checkmark$	Asset Preservation	$\checkmark$	
Planned	$\checkmark$	Reactive	×	
Closure Activity	Lane			
Frequency	Annual	Costs Recoverable	×	



## STRUCTURAL CULVERT REPAIR/MAINTENANCE

<b>Description:</b> Repair defects or replace culverts (3 m span or greater) when defects are identified during the OSIM inspection program.			
In-House Staff	×	Contracted Service	✓
Regulatory	×	Safety	$\checkmark$
Maintenance	$\checkmark$	Asset Preservation	✓
Planned	×	Reactive	$\checkmark$
Closure Activity	Lane/Road		
Frequency	As Required	Costs Recoverable	×

# 6.1.4 Traffic Signs & Supports

# **NEW SIGN PLACEMENT**

<b>Description:</b> Installation of new signs approved by council bylaws. All signs are placed as per the Ontario Traffic Manual.				
In-House Staff	✓	Contracted Service	×	
Regulatory	✓	Safety	$\checkmark$	
Maintenance	×	Asset Preservation	×	
Planned	✓	Reactive	×	
Closure Activity	×			
Frequency	As Required	Costs Recoverable	×	



## SIGN REPAIR OR REPLACEMENT

Description:				
The repair or replacer accidents.	The repair or replacement of supports and signs due to wear and tear, wind damage, auto accidents.			
Reference Minimum N	Maintenance Standards	for Municipal Highway	s Sections 11 & 12.	
In-House Staff	<b>~</b>	Contracted Service	~	
Regulatory	✓	Safety	$\checkmark$	
Maintenance	×	Asset Preservation	×	
Planned	×	Reactive	$\checkmark$	
Closure Activity	×			
Frequency	Repair or replace within 21 to 30 days for class 3 to 5.	Costs Recoverable	✓ Accidents only	

## DELINEATORS REPAIR/MAINTENANCE/REPLACEMENT

<b>Description:</b> The repair or replacement of delineators and supports (if applicable) due to wear and tear, wind damage, and auto accidents.			
In-House Staff	✓	Contracted Service	×
Regulatory	×	Safety	$\checkmark$
Maintenance	×	Asset Preservation	×
Planned	×	Reactive	$\checkmark$
Closure Activity	×		
Frequency	As Required	Costs Recoverable	✓ Accidents only



# STREET LIGHTING LAMP REPLACEMENT

<b>Description:</b> Replacement of burnt out lamps.				
Reference Minimum N	Maintenance Standards	for Municipal Highway	s Section 10.	
In-House Staff	×	Contracted Service	~	
Regulatory	$\checkmark$	Safety	$\checkmark$	
Maintenance	$\checkmark$	Asset Preservation	×	
Planned	×	Reactive	$\checkmark$	
Closure Activity	×			
Frequency	Replace within 14 days.	Costs Recoverable	×	

# 6.1.5 Pavement Markings

# CENTRE AND EDGE LINE PAINTING

<b>Description:</b> Refers to applying a material formulated for application onto asphalt or concrete pavement to delineate vehicle operating limits (e.g., center line and edge line).				
In-House Staff	×	Contracted Service	✓	
Regulatory	×	Safety	$\checkmark$	
Maintenance	$\checkmark$	Asset Preservation	×	
Planned	$\checkmark$	Reactive	×	
Closure Activity	Lane			
Frequency	2 Years	Costs Recoverable	×	



# **ZONE PAINTING**

<b>Description:</b> Refers to applying a material formulated for application onto asphalt or concrete pavement to delineate vehicle operating limits (e.g., stop bars, turn arrows, and miscellaneous text).				
In-House Staff	×	Contracted Service	✓	
Regulatory	×	Safety	$\checkmark$	
Maintenance	$\checkmark$	Asset Preservation	×	
Planned	$\checkmark$	Reactive	×	
Closure Activity	Lane			
Frequency	2 Years	Costs Recoverable	×	

# 6.1.6 Winter Control

# ANTI-ICING

<b>Description:</b> Reference <i>Minimum Maintenance Standards for Municipal Highways</i> Section 5.			
In-House Staff	~	Contracted Service	×
Regulatory	$\checkmark$	Safety	$\checkmark$
Maintenance	×	Asset Preservation	×
Planned	×	Reactive	$\checkmark$
Closure Activity	×		
Frequency	Per Section 5.1, Ice formation prevention within 16 to 24 hours 5.1 (3) treatment of ice formation within 8 to 16 hours for class 3 to 5 roads	Costs Recoverable	×



## PATROLLING/WEATHER MONITORING

Description:				
Reference Minimum	Maintenance Standards	for Municipal Highway	s Section 3.	
In-House Staff	1	Contracted Service	×	
Regulatory	$\checkmark$	Safety	$\checkmark$	
Maintenance	×	Asset Preservation	×	
Planned	$\checkmark$	Reactive	×	
Closure Activity	×			
Frequency		Costs Recoverable	×	

# PLOWING

Description:				
Reference Minimum I	Maintenance Standards	for Municipal Highway	s Section 4.	
In-House Staff	<b>√</b>	Contracted Service	×	
Regulatory	$\checkmark$	Safety	$\checkmark$	
Maintenance	×	Asset Preservation	×	
Planned	✓	Reactive	$\checkmark$	
Closure Activity				
Frequency	Snow accumulation 8 to 10 cm of snow to respond, 12 to 24 hours to clear after accumulation. Ice formation prevention within 16 to 24 hours. Treatment of ice formation within 8 to 16 hours for class 3 to 5 roads. Patrol once every 7 to 30 days for Class 3 to 5 roads. 3.1(1) & (2) Winter monitoring 3x a day, May - Sept 1x per day.	Costs Recoverable	×	



# 6.1.7 Vegetation/Cleaning and Debris Management

# GRASS AND WEED CONTROL MANAGEMENT AND DEBRIS PICKUP

<b>Description:</b> Grass cutting activities and weed control. Pick up and removal of debris. Reference <i>Minimum Maintenance Standards for Municipal Highways</i> Section 9.					
In-House Staff	Staff Contracted Service *				
Regulatory	×	Safety	$\checkmark$		
Maintenance	✓	Asset Preservation	×		
Planned	$\checkmark$	Reactive	$\checkmark$		
Closure Activity	×				
Frequency	4x per year.	Costs Recoverable	×		

# SWEEPING

Description:				
Removes gravel or stone at Township road intersections. In response to accidents or spills, clear affected area of debris or liquid. Remove mud or debris tracked onto roadways from construction sites. Maintenance and cleaning of bridge decks and structural components by sweeping decks when required.				
In-House Staff	✓	Contracted Service	✓	
Regulatory	×	Safety	×	
Maintenance	$\checkmark$	Asset Preservation	×	
Planned	$\checkmark$	Reactive	$\checkmark$	
Closure Activity ×				
Frequency	Current practice once annually or as required	Costs Recoverable	×	



# **TREE MAINTENANCE – GENERAL**

<b>Description:</b> The maintenance associated with trimming, removal of fallen trees, branches and limbs that result in reduced visibility/sightlines or pose a hazard to the public.				
In-House Staff ✓ Contracted ×				
Regulatory	×	Safety	$\checkmark$	
Maintenance	$\checkmark$	Asset Preservation	×	
Planned	$\checkmark$	Reactive	$\checkmark$	
Closure Activity	×			
Frequency	4x per year	Costs Recoverable	×	

# 6.1.8 Road & Traffic Patrol & Inspection

# **ROAD PATROL & INSPECTION**

<b>Description:</b> Routine patrol for deficiencies such as potholes, cracks, defective luminaries, debris and general unsafe roadway conditions. Reference <i>Minimum Maintenance Standards for Municipal Highways</i> Section 3.			
In-House Staff	✓	Contracted Service	×
Regulatory	$\checkmark$	Safety	$\checkmark$
Maintenance	$\checkmark$	Asset Preservation	$\checkmark$
Planned	$\checkmark$	Reactive	×
Closure Activity	×		
Frequency	3 times every 10 to 10 days. May to Sept weekly.	Costs Recoverable	×



# **TRAFFIC SIGN PATROL & INSPECTION**

Description:					
Routine patrol to iden	tify deficiencies on regu	ulatory and warning sig	ns.		
Reference Minimum N	Maintenance Standards	for Municipal Highway	s Section 11 – 12.		
In-House Staff	$\checkmark$	Contracted Service	×		
Regulatory	$\checkmark$	Safety	×		
Maintenance	$\checkmark$	Asset Preservation	×		
Planned	$\checkmark$	Reactive	×		
Closure Activity	×	Annual Closure Activity	×		
Frequency	Inspect, test & maintain 1x per year (within 16 months of previous).	Costs Recoverable	×		



# 6.2 SCHEDULE OF PLANNED ACTIVITIES

The following section provides a summary of activities based on their frequency; these are categorized as follows:

- Annual (refer to **Table 17**)
- Yearly Plus (refer to **Table 18**)
- Monthly (refer to Table 19)
- As Required (refer to **Table 20**)
- To-be-considered (refer to **Table 21**)

## **Table 17: Annual Maintenance Activities**

Asset Type	Asset Component	Maintenance Activity	Closure Activity	Seasonal Preference
Bridges & Structural Culverts	Bridges	Bridge Maintenance- own Forces	Lane	Spring
Road & Traffic Patrol & Inspection	Traffic	Traffic Sign Patrol and Inspection	No	-
Vegetation / cleaning & Debris management	Roadway	Sweeping	No	Spring

#### **Table 18: Yearly Plus Maintenance Activities**

Asset Type / Major Activity	Asset Component	Maintenance Activity	Closure Activity	Frequency	Seasonal Preference
Drainage	Catch Basins	Catch Basin Cleaning	Lane	2 years	Spring
Drainage	Culverts	Culvert Repair / Replacement	Lane	15 years	Spring/Summer/Fall
Drainage	Inlets/Outlets	Inlet/Outlet Cleaning	Lane	5 years	Spring
Traffic	Pavement Markings	Centre and Edge Line	Lane	2 years	Spring/Summer/Fall
Traffic	Pavement Markings	Zone Painting (e.g., turn lanes, stop bars, etc.)	Lane	2 years	Spring/Summer/Fall

#### **Table 19: Monthly Maintenance Activities**

Asset Type / Major Activity	Asset Component	Maintenance Activity	Closure Activity	Seasonal Preference
Vegetation / Cleaning & Debris Management	Roadway	Sweeping	Lane	Spring/Summer/Fall
Roadway	Roadway	Grading	No	Once per month from Spring to freeze up
Vegetation / Cleaning & Debris Management	Roadway	Tree Maintenance - General	No	Spring/Summer/Fall 4x per year



Asset Type / Major Activity	Asset Component	Maintenance Activity	Closure Activity	Seasonal Preference
Vegetation / Cleaning & Debris Management	Roadway	Grass and Weed Control Management and Debris Pickup	No	Spring/Summer/Fall 4x per year

### Table 20: As-Required Maintenance Activities

Asset Type / Major Activity	Asset Component	Maintenance Activity	Closure Activity	Seasonal Preference
Roadway	Roadway	Pothole Repair	No	Winter/Spring
Roadway	Shoulder	Repair	No	Spring/Summer/Fall
Roadway	Crash Attenuators	Safety Barrier Repair	Lane	Spring/Summer/Fall
Roadway	Sidewalks	Repair/maintenance/ Replacement	No	Spring/Summer/Fall
Roadway	Curbs	Repair/Maintenance	Lane / Road	Spring/Summer/Fall
Drainage	Catch Basins	Catch Basin Repairs	Lane	Spring/Summer/Fall
Drainage	Culverts	Culvert Cleaning	Lane	Spring
Drainage	Pipe	Storm Sewer CCTV & Cleaning	Lane	Spring
Bridges & Structural Culverts	Structural Culverts	Repair/Maintenance	Lane / Road	Spring/Summer/Fall
Traffic	Signs & Supports	Sign Placement New	No	As required
Traffic	Signs & Supports	Sign Repair or Replacement	No	Ongoing
Traffic	Overhead Signs & Supports	Sign Repair or Replacement	Lane	Ongoing
Traffic	Delineators	Repair/Maintenance/ Replacement	No	Spring/Summer/Fall
Traffic	Lighting	Street Lighting Lamp Replacement	No	Ongoing
Winter Control	Roadway	Anti-Icing - Activation	No	Winter
Winter Control	Roadway	Patrolling/Weather Monitoring	No	Winter
Winter Control	Roadway	Plowing - Activation	No	Winter
Road & Traffic Patrol & Inspection	Roadway	Road Patrol & Inspection	No	Ongoing
Road & Traffic Patrol & Inspection	Traffic     Traffic Sign F       ol &     Traffic and Inspect		No	Spring/Summer/Fall



Asset Type /	Asset Component	Maintenance	Closure	Seasonal
Major Activity		Activity	Activity	Preference
Roadway	Roadway	Crack Sealing/Filling	Lane / Road	Spring

Crack sealing is considered one of the most cost-effective processes that could be incorporated into the Township's road maintenance plan. Sealing cracks at an early stage (3 to 5 years after construction) on roads which have had a double lift of asphalt and making them watertight will help direct surface runoff towards ditches and prevent water and moisture from getting into the road base. This will also prevent moisture from freezing in the cracks during the winter, which causes the cracks to expand when the water freezes leading to additional cracks, potholes and rough riding surfaces. Implementing crack sealing annually is anticipated to result in the pavement service life being maximized.

Since the Township is currently not undertaking crack sealing, the Township should consider the following prior to setting up an annual crack sealing program;

- The estimated crack sealing averages about \$8 per linear metre (excluding construction inspection and traffic control costs);
- There is currently approximately 22.7 km of roads which have had a double lift of asphalt (**Appendix A**); and,
- The lack of in-house staff to undertake construction inspection.

A crack sealing program is estimated to provide an additional 3-5 years of additional service life for roads that have adequate drainage and subbase, based on the experiences of project team members. Our experience has been that crack sealing offers its greatest benefit to increasing service life on double-lift asphalt roads. We have concerns about whether crack sealing on roads with 50 mm or less of asphalt thickness would have any measurable impact to the service life.

# 6.3 **REGULATORY MAINTENANCE ACTIVITIES**

The following activities are required to satisfy the Minimum Maintenance Standards for Municipal Highways:

- Roadway Pothole Repair
- Roadway Crack Sealing/Filling
- Crash Attenuators Safety Barrier Repair
- Street Lighting Lamp Replacement
- Roadway Anti-Icing Activation
- Roadway Patrolling/Weather Monitoring
- Roadway Plowing Activation
- Sign Placement New
- Sign Repair or Replacement
- Routine Signal Inspection & Maintenance
- Traffic Sign Patrol & Inspection
- Road Patrol & Inspection

Within the *Minimum Maintenance Standards for Municipal Highways*, each of the activities have defined criteria for response times. These response times have been identified in the activity descriptions shown above.



# 7 CAPITAL NEEDS REQUIREMENTS

The following section discusses the analysis of capital needs across the Township's paved road network (not including boundary roads). Any decision to convert gravel roads to asphalt as a capital project should be taken into consideration when developing budgetary requirements and prioritizing capital needs.

The costs provided within this section are to be used for high-level budgeting values. These numbers should be re-evaluated periodically (i.e., every 5 years) to ensure that market trends and needs identified through the Preliminary Design Checklists are incorporated into the budget values. <u>These budgetary values do not</u> correspond with the values provided in Section 4 of this Plan. Unlike the cost information provided in Section 4, cost estimates within this section include items for the following:

- Associated costs such as mobilization, traffic control, bonding, insurance
- Small diameter (<900mm) culvert replacements where upsizing the culvert is not required
- Minor earth excavation quantities for ditching and/or small diameter culvert replacements
- Minor rip-rap quantities
- Restoration
- Line painting
- Allowances for an Asphalt Cement Index adjustment payment, contingency, engineering design, construction layout, materials testing, contract administration and inspection, and conservation authority permit applications.

Detailed breakdowns of these cost estimates are provided in <u>Appendix K</u>. As no site-specific considerations have been considered, these estimates should be considered with an accuracy of  $\pm 40\%$ .

# 7.1 TIME OF NEED

The Time of Need represents the timeline in which major road rehabilitation or reconstruction will be required. The PCI scores derived from the road condition assessments are used as a guide to determine the Time of Need of each road section. Refer to **Table 22** for a summary of the Time of Need based on PCI.

Immediate resurfacing or reconstruction needs are identified as "NOW" needs. Roads sections have also been assigned "1-5 Year" and "6-10 Year" Time of Need based on their PCI score. This means that these road sections should be resurfaced before the next 5 or 10 years, respectively, as they will likely require major rehabilitation or reconstruction beyond these timeframes. Roads that are not expected to have a Time of Need within the next 10 years are identified as "Adequate".

Time of Need	PCI	Centerline Kilometres	Percentage of Network	Estimated Resurfacing Cost
Adequate	>80	61.2	48%	0
6 – 10 Years	65-80	31.1	24%	\$12,811,000
1 – 5 Years	50-65	29.2	23%	\$11,619,000
NOW Resurfacing	30-50	6.4	5%	\$2,691,000
NOW Reconstruct	< 30	0.0	0.0	0
			Total	\$27,121,000

### Table 22: Time of Need for Paved Roads (based on 2022 pricing)

The table above shows that majority of the Township's paved road network is considered "Adequate" with no immediate resurfacing needs. However, it should be noted that roads falling into this category are still candidates for potential maintenance activities such as crack sealing and patching.



The results show that approximately 23% of the paved road network is in the "1-5 Year" Time of Need for resurfacing with an additional 5% of the network requiring immediate resurfacing. The results also show that approximately \$27.1M (2023 dollars) in resurfacing needs are currently identified across the paved road network. Roads will deteriorate over time, and as such, roads that are considered "Adequate" today will eventually become resurfacing needs over the next 10-15 years.

Road sections identified in the "NOW" time of need are summarized in Table 23.

Asset ID	Street Name	From Street	To Street	Est. Cost/km	Estimated Cost
4	Gore Road	Sideroad 20 South	Valens Road	\$370,000	\$983,000
38	Mason Road	Concession 7	End	\$370,000	\$84,000
148	Puslinch- Flamborough Townline	Leslie Road West	Township Limits	\$370,000	\$114,000
25	Leslie Road West	Curve at Highway 401	Puslinch- Flamborough Townline	\$370,000	\$384,000
37	Concession 2A	Concession 2	Concession 7	\$494,000	\$117,000
139	Watson Road South	Hume Road	Maltby Road East	\$494,000	\$1,009,000
				Total	\$2,691,000

#### Table 23: NOW Resurfacing Time of Need for Paved Roads

# 7.2 PRIORITY RATING

The previous section outlined Road Needs based solely on condition. However, it is generally acknowledged that there are additional factors which are considered when developing a capital program.

By means of the MTO's Priority Rating (PR) score, not only is the condition of the road taken into the account but also the number of users (i.e., ADT) the roadway serves.

The Priority Rating formula is as follows:

**Priority Rating:** 
$$PR = 0.2 \times (100 - PCI) \times (ADT + 40)^{0.25}$$

Where PCI is the Pavement Condition Index and ADT is the Average Daily Traffic

By applying the Priority Rating, roads with higher traffic volumes will be prioritized over lower traffic volume roads of similar condition. Likewise, traffic being equal, roads with a lower condition rating will rank higher for prioritizing capital needs.

The top 20 road sections by Priority Rating are provided in **Table 24**.



# Table 24: Top Priority Ratings for Township Paved Roads

Asset ID	Street Name	From Street	To Street	Length (m)	Traffic	Truck	PCI	Time of Need	Treatment	Estimated Cost	Priority Rating
4	Gore Road	Sideroad 20 South	Valens Road	2606.6	1000-1999		42.2	NOW Resurface	PR1	\$983,000	101.4
139	Watson Road South	Hume Road	Maltby Road East	2041.7	2000-2999		47.8	NOW Resurface	PR2	\$1,009,000	99.9
6	Gore Road	Concession 7	Lennon Road	959.1	1000-1999		51.8	1- 5 Years	PR1	\$362,000	84.5
5	Gore Road	Valens Road	Concession 7	1526.6	1000-1999		54.2	1- 5 Years	PR1	\$576,000	80.4
37	Concession 2A	Concession 2	Concession 7	235.3	500-999	Y	47.1	NOW Resurface	PR2	\$117,000	78.5
126	Victoria Road South	County Road 34	Maltby Road East	2074.1	4000-4999		68.3	6 - 10 Years	PR2	\$1,025,000	72.8
18	Concession 1/Leslie Rd W	Concession 7	Highway 6	2350.3	1000-1999		58.6	1- 5 Years	PR1	\$887,000	72.6
33	Concession 2	Sideroad 10 South	County Road 35	2063.5	500-999		51.9	1-5 Years	PR1	\$778,000	71.5
35	Concession 2	Sideroad 20 South	Sideroad 25 South	2050.2	500-999	Y	54.2	1-5 Years	PR2	\$1,013,000	68.0
90	Roszell Road	Forestell Road	Concession 4	993.8	1000-1999		61.9	1-5 Years	PR1	\$375,000	66.8
34	Concession 2	County Road 35	Sideroad 25 South	2096.2	500-999		55.9	1-5 Years	PR1	\$791,000	64.9
54a	Roszell Road	Concession 4	Townline Road	1369.1	1000-1999		64.2	1-5 Years	PR1	\$517,000	64.2
3	Gore Road	County Road 35	Foreman Road	2067.0	1000-1999		66.4	6 - 10 Years	PR1	\$212,000	61.8
115	Concession 7	Concession 2A	Mason Road	428.2	3000-3999	Y	71.4	6 - 10 Years	PR2	\$479,000	61.7
12	Concession 1	Townline Road	transition	1269.2	1000-1999		66.7	6 - 10 Years	PR1	\$780,000	60.5
212a	Winer Road	McLean Road	Nicholas Beaver Road	785.8	200-499	Y	53.8	1-5 Years	PR2	\$389,000	57.5
38	Mason Road	Concession 7	End	222.6	50-199		43.3	NOW Resurface	PR1	\$84,000	56.9
148	Puslinch-Flamborough Townline	Leslie Road West	Township Limits	301.4	50-199		43.3	NOW Resurface	PR1	\$114,000	56.9
14	Concession 1	Sideroad 10 South	County Road 35	2068.7	1000-1999		68.8	6 - 10 Years	PR1	\$780,000	56.7
13a	Concession 1	transition	transition	2112.9	1000-1999		68.8	6 - 10 Years	PR1	\$797,000	56.6
			Total:	29.6	kms					\$12,068,000	



The Priority Ranking should only be used to assist in the prioritization and development of the annual Capital program. An optimal approach will be different for any given municipality, as there are other factors that need to be considered such as available budgets, truck traffic, road continuity, roads with isolated and especially poor condition, safety considerations, other planned or necessary construction activities (e.g., land development, sewer replacement), or site-specific conditions such as geometric deficiencies.

A listing of all paved road sections and associated treatment needs and costs, and Time of Need and Priority Rating is provided in **Appendix K**. This list will aid the Township in developing its capital program.



# 8 TRAFFIC MANAGEMENT POLICIES

# 8.1 TRAFFIC CALMING

## 8.1.1 Introduction

#### 8.1.1.1 <u>Purpose</u>

The **Traffic Calming Policy** is intended to aid the Township in assessing the merit of installing traffic calming measures on Township roads. The policy:

- Identifies locations where traffic calming may and may not be appropriate;
- Outlines the steps to be completed in responding to a request for traffic calming; and,
- Provides guidance on the selection and design of traffic calming measures.

The Wellington County Official Plan notes local roadways include both urban and rural roadways under the jurisdiction of a local municipal government. Section 12.5.4 c) of the plan states that "local roads will be improved through widenings, intersection improvements, signalization daylight triangles, turning lanes, tapers and traffic calming devices where required." That said, Section 12.5.4 a) indicates that "rural roads laid out along original township concession and lot lines often provide important collector functions and operate at reasonably high speeds. These routes need to be protected from strip development, access points with poor visibility and other conditions which would impair their functions." This infers traffic calming measures will be more appropriately applied on urban roads rather than rural roads in the Township. Further the Official Plan encourages walking and cycling both as a means of travel and for recreation (Sections 12.2 and 12.3), with the plan policies focussing on the provision of supportive facilities in urban areas of the Township.

### 8.1.1.2 Objectives

The *Canadian Guide to Traffic Calming* describes traffic calming as "the process and measures applied by road authorities to address concerns about the behaviour of motor vehicle drivers travelling on streets within their jurisdictions." [1] Such measures are usually applied on roads experiencing excessive vehicle speeds and/or high volumes of shortcutting traffic.

Municipalities implement traffic calming measures to enhance community livability, reduce aggressive driving, and improve road safety, particularly for vulnerable users such as pedestrians and cyclists. The application of traffic calming is intended to restore streets to their desired function, which will depend on the location and classification of the roadway. Most Township roads are intended to serve local traffic and are not designed to carry higher volumes of traffic, especially trucks, at higher speeds.

This policy broadly categorizes traffic calming measures into two groups being:

- **Physical Measures**, which primarily consist of vertical and horizontal deflections in the roadway. This group also includes treatments that narrow the roadway, alter the road surface, and restrict access; and
- **Non-Physical Measures**, which include tools and strategies designed to influence or modify driver behaviour. This group is often described as education and enforcement.

The Traffic Calming Toolbox (see **Appendix L**) provides further information on the physical and non-physical traffic calming measures applicable for use in the Township.

When applied properly, traffic calming can help "reduce the negative effects of motor vehicle use, alter driver behaviour, and improve conditions for non-motorized street users" [2] by decreasing:

• Motor vehicle speeds;



- Traffic volumes;
- Shortcutting (traffic infiltration);
- Conflicts between roadway users;
- Pedestrian crossing distances and times; and
- Risk and severity of motor vehicle collisions.

However, traffic calming measures, especially physical devices, can be costly and time-consuming to design, install, and maintain if used inappropriately. The installation of traffic calming measures can also cause unintended consequences, such as:

- Increased emergency vehicle response times;
- Reduced or impeded vehicle access to neighbourhoods;
- Shifting or diverting shortcutting and/or speeding concerns onto other roadways;
- Higher maintenance costs for services such as snow clearing and curbside waste collection; and
- Increased vehicle emissions, noise pollution, and/or visual intrusion.

Careful consideration and proper planning, design, and implementation are key to the success of a traffic calming plan.

## 8.1.1.3 <u>Scope</u>

This Traffic Calming Policy defines the municipal position on the application of traffic calming measures on Township roads. The policy features:

- A neighbourhood driven process for receiving, evaluating, and responding to citizen requests for traffic calming, including a typical community engagement protocol;
- A methodology and evaluation criteria for determining if traffic calming is appropriate for a given street and a protocol for prioritizing locations recommended for implementation;
- A list of proven traffic calming measures (the "toolbox"); and
- A procedure for monitoring and assessing the effectiveness of traffic calming measures after installation.

The policy combines best practices in traffic calming with local context to provide an appropriate, efficient, and flexible framework for addressing traffic-related inquiries received by the Township. It supplements guidance contained in the *Canadian Guide to Traffic Calming* and *Geometric Design Guide for Canadian Roads*. The policy also reflects applicable Provincial legislation including the *Accessibility for Ontarians with Disabilities Act* (AODA) and the *Highway Traffic Act* (HTA). The planning, design, and implementation of Traffic Calming Plans on roads in the Township of Puslinch must comply with relevant provisions of these and other statutes.

# 8.1.2 Traffic Calming Policy Statement

### 8.1.2.1 Application of Traffic Calming

The Township may implement traffic calming measures on roads under its jurisdiction based on the provisions of this policy.

The Township will typically apply non-physical traffic calming measures before implementing physical measures.

If non-physical measures prove ineffective or inappropriate under the circumstances, the Township will consider the installation of physical traffic calming measures on its roads:

• Where there is a demonstrated safety, excessive speed, and/or shortcutting traffic concern; and



• After exploring opportunities to improve operation of the County road and/or Provincial highway networks.

The Township may also consider implementing traffic calming measures, pursuant to Section 8.1.2.5:

- In new developments as part of the development approval process; and
- On road reconstruction projects where safety, excessive speed, and/or shortcutting traffic concerns are anticipated to occur upon (re)opening the road to traffic after construction.

The Township will not install traffic calming measures on streets in new subdivision plans until they have been assumed by the municipality. Measures may be installed by others during the development phase if approved by the Township.

Where the installation of physical traffic calming measures is deemed the preferred course of action, the Township will:

- Determine whether an area-wide plan or street-specific plan is more suitable. An area-wide plan will be pursued if a street-specific plan would likely result in the displacement of traffic onto adjacent streets.
- Take into consideration the needs of non-motorized modes of transportation when developing the Traffic Calming Plan. Measures will typically be designed to minimize impacts to pedestrian and cyclist movement and enhance the experience of these users.

Traffic calming measures may not be appropriate in every situation and, if considered for implementation, should ensure the equitable and consistent treatment of all street users following the guidance in this document.

### 8.1.2.2 <u>Responsibilities</u>

The Director of Public Works, Parks, and Facilities (the Director), or designate, will apply the Traffic Calming Policy on behalf of the Township of Puslinch through Traffic Calming Studies led by the Public Works, Parks, and Facilities Department. Other Township departments, external agencies, and consultants, if required, may partake in these studies at the request of the Director or designate. Members of Township Council, residents, businesses, and interested groups may also participate in the study process, as noted in **Section 8.1.3.3**.

### 8.1.2.3 Initiating a Traffic Calming Study

The Township may initiate a Traffic Calming Study following the process illustrated in **Figure 3** and described in **Section 8.1.3** for streets meeting all screening criteria listed in **Table 25**. Requests for a study that do not satisfy these minimum thresholds will be denied. See Stage 2 of the study process for further guidance on the initial screening.

Criteria	Threshold	A Traffic Calming Study may be considered if:
Previously Requested	Within Last Three Years	A prior request for traffic calming on the subject street has not been denied within the last three years
Measures Removed	Within Last Five Years	Traffic calming measures have not been removed from the subject street within the last five years
Roadway Classification	Township Road	The subject street is under the Township's jurisdiction
Location	Primary Fire Routes	The subject street does not serve as a primary fire route in the Township
Speed Limit	≤ 50 km/h	The posted speed limit on the subject street is 50 km/h or less
Location Speed Limit	Primary Fire Routes ≤ 50 km/h	The subject street does not serve as a primary fire route in the Township The posted speed limit on the subject street is 50 km/h or less

### Table 25: Screening Criteria for Traffic Calming Study



Criteria	Threshold	A Traffic Calming Study may be considered if:
Road Grade	≤ 8%	The grade of the subject street is less than 8%
Segment Length	≤ 150 metres	The distance between stop-controlled intersections along the subject street is 150 metres or more
	Are All Criteria Met?	Yes/No

Per the screening criteria in **Table 25**, the Township will not entertain new requests for a Traffic Calming Study for a period of at least:

- Three years on streets reviewed and denied for physical traffic calming at any stage in the process (unless otherwise specified in **Section 8.1.3**); or
- Five years on streets where traffic calming measures have been removed (see Subsection 8.1.2.7).

### 8.1.2.4 Required Neighbourhood Support

For most Traffic Calming Studies, the Township will gauge the level of resident support to proceed to subsequent stages in the study process through a neighbourhood survey. For each survey, the Township must receive a response for at least 25% of all eligible households (response rate), with at least 51% of those households responding in the affirmative (support rate), for the study to proceed to the next step. The Township may deviate from the minimum response and/or support rates on a study-specific basis if the Director or their designate deems the revised rate(s) more representative for the study area. Survey responses not meeting the minimum thresholds will typically result in the Township ending the Traffic Calming Study. See Stages 4, 5, and 7 of the Traffic Calming Study process set out in **Section 8.1.3** for further guidance on the application of these criteria.

The Township will issue only one survey questionnaire to each household within the study area regardless of the number of residents living at the address.

## 8.1.2.5 Other Triggers to Implement Traffic Calming

Traffic calming measures may also be implemented through land development and road reconstruction projects. In both cases, measures will still be selected from the Traffic Calming Toolbox provided in **Appendix L** and approved by the Township. The resulting traffic calming installation will also be monitored and evaluated after implementation following the procedures described in Stage 9 of the Traffic Calming Study process set out in **Section 8.1.3**.

#### **New Development**

The Township may require the implementation of traffic calming measures through the land development process, typically as a condition of approval for a Plan of Subdivision or Site Plan Control application. The Township may request proponents to investigate the need for changes to the street network, including consideration of traffic calming measures, as part of the Transportation Impact Assessment completed in support of the proposed development. This may include traffic calming measures on existing roads to mitigate anticipated negative impacts of the development and on planned roads within the development to avoid potential issues in the future. In most cases, the Township will require the proponent to finance all costs to implement the measures.

#### **Road Reconstruction Projects**

The Township may install traffic calming measures as part of a road reconstruction project where safety, excessive speed, and/or shortcutting traffic concerns are anticipated upon (re)opening the road to traffic after construction. Combining traffic calming projects with other planned works can reduce costs and lessen



community impact and intrusion caused by construction activity. The Township will generally follow the process set out in **Section 8.1.3** in developing the Traffic Calming Plan component of the integrated project.

## 8.1.2.6 <u>Trial Installations</u>

The Township will typically implement the recommended Traffic Calming Plan on a trial basis using temporary/seasonal measures before installing the permanent solution. This approach enables the Township to:

- Better understand the plan's impacts and effectiveness before investing in a permanent installation, thereby allowing for refinement of the final design and avoidance of "throwaway" costs;
- Avoid or defer the initial capital cost of more expensive permanent installations;
- Gauge community reaction prior to permanent installation; and
- Retain flexibility to remove traffic calming measures seasonally.

Products typically used for temporary/seasonal traffic calming installations include:

- Removable rubber products (e.g., curbing, speed humps, tables, cushions);
- Removable/flexible posts and bollards;
- Painted pavement markings;
- Regulatory, warning, and informational traffic signs; and
- Temporary speed display boards.

In certain circumstances, the Township may proceed with permanent installation, without a trial application, after considering the possible negative aspects and outcomes of using temporary/seasonal measures, which can include:

- Lower relative aesthetic value;
- On-going operational costs and/or additional operational resource requirements;
- Challenges with winter maintenance;
- Requirements for seasonal installation and removal;
- Potential to have similar or higher overall costs than permanent installations;
- Potentially lower effectiveness than permanent materials; and
- Quicker degradation of roadway surfaces, specifically where measures are anchored into existing road surfaces.

### 8.1.2.7 <u>Reconsideration and Removal</u>

The Township may consider the removal of permanent traffic calming installations if a majority of residents (51%) directly fronting the subject street support the request. The approved Traffic Calming Plan must be installed for at least three years before removal can be requested. If the measures are removed, residents of the subject street must wait at least five years before submitting a new request for traffic calming. See Stage 9 of the Traffic Calming Study process set out in **Section 8.1.3** for further information on the resident-initiated removal process.

If requested to remove only a portion of an approved Traffic Calming Plan, the Township may choose to remove the entire installation if the proposed changes significantly degrade or compromise the effectiveness and/or safety of the remaining measures or cause unintended consequences that cannot be rectified to the municipality's satisfaction. In most cases, the plan is designed to function with all measures in place.

The Township reserves the right to remove traffic calming measures deemed ineffective, causing a safety risk, and/or creating unintended consequences that cannot be rectified to the municipality's satisfaction. This may include the diversion of traffic onto a parallel or adjacent Township road rather than onto the County road and/or



Provincial highway network. See Stage 9 of the Traffic Calming Study process set out in **Section 8.1.3** for further information on the Township-initiated removal process.

## 8.1.2.8 <u>Use of Regulatory Traffic Signs for Traffic Calming</u>

Consistent with the guidance contained in the *Canadian Guide to Traffic Calming*, the Township will not use the following types of regulatory traffic signs for the sole purpose of traffic calming:

## All-Way Stop Control

The purpose of an all-way stop is to assign right-of-way between vehicles approaching an intersection from different directions when traffic signals are not warranted or not yet installed. All-way stop control should not be used:

- Where the protection of pedestrians, particularly school children, is a prime concern. Other measures can address this concern more effectively;
- As a speed control device; and/or
- As a means of deterring the movement of through traffic in a residential area.

Using all-way stops indiscriminately can lead to increased driver delay and frustration, greater speeding between intersections, increased noise from vehicle acceleration, increased emissions from vehicles forced to stop and idle, and reduced compliance with all-way stop control, both at the subject location and in general. Even when justified, all-way stops can increase the risk of certain collision types, most notably rear-end crashes.

The Township will follow the provincially recommended guidelines set out in Ontario Traffic Manual (OTM) *Book* 5 - Regulatory Signs in assessing the justification for all-way stop control on roads under its jurisdiction. These warrants consider vehicle and pedestrian volumes, traffic distribution (percent of vehicles on the major street versus the minor street), and collision history to determine the merit of installing an all-way stop.

### **Speed Reduction and Movement Restriction**

Regulatory signs intended to control vehicle speeds (e.g., speed limits, Community Safety Zones) or restrict traffic movements (e.g., turn prohibitions, one-way streets) often require enforcement to achieve driver compliance and ensure effectiveness. For this reason, the TAC *Canadian Guide to Traffic Calming* recommends using these signs only to supplement and reinforce desired driver behaviour and not as traffic calming measures on their own.

The Township will follow the guidance contained in the complementary **Speed Limit Policy** and **Community Safety Zone** Policy in assessing requests for speed limit changes and Community Safety Zones, respectively, on roads under its jurisdiction.

# 8.1.3 Traffic Calming Study Process

## 8.1.3.1 <u>Study Process</u>

**Figure 3** illustrates the process for responding to resident-initiated requests for traffic calming on Township roads primarily in Hamlet Areas and Urban Centres defined on Schedule A7 (Puslinch) of the Wellington County Official Plan. The Township will review traffic calming requests for areas outside Hamlet Areas and Urban Centres on a case-by-case basis to determine if the location would be a candidate for traffic calming (see **Table 25**) or would be better served by alternative strategies (such as the Speed Limit and Community Safety Zone Policy or the Truck Route Policy). The Traffic Calming Study process, which involves both engagement and technical tasks, can be distilled into the following nine stages. The Township will administer the process:



## Stage 1 – Traffic Calming Request

Residents will submit their written request for a Traffic Calming Study to the Township's Public Works, Parks, and Facilities Department using the Community Traffic Issue Reporting Form in **Appendix M**. The requester must specify the subject street and the nature of the traffic concern. Members of Township Council can also request a study on behalf of their constituents.

### Stage 2 – Initial Screening

Township staff will screen the request to determine if the subject street meets all criteria for a Traffic Calming Study per **Table 25**. Requests not satisfying these minimum thresholds will be denied and the process ended. In some locations, the Township may consider non-physical traffic calming measures such as education and enforcement to address resident concerns as an alternative or a first step.

After completing the initial screening, Township staff will notify the original requester whether the location satisfies the minimum thresholds for a Traffic Calming Study and, if so, outline the next steps in the process. If denied, Township staff will provide an explanation as to why the request was refused.

### Stage 3 – Technical Assessment

Township staff will assess requests satisfying the initial screening to gauge the potential benefit of installing physical traffic calming measures on the subject street. The point system shown in **Table 26** provides the basis for assessing requests, with top priority given to projects achieving the highest scores. The maximum score, calculated by summing the individual criteria points, is 100 points based on this methodology.

Township staff will assign a point score to each criterion in **Table 26** based on traffic and road condition data. The Township will typically collect the data required to complete the technical assessment in the spring, summer, and/or fall season. Requests received in the winter season will be investigated in the spring.

Requests meeting a minimum score of 40 points for the technical criteria (out of 100) will proceed to a neighbourhood survey in Stage 4. Requests not attaining this minimum threshold will only be considered for non-physical traffic calming measures such as education and enforcement.

### Stage 4 – Neighbourhood Survey

Township staff will survey households within the study area to gauge resident support for developing a Traffic Calming Plan for the subject street. Key considerations when defining the study area include:

- Subject street (segment(s) of concern);
- Traffic data;
- Location and context of sensitive land uses near, or adjacent to, streets of interest;
- Other Township policies;
- Opportunities and limitations such as available resources and partnerships; and
- Environmental factors (e.g., geographic features, major streets, key intersections).

The study area will typically comprise households with direct frontage on the subject street but may be expanded capture households on other streets, especially if shortcutting traffic is the primary concern and traffic diversion is a possible outcome.

Requests meeting the minimum response and support rates per **Section 8.1.2.4** will be considered for plan development in Stage 5. Requests not attaining these thresholds will be denied and the process ended. The Township will also not entertain a new request for a Traffic Calming Study on the subject street for a period of at least three years. Township staff will inform study area households of the survey results and next steps.





#### Figure 3: Traffic Calming Study Process



## Table 26: Technical Assessment and Prioritization Criteria

Criteria	Point Assignment	Maximum Points	
Vulnerable Road Users	5 points for each adjacent pedestrian and/or cycling generator within the study area (e.g., school, park, playground, recreation centre, senior's home, library, shopping centre, place of worship, etc.)	20	
Pedestrian and	5 points if no sidewalks on the subject street	10	
Cycling Facilities	5 points for designated cycling facilities on the subject street	10	
Residential Frontage	5 points for primarily (more than 50%) residential frontage on subject street	5	
Cut-Through Traffic <sup>1</sup>	5 points if 25% plus 5 points for each 10% increment thereafter	15	
Total Traffic Volumes <sup>2</sup>	1 point for every 100 vehicles per day	15	
Speed <sup>3</sup>	<ul> <li>1 point for every:</li> <li>1 km/h over the posted speed limit; and</li> <li>1% of vehicles observed 10 km/h or more over the posted speed limit</li> </ul>	30	
Collision History <sup>4</sup>	1 point for each qualifying collision over the last three years	5	
	Minimum Total Score to Proceed	40 (out of 100)	

Notes:

- 1. See **Section 8.1.3.2** to estimate the percentage of cut-through (non-local) traffic.
- 2. Traffic volumes used in the evaluation are two-way average daily volumes over a 24-hour period.
- 3. The 85th percentile speed is calculated from data collected using automated traffic recorders (or similar units) over a 24-hour period.
- 4. Includes all collisions along the subject street except for collisions occurring at intersections with County roads or Provincial highways and collisions involving animals.

### Stage 5 – Plan Development

Township staff will initiate development of a Traffic Calming Plan for the subject street contingent on available financing and staff resources. Multiple requests may be prioritized based on the scores from Stage 3.

The toolbox of measures contained in **Appendix L** will be referenced in selecting and designing traffic calming treatments. The Township will typically select speed humps/tables for most traffic calming installations unless site-specific conditions/considerations do not support their use. Other measures from the Traffic Calming Toolbox may be applied in such instances. Data collected during earlier stages, in addition to site visits, historical information, future maintenance and construction plans, and participant feedback, will be considered in preparing the plan. The Township may consider rural traffic calming measures in conjunction with a speed limit review following the Speed Limit and Community Safety Zone Policy.

The Township will develop the Traffic Calming Plan in consultation with residents and stakeholders following the three-step process below:

- Step 1: Consult with residents and stakeholders to confirm traffic issues, note potential implementation challenges, and identify candidate traffic calming measures.
- Step 2: Prepare conceptual Traffic Calming Plan (options) taking into consideration resident and stakeholder input.



• Step 3: Present conceptual Traffic Calming Plan (options) to residents, incorporate feedback received, and finalize the proposed plan (options).

## Stage 6 – Council Approval

Township staff will present the proposed Traffic Calming Plan to Township Council for approval. Council may suggest changes to the plan in considering approval (e.g., cost, design, funding source).

If the plan is not approved, the Township will not entertain new requests for a Traffic Calming Study from residents on the subject street for a period of at least three years.

### Stage 7 – Trial Implementation

Township staff may propose trial traffic calming installations for the coming year through Capital Budget preparation. Locations will be selected and prioritized based on the point score calculated through the technical assessment in Stage 3.

Upon budget approval, Township staff will implement the approved Traffic Calming Plan for a period of up to 24 months, at the discretion of the Director, using temporary/seasonal materials per **Section 8.1.2.5**. Township staff will notify study area households of the intention to install the traffic calming measures on a trial basis prior to implementation.

The Township will monitor the effectiveness of the installation and make minor refinements, if needed, during the trial period. The modifications should not alter the intent or key features of the recommended Traffic Calming Plan unless a significant operational and/or safety concern arises following installation.

As the trial period closes, Township staff will evaluate the success of the trial installation and identify potential refinements if the Traffic Calming Plan is being considered for permanent installation. The scope of the evaluation should be consistent with the investigations conducted prior to installation to allow "before/after" or "cause/effect" comparisons. Potential studies may include speed surveys (to assess change in vehicle speeds), traffic counts (to determine changes in volumes), and/or origin-destination surveys (to estimate the volume of traffic diverting to adjacent streets). The evaluation should also consider winter operating conditions.

The Traffic Calming Plan should not cause transference of traffic from the subject street to adjacent Township roads. If evaluation studies indicate traffic volumes have increased by 15% or more (with a minimum of 100 vehicles per day) on an adjacent Township road after implementing the traffic calming measures, the Township will consider corrective action to remedy the situation or reconsider permanent installation.

The Township may survey study area households to gauge support before making the Traffic Calming Plan permanent, subject to any plan refinements identified through monitoring and evaluation. The thresholds for defining broad-based neighbourhood support noted in **Section 8.1.2.4** apply (i.e., minimum of 51% support from at least 25% of all eligible households within the study area). The Township may also consult with study area residents and/or stakeholders in determining whether to install the plan permanently, including publishing the findings of the monitoring and evaluation program online.

After reviewing the technical and public/stakeholder input, Township staff will recommend the retention, removal, or alteration of the Traffic Calming Plan to Township Council.

### Stage 8 – Permanent Installation

Township staff may propose permanent traffic calming installations for the coming year through Capital Budget preparation. Locations will be selected based on their relative priority and included in the Capital Budget request presented to Township Council with a high-level cost estimate for implementation.



Upon budget approval, Township staff will prepare detailed design and construction tender documents if required and implement the approved Traffic Calming Plan with permanent materials, subject to available resources. Township staff will inform study area households of the intention to install the traffic calming measures permanently prior to implementation.

## Stage 9 – Monitoring and Evaluation

Township staff will continue to monitor the subject street (and entire study area as required) after implementation of the permanent installation to ensure the approved Traffic Calming Plan functions as designed. The monitoring process will also identify any unintended impacts on the surrounding road network and the need for potential refinements and/or remedial measures.

The scope of the post-implementation evaluation should be consistent with the investigations conducted prior to installation. Potential studies may include speed surveys (to assess change in vehicle speeds), traffic counts (to determine changes in volumes) and/or origin-destination surveys (to estimate the volume of traffic diverting to adjacent streets).

The Traffic Calming Plan should not cause transference of traffic from the subject street to adjacent Township roads. If post-implementation evaluation studies indicate traffic volumes have increased by 15% or more (with a minimum of 100 vehicles per day) on an adjacent Township road after implementing the traffic calming measures, the Township will consider corrective action to remedy the situation and/or minimize the impact.

In certain instances, the Township may wish to remove permanent traffic calming installations determined through post-implementation evaluation to be ineffective, causing a safety risk, and/or creating unintended consequences that cannot be rectified to the municipality's satisfaction. Township staff will notify study area households of the intended action by mail and through a posting on its website. The Township may consult with study area residents and/or stakeholders, and if needed, survey study area households to obtain their views on removing the permanent installation. If removal remains the preferred course of action, Township staff will prepare a report to Township Council and, if approved, take the necessary steps to return the subject street to its configuration prior to the Traffic Calming Plan. Township staff will inform study area households of the intention to eliminate the traffic calming measures prior to removal.

Residents can also request the removal of permanent traffic calming installations in place for at least three years pursuant to **Section 8.1.2.7**. Township staff will evaluate the request and survey study area households to gauge support for removing the permanent measures. Requests not meeting the thresholds for broad-based neighbourhood support noted in **Section 8.1.2.4** (i.e., minimum of 51% support from at least 25% of all eligible households within the study area) will be denied. The Township will also consult with study area residents and/or stakeholders in determining whether to remove the measures.

If the request is supported by affected residents, Township staff will prepare a report to Township Council and, if approved, take the necessary steps to return the subject street to its configuration prior to the Traffic Calming Plan. Township staff will inform study area households of the intention to eliminate the traffic calming measures prior to removal. If the request is not supported by residents or refused by Township Council, the Township will not entertain a new request for removal of the approved Traffic Calming Plan for a period of at least five years. Township staff will inform study area households of the results and any further steps.

# 8.1.3.2 <u>Estimating Cut-Through Traffic</u>

When applying **Table 26**, the Township will estimate the percentage of cut-through (non-local) traffic on the subject street using one of the following methods, listed in order from least to most complex/resource intensive/accurate. Select the technique providing the necessary level of precision for the least effort, with Method 1 or Method 2 typically used earlier in the study process (Stage 2 – Initial Screening and Stage 3 –



Technical Assessment) and Method 3 in the later stages (Stage 7 – Trial Implementation and Stage 9 – Monitoring and Evaluation):

## Method 1 – Simplified Trip Generation Calculation

Approximate the percentage of cut-through traffic in predominately residential areas using the following formula:

Percentge Cut-Through Traffic = 
$$\frac{(ADT - (10 x Dwellings))}{ADT}$$

Where **ADT** is the recorded Average Daily Traffic volume (vehicles per day) and **Dwellings** is the number of houses on the subject street.

Each dwelling on the subject street is assumed to generate 10 vehicle trips per day, roughly the weekday trip generation rate for a single-family detached dwelling cited in the Institute of Transportation Engineers (ITE) *Trip Generation Manual (11th Edition)*. The percentage of cut-through traffic on the subject street should be measured between main intersections or entry points into the study area.

## Method 2 – Study Area Trip Generation Calculation

Determine the daily or peak hour trip generation potential of the study area based on its land uses and ITE *Trip Generation Manual* rates. Compare the projected volume of trips to the recorded ADT or peak hour traffic counts to calculate the percentage of cut-through traffic. Similar in approach to Method 1, this method can be used for study areas that feature a range of land uses, like residential, commercial, schools and parks, for example.

### Method 3 – Origin-Destination Study

Record vehicle license plates at all entry and exit points to the study area manually or using digital technology. Match the license plates of vehicles entering and exiting. Determine the percentage of vehicles passing through the study area compared to those that begin or end their trip within the zone.

### 8.1.3.3 Engagement and Communication

Resident and stakeholder involvement plays a vital role in the Traffic Calming Study process. Active and robust participation helps foster support (and avert opposition) for potential traffic calming measures and ultimately aids in ensuring a positive outcome. Township Council is also more inclined to approve a Traffic Calming Plan that has demonstrated resident and stakeholder involvement and support than one met by negative opinion.

The Township will engage with residents and stakeholders impacted by potential traffic calming measures in a consistent and meaningful manner throughout the Traffic Calming Study process. Parties potentially impacted will:

- Have the opportunity to participate in developing and providing input on proposed solutions;
- Be provided with convenient and accessible methods to participate in the study and offer feedback;
- Be provided with relevant technical information to provide informed input;
- Feel that the process is open, understandable, transparent, and inclusive;
- Understand what is (and is not) considered within the project scope; and
- Understand how their feedback has influenced the decision-making process, including why specific suggestions were (or were not) included.

There may be instances when traffic calming measures are warranted, but affected residents have conflicting opinions on the preferred approach to addressing the identified concerns. In these circumstances, the Township may need to conduct additional engagement and further outreach with the potentially impacted residents to



address the situation. Similarly, stakeholders, including emergency responders and other Township departments, may have concerns specific to their mandates requiring further dialogue and resolution.

As noted, the Township will engage two primary groups in the Traffic Calming Study process being:

- **Residents** Includes all households in the study area as defined by Township staff in Stage 4 of the Traffic Calming Study process.
- Stakeholders Includes emergency responders (Township of Puslinch Fire Services, Ontario Provincial Police, and Wellington County/Township Paramedics). Also includes school councils, resident associations, and other community groups with a mandate specific to the neighbourhood (not Township-wide).

It is expected that most requests for traffic calming will originate from the community, signalling their involvement from the beginning of the Traffic Calming Study. Decision-makers may also engage residents and stakeholders.

Points in the Traffic Calming Study process where the Township will engage with residents and stakeholders include:

- Stage 4 Neighbourhood Survey
  - Survey to gauge resident support for developing a Traffic Calming Plan for the subject street.
- Stage 5 Plan Development
  - Step 1: Consultation with residents and stakeholders to confirm traffic issues, note potential implementation challenges, and identify candidate traffic calming measures.
  - Step 3: Consultation with residents to present conceptual Traffic Calming Plan (options) and receive feedback to be considered in preparing the proposed plan (options).
- Stage 7 Trial Implementation
  - If necessary and appropriate, survey to gauge resident support for implementing the approved Traffic Calming Plan with a permanent installation.
  - If necessary and appropriate, consultation with potentially impacted residents and stakeholders prior to implementing the approved Traffic Calming Plan.
- Stage 9 Monitoring and Evaluation (if necessary and appropriate)
  - Survey to gauge resident support for removing an installed Traffic Calming Plan.
  - Consultation with potentially impacted residents and stakeholders prior to removing an installed Traffic Calming Plan.

The Township will undertake communication activities to support the Traffic Calming Study. Communication will occur throughout the study process, specifically:

- After initial screening in Stage 2 to notify the original requester whether the location satisfies the minimum thresholds for a Traffic Calming Study;
- After each neighbourhood survey to inform residents of the results and next steps;
- Two-weeks in advance of any engagement opportunity (i.e., survey, workshop, etc.);
- When traffic calming measures are to be installed, whether trial or permanent installation; and
- If traffic calming measures are to be removed, whether trial or permanent installation.

The above communications should be distributed to affected residents and stakeholders via mail and/or email and posted on the Township's website. The Township will also use the Engage Puslinch engagement site [https://engagepuslinch.ca/] as a "one-stop portal" and landing page for all project-related information and online traffic calming engagement efforts. The Township may also include these communications on their social media feeds and in local newspapers, as deemed appropriate. Distribution methods will depend on the size and nature of the study area.



# 8.1.4 Traffic Calming Toolbox

The *Canadian Guide to Traffic Calming* identifies a broad range of traffic calming techniques. From this catalogue of options, the Township has established a shortlist of potential traffic calming measures for use in Puslinch.

**Appendix L** provides the "toolbox" of traffic calming measures with a description and photo of each treatment. The Traffic Calming Toolbox notes where the measures are applicable and summarizes potential traffic calming benefits and other implementation considerations. The toolbox also includes a process for selecting the most appropriate traffic calming treatments from the list of potential measures. Indicative costs and design guidance are provided as well.

Applying the toolbox consistently will assist the Township in selecting appropriate measures to address specific community traffic issues and help to avoid the undesirable consequences of traffic calming noted in **Section 0**. It is important to note that not all traffic calming measures are appropriate under all circumstances. Selection of suitable measures will depend on the specific issues being addressed and careful consideration of site-specific conditions. The Township may consider rural traffic calming measures in conjunction with a speed limit review following the Speed Limit and Community Safety Zone Policy.

# 8.2 SPEED LIMIT AND COMMUNITY SAFETY ZONE POLICY

# 8.2.1 Introduction

### 8.2.1.1 <u>Purpose</u>

The **Speed Limit Policy** and **Community Safety Zone Policy** are intended to provide the Township with clear, concise, and standardized processes for assessing community requests for lower speed limits and/or the placement of Community Safety Zones. The Speed Limit Policy will aid the Township in establishing consistent, enforceable, and safe speed limits on its roads. The Community Safety Zone Policy will assist the Township in identifying locations meriting heightened safety and enforcement.

### 8.2.1.2 Objectives

### **Speed Limits**

Speed limits aid motorists in selecting safe operating speeds for the prevailing conditions, which will vary as roadway geometry, traffic demands, and road environment change. The selection of an appropriate posted speed limit must take into consideration legislative regulations, public recognition and understanding, ease of implementation, and adherence to recognized engineering standards and practices.

The *Highway Traffic Act* (HTA) establishes the regulatory framework for setting speed limits in Ontario. Section 128 (Rate of Speed), subsection (1) of the HTA defines the "default" limits as:

- 50 km/h on roads within a built-up area; and
- 80 km/h on roads not within a built-up area and within a local municipality that had the status of a township on December 31, 2002 (the Township of Puslinch falls into this category).

These provisions, commonly referred to as the urban and rural statutory speed limits, respectively, apply to all roads without MAXIMUM SPEED signs posted.

Section 128, subsection (2) permits municipal councils to prescribe rates of speed that differ from the statutory limits on roads under their jurisdiction. The speed limit set must be less than 100 km/h.



Section 128, subsection (2.1) allows municipalities to prescribe rates of speed lower than 50 km/h for all roads within a designated area. When the municipality posts gateway speed limit signs at entry and exit points to this designated area, all streets within that area assume the same speed limit.

Studies have shown that drivers will generally choose the speed that allows them to reach their destination as quickly as possible without endangering themselves, others, or their property. Posted speed limits are one factor, but not the only not the most important consideration for a motorist in selecting their operating speed. Other tools like increasing law enforcement presence, educating drivers on the risks of speeding, and/or changing the design of a roadway tend to be more effective and usually necessary to realize meaningful long-term change.

## **Community Safety Zones**

Pursuant to Section 214.1 (Community Safety Zones, Municipal Highways) of the HTA, the Township can designate Community Safety Zones to denote locations of heightened safety and enforcement emphasis on its roads. Community Safety Zone signs inform drivers they are entering an area the community has deemed paramount to the safety of its children and citizens. These sections of roadway are typically near schools, day care centres, playgrounds, parks, hospitals, senior citizen residences and may also be used for collision-prone areas within a community. Traffic related offences committed within Community Safety Zones are subject to increased fines. Many set fines are doubled, including speeding and traffic signal related offences.

Designating Community Safety Zones enables the Township to focus resources and attention on specific locations where safety risk to vulnerable road users is highest. However, experience from other communities suggests the signs can be ineffective in some circumstances and benefits are not commensurate with the enforcement effort required.

### **Network and Other Considerations**

The Township of Puslinch does not have its own Official Plan and relies on the Wellington County Official Plan for direction on the physical development of the municipality. [3] The Wellington County Official Plan does not define a road classification system beyond road jurisdiction. Higher order roads, most of which fall under the jurisdiction of Wellington County, function to provide capacity and mobility for traffic movement between the Township roads and Provincial highways. Roads under Township jurisdiction generally follow a standard grid, traverse rural terrain, and may or may not be hard surfaced. In the urban centres of Aberfoyle and Morriston and hamlet of Arkell more suburban style road networks exist.

### 8.2.1.3 <u>Scope</u>

The Speed Limit Policy and Community Safety Zone Policy include:

- A process for receiving, evaluating, and responding to citizen requests for speed limit changes;
- A process for establishing appropriate speed limits on Township roadways. Separate guidance is provided for urban and rural roads given their different characteristics and conditions;
- An evaluation methodology for undertaking speed limit assessments; and
- Criteria for establishing Community Safety Zones.

The policies supplement guidance contained in the Transportation Association of Canada (TAC) publications *Canadian Guidelines for Establishing Posted Speed Limits* and *Geometric Design Guide for Canadian Roads*. The document also reflects applicable Provincial legislation including the *Accessibility for Ontarians with Disabilities Act* (AODA) and the *Highway Traffic Act* (HTA).



# 8.2.2 Speed Limit Policy Statement

The Township will apply the methodology set out in the *Canadian Guidelines for Establishing Posted Speed Limits* in setting speed limits on its roads where noted. The recommended practice contained in this guidebook should be applied with sound engineering judgment.

This policy will apply to requests received for speed limit changes on Township roads. The Township should consider conducting a comprehensive speed limit review for all roads under its jurisdiction to minimize the number of such requests.

### 8.2.2.1 <u>Urban Areas</u>

The Township will maintain the statutory 50 km/h speed limit on Township roads in Hamlet Areas and Urban Centres defined on Schedule A7 (Puslinch) of the Wellington County Official Plan. If justified by analysis following the *Canadian Guidelines for Establishing Speed Limits*, the Township may consider a 40 km/h speed limit for road sections:

- Within a designated School Zone or Community Safety Zone;
- With unfavourable geometric characteristics and design speeds of 50 km/h or less (e.g., sight distance, horizontal or vertical curvature). Use of appropriate warning signs should be considered before changing the speed limit depending on length of the design feature; or
- With unprotected shared use pathways or cycling routes.

Area-wide (i.e., gateway) signing may denote the limits of speed zones comprising multiple roads in the same area.

Speed limit transition zones should be no less than 250 metres on Township roads. Refer to Ontario Traffic Manual (OTM) *Book 5 – Regulatory Signs* for guidance on the placement of speed limit signs within transition zones.

### 8.2.2.2 Rural Areas

The Township will maintain the statutory 80 km/h speed limit on Township roads outside the urban area designations shown on Schedule A7 (Puslinch) of the Wellington County Official Plan. If justified by analysis following the *Canadian Guidelines for Establishing Posted Speed Limits*, the Township may reduce speed limits for road sections:

- Within a designated School Zone or Community Safety Zone to 50 km/h;
- With unfavourable geometric characteristics and design speeds of 90 km/h or less (e.g., sight distance, horizontal or vertical curvature). The speed limit shall be set at or below the speed dictated by the geometric restriction, but no less than 50 km/h. Use of appropriate warning signs should be considered before changing the speed limit depending on the length of the design feature; or
- Where Township roads are within the area of influence of a County road with lower or higher posted speeds. The Township may consider increasing or decreasing the speed limit by 10 km/h on the Township road to bring its posted speed closer to the County road.

Speed limit transition zones should be no less than 500 metres on Township roads. Refer to Ontario Traffic Manual (OTM) *Book 5 – Regulatory Signs* for guidance on the placement of speed limit signs within transition zones.

The Township will not entertain requests for speed limit reductions on roads outside the Hamlet Areas and Urban Centres shown on Schedule A7 (Puslinch) of the Wellington County Official Plan solely to address concerns expressed by residents about the perceived safety of walking on the side or shoulder of the roadway.


## 8.2.3 Community Safety Zone Policy Statement

The Township may consider installing Community Safety Zones on a site-specific basis but will not actively pursue new locations for designation.

The Township may designate Community Safety Zones on Township roads meeting the three warrants defined in **Appendix N**. If justified, the Township will consider the following three factors before designating the zone, all of which depend on the nature and extent of the safety issue and are not prescribed by legislation:

- **Size:** A Community Safety Zone could encompass all streets surrounding a particular site or only a section of the street fronting the subject site.
- Duration: The Community Safety Zone should be removed once the identified concern is resolved.
- **Time Period**: A Community Safety Zone may be in effect during certain times of the day, days of the week, and/or months of the year.

## 8.2.4 Speed Limit and Community Safety Zone Review Process

**Figure 4** illustrates the process for responding to resident-initiated requests for speed limit changes and/or Community Safety Zones on Township roads. The five-step process for completing the review is described below.

At any point, the Township may determine the traffic concerns cited could be better addressed using other measures and may decide to administer the request through a different process, such as the Township Traffic Calming Policy or the Township Truck Route Policy. Township staff will inform the resident(s) of this decision after completing the assessment. Residents will also be advised if their request is denied for any reason.

## Step 1 – Resident Request

Residents with traffic-related concerns will submit their written request to the Township's Public Works, Parks and Facilities Department using the Community Traffic Issue Reporting Form in **Appendix M**. The requester must specify the subject street and the nature of the traffic concern. Requests received from residents living on the subject street will be given priority. Members of Township Council can also submit requests on behalf of their constituents.

## Step 2 – Initial Screening

Township staff will conduct an initial screening of the request based on the following two questions to determine if the subject street satisfies the minimum criteria for a speed limit change and/or Community Safety Zone:

- A. Has a request for a Community Safety Zone and/or speed limit modification been received or implemented within the last three years? If no, proceed to initial screening question B, or for speed limit requests, proceed to Step 4 Speed Limit Technical Assessment. If yes, but circumstances surrounding the inquiry and/or conditions in the immediate area have changed since the previous submission, still proceed to initial screening question B. For speed limit requests, proceed to Step 4 Speed Limit Technical Assessment. If yes, but circumstances surrounding the inquiry and/or conditions in the immediate area have changed since the previous submission, still proceed to initial screening question B. For speed limit requests, proceed to Step 4 Speed Limit Technical Assessment. If not, the request will be denied.
- B. <u>Only for Community Safety Zone Reviews:</u> Are one or more of the following pedestrian generating land uses present on the subject street?
  - Elementary or secondary school
  - Daycare centre
  - Retirement residence or senior's centre
  - Community centre
  - Hospital



 High pedestrian traffic locations (more than 75 pedestrians per hour for any eight hours of the day)

If no, the request is denied and the process is ended. If yes, proceed to Step 3 – Community Safety Zone Technical Assessment.







## Step 3 – Community Safety Zone Technical Assessment

For requests satisfying the initial screening, Township staff will assess whether a Community Safety Zone is justified based on the Community Safety Zone Warrants provided in **Appendix N**.

## Step 4 – Speed Limit Technical Assessment

For requests satisfying the initial screening, Township staff will assess whether a speed limit change is justified based primarily on the methodology set out in the *Canadian Guidelines for Establishing Posted Speed Limits*.

If the subject street does not meet the requirements for a speed limit change, Township staff will consider whether the concerns cited could be better addressed using other measures and may decide to administer the request through a different process, such as the Township Traffic Calming Policy or Township Truck Route Policy.

If a subject street meets the requirements for a speed limit change or does not meet the requirements for a speed limit change but meets the requirements for a Community Safety Zone, Township staff will proceed to Step 5 (Council Approval).

#### Step 5 – Council Approval

After completing the technical assessments, Township staff will present the recommended speed limit change and/or Community Safety Zone to Council for approval. An amendment to the Consolidated Regulatory Signs By-law will be required to implement the new speed limit and/or Community Safety Zone.

Upon receiving Council approval, Township staff will install the official signs needed to enact the changes.

## Step 6 – Monitoring and Evaluation

Following implementation, Township staff will evaluate the effectiveness of the speed limit change and/or Community Safety Zone for the subject street and monitor its impact on the surrounding road network. The Township may conduct speed surveys to quantify the change in vehicle speeds.

## 8.3 TRUCK ROUTE POLICY

## 8.3.1 Introduction

## 8.3.1.1 <u>Purpose</u>

The **Truck Route Policy** provides guidelines and principles for identifying acceptable truck routes in the Township of Puslinch based on sound engineering, ensuring adherence to other Township policies, and minimizing impacts on the environment, social fabric, and economic sustainability. The policy aims to balance the needs of commerce and the trucking industry with the desire to minimize the impacts of trucks on sensitive land uses.

## 8.3.1.2 Objectives

The safe and efficient movement of goods is important to economic development and commerce in the Township. Trucks play an important role for local businesses, delivering raw materials to manufacturers and transporting finished products to market. Their relevance is heightened in communities like the Township with limited or no access to alternative freight shipping modes, namely rail, air, and water. Without other options, local businesses and residents depend almost entirely on trucking for access to markets and the supply of essential commodities.

The movement of trucks needs special consideration given their increased size and weight and perceived negative impacts on safety, congestion, noise, vibration, air quality, and livability in communities. Many



municipalities have established truck routes to define a network of safe, efficient, and connected roadways and related operating procedures for trucks travelling within and through their jurisdictions. These policies aim to balance the needs of commerce and the trucking industry with the desire to minimize the impacts of heavy vehicles on sensitive land uses.

## 8.3.1.3 <u>Scope</u>

The Truck Route Policy incorporates best practices with local context to identify a network of routes and supporting measures that facilitate movement for heavy vehicles, enhance quality of life for residents, and minimize Township road maintenance costs. The policy:

- Establishes a truck route network (Section 8.3.2);
- Provides a roadway signage strategy for demarcating these routes (Section 8.3.3);
- Addresses freight movement needs in planning (Section 8.3.4); and
- Sets out the basis of a truck route by-law (Section 8.3.5).

For the purposes of this policy, a truck is defined as "a motor vehicle, other than a bus, which is larger than a passenger vehicle, sport utility vehicle (SUV), pick-up truck or van, carries cargo and transports goods, freight, commodities, livestock, etc. A truck may:

- Be a single unit (cab plus cargo area) or a combination vehicle (tractor and trailer(s));
- Have a variety of different cargo carrying configurations enclosed, flatbed, open with sidewalls, containers, automobile rack, etc.;
- Be operated under a for-hire common carrier or private carrier; or
- Also be operated by a truckload carrier (e.g., single load transported from origin to destination) or a 'less than truckload' (LTL) carrier." [4]

## 8.3.1.4 Guidance

## Wellington County Official Plan

It is the goal of the Wellington County Official Plan, in Section 12.1, to "encourage the development of safe and efficient transportation systems which are both environmentally responsible and convenient for users. The County will co-operate with surrounding jurisdictions to develop a transportation system that recognizes the mobility of people within [the] area and their need for effective inter-regional transportation systems." [3] Section 12.5.3 (Major Roads) further states that "major roadways are expected to provide and serve high volumes of traffic including truck traffic."

The Township relies on a well-defined grid network of Provincial highways, County roads, and Township roads to serve local travel needs. Section 12.5.4 (Local Roads) notes that "rural roads laid out along original township concession and lot lines often provide important collector functions and operate at reasonably high speeds, whereas urban roads may be classified as arterial, collector, or local routes to recognize a hierarchy of functions..."

## Truck Route Specific Policies

Neither the Township of Puslinch or Wellington County currently have a truck route policy or broader goods movement strategy. All County roads and Provincial highways within the Township serve as goods movements routes.



## **Other Guidance**

The Truck Route Policy is influenced by guidance from Provincial agencies and industry groups, as well as initiatives of other municipalities. Notable guidance includes the:

- Ministry of Transportation *Freight-Supportive Guidelines*, which helps local jurisdictions plan available land, design sites, and manage municipal transportation networks to support effective freight movement.
- Ontario Trucking Association *Local Truck Routes: A Guide for Municipal Officials*, which provides advice on establishing truck routes that preserve mobility for all roadway users, including the safe and efficient movement of freight to grow the local economy.
- City of Hamilton *Truck Route Master Plan*, which offers insight into the process of establishing a comprehensive truck route network and policies for signage.

The policy also reflects applicable Provincial policy and legislation including the Provincial Policy Statement, *Accessibility for Ontarians with Disabilities Act* (AODA), and the *Highway Traffic Act* (HTA).

## 8.3.2 Truck Route Network

## 8.3.2.1 Rationale and Approach

The Township will establish a truck route network to manage and regulate the flow of trucks on Township of Puslinch roads. For the purposes of this policy, a "truck route" is defined as a road segment formally designated for trucks to use when traveling through or within the Township.

The truck routes are denoted on the most suitable roads to the greatest extent possible, while limiting intrusion into designated Urban Centres and Hamlet Areas such as Aberfoyle, Morriston, and Arkell to the minimum possible. The goal is to define the preferred method of moving trucks through the Township with a network of routes that:

- Are safest for the movement of heavy vehicles;
- Avoid sensitive land uses like schools, residential areas, and community facilities;
- Support local and regional commerce and industry; and
- Provide sufficient capacity and adequate design features to accommodate the anticipated volume, size, and weight of vehicles.

The truck route network in Puslinch is designed to direct truck traffic to major roads (primarily Provincial highways and County roads) intended for use by heavy vehicles and avoid minor streets (Township roads) with more sensitive abutting land uses. It is based on the principle that heavy vehicles should stay on designated routes and only use minor streets to access local destinations.

Consistent with this philosophy, the Township will introduce a primarily permissive signing system to denote the truck route network. This type of system offers better guidance to truck drivers, minimizes the potential for confusion, and supports consistent enforcement. A predominately permissive system also requires far fewer signs than an entirely restrictive one, in which all roads not forming the network must be signed. As well, it recognizes heavy vehicles with local origins or destinations can still travel on any road to access a designated truck route by law, as permitted by the *Highway Traffic Act*. Section 8.3.3 describes the proposed "hybrid" roadway signage strategy in further detail.

## 8.3.2.2 <u>Establishing the Truck Routes</u>

The process of developing the permissive truck route network involved identifying a series of roadway segments suitable (and preferred) for heavy vehicle use based on the following factors:



- Existing truck routes and restrictions;
- Roadway classification and jurisdiction;
- Adjacent land uses;
- Road condition and structural capacity;
- Bridge locations;
- Network improvements; and
- Traffic volumes.

Other considerations also factored into the assessment, helping to justify the inclusion or exclusion of specific road sections from the network. These include:

- Social, environmental, and economic impacts Routes should pose the least visual, safety, noise, vibration, and traffic impacts while offering the most efficient routes possible to deliver goods expeditiously.
- Route connectivity, continuity, and consistency Routes should link key destinations in a logical, direct manner, providing for uninterrupted, non-circuitous travel for trucks while still avoiding sensitive land uses.
- **Parallel route duplication** Routes serving similar travel patterns as Provincial highways and County roads should be avoided where possible.
- Active transportation corridors Routes should avoid designated pedestrian and cycling corridors (including locations identified in the County's Road Master Action Plan). Recognizing this is not always practical (as many County roads provide the most direct route between centres), separated active transportation facilities may need to be considered.
- **Need for enforcement** Routes should be logical to vehicle operators to avoid the need for extensive police enforcement to ensure compliance.

## 8.3.2.3 Key Goods Movement Generators

Major destinations for trucks typically include commercial areas with high volumes of deliveries, industrial areas, and intermodal freight facilities. Schedule A7 of the Wellington County Official Plan illustrates the key rural employment areas and mineral aggregate areas, which include lands surrounding:

- Highway 6 between Laird Road and Wellington Road 34;
- Wellington Road 46 (Brock Road) between Highway 401 and Aberfoyle; and
- Concession Road 7 near Calfass Road.

## 8.3.2.4 <u>Preferred Network</u>

**Figure 5** illustrates the preferred truck route network for the Township of Puslinch. The network comprises only County roads and Provincial highways.

Assuming a by-law like the template set out in **Appendix O** is enacted, trucks would be prohibited from using Township roads unless destined to or originating from a location on the subject street, with enforcement provided by the Ontario Provincial Police and/or Ministry of Transportation. **Section 8.3.3** outlines the recommended approach for reconciling signage.

Time of day restrictions may be needed for certain road sections abutting urban residential areas with numerous driveways. Trucks could be prohibited from operating overnight (e.g., between 7:00 PM and 7:00 AM) on these routes. However, alternative routing would be required during these periods. The Township should coordinate time of day restrictions with Wellington County and the Ministry of Transportation, as deemed appropriate.





## 8.3.2.5 <u>Measures to Support Truck Route Network</u>

## Infrastructure

In some instances, improvements to the roadway infrastructure forming the preferred truck route network could help to overcome perceive impediments to its use by heavy vehicle operators. Typical measures used to mitigate potential conflicts between road users, enhance the safety of trucking, and/or improve the efficiency of freight movement include:

- Wayfinding and guide sign installations to provide clear, consistent, and easily identifiable messaging to truck drivers. **Section 8.3.3** discusses recommended measures in further detail;
- Pavement marking, geometric design, and structural modifications to help trucks merging and diverging into traffic, and turning and manoeuvring at intersections, driveways, bridges, and on grades;
- Traffic signal timing and synchronization changes to reduce the number of stops and improve traffic flow; and
- Intelligent Transportation Systems (ITS) deployment to collect and communicate information pertinent to freight movement and better manage the flow of heavy truck traffic.

The Township should work with Wellington County and the Ministry of Transportation to identify and implement potential infrastructure measures as the more senior levels of government have jurisdiction over the roadways forming the preferred truck route network.

## Education and Communication

The Township should develop an education and communication campaign in association with Wellington County to inform residents, businesses, and heavy vehicle operators of the truck route network and its purpose. Education will be an important element of implementing and enforcing the truck route network and should be targeted to improve compliance and reduce inappropriate complaints.

As a first step, the Township should work with Wellington County to implement truck route mapping and signage (see **Section 8.3.3** for recommended signing). A webpage like the outline provided in **Appendix P** should also be created on the Township website. These and other education and communication techniques should be explored to disseminate information about local heavy vehicle provisions.

The Township should also consider forming a liaison committee with local businesses, the trucking industry, enforcement entities, community representatives, and Wellington County to facilitate ongoing communication about trucking. Having a common understanding of the issues, educating and building awareness, keeping an open dialogue, and organizing and working together to craft solutions can help to avoid misconceptions and foster mutual cooperation.

## Enforcement

Assuming a by-law like the template set out in **Appendix O** is enacted, failure to adhere to the truck route network and other heavy truck restrictions could result in fines under the *Highway Traffic Act*. For this reason, the Township should work with the Ontario Provincial Police and Ministry of Transportation to enforce and refine the proposed provisions.

## 8.3.3 Truck Route Signage Strategy

## 8.3.3.1 <u>Rationale and Approach</u>

Denoting the truck route network using clear, consistent, and easily identifiable roadway signage provides clarity to truck drivers and helps ensure compliance with municipal regulations. Signage identifying the truck routes is



expected to reduce the number of heavy vehicles using Township roads unnecessarily, improve safety, and reduce damage and maintenance costs to the Township's infrastructure.

As noted in **Section 8.3.2**, the truck route network will feature a "hybrid" signing system. This system combines permissive signs (Rb-61 TRUCK ROUTE and Rb-61t MOVEMENTS PERMITTED Tab) directing heavy vehicles to the prescribed truck routes. Restrictive signs (Rb-62 NO HEAVY TRUCKS) may be used to prohibit access to streets: where truck traffic is undesirable or less safe; experiencing poor compliance with permissive signing; and/or where drivers maybe confused.

## 8.3.3.2 Signage Hierarchy

The Ontario Traffic Manual (OTM) establishes a hierarchy of roadway signs in order of importance. The following sign types are proposed for the truck route network:

- Regulatory signs will inform truck drivers of actions needed to comply with the truck route by-law. The signs are enforceable pursuant to the *Highway Traffic Act* and the enabling municipal by-law, disregard of which would constitute a violation. **Figure 6** illustrates the regulatory signs to be used.
- Guide and information signs will supplement the regulatory signage and be installed at strategic locations to direct truck drivers to/along the routes and/or bring awareness to the truck route network. **Figure 7** illustrates the guide and information signs to be used, which can be described as follows:
  - Gateway signs will be used at entries into the Township and on roads at Highway 401 or Highway 6 interchanges to advise truck drivers and other motorists of the truck route network;
  - Alternate signs will be used in advance of intersections to inform truck drivers of designated routes on adjoining Wellington County roads;
  - Directional signs will be used approaching/at intersections to inform truck drivers where routes change direction; and
  - Boundary signs will be used at entries into the Township without Gateway signs to inform truck drivers and other motorists of the requirement for heavy vehicles to follow the truck route network.

## Figure 6: Regulatory Signs for Truck Routing



TRUCK ROUTE (Rb-61)





MOVEMENTS PERMITTED Tab (Rb-61t)

NO HEAVY TRUCKS (Rb-62)



## Figure 7: Guide and Information Signs for Truck Routing



## 8.3.3.3 <u>Recommended Signing Plan</u>

**Figure 8** illustrates the locations of recommended signs to implement the truck route network. The figure identifies the proposed sign type for each location. In addition, Boundary signs, as shown above, should be installed on each road entering the Township without a Gateway sign. The Township may consider supplementing the recommended plan with additional signs if further guidance or clarification is required.

## 8.3.3.4 <u>Use of Restrictive Signage</u>

Existing restrictive signage (Rb-62 NO TRUCKS) will be maintained at all current locations until signs need to be replaced. At that time, the Township will review the need to retain the signs based on the following five-step process:

- 1. Confirm history of complaints for the area with police.
- 2. Verify issue by collecting and analyzing truck volume data (particularly illegal movement data);
- 3. If there is a demonstrated concern or issue, install additional permissive signage to reinforce the designated routes;
- 4. If there continues to be a demonstrated need, target area for police enforcement and monitor results; and
- 5. If additional, redundant permissive signage and/or police enforcement do not significantly improve the situation, implement restrictive signage.

The Township may consider the installation of new restrictive signage on roads that do not form part of the truck route network subject to the criteria and procedure described above.

## 8.3.4 Freight Movement Needs in Planning

Incorporating freight movement needs into land use and transportation planning and site design can help ensure trucking occurs safely and efficiently with less impact on sensitive land uses in the future. The *Freight-Supportive* 



*Guidelines* provide guidance on a range of potential strategies and actions that explicitly consider freight in the planning process, as summarized below.

## 8.3.4.1 Land Use and Transportation Planning

Coordinating and integrating land use planning with transportation planning is an important step in creating an efficient, complete, and sustainable community. To this end, the Township should explicitly consider freight movement and trucking when carrying out land use and transportation planning exercises, such as preparing new or updated planning policies and/or zoning by-laws. Preparation of this truck route policy is an example of such a strategy.

The Township should consider requesting a policy in the Wellington County Official Plan that provides support and direction for local freight movement and specifically addresses truck route planning. Protecting industrial and/or commercial lands located near identified truck routes, particularly properties adjacent to Highway 401 interchanges, is another strategy the Township should consider to better facilitate freight movement and minimize conflicts with trucks. Provisions should also be included in the Township's zoning by-law, such as setbacks, loading zones, ingress, and egress, to support freight movement and address potential impacts to adjacent sensitive land uses.

In future land use planning, the Township should locate new and expanded employment areas close to or in the vicinity of transportation facilities, including the preferred truck route network. Freight-intensive land uses, specifically, should be directed to areas well served by major road and rail facilities, such as the Highway 401 corridor. This reduces the number of trucks that need to travel on local roads between locations and helps cargo move more efficiently. The location of existing and planned infrastructure should also be considered when planning employment uses, along with the separation of sensitive uses, in determining the best location for high freight generating facilities.

When planning for cycling and pedestrian movements, the Township should avoid co-locating active transportation facilities with truck routes. Alternative routes for cyclists or landscaped buffers or barriers to separate users should be considered.





## 8.3.4.2 <u>Site Design</u>

Proper design of vehicle circulation and loading facilities at commercial and industrial sites results in development that blends more seamlessly into the surrounding community and limits noise and air pollution. Examples of supportive site design features include:

- Appropriate site access points that consider manoeuvrability of trucks typically serving the development;
- On-site circulation and loading docks designed to accommodate the types of vehicles expected to use the facility;
- Adequate parking, designed with appropriate dimensions and reserved for trucks;
- Appropriate building and amenity placement on site, with suitable setbacks, landscaping, noise mitigation, and lighting;
- Safe accommodation of pedestrians and cyclists; and
- Appropriate design of service lanes in strategic locations, if appropriate.

Smaller delivery vehicles are often used to transport relatively small volumes of freight and/or in built-up areas with constraints on the movement of larger trucks. The Township can improve the efficiency of small-scale delivery operations and reduce the need for heavy vehicle movements through actions such as:

- Accounting for the size and number of trucks/delivery vehicles when determining loading requirements and related infrastructure improvements in downtown Morriston and other hamlet or urban centre areas;
- Assessing opportunities for smaller retail and/or manufacturing uses to share loading facilities, after considering the typical frequency and duration of deliveries for each user; and
- Providing on-street lay-bys for short-term, time-sensitive loading activity in locations not interfering with other community uses, typically with signage indicating a limited stopping period (typically ten minutes).

Site design features to help mitigate the impacts of noise, vibration, and air quality concerns for sensitive land uses abutting truck routes include:

- Implementing buffers;
- Introducing rear lotting (in areas with moderate to high pedestrian activity);
- Providing larger setbacks;
- Installing sounds barrier walls;
- Enhancing building surface density in new and retrofit construction.

## 8.3.5 Truck Route By-law

The Township will enforce the proposed truck route network and accompanying policies through the enactment of the truck route by-law. The by-law template attached as **Appendix O** describes typical truck route regulations, detailing where, when, and to whom they apply. The by-law template:

- Defines a "truck route" and a "non-truck route";
- Lists the Township roads included in the truck route network by schedule;
- Defines the types of vehicles that must follow the designated truck routes, being:
  - Commercial motor vehicles over 5,000 kilograms in gross vehicle weight; and
  - Trailers over 1,360 kilograms in gross weight.
- Exempts certain types of vehicles from the truck route provisions including:
  - Vehicles operated by or on behalf of the Township for highway maintenance or transporting waste;
  - Trucks following a route approval through a site alternation agreement (if such a policy exists);
  - Emergency vehicles;
  - School buses; and



•

- Vehicles instructed by a police officer to operate on a truck route.
- Requires heavy vehicles to use the shortest route to or from the truck route when:
  - Hauling water;
  - o Transporting milk;
  - Serving agricultural purposes;
  - Following a temporary detour route; or
  - Delivering or providing goods or services.
  - Specifies the roads and time of year reduced load limits; and
- Prescribes penalty, obstruction, severability, enforcement, and enactment provisions.



## 9 PUBLIC ENGAGEMENT

The Township provided an open comment period for the Roads Management Plan through its "Engage Puslinch" website from May 5, 2023 to June 12, 2023. Additional comments have been received between 2018 and 2022 that Township staff have included as part of this engagement tracking.

For public comments relating to roads in general as well as this Plan, and comments received moving forward, the Township will follow the following general process:

- Comment is received and itemized in a "Public Comments Roads" register.
- Comments that do not require further investigation will be addressed within a reasonable timeline and confirmation will be provided to the commenting author. No further action will be required. These comments are expected to be minor in nature and generally related to maintenance of existing roads (e.g., broken signs, potholes, vegetation trimming, etc.).
- An internal review will be initiated for any comments received that require further investigation, consultation with standards and guidelines, or retention of third-party specialists to inform the review process and provide recommendations. The Township will endeavour to review and provide a response to the commenting author within 30 days; however, depending on the level of review required, this response time may vary. Comments of this nature are anticipated to relate to expansions to existing Township facilities or enhancements to levels of service (e.g., additional signage, additional roadside safety features, etc.).
- If the review determines that an action is recommended, a staff report will be prepared for Council review
  and approval as these will generally have budget implications. The staff report will detail the initial budget
  implications of the action and future maintenance / capital expenditures that are to be expected. The
  Township will notify the commenting author of the results of the review and that the staff report will be
  prepared and presented to Council in advance of the next budgeting cycle, along with any other
  comments where an action is required. This is anticipated to generally occur in September of each year.

Refer to **Appendix Q** for the public engagement notice, comments received as part of this Plan and proposed responses to be provided by the Township upon Council acceptance of this Plan. A general summary of the recommended outcomes of these comments is as follows:

- Forward comments and requests received that did not apply to Township infrastructure to the required municipal government (i.e., Wellington County, City of Guelph, Ontario Ministry of Transportation).
- Initiate reviews in response to comments received following the practices, policies, guidelines and standards provided within this Plan and following the practice above.
- Implement a comment tracking register for current and future public comments regarding road-related facilities (refer to **Appendix Q** for a template register).

## **10 RECOMMENDATIONS & CONCLUSIONS**

The following is a brief summary of recommendations made based on the information contained within this Plan.

- It is recommended that annual roads capital funding for road rehabilitation be approximately \$2.7M based on the Road Condition Assessment indicating that the total 10 Year Road Capital Needs are \$27.1M.
- It is recommended that the Township's *Municipal Development Standards* and guidance within the Inventory Manual be used for the planning, design and construction of capital improvements on its existing road network, to the extent practical and feasible.



- It is recommended that the proposed cross-section for surfacing of existing roads be implemented as a guideline. Each road section will need to be evaluated on a case-by-case basis for confirm suitability of asphalt depths and thicknesses, drainage, subbase suitability as well as lane and shoulder widths.
- Data provided by the Township suggests that the current approach used to maintain the existing asphalt road network is allowing the Township to realize an appropriate service life out of each road asset. It is recommended that geotechnical investigations are completed on existing roads scheduled for resurfacing to inform asphalt and road base thicknesses for road segments that are not realizing a minimum service life of 15 years.
- Where a single lift of asphalt is to be applied, whether for a gravel road conversion or where budget does not permit a two-lift road, and in the absence of a geotechnical investigation, it is recommended that the Township increase its budget to accommodate a single lift of HL 4 Surface Asphalt at a minimum thickness of 60 mm. Our experience has been that premature restoration of isolated sections of road due to paving at thicknesses less than 50 mm is comparable to the additional cost of paving the additional 10 mm of asphalt. The additional 10 mm of asphalt has, in our experience, mitigated issues of paving at thicknesses less than 50 mm when combined with increased emphasis on proper grading of the road prior to paving.
- It is recommended that the Township increase the asphalt thickness for resurfacing projects on roads with an AADT greater than 2,000 vehicles to a minimum asphalt thickness of 100 mm, as prescribed within the Inventory Manual. Geotechnical investigations should be completed to confirm road base construction and subbase conditions. Additional studies may be required to confirm AADT values for identified road sections.
- For roads that need to consider truck traffic, the Township has historically applied 100 mm of asphalt (50 mm HL 4 Binder Course, 50 mm HL 4 Surface Course). In the absence of a geotechnical investigation report, It is recommended that the Township <u>consider</u> increasing its budget to allow for the thickness of asphalt applied as part of its surfacing program to be the minimum thickness provided in the Township's *Municipal Development Standards* standard drawing STD-101, which is 110 mm (60 mm HL 8 Binder Course, 50 mm HL 4 Surface Course) for all roads requiring consideration for truck traffic.
- It is recommended that the Township follow the provided flow chart for conversions of existing gravel roads, including an evaluation of surface treatment versus asphalt for hard-surfacing type. Ditching and subbase improvement programs should be implemented to provide adequate drainage and strength to road prior to hard-surfacing. A minimum of 1 year between ditching and subbase improvements and hard-surfacing is recommended. In general, a three year approach should be taken to gravel road conversions: investigate and gather information in Year 1; complete required platform, drainage and subbase upgrades in Year 2; hard-surface in Year 3.
- Where the Township wishes to proceed with hard-surfacing of gravel roads where the recommended criteria have not been met, it is recommended that the revised criteria are documented and guidelines are developed for staff to administer the decision making process.
- It is recommended that the Township <u>consider</u> the process for property owner requests to hard-surface an existing gravel road for further development and adoption into a formal practice, if desired. A petition form should also be developed by the Township for use by property owners when making requests under the practice.
- It is recommended that the Township institute a ditching program for its road network. An annual budget of \$50,000 is suggested until the Township has completed one or two seasons of ditching and can more-reasonably estimate an annual amount to carry for future years.
- It is recommended that the Township's annual gravel road budget be increased to accommodate placement of granular material at a minimum thickness of 60 mm. Following application of this recommended increased thickness, as well as completion of ditching, a review to determine if the application of gravel can be increased from every 2 years can be completed.
- It is recommended that the Township utilize the preliminary design checklist for capital works projects provided. The first iteration of this checklist should be completed (or revised) within 2 years prior to the



desired capital project's scheduled construction date to ensure that the budget can be refined ahead of the planned implementation.

- It is recommended that the Township allocate \$10,000 in the current Roads Maintenance Budget in 2023 for crack sealing. Prior to contracting this service, Township staff should review the current sections of road which have a double lift of asphalt to identify crack sealing candidate locations. As well, the Township should follow-up with Wellington County to explore the opportunity of adding the Township locations onto the Wellington County crack sealing contract. The advantages here would be possible cost savings of being part of a larger contact and the ability to share construction inspection services. At the completion of the crack sealing program in 2023, the budget should be re-examined to reflect the experience and knowledge achieved through the implementation of this program and possible needs in 2024.
- It is recommended that the Traffic Management Policies outlined this Plan be implemented.
- It is recommended that the Township consider conducting a comprehensive speed limit review for all roads under its jurisdiction with a posted speed above 60 km/h. An approximate budget for this study would be \$30,000.
- It is recommended that the Township implement the recommendations provided within the Public Engagement section of the Plan for responding to public comments and internal tracking.



## 11 BIBLIOGRAPHY

- [1] Transportation Association of Canada, "Canadian Guide to Traffic Calming," Ottawa, ON, 2016.
- [2] Institute of Transportation Engineers, "Subcommittee of Traffic Calming," 1997.
- [3] Wellington County, "Official Plan," 1999.
- [4] Ontario Trucking Association, "Local Truck Routes: A Guide for Municipal Officials," 2011.

# APPENDIX A: TOWNSHIP ROAD NETWORK INVENTORY TABLES AND ROAD PCI MAPS

									GMBP:	121149	
Asset ID	Street Name	From Street	To Street	Length (m)	Surface	Environment	Speed Limit	Estimated Traffic Range	Truck Route	Minimum Maint. Class	PCI
211	Ann Street	County Road 36 (Badenoch Street)	End	63.1	Gravel	RUR	50.0	0-49		6	83.6
30	Back Street	Main Street	Badenoch St E	345.5	Paved	SU	50.0	50-199		6	74.9
214	Beiber Road	Nicholas Beaver Road	End	169.7	Paved	URB	50.0	200-499	Y	5	74.0
208	Boreham Drive	County Road 37 (Arkell Road)	County Road 41 (Watson Road South)	442.3	Paved	SU	50.0	200-499		5	74.1
200	Boyce Drive	County Road 46	End	253.5	Gravel	RUR	50.0	0-49		6	82.1
185	Bridle Path	Brock Rd N	Bridle Path	446.0	Paved	URB	50.0	200-499		5	57.5
204	Bridle Path	Bridle Path	Bridle Path	1116.0	Paved	URB	50.0	200-499		5	65.0
27	Calfass Road	Concession 7	Victoria Street	2077.4	Gravel	RUR	50.0	50-199		6	63.4
27b	Calfass Road	Victoria Street	Queen Street (Highway 6)	97.0	Paved	URB	50.0	200-499		5	89.3
201	Carriage Lane	Bridle Path	End	738.0	Paved	URB	50.0	200-499		5	85.8
129	Carter Road	Arkell Road (County Road 37)	Cooks Mill Road	1849.2	Gravel	RUR	50.0	200-499		5	83.6
202	Cassin Court	Daymond Drive	End	164.2	Paved	URB	50.0	200-499		5	82.7
50	Cockburn Street	Country Road 46	Old Brock Road	123.5	Paved	URB	30.0	200-499		6	89.7
12	Concession 1	Townline Road	transition	1269.2	Paved	RUR	80.0	1000-1999		3	66.7
14	Concession 1	Sideroad 10 South	County Road 35	2068.7	Paved	RUR	80.0	1000-1999		3	68.8
15	Concession 1	County Road 35	Sideroad 20 South	2073.8	Paved	RUR	60.0	1000-1999		4	93.9
16	Concession 1	Sideroad 20 South	Sideroad 25 South	2062.4	Paved	RUR	60.0	1000-1999		4	94.7
17	Concession 1	Sideroad 25 South	Concession 7	2065.1	Paved	RUR	60.0	1000-1999		4	94.7
19	Concession 1	Leslie Road W	Highway 6	546.9	Paved	RUR	80.0	200-499		4	55.8
13a	Concession 1	transition	transition	2112.9	Paved	RUR	80.0	1000-1999		3	68.8
13b	Concession 1	transition	Sideroad 10 South	751.8	Paved	RUR	80.0	1000-1999		3	71.7
18	Concession 1/Leslie Rd W	Concession 7	Highway 6	2350.3	Paved	RUR	80.0	1000-1999		3	58.6
142	Concession 11	Little Road	Leslie Road East	2065.7	Gravel	RUR	60.0	50-199		5	56.7
143	Concession 11	Sideroad 17	County Road 36	1320.9	Gravel	RUR	60.0	50-199		5	77.8
144	Concession 11	County Road 34	Sideroad 17	1960.4	Gravel	RUR	60.0	50-199		5	75.9
145	Concession 11	Maltby Road East	County Road 34	2053.6	Gravel	RUR	60.0	50-199		5	74.9
146	Concession 11	Hume Road	Maltby Road East	2053.6	Gravel	RUR	60.0	50-199		5	74.9
32	Concession 2	Sideroad 10 South	County Road 32	2101.3	Paved	RUR	80.0	500-999		4	94.6
33	Concession 2	Sideroad 10 South	County Road 35	2063.5	Paved	RUR	80.0	500-999		4	51.9
34	Concession 2	County Road 35	Sideroad 25 South	2096.2	Paved	RUR	80.0	500-999		4	55.9
35	Concession 2	Sideroad 20 South	Sideroad 25 South	2050.2	Paved	RUR	60.0	500-999	Y	4	54.2
36	Concession 2	Concession 2/2A	Concession 7	261.4	Gravel	RUR	60.0	0-49		6	71.1
36	Concession 2/2A	Sideroad 25 South	Concession 2	639.3	Paved	RUR	60.0	500-999	Y	4	64.4
37	Concession 2A	Concession 2	Concession 7	235.3	Paved	RUR	60.0	500-999	Y	4	47.1
55	Concession 4	Forestell Road	County Road 32	1239.0	Paved	RUR	80.0	200-499		4	85.3
56	Concession 4	County Road 32	Sideroad 10 North	2072.0	Paved	RUR	80.0	200-499		4	95.0
57	Concession 4	Sideroad 10 North	Sideroad 12 North	823.3	Paved	RUR	60.0	200-499		5	97.4
58	Concession 4	Sideroad 12 North	County Road 35	1235.7	Paved	RUR	80.0	200-499		4	96.0
59	Concession 4	County Road 35	Sideroad 20 North	2068.3	Paved	RUR	80.0	200-499		4	63.9
161	Concession 4	Curve in Road	Highway 6	784.8	Paved	RUR	80.0	200-499		4	67.1

									GMBP:	121149	
Asset ID	Street Name	From Street	To Street	Length (m)	Surface	Environment	Speed Limit	Estimated Traffic Range	Truck Route	Minimum Maint. Class	PCI
113	Concession 7	Concession 1	Gore Road	1922.6	Gravel	RUR	60.0	200-499		5	76.9
114	Concession 7	Concession 1	Calfrass Road	1031.7	Gravel	RUR	60.0	500-999		4	58.6
114	Concession 7	Calfrass Road	Concession 2A	1619.2	Gravel	RUR	60.0	500-999		4	35.7
115	Concession 7	Concession 2A	Mason Road	428.2	Paved	RUR	60.0	3000-3999	Y	3	71.4
116	Concession 7	Mason Road	McLean Road West	235.7	Paved	RUR	60.0	3000-3999	Y	3	97.4
118	Concession 7	County Road 34	Start of Pavement	35.3	Gravel	RUR	60.0	50-199		5	60.8
118	Concession 7	Start of Pavement	Maltby Road West	2017.4	Paved	RUR	60.0	50-199		5	78.2
81	Cooks Mill Road	Carter Road	Bridge	596.7	Gravel	RUR	50.0	200-499		5	80.0
82	Cooks Mill Road	Bridge	County Road 41	437.0	Paved	SU	50.0	200-499		5	69.1
180	Currie Drive	County Road 36 (Badenoch Street)	Highway 6 (Queen Street)	888.1	Paved	SU	50.0	200-499		5	89.7
202	Daymond Drive	Brock Rd N	End	441.7	Paved	URB	50.0	200-499		5	78.9
195	Deer View Ridge	Hammersley Drive	Fox Run Drive	665.6	Paved	URB	50.0	200-499		5	69.4
44	Ellis Road	County Road 33	County Road 32	2185.5	Paved	RUR	50.0	500-999		5	93.8
45a	Ellis Road	6725 Ellis Road	Sideroad 10 North	448.6	Paved	RUR	80.0	200-499		4	83.8
45b	Ellis Road	County Road 32	6725 Ellis Road	1866.5	Paved	RUR	80.0	200-499		4	79.4
79	Farnham Road	Arkell Road (County Road 37)	Carter Road	962.4	Gravel	RUR	50.0	50-199		6	72.1
66	Forestell Road	Roszell Road	County Road 32	1220.7	Paved	RUR	60.0	1000-1999		4	93.2
67	Forestell Road	County Road 32	Sideroad 10 North	2079.9	Paved	RUR	80.0	1000-1999		3	94.3
68	Forestell Road	Sideroad 10 North	Sideroad 12 North	821.3	Paved	RUR	80.0	1000-1999		3	94.0
69	Forestell Road	Sideroad 12 North	County Road 35	1239.7	Paved	RUR	80.0	1000-1999		3	94.3
196	Fox Run Drive	Deer View Ridge	Fox Run Drive transition to curb	415.6	Paved	SU	50.0	200-499		5	73.7
205	Fox Run Drive	Fox Run Drive transition to median	Fox Run Drive transition to curb	200.1	Paved	URB	50.0	200-499		5	70.1
206	Fox Run Drive	Brock Rd N	Fox Run Drive transition to median	160.5	Paved	URB	50.0	200-499		5	65.4
207	Fox Run Drive	Fox Run Drive	Fox Run Drive	650.8	Paved	SU	50.0	200-499		5	73.2
46	Gilmour Road	County Road 46 (Brock Road)	subdivision entrance	248.1	Paved	URB	60.0	200-499		5	76.2
47	Gilmour Road	Victoria Road South	new subdivision	1729.1	Gravel	RUR	60.0	200-499		5	74.2
1	Gore Road	Townline Road	Sideroad 10	4138.0	Paved	RUR	60.0	1000-1999		4	85.6
2	Gore Road	Sideroad 10 South	County Road 52 (Cooper Road)	1529.7	Paved	RUR	60.0	1000-1999		4	89.3
3	Gore Road	County Road 35	Foreman Road	2067.0	Paved	RUR	60.0	1000-1999		4	66.4
4	Gore Road	Sideroad 20 South	Valens Road	2606.6	Paved	RUR	60.0	1000-1999		4	42.2
5	Gore Road	Valens Road	Concession 7	1526.6	Paved	RUR	60.0	1000-1999		4	54.2
6	Gore Road	Concession 7	Lennon Road	959.1	Paved	RUR	60.0	1000-1999		4	51.8
53	Hammersley Road	County Road 46	End	1002.5	Gravel	RUR	60.0	0-49		6	75.9
77	Hume Road	Nassagaweya-Puslinch Townline	Watson Road South	2344.4	Paved	RUR	60.0	200-499		5	71.7
157	Jones Baseline	Stone Road East	End	434.6	Gravel	RUR	60.0	0-49		6	62.5
198	Kerr Crescent	McLean Road West	McLean Road West	834.7	Paved	SU	50.0	500-999	Y	5	88.5
210	Laing Court	Currie Drive	End	113.5	Paved	SU	50.0	50-199		6	82.7
72	Laird Road West	End	County Road 32	427.4	Paved	RUR	50.0	0-49		6	57.5
72	Laird Road West	County Road 32	Sideroad 10 North	2063.8	Paved	RUR	60.0	2000-2999	Y	4	95.9
73	Laird Road West	Sideroad 10 North	Pioneer Trail	828.4	Paved	RUR	60.0	2000-2999	Y	4	95.9

									GMBP:	121149	
Asset ID	Street Name	From Street	To Street	Length (m)	Surface	Environment	Speed Limit	Estimated Traffic Range	Truck Route	Minimum Maint. Class	PCI
74	Laird Road West	Pioneer Trail	County Road 35	1239.1	Paved	RUR	60.0	2000-2999	Y	4	97.4
20	Leslie Road West	Highway 6	Victoria Road South	2045.0	Paved	RUR	80.0	200-499		4	92.1
21	Leslie Road West	Victoria Road South	Watson Road South	2015.6	Paved	RUR	80.0	200-499		4	60.8
22	Leslie Road West	Watson Road South	Bridge 5 (Mountsberg)	543.2	Paved	RUR	80.0	50-199		4	57.1
23	Leslie Road West	Mountsberg Bridge	Curve at Hwy 401	1204.8	Paved	RUR	80.0	50-199		4	51.1
25	Leslie Road West	Curve at Highway 401	Puslinch-Flamborough Townline	1018.1	Paved	RUR	80.0	50-199		4	46.3
31	Little Road	Nassagaweya-Puslinch Townline	County Road 36	389.9	Gravel	RUR	60.0	50-199		5	75.0
8	MacPherson's Lane	Puslinch-Flamborough Townline	Highway 6	878.6	Gravel	RUR	60.0	0-49		6	74.0
121a	Maddaugh Road	14th Concession East	Highway 6	487.7	Paved	RUR	60.0	500-999		4	63.7
121b	Maddaugh Road	Puslinch-Flamborough Townline	14th Concession East	507.9	Paved	RUR	60.0	500-999		4	74.7
29	Main Street	Badenoch St E	Morriston Ball Park	256.0	Paved	SU	50.0	50-199		6	71.4
64	Maltby Road East	Watson Road South	Concession 11	2070.3	Gravel	RUR	60.0	50-199		5	46.0
64	Maltby Road East	Concession 11	Nassagaweya-Puslinch Townline	308.0	Gravel	RUR	60.0	50-199		5	22.0
63a	Maltby Road East	Victoria Road South	1161m East of Victoria Road South	1161.0	Paved	RUR	80.0	50-199		4	78.4
63b	Maltby Road East	1161m East of Victoria Road South	Watson Road South	924.9	Paved	RUR	80.0	50-199		4	64.3
52	Maple Leaf Lane	County Road 46	End	266.2	Paved	SU	30.0	50-199		6	57.2
38	Mason Road	Concession 7	End	222.6	Paved	SU	50.0	50-199		6	43.3
40	McLean Road East	County Road 46 (Brock Road)	Sideroad 25 North	3052.8	Paved	RUR	60.0	3000-3999	Y	3	96.3
158	McLean Road East	Brock Road South	End	652.1	Paved	SU	50.0	1000-1999	Y	5	97.4
159	McLean Road East	Victoria Road South	End	361.8	Gravel	RUR	50.0	0-49		6	69.2
165	McLean Road/Concession 7	Sideroad 25 North	County Road 34	829.5	Paved	RUR	60.0	3000-3999	Y	3	94.9
149	Nassagaweya-Puslinch Townline	Leslie Road East	Sideroad 10 Nassagaweya	141.3	Gravel	RUR	60.0	50-199		5	70.1
150	Nassagaweya-Puslinch Townline	Leslie Road East	Little Road	2062.8	Gravel	RUR	60.0	50-199		5	69.2
152	Nassagaweya-Puslinch Townline	Sideroad 17	End	826.4	Gravel	RUR	60.0	50-199		5	50.3
162	Nicholas Beaver Road	Winer Rd	Brock Rd S	957.3	Paved	URB	60.0	500-999	Y	4	68.7
78	Niska Road	Bailey Bridge	Whitelaw Road	613.7	Paved	RUR	50.0	2000-2999		5	85.9
181	Ochs Drive	Currie Drive	County Road 36 (Badenoch Street)	576.2	Paved	SU	50.0	50-199		6	90.2
51	Old Brock Road	County Road 46	Cockburn Street	227.3	Paved	URB	50.0	50-199		6	80.1
51	Old Brock Road	Cockburn Street	End	115.8	Paved	SU	50.0	0-49		6	56.6
103	Pioneer Trail	Laird Road West	Niska Road	2080.9	Gravel	RUR	60.0	50-199		5	76.9
9	Puslinch-Flamborough Townline	Victoria Road South	Maddaugh Road	1081.3	Paved	RUR	60.0	500-999		4	80.4
10	Puslinch-Flamborough Townline	14th Concession East	Victoria Road South	1388.9	Paved	RUR	60.0	500-999		4	85.0
148	Puslinch-Flamborough Townline	Leslie Road West	Township Limits	301.4	Paved	RUR	80.0	50-199		4	43.3
90	Roszell Road	Forestell Road	Concession 4	993.8	Paved	RUR	60.0	1000-1999		4	61.9
54a	Roszell Road	Concession 4	Townline Road	1369.1	Paved	RUR	60.0	1000-1999		4	64.2
191	Settler's Road	Calfass Road	Telfer Glen	318.9	Paved	SU	50.0	50-199		6	77.6
94	Sideroad 10 North	County Road 34	Ellis Road	808.4	Paved	RUR	60.0	200-499		5	82.1
95	Sideroad 10 North	County Road 34	Concession 4	2038.6	Gravel	RUR	60.0	50-199		5	56.6
96	Sideroad 10 North	Concession Road 4	Forestell Road	1036.8	Paved	RUR	60.0	50-199		5	86.6
97	Sideroad 10 North	Forestell Road	Laird Road West	1037.7	Paved	RUR	60.0	50-199		5	62.1

									GMBP:	121149	
Asset ID	Street Name	From Street	To Street	Length (m)	Surface	Environment	Speed Limit	Estimated Traffic Range	Truck Route	Minimum Maint. Class	PCI
98	Sideroad 10 North	Laird Road West	End	137.5	Gravel	RUR	60.0	0-49		6	74.9
99a	Sideroad 10 North	Whitelaw Road	End	335.4	Paved	RUR	50.0	50-199		6	84.4
91	Sideroad 10 South	Gore Road	Concession 1	1879.1	Gravel	RUR	60.0	50-199		5	46.0
92	Sideroad 10 South	Concession 1	Concession 2	2085.8	Gravel	RUR	60.0	200-499		5	76.1
93	Sideroad 10 South	Concession 2	Concession 2	738.6	Gravel	RUR	60.0	50-199		5	72.0
100	Sideroad 12 North	Concession 4	End	335.8	Gravel	RUR	60.0	0-49		6	73.2
101	Sideroad 12 North	Forestell Road	Concession 4	1040.2	Gravel	RUR	60.0	50-199		5	57.9
43	Sideroad 17	Nassagaweya-Puslinch Townline	Concession 11	376.5	Gravel	RUR	60.0	50-199		5	39.6
106	Sideroad 20 North	County Road 34	End	1044.0	Gravel	RUR	60.0	0-49		6	75.9
108	Sideroad 20 North	County Road 34	Concession 4	2076.7	Paved	RUR	80.0	200-499		4	64.0
166	Sideroad 20 North	Concession 4	Forestell Road	1113.8	Paved	RUR	80.0	200-499		4	61.2
104	Sideroad 20 South	Gore Road	Concession 1	1890.4	Gravel	RUR	60.0	50-199		5	65.3
105	Sideroad 20 South	Concession 1	Concession 2	2093.9	Gravel	RUR	60.0	50-199		5	45.1
112	Sideroad 25 North	Concession 7	End	566.8	Gravel	RUR	60.0	50-199		5	42.9
110	Sideroad 25 South	Concession 1	Gore Road	1897.3	Gravel	RUR	60.0	50-199		5	64.5
111	Sideroad 25 South	Concession 2	Concession 1	2091.9	Gravel	RUR	60.0	50-199		5	55.0
26	Small Rd/Leslie Rd E	Nassagaweya-Puslinch Townline	Concession 11	432.7	Gravel	RUR	60.0	50-199		5	69.2
48	Smith Road	Concession 7	County Road 34	332.0	Paved	SU	60.0	50-199		5	71.9
213	Tawse Place	Nicholas Beaver Road	End	154.1	Paved	SU	50.0	50-199	Y	6	84.1
190	Telfer Glen	Queen Street (Highway 6)	End	697.8	Paved	SU	50.0	200-499		5	71.8
122	Victoria Road South	Leslie Road West	Flamborough Puslinch Townline	918.5	Paved	RUR	80.0	1000-1999		3	81.1
123	Victoria Road South	Leslie Road West	County Road 36	2232.3	Paved	RUR	80.0	1000-1999		3	77.0
124	Victoria Road South	County Road 36 (Badenoch Street)	Gilmour Road	3042.0	Paved	RUR	80.0	2000-2999		3	93.5
126	Victoria Road South	County Road 34	Maltby Road East	2074.1	Paved	RUR	80.0	4000-4999		3	68.3
125a	Victoria Road South	Gilmour Road	entrance to Aberfoyle Pit #2	357.7	Paved	RUR	60.0	2000-2999		4	95.9
125b	Victoria Road South	entrance to Aberfoyle Pit #2	County Road 34	621.8	Paved	RUR	60.0	2000-2999	Y	4	95.0
28	Victoria Street And Church Street	Calfass Road	Queen Street (Highway 6)	282.7	Paved	URB	50.0	50-199		6	69.9
133	Watson Road South	Leslie Road West	McRae Station Road	988.8	Paved	RUR	80.0	500-999		4	94.4
134	Watson Road South	bridge	Leslie Road West	565.8	Paved	RUR	80.0	500-999		4	94.6
135	Watson Road South	bridge	bridge	721.9	Paved	RUR	80.0	500-999		4	76.6
136	Watson Road South	County Road 36 (Badenoch Street)	Bridge	758.0	Paved	RUR	80.0	500-999		4	95.7
137	Watson Road South	County Road 34	County Road 36	4144.8	Paved	RUR	80.0	500-999		4	95.9
138	Watson Road South	Maltby Road East	County Road 34	2130.4	Paved	RUR	80.0	1000-1999		3	89.8
139	Watson Road South	Hume Road	Maltby Road East	2041.7	Paved	RUR	80.0	2000-2999		3	47.8
140	Watson Road South	County Road 37 (Arkell Road)	Hume Road	1647.4	Paved	RUR	80.0	2000-2999		3	78.8
209	Winer Court	Ochs Drive	End	89.4	Paved	SU	50.0	0-49		6	94.9
212a	Winer Road	McLean Road	Nicholas Beaver Road	785.8	Paved	SU	50.0	200-499	Y	5	53.8
212b	Winer Road	Nicholas Beaver Road	End	167.9	Paved	SU	50.0	50-199	Y	6	89.3

## TOWNSHIP INVENTORY - DOUBLE LIFT ASPHALT ROADS (ASSUMED)

									GMBP:	121149	
Asset ID	Street Name	From Street	To Street	Length (m)	Surface	Environment	Speed Limit	Estimated Traffic Range	Truck Route	Minimum Maint. Class	PCI
214	Beiber Road	Nicholas Beaver Road	End	169.7	URB	Paved	50.0	200-499	Y	5	74.0
208	Boreham Drive	County Road 37 (Arkell Road)	County Road 41 (Watson Road South)	442.3	SU	Paved	50.0	200-499		5	74.1
185	Bridle Path	Brock Rd N	Bridle Path	446.0	URB	Paved	50.0	200-499		5	57.5
204	Bridle Path	Bridle Path	Bridle Path	1116.0	URB	Paved	50.0	200-499		5	65.0
201	Carriage Lane	Bridle Path	End	738.0	URB	Paved	50.0	200-499		5	85.8
202	Cassin Court	Daymond Drive	End	164.2	URB	Paved	50.0	200-499		5	82.7
50	Cockburn Street	Country Road 46	Old Brock Road	123.5	URB	Paved	30.0	200-499		6	89.7
35	Concession 2	Sideroad 20 South	Sideroad 25 South	2050.2	RUR	Paved	60.0	500-999	Y	4	54.2
36	Concession 2/2A	Sideroad 25 South	Concession 2	639.3	RUR	Paved	60.0	500-999	Y	4	64.4
37	Concession 2A	Concession 2	Concession 7	235.3	RUR	Paved	60.0	500-999	Y	4	47.1
115	Concession 7	Concession 2A	Mason Road	428.2	RUR	Paved	60.0	3000-3999	Y	3	71.4
116	Concession 7	Mason Road	McLean Road West	235.7	RUR	Paved	60.0	3000-3999	Y	3	97.4
202	Daymond Drive	Brock Rd N	End	441.7	URB	Paved	50.0	200-499		5	78.9
195	Deer View Ridge	Hammersley Drive	Fox Run Drive	665.6	URB	Paved	50.0	200-499		5	69.4
196	Fox Run Drive	Deer View Ridge	Fox Run Drive transition to curb	415.6	SU	Paved	50.0	200-499		5	73.7
205	Fox Run Drive	Fox Run Drive transition to median	Fox Run Drive transition to curb	200.1	URB	Paved	50.0	200-499		5	70.1
206	Fox Run Drive	Brock Rd N	Fox Run Drive transition to median	160.5	URB	Paved	50.0	200-499		5	65.4
207	Fox Run Drive	Fox Run Drive	Fox Run Drive	650.8	SU	Paved	50.0	200-499		5	73.2
198	Kerr Crescent	McLean Road West	McLean Road West	834.7	SU	Paved	50.0	500-999	Y	5	88.5
72	Laird Road West	County Road 32	Sideroad 10 North	2063.8	RUR	Paved	60.0	2000-2999	Y	4	95.9
73	Laird Road West	Sideroad 10 North	Pioneer Trail	828.4	RUR	Paved	60.0	2000-2999	Y	4	95.9
74	Laird Road West	Pioneer Trail	County Road 35	1239.1	RUR	Paved	60.0	2000-2999	Y	4	97.4
40	McLean Road East	County Road 46 (Brock Road)	Sideroad 25 North	3052.8	RUR	Paved	60.0	3000-3999	Y	3	96.3
158	McLean Road East	Brock Road South	End	652.1	SU	Paved	50.0	1000-1999	Y	5	97.4
165	McLean Road/Concession 7	Sideroad 25 North	County Road 34	829.5	RUR	Paved	60.0	3000-3999	Y	3	94.9
162	Nicholas Beaver Road	Winer Rd	Brock Rd S	957.3	URB	Paved	60.0	500-999	Y	4	68.7
78	Niska Road	Bailey Bridge	Whitelaw Road	613.7	RUR	Paved	50.0	2000-2999		5	85.9
51	Old Brock Road	County Road 46	Cockburn Street	227.3	URB	Paved	50.0	50-199		6	80.1
213	Tawse Place	Nicholas Beaver Road	End	154.1	SU	Paved	50.0	50-199	Y	6	84.1
190	Telfer Glen	Queen Street (Highway 6)	End	697.8	SU	Paved	50.0	200-499		5	71.8
28	Victoria Street And Church Street	Calfass Road	Queen Street (Highway 6)	282.7	URB	Paved	50.0	50-199		6	69.9
212a	Winer Road	McLean Road	Nicholas Beaver Road	785.8	SU	Paved	50.0	200-499	Y	5	53.8
212b	Winer Road	Nicholas Beaver Road	End	167.9	SU	Paved	50.0	50-199	Y	6	89.3
			Total:	22.7	KMS						







# Township of Puslinch Gravel Roads - PCI



October, 2022 Project #121149 Projection EPSG:26917

# APPENDIX B: EXCERPTS FROM MTO INVENTORY MANUAL

#### <sup>#</sup>ITEM 32 **ROADSIDE ENVIRONMENT**

## CODE (R) - Rural Section

Rural Environment is defined as being where:

- Areas with sparse development

or where

Development is less than 50% of the frontage, including developed areas extending less than 300 metres on one side or 200 metres on both sides and no curbs and gutters

## CODE (S) - Semi-Urban/Suburban Section

Semi-Urban/Suburban Environment is defined as being where:

- development exceeds 50% of the frontage for a minimum of 300 metres on one side or 200 metres on both sides
  - and
- no curbs and gutters, with or without storm/combination sewers or curb and gutter on one side only without storm/combination sewers or
- for subdivisions, the majority of the lot frontages are 30 metres or greater and the roads comply with the ministry's suburban area standards (refer to Directive B-18) as a minimum,

## CODE (U) - Urban Section

Urban Environment is defined as being where:

- Curb and gutters on both sides with or served by storm/combination sewers or
- Curb and gutter on one side with or served by storm/combination sewers
- Reversed paved shoulders with or served by storm/combination sewers
- for subdivisions, the majority of the lot frontages must be less than 30 metres (refer to Directive B-18)

#### # **ITEM 33** EXISTING CLASS

## RURAL SECTIONS

Enter the Existing Class for rural sections according to the present AADT (Item 57) as follows (Classes 100 to 800 apply only to road sections with less than 4 lanes):

CODE (100) -' 01 - 49 AADT (200)- 50 - 199 AADT

Feb 1, 1991

(

300)	-	200 - 399 AADT
400)	-	400 - 999 AADT
500)	-	1000 - 1999 AADT
600)	-	2000 - 2999 AADT
700)	-	3000 - 3999 AADT
800)	-	4000 AADT and over
4LN)	-	4 or more lanes
		Dunal Franciscourse

(EXP) - Rural Expressways connect the larger cities, industrial concentrations and recreational areas. They carry large volumes of traffic moving at high speeds under free-flowing conditions.

#### SEMI-URBAN SECTIONS

Enter the Existing Class for semi-urban sections as follows:

- CODE. (ALL) Alleyways are public ways functioning as an alternative to a local street servicing business sections or off-street parking lots. They have a width of 5.0 m or more, and are continuous through a block (Refer to MTR-B51 for details).
  - (L/R) Local Residential roads provide access to residential developments.
  - (LCI) Local Commercial or Industrial roads provide access to commercial or industrial areas.
  - (C/R) Collector Residential roads serve traffic between local residential and arterial roads, and provide access to adjacent residential properties.
  - (CCI) Collector Commercial or Industrial roads serve traffic between local commercial or industrial and arterial roads, and provide access to adjacent commercial or industrial properties.
  - (ART) Arterial roads serve large volumes of all types of traffic moving at medium to high speeds. Direct access to adjacent development is limited, and traffic flow is generally uniterrupted. Design speeds range between 50 km/h and 100 km/h.

Note: Collector roads are characterized by interrupted traffic, design speeds normally between 50 km/h and 80 km/h, and equal importance given to traffic movement and land access.

#### URBAN SECTIONS

The definitions for Semi-Urban road classes also apply to the Urban environment. Enter the Existing Class for urban sections according as follows:

CODE	(ALL)	- Alleyways
	(L/.R)	- Local Residential
	(LCI)	<ul> <li>Local Commercial or Industrial</li> </ul>
	(C/R)	- Collector Residential
	(CCI)	<ul> <li>Collector Commercial or Industrial</li> </ul>
	(ART)	- Arterial
	(EXP)	- Urban Expressways serve traffic between large residential areas, industrial or commercial concentrations and the central business district. They carry high volumes of traffic, moving at high speeds under free-flowing conditions.
	. •	



15

For municipalities with pavement management studies, the ten point roughness rating may be used as the ten point Surface Condition rating for this item.

Rate the existing Surface Condition as follows:

#### POINT RATING

- If the section affords a fully adequate standard of service, with no annoyance or discomfort.
- (09 to 07) If it is possible to maintain the lesser of the Minimum Tolerable Average Operating Speed (Item 91) the legal Speed Limit (Item 51) with only a noticeable amount of annoyance to the driver due to sway, vibration or steering effort, but with no noticeable feeling of hazard.
- (06 to 04) If maintaining even the lesser of the Minimum Tolerable Average Operating Speed (Item 91) or the legal Speed Limit (Item 51) results in either a "tug-of-war" with a too-steep or uneven crown, or a feeling that the car is taking undue punishment.
- (03 to 01) If the surface irregularities are so severe that a driver will tend to reduce speed considerably, possibly even steering an irregular course, or if the crown is so steep as to be hazardous in winter.

# \* ITEM 84 SHOULDER WIDTH - Maximum Points 10 (RURAL AND SEMI-URBAN SECTIONS ONLY)

Point ratings for Shoulder Width will be calculated by the computer and are based on Shoulder Width (Item 40) and Existing Class (Item 33) using linear interpolation.

The Shoulder Width Point Rating Tables are shown below.

#### TABLE 84R RURAL SECTIONS

Point			EX	ISTING CLA	SS			
Rating	100 & 200	300	400	500	600	700	800	4LN,EXP
10	1.5	1.5	1.5	2.5	2.5	3.0	3.0	3,0
1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

#### TABLE 84S SEMI-URBAN SECTIONS

	Loca	l Roads	Collecto	r Roads	Arteriais
Point	Residential	Comm/Ind	Residential	Comm/Ind	All Lanes
Rating	ALL,L/R	LCI	C/R	CCI	ART
10	1.5	2.0	2.5	3.0	3.5
1	0.5	1.0	1.0	1.5	1.5

Note: The highest point rating corresponds to the design standard surface width or more; and the lowest point rating corresponds to the minimum tolerable surface width or less. Point ratings for intermediate surface widths will be determined by the computer through interpolation.



Point ratings for Surface Width will be calculated by the computer and are based on Roadside Environment (Item 32), Existing Class (Item 33) and Surface Width (Item 37) using linear interpolation. The Surface Width Point Rating Tables are shown below for information purposes.

#### TABLE 85R RURAL SECTIONS

Point				EXISTING	CLASS			
Rating	100 & 200	300	400	500	600	700	800	4LN,EXP
15	6.0	6.0	6.5	7.0	7.0	7.0	7.0	3.75/lane
<u> </u>	5.0	5.0	6.0	6.0	6.0	6.5	6.5	3.5/lane

#### TABLE 85S SEMI-URBAN SECTIONS

		2L.N	l i			31.	1		4L	N	2LN	3LN	4LN	6LN	6LN	71.N	8LN	9LN
Point	L/R											•	-	Arterial	\$			
Rating	ALL	LCI	C/R	CCI	L/R	LCI	C/R	CCI	C/R	CCI				ART				
15	6.0	6.5	6.5	7.5	9.0	9.75	9.75	11.25	13.0	15.0	7.5	11.25	15.0	18.75	22.5	26.25	30.0	33.75
	5.0	5.5	5.5	6.0	7.5	9.0	9.0	9.0	11.0	12.0	6.0	9.0	12.0	15.0	18.0	21.5	24.5	27.5

TABLE 85U URBAN SECTIONS

		2LN				31.1	1		411	N	2LH	JUN	41.8	SLN	6L N	71 N	BL M	<b><u><u></u></u></b> <u></u>	Explana
Point	L/R													Artoria					ways
Rating	ALL	LCI	C/R	CCI	L/R	LCI	C/R	CCI	C/R	001				ART				ĺ	EXP
25	6.0	6.5	6.5	7.5	9.0	9.75	9.75	11.25	13.0	15.0	7.5	11.25	15.0	18.75	22.5	26.25	30.0	33.75	3.75Aane
	5.5	6.0	6.0	6.5	8.25	9.0	9.0	0.0	11.5	12.5	6.5	9.5	12.5	15.5	18.5	22.0	25.0	28.0	3.5/lane

## \* ITEM 93 SURFACE WIDTH

## RURAL

Under Existing Conditions the Surface Width (Item 37) is transcribed by the computer. The Minimum Tolerable Standard for the existing Road Class (Item 33) is then derived using Table 93R.

TABLE 93R .	MINIMUM TO	DLERABLE SU	RFACE WIDT	H • RI	JRAL (	metres
-------------	------------	-------------	------------	--------	--------	--------

	EXISTING CLASS									
	100	200	300	400	500	600	700	800	4LN	EXP
ROADWAY										
WIDTH	5.0	5.5	5,5	6.0	6.0	6.0	6,5	6.5	13.0	3.5/lane

#### SEMI-URBAN and URBAN

Under Existing Conditions the Surface Width (Item 37) is transcribed by the computer. The Minimum Tolerable Standard for the existing Road Class (Item 33), the Number of Lanes (Item 34) and the Traffic Operation (Item 53) is then derived using Table 93SU.

TABLE 93SU - MINIMUM TOLERABLE SURFACE WIDTH - SEMI-URBAN and URBAN (metres)

-	SEMI-UF	BAN	URBAN	
FUNCTIONAL CLASSIFICATION	2 Way (2W,2M)	1 Wey (1W,1M)	2 Way (2W,2M)	1 Way (1W,1M)
2-lane Local Comm. & Ind.	5.5	5.5	6.0	6.0
2-tane Collector Residential	5.5	5,5	6.0	6.0
2-lane Collector Comm. & Ind.	6.0	6.0	6.5	6.5
2-lane Arterial	6.0	6.0	6.5	6.5
3-lane Local Comm, & Ind.	9.0	8.7	9.0	8.7
3-lane Collector Residential	9.0	8.7	9.0	8.7
3-lane Collector Comm. & Ind.	9.0	8,7	9.0	8.7
3-lane Arterial	9.0	9.0	9.5	9.5
4-lane Collector Residential	11.0	11.0	11.5	11.5
4-lane Collector Comm. & Ind.	12.0	12.0	12.5	12.5
4-lane Arterial	12.0	12.0	12.5	12.5
5-lane Antenal	15.0	15.0	15.5	15.5
6-lane Arterial	18.0	18.0	18.5	18.5
7-lane Arterial	21.5	21,5	22.0	22.0
8-lane Arterial	24.5	24.5	25.0	25.0
9-lane Arterial	27.5	27.5	28.0	28.0
Expressway	<b>—</b>	-	3.5/In	3.5/In

In all cases the computer compares Existing Condition to the Minimum Tolerable Standard and code as follows:

#### RURAL SECTIONS

- CODE (Now) If the Existing Condition is less than the Minimum Tolerable Standard, based on the existing AADT (Item 57).
  - (1-5) If the existing Surface Width based on the 10 year forecasted AADT (Item 65), is expected to be less than the Minimum Tolerable Standard within 5 years.
  - (6-10) If the existing Surface Width, based on the 10 year forecasted AADT (Item 65) is expected to be less than the Minimum Tolerable Standard in the 6-10 year time period.

Feb 1, 1991

# TABLE F-1 ROAD DESIGN STANDARDS

## RURAL ROAD STANDARDS

, <b></b>		50-199 AADT 200	200-399 AADT 300	400-999 AADT 400	1000-1999 AADT 500	2000-2999 AADT	3000-3999 AADT	4000+ AADT	4 lanes 8 Exp
Shw DDP DA	Surface Width (m) Shoulder Width (m) Hot Mix (mm) Granular A (mm) Southern Ontario	6.0 1.5 150	6.0 1.5 *16 150	6.5 1.5 50 150	6.5 2.5 50 150	7.0 2.5 100 150	7.0 3.0 100 150	7.5 3.0 100 150	4LN,EXP 15.0 3.0 100 150
08	Granular B (mm) BS RW, REC,NC	150 300	150 300	150 450	150 450	150 450	150 450	150 450	150 450
D8	Granular B (mm) BS RW, REC.NC	250 400	250 400	250 550	250 550	250 550	250 550	250 550	250 550
DC DB	Concrete Surface Concrete (mm) Granular B (mm) * Double Surface Treatment (D)	150 150	150 150	150 150	225 150	225 150	225 150	225 150	225 150

be Treatment (DST) assumed to equal 16 mm of Hot Mix

Note: Cleas 100 rural roads are eligible for maintenance subsidy only.

## SEMI-URBAN ROAD STANDARDS

		Loca	Roads	Collecto	Collector Roads		
<u> </u>		Residential	Comm/Ind	Residential CR	Comm/Ind	All Lanes	
Shw DDP DA	Lane Width (m) Shoulder Width (m) Hot Mix (mm) Granular A (mm)	3.0 1.5 50 150	3.25 1.5 50 150	3.25 2.5 50	3.75 2.5 100	3.75 3.0 100	
De	Southern Ontatio Granular B (mm) BS	150	150	150	150		
na	RW, REC Northern Ontario	_250	300	300	450	450	
	BS RW, REC	250 350	250 400	250 400	250 550	250 550	
D2 D8	Concrete Surface Concrete (mm) Granular B (mm)	150 150	150 150	225 150	225 150	225	

## URBAN ROAD STANDARDS

		Local Roads		Collecto	r Roads	Arteriale	Erate
	Theorem 1 and 10 and 10	Residential	Comm/Ind LCI	Residential CR	Cemm/Ind CCI	All Lanes	All Lanes
r	Parking Lane Width (m) Parking Lane Width (m) Curb Offset each side (m)	3.0 2.5 .5	3.25 2.5 .5	3.25 2.5 .5	3.75 2.5 .5	3.75 3.0	3.75 3.0
DDP DA DB	Hot Mix (mm) Granular A (mm) Granular A (mm) Southern Ontario Northern Ontario	100 150 300 400	100 150 300	100 150 300	150 150 300	150 150 450 .	.5 150 150 450
DDP DC DB	Concrete Base Hot Mix (mm) Concrete (mm) Granular B (mm)	50 150 150	50 150 150	50 200 150	- 50 200 150	550 100 200 150	550 100 200 200
CC DB	Concrete Surface Concrete (mm) Granular B (mm)	150 150	150 150	250 150	250 150	250 150	250 150

Note: Bench Mark Costs will not exceed the design standards specified in the above tables

-Feb-1, 1991-----

-----

# APPENDIX C: RECOMMENDED CROSS-SECTION FOR EXISTING ROADS



# APPENDIX D: COST ESTIMATES FOR SURFACING OPTIONS
#### ROADS MANAGEMENT PLAN Township of Puslinch Pre-Engineering Cost Estimate - Gravel Road Surfacing GMBP Project: 121149

Year 1 Cost - Gravel Addition (per km of road)

ITEM SPEC. **ITEM DESCRIPTION** UNIT QUANTITY UNIT PRICE TOTAL AMOUNT A1 \$ \$ 14,520.00 12.00 Supply Granular 'M' t 1210 A2 \$ 3,000.00 Grade and Compact Road (by Township forces) LS 1 3,000.00 \$ \$ 17,520.00 Sub-total per km \$ 18,000.00 TOTAL per km (rounded)

Date: 2022-10-11

#### ROADS MANAGEMENT PLAN Township of Puslinch Pre-Engineering Cost Estimate - Surface Treatment GMBP Project: 121149

Date: 2022-10-11

#### Year 1 Cost - Double Lift Surface Treatment (per km of road)

ITEM	SPEC.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	то	TAL AMOUNT
A1		Bonding and Insurance	LS	1	\$ 2,000.00	\$	2,000.00
A2		Mobilization and Demobilization	LS	1	\$ 5,000.00	\$	5,000.00
A3		Traffic Control (Road Closed)	LS	1	\$ 3,000.00	\$	3,000.00
A4		Pulverize Existing Road	m2	8000	\$ 0.50	\$	4,000.00
A5		Grade and Compact Road Base	m2	8000	\$ 1.00	\$	8,000.00
A6		Granular 'A' (for grading)	t	480	\$ 15.00	\$	7,200.00
A7		Double Lift Surface Treatment	m2	8000	\$ 6.50	\$	52,000.00
A8		Line Painting	LS	1	\$ 2,000.00	\$	2,000.00
A9		Street Sweeping	LS	1	\$ 2,000.00	\$	2,000.00
		Sub-total per km				\$	85,200.00
		TOTAL per km (rounded)				\$	86,000.00

#### Year 2 Cost - Single Lift Surface Treatment (per km of road)

ITEM	SPEC.	ITEM DESCRIPTION UNIT QUANTITY UNIT PRICE					то	TAL AMOUNT
A1		Bonding and Insurance	LS	1	\$	1,000.00	\$	1,000.00
A2		Mobilization and Demobilization	LS	1	\$	5,000.00	\$	5,000.00
A3		Traffic Control (Road Closed)	LS	1	\$	2,000.00	\$	2,000.00
A4		Single Lift Surface Treatment	m2	8000	\$	4.50	\$	36,000.00
A5		Line Painting	LS	1	\$	2,000.00	\$	2,000.00
A6		Street Sweeping	LS	1	\$	2,000.00	\$	2,000.00
		Sub-total per km					\$	48,000.00
		TOTAL per km (rounded)					\$	48,000.00

#### Year 8 Cost - Asphalt Padding and Single Lift Surface Treatment (per km of road)

ITEM	SPEC.	ITEM DESCRIPTION	ITEM DESCRIPTION UNIT QUANTITY UNIT PRICE				тот	TAL AMOUNT
A1		Bonding and Insurance	LS	1	\$	1,000.00	\$	1,000.00
A2		Mobilization and Demobilization	LS	1	\$	5,000.00	\$	5,000.00
A3		Traffic Control (Road Closed)	LS	1	\$	2,000.00	\$	2,000.00
A4		Asphalt Padding (allowance)	LS	1	\$	10,000.00	\$	10,000.00
A5		Single Lift Surface Treatment	m2	8000	\$	4.50	\$	36,000.00
A6		Line Painting	LS	1	\$	2,000.00	\$	2,000.00
A7		Street Sweeping	LS	1	\$	2,000.00	\$	2,000.00
		Sub-total per km			-		\$	58,000.00
		TOTAL per km (rounded)					\$	58,000.00

#### ROADS MANAGEMENT PLAN Township of Puslinch Pre-Engineering Cost Estimate - Asphalt Wearing Surface (No Truck Traffic Considerations, Existing Practice) GMBP Project: 121149 Date:

#### Year 1 Cost - Pulverize and Pave (per km of road)

ITEM SPEC. UNIT QUANTITY UNIT PRICE TOTAL AMOUNT ITEM DESCRIPTION \$ A1 3,000.00 \$ 3,000.00 Bonding and Insurance LS 1 A2 Mobilization and Demobilization LS \$ 6,000.00 \$ 6,000.00 1 \$ A3 3,000.00 3,000.00 Traffic Control (Road Closed) LS 1 \$ A4 \$ Pulverize Existing Road m2 8000 1.00 \$ 8,000.00 A5 Grade and Compact Road Base m2 8000 \$ 1.00 \$ 8,000.00 A6 \$ Granular 'A' (for grading) 480 15.00 \$ 7,200.00 t A7 HL 4 Surface Asphalt (50 mm) t \$ 80.00 \$ 70,000.00 875 \$ A8 4,050.00 Granular 'A' Shoulders (50 mm) t 270 15.00 \$ A9 LS \$ 2,000.00 \$ 2,000.00 Line Painting 1 Sub-total \$ 111,250.00 \$ TOTAL (rounded) 112,000.00

2022-10-11

#### ROADS MANAGEMENT PLAN Township of Puslinch Pre-Engineering Cost Estimate - Asphalt Wearing Surface (No Truck Traffic Considerations, Development Standards) GMBP Project: 121149

#### Year 1 Cost - Pulverize and Pave (per km of road)

Date: 2022-10-11

ITEM	SPEC.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	тот	AL AMOUNT
A1		Bonding and Insurance	LS	1	\$ 4,000.00	\$	4,000.00
A2		Mobilization and Demobilization	LS	1	\$ 8,000.00	\$	8,000.00
A3		Traffic Control (Road Closed)	LS	1	\$ 3,000.00	\$	3,000.00
A4		Pulverize Existing Road	m2	8000	\$ 1.00	\$	8,000.00
A5		Grade and Compact Road Base	m2	8000	\$ 1.00	\$	8,000.00
A6		Granular 'A' (for grading)	t	480	\$ 15.00	\$	7,200.00
A7		HL 4 Binder Asphalt (60 mm)	t	1050	\$ 75.00	\$	78,750.00
A8		HL 3 Surface Asphalt (35 mm)	t	620	\$ 75.00	\$	46,500.00
A9		Granular 'A' Shoulders (95 mm)	t	510	\$ 15.00	\$	7,650.00
A10		Line Painting	LS	1	\$ 2,000.00	\$	2,000.00
		Sub-total				\$	173,100.00
		TOTAL (rounded)				\$	174,000.00

#### ROADS MANAGEMENT PLAN Township of Puslinch Pre-Engineering Cost Estimate - Asphalt Wearing Surface (Truck Traffic Considerations, Existing Practice) GMBP Project: 121149 Date:

#### Year 1 Cost - Pulverize and Pave (per km of road)

ITEM SPEC. UNIT QUANTITY UNIT PRICE TOTAL AMOUNT ITEM DESCRIPTION A1 \$ 5,000.00 \$ 5,000.00 Bonding and Insurance LS 1 A2 Mobilization and Demobilization LS \$ 9,000.00 \$ 9,000.00 1 A3 \$ 3,000.00 3,000.00 Traffic Control (Road Closed) LS 1 \$ A4 \$ Pulverize Existing Road m2 9500 1.00 \$ 9,500.00 A5 Grade and Compact Road Base m2 9500 \$ 1.00 \$ 9,500.00 A6 \$ Granular 'A' (for grading) 570 15.00 \$ 8,550.00 t A7 HL 8 Binder Asphalt (50 mm) t \$ 75.00 \$ 70,500.00 940 \$ A8 73,320.00 HL 4 Surface Asphalt (50 mm) t 940 78.00 \$ A9 Granular 'A' Shoulders (100 mm) \$ \$ 12,000.00 t 800 15.00 \$ A10 Line Painting LS 1 2,000.00 \$ 2,000.00 Sub-total \$ 202,370.00 TOTAL (rounded) \$ 203,000.00

2022-10-11

#### ROADS MANAGEMENT PLAN **Township of Puslinch** Pre-Engineering Cost Estimate - Asphalt Wearing Surface (Truck Traffic Considerations, Development Standards) GMBP Project: 121149 Date:

#### Year 1 Cost - Pulverize and Pave (per km of road)

ITEM SPEC. UNIT QUANTITY UNIT PRICE TOTAL AMOUNT ITEM DESCRIPTION A1 \$ 6,000.00 \$ 6,000.00 Bonding and Insurance LS 1 A2 Mobilization and Demobilization LS \$ 10,000.00 \$ 10,000.00 1 A3 \$ 3,000.00 Traffic Control (Road Closed) LS 1 \$ 3,000.00 A4 \$ Pulverize Existing Road m2 9500 1.00 \$ 9,500.00 A5 Grade and Compact Road Base m2 9500 \$ 1.00 \$ 9,500.00 A6 \$ Granular 'A' (for grading) 570 15.00 \$ 8,550.00 t A7 HL 8 Binder Asphalt (60 mm) \$ 75.00 \$ 84,750.00 t 1130 \$ A8 73,320.00 HL 4 Surface Asphalt (50 mm) t 940 78.00 \$ A9 \$ \$ 13,200.00 Granular 'A' Shoulders (110 mm) t 880 15.00 \$ A10 Line Painting LS 1 2,000.00 \$ 2,000.00 Sub-total \$ 219,820.00 TOTAL (rounded) \$ 220,000.00

2022-10-11

# APPENDIX E: ROAD AGE CALCULATIONS

# Asphalt Road Age Summary Township of Puslinch

					GMBP:	121149
Asset ID	Street Name	From Street	To Street	Acquisition Date	Re- Acquisition Date	Achieved Road Life
1	Gore Road	Townline Road	Sideroad 10	1995	2015	20
2	Gore Road	Sideroad 10 South	County Road 52	1996	2015	19
3	Gore Road	County Road 35	Foreman Road	1992	2013	21
12	Concession 1	transition	Townline Road	1999	2013	14
13B	Concession 1	Sideroad 10 South	transition	1999	2013	14
14	Concession 1	Sideroad 10 South	County Road 35	2000	2013	13
16	Concession 1	Sideroad 20 South	Sideroad 25 South	1999	2020	21
17	Concession 1	Sideroad 25 South	Concession 7	1997	2020	23
20	Leslie Road West	Highway 6	Victoria Road South	1993	2016	23
33	Concession 2	Sideroad 10 South	County Road 35	1996	2014	18
40	McLean Road East	County Road 46	Concession 7	2007	2021	14
56	Concession 4	County Road 32	Sideroad 10 North	2008	2021	13
57	Concession 4	Sideroad 10 North	Sideroad 12 North	2004	2019	15
58	Concession 4	Sideroad 12 North	County Road 35	2003	2019	16
66	Forestell Road	County Road 32	Roszell Road	2000	2018	18
67	Forestell Road	Sideroad 10 North	County Road 32	1999	2017	18
68	Forestell Road	Sideroad 12 North	Sideroad 10 North	1999	2018	19
69	Forestell Road	County Road 35	Sideroad 12 North	1999	2018	19
72	Laird Road West	County Road 32	Sideroad 10 North	1999	2017	18
73	Laird Road West	Sideroad 10 North	Pioneer Trail	1999	2017	18
123	Victoria Road South	Leslie Road West	County Road 36	1993	2014	21
124	Victoria Road South	County Road 36	Gilmour Road	1995	2019	24
125A	Victoria Road South	Gilmour Road	entrance to Aberfoyle Pit #2	2000	2019	19
125B	Victoria Road South	entrance to Aberfoyle Pit #2	County Road 34	1990	2016	26
126	Victoria Road South	County Road 34	Maltby Road East	1995	2016	21
133	Watson Road South	Leslie Road West	McRae Station Road	1997	2020	23
134	Watson Road South	bridge	Leslie Road West	1996	2020	24
136	Watson Road South	County Road 36	bridge	1998	2020	22
137	Watson Road South	County Road 34	County Road 36	1996	2020	24
138	Watson Road South	Maltby Road East	County Road 34	1994	2016	22
158	McLean Road East	Brock Road South	Brock Road South	1996	2021	25
164	Concession 7	bridge	Sideroad 25 North	2004	2021	17
165	Concession 7	Sideroad 25 North	County Road 34	2004	2021	17
180	Currie Drive	County Road 36	Highway 6	1993	2015	22
181	Ochs Drive	Currie Drive	County Road 36	1998	2015	17
210	Lang Court	Currie Drive	dead end	1995	2015	20
27B	Calfass Road	Victoria Street	Highway 6	1995	2016	21
					Average:	19

Average: Min:

Max:

13

26

# APPENDIX F: GRAVEL ROAD CONVERSION FLOW CHART



# APPENDIX G: PRELIMINARY DESIGN CHECKLIST FOR TRANSPORTATION CAPITAL PROJECTS

### TOWNSHIP OF PUSLINCH Transportation Capital Project – Preliminary Design Checklist

Capital Project:		Asset IDs:
Description:		
Checklist Prepar	ed Bv:	Date:

# Project Definition:

Main Road Name:				Leng	gth:		
	From:			To:			
Road Construction:	🗆 Ur	ban	🗆 Se	mi-Urban		🗆 Rural	
Traffic: 🗆 Local	Residential		ector Residential	🗆 Loca	I Commerci	ial 🗆 C	Collector Commercial
Other	:						
AADT:				% Trucks:			
Traffic Growth Rate:				10 Year AA	DT:		
Improvement:	New Road		Gravel Conversi	on 🗆	Resurfacin	g 🗆	Reconstruction
Other	:						
Boundary Road? Y	/ N			Rail Crossing	? Y/N		
Construction Year:		Budget:		Pre	liminary Co	st Estimate:	
Funding:							

### **Background Review:**

Studies:	Required	Date Received	Comments
Topographic Survey:	Y / N		
Legal Survey:	Y / N		
Permission to Enter:	Y / N		
Geotechnical Investigation:	Y / N		
Environmental Assessment:	Y / N		
Environmental Impact Study:	Y / N		
Traffic Study:	Y / N		
Development Study:	Y / N		
Active Transportation:	Y / N		
Traffic Calming:	Y / N		
Pavement Management:	Y / N		
Functional Plans:	Y / N		
Noise Impact Study:	Y / N		
Archaeology:	Y / N		
Heritage:	Y / N		
Tree Inventory:	Y/N		
Bridge/Culvert Review:	Y / N		
Hydrogeology:	Y/N		

# Existing Conditions:

Item	Comments
Pavement History:	
Pavement Condition:	
Maintenance Demand:	
Landscaping:	
Horizontal Alignment Issues:	
Vertical Alignment Issues:	
Collision/Accident History:	
Sightline Issues:	
Drainage Issues:	
Subbase Issues:	

### **Existing Geometry:**

Pavement Width:		Shoulder Wid	th:		Р	latform Width:	
Boulevard Type/Widt	ih:		5	Sidewalk Type/Wi	dth:		
Right-of-Way Width:							

### Structures and Drainage:

Item	Comments
Curb and Gutter:	
Storm Sewer:	
Ditches:	
Municipal Drains:	
Watercourses:	
Equalization Culverts:	
Driveway Culverts:	
Guide Rail:	
Bridges/Culverts:	
Retaining Walls:	

### **Utilities:**

Utility	Identified	Exposed	Date Exposed	Comments
Storm Sewer:	Y/N	Y/N		
Sanitary Sewer:	Y/N	Y/N		
Watermain:	Y/N	Y/N		
Natural Gas:	Y/N	Y/N		
Telecommunications:	Y/N	Y/N		
Cable:	Y/N	Y/N		
Hydro:	Y/N	Y/N		
Street Lighting:	Y/N	Y/N		
Other:	Y/N	Y/N		

### **Construction Staging:**

Traffic Management:	Road Closed	One Lane Open
Waste Collection Day:		
School Bus Routes:		
Business Delivery Schedules:		

### Anticipated Approvals/Permits:

Studies:	Required?	Date Received	Comments
MECP C of A:	Y / N		
MTO:	Y / N		
PTTW / EASR:	Y / N		
Rail Authority:	Y / N		
Conservation Authority:	Y / N		
Drainage Act:	Y / N		
DFO:	Y / N		
TC:	Y / N		
MECP SAR:	Y / N		
County of Wellington:	Y/N		
MCEA:	Y/N		

# Summary and Recommendations:

Additional Investigations	s Require	ed:					
Utilities to be Daylighted	d:						
Public Consultation:							
Procurement Recomme	nded:		Sole Source	RFQ	🗆 RFT	□ RFP	
Council Approval:							
Other:							

# APPENDIX H: CURRENT TRAFFIC COUNTS AND 10 YEAR FORECAST

								GMBP: 121149				
Asset ID	Street Name	From Street	To Street	Length (m)	Surface	Environment	Speed Limit	Truck Route	2022 Traffic Count (ADT)	Estimated Traffic Range	Assumed Growth Rate	Esitamte 10 Year ADT
211	Ann Street	County Road 36 (Badenoch Street)	End	63.1	Gravel	RUR	50.0			0-49	0.5%	51.5
30	Back Street	Main Street	Badenoch St E	345.5	Paved	SU	50.0			50-199	0.5%	131.4
214	Beiber Road	Nicholas Beaver Road	End	169.7	Paved	URB	50.0	Y		200-499	0.5%	367.9
208	Boreham Drive	County Road 37 (Arkell Road)	County Road 41 (Watson Road South)	442.3	Paved	SU	50.0			200-499	0.5%	367.9
200	Boyce Drive	County Road 46	End	253.5	Gravel	RUR	50.0			0-49	0.5%	51.5
185	Bridle Path	Brock Rd N	Bridle Path	446.0	Paved	URB	50.0			200-499	0.5%	367.9
204	Bridle Path	Bridle Path	Bridle Path	1116.0	Paved	URB	50.0			200-499	0.5%	367.9
27	Calfass Road	Concession 7	Victoria Street	2077.4	Gravel	RUR	50.0		190	50-199	0.5%	199.7
27b	Calfass Road	Victoria Street	Queen Street (Highway 6)	97.0	Paved	URB	50.0			200-499	0.5%	367.9
201	Carriage Lane	Bridle Path	End	738.0	Paved	URB	50.0			200-499	0.5%	367.9
129	Carter Road	Arkell Road (County Road 37)	Cooks Mill Road	1849.2	Gravel	RUR	50.0		220	200-499	0.5%	231.3
202	Cassin Court	Daymond Drive	End	164.2	Paved	URB	50.0			200-499	0.5%	367.9
50	Cockburn Street	Country Road 46	Old Brock Road	123.5	Paved	URB	30.0			200-499	0.5%	367.9
12	Concession 1	Townline Road	transition	1269.2	Paved	RUR	80.0		1732	1000-1999	0.5%	1820.6
14	Concession 1	Sideroad 10 South	County Road 35	2068.7	Paved	RUR	80.0		1750	1000-1999	0.5%	1839.5
15	Concession 1	County Road 35	Sideroad 20 South	2073.8	Paved	RUR	60.0		1750	1000-1999	0.5%	1839.5
16	Concession 1	Sideroad 20 South	Sideroad 25 South	2062.4	Paved	RUR	60.0			1000-1999	0.5%	1576.7
17	Concession 1	Sideroad 25 South	Concession 7	2065.1	Paved	RUR	60.0			1000-1999	0.5%	1576.7
19	Concession 1	Leslie Road W	Highway 6	546.9	Paved	RUR	80.0			200-499	0.5%	131.4
13a	Concession 1	transition	transition	2112.9	Paved	RUR	80.0		1732	1000-1999	0.5%	1820.6
13b	Concession 1	transition	Sideroad 10 South	751.8	Paved	RUR	80.0		1732	1000-1999	0.5%	1820.6
18	Concession 1/Leslie Rd W	Concession 7	Highway 6	2350.3	Paved	RUR	80.0			1000-1999	0.5%	1576.7
142	Concession 11	Little Road	Leslie Road East	2065.7	Gravel	RUR	60.0		95	50-199	0.5%	99.9
143	Concession 11	Sideroad 17	County Road 36	1320.9	Gravel	RUR	60.0		140	50-199	0.5%	147.2
144	Concession 11	County Road 34	Sideroad 17	1960.4	Gravel	RUR	60.0		140	50-199	0.5%	147.2
145	Concession 11	Maltby Road East	County Road 34	2053.6	Gravel	RUR	60.0		111	50-199	0.5%	116.7
146	Concession 11	Hume Road	Maltby Road East	2053.6	Gravel	RUR	60.0		122	50-199	0.5%	128.2
32	Concession 2	Sideroad 10 South	County Road 32	2101.3	Paved	RUR	80.0			500-999	0.5%	788.4
33	Concession 2	Sideroad 10 South	County Road 35	2063.5	Paved	RUR	80.0			500-999	0.5%	788.4
34	Concession 2	County Road 35	Sideroad 25 South	2096.2	Paved	RUR	80.0		720	500-999	0.5%	756.8
35	Concession 2	Sideroad 20 South	Sideroad 25 South	2050.2	Paved	RUR	60.0	Y		500-999	0.5%	788.4
36	Concession 2	Concession 2/2A	Concession 7	261.4	Gravel	RUR	60.0			0-49	0.5%	51.5
36	Concession 2/2A	Sideroad 25 South	Concession 2	639.3	Paved	RUR	60.0	Y		500-999	0.5%	788.4
37	Concession 2A	Concession 2	Concession 7	235.3	Paved	RUR	60.0	Y		500-999	0.5%	788.4
55	Concession 4	Forestell Road	County Road 32	1239.0	Paved	RUR	80.0			200-499	0.5%	367.9
56	Concession 4	County Road 32	Sideroad 10 North	2072.0	Paved	RUR	80.0			200-499	0.5%	367.9
57	Concession 4	Sideroad 10 North	Sideroad 12 North	823.3	Paved	RUR	60.0			200-499	0.5%	367.9
58	Concession 4	Sideroad 12 North	County Road 35	1235.7	Paved	RUR	80.0			200-499	0.5%	367.9
59	Concession 4	County Road 35	Sideroad 20 North	2068.3	Paved	RUR	80.0		347	200-499	0.5%	364.7

									GMBP:	121149		1
Asset ID	Street Name	From Street	To Street	Length (m)	Surface	Environment	Speed Limit	Truck Route	2022 Traffic Count (ADT)	Estimated Traffic Range	Assumed Growth Rate	Esitamte 10 Year ADT
161	Concession 4	Curve in Road	Highway 6	784.8	Paved	RUR	80.0			200-499	0.5%	367.9
113	Concession 7	Concession 1	Gore Road	1922.6	Gravel	RUR	60.0		294	200-499	0.5%	309.0
114	Concession 7	Concession 1	Calfrass Road	1031.7	Gravel	RUR	60.0			500-999	0.5%	788.4
114	Concession 7	Calfrass Road	Concession 2A	1619.2	Gravel	RUR	60.0			500-999	0.5%	788.4
115	Concession 7	Concession 2A	Mason Road	428.2	Paved	RUR	60.0	Y		3000-3999	0.5%	3679.0
116	Concession 7	Mason Road	McLean Road West	235.7	Paved	RUR	60.0	Y		3000-3999	0.5%	3679.0
118	Concession 7	County Road 34	Start of Pavement	35.3	Gravel	RUR	60.0			50-199	0.5%	131.4
118	Concession 7	Start of Pavement	Maltby Road West	2017.4	Paved	RUR	60.0			50-199	0.5%	131.4
81	Cooks Mill Road	Carter Road	Bridge	596.7	Gravel	RUR	50.0			200-499	0.5%	367.9
82	Cooks Mill Road	Bridge	County Road 41	437.0	Paved	SU	50.0			200-499	0.5%	367.9
180	Currie Drive	County Road 36 (Badenoch Street)	Highway 6 (Queen Street)	888.1	Paved	SU	50.0			200-499	0.5%	367.9
202	Daymond Drive	Brock Rd N	End	441.7	Paved	URB	50.0			200-499	0.5%	367.9
195	Deer View Ridge	Hammersley Drive	Fox Run Drive	665.6	Paved	URB	50.0			200-499	0.5%	367.9
44	Ellis Road	County Road 33	County Road 32	2185.5	Paved	RUR	50.0			500-999	0.5%	788.4
45a	Ellis Road	6725 Ellis Road	Sideroad 10 North	448.6	Paved	RUR	80.0			200-499	0.5%	367.9
45b	Ellis Road	County Road 32	6725 Ellis Road	1866.5	Paved	RUR	80.0			200-499	0.5%	367.9
79	Farnham Road	Arkell Road (County Road 37)	Carter Road	962.4	Gravel	RUR	50.0			50-199	0.5%	367.9
66	Forestell Road	Roszell Road	County Road 32	1220.7	Paved	RUR	60.0			1000-1999	2.0%	1828.5
67	Forestell Road	County Road 32	Sideroad 10 North	2079.9	Paved	RUR	80.0			1000-1999	2.0%	1828.5
68	Forestell Road	Sideroad 10 North	Sideroad 12 North	821.3	Paved	RUR	80.0			1000-1999	2.0%	1828.5
69	Forestell Road	Sideroad 12 North	County Road 35	1239.7	Paved	RUR	80.0			1000-1999	2.0%	1828.5
196	Fox Run Drive	Deer View Ridge	Fox Run Drive transition to curb	415.6	Paved	SU	50.0			200-499	0.5%	367.9
205	Fox Run Drive	Fox Run Drive transition to median	Fox Run Drive transition to curb	200.1	Paved	URB	50.0			200-499	0.5%	367.9
206	Fox Run Drive	Brock Rd N	Fox Run Drive transition to median	160.5	Paved	URB	50.0			200-499	0.5%	367.9
207	Fox Run Drive	Fox Run Drive	Fox Run Drive	650.8	Paved	SU	50.0			200-499	0.5%	367.9
46	Gilmour Road	County Road 46 (Brock Road)	subdivision entrance	248.1	Paved	URB	60.0		248	200-499	0.5%	260.7
47	Gilmour Road	Victoria Road South	new subdivision	1729.1	Gravel	RUR	60.0		248	200-499	0.5%	260.7
1	Gore Road	Townline Road	Sideroad 10	4138.0	Paved	RUR	60.0		1936	1000-1999	0.5%	2035.0
2	Gore Road	Sideroad 10 South	County Road 52 (Cooper Road)	1529.7	Paved	RUR	60.0			1000-1999	0.5%	1576.7
3	Gore Road	County Road 35	Foreman Road	2067.0	Paved	RUR	60.0		1823	1000-1999	0.5%	1916.2
4	Gore Road	Sideroad 20 South	Valens Road	2606.6	Paved	RUR	60.0			1000-1999	0.5%	1576.7
5	Gore Road	Valens Road	Concession 7	1526.6	Paved	RUR	60.0			1000-1999	0.5%	1576.7
6	Gore Road	Concession 7	Lennon Road	959.1	Paved	RUR	60.0			1000-1999	0.5%	1576.7
53	Hammersley Road	County Road 46	End	1002.5	Gravel	RUR	60.0			0-49	0.5%	51.5
77	Hume Road	Nassagaweya-Puslinch Townline	Watson Road South	2344.4	Paved	RUR	60.0		312	200-499	0.5%	328.0
157	Jones Baseline	Stone Road East	End	434.6	Gravel	RUR	60.0			0-49	0.5%	51.5
198	Kerr Crescent	McLean Road West	McLean Road West	834.7	Paved	SU	50.0	Y		500-999	0.5%	788.4
210	Laing Court	Currie Drive	End	113.5	Paved	SU	50.0			50-199	0.5%	131.4
72	Laird Road West	End	County Road 32	427.4	Paved	RUR	50.0			0-49	0.5%	51.5

									GMBP:	121149		I.
Asset ID	Street Name	From Street	To Street	Length (m)	Surface	Environment	Speed Limit	Truck Route	2022 Traffic Count (ADT)	Estimated Traffic Range	Assumed Growth Rate	Esitamte 10 Year ADT
72	Laird Road West	County Road 32	Sideroad 10 North	2063.8	Paved	RUR	60.0	Y	2418	2000-2999	2.0%	2947.5
73	Laird Road West	Sideroad 10 North	Pioneer Trail	828.4	Paved	RUR	60.0	Y		2000-2999	2.0%	3047.5
74	Laird Road West	Pioneer Trail	County Road 35	1239.1	Paved	RUR	60.0	Y		2000-2999	2.0%	3047.5
20	Leslie Road West	Highway 6	Victoria Road South	2045.0	Paved	RUR	80.0		267	200-499	0.5%	280.7
21	Leslie Road West	Victoria Road South	Watson Road South	2015.6	Paved	RUR	80.0		257	200-499	0.5%	270.1
22	Leslie Road West	Watson Road South	Bridge 5 (Mountsberg)	543.2	Paved	RUR	80.0			50-199	0.5%	131.4
23	Leslie Road West	Mountsberg Bridge	Curve at Hwy 401	1204.8	Paved	RUR	80.0			50-199	0.5%	131.4
25	Leslie Road West	Curve at Highway 401	Puslinch-Flamborough Townline	1018.1	Paved	RUR	80.0			50-199	0.5%	131.4
31	Little Road	Nassagaweya-Puslinch Townline	County Road 36	389.9	Gravel	RUR	60.0			50-199	0.5%	131.4
8	MacPherson's Lane	Puslinch-Flamborough Townline	Highway 6	878.6	Gravel	RUR	60.0			0-49	0.5%	51.5
121a	Maddaugh Road	14th Concession East	Highway 6	487.7	Paved	RUR	60.0			500-999	0.5%	788.4
121b	Maddaugh Road	Puslinch-Flamborough Townline	14th Concession East	507.9	Paved	RUR	60.0			500-999	0.5%	788.4
29	Main Street	Badenoch St E	Morriston Ball Park	256.0	Paved	SU	50.0			50-199	0.5%	131.4
64	Maltby Road East	Watson Road South	Concession 11	2070.3	Gravel	RUR	60.0			50-199	0.5%	131.4
64	Maltby Road East	Concession 11	Nassagaweya-Puslinch Townline	308.0	Gravel	RUR	60.0			50-199	0.5%	131.4
63a	Maltby Road East	Victoria Road South	1161m East of Victoria Road South	1161.0	Paved	RUR	80.0			50-199	0.5%	131.4
63b	Maltby Road East	1161m East of Victoria Road South	Watson Road South	924.9	Paved	RUR	80.0			50-199	0.5%	131.4
52	Maple Leaf Lane	County Road 46	End	266.2	Paved	SU	30.0			50-199	0.5%	131.4
38	Mason Road	Concession 7	End	222.6	Paved	SU	50.0			50-199	0.5%	131.4
40	McLean Road East	County Road 46 (Brock Road)	Sideroad 25 North	3052.8	Paved	RUR	60.0	Y		3000-3999	0.5%	3679.0
158	McLean Road East	Brock Road South	End	652.1	Paved	SU	50.0	Y		1000-1999	0.5%	1576.7
159	McLean Road East	Victoria Road South	End	361.8	Gravel	RUR	50.0			0-49	0.5%	51.5
165	McLean Road/Concession 7	Sideroad 25 North	County Road 34	829.5	Paved	RUR	60.0	Y		3000-3999	0.5%	3679.0
149	Nassagaweya-Puslinch Townline	Leslie Road East	Sideroad 10 Nassagaweya	141.3	Gravel	RUR	60.0			50-199	0.5%	131.4
150	Nassagaweya-Puslinch Townline	Leslie Road East	Little Road	2062.8	Gravel	RUR	60.0			50-199	0.5%	131.4
152	Nassagaweya-Puslinch Townline	Sideroad 17	End	826.4	Gravel	RUR	60.0			50-199	0.5%	131.4
162	Nicholas Beaver Road	Winer Rd	Brock Rd S	957.3	Paved	URB	60.0	Y		500-999	0.5%	788.4
78	Niska Road	Bailey Bridge	Whitelaw Road	613.7	Paved	RUR	50.0			2000-2999	0.5%	2627.9
181	Ochs Drive	Currie Drive	County Road 36 (Badenoch Street)	576.2	Paved	SU	50.0			50-199	0.5%	131.4
51	Old Brock Road	County Road 46	Cockburn Street	227.3	Paved	URB	50.0			50-199	0.5%	131.4
51	Old Brock Road	Cockburn Street	End	115.8	Paved	SU	50.0			0-49	0.5%	51.5
103	Pioneer Trail	Laird Road West	Niska Road	2080.9	Gravel	RUR	60.0		154	50-199	0.5%	161.9
9	Puslinch-Flamborough Townline	Victoria Road South	Maddaugh Road	1081.3	Paved	RUR	60.0			500-999	0.5%	788.4
10	Puslinch-Flamborough Townline	14th Concession East	Victoria Road South	1388.9	Paved	RUR	60.0			500-999	0.5%	788.4
148	Puslinch-Flamborough Townline	Leslie Road West	Township Limits	301.4	Paved	RUR	80.0			50-199	0.5%	131.4
90	Roszell Road	Forestell Road	Concession 4	993.8	Paved	RUR	60.0			1000-1999	2.0%	1828.5
54a	Roszell Road	Concession 4	Townline Road	1369.1	Paved	RUR	60.0		1646	1000-1999	2.0%	2006.5
191	Settler's Road	Calfass Road	Telfer Glen	318.9	Paved	SU	50.0			50-199	0.5%	131.4
94	Sideroad 10 North	County Road 34	Ellis Road	808.4	Paved	RUR	60.0			200-499	0.5%	367.9

								GMBP: 121149				
Asset ID	Street Name	From Street	To Street	Length (m)	Surface	Environment	Speed Limit	Truck Route	2022 Traffic Count (ADT)	Estimated Traffic Range	Assumed Growth Rate	Esitamte 10 Year ADT
95	Sideroad 10 North	County Road 34	Concession 4	2038.6	Gravel	RUR	60.0		159	50-199	0.5%	167.1
96	Sideroad 10 North	Concession Road 4	Forestell Road	1036.8	Paved	RUR	60.0			50-199	0.5%	131.4
97	Sideroad 10 North	Forestell Road	Laird Road West	1037.7	Paved	RUR	60.0			50-199	0.5%	131.4
98	Sideroad 10 North	Laird Road West	End	137.5	Gravel	RUR	60.0			0-49	0.5%	51.5
99a	Sideroad 10 North	Whitelaw Road	End	335.4	Paved	RUR	50.0			50-199	0.5%	78.8
91	Sideroad 10 South	Gore Road	Concession 1	1879.1	Gravel	RUR	60.0		120	50-199	0.5%	126.1
92	Sideroad 10 South	Concession 1	Concession 2	2085.8	Gravel	RUR	60.0		240	200-499	0.5%	252.3
93	Sideroad 10 South	Concession 2	Concession 2	738.6	Gravel	RUR	60.0			50-199	0.5%	131.4
100	Sideroad 12 North	Concession 4	End	335.8	Gravel	RUR	60.0			0-49	0.5%	51.5
101	Sideroad 12 North	Forestell Road	Concession 4	1040.2	Gravel	RUR	60.0			50-199	0.5%	131.4
43	Sideroad 17	Nassagaweya-Puslinch Townline	Concession 11	376.5	Gravel	RUR	60.0			50-199	0.5%	131.4
106	Sideroad 20 North	County Road 34	End	1044.0	Gravel	RUR	60.0			0-49	0.5%	51.5
108	Sideroad 20 North	County Road 34	Concession 4	2076.7	Paved	RUR	80.0			200-499	0.5%	131.4
166	Sideroad 20 North	Concession 4	Forestell Road	1113.8	Paved	RUR	80.0			200-499	0.5%	131.4
104	Sideroad 20 South	Gore Road	Concession 1	1890.4	Gravel	RUR	60.0			50-199	0.5%	131.4
105	Sideroad 20 South	Concession 1	Concession 2	2093.9	Gravel	RUR	60.0			50-199	0.5%	131.4
112	Sideroad 25 North	Concession 7	End	566.8	Gravel	RUR	60.0			50-199	0.5%	131.4
110	Sideroad 25 South	Concession 1	Gore Road	1897.3	Gravel	RUR	60.0			50-199	0.5%	131.4
111	Sideroad 25 South	Concession 2	Concession 1	2091.9	Gravel	RUR	60.0			50-199	0.5%	131.4
26	Small Rd/Leslie Rd E	Nassagaweya-Puslinch Townline	Concession 11	432.7	Gravel	RUR	60.0			50-199	0.5%	131.4
48	Smith Road	Concession 7	County Road 34	332.0	Paved	SU	60.0			50-199	0.5%	131.4
213	Tawse Place	Nicholas Beaver Road	End	154.1	Paved	SU	50.0	Y		50-199	0.5%	131.4
190	Telfer Glen	Queen Street (Highway 6)	End	697.8	Paved	SU	50.0			200-499	0.5%	367.9
122	Victoria Road South	Leslie Road West	Flamborough Puslinch Townline	918.5	Paved	RUR	80.0			1000-1999	0.5%	1576.7
123	Victoria Road South	Leslie Road West	County Road 36	2232.3	Paved	RUR	80.0			1000-1999	0.5%	1576.7
124	Victoria Road South	County Road 36 (Badenoch Street)	Gilmour Road	3042.0	Paved	RUR	80.0		2528	2000-2999	2.0%	3081.6
126	Victoria Road South	County Road 34	Maltby Road East	2074.1	Paved	RUR	80.0		4511	4000-4999	2.0%	5498.9
125a	Victoria Road South	Gilmour Road	entrance to Aberfoyle Pit #2	357.7	Paved	RUR	60.0		2528	2000-2999	2.0%	3081.6
125b	Victoria Road South	entrance to Aberfoyle Pit #2	County Road 34	621.8	Paved	RUR	60.0	Y	2528	2000-2999	2.0%	3081.6
28	Victoria Street And Church Street	Calfass Road	Queen Street (Highway 6)	282.7	Paved	URB	50.0			50-199	0.5%	131.4
133	Watson Road South	Leslie Road West	McRae Station Road	988.8	Paved	RUR	80.0			500-999	0.5%	788.4
134	Watson Road South	bridge	Leslie Road West	565.8	Paved	RUR	80.0			500-999	0.5%	788.4
135	Watson Road South	bridge	bridge	721.9	Paved	RUR	80.0			500-999	0.5%	788.4
136	Watson Road South	County Road 36 (Badenoch Street)	Bridge	758.0	Paved	RUR	80.0			500-999	0.5%	788.4
137	Watson Road South	County Road 34	County Road 36	4144.8	Paved	RUR	80.0		619	500-999	0.5%	650.7
138	Watson Road South	Maltby Road East	County Road 34	2130.4	Paved	RUR	80.0		1917	1000-1999	2.0%	2336.8
139	Watson Road South	Hume Road	Maltby Road East	2041.7	Paved	RUR	80.0		2152	2000-2999	2.0%	2623.3
140	Watson Road South	County Road 37 (Arkell Road)	Hume Road	1647.4	Paved	RUR	80.0			2000-2999	2.0%	3047.5
209	Winer Court	Ochs Drive	End	89.4	Paved	SU	50.0			0-49	0.5%	51.5

								GMBP: 121149				
Asset ID	Street Name	From Street	To Street	Length (m)	Surface	Environment	Speed Limit	Truck Route	2022 Traffic Count (ADT)	Estimated Traffic Range	Assumed Growth Rate	Esitamte 10 Year ADT
212a	Winer Road	McLean Road	Nicholas Beaver Road	785.8	Paved	SU	50.0	Y		200-499	0.5%	367.9
212b	Winer Road	Nicholas Beaver Road	End	167.9	Paved	SU	50.0	Y		50-199	0.5%	131.4

# APPENDIX I: TRAFFIC COUNT LOCATIONS AND TRAFFIC RANGE ESTIMATES



October, 2022 121149 Projection EPSG:26917 © OpenStreetMap contributors

APPENDIX J: ROAD MAINTENANCE ACTIVITY SPREADSHEET

Asset Type	Asset Component	Maintenance Activity	In-House Staff	Contracted Service	Regulatory	Safety	Maintenance	Asset Preservation	Planned	Reactive	Closure Activity	Costs Recoverable	Frequency
	Roadway	Pothole Repair	Yes	No	Yes	Yes	Yes	Yes	No	Yes	No		As Required per Sect6.(1) MMS: repair within 7 to 30 days of ID [roadway] within 14 to 60 days of ID [shoulder] based on Class 3 to 5 roads.
	Roadway	Crack Sealing/Filling	No	No	Yes	Yes	Yes	Yes	No	No	No		As Required per Sect8.(1) MMS: repair within 60 tp 180 days based on Class 3 to 5 roads.
	Roadway	Grading	Yes	No	No	No	Yes	Yes	Yes	Yes	No		Once per month from spring till freeze up
Roadway	Shoulders	Repair	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No		As Required per Sect6.(1) MMS: repair within 7 to 30 days based on Class 3 to 5 roads. Monthly as needed basis
	Crash Attenuators	Safety Barrier Repair	Yes	Yes	No	Yes	Yes	No	No	Yes	No	Yes (for accidents only)	As Required
	Sidewalks	Repair/Maintenance/R eplacement	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No		As Required
	Curbs	Repair/Maintenance	No	Yes	No	No	Yes	Yes	No	Yes	No		As Required
	Catch Basins	Catch Basin Cleaning	No	Yes	No	No	Yes	No	Yes	Yes	No		Every 2 years
	Culverts	Culvert Cleaning	Vec	Yes	NO	No	Yes	Yes	NU Vec	Vec	NO		As required
Drainage	Culverts	Culvert Culvert Repair/Replacement	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Lane		15 years
_	Inlets/Outlets	Inlet/Outlet Cleaning	Yes	No	No	No	Yes	No	Yes	Yes	No		5 years and as required
	Pipes	Storm Sewer CCTV & Cleaning	No	Yes	No	No	Yes	Yes	Yes	Yes	No		As required
Bridges &	Bridges	Bridge Maintenance - Own Forces.	Yes	No	No	No	Yes	Yes	Yes	No	Lane		Annually
Structural													
Culverts	Structural Culverts	Repair/Maintenance	No	Yes	No	Yes	Yes	Yes	No	Yes	Lane/Road		As Required
	Signs & Sunnorts	Sign Placement New	Yes	No	Yes	Yes	Yes	No	Yes	No	No		As Required
	Signs & Supports	Sign Repair or Replacement	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes (for accidents only)	Reg/Warning signs; per Sects 11 & 12.(2) MMS: repair within 21 to 30 days once ID SIGNS; per Sect11.(1) MMS: repair as soon as practicable once ID.
Troffic	Delineators	Repair/Maintenance/R eplacement	Yes	No	No	Yes	No	No	No	Yes	No	Yes (for accidents only)	As Required
Traffic	Lighting	Street Lighting Lamp Replacement	No	Yes	Yes	Yes	Yes	No	No	Yes	No		Per Sect10.(2)-(5) MMS: repair within 14 days.
	Pavement Markings	Centre and Edge Line	No	Yes	No	Yes	Yes	No	Yes	No	Lane		Every 2 years
	Pavement Markings	Zone Painting (i.e. turn lanes, stop bars etc.)	No	Yes	No	Yes	Yes	No	Yes	No	Lane		Every 2 years
	Roadway	Anti-Icing - Activation	Yes	No	Yes	Yes	No	No	Yes	Yes	No		Per Sect 5.1 lce formation prevention within 16 to 24 hours 5.1 (3) treatment of ice formation within 8 to 16 hours for Class 3 to 5 roads.
Winter Control	Roadway	Patrolling/Weather Monitoring	Yes	No	Yes	Yes	No	No	Yes	No	No		Per Sect 3 Patrol every 7 to 30 days. 3.1(1)& (2) Winter monitoring 3x a day, May - Sept 1x per day.
	Roadway	Plowing - Activation	Yes	No	Yes	Yes	No	No	Yes	Yes	No		Per Sect 4.1 MMS: snow accumulation 8 to 10 cm of snow to respond, 12 to 24 hours to clear after accumulation 5.1 lce formation prevention within 16 to 24 hours 5.1 (3) treatment of ice formation within 8 to 16 hours for Clss 3 to 5 roads.
Vegetation/	Roadway	Grass and Weed Control Management and Debris Pickup	Yes	No	No	Yes	Yes	No	Yes	Yes	No		4x per year.
Cleaning &	Roadway	Sweeping	Yes	Yes	No	No	Yes	No	Yes	Yes	No		once annually and as required

Asset Type	Asset Component	Maintenance Activity	In-House Staff	Contracted Service	Regulatory	Safety	Maintenance	Asset Preservation	Planned	Reactive	Closure Activity	Costs Recoverable	Frequency
Debris Management	Roadway	Tree Maintenance - General	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes		4 times per year
Road and	Roadway	Road Patrol & Inspection	Yes	No	Yes	Yes Yes		No	Yes	No	No		Per Sect 3 Patrol every 7 to 30 days for Class 3 to 5 roads. May to Sept weekly
and Inspection	Traffic	Traffic Sign Patrol & Inspection	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No		Sign reflectivity performed once per year (within 16 months of previous); patrol and inspection done 7 to 30 days for Class 3 to 5 roads.

# APPENDIX K: TIME OF NEED AND PRIORITY RATINGS

#### ROADS MANAGEMENT PLAN Township of Puslinch Pre-Engineering Cost Estimate - Capital Project for Asphalt Resurfacing (No Truck Traffic Considerations) GMBP Project: 121149

### COST ESTIMATE PER KM OF ROAD

Date: 2023-06-19

ITEM	SPEC.	ITEM DESCRIPTION	UNIT	QUANTITY	1	UNIT PRICE	то	TAL AMOUNT
1		Bonding and Insurance	LS	1	\$	10,000.00	\$	10,000.00
2		Mobilization and Demobilization	LS	1	\$	10,000.00	\$	10,000.00
3		Traffic Control (road closed)	LS	1	\$	8,000.00	\$	8,000.00
4		Pulverize Existing Road	m2	8000	\$	1.80	\$	14,400.00
5		Earth Excavation and Offsite Disposal (small diameter culvert)	m3	150	\$	40.00	\$	6,000.00
6		Remove Existing Culvert (small diameter)	ea	1	\$	1,000.00	\$	1,000.00
7		HDPE Pipe Culvert (small diameter)	m	14	\$	600.00	\$	8,400.00
8		Earth Excavation and Offsite Disposal (ditching)	m3	80	\$	50.00	\$	4,000.00
9		Earth Excavation and Offsite Disposal (road reconstruction)	m3	120	\$	50.00	\$	6,000.00
10		Granular A (backfill)	t	360	\$	30.00	\$	10,800.00
11		Granular B (road reconstruction)	t	180	\$	30.00	\$	5,400.00
12		Granular A (road reconstruction)	t	120	\$	30.00	\$	3,600.00
13		Mill Lap Joint	m2	25	\$	150.00	\$	3,750.00
14		R-10 Rip-Rap on Geotextile	t	40	\$	100.00	\$	4,000.00
15		Grade and Compact Road Base	m2	8000	\$	1.50	\$	12,000.00
16		Hot Mix HL 4 Base Asphalt (60 mm)	t	1050	\$	90.00	\$	94,500.00
17		Hot Mix HL 3 Surface Asphalt (35 mm)	t	620	\$	90.00	\$	55,800.00
18		Material Transfer Unit	t	1670	\$	3.00	\$	5,010.00
19		Hot Mix HL 4 Surface Asphalt (50mm, driveways)	t	25	\$	160.00	\$	4,000.00
20		Granular A (driveways)	t	60	\$	50.00	\$	3,000.00
21		Granular A (shoulders)	t	350	\$	30.00	\$	10,500.00
22		Water for Compaction and Dust Suppression	m3	500	\$	25.00	\$	12,500.00
23		Topsoil, Seed and Erosion Control Blanket	m2	250	\$	18.00	\$	4,500.00
24		Line Painting	LS	1	\$	2,000.00	\$	2,000.00
		Sub-total (Construction)					\$	299,160.00
а		Allowance for AC Index Adjustment Payment	LS	1	\$	5,000.00	\$	5,000.00
b		Contingency	LS	1	\$	40,000.00	\$	40,000.00
С		Engineering Design and Contract Preparation	LS	1	\$	6,000.00	\$	6,000.00
d		Construction Layout	LS	1	\$	5,000.00	\$	5,000.00
е		Materials Testing	LS	1	\$	5,000.00	\$	5,000.00
f		Contract Administration and Construction Inspection	LS	1	\$	8,000.00	\$	8,000.00
g		Permit Application Allowance	LS	1	\$	1,000.00	\$	1,000.00
		TOTAL per km of Road					\$	369,160.00
		TOTAL (rounded) per km of Road					\$	370,000.00

#### ROADS MANAGEMENT PLAN Township of Puslinch Pre-Engineering Cost Estimate - Capital Project for Asphalt Resurfacing (Truck Traffic Considerations) GMBP Project: 121149

#### Date: 2023-06-19

### COST ESTIMATE PER KM OF ROAD

ITEM	SPEC.	ITEM DESCRIPTION	UNIT	QUANTITY		UNIT PRICE	то	TAL AMOUNT
1		Bonding and Insurance	LS	1	\$	15,000.00	\$	15,000.00
2		Mobilization and Demobilization	LS	1	\$	15,000.00	\$	15,000.00
3		Traffic Control (road closed)	LS	1	\$	20,000.00	\$	20,000.00
4		Pulverize Existing Road	m2	9500	\$	1.80	\$	17,100.00
5		Earth Excavation and Offsite Disposal (small diameter culvert)	m3	175	\$	40.00	\$	7,000.00
6		Remove Existing Culvert (small diameter)	ea	1	\$	1,500.00	\$	1,500.00
7		HDPE Pipe Culvert (small diameter)	m	18	\$	600.00	\$	10,800.00
8		Earth Excavation and Offsite Disposal (ditching)	m3	80	\$	50.00	\$	4,000.00
9		Earth Excavation and Offsite Disposal (road reconstruction)	m3	150	\$	50.00	\$	7,500.00
10		Granular A (backfill)	t	420	\$	30.00	\$	12,600.00
11		Granular B (road reconstruction)	t	220	\$	30.00	\$	6,600.00
12		Granular A (road reconstruction)	t	150	\$	30.00	\$	4,500.00
13		Mill Lap Joint	m2	35	\$	100.00	\$	3,500.00
14		R-10 Rip-Rap on Geotextile	t	40	\$	100.00	\$	4,000.00
15		Grade and Compact Road Base	m2	9500	\$	1.00	\$	9,500.00
16		Hot Mix HL 8 Base Asphalt (60 mm)	t	1130	\$	100.00	\$	113,000.00
17		Hot Mix HL 4 Surface Asphalt (50 mm)	t	940	\$	100.00	\$	94,000.00
18		Material Transfer Unit	t	2070	\$	3.00	\$	6,210.00
19		Hot Mix HL 4 Surface Asphalt (50mm, driveways)	t	60	\$	160.00	\$	9,600.00
20		Granular A (driveways)	t	60	\$	35.00	\$	2,100.00
21		Granular A (shoulders)	t	720	\$	25.00	\$	18,000.00
22		Water for Compaction and Dust Suppression	m3	650	\$	18.00	\$	11,700.00
23		Topsoil, Seed and Erosion Control Blanket	m2	250	\$	20.00	\$	5,000.00
24		Line Painting	LS	1	\$	2,500.00	\$	2,500.00
		Sub-total (Construction)			-		\$	400,710.00
а		Allowance for AC Index Adjustment Payment	LS	1	\$	10,000.00	\$	10,000.00
b		Contingency	LS	1	\$	50,000.00	\$	50,000.00
с		Engineering Design and Contract Preparation	LS	1	\$	10,000.00	\$	10,000.00
d		Construction Layout	LS	1	\$	5,000.00	\$	5,000.00
e		Materials Testing	LS	1	\$	7,000.00	\$	7,000.00
f		Contract Administration and Construction Inspection	LS	1	\$	10,000.00	\$	10,000.00
g		Permit Application Allowance	LS	1	\$	1,000.00	\$	1,000.00
		TOTAL per km of Road					\$	493,710.00
		TOTAL (rounded) per km of Road					\$	494,000.00





**Puslinch Roads Management Plan** 

# Paved Roads - Time of Need

Adequate 6 - 10 Years 1- 5 Years NOW Resurface Highway County Road Railway Waterways Waterbodies Municipal Boundary

		 _
		 _
<b>├</b>	+ +	 +
		5

# Township of Puslinch Time of Need Map



October, 2022 Project #121149 Projection EPSG:26917

#### TOWNSHIP INVENTORY - TIME OF NEED AND PRIORITY RATING

														GMBP: 121149			149	
Asset ID	Street Name	From Street	To Street	Length (m)	Surface	Environment	Speed Limit	Estimated Traffic Range	Truck Route	Minimum Maint. Class	PCI	Time of Need	Treatment	U (1	Init Rate per km)	Estimated Cost	Prirority Rating	
4	Gore Road	Sideroad 20 South	Valens Road	2606.6	Paved	RUR	60.0	1000-1999		4	42.2	NOW Resurface	PR1	\$	377,000	\$ 983,00	) 101.4	
139	Watson Road South	Hume Road	Maltby Road East	2041.7	Paved	RUR	80.0	2000-2999		3	47.8	NOW Resurface	PR2	\$	494,000	\$ 1,009,00	) 99.9	
6	Gore Road	Concession 7	Lennon Road	959.1	Paved	RUR	60.0	1000-1999		4	51.8	1- 5 Years	PR1	\$	377,000	\$ 362,00	) 84.5	
5	Gore Road	Valens Road	Concession 7	1526.6	Paved	RUR	60.0	1000-1999		4	54.2	1- 5 Years	PR1	\$	377,000	\$ 576,00	) 80.4	
37	Concession 2A	Concession 2	Concession 7	235.3	Paved	RUR	60.0	500-999	Y	4	47.1	NOW Resurface	PR2	\$	494,000	\$ 117,00	) 78.5	
126	Victoria Road South	County Road 34	Maltby Road East	2074.1	Paved	RUR	80.0	4000-4999		3	68.3	6 - 10 Years	PR2	\$	494,000	\$ 1,025,00	) 72.8	
18	Concession 1/Leslie Rd W	Concession 7	Highway 6	2350.3	Paved	RUR	80.0	1000-1999		3	58.6	1- 5 Years	PR1	\$	377,000	\$ 887,00	) 72.6	
33	Concession 2	Sideroad 10 South	County Road 35	2063.5	Paved	RUR	80.0	500-999		4	51.9	1- 5 Years	PR1	\$	377,000	\$ 778,00	) 71.5	
35	Concession 2	Sideroad 20 South	Sideroad 25 South	2050.2	Paved	RUR	60.0	500-999	Y	4	54.2	1- 5 Years	PR2	\$	494,000	\$ 1,013,00	) 68.0	
90	Roszell Road	Forestell Road	Concession 4	993.8	Paved	RUR	60.0	1000-1999		4	61.9	1- 5 Years	PR1	\$	377,000	\$ 375,00	) 66.8	
34	Concession 2	County Road 35	Sideroad 25 South	2096.2	Paved	RUR	80.0	500-999		4	55.9	1- 5 Years	PR1	\$	377,000	\$ 791,00	) 64.9	
54a	Roszell Road	Concession 4	Townline Road	1369.1	Paved	RUR	60.0	1000-1999		4	64.2	1- 5 Years	PR1	\$	377,000	\$ 517,00	) 64.2	
115	Concession 7	Concession 2A	Mason Road	428.2	Paved	RUR	60.0	3000-3999	Y	3	71.4	6 - 10 Years	PR2	\$	494,000	\$ 212,00	) 61.7	
12	Concession 1	Townline Road	transition	1269.2	Paved	RUR	80.0	1000-1999		3	66.7	6 - 10 Years	PR1	\$	377,000	\$ 479,00	) 60.5	
3	Gore Road	County Road 35	Foreman Road	2067.0	Paved	RUR	60.0	1000-1999		4	66.4	6 - 10 Years	PR1	\$	377,000	\$ 780,00	) 61.8	
212a	Winer Road	McLean Road	Nicholas Beaver Road	785.8	Paved	SU	50.0	200-499	Y	5	53.8	1- 5 Years	PR2	\$	494,000	\$ 389,00	) 57.5	
38	Mason Road	Concession 7	End	222.6	Paved	SU	50.0	50-199		6	43.3	NOW Resurface	PR1	\$	377,000	\$ 84,00	) 56.9	
148	Puslinch-Flamborough Townline	Leslie Road West	Township Limits	301.4	Paved	RUR	80.0	50-199		4	43.3	NOW Resurface	PR1	\$	377,000	\$ 114,00	) 56.9	
14	Concession 1	Sideroad 10 South	County Road 35	2068.7	Paved	RUR	80.0	1000-1999		3	68.8	6 - 10 Years	PR1	\$	377,000	\$ 780,00	) 56.7	
13a	Concession 1	transition	transition	2112.9	Paved	RUR	80.0	1000-1999		3	68.8	6 - 10 Years	PR1	\$	377,000	\$ 797,00	) 56.6	
121a	Maddaugh Road	14th Concession East	Highway 6	487.7	Paved	RUR	60.0	500-999		4	63.7	1- 5 Years	PR1	\$	377,000	\$ 184,00	) 54.0	
25	Leslie Road West	Curve at Highway 401	Puslinch-Flamborough Townline	1018.1	Paved	RUR	80.0	50-199		4	46.3	NOW Resurface	PR1	\$	377,000	\$ 384,00	) 53.9	
185	Bridle Path	Brock Rd N	Bridle Path	446.0	Paved	URB	50.0	200-499		5	57.5	1- 5 Years	PR2	\$	494,000	\$ 221,00	) 52.9	
36	Concession 2/2A	Sideroad 25 South	Concession 2	639.3	Paved	RUR	60.0	500-999	Y	4	64.4	1- 5 Years	PR2	\$	494,000	\$ 316,00	) 52.9	
13b	Concession 1	transition	Sideroad 10 South	751.8	Paved	RUR	80.0	1000-1999		3	71.7	6 - 10 Years	PR1	\$	377,000	\$ 284,00	) 51.5	
23	Leslie Road West	Mountsberg Bridge	Curve at Hwy 401	1204.8	Paved	RUR	80.0	50-199		4	51.1	1- 5 Years	PR1	\$	377,000	\$ 455,00	) 49.1	
162	Nicholas Beaver Road	Winer Rd	Brock Rd S	957.3	Paved	URB	60.0	500-999	Y	4	68.7	6 - 10 Years	PR2	\$	494,000	\$ 473,00	) 46.5	
21	Leslie Road West	Victoria Road South	Watson Road South	2015.6	Paved	RUR	80.0	200-499		4	60.8	1- 5 Years	PR1	\$	377,000	\$ 760,00	) 45.6	
59	Concession 4	County Road 35	Sideroad 20 North	2068.3	Paved	RUR	80.0	200-499		4	63.9	1- 5 Years	PR1	\$	377,000	\$ 780,00	) 44.9	
19	Concession 1	Leslie Road W	Highway 6	546.9	Paved	RUR	80.0	200-499		4	55.8	1- 5 Years	PR1	\$	377,000	\$ 207,00	) 44.4	
204	Bridle Path	Bridle Path	Bridle Path	1116.0	Paved	URB	50.0	200-499		5	65.0	1- 5 Years	PR2	\$	494,000	\$ 552,00	) 43.6	
206	Fox Run Drive	Brock Rd N	Fox Run Drive transition to median	160.5	Paved	URB	50.0	200-499		5	65.4	6 - 10 Years	PR2	\$	494,000	\$ 80,00	) 43.0	
22	Leslie Road West	Watson Road South	Bridge 5 (Mountsberg)	543.2	Paved	RUR	80.0	50-199		4	57.1	1- 5 Years	PR1	\$	377,000	\$ 205,00	) 43.0	
52	Maple Leaf Lane	County Road 46	End	266.2	Paved	SU	30.0	50-199		6	57.2	1- 5 Years	PR1	\$	377,000	\$ 101,00	) 42.9	
140	Watson Road South	County Road 37 (Arkell Road)	Hume Road	1647.4	Paved	RUR	80.0	2000-2999		3	78.8	6 - 10 Years	PR2	\$	494,000	\$ 814,00	) 42.1	
161	Concession 4	Curve in Road	Highway 6	784.8	Paved	RUR	80.0	200-499		4	67.1	6 - 10 Years	PR1	\$	377,000	\$ 296,00	) 40.9	
123	Victoria Road South	Leslie Road West	County Road 36	2232.3	Paved	RUR	80.0	1000-1999		3	77.0	6 - 10 Years	PR1	\$	377,000	\$ 842,00	) 40.4	
166	Sideroad 20 North	Concession 4	Forestell Road	1113.8	Paved	RUR	80.0	200-499		4	61.2	1- 5 Years	PR1	\$	377,000	\$ 420,00	) 38.9	
82	Cooks Mill Road	Bridge	County Road 41	437.0	Paved	SU	50.0	200-499		5	69.1	6 - 10 Years	PR1	\$	377,000	\$ 165,00	) 38.5	
195	Deer View Ridge	Hammersley Drive	Fox Run Drive	665.6	Paved	URB	50.0	200-499		5	69.4	6 - 10 Years	PR2	\$	494,000	\$ 329,00	) 38.1	
97	Sideroad 10 North	Forestell Road	Laird Road West	1037.7	Paved	RUR	60.0	50-199		5	62.1	1- 5 Years	PR1	\$	377,000	\$ 392,00	) 38.0	
121b	Maddaugh Road	Puslinch-Flamborough Townline	14th Concession East	507.9	Paved	RUR	60.0	500-999		4	74.7	6 - 10 Years	PR1	\$	377,000	\$ 192,00	) 37.6	
51	Old Brock Road	Cockburn Street	End	115.8	Paved	SU	50.0	0-49		6	56.6	1- 5 Years	PR1	\$	377,000	\$ 44,00	) 37.3	
205	Fox Run Drive	Fox Run Drive transition to median	Fox Run Drive transition to curb	200.1	Paved	URB	50.0	200-499		5	70.1	6 - 10 Years	PR2	\$	494,000	\$ 99,00	) 37.1	
72	Laird Road West	End	County Road 32	427.4	Paved	RUR	50.0	0-49		6	57.5	1- 5 Years	PR1	\$	377,000	\$ 162,00	) 36.6	
108	Sideroad 20 North	County Road 34	Concession 4	2076.7	Paved	RUR	80.0	200-499		4	64.0	1- 5 Years	PR1	\$	377,000	\$ 783,00	) 36.1	
63b	Maltby Road East	1161m East of Victoria Road South	Watson Road South	924.9	Paved	RUR	80.0	50-199		4	64.3	1- 5 Years	PR1	\$	377,000	\$ 349,00	35.8	
190	leiter Glen	Queen Street (Highway 6)	End	697.8	Paved	SU	50.0	200-499		5	71.8	6 - 10 Years	PR2	\$	494,000	\$ 345,00	) 35.1	
135	Watson Road South	bridge	bridge	721.9	Paved	RUR	80.0	500-999		4	76.6	6 - 10 Years	PR1	\$	377,000	\$ 273,00	) 34.7	
77	Hume Road	Nassagaweya-Puslinch Townline	Watson Road South	2344.4	Paved	RUR	60.0	200-499		5	71.7	6 - 10 Years	PR1	\$	377,000	\$ 884,00	) 34.4	
207	Fox Run Drive	Fox Run Drive	Fox Run Drive	650.8	Paved	SU	50.0	200-499		5	73.2	6 - 10 Years	PR2	\$	494,000	\$ 322,00	) 33.3	
196	Fox Run Drive	Deer View Ridge	Fox Run Drive transition to curb	415.6	Paved	SU	50.0	200-499		5	73.7	6 - 10 Years	PR2	\$	494,000	\$ 206,00	) 32.8	
214	Beiber Road	Nicholas Beaver Road		169.7	Paved	URB	50.0	200-499	Y	5	74.0	6 - 10 Years	PR2	\$	494,000	\$ 84,00	32.3	
208	Boreham Drive	County Road 37 (Arkell Road)	County Road 41 (Watson Road South)	442.3	Paved	SU	50.0	200-499		5	74.1	6 - 10 Years	PR2	\$	494,000	\$ 219,00	) 32.2	
28	Victoria Street And Church Street	Caltass Road	Queen Street (Highway 6)	282.7	Paved	URB	50.0	50-199		6	69.9	6 - 10 Years	PR2	\$	494,000	\$ 140,00	30.2	
29	Main Street	Badenoch St E	Morriston Ball Park	256.0	Paved	SU	50.0	50-199		6	71.4	6 - 10 Years	PR1	\$	377,000	\$ 97,00	) 28.7	
48	Smith Road	Concession 7	County Road 34	332.0	Paved	SU	60.0	50-199		5	71.9	6 - 10 Years	PR1	\$	377,000	\$ 126,00	) 28.2	
46	Gilmour Road	County Road 46 (Brock Road)	subdivision entrance	248.1	Paved	URB	60.0	200-499		5	76.2	6 - 10 Years	PR1	\$	377,000	\$ 94,00	) 27.5	
202	Daymond Drive	Brock Rd N	End	441.7	Paved	URB	50.0	200-499		5	78.9	6 - 10 Years	PR2	\$	494,000	\$ 219,00	) 26.3	
45b	Ellis Road	County Road 32	6725 Ellis Road	1866.5	Paved	RUR	80.0	200-499		4	79.4	6 - 10 Years	PR1	\$	377,000	\$ 704,00	) 25.7	
30	Back Street	Main Street	Badenoch St E	345.5	Paved	SU	50.0	50-199		6	74.9	6 - 10 Years	PR1	\$	377,000	\$ 131,00	) 25.2	
191	Settler's Road	Caltass Road	lelter Glen	318.9	Paved	SU	50.0	50-199		6	77.6	6 - 10 Years	PR1	\$	377,000	\$ 121,00	) 22.4	
118	Concession 7	Start of Pavement	Maltby Road West	2017.4	Paved	RUR	60.0	50-199		5	78.2	6 - 10 Years	PR1	\$	377,000	\$ 761,00	) 21.9	
63a	Maltby Road East	Victoria Road South	1161m East of Victoria Road South	1161.0	Paved	RUR	80.0	50-199		4	78.4	6 - 10 Years	PR1	\$	377,000	\$ 438,00	) 21.6	

\$ 27,121,000

# APPENDIX L: TRAFFIC CALMING TOOLBOX

# Township of Puslinch Traffic Calming Toolbox

This appendix provides the "toolbox" of traffic calming measures with a description and photo of each treatment. The **Traffic Calming Toolbox** notes whether the measures are intended for use on urban and/or rural roads, sets out typical criteria for their applicability, and highlights potential benefits and disbenefits. **Table A** summarizes the traffic calming measures applicable for use on roads in Puslinch and the indicative costs. **Table B** summarizes the potential traffic calming benefits and implementation considerations for the measures. Detailed descriptions of the measures follow the introductory section.

The Township will typically select speed humps for most traffic calming installations unless site-specific conditions/considerations do not support their use. Other measures from the Traffic Calming Toolbox may be applied in such instances. Applying the toolbox consistently in these circumstances will assist the Township in selecting appropriate measures to address specific traffic issues and help to avoid the undesirable consequences of traffic calming. It is important to note that not all traffic calming measures are appropriate under all circumstances. Selection of suitable measures will depend on the specific issues being addressed and careful consideration of site-specific conditions.

# **Selecting Measures from the Toolbox**

The following outlines the typical decision process for selecting the most appropriate measures from the **Traffic Calming Toolbox**. Note that other, site-specific factors can also influence the measures selected:

- Step 1 Determine if the subject street is a candidate for physical traffic calming measures. Per the Traffic Calming Policy, locations meeting the initial screening criteria (assessed in Stage 2 of the process) would be candidates for physical treatments. Streets not satisfying these criteria may be considered for passive traffic calming measures such as enforcement and education to address resident concerns as an alternative or a first step.
- **Step 2** Assess whether speed humps/tables would be appropriate for the subject street based on the guidance in **Table B** and the detailed information provided below.
- **Step 3** Identify the list of potential traffic calming measures based on roadside environment. For urban roads, use Column 2 in **Table A**. For rural roads, use Column 3.
- **Step 4** Confirm and rank (based on severity) the primary issue(s) to be addressed through the Traffic Calming Plan. Potential issues include:
  - Speeding
  - Shortcutting traffic
  - Pedestrian crossings
  - Vehicle and pedestrian/cyclist conflicts
  - Heavy vehicles

- Step 5 Shortlist the measures that address the identified issue(s) and severity/priority. Select measures considering the potential traffic calming benefits detailed in Table B and defined as follows:
  - **Speed Reduction**: Measures aimed at reducing the speed vehicles are travelling at through the study area.
  - **Volume Reduction**: Measures aimed at reducing the volume of vehicles travelling through and without a destination within the study area.
  - Conflict Reduction: Measures aimed at reducing conflicts between vehicles, pedestrians, and cyclists.
- Step 6 Eliminate measures that would not be appropriate for the subject street. Focus
  on incorporating measures that would complement the following conditions, considering
  midblock versus intersection application:
  - School zones and Community Safety Zones
  - Active transportation routes
  - Adjacent to a park
  - High pedestrian generators
  - Adjacent land uses (residential versus non-residential)
  - Planned reconstruction
  - Available budget
  - Applicability for temporary installation
- **Step 7** Confirm measures can be used under prevailing roadway characteristics. Factors to consider include:
  - Existing intersections and control
  - Midblock pedestrian/cyclist crossings and control
  - Cross-section width
  - Need for on-street parking
  - Roadway alignment (i.e., horizontal and vertical curvature)
  - Grade
  - Block length
  - Driveway density
  - Pavement condition and materials
  - Drainage
  - Utilities and street furniture (e.g., poles, boxes, benches)
  - Streetlighting

Magaura		Applic	Applicability				
	measure	Urban	Rural	Cost			
Ver	tical Deflection						
1	Raised Crosswalk	•		\$-\$\$			
2	Raised Intersection	•		\$\$-\$\$\$			
3	Speed Hump/Table	•		\$-\$\$			
4	Speed Cushion	•		\$-\$\$			
Hor	izontal Deflection						
5	Chicane (One-Lane, Two-Lane)	•		\$\$			
6	Curb Radius Reduction	•		\$-\$\$			
7	Lateral Shift		•	\$-\$\$			
8	Speed Kidney	•		\$-\$\$			
a	Traffic Circle/Traffic Button/			222_22			
<u> </u>	Mini-Roundabout			ΨΨ-ΨΨΨ			
Roa	adway Narrowing						
10	Curb Extension	•		\$\$-\$\$\$			
11	Lane Narrowing	•		\$-\$\$			
12	On-Street Parking	•		\$-\$\$			
13	Raised Median Island	•		\$\$-\$\$\$			
14	Lane Reconfiguration (Road Diet)	•		\$-\$\$\$			
15	Vertical Centreline Treatment			\$			
Sur	face Treatment		1				
16	Sidewalk Extension/Textured Crosswalk			\$-\$\$			
17	Textured Pavement	•		\$\$-\$\$\$			
18	Transverse Rumble Strips		•	\$			
Pav	vement Markings	-					
19	Converging Chevrons		•	\$			
20	Dragon's Teeth		•	\$			
21	Full-Lane Transverse Bars		٠	\$			
22	Peripheral Transverse Bars		•	\$			
23	On-Road "Sign" Pavement Markings			\$			

# TABLE A: POTENTIAL TRAFFIC CALMING MEASURES

Magaura		Applic	ability	Indicative
	measure	Urban	Rural	Cost
Acc	ess Restriction			
24	Directional Closure	•		\$-\$\$\$
25	Diverter	•		\$-\$\$
26	Full Closure	•		\$\$-\$\$\$
27	Intersection Channelization	•		\$-\$\$
28	Raised Median Through Intersection	•	•	\$-\$\$
29	Right-in/Right-Out Island	•	•	\$-\$\$
Gat	eways			
30	Gateway <sup>1</sup>	•	•	\$-\$\$
Sha	ired Spaces			
31	Shared Space <sup>2</sup>	•		\$-\$\$\$
Enf	orcement and Education			
32	Speed Display Devices	•	•	\$-\$\$
33	Targeted Speed Enforcement			\$\$\$
34	Targeted Education Campaign		•	\$-\$\$\$

# TABLE A: POTENTIAL TRAFFIC CALMING MEASURES

Legend: \$ - \$1,000 or less \$\$ - \$1,000 to \$10,000 \$\$\$ - \$10,000 or more

### Notes:

- 1. To be used in conjunction with other traffic calming measures, typically consider for new development
- 2. Measure is site specific, implemented as part of road reconstruction or new development

TABLE B:	<b>POTENTIAL BENEFITS</b>	AND IMPLEMENTATION	CONSIDERATIONS
----------	---------------------------	--------------------	----------------

		Pote Calm	ntial Tr ing Be	affic nefits	Implementation Considerations						
	Measure	Speed Reduction	Volume Reduction	Conflict Reduction	Local Vehicle Access	Emergency Vehicle Response	Cycling Use	Traffic Enforcement	Vehicle Parking	Street Maintenance	
Ver	tical Deflection										
1	Speed Hump/Table										
2	Raised Crosswalk										
3	Raised Intersection										
4	Speed Cushion										
Hor	izontal Deflection				1						
5	Chicane (One-Lane, Two- Lane) <sup>1</sup>										
6	Curb Radius Reduction										
7	Lateral Shift										
8	Speed Kidney										
9	Traffic Circle/Traffic Button/Mini-Roundabout										
Roa	adway Narrowing										
10	Curb Extension										
11	Lane Narrowing										
12	On-Street Parking										
13	Raised Median Island										
14	Lane Reconfiguration (Road Diet)										
15	Vertical Centreline Treatment										
Sur	face Treatment										
16	Sidewalk Extension/ Textured Crosswalk										
17	Textured Pavement										
18	Transverse Rumble Strips										

TABLE B:	<b>POTENTIAL BENEFITS</b>	AND IMPLEMENTATION	CONSIDERATIONS
----------	---------------------------	--------------------	----------------

1		Pote Calm	ential Tr ing Bei	raffic nefits	Implementation Considerations						
	Measure	Speed Reduction	Volume Reduction	Conflict Reduction	Local Vehicle Access	Emergency Vehicle Response	Cycling Use	Traffic Enforcement	Vehicle Parking	Street Maintenance	
Pav	ement Markings										
19	Converging Chevrons										
20	Dragon's Teeth										
21	Full-Lane Transverse Bars										
22	Peripheral Transverse Bars										
23	On-Road "Sign" Pavement Markings										
Access Restriction											
24	Directional Closure										
25	Diverter										
26	Full Closure										
27	Intersection Channelization										
28	Raised Median Through Intersection										
29	Right-in/Right-out Island										
Gat	eways	-	-	-				-	-		
30	Gateways										
Sha	red Space	T	1	1				1	1	T	
31	Shared Space										
Enf	orcement and Education										
32	Speed Display Devices										
33	Targeted Speed Enforcement										
34	Targeted Education Campaign										
Leger	Legend: No Benefit / Impact Minor Benefit / Impact Substantial Benefit / Impact							oact 🔳			
## VERTICAL DEFLECTION 1 – Speed Hump/Table

## **Description and Purpose**

A speed hump is a raised area on a road that causes the vertical upward movement of a traversing vehicle, creating driver discomfort. A speed table is an elongated, raised speed hump with a flat-topped section that is long enough to raise the entire wheelbase of a vehicle. The flat section of the table may be constructed with brick or other textured materials.

A speed hump/table is intended to lower vehicle speeds.

## Applicability

- Roadside Environment Urban
- Location Midblock
- Speed Limit 50 km/h or less
- Traffic Volume All
- Grade 8% or less

## Cost

• \$-\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### **Implementation Considerations**

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## VERTICAL DEFLECTION 2 – Raised Crosswalk

### **Description and Purpose**

Marked pedestrian crosswalk at an intersection or mid-block location constructed at a higher elevation than the adjacent roadway. The raised area on the road causes the vertical upward movement of a traversing vehicle, creating driver discomfort.

A raised crosswalk is intended to lower vehicle speeds, better define crosswalk areas, and reduce pedestrian–vehicle conflicts.

## Applicability

- Roadside Environment Urban
- Location Midblock or intersection, sidewalk on at least one side of road
- Speed Limit 50 km/h or less
- Traffic Volume All
- Grade Between 1% and 8%

#### Cost

• \$ to \$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## VERTICAL DEFLECTION 3 – Raised Intersection

### **Description and Purpose**

Intersection, that may include crosswalks, constructed at a higher elevation than the adjacent approach roadways. The raised area on the road causes the vertical upward movement of a traversing vehicle, creating driver discomfort.

A raised intersection is intended to lower vehicle speeds, improve pedestrian visibility, and reduce pedestrian–vehicle conflicts.

## Applicability

- Roadside Environment Urban
- Location Intersection
- Speed Limit 50 km/h or less
- Traffic Volume All
- Grade Between 1% and 8%

#### Cost

• \$\$ to \$\$\$



## **Potential Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### **Implementation Considerations**

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## VERTICAL DEFLECTION 4 – Speed Cushion

### **Description and Purpose**

A raised area like a speed hump but does not extend the entire width of the road. Designed to allow larger vehicles, such as buses or fire trucks, to "straddle" the cushion, while smaller vehicles will have at least one side deflected upward.

Speed cushions are intended to cause sufficient driver discomfort to lower smaller vehicle speeds (yet allow the driver to maintain control) while allowing larger vehicles to pass without (with less) difficulty.

## Applicability

- Roadside Environment Urban
- Location Midblock
- Speed Limit 50 km/h or less
- Traffic Volume All
- Grade 8% or less

#### Cost

• \$-\$\$



#### **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## HORIZONTAL DEFLECTION 5 – Chicane

## **Description and Purpose**

A series of curb extensions on alternating sides of a road, which narrow the roadway and require drivers to steer from one side to the other, forcing the lateral shifting of the vehicle. Multiple series of curb extensions can be used.

A chicane is intended to discourage shortcutting or through traffic, lower vehicle speeds, and can enhance corridor aesthetics.

## Applicability

- Roadside Environment Urban
- Location Midblock
- Speed Limit 50 km/h or less
- Traffic Volume More than 750 vpd
- Grade 8% or less

#### Cost

• \$\$



#### **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### **Implementation Considerations**

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## HORIZONTAL DEFLECTION 6 – Curb Radius Reduction

## **Description and Purpose**

Reconstruction or modification of an intersection corner with a smaller radius, usually in the 3.0 m to 5.0 m range, creating a more abrupt turning movement.

A curb radius reduction is intended to lower right-turning vehicle speeds, reduce pedestrian crossing distances, and improve visibility of pedestrians.

## Applicability

- Roadside Environment Urban
- Location Intersection
- Speed Limit All
- Traffic Volume All
- Grade All

#### Cost

• \$-\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### **Implementation Considerations**

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

## Legend

## HORIZONTAL DEFLECTION 7 – Lateral Shift

## **Description and Purpose**

The use of pavement markings or curb extensions to create a curvilinear alignment (a 'jog') like a chicane within an otherwise straight section of roadway, forcing the lateral shifting of the vehicle. This effect can also be achieved with the use of a central island.

A lateral shift is intended to lower vehicle speeds.

## Applicability

- Roadside Environment Urban or rural
- Location Midblock
- Speed Limit 50 km/h or less
- Traffic Volume All
- Grade All

## Cost

• \$-\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

## Legend

## HORIZONTAL DEFLECTION 8 – Speed Kidney

#### **Description and Purpose**

An arrangement of three speed humps elongated with a curvilinear shape in the direction of traffic, forcing the lateral shifting of the vehicle. Vehicle drivers choosing to drive in a straight path will travel over a raised area on the road, experiencing discomfort as two or four wheels traverse the different parts of the speed kidney. Vehicles are required to take a curvilinear path to avoid vertical upward movement that creates driver discomfort.

A speed kidney is intended to lower vehicle speeds.

## Applicability

- Roadside Environment Urban
- Location Midblock
- Speed Limit 50 km/h or less
- Traffic Volume All
- Grade 5% or less

#### Cost

• \$-\$\$



#### **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## HORIZONTAL DEFLECTION 9 – Traffic Circle/Traffic Button/ Mini-Roundabout

### **Description and Purpose**

A circular intersection with an island located in the centre that requires vehicles to travel around the feature in a counter-clockwise direction. Yield traffic control is recommended on all approaches.

Mini-roundabouts are designed similar to full-size roundabouts, with splitter islands and deflection of vehicles on all approaches, but with a smaller diameter and traversable islands. A traffic circle is typically smaller than a mini-roundabout and does not have splitter islands on the approaches. A traffic button is like a traffic circle but with a mountable central island.

Left-turning trucks, buses, and emergency vehicles, which require a larger turning radius than the intersection provides, may turn in front of the traffic circle, or mount the central raised island.

A traffic circle/traffic button/mini-roundabout is intended to lower vehicle speeds and reduce conflicts.

## Applicability

- Roadside Environment Urban
- Location Intersection, two-lane road
- Speed Limit 50 km/h or less
- Traffic Volume 1,500 vpd or more
- Grade All

## Cost

• \$\$-\$\$\$



#### **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## ROADWAY NARROWING 10 – Curb Extension

#### **Description and Purpose**

Also known as a neckdown, choker, curb bulb, or bulb-out, a horizontal intrusion of the curb into the roadway to narrow the travelled portion. The curb is extended on one or both sides to reduce the roadway width to as a little as 6.0 m for two-lane, two-way traffic. In some locations, it may be possible to implement curb extensions by removing existing parking spaces.

A curb extension is intended to lower vehicle speeds, reduce pedestrian crossing distances, increase visibility of pedestrians, prevent parking close to an intersection, and better define parking areas.

## Applicability

- Roadside Environment Urban
- Location Midblock or intersection
- Speed Limit 60 km/h or less
- Traffic Volume All
- Grade All

## Cost

• \$\$-\$\$\$



#### **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### **Implementation Considerations**

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## ROADWAY NARROWING 11 – Lane Narrowing

### **Description and Purpose**

The use of pavement markings or other features (for example, bicycle lanes, street beautification programs, pavement texture) to reduce lane widths. The intention is for drivers to perceive the roadway to be less comfortable to travel at higher speeds due to the narrowing of the lanes.

Lane narrowing is intended to lower vehicle speeds.

## Applicability

- Roadside Environment Urban
- Location Midblock
- Speed Limit 60 km/h or less
- Traffic Volume All
- Grade All

## Cost

• \$-\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### **Implementation Considerations**

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

## Legend

## ROADWAY NARROWING 12 – On-Street Parking

### **Description and Purpose**

Allowing motor vehicles to park adjacent and parallel to the curb to reduce the roadway width available for vehicle movement. Angled parking is not appropriate as a traffic calming measure due to the increased potential for conflicts.

On-street parking is intended to lower vehicle speeds while allowing vehicles to continue to park on road.

## Applicability

- Roadside Environment Urban
- Location Midblock
- Speed Limit 50 km/h or less
- Traffic Volume All
- Grade All

## Cost

• \$-\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

## Legend

## ROADWAY NARROWING 13 – Raised Median Island

### **Description and Purpose**

A raised island constructed on the centerline of a two-way roadway to reduce the overall width of the adjacent travel lanes. The island can provide a refuge for pedestrians and cyclists, enabling them to cross one direction of travel at a time, thereby reducing waiting time for gaps when crossing the roadway.

A raised median island is intended to lower vehicle speeds, reduce conflicts, and reduce crossing distances for pedestrians.

## Applicability

- Roadside Environment Urban
- Location Midblock
- Speed Limit 60 km/h or less
- Traffic Volume All
- Grade All

## Cost

• \$\$-\$\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## ROADWAY NARROWING 14 – Lane Reconfiguration (Road Diet)

### **Description and Purpose**

A reconfiguration of a roadway to reduce the number of travelled lanes and/or the effective width. The reclaimed space can then be allocated to other uses, such as wider sidewalks, turning lanes, bus lanes, pedestrian refuge islands, bike lanes, parking, etc.

The most common form of lane reconfiguration involves converting a fourlane, undivided roadway segment to a three-lane cross-section consisting of two through lanes, a centre two-way left-turn lane, and two bicycle lanes. Other conversions include four-lane to five-lane, two-lane to three-lane, and five-lane to three-lane.

A lane reconfiguration is intended to lower vehicle speeds and reduce conflicts.

## Applicability

- Roadside Environment Urban
- Location Midblock
- Speed Limit 60 km/h or less
- Traffic Volume Moderate
- Grade All

#### Cost

• \$-\$\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## ROADWAY NARROWING 15 – Vertical Centreline Treatment

### **Description and Purpose**

The use of vertical treatments, such as flexible post-mounted delineators or raised pavement markers, to create a centre median, thereby giving the perception of lane narrowing and a sense of constriction. The treatments can also raise driver awareness of school areas and other locations where vulnerable road users are present.

A vertical centreline treatment is intended to lower vehicle speeds.

## Applicability

- Roadside Environment Urban or rural
- Location Midblock, two-lane road
- Speed Limit 60 km/h or less
- Traffic Volume All
- Grade All

## Cost

• \$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## SURFACE TREATMENT 16 – Sidewalk Extension/ Textured Crosswalk

### **Description and Purpose**

A sidewalk continued across a local street intersection at the same elevation as the roadway. Textured/patterned elements that contrast the roadway can be incorporated into the sidewalk extension.

A sidewalk extension visually enhances a pedestrian crossing location, so drivers become more aware of its presence. It is not intended to indicate whether drivers or pedestrians are required to yield. Traffic must comply with local or provincial regulations governing the type of pedestrian crossing system being enhanced by the sidewalk extension/textured crosswalk.

With a sidewalk extension/textured crosswalk, the continuation of the surface and enhanced visual/tactile identification of the crosswalk area emphasizes pedestrian priority.

A sidewalk extension/textured sidewalk is intended to lower vehicle speeds and reduce pedestrian-vehicle conflicts.

## Applicability

- Roadside Environment Urban
- Location Midblock or intersection, sidewalks on both sides
- Speed Limit 60 km/h or less
- Traffic Volume All
- Grade All

#### Cost

• \$-\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## SURFACE TREATMENT 17 – Textured Pavement

## **Description and Purpose**

Roadway pavement that incorporates a textured and/or patterned surface that contrasts other adjacent roadways in the surrounding area. The difference in texture alerts drivers of the need to reduce speed.

Textured pavement is intended to lower vehicle speeds.

## Applicability

- Roadside Environment Urban
- Location Midblock or intersection
- Speed Limit 60 km/h or less
- Traffic Volume All
- Grade All

#### Cost

• \$\$-\$\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## SURFACE TREATMENT 18 – Transverse Rumble Strips

## **Description and Purpose**

Raised buttons, bars or grooves closely spaced at regular intervals on the roadway that create both noise and vibration in a moving vehicle, alerting motorists to a traffic control device associated with unusual or changing conditions ahead. Rumble strips are sometimes inappropriately used in isolation as a speed control device.

Transverse rumble strips are intended to lower vehicle speeds.

## Applicability

- Roadside Environment Rural
- Location Midblock
- Speed Limit All
- Traffic Volume All
- Grade All

#### Cost

• \$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## PAVEMENT MARKINGS 19 – Converging Chevrons

### **Description and Purpose**

A series of pavement markings painted in the shape of a forward-facing V, pointing in the roadway travel direction, to alert the driver of the need to reduce speed. The markings may be spaced closer together or painted thinner as the target feature (e.g., speed limit change, entry to built-up area) approaches to create the illusion that the speed of the vehicle is increasing.

Converging chevrons are intended to lower vehicle speeds.

## Applicability

- Roadside Environment Rural
- Location Midblock, entrances to communities
- Speed Limit All
- Traffic Volume All
- Grade All

#### Cost

• \$



#### **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## PAVEMENT MARKINGS 20 – Dragon's Teeth

#### **Description and Purpose**

A series of triangular pavement markings placed along the edge of the travelled lanes to alert the driver of the need to reduce speed. The markings may be spaced closer together or painted with increasing size as the target feature (e.g., speed limit change, entry to built-up area) approaches to create the illusion that the speed of the vehicle is increasing.

Dragon's teeth are intended to lower vehicle speeds.

## Applicability

- Roadside Environment Rural
- Location Midblock, entrances to communities
- Speed Limit All
- Traffic Volume All
- Grade All

#### Cost

• \$



#### **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## PAVEMENT MARKINGS 21 – Full-Lane Transverse Bars

### **Description and Purpose**

A series of parallel pavement markings extending across most of the travelled lane to alert the driver of the need to reduce speed. The markings may be spaced close together or painted thinner as the target feature (e.g., speed limit change, entry to built-up area) approaches to create the illusion that the speed of the vehicle is increasing.

Full lane transverse bars are intended to lower vehicle speeds.

## Applicability

- Roadside Environment Rural
- Location Midblock, entrances to communities
- Speed Limit All
- Traffic Volume All
- Grade All

#### Cost

• \$



#### **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## PAVEMENT MARKINGS 22 – Peripheral Transverse Bars

### **Description and Purpose**

A series of parallel pavement markings placed along the edge of the travelled lanes to alert the driver of the need to reduce speed. The markings may be spaced closer together or painted with increasing size as the target feature (e.g., speed limit change, entry to built-up area) approaches to create the illusion that the speed of the vehicle is increasing.

Peripheral transverse bars are like full-lane transverse bars but require less maintenance of pavement markings.

Peripheral transverse bars are intended to lower vehicle speeds.

## Applicability

- Roadside Environment Rural
- Location Midblock, entrances to communities
- Speed Limit All
- Traffic Volume All
- Grade All

#### Cost

• \$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## PAVEMENT MARKINGS 23 – On-Road "Sign" Pavement Markings

#### **Description and Purpose**

Pavement markings painted on the roadway to convey information typically given to drivers through signage. The words and symbols provide a larger image of the sign information but directly in the driver's line of sight. Examples include speed limit, 'SLOW', 'Stop Ahead, etc.

On-road "sign" pavement markings are intended to lower vehicle speeds.

## Applicability

- Roadside Environment Urban or rural
- Location Midblock, approaching feature
- Speed Limit All
- Traffic Volume All
- Grade All

#### Cost

• \$



#### **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### **Implementation Considerations**

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## ACCESS RESTRICTIONS 24 – Directional Closure

### **Description and Purpose**

A curb extension or vertical barrier extending to approximately the centerline of the roadway, effectively obstructing (prohibiting) one direction of traffic. Bicycles are typically permitted to travel through a directional closure in both directions, including the direction in which motor vehicle traffic is obstructed. In some cases, gaps or a contra-flow bicycle lane are used to provide bicycle access.

A directional closure is intended to eliminate short-cutting or through traffic and reduce conflicts.

## Applicability

- Roadside Environment Urban
- Location Midblock or intersection
- Speed Limit All
- Traffic Volume Less than 1,500 vpd
- Grade All

#### Cost

• \$-\$\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## ACCESS RESTRICTIONS 25 – Diverter

### **Description and Purpose**

A raised barrier placed diagonally across an intersection that forces vehicles to turn, thereby preventing drivers from proceeding straight through the intersection. Diverters can incorporate gaps for pedestrians, wheelchairs and bicycles and can be mountable by emergency vehicles.

A diverter is intended to eliminate shortcutting or through traffic and reduce conflicts.

## Applicability

- Roadside Environment Urban
- Location Intersection
- Speed Limit 50 km/h or less
- Traffic Volume Less than 1,500 vpd, use with caution for volumes up to 5,000 vpd
- Grade All

#### Cost

• \$-\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## ACCESS RESTRICTIONS 26 – Full Closure

### **Description and Purpose**

A barrier extending the entire width of a roadway that obstructs all motor vehicle traffic movements from continuing along the roadway. A closure can change a four-way intersection to a three-way, or a three-way intersection to a non-intersection. Closures can incorporate gaps for pedestrians, wheelchairs and bicycles and can be mountable by emergency vehicles.

A full closure is intended to eliminate shortcutting or through traffic and reduce conflicts.

## Applicability

- Roadside Environment Urban
- Location Intersection
- Speed Limit 50 km/h or less
- Traffic Volume All
- Grade All

#### Cost

• \$\$-\$\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

## Legend

## ACCESS RESTRICTIONS 27 – Intersection Channelization

## **Description and Purpose**

Raised islands or bollards located in an intersection to obstruct specific traffic movements and physically direct traffic through an intersection. Bicycles are typically permitted to make all movements, including those which motor vehicles are prevented from making, either through gaps or depressions in the island, or by travelling around the island.

Intersection channelization is intended to obstruct short-cutting or through traffic and reduce crossing distances for pedestrians.

## Applicability

- Roadside Environment Urban
- Location Intersection
- Speed Limit All
- Traffic Volume All
- Grade All

## Cost

• \$-\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## ACCESS RESTRICTIONS 28 – Raised Median Through Intersection

## **Description and Purpose**

A raised island constructed on the centerline of a two-way roadway through an intersection to prevent left turns and through movements to and from the intersecting roadways. The island can provide a refuge for pedestrians and cyclists, enabling them to cross one direction of travel at a time, thereby reducing waiting time for gaps when crossing the roadway.

A raised median through an intersection is intended to eliminate short-cutting or through traffic, reduce conflicts, and reduce crossing distances for pedestrians.

## Applicability

- Roadside Environment Urban or rural
- Location Intersection
- Speed Limit All
- Traffic Volume All
- Grade All

## Cost

• \$-\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

## Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	C
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	L

## Legend

## ACCESS RESTRICTIONS 29 – Right-In/Right-Out Island

## **Description and Purpose**

A raised triangular island at an intersection approach that obstructs left turns and through movements to and from the intersecting street or driveway. Bicycles are typically permitted to make left turns and through movements from the side street, either through gaps or depressions in the island, or by travelling around the island.

A right-in/right-out island is intended to obstruct short-cutting or through traffic and reduce crossing distances for pedestrians.

## Applicability

- Roadside Environment Urban or rural
- Location Intersection
- Speed Limit All
- Traffic Volume All
- Grade All

## Cost

• \$-\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## GATEWAYS

## 30 – Gateway

#### **Description and Purpose**

A combination of traffic calming measures that help to create an entry or "gateway" to a community. Gateways typically denote transitional zones between commercial/ residential areas and urban/rural villages or hamlets.

A gateway is intended to lower vehicle speeds.

## Applicability

- Roadside Environment Urban or rural
- Location Midblock or intersection
- Speed Limit All
- Traffic Volume All
- Grade All

## Cost

• \$-\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### **Implementation Considerations**

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

No Benefit □ / Impact □ Minor Benefit □ / Impact □ Substantial Benefit ■ / Impact ■ 

## SHARED SPACES 31 – Shared Space

### **Description and Purpose**

A design concept that shifts priority from vehicles to cyclists and pedestrians, allowing vulnerable road users to cross anywhere along the roadway. Often, there are no pavement markings, traffic signals, signs, or barriers, requiring drivers to be more attentive. There may also be trees or street furniture in the roadway to act as deflections.

Shared space design is intended to lower vehicles speeds and enhance the public realm.

## Applicability

- Roadside Environment Urban
- Location Midblock
- Speed Limit 50 km/h or less, lower to 20-30 km/h
- Traffic Volume Less than 15,000 vpd
- Grade All

#### Cost

• \$-\$\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

## Legend

## ENFORCEMENT AND EDUCATION 32 – Speed Display Devices

### **Description and Purpose**

An interactive sign that displays the speed of an approaching vehicle. The vehicle speed is captured using radar and can trigger the display board to show specific messages when a driver approaches at a predetermined undesirable speed. The devices are often used upstream of targeted speed enforcement areas.

A speed display device is intended to lower vehicle speeds.

## Applicability

- Roadside Environment Urban or rural
- Location Midblock
- Speed Limit All (typically 60 km/h or less)
- Traffic Volume All
- Grade All

#### Cost

• \$-\$\$



#### **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### **Implementation Considerations**

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

## ENFORCEMENT AND EDUCATION 33 – Targeted Speed Enforcement

### **Description and Purpose**

Additional police enforcement in locations where speed, collisions, citations, resident comments, or other sources of information suggest that the site is unusually hazardous due to illegal driving practices.

Targeted speed enforcement is intended to lower vehicle speeds.

## Applicability

- Roadside Environment Urban or rural
- Location Midblock
- Speed Limit All (typically 60 km/h or less)
- Traffic Volume All
- Grade n/a

## Cost

• \$\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

#### Implementation Considerations

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

#### Legend

No Benefit □ / Impact □ Minor Benefit □ / Impact □ Substantial Benefit ■ / Impact ■  $\square$ 

## ENFORCEMENT AND EDUCATION 34 – Targeted Education Campaign

## **Description and Purpose**

Initiatives to raise awareness of road safety issues. Education campaigns typically include an element of community outreach and involvement and often will complement physical traffic calming measures. In some cases, these campaigns will form an integral component of an overall strategic road safety program.

A targeted education campaign is intended to raise driver awareness with the aim of lowering vehicle speeds, reducing shortcutting or through traffic, and/or reducing conflicts.

## Applicability

- Roadside Environment Urban or rural
- Location Midblock
- Speed Limit All (typically 50 km/h or less)
- Traffic Volume All
- Grade n/a

## Cost

• \$-\$\$\$



## **Potential Traffic Calming Benefits**

Speed Reduction	
Volume Reduction	
Conflict Reduction	

## **Implementation Considerations**

Local Vehicle Access	
Emergency Vehicle Response	
Cycling Use	
Traffic Enforcement	
Vehicle Parking	
Street Maintenance	

## Legend

# APPENDIX M: COMMUNITY TRAFFIC ISSUE REPORTING FORM

# **Community Traffic Issue Reporting Form**

Name:	
Mailing Address:	
Phone:	
Email:	

Please indicate the location (street or area) of the traffic concern:

What is the area/zone of your traffic concern?							
	School Zone/Community Safety Zone					Park	
	Residential A	Area					Road with limited visibility
	Hamlet						Other
Pleas	e select any	of the	followin	g traffic co	ncerns:		
	Speeding			Collision concerns			
	Vehicle volumes			Cut-throu	igh t	raffic	
	Pedestrian Safety						
When does the problem typically occur?							
	Morning rusł	n hour		Veekdays			
	Mid-day		Weeker	nds			
	Afternoon ru	sh hou	r 🗆 🛛 🕻	Other			
Whic	Which seasons does the problem occur?						
	Winter		Summe	r			
	Spring		Fall				
Pleas	Please provide any further comments:						
## APPENDIX N: WARRANTS FOR COMMUNITY SAFETY ZONES

## **Community Safety Zone Warrants**

The following warrants are to be used in conjunction with the **Community Safety Zone Policy** when considering designating a Community Safety Zone on a Township of Puslinch road.

Road Name and Limits:		
Date Inquiry Received:		
Date Inquiry Completed:		
Name of Reviewer:		
Road Environment:	Urban 🗆	Rural 🗆

### Warrant 1 – Areas of Special Consideration

Community Safety Zones should only be implemented in locations of special concern that are obvious to the road user, specifically:

- Elementary and secondary school
- Daycare centre
- Retirement residence or senior's centre
- Community centre
- Hospital
- High pedestrian traffic locations (more than 75 pedestrians per hour for any 8 hours of the day)

### Warrant 2 – Identified Safety Concern

Community Safety Zones should only be implemented in locations of identified safety concern. The safety warrant is comprised of two parts. Either component must be met to satisfy the warrant:

- **Collision Component:** Collision ratio is less than 1:900 (collisions per year to average annual daily traffic (AADT)) averaged over 36 consecutive months.
- Risk Component: Locations where a significant safety concern may exist even though it is not reflected in the collision component. Table A lists the six risk factors considered in assessing the level of risk. Locations scoring:
  - 6 points are considered low risk;
  - 7 to 12 points are considered moderate risk; and
  - 13 to 18 points are considered high risk.

# A minimum score of 13 points is required to satisfy the risk component of the safety warrant.

#### TABLE A: COMMUNITY SAFETY ZONE RISK FACTOR SCORING

	Risk Factor Scoring			
Risk Factor	High (Score 3)	Moderate (Score 2)	Low (Score 1)	Score
85th Percentile Speed (above posted speed limit)	>20	15-20	<15	
Average Annual Daily Traffic Volume (AADT)	>2,000	1,000-2,000	<1,000	
Truck Volume (% of AADT)	>5%	3%-5%	<3%	
Pedestrian Volume (in any 8 hours)	>75	40-75	<40	
Length of Sidewalks (% of Road)	<25%	25%-75%	>75%	
Intersection and Entrances (per kilometre)	>10	4-10	<4	
			Total Score	

Prior to assessing the risk component of the safety warrant, field observations or local law enforcement must verify that there is an unusually high violation rate in the subject location.

### Warrant 3 – Ability to Enforce

Community Safety Zone implementation in Puslinch requires enforcement commitment from the Ontario Provincial Police (OPP). This warrant ensures that sufficient resources are available to provide the necessary enforcement.

## APPENDIX O: TRUCK ROUTE BY-LAW TEMPLATE

#### **TOWNSHIP OF PUSLINCH**

#### By-law No. xx-xx

#### Being a by-law to identify Truck Routes and to restrict Heavy Trucks on Non-Truck Routes within the Township of Puslinch

**WHEREAS** Section 10 (2) subsection 7 of the *Municipal Act, 2001*, c. 25, as amended, (the Act) provides that a municipality may pass by-laws to provide any service or thing that the municipality considers necessary or desirable to the public;

**WHEREAS** Section 27 (1) of the Act authorizes municipalities to pass by-laws in respect of a highway under its jurisdiction;

**WHEREAS** Section 429 (1) of the Act authorizes a municipality to establish a system of fines for offences under a by-law of the municipality;

**AND WHEREAS** Section 122 (7) of the *Highway Traffic Act*, R.S.O 1990, c.H.8, as amended, provides that the municipality or other authority having jurisdiction over a highway may by by-law designate the date on which a reduced load period shall start or end and the highway or portion thereof under its jurisdiction to which the designation applies,

# NOW THEREFORE the Council of The Corporation of the Township of Puslinch enacts as follows:

#### PART I – SHORT TITLE

This by-law may be cited as the **Truck Route By-law**.

#### **PART II – DEFINITIONS**

- 1. In this by-law,
  - a. "Agricultural Purposes" means land where animals or birds are kept for grazing, breeding, raising, boarding, training, or for the tillage of soil rowing, harvesting of vegetables, fruits, field crops or landscaping materials;
  - b. "Commercial Motor Vehicle" means a motor vehicle having permanently attached thereto a truck or delivery body, and includes ambulances, hearses, casket wagons, fire apparatus, motor buses and tractors used for hauling purposes on the highways;
  - c. "Council" means the Council of the Corporation of the Township of Puslinch;

- d. "Director of Public Works" means Director of Public Works or any employee or agent of the Township designated by the said Director of Public Works to act on their behalf;
- e. "Heavy Truck(s)" means:
  - i. any commercial motor vehicle that has a registered gross vehicle weight exceeding 5 tonnes (5,000 kilograms) according to the current permit or vehicle registration which has been issued under the *Highway Traffic Act*, or its foreign equivalent for such vehicle, regardless of the actual weight of such vehicles; or
  - ii. a trailer that has a manufacturer's gross weight rating exceeding 1,360 kilograms, regardless of the actual weight of such trailer;
- f. "Highway" means a common and public highway and includes one or both of the following:
  - i. any street, road, avenue, parkway, lane, driveway, boulevard, sidewalk, square, place, bridge, viaduct or trestle, any part of which is intended for or used by the public for the passage of vehicles or persons; or
  - ii. the area between the lateral property lines of any highway or road allowance including any curbs, gutters, boulevards, culverts, ditches and retaining wall;
- g. "Motor Vehicle" includes an automobile, motorcycle, motor assisted bicycle unless otherwise indicated in this by-law, and any other vehicle propelled or driven otherwise than by muscular power, but does not include a street car, or other motor vehicles running only upon rails, or a motorized snow vehicle, traction engine, farm tractor, self-propelled implement of husbandry or road building machine within the meaning of the *Highway Traffic Act*;
- h. "Municipal Law Enforcement Officer" means a person or persons duly appointed, pursuant to the *Police Services Act*, by Council;
- i. "Non-Truck Route" means any Highway or part thereof within the Township not set forth in Schedule A of this by-law and further not signed as a Truck Route;
- j. "Officer" means a Municipal Law Enforcement Officer duly appointed by Council, and includes any police officer appointed pursuant to the *Police Services Act* and any enforcement officer for the Ministry of Transportation;

- k. "Person" includes any individual, driver, vehicle operator, firm, partnership, association, corporation, company or organization of any kind;
- I. "Reduced Load Limit" means and refers to a Heavy Truck restricted to a limit of a maximum weight of five (5) tonnes per axle for any vehicle traveling on the said Highways during the Reduced Load Period in any year;
- m. "Reduced Load Period" means the period between March 1<sup>st</sup> to April 30<sup>th</sup> inclusive in any year;
- n. "Road Allowance" means all allowances for roads, except in so far as they have been stopped up according to law, made by the Crown surveyors, all Highways laid out or established under the authority of any statute, all roads on which public money has been expended for opening them or on which statute labour has been usually performed, all roads dedicated by the owner of the land to public use, and all alterations and deviations of and all bridges over any such allowance for Highway or road;
- o. "School Bus" means a chrome yellow bus that is used for the transportation of:
  - i. children; or
  - individuals with physical and/or intellectual disabilities to or from a training centre that bears on the front and rear thereof the words "School Bus" and on the rear thereof the words "Do Not Pass When Signals Flashing";
- p. "Site Alteration Agreement" means a permit issued pursuant to the provisions of the xxx by the Township;
- q. "Township" means the Corporation of the Township of Puslinch;
- r. "Truck Route" means a Highway identified in Schedule A of this by-law;
- s. "Water Hauler" means vehicles transporting potable water in a water tank fixed to a truck.

#### PART III - HEAVY VEHICLES

- 2. Heavy Truck Routes
  - a. No Person shall operate or permit the operation of a Heavy Truck except on a Truck Route, unless otherwise exempt or provided for in this by-law.

- b. The Director of Public Works is hereby authorized to erect such signage as is required to properly designate and identify the Highways listed in Schedule A of this by-law as Truck Routes.
- c. The Director of Public Works is hereby authorized to erect such signage as is required to properly designate and identify the Highways not listed in Schedule A of this by-law as prohibited for use by Heavy Trucks.
- 3. Reduced Load Limit
  - a. The Highways set out in Schedule B to this by-law are restricted to a Reduced Load Limit during the Reduced Load Period.
  - b. The Director of Public Works is hereby authorized to erect such signage as is required to properly designate and identify the Highways listed in Schedule B of this by-law as having Reduced Load Limits during the Reduced Load Period.
  - c. No Person shall operate or permit the operation of a vehicle on a Highway that does not comply with the Reduced Load Limit during the Reduced Load Period.
- 4. Exceptions
  - a. Section 2 above does not apply in the following circumstances:
    - i. To a Person operating a Heavy Truck by or on behalf of the Township, for the purposes of Highway maintenance, including the carriage and application of abrasives or chemicals to the Highway, the stockpiling of abrasives or chemicals for use on a Highway, or the removal of snow from a Highway;
    - ii. To a Person operating a Heavy Truck following a route that has been approved through a Site Alteration Agreement with the Township;
    - iii. To a Person operating fire apparatus or other vehicles which are responding to a bona fide emergency;
    - iv. To a Person operating Heavy Trucks on behalf of the Township for the purposes of transporting waste;
    - v. To a Person operating a public utility or emergency vehicle;
    - vi. To a Person operating a School Bus; or
    - vii. To a Person operating a Heavy Truck on a Non-Truck Route when instructed to do so by a police officer.

- b. Section 2 does not apply to a Person operating a Heavy Truck in the usual conduct of business (existing or established place of business) and proceeding by way of the shortest route to or from any Truck Route in respect of the following vehicles:
  - i. Water Haulers;
  - ii. Heavy Trucks used exclusively for the transportation of milk;
  - iii. Heavy Trucks being used for Agricultural Purposes;
  - iv. Heavy Trucks on any Highway or part of Highway which has been properly authorized as a temporary detour route; or
  - v. Heavy Trucks delivering or providing goods or services.

### PART IV – PENALTY

- 5. Every Person who contravenes any of the provisions of this by-law and, if the Person is a corporation, every director or officer of the corporation who knowingly concurs in the contravention, is guilty of an offence and on conviction is liable:
  - a. On a first conviction, to a fine of not more than \$10,000; and
  - b. On a subsequent conviction, to a fine of not more than \$10,000 for each day, or part thereof, upon which the contravention has continued after the day on which the Person was first convicted.
- 6. Notwithstanding Section 5 above, where the Person convicted is a corporation, the maximum penalty that may be imposed is:
  - a. On a first conviction, a fine of not more than \$50,000; and
  - b. On a subsequent conviction, a fine of not more than \$25,000 for each day, or part thereof, upon which the contravention has continued after the day on which the corporation was first convicted, and not as provided in subsection a.
- 7. For the purposes of establishing set fines, every Person who contravenes any provision of this by-law is guilty of an offence and is subject to a fine pursuant to the provisions of the *Provincial Offences Act*, R.S.O., 1990, c. P.33, as amended, or any other applicable legislation or successor thereto.

### PART V – OBSTRUCTION

- 8. No Person shall hinder or attempt to hinder or obstruct an Officer in carrying out their duties under this by-law.
- 9. No Person shall obstruct any employee or authorized agent in carrying out work

for the Township, such as erecting signage, under this by-law.

#### PART VI – SEVERABILITY

10. If a court or tribunal of competent jurisdiction declares any portion of this by-law to be illegal or unenforceable, that portion of this by-law will be considered to be severed from the balance of the by-law, which will continue to operate in full force.

#### PART VII – ENFORCEMENT

11. This by-law may be enforced by any Officer as defined in this by-law.

#### PART VIII – ENACTMENT

12. This by-law comes into force and effect on the date of its passing.

### Schedule A

#### **Truck Routes**

Road Name	From	То

#### Schedule B

### Reduced Load Limit Highways

Road Name	From	То

# APPENDIX P: WEB PAGE OUTLINE, HEAVY TRUCK USAGE

### Web Page Outline

#### HEAVY TRUCK USE IN PUSLINCH

#### TRUCK ROUTE NETWORK

#### What is it?

The Truck Route By-law identifies roads within the Township of Puslinch (under the Township's jurisdiction) where heavy trucks are permitted. This by-law is designed to restrict the gross vehicle weight limit to 5 tonnes per axle for road sections not identified as truck routes and provides additional information regarding restrictions during the spring thaw period from February 15 to May 15 in each calendar year on a portion of the truck route network.

Exceptions to the Truck Route By-law on non-heavy truck roads include but is not limited to:

- Trucks making local deliveries of goods and services
- Water haulers
- Milk deliveries
- Emergency Services vehicles
- Municipal vehicles or vehicles providing services on behalf of the Township.

Exceptions also include various agricultural vehicles and activities.

The *Municipal Act, 2001* authorizes the Township of Puslinch Council to pass by-laws with respect to highways. The Truck Route By-law will be enforced by the Ontario Provincial Police (OPP) through the *Highway Traffic Act* and persons guilty of violations are subject to fines approved by the Ministry of the Attorney General and prescribed under the *Provincial Offences Act*.

The Ministry of Transportation (MTO) is also granted enforcement rights through the *Highway Traffic Act* for gross vehicle and axle weights. These enforcement rights apply to vehicles that are overloaded as described in the *Highway Traffic Act*, as well as vehicles traversing load posted bridges.

#### Which roads are truck routes?

The truck routes are denoted on the most suitable roads to the greatest extent possible, while limiting intrusion into residential neighbourhoods and core areas like Aberfoyle, Morriston, and Arkell to the minimum possible. The goal is to define the preferred method of moving trucks through the Township with a network of routes that:

- Are safest for the movement of heavy vehicles;
- Avoid sensitive land uses like schools, residential areas, and community facilities;
- Support local and regional commerce and industry; and

• Provide sufficient capacity and adequate design features to accommodate the anticipated volume, size, and weight of vehicles.

The truck route network in Puslinch is designed to direct truck traffic to roads more intended for use by heavy vehicles and avoid minor streets with more sensitive abutting land uses. It is based on the principle that heavy vehicles should stay on designated routes (primarily Provincial highways and County roads) and only use minor streets (Township roads) to access local destinations.

[MAP OF TRUCK ROUTE NETWORK]

#### How are truck routes denoted?

The truck route network combines permissive signs directing heavy vehicles to the prescribed truck routes with restrictive signs prohibiting access to streets: where truck traffic is undesirable or less safe; experiencing poor compliance with permissive signing; and/or where drivers maybe confused.

Regulatory signs inform truck drivers of actions needed to comply with the Truck Route By-Law. The signs are enforceable traffic regulations prescribed under the *Highway Traffic Act* and the Truck Route By-law, disregard of which would constitute a violation. Below illustrates the regulatory signs used for the truck route network.



TRUCK ROUTE Sign

Denote roads where heavy truck use is permitted





MOVEMENTS PERMITTED Tab Sign

Used in combination with TRUCK ROUTE signs to denote permitted turns by trucks



**NO HEAVY TRUCKS Sign** 

Denote roads where heavy truck use is not permitted unless one of the exemptions listed above applies

Guide and information signs supplement the regulatory signage and are installed at strategic locations to guide truck drivers to/along the routes and/or bring awareness to the truck route network. Below illustrates the guide and information signs used for the network.



#### **TRUCK ROUTE GATEWAY Sign**

Used at entries into the Township and on roads at Highway 401 interchanges to inform truck drivers and other motorists of the route network



ALTERNATE TRUCK ROUTE Sign

Used in advance of intersections to inform truck drivers of designated routes on adjoining Wellington County roads



### TRUCK ROUTE DIRECTIONAL Sign

Used approaching/at intersections to inform truck drivers where routes change direction



### TRUCK ROUTE BOUNDARY Sign

Used at entries into the Township without Gateway signs to inform truck drivers and other motorists of the requirement for trucks to follow the route network

### HALF-LOAD RESTRICTIONS

#### What is a half-load restriction?

The Township imposes an annual "half-load" season from February 15 to May 15 on select Township roads to protect the road and road base from being permanently damaged during the spring thaw. During this period vehicles over a certain weight class (5 tonnes per axle) are not permitted to use the roadway. It is the responsibility of the heavy equipment operator to ensure that they plan their route to avoid roadways with half-load restrictions.

Passenger vehicles are exempt from the restriction. Larger vehicles such as dump trucks, delivery trucks, concrete trucks and heavy equipment floats that haul excavators, bulldozers, and cranes are included.

#### How does a road get permanently damaged?

In the spring, frost comes out of the ground. As moisture comes out of the road base, the road becomes softer and weaker. Heavy loads can cause the road to sink and break apart, which can lead to permanent damage. Most rural roads and highways are not built to withstand the pressures of heavy equipment.

#### Why are half-load restrictions imposed?

To avoid rebuilding after every spring thaw, which would cost a lot of taxpayer dollars, municipalities impose restrictions to give the roads time to properly shed the frost.

APPENDIX Q: PUBLIC ENGAGEMENT, COMMENTS AND RESPONSES





Home / Roads Management Plan

#### **Roads Management Plan**

#### 6 y 🗈 🖬

Join the conversation about the Township of Puslinch's Roads Management Plan

The Township of Puslinch is seeking your feedback regarding its Roads' Management Plan.

What is a Roads Management Plan?

The purpose of a Roads Management Plan is to:

- Allow the Township to appropriately plan and undertake maintenance on the Township's road network
   as well as to plan and prioritize the appropriate capital work:
- Establish criteria and steps to follow for responding to service requests or service upgrades relating to the Township's road network (e.g., paving, sidewalks, street lights, changes to speed limits);
- Identify road rehabilitation needs to assist the Township in developing a realistic annual capital budget to provide an adequate service level; and
- Assist the Township in formalizing an ongoing road maintenance operation and to facilitate proactive planning for future operations, replacements, and upgrades.
- planning for rulure operations, replacements, and upgrades.

View the Roads Management Plan on the Township of Puslinch Website or under the Roads Management Plan Documents available on this page, The Township will be collecting feedback regarding the Roads Management Plan until 12:00 p.m. on June 12, 2023. Feedback is being received through the feedback form below or through written comments sent to the Municipal Office (7404 Wellington Rd 34, Puslinch ON, NoB 2JO).

irvey	
CLOSED: This survey has concluded.	
Roads Management Plan Fe	edback
The Township of Puslinch wants to hea appropriate staff for consideration.	ar your feedback regarding its Roads Management Plan. All comments will be provided to th
SHARE YOUR FEEDBACK	



C

Page last updated: 05 Jun 2023, 02:58 PM

#### Roads Management Plan Documents

- Section 1 Introduction and Approach .pdf (131 KB) (pdf)
- Section 2 Project Team .pdf (201 KB) (pdf)
- 🖺 Section 3 Road Condition Assessment .pdf (209 KB) (pdf)
- Section 4 Road Design Standards.pdf (253 KB) (pdf)
- Section 5 Traffic Count Collection & Growth Project.pdf (165 KB) (pdf)
- Section 6 Road Maintenance Strategy.pdf (279 KB) (pdf)
- Section 7 Capital Needs Requirements .pdf (157 KB) (pdf)
- Section 8 Traffic Management Policies .pdf (2.87 MB) (pdf)
- Section 9 Recommendations & Conclusions.pdf (130 KB) (pdf)
- 🖺 Section 10 Bibliography.pdf (102 KB) (pdf)

Appendix A- Township Road Network Inventory Tables and Road PCI Maps.pdf (3.47 MB) (pdf)

Appendix B- Excerpts from MTO Inventory Manual .pdf (406 KB) (pdf)

Appendix C- Recommended Cross-Section for Existing Roads .pdf (248 KB) (pdf)

Appendix D- Cost Estimates for Surfacing Options .pdf (163 KB) (pdf)

Appendix E- Road Age Calculations .pdf (128 KB) (pdf)

- Appendix F- Gravel Road Conversion Flow Chart .pdf (144 KB) (pdf)
- Appendix G- Preliminary Design Checklist for Transportation Capital Projects.pdf (186 KB) (pdf)

Appendix H- Current Traffic Counts and 10 Year Forecast .pdf (172 KB) (pdf)

Appendix I- Traffic County Locations and Traffic Range Estimates .pdf (1,68 MB) (pdf)

Appendix J- Road Maintenance Activity Spreadsheet .pdf (182 KB) (pdf)

Appendix K- Time of Need and Priority Ratings .pdf (1.98 MB) (pdf)

Appendix L- Traffic Calming Toolbox .pdf (3.87 MB) (pdf)

Appendix M- Community Safety Zones .pdf (175 KB) (pdf)

Appendix N- Warrants for Community Safety Zones .pdf (18z KB) (pdf)

Terms and Conditions Privacy Policy Moderation Policy Accessibility Technical Support Cookie Policy Site Map

Appendix P- Web Page Outline, Heavy Truck Usage,pdf (302 KB) (pdf)

Appendix O-Truck Route By-law Template.pdf (183 KB) (pdf)

REGISTER to get involved!

A BUTTENES

**Comments Received between 2018 and 2022** 

Date	Comments
June 6, 2018	I am a local concerned citizen. I have lived in the city of Guelph since 2011 I and just recently moved to Puslinch. It's a of Old Ruby and Victoria. The reason for this letter is because it has come to my attention recently that the traffic has the traffic increase, the speeds of the cars are also surpassing the actual speed limit of side street. The other problem the side ofthe road. No barriers or fence (fence not allowed land developer). The exposed back and front yard coupled creates a hazard for me and my family. This really hit home for me last month when a car had a flat tire on the road ar only a few feet. But I thought what if my kids were playing the back yard and what if the car was speeding and then bl I thought I should at least make the city aware of the situation. I don't know if there can be something done in the for something of that matter in order to help either reduce the speeds or at least protect my open space. I would definite I do thank you for allowing me the opportunity to voice my concerns and to thank you for all that you do to keep our of the situation.
	Response: The Township has received the request and will initiate a review under the practices, policies, guidelines and standa Management Plan to determine if additional traffic calming measures can be implemented.

a corner house that sits on the intersection is severely increased on Victoria. Along with is that our house has no protection along ed with the excess speeds on (road) now and swerved into our yard area. Not by a lot, elew a tire or just lost control. So that's when rm of maybe a stop sign, or speed bumps, or ely appreciate any feedback from your end. community clean and safe.

### ards provided within the Roads

Date	Comments
	This letter is being written on behalf of the residents of Puslinch Concession 4 (see attached petition), who reside betw
	(Downey Road). Our purpose is to request of the Puslinch Township Council that the speed limit on this part of Conces
	at 60 kph.
	Our request for this lowering of the speed limit is based upon our experiences of life on this roadway where there are
	cars and pedestrians and/or between passing cars and residents attempting to access their properties.
	This section of road is 1 ½ km in length and there are now 18 driveways and 4 field accesses along the distance. Elever
	properties for 30 years or more and they have seen, first-hand, the changes in traffic densities and speeds.
	We make this request based upon the following considerations:
	• The road is very much a thoroughfare for commuters to and from Guelph, Kitchener and Cambridge. Traffic density morning and evening rush hours over a thirty-year period.
	• On the occasions when highway 401 is closed, and Wellington Road 34 is congested, our road is used as an alternate bumper to bumper, travelling at high speeds.
November	• The speed limit on the Hanlon Expressway is 80 kph and that road is a four-lane highway with wide shoulders and co
29, 2019	roadway, Concession 4, should have a lower, safer speed.
	• The Aberfoyle Waste Facility is located on this section of Concession 4. On Saturdays, in particular, there is heavy tra
	the Facility. There is a marked increase on Wednesdays and Fridays as well since these are the Facilitiy's other two op
	• To all intents and purposes, there are no shoulders or walkways on this section of Concession 4. It is dangerous to w
	the mail. Riding a bicycle on this stretch is a precarious endeavor.
	• Residents are able to provide first hand testimony of cars that regularly travel 100 kph on this section of road.
	• Several of the driveways have limited sight ranges. Extreme caution is required whenever a resident leaves his or he
	• Frequently, gravel trucks travel this section and often at high speeds
	In closing I would like to add that the existing 80 kph speed limit was established over 70 years ago when population a
	lower. In 2019, this is not the case and the residents of Concession 4 between Sideroad 20 and Downey Road should r
	they leave or enter their properties due to the exponential increase in traffic density and speed of travel in recent dec
	Thank you for your attention to this matter.
	Response:
	Response.
	The Township has received the request and will initiate a review under the practices, policies, guidelines and standa Management Plan to determine if additional traffic calming measures can be implemented. Please reach out to the Facilities at the Township of Puslinch to initiate discussions on your comments.

ween Sideroad 20 and Wellington Road 35 ession 4 be lowered from 80 kph and posted

e almost daily near-miss accidents between

n of the resident families have owned their

and speed has increased yearly during

e. At these times the traffic is frequently

ontrolled access points. Surely our narrow

affic along the road, turning in and out of ben days.

valk at the sides and/or to go out to collect

er property.

and traffic densities were dramatically not have to fear for their lives every time cades.

ards provided within the Roads e Director of Public Works, Parks and

Date	Comments
July 8, 2020	Increased traffic and speeding along Lake Rd and surrounding area are making our community more dangerous. More incidents along these roads. Just recently a man was charged after an encounter with a young mom and her baby resu the pair as he blasted past them in his vehicle. With more construction coming to the nearby 401, our roads are once traffic bypassing the work, bringing more cars, more noise pollution and more litter along the roads. It's scary to think and standing on the gravel shoulder on a school bus route while heavy trucks and lines of cars speed by. We need to g gets any more serious. After bringing these concerns forward to our mayor, our MP, or MPP, Wellington County, the OPP and the Ministries we have not been able to come to a resolution. So we the citizens of this great community are getting together to rall community safer. We are asking you to sign this petition to join us in demanding the safety of our children and familie who are just passing through to avoid congestion on the highway. We Request: - Safety plan which could include a reduced speed limit, speed bumps, sidewalks and/or other traffic calming measure - Greater police presence to crack down on transport trucks speeding and breaking rules surrounding weight limits or - Plan to measure and address noise pollution resulting from more traffic and construction, including a sound barrier - Community input on the plan to bypass traffic during 401 construction, where the impacts are carefully considered b
	<ul> <li>More attention to the pollution and litter in and around Little Lake as more people park their cars to enjoy nature. T</li> <li>We are asking for a meeting with our local leaders including Mayor James Seeley and our 4 Puslinch Councillors, MP I</li> <li>County Officials and the OPP. We want to begin a dialogue to address our concerns and hear from our leaders how th</li> </ul>
	Response:
	Lake Road is a Wellington County Road. Any changes to speed limits, traffic calming measures, sidewalks and signa County decision. Township staff have forwarded this request to Wellington County staff. Should you wish to follow and require assistance in locating a suitable contact at Wellington County, please follow up with Township staff for
August 12, 2020	Re: Boreham Drive We have a problem on our street, people with fancy cars want to show off them by going really fast and they are whi little kids playing and people can get hit. All I am asking is for you to put a couple of speed bumps on our road and if y sign. Other than that would you rather put down a sidewalk? I got the entire street to sign, that is 12 people. I am tryi people on the street but the pople in the car. Our street is Boreham Dr Arkell.
	Response:
	The Township has received the request and will initiate a review under the practices, policies, guidelines and stando Management Plan to determine if additional traffic calming measures can be implemented.

e often we are hearing about hazardous sulted in him throwing a full pop bottle at e again going to be burdened with extra k about our children playing in our yards get out in front of this problem before it

of Natural Resources and of Transportation, ly for positive change to make our es are prioritized above the needs of people

es.

- n our roads.
- between the highway and Lake Road. by our local leaders.

The parking situation also requires attention. Mike Chung, MPP Ted Arnott, Wellington his situation can be improved.

age on this road would be a Wellington up directly with Wellington County staff r assistance.

zzing arounf the corner and there could be you don't want to then at least put down a ing to save lots of lives and not only the

ards provided within the Roads

Date	Comments
	I wasn't aware that the speed limit is 80 kms when there are no signs. I would like to see the speed reduced to 60 km Wellington Rd 32 to Cambridge and vice versa. The cars come off 32, which is 80 kms, and continue on our stretch so portion with hidden driveways.
September 15, 2020	Roszell Rd is 60 kms from Wellington Rd 32 into Cambridge. There is a stretch of Concession 4 between Side Rd 10 an km to 60 km. Side Rd 10 and 12 are 60 km. Laird Rd is 60 km. The stretch of Wellington Rd 34 from Wellington Rd 32 t
	We have a community of about 10 homes here. It has been mostly an older population but there seems to be a shift purchasing here. My greatest fear is for a child to be playing and chase after a ball or perhaps 1 of the elderly resident
	If there is anything I can do to help my case with the Township Transportation Master Plan please let me know. If the signed by neighbours would help, again please let me know.
	The Township has received the request and will initiate a review under the practices, policies, guidelines and stando Management Plan to determine if additional traffic calming measures can be implemented.
October 15, 2020	Thank you for your time and consideration with the following matters. Old Brock road during school drop off and pick become extremely dangerous. Parents dropping off and picking up has been an ongoing issue however, with covid the bus. Parents have been asked to park at the community center and use the new side walk. I would say 50% of par other 50% are parking on both sides of Cockburn street facing the wrong direction, parking very tight on Old Brock an on the street to exit or enter their own driveways, turning around in peoples driveways where children are walking he signs. The school has mandated that parents can no longer park in the staff parking lot but the other day I witnessed a have a prime spot. Children had to walk behind her running car to get home. The school has even tried placing pylons them. I can only imagine that as the weather turns colder this problem will become a bigger issue as less parents will community center. I have suggested possibly a crossing guard at the lights will make parents feel more conformable but the school needs. Possibly Old Brock road and Cockburn needs No Stopping/Parking signs Monday to Friday. Another issue is the No Exit sign at the end of Old Brock Road. At least 10 times a day we have cars drive down the street weekends I would say 10-20 cars especially during antique market times. A lot of times people are frustrated and end down the street. Is it possible to make the No Exit Sign larger or place one on each side of the road. I know we can't fi of the frustrations on these streets.

ns. Our stretch is used as a short cut from ometimes faster as there is a hill along this

nd 12 where the speed is reduced from 80 to Townline Rd is 60 kms.

recently with some younger families its hit while walking along the road.

eres an opportunity to talk or if a petition

### lards provided within the Roads

kup times 8:15 am-8:35 and 2:45-3:05 has ne issue has heightened as less children ride rents are following these guidelines. The nd making it impossible for people who live nome and parking directly under no stopping a parent blocking the staff lot so she could s on the street but parents are moving want to walk the 2 minutes from the

Is time to look into that.

reet only to realize it is a dead end. On d up driving across lawns and speeding back ix stupid but maybe we can eliminate some

Date	Comments
	Response:
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine the warrant of additional signage and/or traffic calming measures.
	Proposal to address the "Community Safety Zone" in Puslinch to also include Victoria Rd between Maltby Road and W Brock Rd and Lake Rd.
October 21, 2020	-Concerns: 70 km speed limit through this area as well as the safety issue in the residential area along this stretch of r the posted limit), transport and other heavy trucks travelling this road despite signs, dangerous passing and racing on Maltby Rd. (Exotic Car Rentals), drag racing of muscle cars and motorcycles. The proposal is to lower the speed limit t included in a "Community Safety Zone", install lane dividers in front of residential homes similar to those located on V and unsafe passing.
	Reason: multiple children in this area boarding school buses, residences in this area with cars attempting to turn or m in the area with a non existent bike lane.
	Response:
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine if additional traffic calming measures or designated areas can be implemented.
March 16, 2021	As a Puslinch resident and avid biker for fitness on the weekends and commuting during the week I'm concerned about roads. Of particular concerns are the gravel and heavy trucks. With spring quickly approaching I was wondering:
	1. what historically has been done to raise awareness about respecting bikers, sharing the road and enforcing laws the safety.
	<ol> <li>are there any initiatives or plans being worked on currently to help further protect our citizens and other local bike</li> <li>Has there been consideration or exploration around securing grants or funds from various other levels of governme safety, bike lanes, increasing biker awareness signage etc. etc.</li> </ol>
	3. I wondered if council and the mayor might be open to creating or working towards some form of campaign, progra we are uniquely positioned as one of the best areas for road biking. I would be interested in personally participating, contributing to this as I think it's an important and growing issue in our township.

### lards provided within the Roads

Vellington Road 34, in addition to Aberfoyle

road due to increased speed (in excess of n Victoria Rd between Wellington 34 and through this stretch of Victoria Road to be Wellington Road 36 to limit speed, traffic

nerge into traffic, a high number of cyclists

### lards provided within the Roads

ut my and other biker safety on Puslinch

hat help protect bikers & increase their

ers

ent etc. that support healthy living, biker

am to make Puslinch more bike friendly as possibly leading and/or financial

Date	Comments
	Response:
	<ol> <li>The Township participated in Wellington County's Active Transportation Plan, which is available on Wellington location: https://www.wellington.ca/en/resident-services/pl-activetransportation.aspx .</li> <li>All initiatives relating to active transportation are being administered through Wellington County for consistent well as the local municipalities.</li> </ol>
	<ol> <li>There has currently not been any exploration or consideration around securing grants or funds from various of biker safety, bike lanes, increasing biker awareness, signage, etc. at the Township level. There have been grant to develop new walking and active transportation trails in off-road settings in the past. There are no plans will lanes on any Township road. Township roads currently do not have the required platform width or Right-of-W</li> <li>Township staff have forwarded this request to Wellington County staff. Should you wish to follow up directly assistance in locating a suitable contact at Wellington County, please follow up with Township staff for assist Director of Public Works, Parks and Facilities to initiate discussions based on your comments of what can be a</li> </ol>
June 1, 2021	I'm a student and find it very difficult to find transportation since Puslinch doesn't have much options of public transporter there's a possibility that a bikeway could be made in the road of Gordon St. Riding my bike to get to places is one of t for the environment, but the only issue is the traffic and risk there is for bike riders. Hope my voice can be heard since same problem.
	Response:
	Gordon Street is a City of Guelph road, and within Puslinch, Wellington County Road 46 / Brock Road is a Wellingto forwarded this request to Wellington County and City of Guelph staff. Should you wish to follow up directly with require assistance in locating a suitable contact at Wellington County or the City of Guelph, please follow up with T
June 21, 2021	Hi, I'm just wondering if we can get a "please slow done" sign or "share the road" sign for the 90 degree bend area wher This has been a concern for years. But, there are more kids in this section, crossing the road and there is no shoulder accidents on this corner reported and often unreported. With the number of bikers, walkers and an increase in peopl to slow the traffic down. And thank you, to the officers that do ride programs and speed traps on this road. It is much appreciated and sadly ne <b>Response:</b>
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine the warrant of additional signage.

### on County's website at the following

ency across the County's road network as

other levels of government that support nts that have been applied for and received ithin the Capital Program to install bicycle Vay property to support this expansion. with Wellington County staff and require tance. Additionally, please reach out to the achieved locally within the Township.

portation. I'm writing this email to see if the best options since it's cheap and good te many students and bike riders have the

on County Road. Township staff have /ellington County or City of Guelph staff and Township staff for assistance. .

re Forestell Road to Roszell Road meet. for driver error. There are numerous le using the trail, I'm thinking it's time to try

eeded.

lards provided within the Roads

Date	Comments
Date	Comments I am writing to you after reaching a precipice of my tolerance this morning on my drive into work. I have worked in Kir Emergency Department of St Mary's General Hospital. I live on the south end of Guelph just off of Downey Rd and my commute into work includes the stretch of Laird Rd be where we currently have at least 2 active aggregate sites as well as multiple entrances on the adjacent roads (Sideroad As you probably are aware, during and since the Niska Road single lane bridge construction, there has been a tremend Laird Rd. The posted speed on Laird had been reduced a few years ago across it's entire length to 60km/hr.
July 13, 2021	who frequent the road for their commutes to work and leisure (this includes myself and my children on occasion). On many accounts, I've appreciated vehicles bombing along this road at rates of speed well beyond the posted rate, I'v bike on multiple occasions while 6" from the shoulder, by various aggregate haulers as well as standard cars and truck This morning's auto commute without a doubt takes the cake and I think there needs to be some discussion and account incident like that of OPP veteran, Gregory Stobbart.
	tractor with a trailer labelled 'CV Quarry and Contractors Water Service Inc' was subsequently making a left hand turn This truck turned at the last minute right in front of me causing me to have to hit the breaks and reach a standstill for intersection. They then started to accelerate on Laird and appeared to be pulling away from me at quite significant spe maintained their speed. They were cruising at a crazy 94 km/hr through the entire roller, low visibility section. The tru Plant. Simply dangerous and tremendously irresponsible. This is a REAL problem.
	drivers/contractors/clients etc about this issue.
	Response:
	The Township will notify the local detachment of the Ontario Provincial Police of your comments. While the Townsh safety and adherence to traffic regulations with its staff, contractors and clients, the Township does not enforce reg

itchener for 18 years as a Practitioner in the

etween Downey Rd and County Road 32 ad 10, Downey Rd).

dous shift in the volume of traffic daily to

ch, no shoulder and many many cyclists

've been nearly blown off the road on my ks.

untability taken before we have another

) from Downey Rd (green light), A full sized rn from Downey northbound onto Laird Rd. r at least 5-10 second while they cleared the beed so I caught up to them, then ruck then turned left into the COX Asphalt

propriate discussions with your

hip routinely discusses issues of roadside gulations of the Highway Traffic Act.

Date	Comments
	On Saturday afternoon, Aug. 6th, under sunny weather conditions, William Irving of Guelph died in a car crash at the o Puslinch.
	In addition to numerous minor accidents at this dangerous intersection, other drivers have died here in the past. How could Puslinch make this intersection safer?
	1) Regularly cut back the vegetation along the margins of the roads to the fence lines, especially at intersections. I hav year at the intersection of Watson and Maltby. Visibility is currently seriously impaired (one must partially enter the in likely contributed to the Aug. 6th accident. This could be accomplished by two workers in an hour.
	2) Post the 80 kph speed limit along Watson Rd. between Arkell Rd. ad Wellington 34. Many drivers are unaware of th moderate.
August 15, 2021	3) Consider reducing the speed limit to 70 kph at the intersection of Watson and Maltby. This an easy, low cost action southbound).
	4) Contact the OPP and request that they ticket speeders.
	I regularly witness vehicles travelling faster than 130 km/hr on Watson Road. There is no cost to Puslinch to make this
	5) Install rumble strips on both Maltby and Watson Roads. They would force drivers to notice the intersection and to s effective.
	6) Install gentle speed bumps on both Maltby and Watson Roads. They would force drivers to slow down to desired sp most effective long-term solution.
	7) Install a traffic light and signs indicating a new stop light. This is an expensive option and my least favourite.
	If some of these actions had been taken after the last fatal crash at this corner, William Irving may be alive today. Plea prevent another fatality.
	Response:
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stando Management Plan to determine the warrant of additional signage, traffic calming measures and posted speed limit "all-way" stop signs at this intersection since the submission of this comment.

corner of Watson and Maltby Roads,

ve seen no evidence this has been done this ntersection to see oncoming traffic) and

ne speed limit. This action is simple; cost is

n (installation of two signs, northbound and

s request. slow down. I think this would be very

peeds. In my opinion this would be the

ase, Puslinch- take actions NOW and

ards provided within the Roads its. The Township has installed additional

Date	Comments
	RE: TRAFFIC PROBLEM,
	HUME ROAD, PUSLINCH TWP.
	I would like to express our concern about the current traffic situation on Hume Road in our Township of Puslinch, In a
	uncontrolled and dangerous speeding of motor vehicles on this road. We, the residents would like the speed linlit to r
	with reasonable traffic calming measures.
	Since Hume Road was repaired and re-surfaced many years ago, it has become a much used transit for vehicles enteri
	Lines. The latter linking WR 34 and Arkell Road to and from Rockwood, Maximum traffic volume appears to be compa
Διισιις† 27	weekends. The speed limit is currently set to 60 km/H but this is rarely followed, Concurrently with residential develop
2021	need to be considered:
2021	1, There are now numerous hidden entrances and exits from properties
	2. There are more children playing, cycling, or being picked up and deposited by school buses
	3, There are more pedestrians and dog walkers along the road as well as some wheelchair bound individuals
	4, There are more service vehicles with ongoing construction, increased services, and congestion with on road parking
	5. There are many hilly areas with restricted sightlines
	6. There is an unregulated railway crossing on this road,
	We recognize that these ere common problems throughout the township, t:ut this road has beconne a significant con
	points mentioned. The lowered speed linrit to 50km/hr. with some enforcement would be a good place to start
	Response:
	The Terrebin has received this request and will initiate a review we don'the prostings, we lising, and should should
	Management Plan to determine the warrant of additional signage, traffic calming measures and posted speed limit
	"all-way" stop signs at the intersection of Hume Road and Watson Road South since the submission of this commen
	un-way stop signs at the intersection of name Road and Watson Road South since the submission of this commen
	a grade 12 student at Bishop Macdonell Catholic High School. I'm writing this letter since I've been having trouble whe
	live in Fox Run Dr and there's very little options of transportation to get to Guelph or back home when I'm in town. I'm
September 20, 2021	but in the meantime it is impossible to find a way to get to the city other than uber, which gets expensive or biking wh
	of course. My brother is my same age and he is currently employed at Mucho Burrito in Stone Road, he spends about
	another way to get to his job, of course when my mom is not busy, she tries her best to help him, but most of the time
	(back and forth). I'm writing this letter hoping to be heard and being the voice of many students of Puslinch to have a
	wondering if this problem can be solved by making bus stops or having a city bus that could take us town. I will be wai
	for your time and I hope this problem can be solved.

nutshell, the major issue is that of reset from 60 to 50kmr/H and combined

ing or leaving Watson Road or Nassagaweya atible with working hours and some opment along this road the following factors

g of commercial vehicles

nduit for nrotor vehicles to and from the

### ards provided within the Roads ts. The Township has installed additional nt.

en needing transportation to get home. I m trying to find a job so I can save for a car, hich only works in summer and not winter \$60 a week in uber since he doesn't have he needs to take an uber 3 times a week better transportation choice. I'm hiting for a response, thank you very much

Date	Comments
	Response:
	There are currently no plans within the Township for public transportation services. Expansion of City of Guelph public discussion with the City of Guelph staff. Township staff have forwarded this request to City of Guelph staff. Should guelph staff and require assistance in locating a suitable contact at the City of Guelph, please follow up with Towns
December 21, 2021	In response to the online public consultation regarding the new construction of Hwy 6 / Hanlon expressway the follow process. We felt it important to also present our concerns directly to the Puslinch Council. We have a concern regarding the intersection at the Hanlon & Conc 4 remaining open during construction. Concessio dangerous with the increase in commuter traffic than it already is. For many years the residents have complained ab prime commuter hours and a lack of police radar control. Wellington Rd 34 is avoided by many commuters who want sign at Townline Road. Using Concession 4 to Rozell Road allows commuters to avoid the wait and gives them an unit With the heavy commuter traffic on Wellington Rd 35 even that intersection at Conc 4 has become a challenge. Conc dump and is used for training by cycling and skiing groups and exiting our driveways safely is often difficult. The interse history of accidents with aggressive drivers taking risks to cross and should be closed to avoid creating an even more <i>Response:</i>
	Management Plan to determine the warrant of additional signage, traffic calming measures and posted speed limi intersection of Wellington Road 35 and Concession 4 need to be raised with Wellington County staff. Requests to re Concession 4 need to be raised with the Ontario Ministry of Transportation. Township staff have forwarded this red Ministry of Transportation staff. Should you wish to follow up directly with Wellington County or Ontario Ministry of assistance in locating a suitable contact at Wellington County or the Ontario Ministry of Transportation, please follow
February 11, 2022	I am part of the Families for Rolling Hills Group. We have shared concerns with Puslinch Council regarding the City of subdivision that was originally a part of Puslinch, I hope you are familiar with our area. We share your concerns about increased traffic flow on township roads, and of course the overall effect residential intensification will have. Specific Clair Road will surely lead to an increase in traffic heading to the 401 via Victoria Rd S. This section of road was not do are poor, and significant areas along the roadway are environmentally sensitive. Further, ponds, wetlands and the nationary safe use for pedestrians and cyclists, etc. I am sure the township is already aware of the impact adding the apart already had on the township's roadways. The City of Guelph's Transportation Master Plan does not address any of the future increases that the redevelopment of Clair Rd will have on the township. Given these facts, we find it object additional intensification along Clair Rd. We are hoping that Puslinch Council is expressing similar concerns to the City issues be addressed before any redevelopment of Clair Road is permitted.

### blic transportation would require you wish to follow up directly with City of ship staff for assistance.

wing is the concern we sent using their

on 4 (a country road) will become even more out excessive traffic & speeding during t to skip the long wait times due to the stop interrupted right of way along Townline. A has the Donkey Sanctuary, Aberfoyle resection at the Hanlon and Conc 4 has a dangerous situation.

ndards provided within the Roads its on Concession 4. Requests to review the eview the intersection of Highway 6 and quest to Wellington County and Ontario of Transportation staff and require low up with Township staff for assistance.

f Guelph's Transportation Master Plan. As a ut the transition from urban to rural, the cally, the increased density and traffic along lesigned for high levels of traffic; sight zones atural topography do not lend themselves to tment buildings at Clair and Victoria has his increased usage. It also fails to address ctionable that the City is planning any sort of y of Guelph and will demand that these

Date	Comments
	Response:
	The Township has received this comment and have previously raised concerns to the City of Guelph Council regardin Master Plan. Township staff have forwarded this request to City of Guelph staff. Should you wish to follow up direct assistance in locating a suitable contact at the City of Guelph, please follow up with Township staff for assistance.
March 4, 2022	I would like to draw your attention the need to take immediate action for signage at this intersection of Church Street is no stop sign where these 3 roads meet. For decades Church and Victoria have been used as a two way road. Whitcomb lines up with Victoria. Much of the tra intersection and because Whitcomb is a wider road those traveling much of the full length enter the intersection at qu accident where a pickup truck exiting from Whitcomb collided with a vehicle coming up Church and heading into the C driver should have checked for traffic before making the awkward left into the church parking lot. (which is straight al rounding the bend she would have been hit. Having Sara Bailey's contact information, I sent her a note to bring it to the attention of Council. Afterwards I spoke w that there was no stop sign, he couldn't enforce traffic exiting the sub-division. We had concerns over this corner for of subdivision was light and seemed to recognize that it was two way traffic they were entering. With further developmed you see more often vehicles travelling from Whitcomb onto Victoria entering at about 30km without slowing, as they This very thing happened while I was talking to the officer who was parked visibly in the church lot. I feel it is my duty for the safety of everyone using this road to bring this to the IMMEDIATE ATTENTION of the Townsh quickly as possible. Even if it is just a temporary sign.
	There is another problem that we have noticed with this intersection but it has more to do with lack of common sense wishing to enter onto Whitcomb, start to make their left hand turn before arriving at the blind corner and checking to Thank you in advance for your immediate attention to this serious problem. Hoping you will be able to set a sign up in
	Response:
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine the warrant of additional signage. The Township has installed additional stop sign of this comment.

## ng the City of Guelph's Transportation tly with City of Guelph staff and require

t, Victoria Street and Whitcomb Way. There

affic exiting Whitcomb doesn't stop at this uite a speed. On March 1 there was an Church parking lot. True the Church street head) However, I feel even if she was

vith the attending police officer who said quite some time, but the traffic exiting the ent and the increase in traffic on Whitcomb feel it is a continuation of the same road.

hip to put a stop sign on Whitcomb, as

e. The traffic coming up Church Street o look for traffic coming up Victoria Street. n the next few days.

### lards provided within the Roads as at this intersection since the submission

Date	Comments
May 27, 2022	I am writing as a concerned resident and parent who lives on concession 1 in Puslinch. I have witnessed on serveral oc speeding and barely stopped for my children's school bus and in some cases have failed to stop at all. There are a num occurring but I want to get in touch with the proper authorities to make changes to the speed limit and signage on the is 6994 on Concession 1, and the bus stops at our driveway which is on the crest of a hill making it difficult to see when addition, the posted speed limit of 60km/hr ends a few hundred meters before our stop. I often witness vehicles appro- while we wait for the bus! This in addition to increased traffic over the last few years and increases number of new res- contributing to an unsafe situation and increasing the likelyhood of a severe or fatal incident. I would like to speak wit make changes to the posted speed limit and install additional signage that a school bus stop is located here.
	Response: The Township has received this request and will initiate a review under the practices, policies, guidelines and stando Management Plan to determine the warrant of additional signage.
July 7, 2022	RE: ONGOING TRAFFIC PROBLEM, HUME ROAD, PUSLINCH TWP. This is a reminder and a follow up in relation to our presentation to Council in November 2021. Your office will no dou repeat these here. I am willing to forward copies if necessary. Essentially nothing much has changed, and we continue this road and the attendant dangers. There have been quite a few new houses constructed or in process on Hume Roa as a conduit to and from elsewhere is increasing. Of course, the presence of School Buses and the parking of large con create further dangers. In addition, the volume of cyclists this year is probably at al all time high. The speeding of moto observation can show speeds of 100 KmH which is totally irresponsible and well above the posted limit. It is "a disaste The time has come to reset the speed limit at 50 km/h as we requested and to install the appropriate traffic calming n Hume/Watson recently installed does help at that corner but does not address our major concern. <b>Response:</b>
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stando Management Plan to determine the warrant of additional signage, traffic calming measures and posted speed limit

ccasions this year drivers who have been nber of factors to consider as to why this is e road before a tragedy occurs. Our address en approaching from the other direction. In roaching our location well over 100 kph esidential homes on the road are all th someone at the municipality in order to

### ards provided within the Roads

ubt have copies of the details and I will not e to be concerned about the speeding on ad. The amount of traffic using Hume Road Instruction related vehicles along the road all for vehicles is our principal concern. Casual er waiting to happen " as the saying goes. measures. The 3-way STOP at

ards provided within the Roads ts. **Comments Received between during 2023 Public Comment Period** 

Date	Comments
	Summary: The Ontario government has given municipalities the power to reduce residential speed limits from the stat set their own statutory speed limits. We recommend that Puslinch Township and Wellington County initiate the below Watson Rd S, and consider the safety benefits of Arkell being zoned a "Community Safety Zone" with electronic Speed
January 2, 2023	Problems 1. The major speed limit change from 50 to 80 km/h, when driving north from Arkell on Watson Rd S, is in too short a while still in the 50 km/h zone in Arkell, and speed up which totally defeats the 50 km/h speed limit in Arkell.
	2. Speed limits fail to graduate when driving north from Arkell on Watson Rd S, for example, from 40 to 50 to 60 km/h then back to 50 km/h after descending two hills. A good example of speed limits that graduate is Victoria Rd N from Sp Trail. It is a similar road to Watson Rd S where people park in order to walk the trails.
	3. More and more trail walkers are parking along the two trail entrances north of Arkell on Watson Rd S, especially at 80-120 km/h while people with dogs are exiting their vehicles is unsafe. The shoulders were not designed for parking. reason for reducing the speed limit to 60 km/h. Eventually, a parking area may be necessary, similar to Starkey Hill's.
	Recommendations
	1. That the speed limits of 50 km/h currently on Arkell Rd and Watson Rd S be reduced to 40 km/h."40 is the new 50" Reductions in speed limits are being made all across Ontario and Canada. Guelph, Kitchener, Sarnia, Ottawa, Sudbury,
	2. That the 80 km/h sign on Watson Rd S near Boreham Dr, be posted further north of Arkell, for example, past Mott's changed to 60 km/h.
	3. That 60 km/h (not 80) be posted on Watson Rd S, from Arkell to Arkell Ridge Sand and Gravel (661 Watson Rd S), ar
	We hope both Councils will keep safety as top priority, and add local input and insight to the criteria for setting maxim

atutory default 50 km/h to 40 km/h, or to w maximum speed limits for Arkell Rd and d Display Signs.

distance. Drivers see the 80 km/h sign,

n. Instead, they go from 50 to 80 km/h and Speedvale Ave north past the Eramosa River

Arkell Springs Trail. Vehicles driving by at Safety of these people should be a major

is what municipalities are saying.

, and Mississauga are but a few examples.

s Equestrian Centre (756 Watson Rd S), and

nd then 40 km/h (not 50) to Stone Rd.

num speed limits.

Date	Comments
	Response:
	Roadways entering the village of Arkell from the west, east and north are Wellington County Roads. Any changes t would be a Wellington County decision. As the Township only has ownership of Watson Road South, south of Arkel revised speed limits or additional signage to the County. Should the County elect to change the maximum speed lim designate a "Community Safety Zone", the Township would apply these same requirements on roads of their owner
	Problem/Recommendation 1: Watson Road South, north of Arkell Road, is a Wellington County Road. The Township implement any changes to speed limits on this road. Township staff have forwarded this request to Wellington Cou directly with Wellington County staff and require assistance in locating a suitable contact at Wellington County, pla assistance.
	Problem/Recommendation 2: Refer to the response provided for Problem/Recommendation 1.
	Problem/Recommendation 2: Refer to the response provided for Problem/Recommendation 1.
March 9, 2023	I would like to know who I can speak to about a installing a traffic shield on Roszell Rd. There are regular accidents in 3 weeks. One of which hit a tree on our property, and the most recent of took out a quarter of our garage. Two of the no inclement weather
	Response:
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine the warrant of additional roadside safety measures.
April 19,	Just an FYI. We're residents on Concession 4, and it was recently repaved (about 2 years ago). We noticed that there a
2023	cracking a bit east of 35. Perhaps someone wants to take a look at it, especially if there's some type of warranty perio
	Response:
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine the warrant of additional works / warranty work.
May 6, 2023	Wondering what it would take to get speed limit signs up on concession 1? When you turn left from townline road in great!

to speed limits and signage on these roads I Road, we would defer the decision of nits within the village of Arkell and rship within the village for consistency.

p does not have the authority to inty staff. Should you wish to follow up ease follow up with Township staff for

the bend of the road including 3 in the past e three accidents occurred on dry roads with

ards provided within the Roads

appears to be a depression with significant od for the road work.

lards provided within the Roads

the first 1-2kms a speed limit sign would be

Date	Comments
	Response:
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine the warrant of additional signage.
May 14, 2023	This is regarding Pioneer Trail. Recent grading, along with the better weather, has significantly worsened dust raised wheel traction. The dust affects all of us who walk, run, bicycle and reside on this route. [It is particularly popular with nearby] It has also become a dangerous situation for vehicles following others as the brake lights of the vehicle ahead vehicles are driving well below the speed limit, but there are some who are actually going above the speed limit. Givi trouble, but these drivers don't seem to realize the risk they are taking. Just a few days back, there was a "situation" one of the residences while the vehicle behind reacted late, possibly because the brake lights were partially or fully o video depicting the situation to services@puslinch.ca.
	Response: The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine the warrant of additional road maintenance.
May 16, 2023	This is with respect to dirt roads. Could grading and dust suppression be considered a single task? It appears that, for Puslinch roads is completed prior to commencement of dust suppression works. This leaves a window between gradi is greatly reduced 2. Brake light visibility is reduced, often obscured completely 3. At times the entire vehicle ahead is unknown but also obscuring oncoming traffic 4. Runners, walkers, cyclists and residents are treated to regular doses out ways to immediately follow grading of a road with dust suppression. Thank you.
	Response: The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine whether adjustments can be made to the grading and dust suppressant operation
May 17, 2023	I would like to comment about Sideroad 10 N on the gravel portion as that's where I live. Firstly the speed limit is way township. Many people (including two police vehicles I witnessed just last week) travel in excess of the posted limit. Condition but the amount of dust created and stones being thrown which I have been hit by in the past. I understand but wondering if it could be considered to pave a section of 10 N just north of WR 34 for the denser (relatively) collect to mitigate dust and rocks for those residents and allow us to open windows without having our interiors covered in a stone of the section.

### lards provided within the Roads

by vehicles. It has also significantly reduced tha number of Guelph residents who live d are often hidden in the dust. Many ing the limited traction, this is asking for where the vehicle ahead was turning into obscured -- no accident, luckily. I have sent a

### lards provided within the Roads

r possibly good reasons, grading of all ing and suppression when: 1. Road traction is obscured not only making its position of the fine clay dust of Guelph Please figure

### dards provided within the Roads as.

by too high for it and all gravel roads in the This takes a tolls not only on the road If the issues in paving the entire road as well of houses that are there. It would help a thick layer of dirt.
Date	Comments
	Response:
	The recommended process for evaluating whether gravel roads are candidates for being upgraded to paved roads in Management Plan. For roads that do not meet the criteria outlined within this recommended process, the Township practice around completing these requested upgrades through the provisions of O.Reg. 586/06 Local Improvement This process has been outlined in Section 4.9 of the revised Roads Management Plan for Council consideration.
May 18, 2023	Please cut down trees that look like they are about to fall , on Gore Road. Between Shellard and Townline.
	Response:
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine whether maintenance of vegetation is required.
May 18, 2023	I live on concession #1 where we see large numbers of cyclists in all weather. With poor sight lines on many of our road serious accidents involving cyclists. I have personally observed several very close calls. I suggest bicycle lanes be added Perhaps this could be done in collaboration with a cyclist organization. Thanks for the opportunity to voice my concert
	Response:
	The Township has received this request. The Township will initiate a review under the practices, policies, guidelines Management Plan of whether additional measures can be added to improve safety; however, there are no plans w lanes on any Township road. Township roads currently do not have the required platform width or Right-of-Way pr
May 18, 2023	Paved shoulders for safe cycling usage please!
	Response:
	The Township has received this request. There are no plans within the Capital Program to install bicycle lanes on an currently do not have the required platform width or Right-of-Way property to support this expansion.
May 19, 2023	Consider Side Road 20 north for paving. Thank you.

is provided in Section 4.7 of the Roads ip has initiated the process of formalizing a t Charges – Priority Lien Status legislation.

lards provided within the Roads

eds, I am amazed that we haven't had more ed to the roads plan whenever feasible. rn.

s and standards provided within the Roads within the Capital Program to install bicycle roperty to support this expansion.

ny Township road. Township roads

Date	Comments				
	Response:				
May 21, 2023	The recommended process for evaluating whether gravel roads are candidates for being upgraded to paved roads is Management Plan. For roads that do not meet the criteria outlined within this recommended process, the Township practice around completing these requested upgrades through the provisions of O.Reg. 586/06 Local Improvement This process has been outlined in Section 4.9 of the revised Roads Management Plan for Council consideration.				
	Quite frankly I'm not sure anybody on Council knows where Concession 11 is and if they do, they would probably avoi wasn't very good them. 20 years later and at least 10 more home between 34 and Hume and the increased traffic - it plough it every once in a while but three days later it is pothole ruckus again. And the dust! Nobody knows what 60 k/ some reason other roads are more important. Must have something to do with the tax base. I wonder why they can't to help with the dust. Sum up - try driving on Concession 11 after a couple of days of rain, or when the snow is melting				
	Response:				
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine whether adjustments can be made to the grading and dust suppressant operations				
	The recommended process for evaluating whether gravel roads are candidates for being upgraded to paved roads in Management Plan. For roads that do not meet the criteria outlined within this recommended process, the Township practice around completing these requested upgrades through the provisions of O.Reg. 586/06 Local Improvement This process has been outlined in Section 4.9 of the revised Roads Management Plan for Council consideration.				
May 23, 2023	The village of Arkell suffers with increasing excessive speeds to the extent of burn outs and brake stands (both have c condition worsens every year and it appears nothing is done. I would like to see digital speed indicators installed in all the road so drivers actually see them and more random opp speed traps. All of these need to be implemented asap be				

is provided in Section 4.7 of the Roads p has initiated the process of formalizing a Charges – Priority Lien Status legislation.

id it. We moved here in 2002 and the road has just gotten worse. They come and /hour means. Paving would be ideal but for at least put calcium down more frequently g. Suggest you need 4 WD.

lards provided within the Roads s.

is provided in Section 4.7 of the Roads p has initiated the process of formalizing a Charges – Priority Lien Status legislation.

occurred in front of my home). This I 50 zones, speed limit numbers painted on before someone is hit.

Date	Comments				
	Response:				
	Roadways entering the village of Arkell from the west, east and north are Wellington County Roads. Any changes to would be a Wellington County decision. As the Township only has ownership of Watson Road South, south of Arkell Wellington County staff. Should the County elect to change the maximum speed limits within the village of Arkell a the Township would apply these same requirements on roads of their ownership within the village for consistency. request to Wellington County staff. Should you wish to follow up directly with Wellington County staff and require Wellington County, please follow up with Township staff for assistance.				
	The Township will notify the local detachment of the Ontario Provincial Police of your comments.				
May 25, 2023	Due to the closure of lake rd, CR#32 for the summer could you please put some traffic slowing speed bumps on Ellis rebetween 80 and 100 km/hr down our rd that is 50 km/hr.				
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine the warrant of additional signage and/or roadside safety measures.				
May 27, 2023	paving on .side road would be greatsideroad 10.south like a washboard most times				
	Response:				
	The recommended process for evaluating whether gravel roads are candidates for being upgraded to paved roads i Management Plan. For roads that do not meet the criteria outlined within this recommended process, the Township practice around completing these requested upgrades through the provisions of O.Reg. 586/06 Local Improvement This process has been outlined in Section 4.9 of the revised Roads Management Plan for Council consideration.				
May 28, 2023	Hello Was have lived on Concession 1 for 3 years and have noticed an steep increase in the traffic volume, and cyclist lanes people are passing cyclists and other vehicles very frequently with little visibility due to the blind hills. We lived speed limit is 60km/h but due to the hills on both sides people often drive in excess of 100 km/h. If someone were to more than 20 to catch people approaching or exceeding stunt driving speeds. I have not seen any Police presence but bike lanes or turning lanes this is a major hazard. Is it possible to suggest a bike lane for the long-term plan and perha those flashing signs that displays your speed and says slow down? As I'm typing this, a car drove by so fast that I could assistance is greatly appreciated.				

to speed limits and signage on these roads Il Road, we would defer the decision to and designate a "Community Safety Zone", Township staff have forwarded this assistance in locating a suitable contact at

rd near the golf course. The traffic is going

ards provided within the Roads

## is provided in Section 4.7 of the Roads ip has initiated the process of formalizing a t Charges – Priority Lien Status legislation.

traffic. Our main concern is that with only 2 in a valley on Concession 1 where the set up speed recording it would not take t perhaps they have high priorities. With no aps a short term mitigation would be one of d not even tell what kind it was. Your

Date	Comments
	Response:
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stand Management Plan to determine the warrant of additional signage. There are no plans within the Capital Program t road. Township roads currently do not have the required platform width or Right-of-Way property to support this e
	As you are aware there is an incredible amount of traffic on highway 6 (Brock Road). As parents and grandparents of a across the street from the community centre for two years. We have been witness to many close calls, erratic driving, phones. Parents are walking across with children and strollers and newborn babies in the middle of winter on icy road
May 31, 2023	We are hoping there is a solution that could allow for a one-way street in front of the school with a designated time a we have the ability to drop a child off but for ones that are in kindergarten or require extra assistance, we are walking allow people to park and leave your vehicle.
	At the end of the street past the school there is also a turning circle, perhaps this could be utilized to help with traffic
	We have spoken to the school about our concerns, but they feel that their hands are tied. We need a solution that ma very unsafe and not a solution. Someone could be killed with the current set up. We need help to address this.
	Response. Brock Road in the village of Aberfoyle is a Wellington County Road. Township staff have forwarded this request to to follow up directly with Wellington County staff and require assistance in locating a suitable contact at Wellingto staff for assistance. The Township has received the request to review Old Brock Road in front of the Aberfoyle Public School and will init guidelines and standards provided within the Roads Management Plan to determine if additional traffic calming m implemented on Old Brock Road.
June 6, 2023	I noticed that the road management link is now closed for comments. Residents on Maltby have formed a community about road safety, drivers speeding in excess of 100 km/h in a 60 zone and passing school buses. Wildlife crossings are signs to try and slow traffic but a more permanent solution is necessary. We need help from you and other council me Victoria to Watson is to be resurfaced this summer. We would rather have permanent solar powered road signs erect slow down. Also we would like wildlife crossings put in at a number of locations as per what Guelph did for the Maltb with us to discuss. The Clair, Maltby expansion is going to add more traffic stress to our area and we would like to be

## lards provided within the Roads to install bicycle lanes on any Township expansion.

children at Aberfoyle, we have been walking g, people running red lights, people on cell ds and through the pouring rain.

and or drop off zone for parents Right now, g across the busy highway. They do not

flow.

akes sense for everyone. Right now, this is

## Wellington County staff. Should you wish on County, please follow up with Township

## itiate a review under the practices, policies, neasures or designated areas can be

y association and we are very concerned re another concern. We have erected lawn nembers. I understand that Maltby from ted to show speeders that they need to by section west of Victoria. Can you meet proactive

Date	Comments
	Response:
	The Township has received this request and will initiate a review under the practices, policies, guidelines and stando Management Plan to determine the warrant of additional signage. Please reach out to the Director of Public Works Puslinch to initiate discussions on your comments.

lards provided within the Roads s, Parks and Facilities at the Township of

## **PUBLIC COMMENTS REGISTER - ROADS**

1       Jan 1, 2023       Sample #1       000-00000       We are requesting a traffic colning study be completed on Watton Road between Arkell Road and Store Road       Feb 1, 2023       The foundation staff, found you with to follow a public to with the follow and the provides, policies, a public coling study be completed on Bareham Drive       Feb 1, 2023	Item	Date Received	Name (and address)	Contact Information (phone / email)	Comment	Date Response Provided	Response Provided	Further A Required?
2         Jan 1, 2023         Sample #2         sample2@email.com         We are requesting a traffic colining study be completed on Boreham Drive         Feb 1, 2023         The Township has received the requesting a traffic colining study be completed on Boreham Drive         Feb 1, 2023         Julia Science and Sc	1	Jan 1, 2023	Sample #1	000-000-0000	We are requesting a traffic calming study be completed on Watson Road between Arkell Road and Stone Road	Feb 1, 2023	The identified road section is a Wellington County Road. Township staff have forwarded this request to Wellington County Staff. Should you wish to follow up directly with Wellington County staff and require assistance in locating a suitable contact at Wellington County, please follow up with Township staff for assistance.	N
3	2	Jan 1, 2023	Sample #2	sample2@email.com	We are requesting a traffic calming study be completed on Boreham Drive	Feb 1, 2023	The Township has received the request and will initiate a review under the practices, policies, guidelines and standards provided within the Roads Management Plan to determine if additional traffic calming measures can be implemented	Ŷ
45	3							
SImage: sector of the sector of t	4							
01111171111111911111111101111111111111111111211111111131111111114111111111511111111161111111117111111111911111111201111111121111111112311111111241111111125111111112511111111	5							
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	6							
9000000100000000110000000120000000130000000140000000150000000160000000180000000200000000210000000230000000240000000250000000	7							
1011 <td>9</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	9							
11Image: state of the state of t	10							
121314 <td>11</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	11							
13Image: state st	12							
14111111151111111161111111171111111181111111191111111201111111211111111221111111231111111241111111251111111	13							
151616161616161616161617111 <td< td=""><td>14</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	14							
16MM <th< td=""><td>15</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	15							
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	16							
1818191919191910101010201010101010101010211010101010101010221010101010101010231010101010101010241010101010101010251010101010101010	17							
15151616161616200000002100000022000000230000002400000025000000	18							
20202021 <td>19</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	19							
22     23     24     25     25	20							
23	22							
24	23							
25	24							
	25							

Action P (Y/N)	Description of Further Action	Status (Open / Closed)
	-	Closed
	Complete a review under the Roads Management Plan, provide followup with commenting author pending result of review.	Open



Dufferin Aggregates 2300 Steeles Ave W, 4<sup>th</sup> floor Concord, Ontario L4K 5X6 Canada w **T.** 905-761-7100 **F.** 905-761-7200

www.dufferinaggregates.com

June 27, 2023

Ministry of Natural Resources and Forestry Guelph District Office 1 Stone Road Guelph, ON N1G 4Y2

Attention: Seana Richardson

#### RE: Annual Ecological Monitoring Report – Mill Creek Pit, Licence ID No. 5783

Please find enclosed the 2022 Annual Ecological Monitoring Report for the Dufferin Aggregates Mill Creek Pit. It is a requirement of the approved site plans to submit an Annual Ecological Monitoring Report to the Ministry of Natural Resources and Forestry, the County of Wellington, the Township of Puslinch and the Grand River Conservation Authority by June 30<sup>th</sup> of the following year. The purpose of this report is to demonstrate the implementation of the Ecological Management Plan and Rehabilitation Plan for Phase 6. Dufferin Aggregates is a division of CRH Canada Group Inc.

Please do not hesitate to contact the undersigned if you have any questions or comments.

Yours sincerely,



Jennah Pettenuzzo Environmental Specialist Dufferin Aggregates, a CRH Company

M: 416-602-3422 E: Jennah.pettenuzzo@ca.crh.com

cc: Ken Cornelisse, Resource Liaison Specialist, MNRF Sarah Wilhelm, Manager of Policy Planning, County of Wellington Courtenay Hoytfox, Municipal Clerk, Township of Puslinch Chris Lorenz, Resource Planner, GRCA



## **2022 Ecological Monitoring Report**

## **Dufferin Aggregates Mill Creek Pit - Phase 6**

June 2023

Submitted to: **Dufferin Aggregates** A Division of CRH Canada Group Inc. 2300 Steeles Avenue West, 4<sup>th</sup> Floor Concord Ontario L4K 5X6

Prepared by: Goodban Ecological Consulting Inc. Milton, Ontario [This page left blank intentionally.]

## 2022 ECOLOGICAL MONITORING REPORT

## **Dufferin Aggregates Mill Creek Pit - Phase 6**

## **Table of Contents**

1.0	Introduction	. 1
2.0	Ecological Management Plan (EMP) Overview	. 2
3.0	Ecological Management Plan (EMP) – Spring 2020 Follow-up Work	. 3
4.0	Progressive and Final Rehabilitation	. 4
5.0	2022 Monitoring Summary	. 4
6.0	Summary and Recommendations	. 5

#### LIST OF FIGURES

- Figure 1 Location Map
- Figure 2 Revised Extraction Footprint
- Figure 3 Ecological Management Plan (for lands that will not be extracted)
- Figure 4 Rehabilitation Plan (for lands that will be extracted)

#### LIST OF TABLES

 Table 1
 Ecological Management Plan and Rehabilitation Plan - Unit Summary

#### LIST OF ATTACHMENTS

- Attachment A Sections 3.1 and 3.2 of the Ecological Management Plan (GEC, April 2017)
- Attachment B Mill Creek Pit Dufferin Aggregates Phase 6 2022 Ecological Monitoring Photographs
- Attachment C Dufferin Aggregates Mill Creek Pit Phase 6 2022 Pit Rehabilitation Photographs

[This page left blank intentionally.]

#### 1.0 Introduction

Goodban Ecological Consulting Inc. (GEC) was initially retained by Dufferin Aggregates (Dufferin), a division of CRH Canada Group Inc., in 2016 to assist in addressing agency comments on their Mill Creek Pit Phase 6 Major Site Plan Amendment.

Dufferin submitted their Major Site Plan Amendment to the Mill Creek Pit (Licence 5738) in 2015, along with applications for related Official Plan and Zoning By-law Amendments to the Township of Puslinch. The Mill Creek Pit is owned by the University of Guelph and is located on Part Lot 24 Concession 1 and Part Lots 21-24 Concession 2 in the Township of Puslinch, County of Wellington (**Figure 1**). The Mill Creek site is approximately 188.6 ha in size. The 6.53 ha Phase 6 extraction area is a southerly extension, within the licensed boundary, of existing Phase 2 (**Figure 2**).

GEC's work included the preparation of the *Ecological Management Plan & Rehabilitation Plan, Dufferin Aggregates Mill Creek Pit - Proposed Phase 6* (GEC, April 2017). That report provides details on the management of features on Dufferin land surrounding the proposed Phase 6 extraction area and details on the proposed Rehabilitation Plan for the Phase 6 extraction area. The *Ecological Management Plan* (EMP) covers the 2.55 ha of Phase 6 that will not be extracted (**Figure 3**). The *Rehabilitation Plan* covers the 6.53 ha of Phase 6 that will be extracted (**Figure 4**).

Dufferin successfully implemented EMP Section 3.1 (Pre-Extraction and Site Preparation – Ecological Management Activities) by November 30, 2019, as documented in the December 5, 2019 Letter Report prepared by GEC. The Letter Report contained some recommendations for follow-up actions to be completed by Dufferin in spring 2020. This work has been completed and documentation is included in this 2022 Phase 6 Ecological Monitoring Report.

Sheet 8 of the Site Plans details the reporting requirements for the Ecological Management Plan and Rehabilitation Plan. An Annual Monitoring Report is to be submitted by June 30 of the following year to the Ministry of Natural Resources and Forestry (MNRF), County of Wellington, Township of Puslinch and the Grand River Conservation Authority (GRCA), demonstrating the implementation of the Ecological Management Plan (EMP) and Rehabilitation Plan within Phase 6.

For ease of reference, Sections 3.1 and 3.2 of the Ecological Management Plan (EMP) and Rehabilitation Plan Report (GEC 2017) are provided in **Attachment A**. **Figures 1** to **4** and **Table 1** from the *Ecological Management Plan & Rehabilitation Plan* are also attached.

The remainder of this 2022 Ecological Monitoring Report is organized under the following headings:

- 2.0 Ecological Management Plan (EMP) Overview
- 3.0 Ecological Management Plan (EMP) Spring 2020 Follow-up Work
- 4.0 Progressive and Final Rehabilitation Plan
- 5.0 2022 Monitoring Summary
- 6.0 Summary and Recommendations

### 2.0 Ecological Management Plan (EMP) Overview

The Ecological Management Plan covers the 2.55 ha of Phase 6 that will not be extracted. An overall goal of this Ecological Management Plan is to expand the extent of Significant Woodland areas through an integrated planting approach covering the property setbacks, woodland management zones, acoustic berms and, ultimately, the rehabilitation side slopes. Habitat conditions will be enhanced by controlling invasive woody species, increasing woodland diversity through species selections for reforestation, providing new habitat structures (e.g., rock piles, logs, woody debris, etc.), creating wildlife shrub patches, creating grassland patches with wildflowers for pollinators, and creating shoreline wetlands with habitat structures. The various management zones and rehabilitation areas are shown on **Figures 3** and **4**, and described in **Table 1**.

The main components of the Ecological Management Plan for land that will not be extracted were as follows:

- Stake extraction limits.
- Mark trees for retention and/or removal within setbacks and Woodland Management Zones.
- Cut trees and shrubs marked for removal along the extraction limit and within management areas.
- Install habitat features (e.g., log piles, brush piles) in wooded areas to be retained along the west side of the property.
- Plant trees and shrubs within management areas during spring and/or fall planting periods.
- Install silt fencing as shown on Figure 3.
- Strip topsoil from within berm footprints for use on berms. Strip other topsoil as necessary in order to complete the berm construction.
- Salvage field stones and large rocks for use in management areas and on future rehabilitation slopes.
- Construct south and east berms with irregular, naturalistic contouring, to the extent feasible.
- Install root wads, stumps, logs, rock piles and large boulders on berms.
- Install one (1) snake hibernaculum at the location shown on **Figure 3**.
- Plant trees and shrubs on south and east berms during spring and/or fall planting periods.

Dufferin successfully implemented EMP Section 3.1 (Pre-Extraction and Site Preparation – Ecological Management Activities) by November 30, 2019, as documented in the December 5,

2019 Letter Report prepared by GEC. Puslinch Township's ecological peer reviewer, Mr. Greg Scheifele of GWS Ecological & Forestry Services Inc., reviewed GEC's letter report and attended a site visit with Mr. Anthony Goodban (GEC) and Mr. Ron Van Ooteghem (Dufferin Aggregates) on March 11, 2020, to review the EMP work completed by Dufferin.

GWS Ecological & Forestry Services Inc. then prepared a brief letter report dated March 13, 2020, which included the following summary:

"In summary, the required tree and shrub removal work and follow-up ecological restoration work completed to date was effectively and professionally implemented. I commend Dufferin staff, consultants and contractors on this work and encourage them to perform the same quality of workmanship elsewhere on this site during ongoing progressive rehabilitation."

GEC's December 5, 2019 Letter Report contained some recommendations for follow-up actions to be completed by Dufferin in spring 2020. This work was completed in 2020 and documentation is provided below.

### 3.0 Ecological Management Plan (EMP) - Spring 2020 Follow-up Work

The following ecological management activities were completed by Dufferin as of May 2020:

- From March to May 2020, GEC and Dufferin Aggregates site staff monitored the south and east berms for any signs of erosion or washouts. No corrective measures were required.
- GEC staff walked the south and east berms in May 8, 2020, to check on the berm plantings and identify any follow-up work that the planting contractor should complete, which included the following action items:
  - Tamp down and stake, if necessary, approximately 95 plantings that show signs of frost-heaving and/or are leaning;
  - Replace approximately 195 plantings that are dead or in poor condition; and,
  - Over-seed and reseed any bare or sparsely covered areas where the groundcover seeding from late 2019 did not take.
- Scott's Landscaping and Lawn Care completed the following work in May 2020:
  - All plantings that were leaning or showing signs of frost-heaving were tamped down and staked as necessary;
  - Approximately 250 tree seedlings in 1-gallon containers (or larger) were planted, including Basswood, Sugar Maple, Red Oak, White Birch, White Pine and White Spruce; and,
  - Bare or sparsely covered areas on the berms were seeded with 22.7 kg of the Custom Cover Mix comprising 77% Canada Bluegrass (*Poa compressa*), 20% Kentucky Bluegrass (*Poa pratensis*) and 3% White Clover (*Trifolium repens*), and 10 kg of Canada Wild-rye (*Elymus canadensis*).

#### 4.0 **Progressive and Final Rehabilitation**

**Figure 4** shows the various rehabilitation units included in the Rehabilitation Plan. The progressive rehabilitation of Phase 6 commenced in November 2020 and this work continued through 2022. Pit Rehabilitation Unit RSW2 and the southern portion of Unit RSW1 were created in 2021; this work included the creation of the side slopes, placement of habitat features including boulders, rock piles and woody debris (e.g., stumps root wads, logs, etc.), and seeding with a non-invasive seed mix.

Rehabilitation Units RSW3, RSW4 and RSM2 were created in 2022. Refer to **Attachment C: Photos 1** to **6** for representative site photographs showing the newly created side slope rehabilitation units. Below water extraction in 2022 gradually expanded the Phase 2/6 Lake as the year progressed (see **Photos 2** and **4**).

Wetland Units SW1, SW2 and SW3 were created in 2022. Refer to **Attachment C: Photos 1-2**, **4**, and **6-12** for representative site photographs showing the newly created wetland units. Units SW1 and SW2 have a surface water connection to the Phase 2/6 Lake. Unit SW3 is separated from the Phase 2/6 Lake by a low gravel bar. Habitat features such as gravel bars, boulders, rock piles and logs were placed around the small newly-created wetland features. On November 9, 2022, GEC and CRH staff sowed 2 kg of the Ontario Seed Company's *Valleyland Native Seed Mixture (Problem Solver) 8260* around/in the 3 wetland features. This seed mix includes the following species:

- Fowl Bluegrass (Poa palustris)
- Fowl Manna Grass (Glyceria striata)
- Fox Sedge (Carex vulpinoidea)
- Path Rush (Juncus tenuis)
- Virginia Wild Rye (*Elymus virginicus*)

Late in 2022, Dufferin removed the silt/exclusion fencing surrounding the naturalized berms and around Woodland Protection Zones 'A' and 'B'. These fences no longer serve a purpose because the berms are now naturalized and there is low risk of erosion/sedimentation, and the adjacent rehabilitation Unit RSW2 and the south portion of Unit RSW1 have been created.

The side slope rehabilitation side slopes are scheduled to be planted with native trees and shrubs, and seeded with suitable seed mixes, in 2023.

#### 5.0 2022 Monitoring Summary

Fixed-point ecological monitoring photos are provided in **Attachment B**. The locations of the photo stations are shown on **Figure 3** 

Survivorship of woody plantings was generally good in 2022. Some deciduous plantings had previously been affected by the local Ldd Moth infestation; White Birch and Red Oak were most affected. Deer browsing also mainly affected White Birch and Red Oak. Survivorship was best for Black Cherry (*Prunus serotina*), Chokecherry (*Prunus virginiana*), White Cedar (*Thuja occidentalis*), White Pine (*Pinus strobus*) and Red Cedar (*Juniperus virginiana*).

The groundcover seed mix was initially applied to the naturalized berms late in 2019, so cover was patchy in the spring due to relatively dry conditions and the resultant slow establishment of the groundcovers. Through the 2020 season annual weeds such as Common Ragweed

(*Ambrosia artemisiifolia*), Red-root Amaranth (*Amaranthus retroflexus*), White Goosefoot (*Chenopodium album*), White Amaranth (*Amaranthus albus*), Common Groundsel (*Senecio vulgaris*), Canada Thistle (*Cirsium arvense*), etc., became established. This trend continued in 2021 and 2022, but some of the species included in the 2019 seed mix were more prevalent, especially Canada Wild-rye (*Elymus canadensis*).

The groundcovers in Rehabilitation Unit RSW2 and the southern portion of Unit RSW1 continued to develop in 2022. Groundcovers are a mix of cool season grasses (mostly *Festuca rubra, Lolium perenne* and *Poa pratensis*), White Clover (*Trifolium repens*) and Red Clover (*Trifolium pratense*), as well as many of the annual weeds listed in the preceding paragraph. Similar groundcovers were developing on Rehabilitation Units RSW3, RSW4 and RSM2 as the 2022 season progressed.

Around the newly created small wetland units (SW1, SW2 and SW3), several shrub willow seedlings were observed growing later in the 2022 season. Willow species included Sandbar Willow (*Salix interior* [*S. exigua*]), Heart-leaved Willow (*Salix eriocephala*) and Meadow Willow (*S. petiolaris*).

#### 6.0 Summary and Recommendations

In 2022 Goodban Ecological Consulting Inc. (GEC) observed that the naturalized berms surrounding Phase 6 were generally in good condition and survivorship of planted trees and shrubs was generally good. GEC also observed that progressive rehabilitation continued through 2022 with work on the pit rehabilitation side slopes along the south and east sides of Phase 6 (Units RSW3, RSW4 and RSM2). The north portion of Unit RSW1 and Unit RSM1 will be completed in early 2023.

The following are recommendations for 2023:

- The ecological consultant should take fixed-point photographs during the 2023 field season.
- The ecological consultant should continue to monitor the naturalized berms and, as they area created and planted, the progressive and final rehabilitation features. The ecological consultant should recommend remedial actions to Dufferin as necessary.
- The ecological consultant should work collaboratively with Dufferin staff to ensure that any progressive rehabilitation work undertaken in 2023 is consistent with the requirements contained in the *Ecological Management Plan & Rehabilitation Plan, Dufferin Aggregates Mill Creek Pit Proposed Phase 6* (GEC, April 2017) and the Site Plans.
- Descriptions of any Ecological Management Plan (EMP) and Rehabilitation Plan (RP) activities completed in 2023, including photos, mapping and monitoring data, should be provided in the 2023 Ecological Monitoring Report, to demonstrate the implementation of the Ecological Management Plan and Rehabilitation Plan within Phase 6 of the Mill Creek Pit. The 2023 report should be submitted to the Ministry of Natural Resources and Forestry (MNRF), County of Wellington, Township of Puslinch and the Grand River Conservation Authority (GRCA) by June 30, 2024, or prior to the surrender of the licence covering Phases 2 and 6, whichever comes first.

[This page left blank intentionally.]



Note: This figure is an excerpt from the Ecological Management Plan & Rehabilitation Plan (GEC, April, 2017).

Note: This figure is an excerpt from the Ecological Management Plan & Rehabilitation Plan (GEC, April 2017)



## LEGEND

LICENSED BOUNDARY

WOODLAND PROTECTION ZONE LIMIT WOODLAND PROTECTION ZONE

PROPOSED BERM WOODLAND EDGE MANAGEMENT ZONE NO-TOUCH ZONE

SIGNIFICANT WOODLAND

A - WOODLAND TO BE RETAINED

- B WOODLAND TO BE RETAINED
- C WOODLAND TO BE REMOVED

## Dufferin Aggregates a division of CRH Canada Group Inc.

GEC Ecc

Goodban Ecological Consulting Inc.

## FIGURE 2 REVISED EXTRACTION FOOTPRINT

MILL CREEK PIT PART OF LOTS 21, 22, 23 AND 24, CONCESSION II PART OF LOT 24, CONCESSION I

TOWNSHIP OF PUSLINCH, COUNTY OF WELLINGTON

	J.H. COH	CONSULTING BRANTI	ENGINEERS	g lim	ITED
SCALE: 1:300	00		DATE	MAR.	15/17
0m	50m	100m	150m	200	m



Note: This figure is an excerpt from the Ecological Management Plan & Rehabilitation Plan (GEC, April 2017).



#### LEGEND

Goodban A - WOODLAND PROTECTION ZONE A S1 - 6m NO TOUCH ZONE Ecological Consulting Inc. **B** - WOODLAND PROTECTION ZONE B SB1 - SOUTH BERM AREA C - WOODLAND TO BE REMOVED SEB1 - SOUTHEAST BERM + # Fixed-point Photo Stations (2020) WEMZ1 - WOODLAND EDGE MANAGEMENT ZONE 1 SE1 - NO TOUCH ZONE WEMZ2 - WOODLAND EDGE MANAGEMENT ZONE 2 E1 - 10m NO TOUCH ZONE WEMZ3 - WOODLAND EDGE MANAGEMENT ZONE 3 EB1 - PORTION OF EAST BERM W1a - 15m SETBACK E2 - 6m NO TOUCH ZONE W1b - 15m SETBACK EB2 - PORTION OF EAST BERM W2 - 15m SETBACK **FIGURE 3** W3 - 15m SETBACK



## Dufferin Aggregates

LICENSED BOUNDARY

LIMIT OF EXTRACTION

SILT FENCE LOCATION

WOODLAND PROTECTION ZONE LIMIT

WOODLAND PROTECTION ZONE

(WITH IRREGULAR CONTOURING) SNAKE HIBERNACULUM LOCATION

a division of CRH Canada Group Inc. 2300 Steeles Ave. W., Suite 400, Concord Ontario, L4K 5X6 ECOLOGICAL MANAGEMENT PLAN MILL CREEK PIT

PART OF LOTS 21, 22, 23 AND 24, CONCESSION II PART OF LOT 24, CONCESSION I TOWNSHIP OF PUSLINCH, COUNTY OF WELLINGTON

	.H. COH	<b>100N ENC</b> CONSULTING BRANTE	GINEERIN( ENGINEERS FORD	G LIMITED
SCALE: 1:3000 DATE:				: MAR. 15/17
0m	50m	100m	150m	200m

Note: This figure is an excerpt from the Ecological Management Plan & Rehabilitation Plan (GEC, April 2017).



## LEGEND



LICENSED BOUNDARY LIMIT OF EXTRACTION WOODLAND PROTECTION ZONE LIMIT FUTURE SIGNIFICANT WOODLAND BOUNDARY PROPOSED BERM (WITH IRREGULAR CONTOURING)

REFER TO FIGURE 3 FOR DETAILS

RSW - REHAB SIDE SLOPE WOODLAND

RSM - REHAB SIDE SLOPE MEADOW

SW - SHORELINE WETLAND

SNAKE HIBERNACULUM LOCATION



## FIGURE 4

## REHABILITATION PLAN MILL CREEK PIT

PART OF LOTS 21, 22, 23 AND 24, CONCESSION II PART OF LOT 24, CONCESSION I TOWNSHIP OF PUSLINCH, COUNTY OF WELLINGTON

J.	H. COF	HOON ENC CONSULTING BRANTE	GINEERIN( ENGINEERS FORD	G LIMITED
SCALE: 1:3000			DATE	: MAR. 15/17
0m	50m	100m	150m	200m



## **Dufferin Aggregates**

a division of CRH Canada Group Inc. 2300 Steeles Ave. W., Suite 400, Concord Ontario, L4K 5X6

TABLE 1: MILL CREEK PHASE 6 ECOLOGICAL MANAGEMENT PLAN AND REHABILITATION PLAN UNIT SUMMARY							
UNIT	FEATURE	AREA (ha)	EXISTING OR FUTURE SIGNIFICANT WOODLAND?	MAIN SPECIES SELECTIONS	NOTES		
Ecologic	al Management Plan (for	land that	will not be extracted)				
W1a	15 m "No Touch" Setback - Meadow - Natural Regeneration Area	0.051	n/a	n/a	This area contains a few trees and existing old field meadow vegetation. No additional planting is proposed. A snake hibernaculum will be constructed in this area. Spoil from the hibernaculum exceptation will be used to raise the		
					elevation of the entrances, so that they are south-facing. Habitat features such as root wads, logs and rock piles will be added to this general area, especially in association with the snake hibernaculum entrances.		
W1b	15 m "No Touch" Setback - Tree-planting Area	0.139	Future Significant Woodland	Eastern White Cedar (50%) - Eastern Red Cedar (20%) - White Birch (10%) - Trembling Aspen (10%) - Bigtooth Aspen (10%)	This unit is a 15 m strip just beyond the east limit of the Significant Woodland that extends offsite to the west. This area is presently an open old field meadow. This strip will be planted with tree seedlings on 2.0 m x 2.0 m spacing (2,500 seedlings/ha).		
W2	15 m "No Touch" Setback	0.111	Existing Significant Woodland	n/a	This unit is a section of 15 m setback just beyond the east limit of the Significant Woodland that extends offsite to the west. This area is presently wooded and it is contiguous with the White Pine stand to the east. Saplings with ice storm damage will be flush cut close to the ground to promote regrowth.		

	TABLE 1: MILL CREEK PHASE 6 ECOLOGICAL MANAGEMENT PLAN AND REHABILITATION PLAN UNIT SUMMARY							
UNIT	FEATURE	AREA (ha)	EXISTING OR FUTURE SIGNIFICANT WOODLAND?	MAIN SPECIES SELECTIONS	NOTES			
W3	15 m "No Touch" Setback	0.140	Existing Significant Woodland	Eastern White Cedar (70%) - Eastern Red Cedar (15%) - White Birch (15%)	This unit is a section of 15 m setback that supports deciduous regeneration. Saplings with ice storm damage will be flush cut close to the ground to promote regrowth. Invasive woody species will be cut and stumps treated with herbicide. Any gaps along the 15 m limit will be planted with Eastern White Cedar, Eastern Red Cedar and White Birch (2.0 m x 2.0 m spacing).			
A	Significant Woodland	0.392	Existing Significant Woodland (FOC1-2)	n/a	The west portion of the Significant Woodland in Phase 6 is no longer proposed for extraction. This area will be protected. Some of the non-merchantable timber from elsewhere on site will be cut into at least 50 3' to 4' lengths and scattered on the forest floor.			
В	Cultural Woodland (CUW1)	0.058	Future Significant Woodland	n/a	This small area contains good Sugar Maple and White Pine regeneration and it will be protected. Saplings with ice storm damage will be flush cut close to the ground to promote regrowth.			
WEMZ1 (W2a)	5 m Woodland Buffer	0.034	Future Significant Woodland	Eastern White Cedar (50%) - Eastern Red Cedar (20%) - White Birch (10%) - Trembling Aspen (10%) - Bigtooth Aspen (10%)	This unit is a 5 m strip of old field meadow just beyond the north limit of the Significant Woodland to be retained. The woodland edge is scrubby, being dominated by Common Buckthorn. This unit will be planted with tree seedlings on 2.0 m x 2.0 m spacing (2,500 seedlings/ha). Invasive woody species growing along the north edge of the Significant Woodland will be cut and stumps treated with herbicide.			

	TABLE 1: MILL CREEK PHASE 6 ECOLOGICAL MANAGEMENT PLAN AND REHABILITATION PLAN UNIT SUMMARY							
UNIT	FEATURE	AREA (ha)	EXISTING OR FUTURE SIGNIFICANT WOODLAND?	MAIN SPECIES SELECTIONS	NOTES			
WEMZ2 (W2b)	5 m Woodland Management Zone	0.047	Existing Significant Woodland	Eastern White Cedar (70%) - Eastern Red Cedar (15%) - White Birch (15%)	This unit is a 5 m strip just within the new woodland edge that will be created. Larger trees close to the new woodland edge will be felled. Non-merchantable timber will be cut into 3' to 4' lengths and spread on forest floor. Gaps along the new edge will be planted with Eastern White Cedar, Eastern Red Cedar and White Birch (2.0 m x 2.0 m spacing). Invasive woody species will be cut and stumps treated with herbicide.			
WEMZ3	5 m Woodland Management Zone	0.022	Future Significant Woodland	Eastern White Cedar (70%) - Eastern Red Cedar (15%) - White Birch (15%)	This unit is a 5 m strip just within the new woodland edge that will be created. This area contains Sugar Maple regeneration. Saplings with ice storm damage will be flush cut close to the ground to promote regrowth.			
S1	6 m "No Touch" Setback	0.212	Future Significant Woodland	Eastern White Cedar (70%), Eastern Red Cedar (15%) and White Birch (15%)	This unit is a 6 m "No Touch" strip along the southern property boundary. Desirable woody species will be retained. Invasive woody species will be cut and stumps treated with herbicide. Gaps will be planted with Eastern White Cedar, Eastern Red Cedar and White Birch (2.0 m x 2.0 m spacing).			
SB1	South Berm	0.846	Future Significant Woodland	Pit side of berm: Eastern White Cedar (50%) - Eastern Red Cedar (10%) - Pin Cherry (10%) - White Birch (10%) - Trembling Aspen (10%) - Bigtooth Aspen (10%) Non-pit side and crest of berm: Basswood (20%) - Black Cherry (20%) - Red Oak (40%) - White Pine (20%)	The pit side of berm SB1 is north-facing and will be integrated with the adjacent future rehab slope (RSW3). The non-pit side of the berm is south-facing. Tree planting will be at 2.0 m x 2.0 m spacing. Habitat features such as root wads, logs and rock piles will be added to this berm. Five (5) 10 m x 10 m shrub patches will be established within this unit. Ten (10) 3 m x 10 m pollinator strips will be planted.			

	TABLE 1: MILL CREEK PHASE 6 ECOLOGICAL MANAGEMENT PLAN AND REHABILITATION PLAN UNIT SUMMARY							
UNIT	FEATURE	AREA (ha)	EXISTING OR FUTURE SIGNIFICANT WOODLAND?	MAIN SPECIES SELECTIONS	NOTES			
SEB1	Southeast Corner Berm	0.040	Future Significant Woodland	Pit side of berm: Eastern White Cedar (50%) - Eastern Red Cedar (10%) - Pin Cherry (10%) - White Birch (10%) - Trembling Aspen (10%) - Bigtooth Aspen (10%) Crest of berm: Basswood (20%) - Black Cherry (20%) - Red Oak (40%) - White Pine (20%)	This unit is the southeast corner of the berm that will be constructed around the south and east edges of the Phase 6 extraction area. Tree planting will be at 2.0 m x 2.0 m spacing.			
SE1	Southeast Corner "No Touch" Setback	0.062	Future Significant Woodland	Basswood (20%) - Black Cherry (20%) - Red Oak (40%) - White Pine (20%)	This is a small unit in the southeast corner of Phase 6. It will become a sheltered location between the berm (corner of SB1 and EB1) and the adjacent Significant Woodland. Desirable woody species will be retained. Invasive woody species will be cut and stumps treated with herbicide. Gaps will be planted with Basswood, Black Cherry, Red Oak and White Pine (2.0 x 2.0 m spacing).			
E1	10 m "No Touch" Setback	0.060	Future Significant Woodland	Eastern White Cedar (70%), Eastern Red Cedar (15%) and White Birch (15%)	This unit is a 10 m "No Touch" strip along the eastern property boundary. Desirable woody species will be retained, including an existing double-row of White Spruce previously planted by Dufferin. Invasive woody species will be cut and stumps treated with herbicide. Gaps will be planted with Eastern White Cedar, Eastern Red Cedar and White Birch (2.0 m x 2.0 m spacing).			

	TABLE 1: MILL CREEK PHASE 6 ECOLOGICAL MANAGEMENT PLAN AND REHABILITATION PLAN UNIT SUMMARY							
UNIT	FEATURE	AREA (ha)	EXISTING OR FUTURE SIGNIFICANT WOODLAND?	MAIN SPECIES SELECTIONS	NOTES			
EB1	East Berm	0.148	Future Significant Woodland	East side of berm: Basswood (20%) - Black Cherry (20%) - Red Oak (40%) - White Pine (20%) West side and crest of berm: Eastern White Cedar (50%) - Eastern Red Cedar (10%) - Pin Cherry (10%) - White Birch (10%) - Trembling Aspen (10%) - Bigtooth Aspen (10%)	The west side of berm EB1 is west-facing and will be integrated with the adjacent future rehab slope (RSW3 and RSW4). The south side of the berm is south-facing. Tree planting will be at 2.0 m x 2.0 m spacing. Habitat features such as root wads, logs and rock piles will be added to this berm. Two (2) 10 m x 10 m shrub patches will be established within this unit. Five (5) 3 m x 10 m pollinator strips will be planted.			
E2	6 m "No Touch" Setback - Meadow Section	0.036	n/a	n/a	This unit is a 6 m "No Touch" strip along the eastern property boundary. Desirable woody species will be retained, including an existing double-row of White Spruce previously planted by Dufferin. Invasive woody species will be cut and stumps treated with herbicide.			
EB2	East Berm - Meadow Section	0.156	n/a	Seed with non-invasive grass/legume mixture, using native species to the extent feasible	This section of the berm will be planted with a non-invasive grass/legume mixture, using native species to the extent feasible, for the purposes of slope stabilization. Other suitable native plant species may also be seeded or planted as appropriate. In particular, clusters of Common Milkweed ( <i>Asclepias syriaca</i> ) will be established. Habitat features such as root wads, logs and rock piles will be added to this berm. Two (2) 10 m x 10 m shrub patches will be established within this unit. Five (5) 3 m x 10 m pollinator strips will be planted.			

	TABLE 1: MILL CREEK PHASE 6 ECOLOGICAL MANAGEMENT PLAN AND REHABILITATION PLAN UNIT SUMMARY							
UNIT	FEATURE	AREA (ha)	EXISTING OR FUTURE SIGNIFICANT WOODLAND?	MAIN SPECIES SELECTIONS	NOTES			
Progres	sive and Final Rehabilitat	tion Plan (	for land that will be ex	(tracted)				
RSM1	Rehab Side Slope - Meadow Section	0.078	n/a	Seed with non-invasive grass/legume mixture, using native species to the extent feasible	This rehab slope will be planted with a non-invasive grass/legume mixture, using native species to the extent feasible, for the purposes of slope stabilization. Other suitable native plant species may also be seeded or planted as appropriate. In particular, clusters of Common Milkweed ( <i>Asclepias syriaca</i> ) will be established. Habitat features such as root wads, logs and rock piles will be added to this berm. One (1) 10 m x 10 m shrub patches will be established within this unit. Three (3) 3 m x 10 m pollinator strips will be planted.			
RSW1	Rehab Side Slope - Woodland Section	0.636	Future Significant Woodland	Eastern White Cedar (50%) - Eastern Red Cedar (10%) - Pin Cherry (10%) - White Birch (10%) - Trembling Aspen (10%) - Bigtooth Aspen (10%)	(2.0 m x 2.0 m spacing, 2,500 seedlings/ha) Habitat features such as root wads, logs and rock piles will be added to this rehab side slope. Five (5) 10 m x 10 m shrub patches will be established within this unit. Ten (10) 3 m x 10 m pollinator strips will be planted.			
RSW2	Rehab Side Slope - Woodland Section	0.209	Future Significant Woodland	Black Oak (40%) - Chinquapin Oak (20%) - Red Oak (20%) - White Oak (20%)	(3.0 m x 3.0 m spacing, 1,111 seedlings/ha) Habitat features such as root wads, logs and rock piles will be added to this rehab side slope. Suitable tallgrass prairie plant species will be established (refer to Section 4.3 - Seed Mix Details).			
RSW3	Rehab Side Slope - Woodland Section	0.967	Future Significant Woodland	Eastern White Cedar (50%) - Eastern Red Cedar (10%) - Pin Cherry (10%) - White Birch (10%) - Trembling Aspen (10%) - Bigtooth Aspen (10%)	(2.0 m x 2.0 m spacing, 2,500 seedlings/ha) Habitat features such as root wads, logs and rock piles will be added to this rehab side slope. Seven (7) 10 m x 10 m shrub patches will be established within this unit. Fifteen (15) 3 m x 10 m pollinator strips will be planted.			

	TABLE 1: MILL CREEK PHASE 6 ECOLOGICAL MANAGEMENT PLAN AND REHABILITATION PLAN UNIT SUMMARY							
UNIT	FEATURE	AREA (ha)	EXISTING OR FUTURE SIGNIFICANT WOODLAND?	MAIN SPECIES SELECTIONS	NOTES			
RSW4	Rehab Side Slope - Woodland Section	0.120	Future Significant Woodland	Black Oak (40%) - Chinquapin Oak (20%) - Red Oak (20%) - White Oak (20%)	(3.0 m x 3.0 m spacing, 1,111 seedlings/ha) Habitat features such as root wads, logs and rock piles will be added to this rehab side slope. Suitable tallgrass prairie plant species will be established (refer to Section 4.3 - Seed Mix Details).			
RSM2	Rehab Side Slope - Meadow Section	0.200	n/a	Seed with non-invasive grass/legume mixture, using native species to the extent feasible	This rehab slope will be planted with a non-invasive grass/legume mixture, using native species to the extent feasible, for the purposes of slope stabilization. Other suitable native plant species may also be seeded or planted as appropriate. In particular, clusters of Common Milkweed ( <i>Asclepias syriaca</i> ) will be established. Habitat features such as root wads, logs and rock piles will be added to this berm. Three (3) 10 m x 10 m shrub patches will be established within this unit. Five (5) 3 m x 10 m pollinator strips will be planted.			
SW1	Shoreline Wetland	0.015	n/a	Sandbar Willow ( <i>Salix exigua</i> ) Common Cattail ( <i>Typha latifolia</i> ) Sedges ( <i>Carex</i> spp. and <i>Scirpus</i> spp.) OSC Mix 8180 or equivalent	Unit SW1 is a small patch of shallow wetland that will be created along the lake shoreline. Logs, root wads, rock piles and gravel bars will be installed just above and below the water line. Small clusters of Sandbar Willow and other wetland shrubs will be planted along the shoreline. One (1) 8-10 m x 4-5 m gravel bar will be established above the high water line.			

	TABLE 1: MILL CREEK PHASE 6 ECOLOGICAL MANAGEMENT PLAN AND REHABILITATION PLAN UNIT SUMMARY						
UNIT	FEATURE	AREA (ha)	EXISTING OR FUTURE SIGNIFICANT WOODLAND?	MAIN SPECIES SELECTIONS	NOTES		
SW2	Shoreline Wetland	0.021	n/a	Sandbar Willow ( <i>Salix exigua</i> ) Common Cattail ( <i>Typha latifolia</i> ) Sedges ( <i>Carex</i> spp. and <i>Scirpus</i> spp.) OSC Mix 8180 or equivalent	Unit SW2 is a small patch of shallow wetland that will be created along the lake shoreline. Logs, root wads, rock piles and gravel bars will be installed just above and below the water line. Small clusters of Sandbar Willow and other wetland shrubs will be planted along the shoreline. One (1) 8-10 m x 4-5 m gravel bar will be established above the high water line.		
SW3	Shoreline Wetland	0.015	n/a	Sandbar Willow ( <i>Salix exigua</i> ) Common Cattail ( <i>Typha latifolia</i> ) Sedges ( <i>Carex</i> spp. and <i>Scirpus</i> spp.) OSC Mix 8180 or equivalent	Unit SW3 is a small patch of shallow wetland that will be created along the lake shoreline. Logs, root wads, rock piles and gravel bars will be installed just above and below the water line. Small clusters of Sandbar Willow and other wetland shrubs will be planted along the shoreline. One (1) 8-10 m x 4-5 m gravel bar will be established above the high water line.		
	Phase 6 Lake	4.271	n/a	n/a	The Phase 6 pit lake will be an extension of the existing Phase 2 pit lake.		

Attachment A:



## **Ecological Management Plan & Rehabilitation Plan**

**Dufferin Aggregates Mill Creek Pit - Proposed Phase 6** 

April 2017

Submitted to:

#### **Dufferin Aggregates**

A Division of CRH Canada Group Inc. 2300 Steeles Avenue West, 4<sup>th</sup> Floor Concord Ontario L4K 5X6

Prepared by:

**Goodban Ecological Consulting Inc.** 879 Cabot Trail Milton, Ontario L9T 3W4 habitat structures. The various management zones and rehabilitation areas are shown on **Figures 3** and **4**, summarized below and described in **Table 1**.

## 3.0 General Management and Rehabilitation Activities and Timelines

Following approval of the Major Site Plan Amendment required to allow for the extraction of Phase 6, it is anticipated that Ecological Management Plan activities will be completed within 3 of approval. Rehabilitation Plan activities will be completed progressively as extraction is finished in an area. Phase 6 will represent one of the final phases of extraction for the Mill Creek Pit.

It is intended that the components of the Ecological Management Plan and Rehabilitation Plan described herein shall be referenced on the updated Site Plans for Phase 6.

#### 3.1 Pre-Extraction and Site Preparation - Ecological Management Activities

Activities relating to the Ecological Management Plan will primarily occur as part of or at the same time as the initial pre-extraction site preparation stage which will start as soon as possible after the Major Site Amendment is approved and will be completed within 3 years of approval. Some Ecological Management Plan activities may take place progressively, as Phase 6 is developed for aggregate extraction.

The following Ecological Management Activities will be completed for lands that will not be extracted (refer also to **Figure 3** and **Table 1**):

- Stake the extraction limit along west side of Phase 6. Stake 6 m limit from property line along the south side and 10m and 6 m along the east side of Phase 6. Refer to **Figure 3** for locations of the various management areas.
- Mark trees for removal along the extraction limit and within management areas. Orange/yellow marking paint will be used to identify trees for removal. Blue marking paint will be used to mark blue dots on trees to be retained in proximity to extraction limits and berm footprint.
- Cut any trees and shrubs marked for removal along the extraction limit and within the management areas. Tree cutting should occur outside of the breeding bird season and bat activity period, i.e. cutting should take place between November 1 and April 1. Clearing of the balance of the Phase 6 extraction area should also occur outside of the breeding bird season and bat activity period.
- Install any habitat features (e.g. rock piles, brush piles) in areas to be retained along the west side of the property.
- Plant trees and shrubs within management areas during spring and/or fall planting periods. Spacing/density will be 2.0 m x 2.0 m (2,500 seedlings per hectare). Note that some tree-planting activities may extend into extraction stage of the operation.

- Prior to site stripping and berm construction, install light duty silt fence along the west limit of extraction. Along the south property limit, install light duty silt fence 6 m from property line. Along the east property limit, install light duty silt fence 10 m from property line adjacent to the Significant Woodland and 6 m from the property line for the remainder of the east limit. Refer to **Figure 3** for silt fence location.
- Strip and salvage topsoil from the south and east setbacks, between the silt fence and extraction limit.
- During stripping operations, salvage and stockpile field stones for use in management areas and on future rehabilitation slopes.
- Construct south and east berms with irregular, naturalistic contouring. Top dress berms with a minimum of 30 cm of topsoil. Install habitat features (e.g. rock piles, brush piles, root wads, logs, etc). The south and east berm footprint covers approximately 1.2 ha. As a general guideline at least 12 rock piles should be installed, with a 2 m x 2 m footprint and a minimum height of 1 m, if feasible. As a general guideline, at least 24 root wads and/or large logs should be installed, if feasible. Seed berms with suitable species mix, using native species to the extent feasible.
- Install one (1) snake hibernaculum at the location shown on Figure 3.
- Plant trees and shrubs on south and east berms during spring and/or fall planting periods.

## 3.2 **Progressive and Final Rehabilitation**

As extraction proceeds in Phase 6, rehabilitation will occur progressively.

Progressive and final rehabilitation activities that will contribute to site restoration and better integration of the site with the surrounding Greenlands System include the following:

- Backfill side slopes to a minimum 3:1 slope. Grading will produce an irregular slope surface. The slopes will be top-dressed with a depth of topsoil similar to that which was removed from the field, if available. Habitat features such as root wads, logs and rock piles will be incorporated into the side slopes, to the extent feasible. The side slopes will cover approximately 2.24 ha. As a general guideline, at least 22 rock piles should be installed, with a 2 m x 2 m footprint and a minimum height of 1 m, if feasible. As a general guideline, at least 45 root wads and/or large logs should be installed, if feasible. Side slopes should be seeded with a suitable species mix, using native species to the extent feasible.
- Side slopes will be seeded with suitable species mixes, using native species to the extent feasible.

- Trees and shrubs will be planted on side slopes during the spring and/or fall planting periods as part of progressive and/or final rehabilitation. Spacing/density will be 2.0 m x 2.0 m (2,500 seedlings per hectare).
- Shoreline wetlands will be created by forming shallow water margins to the pit lake. Locations of shoreline wetlands are shown on **Figure 3**. Habitat features such as root wads, logs, rock piles and gravel bars will be installed as part of these shoreline wetlands.
- Remove silt fence once berms and rehab side slopes are vegetated and relatively stable.

## 4.0 Management and Rehabilitation Details

The various management and rehabilitation areas are shown on **Figures 3** and **4** and described in **Table 1**. Details for tree planting, shrub planting, seed mixes and habitat features are provided below.

## 4.1 Tree Planting Details

Tree planting will take place during suitable weather conditions in the spring (prior to May 16) and late fall (mid-October onwards) planting periods. Spring planting events are preferred. Tree planting will occur at a spacing/density of 2.0 m x 2.0 m (2,500 seedlings/ha) unless otherwise specified. Nursery stock will be plugs and/or containergrown stock. A tree seed collection program will be established to the extent feasible and this will involve collecting tree seeds from healthy specimens and providing the collected seed to local nurseries for propagation. Planting areas may need to be mown prior to planting if the herbaceous vegetation is thick and matted. Any mowing should ideally occur in the late fall during dry conditions.

The planting density (2,500 seedlings/ha) is high because, after planting, access to planting areas will be difficult for watering and maintenance of plantings. Therefore a relatively high level of mortality is anticipated. If survivorship to a free-to-grow condition is 40%, it will result in 1,000 trees/ha. This does not take into account natural regeneration which is likely to be considerable.

COCODISC weed control mats/disks and/or wood chip mulch will be installed to control herbaceous competition around planted seedlings and to improve moisture retention.

Site-specific species selections are provided in **Table 1**. A summary of the species groups for planting are provided below:

- Eastern White Cedar (70%) Eastern Red Cedar (15%) White Birch (15%)
- Eastern White Cedar (50%) Eastern Red Cedar (20%) White Birch (10%) -Trembling Aspen (10%) - Bigtooth Aspen (10%)

## Attachment B:

# Dufferin Aggregates – Mill Creek Pit – Phase 6

# 2022 Ecological Monitoring Photographs

# Goodban Ecological Consulting Inc. (GEC) June 2023



FP01 – View looking north across Unit W1b. GEC 2022-05-06

FP01 – View looking north across Unit W1b. GEC 2022-11-09





FP01b – View looking east across Unit WEMZ1. GEC 2022-05-06

FP02 – View looking west across Unit WEMZ1. GEC 2022-05-06






FP03a – View looking east along Unit SB1. GEC 2022-05-06





FP03a – View looking east across Unit SB1. GEC 2022-06-10

FP03b – View looking towards Unit RSW2. GEC 2022-06-10



FP03b – View looking north towards Woodland Protection Zone 'B' and Unit RSW1. GEC 2022-11-09



FP04 – View looking east along Unit SB1. GEC 2022-05-06



FP04 – View looking east along Unit SB1. GEC 2022-06-10 FP04 – View looking east along Unit SB1. GEC 2022-11-09







FP05a – View looking east along Unit SB1. GEC 2022-05-06



FP05a – View looking east along Unit SB1. GEC 2022-06-10

FP05b - View looking west along Unit SB1. GEC 2022-05-06







FP05b – View looking west along Unit SB1. GEC 2022-11-09



FP05c - View looking west northwest towards Woodland Protection Zone 'B' and Unit RSW2. Panorama - Left - GEC 2022-05-06



FP05c - View looking west northwest towards Woodland Protection Zone 'B' and Unit RSW1 and RSW2. Panorama - Right - GEC 2022-05-06



FP05cx - View looking west northwest towards Woodland Protection Zone 'B' and Unit RSW2. Panorama - Left - GEC 2022-06-10



FP05cx -View looking west northwest towards Woodland Protection Zones 'A' and 'B', and Units RSW1 and RSW2.Panorama - Right - GEC 2022-06-10



FP06a – View looking east along Unit SB1. GEC 2022-05-06

FP06a - View looking east along Unit SB1. GEC 2022-06-10



FP06a - View looking east along Unit SB1. GEC 2022-11-09

FP06b - View looking west along Unit SB1. GEC 2022-05-06



FP06b - View looking west along Unit SB1. GEC 2022-06-10



FP06b - View looking west along Unit SB1. GEC 2022-11-09



FP07a - View looking east along Unit SB1. GEC 2022-05-06

FP07a - View looking east along Unit SB1. GEC 2022-06-10



FP07a - View looking east along Unit SB1. GEC 2022-11-09 FP07b - View looking west along Unit SB1. GEC 2022-05-06



FP07b - View looking west along Unit SB1. GEC 2022-06-10

FP08a - View looking north along Unit EB1. GEC 2022-05-06







FP08a - View looking north along Unit EB1. GEC 2022-11-09







FP08b - View looking west along Unit SB1. GEC 2022-06-10



FP08b - View looking west along Unit SB1. GEC 2022-11-09

FP09 - View looking north along Unit EB1. GEC 2022-05-06



FP09 - View looking north along Unit EB1. GEC 2022-06-10

FP09 - View looking north along Unit EB1. GEC 2022-11-09



FP10a - View looking north along Unit EB1 and towards Unit EB2. GEC 2022-05-06



FP10a - View looking north along Unit EB1 and towards Unit EB2. GEC 2022-06-10



FP10b - View looking south along Unit EB1 and towards the east end of Unit SB1. GEC 2022-05-06



FP10b - View looking south along Unit EB1 and towards the east end of Unit SB1. GEC 2022-06-10

Attachment C:

## Dufferin Aggregates – Mill Creek Pit – Phase 6 2022 Pit Rehabilitation Photographs

Goodban Ecological Consulting Inc. (GEC) June 2023



Photo 1 – View looking west along Rehab Slope RSW3. Newly-created Wetland SW3 is in the lower right. GEC 2022-06-10



Photo 2 – View looking west northwest towards Rehab Slopes RSW1 and RSW2. Below water table extraction continues, as the Phase 2/6 Lake expands in size. GEC 2022-06-10



Photo 3 - View looking west along Rehab Slope RSW3. Newly-created Wetland SW3 is in the lower right. GEC 2022-11-09



Photo 4 - View looking west northwest towards Rehab Slopes RSW1 and RSW2. Below water table extraction continues, as the Phase 2/6 Lake expands in size. GEC 2022-11-09



Photo 5 – View looking east along Rehab Slope RSW3. Habitat features have been installed and the slope has been seeded. GEC 2022-11-09



Photo 6 – View looking northeast towards Rehab Slopes RSW4 and RSM2. Wetland SW3 is in the centre of the photo; note the seasonal decline in water level, relative to June (see Photos 1 and 2). GEC 2022-11-09



Photo 7 – View of Wetland SW1 while under construction. CRH 2022-06-09



Photo 8 – View of Wetland SW1 immediately after construction. Larger rocks and logs were used to create habitat features. GEC 2022-06-10



Photo 9 – View of Wetland SW1. This feature along with Wetlands SW2 and SW3 were seeded with a custom native wetland seed mix in early November 2022. GEC 2022-11-09



Photo 10 – View of Wetland SW1, showing the connection with the Phase 2/6 Lake. GEC 2022-11-09



Photo 11 – View showing Wetland SW2 immediately after construction. Rocks and logs were used to create habitat features. Note the open connection with the Phase 2/6 Lake. CRH 2022-06-09



Photo 12 – View showing Wetland SW3 immediately after construction. Compare with Photos 4 and 6, showing Wetland SW3 under late season conditions in early November. SW3 has no direct surface connection with the Phase 2/6 Lake, except potentially under high water conditions. CRH 2022-06-09

## THE CORPORATION OF THE TOWNSHIP OF PUSLINCH

## BY-LAW NUMBER 037-2023

Being a by-law to confirm the proceedings of the Council of the Corporation of the Township of Puslinch at its Council meeting held on SEPTEMBER 6, 2023.

**WHEREAS** by Section 5 of the *Municipal Act, 2001, S.O. 2001, c.25* the powers of a municipal corporation are to be exercised by its Council;

**AND WHEREAS** by Section 5, Subsection (3) of the *Municipal Act*, a municipal power including a municipality's capacity, rights, powers and privileges under section 8, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise;

**AND WHEREAS** it is deemed expedient that the proceedings of the Council of the Corporation of the Township of Puslinch at its Council meeting held on SEPTEMBER 6, 2023 be confirmed and adopted by By-law;

**NOW THEREFORE** the Council of the Corporation of the Township of Puslinch hereby enacts as follows:

- 1) The action of the Council of the Corporation of the Township of Puslinch, in respect of each recommendation contained in the reports of the Committees and each motion and resolution passed and other action taken by the Council at said meeting are hereby adopted and confirmed.
- 2) The Head of Council and proper official of the Corporation are hereby authorized and directed to do all things necessary to give effect to the said action of the Council.
- 3) The Head of Council and the Clerk are hereby authorized and directed to execute all documents required by statute to be executed by them, as may be necessary in that behalf and the Clerk authorized and directed to affix the seal of the said Corporation to all such documents.

## READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 6 DAY OF SEPTEMBER, 2023.

James Seeley, Mayor

Courtenay Hoytfox, Clerk